

Ervin Laszlo's Akashic Field **and the Dilemmas of Modern Consciousness Research**

Stanislav Grof, M.D.

In the course of the twentieth century, various disciplines of modern science have amassed an extraordinary array of observations, which could not be accounted for and adequately explained in terms of the monistic materialistic worldview and within the context of what Fritjof Capra called the Newtonian-Cartesian paradigm (Capra 1975). These paradigm-breaking “anomalous phenomena” came from a wide range of fields from astrophysics, quantum-relativistic physics, and chemistry to biology, anthropology, thanatology, parapsychology, and psychology.

Pioneering scientists from various scientific disciplines have made more or less successful attempts to tackle the formidable conceptual problems presented by the anomalous data. They formulated theories, which suggested revolutionary new ways of looking at the recalcitrant problems they were facing in their respective fields. Over time, a radically different understanding of reality and of human nature started to come into view, which is usually referred to as the new paradigm in science. However, this new perspective was a mosaic consisting of impressive, but disjointed pieces. It lacked “conceptual glue,” a unifying vision that would seamlessly integrate the individual contributions into a comprehensive overarching “theory of everything.”

Ken Wilber expressed in his writings the need for an integral theory of everything and outlined what such a theory should look like (Wilber 2000). However, the credit for actually creating such a theory goes to Ervin Laszlo, arguably the world's greatest system theorist and interdisciplinary scientist and philosopher. Laszlo, who is of Hungarian origin and currently lives in Italy, is a multifaceted individual with a range of interests and talents reminiscent of the great figures of the Renaissance. He achieved international fame as a child prodigy and in his teens performed as a concert pianist. A few years later, he turned to science and philosophy, beginning his lifetime search for the understanding of human nature and of the nature of reality. In addition, he has played an important role in addressing urgent sociopolitical problems of our times.

In an intellectual *tour de force* and a series of books, Laszlo has explored a wide range of disciplines, including astrophysics, quantum-relativistic physics, biology, and psychology (Laszlo 1993, 1995, 1999, 2003, 2004, Laszlo and Abraham 2004). He pointed

out a wide range of phenomena, paradoxical observations, and paradigmatic challenges, for which these disciplines had no explanations. Drawing on revolutionary advances of twentieth century' science, he offered a brilliant solution to the anomalies and paradoxes, which currently plague many of its disciplines. Laszlo achieved that by formulating his "connectivity hypothesis," the main cornerstone of which is the existence of what he called the "psi-field" and, more recently, the Akashic field." (Laszlo 1993, 1995, 2003, 2004). He describes it as a subquantum field, which holds a holographic record of all the events that have happened in the phenomenal world.

In this article, I would like to focus on the ground-breaking contributions Ervin Laszlo's work has made to two areas that are closest to my heart – consciousness research and transpersonal psychology; the latter is a field of psychology of which I am a co-founder. In the last fifty years, my primary area of interest and my lifetime passion has been the study of an important subcategory of non-ordinary states of consciousness, which I call holotropic states. This group includes the states which shamans experience in their initiatory crises and use in their healing practice, those that native people experience in rites of passage and healing ceremonies, as well as those that were described in the reports of neophytes who underwent initiation in the ancient mysteries of death and rebirth. Holotropic states also occur in systematic spiritual practice of yogis, Buddhists, Taoists, and Sufis and they have been described by mystics of all countries and historical periods. Modern psychiatrists and therapists encounter these states in psychedelic therapy, in deep experiential work without psychoactive substances (primal therapy, rebirthing, holotropic breathwork), and in the work with people in psychospiritual crises ("spiritual emergencies").

My interest in non-ordinary states of consciousness began almost fifty years ago, when a powerful experience lasting only several hours of clock-time profoundly changed my personal and professional life. As a young psychiatric resident, only a few months after my graduation from medical school, I volunteered for an experiment with LSD, a substance with remarkable psychoactive properties which had been serendipitously discovered by the Swiss chemist Albert Hofmann in the Sandoz pharmaceutical laboratories in Basel, Switzerland. This session, particularly its culmination period, during which I had an overwhelming and indescribable experience of cosmic consciousness, awakened in me an intense lifelong interest in holotropic states.

Since that time, most of my clinical and research activities have consisted of systematic exploration of the therapeutic, transformative, and evolutionary potential of

holotropic states. The five decades that I have dedicated to consciousness research have been for me an extraordinary adventure of discovery and self-discovery. I spent approximately half of this time conducting therapy with psychedelic substances, first in Czechoslovakia, in the Psychiatric Research Institute in Prague, and then in the United States, at the Maryland Psychiatric Research Center in Baltimore, where I participated in the last surviving official American psychedelic research program. Since 1975, I have worked with holotropic breathwork, a powerful method of therapy and self-exploration that I have developed jointly with my wife Christina. Over the years, we have also supported many people undergoing spontaneous psychospiritual crises, or “spiritual emergencies” as Christina and I call them.

