

Holotropic Breathwork: A New Experiential Method of Psychotherapy and Self-Exploration

Respiración Holotrópica: un Nuevo Método Experiential de Psicoterapia y Auto-Exploración

Stanislav Grof*

California Institute of Integral Studies
San Francisco, USA

Abstract

Holotropic breathwork is an experiential method of psychotherapy and self-exploration that Stanislav and Christina Grof developed at the Esalen Institute in Big Sur, California, in the mid - 1970s. This approach induces deep holotropic states of consciousness by a combination of very simple means: accelerated breathing, evocative music, and a technique of bodywork that helps to release residual bioenergetic and emotional blocks. This paper describes the essential components of holotropic breathwork and the course of a holotropic sesión, and summarized the complementary approaches that can facilitate a good integration and follow-up of the sesión. Furthermore, this paper describes briefly the therapeutic potential of this technique, and also consider the physiological and biochemical mechanisms that might be involved in the effects that holotropic breathwork as on consciousness.

Keywords: Holotropic Breathwork, psychotherapy, self-exploration, holotropic states of consciousness, bodywork

Resumen

La respiración holotrópica es un método experimental de psicoterapia y autoexploración desarrollado por Stanislav y Christina Grof en el Instituto Esalen en Big Sur, California, a mediados de los años 1970. Este enfoque induce profundos estados holotrópicos de consciencia por una combinación de medios muy simples: respiración acelerada, música evocativa, y una técnica de trabajo corporal que ayuda a liberar bloqueos bioenergéticos y emocionales residuales. Este artículo describe los componentes esenciales de la respiración holotrópica y el curso de una sesión holotrópica, y resume los enfoques complementarios que pueden facilitar una buena integración y seguimiento de la sesión. Además, este artículo describe brevemente el potencial terapéutico de esta técnica, así como los mecanismos fisiológicos y bioquímicos que pueden estar involucrados en los efectos que la respiración holotrópica produce sobre la conciencia.

Palabras clave: respiración holotrópica, psicoterapia, auto-exploración, estados holotrópicos de consciencia, trabajo corporal.

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Introduction

Holotropic breathwork is an experiential method of self-exploration and psychotherapy that my wife Christina and I developed at the Esalen Institute in Big Sur, California, in the mid -1970s. This approach induces deep holotropic¹ states of consciousness by a combination of very simple means - accelerated breathing, evocative music, and a technique of bodywork that helps to release residual bioenergetic and emotional blocks. The sessions are usually conducted in groups; participants work in pairs and alternate in the roles of breathers and “sitters.”

The process is supervised by trained facilitators, who assist participants whenever special intervention is necessary. Following the breathing sessions, participants express their experiences by painting mandalas and share accounts of their inner journeys in small groups. Follow-up interviews and various complementary methods are used, if necessary, to facilitate the completion and integration of the breathwork experience.

In its theory and practice, holotropic breathwork combines and integrates various elements from modern consciousness research, depth psychology, transpersonal psychology, Eastern spiritual philosophies, and native healing practices. It differs significantly from traditional forms of psychotherapy, which use primarily verbal means, such as psychoanalysis and various other schools of depth psychology derived from it. It shares certain common characteristics with the experiential therapies of humanistic psychology, such as Gestalt practice and the neo-Reichian approaches, which emphasize direct emotional expression and work with the body. However, the unique feature of holotropic breathwork is that it utilizes the therapeutic potential of holotropic states of consciousness (Grof and Grof, 2010).

The extraordinary healing power of holotropic states - which ancient and native cultures used for centuries or even millennia in their ritual, spiritual, and healing practices - was confirmed by modern consciousness research conducted in the second half of the twentieth century. This research has also shown that the phenomena occurring during these states and associated with them represent a critical challenge for current conceptual frameworks used by academic psychiatry and psychology and for their basic metaphysical assumptions. The work with holotropic breathwork thus requires a new understanding of consciousness and of the human psyche in health and disease. The basic principles of this new psychology were discussed in another context (Grof 1985, 2001, 2007).

Essential Components of Holotropic Breathwork

Holotropic breathwork combines very simple means –faster breathing, evocative music, and releasing bodywork– to induce intense holotropic states of consciousness; it uses the remarkable healing and transformative power of these states. This method provides access to biographical, perinatal, and transpersonal domains of the unconscious and thus to deep psychospiritual roots of emotional and psychosomatic disorders. It also makes it possible to utilize the mechanisms of healing and personality transformation that operate on these levels of the psyche. The process of self-exploration and therapy in holotropic breathwork is spontaneous and autonomous; it is governed by inner healing intelligence, rather than following instructions and guidelines of a particular school of psychotherapy.

