### **Psychology of the Future:**

### Lessons from Modern Consciousness Research.

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Holotropic Experiences and Their Healing and Heuristic Potential.

The source of observations explored in this article has been long-term systematic study of what academic psychiatry calls 'altered' or 'non-ordinary states of consciousness.' The primary focus of this research was on experiences that represent a useful source of data about the human psyche and on those that have a healing, transformative, and evolutionary potential. For this purpose, the term 'non-ordinary states of consciousness' is too general; it includes a wide range of conditions that are not interesting or relevant from this point of view.

Consciousness can be profoundly changed by a variety of pathological processes - by cerebral traumas, by intoxications with poisonous chemicals, by infections, or by
degenerative and circulatory processes in the brain. Such conditions can result in
profound mental changes that would be included in the broad category of 'non-ordinary
states of consciousness'. However, they cause 'trivial deliria' or 'organic psychoses', states
associated with general disorientation, impairment of intellect, and subsequent amnesia.
These conditions are very important clinically, but are not of great interest for
consciousness researchers.

This article summarizes observations focusing on a large and important subgroup of non-ordinary states of consciousnes for which contemporary psychiatry does not have a specific term. I have come to the conclusion that, because of their unique characteristics, they deserve to be distinguished from the rest and placed into a special category. For this reason, I coined for them the name *holotropic*. This composite word literally means "oriented toward wholeness" or "moving in the direction of wholeness" (from the Greek *holos* = whole and *trepein* = moving toward or in the direction of something). The full meaning of this term and the justification for its use will become clear later in this paper. This name suggests that in our everyday state of consciousness we are fragmented and identify with only a small fraction of who we really are.

In holotropic states, consciousness is changed qualitatively in a very profound and fundamental way, but it is not grossly impaired like in organic psychoses or trivial

deliria. We experience invasion of other dimensions of existence that can be very intense and even overwhelming. However, at the same time, we typically remain fully oriented and do not completely lose touch with everyday reality. Holotropic states are characterized by a specific transformation of consciousness associated with dramatic perceptual changes in all sensory areas, intense and often unusual emotions, and profound alterations in the thought processes. They are also usually accompanied by a variety of intense psychosomatic manifestations and unconventional forms of behavior.

The content of holotropic states is often spiritual or mystical. We can experience sequences of psychological death and rebirth and a broad spectrum of transpersonal phenomena, such as feelings of union and identification with other people, nature, the universe, and God. We might uncover what seem to be memories from other incarnations, encounter powerful archetypal figures, communicate with discarnate beings, and visit numerous mythological landscapes. Our consciousness might separate from our body and yet retain its capacity to perceive the immediate environment and remote locations.

Western psychiatrists are aware of the existence of holotropic experiences but, because of their narrow conceptual framework limited to postnatal biography and the Freudian individual unconscious, they have no adequate explanation for them. They see them as pathological products of the brain, symptomatic of a serious mental disease, psychosis. This conclusion is not supported by clinical findings and is highly problematic, to say the least. Referring to these conditions as 'endogenous psychoses' might sound impressive to a lay person, but amounts to little more than acknowledgment of the professionals' ignorance concerning the etiology of these conditions.

It is hard to imagine that and how a pathological process inflicting the brain could produce the rich and intricate spectrum of holotropic experiences, involving such phenomena as shattering sequences of psychospiritual death and rebirth, encounters with archetypal beings, visits to mythological realms, past life sequences from other cultures, or visions of flying saucers and alien abduction experiences. In addition, careful study of the nature of these experiences and the information they convey directly contradicts such an interpretation. One of the tasks of this paper is to explore the ontological status of holotropic experiences and to demonstrate that they are phenomena *sui generis* normal manifestations of the human psyche that have a great healing and heuristic potential.

Ancient and aboriginal cultures have spent much time and energy developing powerful mind-altering techniques that can induce holotropic states. These 'technologies of the sacred' combine in different ways chanting, breathing, drumming, rhythmic dancing, fasting, social and sensory isolation, extreme physical pain, and other elements (Eliade 1964, Campbell 1984). Many cultures have used for this purpose botanical materials containing psychedelic alkaloids (Stafford 1977, Schultes and Hofmann 1979).

The most famous examples of these plants are several varieties of hemp, 'magic' mushrooms, the Mexican cactus peyote, South American and Caribbean snuffs, the African shrub eboga, and the Amazonian jungle liana Banisteriopsis caapi, the source of yagé or ayahuasca. Among psychedelic materials of animal origins are the secretions of the skin of certain toads and the flesh of the Pacific fish Kyphosus fuscus.

Additional important triggers of holotropic experiences are various forms of systematic spiritual practice involving meditation, concentration, breathing, and movement exercises, that are used in different systems of yoga, Vipassana or Zen Buddhism, Tibetan Vajrayana, Taoism, Christian mysticism, Sufism, or Cabalah. Other techniques were used in the ancient mysteries of death and rebirth, such as the Egyptian temple initiations of Isis and Osiris and the Greek Bacchanalia, rites of Attis and Adonis, and the Eleusinian mysteries. The specifics of the procedures involved in these secret rites have remained for the most part unknown, although it is likely that psychedelic preparations played an important part in them (Wasson, Hofmann, and Ruck 1978).

Among modern means of inducing holotropic states of consciousness are pure active principles isolated from psychedelic plants (mescaline, psilocybine, tryptamine derivatives, harmaline, ibogaine, cannabinols, and others), substances synthetized in the laboratory (LSD, amphetamine entheogens, and ketamine) (Shulgin and Shulgin 1991), and powerful experiential forms of psychotherapy, such as hypnosis, neo-Reichian approaches, primal therapy, and rebirthing. My wife Christina and I have developed holotropic breathwork, a powerful method that can facilitate profound holotropic states by very simple means - conscious breathing, evocative music, and focused bodywork (Grof 1988).

There also exist very effective laboratory techniques for altering consciousness. One of these is sensory isolation, which involves significant reduction of meaningful sensory stimuli. In its extreme form the individual is deprived of sensory input by submersion in a dark and soundproof tank filled with water of body temperature (Lilly 1977). Another well-known laboratory method of changing consciousness is biofeedback, where the individual is guided by electronic feedback signals into non-ordinary states of consciousness characterized by preponderance of certain specific frequencies of brainwaves (Green and Green 1978). We could also mention here the techniques of sleep and dream deprivation and lucid dreaming (LaBerge 1985).

It is important to emphasize that episodes of holotropic states of varying duration can also occur spontaneously, without any specific identifiable cause, and often against the will of the people involved. Since modern psychiatry does not differentiate between mystical or spiritual states and mental diseases, people experiencing these states are often hospitalized, labeled psychotic, are and receive routine suppressive psychopharmacological treatment. My wife and I see these states as psychospiritual crises or 'spiritual emergencies.' We believe that properly supported and treated, they can result in emotional and psychosomatic healing, positive personality transformation, and consciousness evolution (Grof and Grof 1989, 1990).