The common denominator of these three situations is that they involve holotropic states of consciousness. In psychedelic therapy, these states are induced by administration of psychoactive substances, such as LSD, psilocybine, mescaline, and tryptamine or amphetamine derivatives. In holotropic breathwork, consciousness is changed by a combination of faster breathing, evocative music, and energy-releasing bodywork. In spiritual emergencies, holotropic states occur spontaneously, in the middle of everyday life, and their cause is usually unknown.

In addition, I have been more peripherally involved in many disciplines which are, more or less directly, related to holotropic states of consciousness. I have participated in sacred ceremonies of native cultures in different parts of the world, involving use of psychedelic plants, such as peyote, sacred mushrooms, ayahuasca, and kava kava. My wife and I have had many encounters with North American, Mexican, and South American shamans, and exchanged information with many anthropologists. I have also had extensive contact with representatives of various spiritual disciplines, including Vipassana, Zen, and Vajrayana Buddhism, Siddha Yoga, Tantra, and the Christian Benedictine order.

Another area that has received much of my attention has been thanatology, the young discipline studying near-death experiences and the psychological and spiritual aspects of death and dying. I participated in the late 1960s and early 1970s in a large research project studying the effects of psychedelic therapy in individuals dying of cancer. I should also add that I have had the privilege of personal acquaintance and experience with some of the great psychics and parapsychologists of our era, pioneers of laboratory consciousness research, and therapists who developed and practiced powerful forms of experiential therapy which induce holotropic states of consciousness.

My initial encounter with holotropic states was very difficult and intellectually, as well as emotionally, challenging. In the early years of my laboratory and clinical research with psychedelics, I was daily bombarded with experiences and observations, for which my medical and psychiatric training had not prepared me. As a matter of fact, I was experiencing and seeing things which, in the context of the scientific worldview I was brought up with, were considered impossible and were not supposed to happen. And yet, those obviously impossible things were happening all the time.

Instead of talking in abstract terms, let me briefly review the most important paradigm challenges that emerged from this research. I came into clinical work with psychedelics as a beginning psychiatrist, prepared by my medical education and equipped with passing knowledge of Freudian psychoanalysis. In serial psychedelic sessions, every single patient we worked with sooner or later transcended the narrow conceptual framework of mainstream psychiatry, which is limited to postnatal biography and to the Freudian individual unconscious. In my work with LSD and psilocybine, I witnessed practically daily deep and authentic age regression in my clients, which took them far beyond the map I had inherited from my teachers, to memories of biological birth and of prenatal existence. The same happened very early in my own psychedelic experiences. For about three years, I carefully charted the experiential territories traversed in psychedelic sessions, creating a vastly expanded cartography of the psyche to accommodate the new data,

The new map which emerged from this work shared with academic psychology and psychiatry the biographical-recollective domain and the Freudian individual unconscious. However, while in the mainstream model of the psyche these two regions represent the totality of the psyche, my new cartography contained two large and important additional domains. Both of these domains were transbiographical in nature, in the sense that they lay beyond (or beneath) the realm of conscious and unconscious contents related to postnatal biography. I called the first of these two new domains *perinatal*, which reflects its close connection with biological birth, and the second *transpersonal*, or reaching beyond the personal identity as it is usually defined.

This expanded cartography of the psyche was not really entirely new. Although it emerged independently from my own research, it represented a synthesis of the perspectives of various schools of depth psychology known from the history of psychoanalysis. It included, besides some of Freud's original concepts, also important revisions proposed by famous psychoanalytic renegades. Thus, Otto Rank described in his

pioneering book *The Trauma of Birth* the existence of the perinatal unconscious and emphasized its importance for psychology and psychotherapy (Rank 1929). Psychoanalysts Lietaert Peerbolte and Nandor Fodor independently confirmed Rank's ideas about the importance of the trauma of birth and prenatal dynamics for psychology and psychotherapy (Peerbolte 1975, Nandor 1949).

Wilhelm Reich discovered the powerful energies stored in the psyche and responsible for what he called the character armor (Reich 1949). He discussed the important role they play in a wide range of phenomena from psychoneuroses and psychosomatic disorders to sociopolitical movements (Reich 1961, 1970). Another of Freud's followers, Ferenczi Sandor, seriously considered in his essay *Thalassa* the possibility that the deep unconscious harbored memories of life in the primeval ocean (Ferenczi 1938). By far the most radical revision was introduced by C. G. Jung with his discovery of the collective unconscious and its governing principles, the archetypes (Jung 1959). As I described in another context, the ideas of the above pioneers of depth psychology had to be significantly modified in the light of the observations from holotropic states before they could be integrated into the new cartography (Grof 1985).