Most of the recent revolutionary discoveries concerning consciousness and the human psyche on which holotropic breathwork is based are new only for modern psychiatry and psychology. They have a long history as integral parts of ritual and spiritual life of many ancient and native cultures and their healing practices. Basic principles of holotropic breathwork thus represent rediscovery, validation, and modern reformulation of ancient wisdom and procedures, some of which can be traced to the dawn of human history. As we will see, the same is true for the principal constituents used in the practice of holotropic breathwork –breathing, instrumental music and chanting, bodywork, and mandala drawing or other forms of artistic expression. They have been used for millennia in healing ceremonies and ritual practices of all pre-industrial human groups.

The Healing Power of Breath

In ancient and pre-industrial societies, breath and breathing have played a very important role in cosmology, mythology, and philosophy, as well as an important tool in ritual and spiritual practice. Various breathing techniques have been used since time immemorial for religious and healing purposes. Since earliest times, virtually every major psychospiritual system seeking to comprehend human nature has viewed breath as a crucial link between nature, the human body, the psyche, and the spirit. This is clearly reflected in the words many languages use for breath.

In the ancient Indian literature, the term *prana* meant not only physical breath and air, but also the sacred essence of life. Similarly, in traditional Chinese

medicine, the word *chi* refers to the cosmic essence and the energy of life, as well as the natural air we breathe by our lungs. In Japan, the corresponding word is *ki*. *Ki* plays an extremely important role in Japanese spiritual practices and martial arts. In ancient Greece, the word *pneuma* meant both air or breath and spirit or the essence of life. The Greeks also saw breath as being closely related to the psyche. The term *phren* was used both for the diaphragm, the largest muscle involved in breathing, and mind (as we see in the term *schizophrenia* = literally split mind).

In the old Hebrew tradition, the same word, *ruach*, denoted both breath and creative spirit, which were seen as identical. The following quote from Genesis shows the close relationship between God, breath, and life: "Then the Lord God formed man {Hebrew *adam*} from the dust of the ground, and breathed into his nostrils the breath of life; and the man became a living being." In Latin the same name was used for breath and spirit - *spiritus*. Similarly, in Slavic languages, spirit and breath have the same linguistic root.

In the native Hawaiian tradition and medicine (kanaka maoli lapa'au), the word *ha* means the divine spirit, wind, air, and breath. It is contained in the popular Hawaiian *aloha*, expression that is used in many different contexts. It is usually translated as presence (*alo*) of the Divine Breath (*ha*). Its opposite, *ha'ole*, meaning literally without breath or without life, is a term that native Hawaiians have applied to white-skinned foreigners since the arrival of the infamous British sea captain James Cook in 1778. The kahunas, "Keepers of Secret Knowledge," have used breathing exercises to generate spiritual energy (*mana*).

It has been known for centuries that it is possible to influence consciousness by techniques that involve breathing. The procedures that have been used for this purpose by various ancient and non-Western cultures cover a very wide range, from drastic interference with breathing to subtle and sophisticated exercises of various spiritual traditions. Thus, the original form of baptism practiced by the Essenes involved forced submersion of the initiate under water for an extended period of time. This resulted in a powerful experience of death and rebirth. In some other groups, the neophytes were half-choked by smoke, by strangulation, or by compression of the carotid arteries.

Profound changes in consciousness can be induced by both extremes in the breathing rate, hyperventilation and prolonged withholding of breath, as well as by using them in an alternating fashion. Very sophisticated and advanced methods of this kind can be found in the ancient Indian science of breath, or *pranayama*. William Walker Atkinson, American writer, who was influential in the turn-of-the-century

(1890s-1900s) spiritual/philosophical movement, wrote under the pseudonym Yogi Ramacharaka a comprehensive treatise on the Hindu science of breath (Ramacharaka, 1903).

Specific techniques involving intense breathing or withholding of breath are also part of various exercises in Kundalini Yoga, Siddha Yoga, the Tibetan Vajrayana, Sufi practice, Burmese Buddhist and Taoist meditation, and many others. Indirectly, the depth and rhythm of breathing gets profoundly influenced by such ritual artistic performances, as the Balinese monkey chant or Ketjak, the Inuit Eskimo throat music, Tibetan and Mongolian multivocal chanting, and singing of kirtans, bhajans, or Sufi chants.