Ancient and pre-industrial cultures have held holotropic states in high esteem, practiced them regularly in socially sanctioned contexts, and spent much time and energy developing safe and effective techniques of inducing them. These states have been the main vehicle for their ritual and spiritual life, as a means of direct communication with the archetypal domains of deities and demons, forces of nature, animal realm, and the cosmos. Additional uses involved diagnosing and healing diseases, cultivating intuition and ESP, and obtaining artistic inspiration, as well as practical purposes, such as locating game and finding lost objects and people. According to anthropologist Victor Turner, sharing in groups also contributes to tribal bonding and tends to create a sense of deep connectedness (communitas).

Western psychiatry and psychology do not see holotropic states (with the exception of dreams that are not recurrent or frightening) as potential sources of valuable information about the human psyche and of healing, but basically as pathological phenomena. Traditional clinicians tend to use indiscriminately pathological labels and suppressive medication whenever these states occur spontaneously. Michael Harner, an anthropologist of good academic standing, who also underwent a shamanic initiation

during his field work in the Amazonian jungle and practices shamanism, suggests that Western psychiatry is seriously biased in at least two significant ways (Harner 1980).

It is <u>ethnocentric</u>, which means that it considers its own view of the human psyche and of reality to be the only correct one and superior to all those shared by other cultural groups. From this perspective, experiences and behaviors for which there is no psychoanalytic or behaviorist explanation are attributed to mental disease. According to Harner, Western psychiatry is also <u>'cognicentric'</u> (a more accurate word might be 'pragmacentric'), meaning that it takes into consideration only experiences and observations in the ordinary state of consciousness. Psychiatry's disinterest in holotropic states and disregard for them has resulted in a culturally insensitive approach and a tendency to pathologize all activities that cannot be understood in the narrow context of the monistic materialistic paradigm. This includes the ritual and spiritual life of ancient and pre-industrial cultures and the entire spiritual history of humanity.

If we study systematically the experiences and observations associated with holotropic states, it leads inevitably to a radical revision of our basic ideas about consciousness and about the human psyche and to an entirely new approach to psychiatry, psychology, and psychotherapy. The changes we would have to make in our thinking fall into several large categories:

- 1. New understanding and cartography of the human psyche.
- 2. The nature and architecture of emotional and psychosomatic disorders.
- 3. Therapeutic mechanisms and the process of healing.
- 4. The strategy of psychotherapy and self-exploration.
- 5. The role of spirituality in human life.
- 6. The nature of reality.

# 1. New understanding and cartography of the human psyche.

Traditional academic psychiatry and psychology uses a model of the psyche that is limited to postnatal biography, and the Freudian individual unconscious. To account for all the phenomena occurring in holotropic states, our understanding of the dimensions of the human psyche has to be drastically expanded. I have myself suggested a cartography or model of the psyche that contains, in addition to the usual *biographical level*, two transbiographical realms: *the perinatal domain*, related to the trauma of biological birth; and *the transpersonal domain*, which accounts for such phenomena as experiential identification with other people, animals, and plants, visions of archetypal and mythological beings and realms, ancestral, racial, and karmic experiences, and identification with the Universal Mind or the Void (Grof 1975). These are experiences that have been described throughout ages in the religious, mystical, and occult literature.

## Postnatal Biography and the Individual Unconscious.

The biographical level of the psyche does not require much discussion, since it is well known from official professional literature. As a matter of fact, it is what traditional psychiatry, psychology, and psychotherapy are all about. However, there are a few important differences between exploring this domain through verbal psychotherapy and through approaches using holotropic states. First, in powerful experiential therapies, one does not just remember emotionally significant events or reconstruct them indirectly from dreams, slips of the tongue, or from transference distortions. One experiences the original emotions, physical sensations, and even sensory perceptions in full age regression. That means that during the reliving of an important trauma from infancy or childhood, one actually has the body image, the naive perception of the world, sensations, and the emotions corresponding to the age he or she was at that time.

The second difference between the work on the biographical material in holotropic states, as compared with verbal psychotherapies, is that in the former, beside confronting the usual psychotraumas, people often have to relive and integrate traumas that were primarily of a physical nature. Many people have to process experiences of near drowning, operations, accidents, and children's diseases, particularly those that were associated with suffocation, such as diphtheria, whooping cough, or aspiration of a foreign object.

This material emerges quite spontaneously and without any programing. As it surfaces, people realize that these physical traumas have actually played a significant role in the psychogenesis of their emotional and psychosomatic problems, such as asthma, migraine headaches, a variety of psychosomatic pains, phobias, sadomasochistic tendencies, or depression and suicidal tendencies. The reliving of such traumatic memories and their integration can then have very far-reaching therapeutic consequences. This contrasts sharply with the attitudes of academic psychiatry and psychology which do not recognize the direct psychotraumatic impact of physical insults.

Another new information about the biographical-recollective level of the psyche that emerged from my psychedelic and holotropic research was the discovery that emotionally relevant memories are not stored in the unconscious as a mosaic of isolated imprints, but in the form of complex dynamic constellations. I coined for them the name COEX systems, which is short for 'systems of condensed experience.' A COEX system consists of emotionally charged memories from different periods of our life that resemble each other in the quality of emotion or physical sensation that they share. Each COEX has a basic theme that permeates all its layers and represents their common denominator. The individual layers then contain variations on this basic theme that occurred at different periods of the person's life.

The nature of the central theme varies considerably from one COEX to another. The layers of a particular system can, for example contain all the major memories of humiliating, degrading, and shaming experiences that have damaged our self-esteem. In another COEX system, the common denominator can be anxiety experienced in various shocking and terrifying situations or claustrophobic and suffocating feelings evoked by oppressive and confining circumstances. Rejection and emotional deprivation damaging our ability to trust men, women, or people in general, is another common motif. Situations that have generated in us profound feelings of guilt and a sense of failure, events that have left us with a conviction that sex is dangerous or disgusting, and encounters with indiscriminate aggression and violence can be added to the above list as characteristic examples. Particularly important are COEX systems that contain memories of encounters with situations endangering life, health, and integrity of the body.

When I first described the COEX systems in the early stages of my psychedelic research, I thought that they governed the dynamics of the biographical level of the unconscious. As my experience with holotropic states became richer and more extensive,

I realized that the roots of the COEX systems reach much deeper. Each of the COEX constellations seems to be superimposed over and anchored in a particular aspect of the trauma of birth. In addition, a typical COEX system reaches even further and has its deepest roots in various forms of transpersonal phenomena, such as past life experiences, Jungian archetypes, conscious identification with various animals, and others. At present, I see the COEX systems as general organizing principles of the human psyche. The concept of COEX systems resembles to some extent Jung's ideas about psychological complexes (Jung 1960) and Hanskarl Leuner's transphenomenal dynamic systems Leuner 1962), but has many features that differentiate it from both of these concepts.