The rich and complex material originating on the *perinatal level of the unconscious* appeared in psychedelic sessions in several typical clusters, matrices, or experiential patterns. It soon became obvious that these categories of experiences were closely related to the consecutive stages of the biological birth process and to the experiences of the child in the perinatal period. I have coined for them the term *Basic Perinatal Matrices or BPMs*. In the following text, I will briefly describe these matrices in the sequence in which the corresponding phases of delivery follow during actual childbirth. In psychedelic sessions this chronological order is not necessarily followed, and individual matrices can occur in many different sequential patterns.

The Experience of Cosmic Unity ("Amniotic Universe")

This important perinatal experience seems to be related to the primal union with the mother, to the original state of intrauterine existence during which the child and the maternal organism form a symbiotic unity. When no noxious stimuli interfere, the conditions for the fetus are close to ideal; they provide protection, security, and continuous satisfaction of all needs. The basic characteristics of this experience are transcendence of the subject-object dichotomy, an exceptionally strong positive affect (peace, tranquility, serenity, bliss), feelings of sacredness, transcendence of time and space, ineffability, and richness of insights of cosmic relevance.

The imagery associated with this matrix combines fetal elements with oceanic and cosmic motifs - floating in the sea or in the interstellar space and identification with various aquatic animals or with astronauts. Positive intrauterine experiences can also be associated with archetypal visions of Mother Nature - safe, beautiful, and unconditionally nourishing like a good womb. Mythological images from the collective unconscious which often appear in this context portray various celestial realms and paradises as they are described in mythologies of different cultures. Reliving episodes of intrauterine disturbances brings about the sense of dark and ominous threat and feelings of being poisoned. Sequences of this kind can be associated with archetypal visions of frightening demonic entities or with a sense of insidious all-pervading evil.

The Experience of Cosmic Engulfment

Individuals confronted with this experiential pattern frequently relate it to the very onset of biological delivery, when the original equilibrium of intrauterine existence is disturbed by chemical signals and later by uterine contractions. This is usually accompanied by feelings of cosmic engulfment, overwhelming anxiety, and strong awareness of imminent death. The source of this danger cannot be clearly identified, and the individual has a tendency to interpret the immediate environment or the whole world in paranoid terms. Not infrequently do individuals in this state report experiencing evil influences coming from members of secret organizations, inhabitants of other planets, evil sorcerers, or devices emanating noxious radiation.

A further intensification of anxiety usually results in an experience of a giant maelstrom sucking the individual and his or her entire world relentlessly toward its center. A frequent variation of such a universal engulfment is that of being swallowed and incorporated by a terrifying monster. Another form of the same experience is the theme of descent into the underworld and an encounter with various dangerous creatures or entities. This situation seems to be closely related to the mythology of the hero's journey into the underworld as described by Joseph Campbell (Campbell 1968) and to the initiatory crisis of shamans.

The Experience of "No Exit"

This experience is related to the first clinical stage of delivery, when uterine contractions encroach on the fetus and inflict on it periodically extreme pressure. In this stage, the uterine cervix is still closed and the way out is not yet available. In psychedelic

sessions, this experience is characterized by striking darkness of the visual field. Individuals feel caged, trapped in a claustrophobic world, and experience incredible psychological and physical tortures. Existence in this world appears to be completely meaningless; people in this predicament are blinded to any positive aspects of life. The symbolism that most frequently accompanies this experiential pattern involves images of hell from various cultural frameworks. The most important characteristic that differentiates this pattern from the following one is the unique emphasis on the role of the victim, and the fact that the situation seems inescapable and eternal - there appears to be no way out either in space or in time.

The Experience of the Death-Rebirth Struggle

Many aspects of this pattern can be understood if we relate it to the second clinical stage of delivery. In this phase uterine contractions continue, but the cervix is now open. It is the time of gradual propulsion through the birth canal, mechanical crushing pressures, struggle for survival, and often a high degree of suffocation. In the terminal phases of delivery the fetus can experience intimate contact with a variety of biological material, such as blood, mucus, fetal liquid, urine, and even feces. From the experiential point of view this pattern is rather complex and has several important facets: the atmosphere of titanic struggle and fight, sadomasochistic sequences, high degree of sexual arousal caused by suffocation, exposure to scatological material, and the element of fire.