More subtle techniques, which emphasize special awareness in relation to breathing rather than changes of the respiratory dynamics, have a prominent place in Buddhism. *Anāpānasati* is a basic form of meditation taught by the Buddha; it means literally "mindfulness of breathing" (from the Pali *anāpāna* = inhalation and exhalation and *sati* = mindfulness). Buddha's teaching of *anāpāna* was based on his experience in using it as a means of achieving his own enlightenment. He emphasized the importance of not being mindful only of one's breath, but using the breath to become aware of one's entire body and of all of one's experience. According to the *Anāpānasati Sutta* (*sutra*), practicing this form of meditation leads to the removal of all defilements (*kilesa*). The Buddha taught that systematic practice of *anāpānasati* would lead to the final release (*nirvāna* or *nibāna*).

Anāpānasati is practiced in connection with *Vipassanā* (insight meditation) and Zen meditation (*shikantaza*, literally "just sitting"). The essence of *anāpānasati* as the core meditation practice in Buddhism, especially the Theravada school, is to be merely a passive observer of the natural involuntary breathing process. This is in sharp contrast with the yogic *pranayama* practices, which employ breathing techniques that aim for rigorous control of breath. However, *anāpānasati* is not the only Buddhist form of breathing meditation. In the Buddhist spiritual practices used in Tibet, Mongolia, and Japan, the control of breathing plays an important role. Cultivation of special attention to breathing represents also an essential part of certain Taoist and Christian practices.

In materialistic science, breathing lost its sacred meaning and was stripped of its connection to the psyche and spirit. Western medicine reduced it to an important physiological function. The physical and psychological manifestations that accompany various respiratory maneuvers, have all been pathologized. The psychosomatic response to faster breathing, the so-called *hyperventilation syndrome*, is considered a pathological condition, rather than what it really is, a

process that has an enormous healing potential. When hyperventilation occurs spontaneously, it is routinely suppressed by administration of tranquilizers, injections of intravenous calcium, and application of a paperbag over the face to increase the concentration of carbon dioxide and combat the alkalosis caused by faster breathing.

In the last few decades, Western therapists rediscovered the healing potential of breath and developed techniques that utilize it. We have ourselves experimented in the context of our monthlong seminars at the Esalen Institute in Big Sur, California, with various approaches involving breathing. These included both breathing exercises from ancient spiritual traditions under the guidance of Indian and Tibetan teachers, and techniques developed by Western therapists. Each of these approaches has a specific emphasis and uses breath in a different way. In our own search for an effective method of using the healing potential of breath, we tried to simplify this process as much as possible.

We came to the conclusion that it is sufficient to breathe faster and more effectively than usual and with full concentration on the inner process. Instead of emphasizing a specific technique of breathing, we follow even in this area the general strategy of holotropic work - to trust the intrinsic wisdom of the body and follow the inner clues. In holotropic breathwork, we encourage people to begin the session with faster and somewhat deeper breathing, tying inhalation and exhalation into a continuous circle of breath. Once in the process, they find their own rhythm and way of breathing.

We have been able to confirm repeatedly Wilhelm Reich's observation that psychological resistances and defenses are associated with restricted breathing (Reich, 1949, 1961). Respiration is an autonomous function, but it can also be influenced by volition. Deliberate increase of the pace of breathing typically loosens psychological defenses and leads to a release and emergence of unconscious (and superconscious) material. Unless one has witnessed or experienced this process personally, it is difficult to believe on theoretical grounds alone the power and efficacy of this technique.

The Therapeutic Potential of Music

In holotropic breathwork, the consciousness-expanding effect of breath is combined with evocative music. Like breathing, music and other forms of sound technology have been used for millennia as powerful tools in ritual and spiritual practice. Monotonous drumming, rattling, chanting, instrumental music, and other forms of sound-producing techniques have long

represented the principle tools of shamans in many different parts of the world. Many preindustrial cultures have developed quite independently drumming rhythms that in laboratory experiments have remarkable effect on the electric activity of the brain (Goldman, 1952; Jilek, 1974; 1982; Neher, 1961, 1962). The archives of cultural anthropologists contain countless examples of trance-inducing methods of extraordinary power combining instrumental music, chanting, and dancing.