The COEX systems play an important role in our psychological life. They can influence the way we perceive ourselves, other people, and the world and how we feel about them. They are the dynamic forces behind our emotional and psychosomatic symptoms, difficulties in relationships with other people, and irrational behavior. There exists a dynamic interplay between the COEX systems and the external world. External events in our life can specifically activate corresponding COEX systems and, conversely, active COEX systems can make us perceive and behave in such a way that we recreate their core themes in our present life (Grof 1975).

Before continuing our discussion of the new extended cartography of the human psyche, it is important to briefly mention a very important and extraordinary characteristic of holotropic states that played an important role in charting the experiential territories of the psyche and that also is invaluable for the process of psychotherapy. Holotropic states tend to engage something like an 'inner radar,' that automatically brings into consciousnes the contents from the unconscious that have the strongest emotional charge and are most psychodynamically relevant at the time. This represents a great advantage in comparison with verbal psychotherapy, where the client presents a broad array of information of various kind and the therapist has to decide what is important, what is irrelevant, and where the client is blocking.

Since there is no general agreement about basic theoretical issues among different schools, such assessments will always be idiosyncratic. They will reflect the perspectives of the therapist's school, as well as his or her personal views. The holotropic states save the therapist such difficult decisions and eliminate much of the personal and professional bias of the verbal approaches. This automatic selection of relevant material by the patient's psyche also spontaneously guides the process of self-exploration beyond the

biographical level and directs it to the perinatal and transpersonal levels of the psyche. These are transbiographical domains not recognized and acknowledged in academic psychiatry and psychology.

# The Perinatal Level of the Psyche.

When our process of deep experiential self-exploration moves beyond the level of memories from childhood and infancy and reaches back to birth, we start encountering emotions and physical sensations of extreme intensity, often surpassing anything we previously considered humanly possible. At this point, the experiences become a strange mixture of the themes of birth and death. They involve a sense of a severe, life-threatening confinement and a desperate and determined struggle to free ourselves and survive. This intimate relationship between birth and death on the perinatal level reflects the fact that birth is a potentially life - threatening event. The child and the mother can actually lose their lives during this process and children might be born severely blue from asphyxiation, or even dead and in need of resuscitation.

The reliving of various aspects of biological birth can be very authentic and convincing and often replays this process in photographic detail. This can occur even in people who have no intellectual knowledge about their birth and lack elementary obstetric information. We can, for example, discover through direct experience that we had a breech birth, that a forceps was used during our delivery, or that we were born with the umbilical cord twisted around the neck. We can feel the anxiety, biological fury, physical pain, and suffocation associated with this terrifying event and even accurately recognize the type of anesthesia used when we were born. This is often accompanied by various postures and movements of the head and body that accurately recreate the mechanics of a particular type of delivery. All these details can be confirmed if good birth records or reliable personal witnesses are available.

The strong representation of birth and death in our psyche and the close association between them might surprise traditional psychologists and psychiatrists, but is actually logical and easily understandable. The delivery brutally terminates the intrauterine existence of the fetus. He or she 'dies' as an aquatic organism and is born as an air-breathing, physiologically, and even anatomically, different form of life. And the passage through the birth canal is itself a difficult and potentially life - threatening situation.

It is not so easy to understand, why the perinatal dynamics also regularly includes a sexual component. And yet, when we are reliving the final stages of birth in the role of the fetus, this is typically associated with an unusually strong sexual arousal. The same is true for delivering women, who can experience a mixture of fear of death and intense sexual excitement. This connection seems strange and puzzling, particularly as far as the fetus is concerned, and certainly deserves a few words of explanation.

There seems to be a mechanism in the human organism that transforms extreme suffering, especially when it is associated with suffocation, into a particular form of sexual arousal. This experiential connection can be observed in a variety of situations other than birth. People who had tried to hang themselves and were rescued in the last moment typically describe that, at the height of suffocation, they felt an almost unbearable sexual arousal. It is known that males executed by hanging typically have an erection and even ejaculate.

The literature on torture and brainwashing describes that inhuman physical suffering often triggers states of sexual ecstasy. In the sects of flagellants, who regularly engage in self-inflicted torture, and in religious martyrs, subjected to unimaginable torments, extreme physical pain at a certain point changes into sexual arousal and eventually results in ecstatic rapture and transcendental experiences. In a less extreme form, this mechanism operates in various sadomasochistic practices that include strangulation and choking.

The experiential spectrum of the perinatal domain of the unconscious is not limited to emotions and physical sensations that can be derived from the biological processes involved in childbirth. It also involves rich symbolic imagery that is drawn from the transpersonal realms. The perinatal domain is an important interface between the biographical and the transpersonal levels of the psyche. It represents a gateway to the to historical and archetypal aspects of the collective unconscious in the Jungian sense. Since the specific symbolism of these experiences has its origin in the collective unconscious, and not in the individual memory banks, it can come from any geographical and historical context, as well as any spiritual tradition of the world, quite independently from our racial, cultural, educational, or religious background.

Identification with the infant facing the ordeal of the passage through the birth canal seems to provide access to experiences of people from other times and cultures, of various animals, and even mythological figures. It is as if by connecting with the experience of the fetus struggling to be born, one reaches an intimate, almost mystical, connection with the consciousness of the human species and with other sentient beings who are or have been in a similar difficult predicament.

Experiential confrontation with birth and death seems to result automatically in a spiritual opening and discovery of the mystical dimensions of the psyche and of existence. It does not seem to make a difference whether this encounter with birth and death occurs in actual life situations, such as in delivering women and in the context of near-death experiences, or is purely symbolic. Powerful perinatal sequences in psychedelic and holotropic sessions or in the course of spontaneous psychospiritual crises ('spiritual emergencies') seem to have the same effect.

Biological birth has three distinct stages. In the first one, the fetus is periodically constricted by uterine contractions without having any chance of escaping this situation, since the cervix is firmly closed. Continued contractions pull the cervix over the fetus' head until it is sufficiently dilated to allow the passage through the birth canal. Full dilation of the cervix and descent of the head into the pelvis mark the transition from the first to the second stage of delivery that is characterized by gradual difficult propulsion through the birth pathways. And finally, in the third stage, the newborn emerges from the birth canal and, after the umbilical cord is cut, he or she becomes an anatomically independent organism.

At each of these stages, the baby experiences a specific and typical set of intense emotions and physical sensations. These experiences leave deep unconscious imprints in the psyche that later in life play an important role in the life of the individual. Reinforced by emotionally important experiences from infancy and childhood, the birth memories can shape the perception of the world, profoundly influence everyday behavior, and contribute to the development of various emotional and psychosomatic disorders.