Several important characteristics of this experiential pattern distinguish it from the previously described no-exit constellation. The situation here does not seem hopeless, and the subject is not helpless. The individual is actively involved and has the feeling that his or her suffering has a definite direction and goal. In religious terms this situation would be closer to the concept of purgatory than hell. In addition, subjects do not exclusively play the role of helpless victims. They are observers and can identify with both sides at the same time to the point that they can hardly distinguish whether they are the aggressors or the victims. While the no-exit situation involves sheer suffering, the experience of the death-rebirth struggle represents the borderline between agony and ecstasy and the fusion of both.

The Death-Rebirth Experience

This experiential pattern is related to the third clinical stage of delivery. The agonizing process of the birth struggle culminates, the propulsion through the birth canal is completed and is followed by explosive relief and relaxation. After the umbilical cord is cut, physical separation from the mother has been completed, and the child starts its new

existence as an anatomically independent individual. The death-rebirth experience represents the termination and resolution of the death-rebirth struggle. Suffering and agony culminate in an experience of total defeat and annihilation on all levels - physical, emotional, intellectual, moral, and transcendental. This is usually referred to as "ego death;" it seems to involve instantaneous destruction of all previous reference points of the individual. The experience of total annihilation is followed by visions of blinding white or golden light, peacock designs, and rainbow spectra. There is a sense of decompression, expansion, liberation, joy, and profound peace. The archetypal domain often contributes to this matrix encounters with Great Mother goddesses and other blissful deities of various cultures. The universe is perceived as indescribably beautiful and radiant; individuals feel cleansed and purged, and talk about redemption, salvation, or union with God.

The Transpersonal Domain of the Psyche.

The second major domain that the work with holotropic states has added to mainstream psychiatry's cartography of the human psyche is now known as *transpersonal*, meaning literally "beyond the personal" or "transcending the personal." The experiences that originate on this level involve transcendence of the usual boundaries of the body/ego and of the limitations of three-dimensional space and linear time that restrict our perception of the world in the ordinary state of consciousness. Transpersonal motifs can appear in holotropic states in various combinations with perinatal elements or independently of them. The transpersonal realm is the source of a wide range of anomalous phenomena, which present serious challenges not only to current conceptual frameworks of psychology and psychiatry, but also to the monistic materialistic philosophy of modern science.

Transpersonal experiences can best be defined by describing how they differ from our everyday experience of ourselves and of the world. In the ordinary or "normal" state of consciousness, we experience ourselves as material objects contained within the boundaries of our skin and operating in a world with Newtonian characteristics. The American writer and philosopher Alan Watts referred to this experience of oneself as identifying with the "skin-encapsulated ego." Our perception of the environment is restricted by the physiological limitations of our sensory organs and by physical characteristics of the environment.

We cannot see objects from which we are separated by a solid wall, ships that are beyond the horizon, or the surface of the other side of the moon. If we are in Prague, we cannot hear what our friends are talking about in San Francisco. We cannot feel the softness

of the lambskin unless the surface of our body is in direct contact with it. In addition, we can experience vividly and with all our senses only the events that are happening in the present moment. We can recall the past and anticipate future events, fantasize about them, or try to use various methods to predict them. However, these are very different experiences from an immediate and direct sensory perception of what is happening in the present moment. In transpersonal states of consciousness, none of these limitations are absolute; any of them can be transcended.

Transpersonal experiences can be divided into three large categories. The first of these involves primarily transcendence of the usual spatial barriers, or of the limitations of the "skin-encapsulated ego. Here belong experiences of merging with another person into a state that can be called "dual unity," assuming the identity of another person, or identifying with the consciousness of an entire group of people (e.g. all mothers of the world, the entire population of India, or all the inmates of concentration camps). In the extremes, it is even possible to experience an extension of consciousness, which is so enormous that it seems to encompass all of humanity, the entire human species. Experiences of this kind have been repeatedly described in the spiritual literature of the world.

In a similar way, one can transcend the limits of the specifically human experience and identify with the consciousness of various animals, plants, or even a form of consciousness that seems to be associated with inorganic objects and processes. In rare instances, it is possible to experience consciousness of the entire biosphere, of our planet, or the entire material universe. Incredible and absurd as it might seem to a Westerner subscribing to the worldview created by materialistic science, these experiences suggest that everything that we can experience in our everyday state of consciousness as an object, has in the holotropic states a corresponding subjective representation. It is as if everything in the universe has its objective and subjective aspect, the way it is described in the great spiritual philosophies of the East. For example, in Hinduism all phenomenal worlds are seen as divine play of Absolute Consciousness or Brahman (lila), in Taoism all elements of material reality are described as transformations of the Tao, and so on.