In many cultures, sound technology has been used specifically for healing purposes in the context of intricate ceremonies. The Navajo healing rituals conducted by trained singers have astounding complexity that has been compared to that of the scripts of Wagnerian operas. The trance dance of the !Kung Bushmen of the African Kalahari Desert combined with extended drumming has enormous healing power, as has been documented in many anthropological studies and movies (Lee and DeVore, 1976; Katz, 1976). The healing potential of the syncretistic religious rituals of the Caribbean and South America, such as the Cuban *santeria* or Brazilian *umbanda* is recognized by many professionals in these countries who have traditional Western medical training. Remarkable instances of emotional and psychosomatic healing occur in the meetings of Christian groups using music, singing, and dance, such as the Snake Handlers (Holy Ghost People), and the revivalists or members of the Pentecostal Church.

Some great spiritual traditions have developed sound technologies that do not induce just a general trance state, but have a specific effect on consciousness and the human psyche and body. Thus the Indian teachings postulate a specific connection between certain acoustic frequencies and the individual chakras. With systematic use of this knowledge, it is possible to influence the state of consciousness in a predictable and desirable way. The ancient Indian tradition called *nada yoga*, or the way to union through sound, has the reputation to maintain, improve, and restore emotional, psychosomatic, and physical health and well-being.

Examples of extraordinary vocal performances used for ritual, spiritual, and healing purposes are the multivocal chanting of the Tibetan Gyotso monks and of the Mongolian and Tuva shamans, the Hindu *bhajans* and *kirtans*, the Santo Daime chants (*Ikaros*) used in the ayahuasca ceremonies, the throat music of the Inuit Eskimo people, or the sacred chants (*dhikrs*) of various Sufi orders. The above are just a few examples of the extensive use of instrumental music and chanting for healing, ritual, and spiritual purposes.

We used music systematically in the program of psychedelic therapy at the Maryland Psychiatric Research Center in Baltimore, Maryland, and have learned much about its extraordinary potential for

psychotherapy (Grof, 1980, 2006). Carefully selected music seems to be of particular value in holotropic states of consciousness, where it has several important functions. It mobilizes emotions associated with repressed memories, brings them to the surface, and facilitates their expression. It helps to open the door into the unconscious, intensifies and deepens the therapeutic process, and provides a meaningful context for the experience. The continuous flow of music creates a carrier wave that helps the subject move through difficult experiences and impasses, overcome psychological defenses, surrender, and let go. In holotropic breathwork sessions, which are usually conducted in groups, music has an additional function: it masks the noises made by the participants and weaves them into a dynamic esthetic gestalt.

To use music as a catalyst for deep self-exploration and experiential work, it is necessary to learn a new way of listening to music and relating to it that is alien to our culture. In the West, we employ music frequently as an acoustic background that has little emotional relevance. Typical examples would be use of popular music in cocktail parties or piped music (*muzak*) in shopping areas and workspaces. A different approach used by sophisticated audiences is the disciplined and attentive listening to music in theaters and concert halls. The dynamic and elemental way of using music characteristic of rock concerts comes closer to the use of music in holotropic breathwork. However, the attention of participants in such events is usually extroverted and the experience lacks an element that is essential in holotropic therapy or self-exploration - sustained focused introspection.

In holotropic therapy, it is essential to surrender completely to the flow of music, let it resonate in one's entire body, and respond to it in a spontaneous and elemental fashion. This includes manifestations that would be unthinkable in a concert hall, where even crying or coughing is seen as a disturbance and causes annoyance and embarrassment. In holotropic work, one has to give full expression to whatever the music is bringing out, whether it is loud screaming or laughing, baby talk, animal noises, shamanic chanting, or talking in tongues. It is also important not to control any physical impulses, such as bizarre grimacing, sensual movements of the pelvis, violent shaking, or intense contortions of the entire body. Naturally, there are exceptions to this rule; destructive behavior directed toward oneself, others, and the physical environment is not permissible.

We also encourage participants to suspend any intellectual activity, such as trying to guess the composer of the music or the culture from which the music comes. Other ways of avoiding the emotional impact of the music involve engaging one's professional expertise - judging the performance of the

orchestra, guessing which instruments are playing, and criticizing the technical quality of the recording or of the music equipment in the room. When we can avoid these pitfalls, music can become a very powerful tool for inducing and supporting holotropic states of consciousness. For this purpose, the music has to be of superior technical quality and sufficient volume to drive the experience. The combination of music with faster breathing has a remarkable mind-manifesting and consciousness-expanding power.