In holotropic states, this unconscious material can surface and be fully experienced. When our process of deep self-exploration takes us back to birth, we discover that reliving each stage of delivery is associated with a distinct experiential pattern, characterized by a specific combination of emotions, physical feelings, and

symbolic images. I refer to these patterns of experience as basic perinatal matrices (BPMs).

The first perinatal matrix (BPM I.) is related to the intrauterine experience immediately preceding birth and the remaining three matrices (BPM II. - BPM IV.) to the three clinical stages of delivery described above. Besides containing elements that represent a replay of the original situation of the fetus at a particular stage of birth, the basic perinatal matrices also include various natural, historical, and mythological scenes with similar experiential qualities drawn from the transpersonal realms.

The connections between the experiences of the consecutive stages of biological birth and various symbolic images associated with them are very specific and consistent. The reason why they emerge together is not understandable in terms of conventional logic. However, that does not mean that these associations are arbitrary and random. They have their own deep order that can best be described as 'experiential logic'. What this means is that the connection between the experiences characteristic for various stages of birth and the concomitant symbolic themes are not based on some formal external similarity, but on the fact that they share the same emotional feelings and physical sensations.

### First Perinatal Matrix (BPM I.)

While experiencing the episodes of undisturbed embryonal existence (BPM I.), we often encounter images of vast regions with no boundaries or limits. Sometimes we identify with galaxies, interstellar space, or the entire cosmos, other times we have the experience of floating in the ocean or of becoming various aquatic animals, such as fish, dolphins, or whales. The undisturbed intrauterine experience can also open into visions of nature — safe, beautiful, and unconditionally nourishing, like a good womb (Mother Nature). We can see luscious orchards, fields of ripe corn, agricultural terraces in the Andes, or unspoiled Polynesian islands. The experience of the good womb can also provide selective access to the archetypal domain of the collective unconscious and open into images of paradises or heavens as they are described in the mythologies of different cultures.

When we are reliving episodes of intrauterine disturbances, or 'bad womb' experiences, we have a sense of dark and ominous threat and we often feel that we are

being poisoned. We might see images that portray polluted waters and toxic dumps. This reflects the fact that many prenatal disturbances are caused by toxic changes in the body of the pregnant mother. The experience of the toxic womb can be associated with visions of frightening demonic figures from the archetypal realms of the collective unconscious. Reliving of more violent interferences during prenatal existence, such as an imminent miscarriage or attempted abortion, is usually connected with a sense of universal threat or with bloody apocalyptic visions of the end of the world.

### Second Basic Perinatal Matrix (BPM II).

When the experiential regression reaches the mmory of the onset of biological birth, we typically feel that we are being sucked into a gigantic whirlpool or swallowed by some mythical beast. We might also experience that the entire world or even cosmos is being engulfed. This can be associated with images of devouring or entangling archetypal monsters, such as leviathans, dragons, giant snakes, tarantulas, and octopuses. The sense of overwhelming vital threat can lead to intense anxiety and general mistrust bordering on paranoia. We can also experience a descent into the depths of the underworld, the realm of death, or hell. As mythologist Joseph Campbell so eloquently described, this is a universal motif in the mythologies of the hero's journey (Campbell 1968).

Reliving the fully developed first stage of biological birth when the uterus is contracting, but the cervix is not yet open (BPM II.), is one of the worst experiences a human being can have. We feel caught in a monstrous claustrophobic nightmare, are suffering agonizing emotional and physical pain, and have a sense of utter helplessness and hopelessness. Our feelings of loneliness, guilt, absurdity of life, and existential despair can reach metaphysical proportions. We lose connection with linear time and are convinced that this situation will never end and that there is absolutely no way out. There is no doubt in our mind that what is happening to us is what the religions refer to as Hell-unbearable emotional and physical torment without any hope for redemption. This can actually be accompanied by archetypal images of devils and infernal landscapes from different cultures.

When we are facing the dismal situation of no exit in the clutches of uterine contractions, we can experientially connect with sequences from the collective unconscious that involve people, animals, and even mythological beings who are in a

similar painful and hopeless predicament. We identify with prisoners in dungeons, inmates of concentration camps or insane asylums, and with animals caught in traps. We might experience the intolerable tortures of sinners in hell or of Sisyphus rolling his boulder up the mountain in the deepest pit of Hades.

Our pain can become the agony of Christ asking God why He has abandoned him. It seems to us that we are facing the prospect of eternal damnation. This state of darkness and abysmal despair is known from the spiritual literature as the Dark Night of the Soul. From a broader perspective, in spite of the feelings of utter hopelessness that it entails, this state is an important stage of spiritual opening. If it is experienced to its full depth, it can have an immensely purging and liberating effect on those who experience it.

### Third Basic Perinatal Matrix (BPM III).

The experience of the second stage of birth, the propulsion through the birth canal after the cervix opens and the head descends (BPM III.), is unusually rich and dynamic. Facing the clashing energies and hydraulic pressures involved in the delivery, we are flooded with images from the collective unconscious portraying sequences of titanic battles and scenes of bloody violence and torture. It is also during this phase that we are confronted with sexual impulses and energies of problematic nature and unusual intensity.

It has already been described earlier that sexual arousal is an important part of the experience of birth. This places our first encounter with sexuality into a very precarious context, into a situation where our life is threatened, where we are suffering pain as well as inflicting pain, and where we are unable to breathe. At the same time, we are experiencing a mixture of vital anxiety and primitive biological fury, the latter being an understandable reaction of the fetus to this painful and life - threatening experience. In the final stages of birth, we can also encounter various forms of biological material - blood, mucus, urine, and even feces.

Because of these problematic connections, the experiences and images that we encounter in this phase typically present sex in a grossly distorted form. The strange mixture of sexual arousal with physical pain, aggression, vital anxiety, and biological material leads to sequences that are pornographic, aberrant, sadomasochistic,

scatological, or even satanic. We can be overwhelmed by dramatic scenes of sexual abuse, perversions, rapes, and erotically motivated murders.

On occasion, these experiences can take the form of participation in rituals featuring witches and satanists. This seems to be related to the fact that reliving this stage of birth involves the same strange combination of emotions, sensations, and elements that characterizes the archetypal scenes of the Black Mass and of the Witches' Sabbath (Walpurgi's Night). It is a mixture of sexual arousal, panic anxiety, aggression, vital threat, pain, sacrifice, and encounter with ordinarily repulsive biological materials. This peculiar experiential amalgam is associated with a sense of sacredness or numinosity which reflects the fact that all this is unfolding in close proximity to a spiritual opening.

This stage of the birth process can also be associated with countless images from the collective unconscious portraying scenes of murderous aggression, such as vicious battles, bloody revolutions, gory massacres, and genocide. In all the violent and sexual scenes that we encounter at this stage, we alternate between the role of the perpetrator and that of the victim. This is the time of a major encounter with the dark side of our personality, Jung's Shadow.