The second category of transpersonal experiences is characterized primarily by overcoming of temporal rather than spatial boundaries, that is by transcendence of linear time. We have already talked about the possibility of vivid reliving of important memories from infancy, childhood, birth, and prenatal existence. In holotropic states, this historical regression can continue farther and involve what appears to be authentic experiential

identification with the sperm and the ovum at the time of conception on the level of cellular consciousness, But the experiential travel back in time does not stop even here and can continue to episodes from the lives of one's human or animal ancestors, or even those that seem to be coming from the racial and collective unconscious as it was described by C. G. Jung. Very frequently, the experiences that seem to be happening in other cultures and historical periods are associated with a sense of personal remembering. People then talk about reliving of memories from past lives, from previous incarnations. These observations throw a new light on the problem of reincarnation, a concept of extreme spiritual and cultural importance, which has been pooh-poohed and ridiculed by materialistic science.

The idea of karma and reincarnation represents a cornerstone of Hinduism, Buddhism, Jainism, Sikhism, Zoroastrianism, the Tibetan Vajrayana Buddhism, and Taoism. Similar ideas can be found in such geographically, historically, and culturally diverse groups as various African tribes, native Americans, pre-Columbian cultures, the Hawaiian kahunas, practitioners of the Brazilian umbanda, the Gauls, and the Druids. In ancient Greece, several important schools of thought subscribed to it. Among them were the Pythagoreans, the Orphics, and the Platonists. This doctrine was also adopted by the Essenes, the Pharisees, the Karaites, and other Jewish and semi-Jewish groups, and it formed an important part of the cabalistic theology of medieval Jewry. It was also held by the Neoplatonists and Gnostics.

The content of the transpersonal experiences described so far reflected various aspects of the material world and events happening at specific points of space and time. These experiences involved elements of the everyday familiar reality - other people, animals, plants, and materials. What was surprising about them was not their content, but the fact that we could witness or experientially identify with something that is not ordinarily accessible to our experience. We know that there are pregnant whales in the world, but we should not be able to have an authentic experience of being one. The fact that there once was the French revolution is readily acceptable, but we should not be able to have a vivid experience of actually being there and dying on the barricades of Paris. We know that there are many things happening in the world in places where we are not present, but it is usually considered impossible to experience something that is happening in remote locations without the mediation of a TV camera, a satellite, and a TV set. We may also be surprised to find consciousness associated with lower animals, plants, and with inorganic nature.

However, the third category of transpersonal experiences is even stranger. Here consciousness seems to extend into realms and dimensions that the Western industrial culture

does not consider to be "real." Here belong numerous visions of archetypal beings and mythological landscapes, encounters or even identification with deities and demons of various cultures, and communication with discarnate beings, spirit guides, suprahuman entities, extraterrestrials, and inhabitants of parallel universes. In its farther reaches, individual consciousness can identify with cosmic consciousness or the Universal Mind known under many different names - Brahman, Buddha, the Cosmic Christ, Keter, Allah, the Tao, the Great Spirit, and many others. The ultimate of all experiences appears to be identification with the Supracosmic and Metacosmic Void, the mysterious and primordial emptiness and nothingness that is conscious of itself and is the ultimate cradle of all existence. It has no concrete content, yet it contains all there is in a germinal and potential form.

Transpersonal experiences have many strange characteristics that shatter the most fundamental metaphysical assumptions of the Newtonian-Cartesian paradigm and of the monistic materialistic worldview. Researchers who have studied and/or personally experienced these fascinating phenomena realize that the attempts of mainstream science to dismiss them as irrelevant products of human fantasy and imagination or as hallucinations - erratic products of pathological processes in the brain - are naive and inadequate. Any unbiased study of the transpersonal domain of the psyche has to come to the conclusion that the observations represent a critical challenge not only for psychiatry and psychology, but for the entire philosophy of Western science.

Although transpersonal experiences occur in the process of deep individual self-exploration, it is not possible to interpret them simply as intrapsychic phenomena in the conventional sense. On the one hand, they appear on the same experiential continuum as the biographical and perinatal experiences and are coming from within the individual psyche in the sense that they are obtained by introspection. On the other hand, they seem to be tapping directly, without mediation of the senses, into sources of information that are clearly far beyond the conventional reach of the individual. Somewhere on the perinatal level of the psyche, a strange flip seems to occur and, what was up to that point deep intrapsychic probing, starts rendering experiences of the universe at large obtained by extrasensory means. Some people have compared this to an "experiential Moebius strip," since it is impossible any more to say what is inside and what is outside.

These observations indicate that we can obtain information about the universe in two radically different ways. Besides the conventional possibility of learning through sensory perception and analysis and synthesis of the data, we can also find out about various aspects

of the world by direct identification with them in a holotropic state of consciousness. Each of us thus appears to be a microcosm containing in the information about the entire macrocosm. In the mystical traditions, this was expressed by such phrases as: "as above so below" or "as without, so within." In the past, this basic tenet of esoteric schools, such as Tantra, the Hermetic tradition, Gnosticism, and Kabbala, appeared to be an absurd confusion of the relationship between the part and the whole and a violation of Aristotelian logic. In the second half of the twentieth century, this claim received unexpected scientific support by the discovery of the principles operating in optical holography (Talbot 1991).