As far as the specific choice of music is concerned, we will outline here only the general principles and give a few suggestions based on our experience. After a certain time, each therapist or therapeutic team develops a list of their favorite pieces for various stages of the sessions. The basic rule is to respond sensitively to the phase, intensity, and content of the participants' experience, rather than trying to program it. This is in congruence with the general philosophy of holotropic therapy, particularly the deep respect for the wisdom of the *inner healer*, for the collective unconscious, and for the autonomy and spontaneity of the healing process.

In general, it is important to use music that is intense, evocative, and conducive to a positive experience. We try to avoid selections that are jarring, dissonant, and anxiety-provoking. Preference should be given to music of high artistic quality that is not well known and has little concrete content. One should avoid playing songs and other vocal pieces in languages known to the participants, which would through their verbal content convey a specific message or suggest a specific theme. When vocal compositions are used, they should be in foreign languages so that the human voice is perceived just as another musical instrument. For the same reason, it is preferable to avoid pieces which evoke specific intellectual associations and tend to program the content of the session, such as Wagner's or Mendelssohn-Bartholdy's wedding marches and overtures to Bizet's *Carmen* or Verdi's *Aida*.

The session typically begins with activating music that is dynamic, flowing, and emotionally uplifting and reassuring. As the session continues, the music gradually increases in intensity and moves to powerful rhythmic pieces, preferably drawn from ritual and spiritual traditions of various native cultures. Although many of these performances can be esthetically pleasing, the main purpose of the human groups that developed them is not entertainment, but induction of holotropic experiences. An example here could be the dance of the whirling dervishes accompanied by beautiful music and chants. It is not designed to be admired, but to take people to the experience of God.

About an hour and a half into the session of holotropic breathwork, when the experience typically culminates, we introduce what we call “breakthrough music.” The selections used at this time range from sacred music - masses, oratoria, requiems, and other strong orchestral pieces - to excerpts from dramatic movie soundtracks. In the second half of the session, the intensity of the music gradually decreases and we bring in loving and emotionally moving pieces ('heart music'). Finally, in the termination period of the session, the music has a soothing, flowing, timeless, and meditative quality.

Most practitioners of holotropic breathwork collect musical recordings and tend to create their own favorite sequences for the five consecutive phases of the session: (1) *opening music*, (2) *trance-inducing music*, (3) *breakthrough music*, (4) *heart music*, and (5) *meditative music*. Some of them use music programs prerecorded for the entire session; this allows the facilitators to be more available for the group, but makes it impossible to flexibly adjust the selection of the music to the energy of the group.

The Use of Releasing Bodywork

The physical response to holotropic breathwork varies considerably from one person to another. Most commonly, faster breathing brings, at first, more or less dramatic psychosomatic manifestations. The textbooks of respiratory physiology refer to this response to accelerated breathing as the *hyperventilation syndrome*. They describe it as a stereotypical pattern of physiological responses that consists primarily of tensions in the hands and feet (“carpopedal spasms”). We have now conducted over thirty-five thousand holotropic breathing sessions and have found the current medical understanding of the effects of faster breathing to be incorrect.

There exist many individuals in whom fast breathing carried over a period of several hours does not lead to a classical hyperventilation syndrome, but to progressive relaxation, intense sexual feelings, or even mystical experiences. Others develop tensions in various parts of the body, but do not show signs of the carpopedal spasms. Moreover, in those who develop tensions, continued faster breathing does not lead to progressive increase of the tensions, but tends to be self-limited. It typically reaches a climactic culmination, followed by profound relaxation. The pattern of this sequence has a certain resemblance to sexual orgasm.

In repeated holotropic sessions, this process of intensification of tensions and subsequent relaxation tends to move from one part of the body to another in a

way that varies from person to person. The overall amount of muscular tensions and of intense emotions tends to decrease with the number of sessions. What happens in this process is that faster breathing, extended for a long period of time, changes the chemistry of the organism in such a way that blocked physical and emotional energies associated with various traumatic memories are released and become available for peripheral discharge and processing. This makes it possible for the previously repressed content of these memories to emerge into consciousness and be integrated. It is thus a healing process that should be encouraged and supported, and not a pathological process that needs to be suppressed, as it is common in medical practice.