As this perinatal phase culminates and approaches resolution, many people envision Jesus, the Way of the Cross, and crucifixion, or even actually experience full identification with Jesus' suffering. The archetypal domain of the collective unconscious contributes to this phase heroic mythological figures and deities representing death and rebirth, such as the Egyptian god Osiris, the Greek deities Dionysus and Persephone, or the Sumerian goddess Inanna.

#### Fourth Perinatal Matrix (BPM IV).

The reliving of the third stage of the birth process, of the actual emergence into the world (BPM IV.), is typically initiated by the motif of fire. We can have the feeling that our body is consumed by searing heat, have visions of burning cities and forests, or identify with victims of immolation. The archetypal versions of this fire can take the form of the cleansing flames of Purgatory or of the legendary bird Phoenix, dying in the heat of his burning nest and emerging from the ashes reborn and rejuvenated. The purifying fire seems to destroy in us whatever is corrupted and prepare us for spiritual rebirth.

When we are reliving the actual moment of birth, we experience it as complete annihilation and subsequent rebirth and resurrection.

To understand why we experience the reliving of biological birth as death and rebirth, one has to realize that what happens to us is much more than just a replay of the original event of childbirth. During the delivery, we are completely confined in the birth canal and have no way of expressing the extreme emotions and sensations involved. Our memory of this event thus remains psychologically undigested and unassimilated. Much of our later self - definition and our attitudes toward the world are heavily contaminated by this constant deep reminder of the vulnerability, inadequacy, and weakness that we experienced at birth. In a sense, we were born anatomically but have not really caught up emotionally with the fact that the emergency and danger are over.

The 'dying' and the agony during the struggle for rebirth reflect the actual pain and vital threat of the biological birth process. However, the ego death that immediately precedes rebirth is the death of our old concepts of who we are and what the world is like, which were forged by the traumatic imprint of birth. As we are purging these old programs from our psyche and body by letting them emerge into consciousness, we are reducing their energetic charge and curtail their destructive influence on our life.

From a larger perspective, this process is actually very healing and transforming. And yet, as we are nearing its final resolution, we might paradoxically feel that, as the old imprints are leaving our system, we are dying with them. Sometimes, we not only experience the sense of personal annihilation, but also the destruction of the world as we know it.

While only a small step separates us from the experience of radical liberation, we have a sense of all-pervading anxiety and impending catastrophe of enormous proportions. The impression of imminent doom can be very convincing and overwhelming. The predominant feeling is that we are losing all that we know and that we are. At the same time, we have no idea what is on the other side, or even if there is anything there at all. This fear is the reason that at this stage many people desperately resist the process if they can. As a result, they can remain psychologically stuck in this problematic territory for an indefinite period of time.

The encounter with the ego death is a stage of the spiritual journey when we might need much encouragement and psychological support. When we succeed in overcoming the metaphysical fear associated with this important juncture and decide to let things happen, we experience total annihilation on all imaginable levels. It involves physical destruction, emotional disaster, intellectual and philosophical defeat, ultimate moral failure, and even spiritual damnation. During this experience, all reference points, everything that is important and meaningful in our life, seems to be mercilessly destroyed.

Immediately following the experience of total annihilation — 'hitting cosmic bottom'— we are overwhelmed by visions of light that has a supernatural radiance and beauty and is usually perceived as sacred. This divine epiphany can be associated with displays of beautiful rainbows, diaphanous peacock designs, and visions of celestial realms with angelic beings or deities appearing in light. This is also the time when we can experience a profound encounter with the archetypal figure of the Great Mother Goddess or one of her many culture - bound forms.

The experience of psychospiritual death and rebirth is a major step in the direction of the weakening of our identification with the body-ego, or the 'skin-encapsulated ego,' as the British-American writer and philosopher Alan Watts called it, and reconnecting with the transcendental domain. We feel redeemed, liberated, and blessed and have a new awareness of our divine nature and cosmic status. We also typically experience a strong surge of positive emotions toward ourselves, other people, nature, God, and existence in general. We are filled with optimism and have a sense of emotional and physical well - being.

It is important to emphasize that this kind of healing and life - changing experience occurs when the final stages of biological birth had a more or less natural course. If the delivery was very debilitating or confounded by heavy anesthesia, the experience of rebirth does not have the quality of triumphant emergence into light. It is more like awakening and recovering from a hangover with dizziness, nausea, and clouded consciousness. Much additional psychological work might be needed to work through these additional issues and the positive results are much less striking.

The perinatal domain of the psyche represents an experiential crossroad of critical importance. It is not only the meeting point of three absolutely crucial aspects of human

biological existence - birth, sex, and death - but also the dividing line between life and death, the individual and the species, and the individual human psyche and the universal spirit. Full conscious experience of the contents of this domain of the psyche with good subsequent integration can have far - reaching consequences and lead to spiritual opening and deep personal transformation.

## The Transpersonal Domain of the Psyche.

The second major domain that has to be added to mainstream psychiatry's cartography of the human psyche when we work with holotropic states is now known under the name *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 individual (his or her body and 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 experiences are best defined by contrasting them with the everyday experience of ourselves and the world - how we have to experience ourselves and the environment to pass for 'normal' according to the standards of our culture and of contemporary psychiatry (Grof 1975, 1988).

In the ordinary or "normal" state of consciousness, we experience ourselves as Newtonian objects existing within the boundaries of our skin. As I mentioned earlier, 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 we are separated from by a solid wall, ships that are beyond the horizon, or 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 or fantasize about them; however, these are very different experiences from an immediate and direct experience of the present moment. In transpersonal states of consciousness, however, 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 bariers, or 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, 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), or even experiencing an extension of consciousness that seems to encompass all of humanity. 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 the extremes, 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 committed to monistic materialism, these experiences suggest that everything we can experience in our everyday state of consciousness as an object, has in the non-ordinary states of consciousness 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 (e.g. in Hinduism all that exists is seen as a manifestation of Brahman, or in Taoism as a transformation of the Tao).

The second category of transpersonal experiences is characterized primarily by overcoming of temporal rather than spatial boundaries, by transcendence of linear time. We have already talked about the possibility of vivid reliving of important memories from infancy and of the trauma of birth. This historical regression can continue farther and involve authentic fetal and embryonal memories from different periods of intrauterine life. It is not even unusual to experience, on the level of cellular consciousness, full identification with the sperm and the ovum at the time of conception.

But the historical regression does not stop here and it is possible to have experiences 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 described by C. G. Jung (Jung 1956, 1959). Quite 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.

In the transpersonal experiences described so far, the content reflects various phenomena existing in spacetime. They involve elements of the everyday familiar reality - other people, animals, plants, materials, and events from the past. What is surprising here is not the content of these experiences, but the fact that we can witness or fully 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 being there and lying wounded 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 the television and a satelite). 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 than the former two. 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 farthest 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 seems to contain 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 materialistic world view. 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 these 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 thus coming from within the individual psyche. On the other hand, they seem to be able to tap directly, without the mediation of the senses, sources of information that are clearly far beyond the conventional reach of the individual. Somewhere on the perinatal level of the psyche, a strange Moebius-like flip seems to occur and what was up to that point deep intrapsychic probing becomes experiencing of the universe at large through extrasensory means.