The reports of subjects who have experienced episodes of embryonal existence, the moment of conception, and elements of cellular, tissue, and organ consciousness abound in medically accurate insights into the anatomical, physiological, and biochemical aspects of the processes involved. Similarly, ancestral, racial and collective memories and past incarnation experiences frequently provide very specific details about architecture, costumes, weapons, art forms, social structure, and religious and ritual practices of the culture and historical period involved, or even concrete historical events. People who experienced phylogenetic experiences or identification with existing life forms not only found them unusually authentic and convincing, but often acquired in the process extraordinary insights concerning animal psychology, ethology, specific habits, or unusual reproductive cycles. In some instances, this was accompanied by archaic muscular innervations not characteristic for humans, or even such complex behaviors as enactment of a courtship dance.

The scientific and philosophical challenges associated with the already described observations are further augmented by the fact that transpersonal experiences correctly reflecting the material world often appear on the same continuum and intimately interwoven with elements from the mythological world, which the Western industrial civilization does not consider to be ontologically real. Here belong experiences involving deities and demons from various cultures, abodes of the Beyond such as heavens and paradises, and legendary or fairy-tale sequences. For example, we can experience communication with Jesus, Virgin Mary, or the Devil, have a shattering encounter with the Hindu goddess Kali, or identify with the dancing Shiva.

In holotropic states, it is also possible to visit various mythological realms, such as Shiva's heaven, the paradise of the Aztec rain god Tlaloc, the Sumerian underworld, or one of the Buddhist hot hells. Even these episodes can impart accurate new information about religious symbolism and mythical motifs that were previously unknown to the person

involved. Observations of this kind confirm C. G. Jung's idea that besides the Freudian individual unconscious we can also gain access to the collective unconscious that contains the cultural heritage of all humanity. Although these mythic elements are accessed intrapsychically, in a process of introspection, they have objective existence, are ontologically real.

To distinguish transpersonal experiences from imaginary products of individual fantasy, Jungians refer to this domain as *imaginal*. French scholar, philosopher, and mystic, Henri Corbin, who first used the term *mundus imaginalis* was inspired by his study of Islamic mystical literature (Corbin 2000). In Islamic theosophy, the imaginal world where everything existing in the sensory world has its analogue is called 'alam a mithal, or the eighth climate, to distinguish it from the seven climates, or regions of traditional Islamic geography. It possesses extension and dimensions, forms and colors, but these are not perceptible to the senses, as they are when they are properties of physical bodies. However, this realm is in every respect as fully ontologically real as the material world perceived by the senses.

It is not an easy task to convey in a few sentences conclusions from daily observations made in the course of almost half a century of research of holotropic states of consciousness and make this statement believable. It is not realistic to expect that a few generalizations would be able to override the deeply culturally ingrained worldview of those readers, who are not familiar with the transpersonal dimension and who cannot relate what I say to their personal experience. Although I myself had the opportunity to observe closely many hundreds of other people experiencing holotropic states and listen to their accounts, it took me years to fully absorb the impact of the cognitive shock involved. The most convincing evidence for the validity of the astonishing and incredible new data did not come from observations of others, but from deep personal experience.

Because of space considerations, I cannot present detailed case histories that would help to illustrate the nature of transpersonal experiences and the extraordinary insights and new knowledge which they make available. I have to refer those readers who would like to explore this area further to my other publications, in which I discuss in detail the various types of such experiences and give many illustrative examples of instances when they provided accurate new information about other people, animals, plants, inorganic materials and processes, and mythological realms (Grof 1975, 1978, 1994). Those who are interested in personal verification of the above observations can attend workshops of holotropic breathwork with some of the many hundreds of certified facilitators in different parts of the

world who have completed our training. The necessary information can be found on our website (holotropic.com).

The existence and nature of transpersonal experiences violates some of the most basic assumptions of mechanistic science. They imply such seemingly absurd notions as relativity and arbitrary nature of all physical boundaries, non-local connections in the universe, communication through unknown means and channels, memory without a material substrate, non-linearity of time, or consciousness associated with all living organisms, and even inorganic matter. Many transpersonal experiences involve events from the microcosm and the macrocosm, realms that cannot normally be reached by unaided human senses, or from historical periods that precede the origin of the solar system, formation of planet earth, appearance of living organisms, development of the nervous system, and emergence of homo sapiens.