Physical manifestations that develop during the breathing in various areas of the body are not simple physiological reactions to faster breathing. They show a complex psychosomatic structure and usually have specific psychological meaning for the individuals involved. Sometimes, they represent an intensified version of tensions and pains, which the person knows from everyday life, either as a chronic problem or as symptoms that appear at times of emotional or physical stress, fatigue, lack of sleep, weakening by an illness, or the use of alcohol or marijuana. Other times, they can be recognized as reactivation of old latent symptoms that the individual suffered from in infancy, childhood, puberty, or some other time of his or her life.

The tensions that we carry in our body can be released in two different ways. The first of them involves *catharsis* and *abreaction* - discharge of pent-up physical energies through tremors, twitches, dramatic body movements, coughing, and vomiting. Both catharsis and abreaction also typically include release of blocked emotions through crying, screaming, or other types of vocal expression. These are mechanisms that are well known in traditional psychiatry since the time when Sigmund Freud and Joseph Breuer published their studies in hysteria (Freud and Breuer, 1936). Various abreactive techniques have been used in traditional psychiatry in the treatment of traumatic emotional neuroses, and abreaction also represents an integral part of the new experiential psychotherapies, such as the neo-Reichian work, Gestalt practice, and primal therapy.

The second mechanism that can mediate release of physical and emotional tensions plays an important role in holotropic breathwork, rebirthing, and other forms of therapy using breathing techniques. It represents a new development in psychiatry and psychotherapy, and seems to be more effective than abreaction. Here the deep tensions surface in the form of *unrelenting muscular contractions of various duration* (“*tetany*”). By sustaining these muscular

tensions for extended periods of time, the organism consumes enormous amounts of previously pent-up energy and simplifies its functioning by disposing of them. The deep relaxation that typically follows the temporary intensification of old tensions or appearance of previously latent ones bears witness to the healing nature of this process.

These two mechanisms have their parallels in sport physiology, where it is well known that it is possible to do work and train the muscles in two different ways, by *isotonic* and *isometric* exercises. As the name suggest, during isotonic exercises the tension of the muscles remains constant while their length oscillates. During isometric exercises, the tension of the muscles changes, but their length remains the same all the time. A good example of isotonic activity is boxing, while weight-lifting or bench-pressing distinctly isometric exercises. Both of these mechanisms are extremely effective in releasing and resolving deep-seated chronic muscular tension. In spite of their superficial differences, they have thus much in common, and in holotropic breathwork they complement each other very effectively.

In many instances, the difficult emotions and physical sensations that emerge from the unconscious during holotropic breathwork sessions get spontaneously resolved, and the breathers end up in a deeply relaxed meditative state. In that case, no external interventions are necessary, and the breathers remain in this state until they return to the ordinary state of consciousness. After getting clearance from the facilitators, they move to the art room to draw a mandala.

If the breathing, in and of itself, does not lead to a good completion and there are residual tensions or unresolved emotions, facilitators offer participants a specific form of bodywork which helps them to reach a better closure for the session. The general strategy of this work is to ask the breather to focus his or her attention on the area where there is a problem and do whatever is necessary to intensify the existing physical sensations. The facilitators then help to intensify these feelings even further by appropriate external intervention.

While the attention of the breather is focused on the energetically charged problem area, he or she is encouraged to find a spontaneous reaction to this situation. This response should not reflect a conscious choice of the breather, but be fully determined by the unconscious process. It often takes an entirely unexpected and surprising form - voice of a specific animal, talking in tongues or an unknown foreign language, shamanic chant from a particular culture, gibberish, or baby talk.

Equally frequent are completely unexpected physical reactions, such as violent tremors, jolts,

coughing, and vomiting, as well as various characteristic animal movements – climbing, flying, digging, crawling, slithering, and others. It is essential that the facilitators encourage and support what is spontaneously emerging, rather than apply some technique offered by a particular school of therapy. This work should be continued until the facilitator and the breather reach an agreement that the session has been adequately closed. The breather should end the session in a comfortable and relaxed state.

Supportive and Nourishing Physical Contact

In holotropic breathwork, we also use a different form of physical intervention, one that is designed to provide support on a deep preverbal level. This is based on the observation that there exist two fundamentally different forms of trauma that require diametrically different approaches. The first of these can be referred to as *trauma by commission*. It is the result of external intrusions that had damaging impact on the future development of the individual. Here belong such insults as physical, emotional, or sexual abuse, frightening situations, destructive criticism, or ridicule. These traumas represent foreign elements in the unconscious that can be brought into consciousness, energetically discharged, and resolved.