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 a holographic way the information about the macrocosm. In the mystical traditions, this was expressed by such phrases as: "as above so below" or "as without, so within."

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 provide quite frequently very specific details about architecture, costumes, weapons, art forms, social structure, and religious and ritual practices of the cultures and historical periods involved, or even about 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 philosophical challenge associated with the already described observations, as formidable as it is all by itself, is further augmented by the fact that the transpersonal experiences correctly reflecting the material world often appear on the same continuum as and intimately interwoven with others that contain elements which the Western industrial world does not consider to be real. Here belong, for example, experiences involving deities and demons from various cultures, mythological realms such as heavens and paradises, and legendary or fairy-tale sequences.

For example, one can have an experience of Shiva's heaven, of the paradise of the Aztec raingod Tlaloc, of the Sumerian underworld, or of one of the Buddhist hot hells. It is also possible to experience oneself as Jesus on the cross, have a shattering encounter with the Hindu goddess Kali, or identify with the dancing Shiva. 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 (Jung 1959).

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 a baffling 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 of 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 (Bohm 1980, Sheldrake 1981, Laszlo 1994).

The expanded cartography 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 we will see in the following sections of this article, it has deep and revolutionary implications for the understanding of emotional and psychosomatic disorders, including psychoses, and offers exciting new perspectives for therapy.

# 2. The nature and architecture of emotional and psychosomatic disorders.

Traditional psychiatry uses for the explanations of various disorders that do not have an organic basis ('psychogenic psychopathology') explanatory models that are limited to postnatal biography and the Freudian individual unconscious. They emphasize such factors as traumatic influences in infancy, childhood, and later life, pathogenic potential of psychological conflict, the importance of family dynamics and interpersonal relationships, and the impact of social environment.

The observations from the study of holotropic states of consciousness show that emotional and psychosomatic disorders, including many states currently diagnosed as psychotic, cannot be adequately understood from difficulties in postnatal development. According to the new insights, these conditions have a multilevel, multidimensional structure with important additional roots on the perinatal level (trauma of birth) and in the transpersonal domain (ancestral, racial, and collective memories, karmic experiences, and archetypal dynamics). Bringing these elements into consideration provides a radically new, much fuller and complete picture of 'psychopathology.'

Recognition of perinatal and transpersonal roots of emotional disorders does not imply that the postnatal biographical factors described by psychoanalysis are irrelevant for their development. The events in infancy and childhood certainly continue to play an important role in the overall picture. However, instead of representing the sources of these disorders, they become important determinants for the emergence of psychological material from deeper levels of the unconscious.

The unconscious record of the experiences associated with birth represents a universal pool of difficult emotions and physical sensations that constitute a potential source for various forms of 'psychopathology.' Whether manifest symptoms and syndromes actually develop and which form they take then depends on the reinforcing influence of traumatic events in postnatal history or, conversely, on the mitigating effect of various biographical factors. In addition, the emotional and psychosomatic disorders can be co-determined by various transpersonal factors, such as karmic, archetypal, or phylogenetic elements. They are thus the result of a complicated interplay between biographical, perinatal, and transpersonal factors.

Thus, for example, a person suffering from psychogenic asthma can trace this disorder to a situation of near drowning at the age of seven, memory of being choked in childhood by an older brother, an episode of whooping cough in infancy, suffocation during birth, and past life experiences involving strangling and hanging. Similarly, the material underlying claustrophobia can include childhood memories of being repeatedly locked in a closet or cellar in childhood, a history of swaddling, difficult birth, and past life episodes of incarceration in a medieval dungeon and a Nazi concentration camp, and so on.

The scope of this paper does not allow me to demonstrate how profoundly the new observations change our understanding of a broad spectrum of specific emotional and psychosomatic disorders. I have to refer the interested reader to my earlier publication where I did this in considerable detail (Grof 1985). In this context, I can only emphasize that the new conceptual framework offers much more complete and convincing explanations for many forms of 'psychopathology' and their various aspects that could not be adequately accounted for by the existing schools of depth psychology.

## 3. Therapeutic mechanisms and the process of healing.

The new understanding of the dimensions of the human psyche and of the architecture of emotional and psychosomatic disorders described above has profound

implications for therapy. Traditional psychotherapy knows only therapeutic mechanisms operating on the level of biographical material, such as remembering of forgotten events, lifting of repression, reconstruction of the past from dreams, reliving of traumatic memories from childhood, and analysis of transference. The work with holotropic states reveals many important additional mechanisms of healing and personality transformation that become available when our consciousness reaches the perinatal and transpersonal levels.

This approach can be referred to as holotropic strategy of psychotherapy. It represents an important alternative to the techniques of various schools of depth psychology, which emphasize verbal exchange between the therapist and the client, as well as to those experiential therapies that are conducted in ordinary states of consciousness. The basic tenet of holotropic therapy is that symptoms of emotional disorders represent an attempt of the organism to free itself from old traumatic imprints, heal itself, and simplify its functioning. They are not only a nuisance and complication of life, but also a major opportunity.

Effective therapy then consists in temporary activation, intensification, and subsequent resolution of the symptoms. This is a principle that holotropic therapy shares with homeopathy. A homeopathic therapist has the task to identify and apply the remedy that in healthy individuals during the so called proofing produces the symptoms that the client manifests (Vithoulkas 1980). The holotropic state of consciousness tends to function as a universal homeopathic remedy in that it activates any existing symptoms and exteriorizes symptoms that are latent.

This understanding does not apply only to neuroses and psychosomatic disorders, but also to many conditions that mainstream psychiatrists would diagnose as psychotic and see as manifestations of serious mental disease (psychospiritual crises or 'spiritual emergencies'). The inability to recognize the healing potential of such extreme conditions reflects the narrow conceptual framework of Western psychiatry that is limited to postnatal biography and the individual unconscious. Experiences for which this framework does not provide a logical explanation are then attributed to a pathological process of unknown origin.

Careful analysis of the phenomenology of 'spiritual emergencies' shows that they constitute various combinations of perinatal, transpersonal, and biographical experiences.

Since the new extended cartography includes the elements of all these domains, a conceptual framework that incorporates it does not have to explain the origin of the content of these episodes. Their experiential elements belong to the deep levels of the human psyche *per se*, understood in this comprehensive way (Jung's 'anima mundi').

The theoretical explanation only has to account for the fact that some people have to get involved in systematic spiritual practice, breathe faster, or take a psychedelic substance to get to these levels of the psyche, whereas for others the deep contents emerge in the middle of their everyday life. The specific patterns of the experiences constituting these episodes can be understood from the general principles governing the dynamics of the psyche (COEX systems, perinatal matrices, archetypal dynamics, etc.)