The research of holotropic states thus reveals an astounding paradox concerning the nature of human beings. It clearly shows that, in a mysterious and yet unexplained way, each of us contains the information about the entire universe and all of existence, has potential experiential access to all its parts, and in a sense is the whole cosmic network, as much as he or she is just an infinitesimal part of it, a separate and insignificant biological entity. The new cartography reflects this fact and portrays the individual human psyche as being essentially commensurate with the entire cosmos and the totality of existence. As absurd and implausible as this idea might seem to a traditionally trained scientist and to our commonsense, it can be relatively easily reconciled with new revolutionary developments in various scientific disciplines usually referred to as the new or emerging paradigm. Modern science has thus brought unexpected supportive evidence for the answer that the ancient Indian Upanishads give to the question about our true nature: “Thou Art That” (in Sanskrit Tat tvam asi) – you are commensurable with the cosmic creative principle and with all there is.

In considering this claim about the identity of the individual with the entire universe, we have to take into consideration that it applies to the world of information and not to the world of matter (understood in the pedestrian sense as “stuff” or in the sense of Newtonian-Cartesian science as an assembly of indestructible particles). We are not obeying here Galileo Galilei’s admonition to limit our scientific exploration only to those aspects of the world, which can be measured and weighed, and draw conclusions from what each human being can experience. The statements which materialistic science has made about the measurable and

weighable aspects of reality remain valid in their own right, but they have no relevance regarding the observations described in this paper and the conclusions drawn from them.

I firmly believe that the expanded cartography, which I have outlined above, is of critical importance for any serious approach to such phenomena as shamanism, rites of passage, mysticism, religion, mythology, parapsychology, near-death experiences, and psychedelic states. This new model of the psyche is not just a matter of academic interest. As I have shown in other publications, it has deep and revolutionary implications for the understanding of emotional and psychosomatic disorders, including psychoses, and offers new and revolutionary therapeutic possibilities (Grof 1987 and 2000, Grof and Grof 1989 and 1991).

It is easy to understand that the plethora of “anomalous” experiences and phenomena, which have emerged from my research of holotropic states represented for me a disturbing intellectual challenge. After I had overcome my initial conceptual shock and doubts about my own senses, judgment, and even sanity, I began to realize that the problem might not be in my capacity to observe or in my critical judgment. It became increasingly clear that fact that these observations appeared to be anomalies reflected serious inherent limitations of current psychological and psychiatric theories and of the monistic materialistic philosophy of Western science. Naturally, it was not easy for me to come to this realization, since I had to struggle with the awe and respect a medical student or a beginning psychiatrist feels toward the academic establishment, scientific authorities, and impressive credentials and titles.

Over the years, my initial suspicion about the inadequacy of academic theories concerning consciousness and the human psyche has gradually turned into certainty, nourished and reinforced by thousands of daily clinical observations, as well as personal experiences. At this point, I have no doubts that the data from the research of holotropic states represent a critical conceptual challenge for the scientific paradigm that currently dominates psychology, psychiatry, psychotherapy, and many other disciplines. I will briefly describe the events after my arrival in the United States, which eventually made it possible for me to bridge the gap which initially seemed to separate my findings from the body of “hard” scientific data imparted on me by my medical and training.

In the late 1960s, I was invited to participate in the working meetings of a small group of people, who felt that the three main psychologies (or Forces as Abraham Maslow called them) – behaviorism, Freudian psychoanalysis, and humanistic psychology - left out

important aspects of the human psyche described in Jungian psychology, studies of creativity, spiritual literature, anthropological field studies, and books on comparative religion. This group, which included Abraham Maslow, Tony Sutich, Jim Fadiman, Miles Vich, Sonya Margulies, and myself, formulated the basic principles of transpersonal psychology or the Fourth Force as Maslow called it. I was included, because the other group members felt that observations from psychedelic research were among the important data that had to be taken into consideration in creating the new discipline.

Transpersonal psychology, as it was born in the late 1960s was culturally sensitive and treated the ritual and spiritual traditions of ancient and native cultures with the respect that they deserve in view of the findings of modern consciousness research. It also embraced and integrated a wide range of transpersonal experiences and other “anomalous phenomena,” paradigm-breaking observations that academic science has been unable to account for and explain. However, although comprehensive and well substantiated in and of itself, transpersonal psychology represented such a radical departure from academic thinking in professional circles that it could not be reconciled with either traditional psychology and psychiatry or with monistic materialism and the Newtonian-Cartesian paradigm of Western science.