Although this distinction is not recognized in conventional psychotherapy, the second form of trauma, *trauma by omission*, is radically different. It actually involves the opposite mechanism - lack of positive experiences that are essential for a healthy emotional development. The infant, as well as an older child, have strong primitive needs for instinctual satisfaction and security that pediatricians and child psychiatrists call *anaclitic* (from the Greek *anaklinein* meaning to lean upon). These involve the need to be held and experience skin contact, be caressed, comforted, played with, and be the center of human attention. When these needs are not met, it has serious consequences for the future of the individual.

Many people have a history of emotional deprivation, abandonment, and neglect in infancy and childhood that resulted in serious frustration of the anaclitic needs. The only way to heal this type of trauma is to offer a *corrective experience* in the form of supportive physical contact in a holotropic state of consciousness. For this approach to be effective, the individual has to be deeply regressed to the infantile stage of development, otherwise the corrective measure would not reach the developmental level on which the trauma occurred. Depending on circumstances and on previous agreement, this physical support can range from simple holding of the hand or touching the forehead to full body contact.

Use of nourishing physical contact is a very effective way of healing early emotional trauma. However, it requires following strict ethical rules. We have to explain to the breathers before the session the rationale of this technique and get their approval to use it. Under no circumstances can this approach be practiced without previous consent and no pressures can be used to obtain this permission. For many people with a history of sexual abuse, physical contact is a very sensitive and charged issue. Very often those who most need such healing touch have the strongest resistance against it. It can sometimes take a long time before a person develops enough trust toward the facilitators and the group to be able to accept this technique and benefit from it.

Supportive physical contact has to be used exclusively to satisfy the needs of the breathers and not those of the sitters or facilitators. By this I do not mean only sexual needs or needs for intimacy which, of course, are the most obvious issues. Equally problematic can be the sitter's strong need to be needed, loved, or appreciated, unfulfilled maternal need, and other less extreme forms of emotional wants and desires. An incident from one of our workshops at the Esalen Institute in Big Sur, California, can serve here as a good example.

At the beginning of our five-day seminar, one of the participants, a postmenopausal woman, shared with the group how much she had always wanted to have children and how much she suffered because this had not happened. In the middle of the holotropic breathwork session, in which she was the sitter for a young man, she suddenly pulled the upper part of her partner's body into her lap and started to rock and comfort him.

Her timing could not have been worse; as we found out later during the sharing, he was at the time in the middle of a past-life experience that featured him as a powerful Viking warrior on a military expedition. He described with a great sense of humor how he initially tried to experience her rocking as the movement of the boat on the ocean; however, when she added comforting babytalk, that made it impossible for him to continue and brought him back to reality.

It is usually quite easy to recognize when a breather is regressed to early infancy. In a really deep age regression, all the wrinkles in the face tend to disappear and the individual can actually look and behave like an infant. This can involve various infantile postures and gestures, as well as copious salivation and intense thumb-sucking. Other times, the appropriateness of offering physical contact is obvious from the context, for example, when the breather just finished reliving biological birth and looks lost and forlorn. The maternal needs of the woman in the Esalen workshop were so strong that they took over and she

was unable to objectively assess the situation and act appropriately.

The use of nourishing physical contact in holotropic states to heal traumas caused by abandonment, rejection, and emotional deprivation was developed by two London psychoanalysts, Pauline McCririck and Joyce Martin; they used this method with their LSD patients under the name of *fusion therapy*. During their sessions, their clients spent several hours in a deep age regression, lying on a couch covered with a blanket, while Joyce or Pauline lay by their side, holding them in close embrace, as a good mother would do to comfort her child (Martin 1965).

Their revolutionary method effectively divided and polarized the community of LSD therapists. Some of the practitioners realized that this was a very powerful and logical way to heal *traumas by omission*, emotional problems caused by emotional deprivation and bad mothering. Others were horrified by this radical "anaclitic* therapy;" they warned that close physical contact between therapist and client in a non-ordinary state of consciousness would cause irreversible damage to the transference/countertransference relationship.