# 4. The strategy of psychotherapy and self-exploration.

The goal in traditional psychotherapies is to reach an intellectual understanding of how the psyche functions and why the symptoms develop and to derive from this understanding a technique and strategy that would make it possible to correct thei emotional functioning of the clients. A serious problem with this approach is the remarkable lack of agreement among psychologists and psychiatrists about fundamental issues, resulting in an astonishing number of competing schools of psychotherapy. The work with holotropic states shows us a surprising radical alternative - mobilization of deep inner intelligence of the clients themselves that guides the process of healing and transformation.

An important assumption of holotropic strategy of therapy is that an average person in our culture operates in a way that is far below his or her real potential and capacity. This impoverishment is due to the fact that they identify with only one aspect of their being, the physical body and the ego. This false identification leads to an inauthentic, unhealthy, and unfulfilling way of life and contributes to the development of emotional and psychosomatic disorders of psychological origin. The appearance of distressing symptoms that do not have any organic basis can be seen as an indication that the individual operating on false premises has reached a point where it became obvious that the old way of being in the world does not work any more and has become untenable.

As the orientation toward the external world collapses, the contents of the unconscious start emerging into consciousness. Such a breakdown can occur in a certain limited area of life - such as marriage and sexual life, professional orientation, and pursuit of various personal ambitions - or afflict simultaneously the totality of the individual's life. The extent and depth of this breakdown correlates approximately with the seriousness of the resulting condition - development of neurotic or psychotic phenomena. Such a situation represents a crisis or even emergency, but also a great opportunity.

The main objective of holotropic strategy of therapy is to activate the unconscious and free the energy bound in emotional and psychosomatic symptoms, which converts these symptoms into a stream of experience. The task of the facilitator or therapist in holotropic therapy then is to support the experiential process with full trust in its healing nature, without trying to direct it or change it. This process is guided by the client's own inner healing intelligence. The term *therapist* is used here in the sense of the Greek *therapeutes*, which means the person assisting in the healing process, not an active agent whose task is to 'fix the client.'

Some powerful healing and transforming experiences might not have any specific content at all; they consist of sequences of intense build-up of emotions or physical tensions and subsequent deep release and relaxation. Frequently the insights and specific contents emerge later in the process, or even in the following sessions. In some instances the resolution occurs on the biographical level, in others in connection with perinatal material or with various transpersonal themes.

Dramatic healing and personality transformation with lasting effects often result from experiences that altogether elude rational understanding. It is important for the therapist to support the experiential unfolding, even if he or she does not rationally understand it. Naturally, with increasing experience, the therapist accumulates significant knowledge of the general principles underlying this process, but this does not save him or her from surprises. The dynamics of the psyche is exquisitely creative and cannot be captured in a set of rigid routinely applicable formulas.

5. The role of spirituality in human life.

In the world view of Western materialistic science only matter really exists and there is no place for any form of spirituality. Being spiritual is seen as an indication of lack of education, superstition, primitive magical thinking, wishful fantasies, and emotional immaturity. Direct experiences of spiritual dimensions of reality are seen as manifestations of serious mental disease, psychosis. Research of holotropic states of consciousness has brought evidence that, properly understood and practiced, spirituality is a natural and important dimension of the human psyche and of the universal scheme of things.

To prevent confusion and misunderstanding that in the past have plagued discussions about spiritual life and have created a false conflict between religion and science, it is critical to make a clear distinction between spirituality and religion. Spirituality is based on direct experiences of ordinarily hidden dimensions of reality. It does not necessarily require a special place, or a special person mediating contact with the divine, although mystics can certainly benefit from spiritual guidance and a community of fellow seekers. Spirituality involves a special relationship between the individual and the cosmos and is in its essence a personal and private affair. At the inception of all great religions were visionary (perinatal and transpersonal) experiences of their founders, prophets, saints, and even ordinary followers. All major spiritual scriptures -- the Vedas, the Buddhist Pali Canon, the Bible, the Koran, the Book of Mormon, and many others are based on revelations in holotropic states.

By comparison, the basis of organized religion is institutionalized group activity that takes place in a designated location (temple, church, synagogue), and involves a system of appointed mediators. Ideally, religions should provide for its members access to and support for direct spiritual experiences. However, it often happens that, once it becomes organized, a religion more or less loses the connection with its spiritual source and becomes a secular institution exploiting the human spiritual needs without satisfying them. Instead, it creates a hierarchical system focusing on the pursuit of power, control, politics, money, and other possessions. Under these circumstances, religious hierarchy tends to actively discourage and suppress direct spiritual experiences of its members, because they foster independence and cannot be effectively controled.

The observations from the study of holotropic states confirm the ideas of C. G. Jung concerning spirituality. According to him, the experiences from deeper levels of the psyche (in my own terminology perinatal and transpersonal) have a certain quality that

Jung called (after Rudolph Otto) 'numinosity'. The subjects having such experiences feel that they are encountering a dimension which is sacred, holy, radically different from everyday life, belonging to another order of reality. The term numinosity is relatively neutral and thus preferable to others, such as 'religious', 'mystical', 'magical', 'holy', 'sacred', 'occult', and others, which have often been used in problematic contexts and are easily misleading.

People who have experiences of numinous dimensions of reality open up to spirituality found in the mystical branches of the great religions of the world or in their monastic orders, not necessarily in their mainstream organizations. True spirituality is universal and all-embracing and is based on personal mystical experience rather than on dogma or religious scriptures. Mainstream organized religions unite people within their own radius, but tend to be divisive, because they set their own group against all the others and often tend to either convert them or eradicate them. There cannot be any conflict between true spirituality and correctly understood science. Transpersonal experiences are a natural manifestation of the human psyche and there is nothing unscientific in subjecting them to serious study.

# 6. The nature of reality.

The necessary revisions that we have discussed up to this point were related to the theory and practice of psychiatry, psychology, and psychotherapy. However, the work with holotropic states brings challenges of a much more fundamental nature. Many of the experiences and observations that occur during this work cannot be understood in the context of the monistic materialistic approach to reality and thus undermine the most basic metaphysical assumptions of Western science.

The most serious of these conceptual challenges concerns the claim of materialistic science that matter is the only reality and that consciousness is its product. This thesis has often been presented with great authority as a scientific fact that has been proven beyond any reasonable doubt (Dennett 1991, Crick 1994). However, when it is subjected to closer scrutiny, it becomes obvious that it is not and never was a serious scientific statement, but a metaphysical assumption masquerading as one. The gap between matter and consciousness is so radical and profound that it is hard to imagine that consciousness could simply emerge as an epiphenomenon out of the complexity of material processes in the central nervous system.