As a result, the new field was extremely vulnerable to accusations of being “irrational,” “unscientific,” and even “flakey,” particularly by scientists who were not aware of the vast body of observations and data on which the new movement was based. These critics also ignored the fact that many of the pioneers of this revolutionary movement had impressive academic credentials. They generated and embraced the transpersonal vision of the human psyche not because they were ignorant of the fundamental assumptions of traditional science, but because they found the old conceptual frameworks seriously inadequate and incapable to account for their experiences and observations.

This situation changed very drastically during the first two decades of the existence of transpersonal psychology. As a result of revolutionary new concepts and discoveries in various scientific disciplines, the philosophy of traditional Western science, its basic assumptions, and its Newtonian-Cartesian paradigm were increasingly seriously challenged. The influx of this exciting new information began by the realization of the profound philosophical implications of quantum-relativistic physics, forever changing our understanding of physical reality. The astonishing convergence between the worldview of modern physics and that of the Eastern spiritual philosophies, foreshadowed already in the

work of Albert Einstein, Werner Heisenberg, Niels Bohr, and others found a full expression in the ground-breaking book *The Tao of Physics* by Fritjof Capra (Capra 1975).

Capra's pioneering vision was in the following years complemented and refined by the work of Fred Alan Wolf (1981), Nick Herbert (Herbert 1979), Amit Goswami (Goswami 1994, 1995), and many others. Of particular interest in this regard were the contributions of David Bohm, former co-worker of Albert Einstein and author of prestigious monographs on theory of relativity and quantum physics. Bohm's concept of the explicate and implicate order and his theory of holomovement expounding the importance of holographic thinking in science gained great popularity in the transpersonal field (Bohm 1980), as did Karl Pribram's holographic model of the brain (Pribram 1971).

Another welcome addition to the above list was Rupert Sheldrake's theory of morphic resonance and morphogenetic fields, demonstrating the importance of non-physical fields for the understanding of forms, genetics and heredity, order, meaning, and the process of learning. Exciting contributions relevant for the transpersonal perspective were also Gregory Bateson's brilliant synthesis of cybernetics, information and systems theories, logic, psychology, and other disciplines (Bateson 1979) Ilya Prigogine's studies of dissipative structures and order out of chaos (Prigogine 1980, Prigogine and Stengers 1984), the chaos theory itself (Glieck 1987), the anthropic principle in astrophysics (Barrow and Tipler 1986), and many others.

All these revolutionary advances in science have been welcome by the transpersonal circles as significant conceptual support for transpersonal psychology. On the one hand, they undermined various aspects of the seemingly monolithic structure of the traditional materialistic worldview with which transpersonal psychology was in principle incompatible. On the other hand, they often brought new insights which seemed to provide supportive evidence for various partial claims of the pioneers of the transpersonal perspective. However, what was still missing was a large integrative vision, the "conceptual glue" that would weave all these pieces into a comprehensive tapestry of ideas about consciousness, psyche, and human nature, one that could also be reconciled with the revolutionary findings of other scientific disciplines about the nature of reality.

It was Ervin Laszlo's work that turned out to be the "Rosetta stone," which the pioneers of consciousness research and transpersonal psychology sought after. His contributions represent a quantum leap in this conceptual evolution and revolution described

above. In a series of works, such as *The Creative Cosmos*, *The Interconnected Universe*, *The Whispering Pond*, *The Connectivity Hypothesis*, and most recently *Science and the Akashic Field*, Laszlo reviewed the major theories, which had attempted to solve the puzzles and paradoxes presented by the “anomalous phenomena” – the work of David Bohm, Karl Pribram, Rupert Sheldrake, Ilya Prigogine, and others. He showed the strength and the weaknesses of these theories and offered an elegant comprehensive metatheory, which addressed the unsolved problems in a number of disciplines.

The key element of this theory of everything, Laszlo’s concept of the psi-field, a subquantum field containing the holographic record of everything that happens in the universe (or possibly the Kosmos as understood by ancient Greeks) certainly accounts for the otherwise baffling problems encountered by modern consciousness research and transpersonal psychology. As the title of his last book - *Science and the Akashic Field* - suggests, Ervin Laszlo has not only been able to formulate a unifying conceptual framework for a number of scientific disciplines, but also to create a bridge that connects the best of hard science quite explicitly to transpersonal psychology and to the great spiritual traditions of the world. His recent article specifically addresses the relevance of his work for transpersonal psychology (Laszlo, in press). The capacity of human consciousness to access in holotropic states the information recorded in the Akashic field would provide a reasonable explanation for the otherwise baffling properties of transpersonal experiences described earlier in this paper and in my previous publications (Grof 1975, 1980, 1988).

Ervin Laszlo creative interdisciplinary synthesis is by any standards an extraordinary intellectual achievement that deserves a prominent place in the history of science. I firmly believe that his work will in the near future be recognized and acknowledged as an important cornerstone of the scientific worldview of the future.

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