We have ample clinical and experimental evidence showing deep correlations between the anatomy, physiology, and biochemistry of the brain and conscious processes. However, none of these findings provides a clear indication that consciousness is actually generated by the brain. The origin of consciousness from matter is simply assumed as an obvious and self - evident fact based on the belief in the primacy of matter in the universe. In the entire history of science, nobody has ever offered a plausible explanation how consciousness could be generated by material processes, or even suggested a viable approach to the problem.

The idea that consciousness is a product of the brain naturally is not completely arbitrary. Its proponents usually refer to the results of many neurological and psychiatric experiments and to a vast body of very specific clinical observations from neurology, neurosurgery, and psychiatry, to support their position. When we challenge this deeply ingrained belief, does it mean that we doubt the correctness of these observations? The evidence for a close connection between the anatomy of the brain, neurophysiology, and consciousness is unquestionable and overwhelming. What is problematic is not the nature of the presented evidence but the interpretation of the results, the logic of the argument, and the conclusions that are drawn from these observations.

While these experiments clearly show that consciousness is closely connected with the neurophysiological and biochemical processes in the brain, they have very little bearing on the nature and origin of consciousness. Let us now take a closer look at the relevant clinical observations and laboratory experiments, as well as the interpretations of the evidence provided by traditional science. There is no doubt that various processes in the brain are closely associated and correlated with specific changes in consciousness. A blow on the head leading to brain concussion or compression of the carotid arteries limiting the oxygen supply to the brain can cause loss of consciousness. A lesion or tumor in the temporal lobe of the brain is often associated with very characteristic changes of consciousness that are strikingly different from those observed in persons with a pathological process in the prefrontal lobe.

The symptoms associated with various lesions of the brain are often so distinct that they can help the neurologist to identify the area afflicted by the pathological process. Sometimes a successful neurosurgical intervention can correct the problem and the conscious experience returns to normal. These facts are usually presented as

conclusive evidence that the brain is the source of human consciousness. At first glance, these observations might appear impressive and convincing. However, they do not hold up when we subject them to closer scrutiny. Strictly speaking, all that these data unequivocally demonstrate is that changes in the brain function are closely and quite specifically connected with changes in consciousness. They say very little about the nature of consciousness and about its origin; they leave these problems wide open. It is certainly possible to think about an alternative interpretation that would use the same data, but come to very different conclusions.

This can be illustrated by looking at the relationship between the TV set and the TV program. The situation here is much clearer, since it involves a system that is human-made and incomparably simpler. The final reception of the TV program, the quality of the picture and of the sound, depends in a very critical way on proper functioning of the TV set and on the integrity of its components. Malfunctions of its various parts result in very distinct and specific changes of the quality of the program. Some of them lead to distortions of form, color, or sound, others to interference between the channels. Like the neurologist who uses changes in consciousness as a diagnostic tool, a television mechanic can infer from the nature of these anomalies which parts of the set and which specific components are malfunctioning. When the problem is identified, repairing or replacing these elements will correct the distortions.

Since we know the basic principles of the television technology, it is clear to us that the set simply mediates the program and that it does not generate it or contribute anything to it. We would laugh at somebody who would try to examine and scrutinize all the transistors, relays, and circuits of the TV set and analyze all its wires in an attempt to figure out how it creates the programs. Even if we carry this misguided effort to the molecular, atomic, or subatomic level, we will have absolutely no clue why, at a particular time, a Mickey Mouse cartoon, a Star Trek sequence, or a Hollywood classic appear on the screen. The fact that there is such a close correlation between the functioning of the TV set and the quality of the program does not necessarily mean that the entire secret of the program is in the set itself. Yet this is exactly the kind of conclusion that traditional materialistic science drew from comparable data about the brain and its relation to consciousness.

Western materialistic science has thus not been able to produce any convincing evidence that consciousness is a product of the neurophysiological processes in the brain. As a matter of fact, it has been able to maintain its present position only by resisting,

censoring, and even ridiculing a vast body of observations indicating that consciousness can exist and function independently of the body and of the physical senses. This evidence comes from parapsychology, anthropology, LSD research, experiential psychotherapy, thanatology, and the study of spontaneously occurring holotropic states of consciousness.

All these disciplines have amassed impressive data demonstrating clearly that human consciousness is capable of doing many things that the brain (as understood by mainstream science) could not possibly do. There exists, for example, ample evidence suggesting that consciousness has access to information that is not and cannot possibly be stored in the brain. Discussing the characteristics of transpersonal experiences, I referred to various situations, in which visionary states provided access to accurate aspects of the universe that were previously unknown to the subject and could not have been acquired through the conventional channels. Specific case histories illustrating this phenomenon can be found in many of my books (Grof 1975, 1985, 1988, 1992, 1998).

However, let me focus on some even more striking evidence suggesting that consciousness can under certain circumstances perform functions that reach far beyond the capacities of the brain. What I have in mind is the existence of out-of-body experiences (OOBEs) with accurate perception of the environment. These can occur spontaneously, or in a variety of facilitating situations which include shamanic trance, psychedelic sessions, hypnosis, experiential psychotherapy, and particularly near-death experiences (NDE) (Moody 1975, Ring 1982 and 1985, Sabom 1982). In all these situations consciousness can separate from the body and maintain its sensory capacity, while moving freely to various close and remote locations.

Of particular interest are 'veridical OOBEs,' where independent verification proves the accuracy of perception of the environment under these circumstances. Recently, thanatologists Ring and Cooper (1997) published a fascinating study indicating that such experiences can occur even in people who are congenitally blind. Repeated reports confirming the possibility of this 'apparent eyeless vision,' as Ring calls it, should alone give mainstream scientists sufficient reason to seriously question their beliefs concerning the relationship between consciousness and the brain and, more generally, consciousness and matter.

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### Conclusions:

In this paper, I have tried to briefly summarize some of the most surprising and challenging observations from forty-five years of my research of holotropic states of consciousness, focusing primarily on three areas: psychedelic therapy, holotropic breathwork, and clinical work with individuals undergoing spontaneous psychospiritual crises ('spiritual emergencies'). The scope of this paper did not allow me to include specific examples and case histories to support my position. However, I hope that even in this sketchy form, I have succeeded to demonstrate that holotropic states deserve serious attention of researchers and theoreticians.

The phenomena associated with holotropic states are truly extraordinary and there is no doubt that they cannot be explained in terms of current theories of psychiatry and psychology. In addition, they also seriously question the basic philosophical assumptions of Western science, especially its monistic materialism. Academic circles have so far ignored and made light of the evidence that has been amassed by various avenues of modern consciousness research in this regard. They have thus been able to avoid a radical conceptual crisis that would be brought about by open-minded critical evaluation of the existing data. I firmly believe that it would lead to a radical change in our understanding of human nature and the nature of reality that would equal in its depth and significance the effects of the revolution in physics at the beginning of the twentieth century.

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