At the Second International Conference on the use of LSD in psychotherapy held in May 1965 in Amityville, Long Island, Joyce and Pauline showed their fascinating film on the use of the fusion technique in psychedelic therapy. In a heated discussion that followed, most of the questions revolved around the transference/countertransference issues. Pauline provided a very interesting and convincing explanation why this approach presented less problems in this regard than orthodox Freudian approach. She pointed out that most patients who come to therapy experienced in their infancy and childhood lack of affection from their parents. The cold attitude of the Freudian analyst tends to reactivate the resulting emotional wounds and triggers desperate attempts on part of the patients to get the attention and satisfaction that had been denied to them (Martin, 1965).

By contrast, according to Pauline, *fusion therapy* provided a corrective experience by satisfying the old anaclitic cravings. Having their emotional wounds healed, the patients recognized that the therapist was not an appropriate sexual object and were able to find suitable partners outside of the therapeutic relationship. Pauline explained that this paralleled the situation in the early development of object relationships. Individuals, who receive adequate mothering in infancy and childhood, are able to emotionally detach from their mothers and find mature relationships. By contrast, those who experienced emotional deprivation, remain pathologically attached and go through life craving and seeking satisfaction of

primitive infantile needs. We used occasionally fusion therapy in the psychedelic research program at the Maryland Research Center, particularly in the work with terminal cancer patients (Grof, 2006). In mid-1970s, when we developed holotropic breathwork, anaclitic support became an integral part of our workshops and training.

Before closing this section, I would like to address one question that often comes up in the context of holotropic workshops or lectures on experiential work: "Why should reliving of traumatic memories be therapeutic rather than represent a retraumatization?" The best answer can be found in the article "Unexperienced Experience" by the Irish psychiatrist Ivor Browne (Browne, 1990). He suggested that we are not dealing here with an exact replay or repetition of the original traumatic situation, but with the first full experience of the appropriate emotional and physical reaction to it. This means that, at the time when they happen, the traumatic events are recorded in the organism, but not fully consciously experienced, processed, and integrated.

In addition, the person who is confronted with the previously repressed traumatic memory is not any more the helpless and vitally dependent child or infant that he or she was in the original situation, but a grown-up adult. The holotropic state induced in powerful experiential forms of psychotherapy thus allows the individual to be present and operate simultaneously in two different sets of space-time coordinates. Full age regression makes it possible to experience all the emotions and physical sensations of the original traumatic situation from the perspective of the child, but at the same time analyze and evaluate the memory in the therapeutic situation from a mature adult perspective. It is also interesting to mention that breathers reliving various traumatic memories who, for an outside observer, appear to be in a lot of pain and suffer immensely, have actually typically a subjective feeling of purging pain from their bodies, and experience relief rather than emotional and physical pain.

Mandala Drawing: Expressive Power of Art

Mandala is a Sanskrit word meaning literally "circle" or "completion." In the most general sense, this term can be used for any design showing complex geometrical symmetry, such as a spiderweb, arrangement of petals in a flower or blossom, sea shell (e.g. a sand dollar), image in a kaleidoscope, stained glass window in a Gothic cathedral or labyrinth design on its floor. The mandala is a visual construct that can be easily grasped by the eye, since it corresponds to the structure of the organ of visual perception. The pupil of

the eye is itself a simple mandala form.

In ritual and spiritual practice, the term mandala refers to images, which can be drawn, painted, modeled, or danced. In the Tantric branches of Hinduism, Buddhism, Vajrayana, and Jainism, this word refers to elaborate cosmograms composed of elementary geometrical forms (points, lines, triangles, squares, and circles), lotus blossoms, and complex archetypal figures and sceneries. They are used as important meditation aids, which help practitioners to focus attention inside and lead them to specific states of consciousness.

Although the use of mandalas in the tantric branches of Hinduism, Buddhism, and Jainism has been particularly refined and sophisticated, the art of mandala drawing as part of spiritual practice can be found in many other cultures. Examples of particularly beautiful mandalas are the *nierikas*, yarn paintings of the Huichol Indians from Central Mexico, portraying visions induced by ritual ingestion of peyote. Elaborate sand paintings used in the healing and other rituals of the Navajo people and the bark paintings of the Australian Aborigenes also include many intricate mandala patterns.

The use of mandalas in spiritual and religious practice of various cultures and in alchemy attracted the attention of the Swiss psychiatrist C. G. Jung, who noticed that similar patterns appeared in the paintings of his patients at a certain stage of their psychospiritual development. According to him, the mandala is a "psychological expression of the totality of the self." In his own words: "The severe pattern imposed by a circular image of this kind compensates the disorder and confusion of the psychic state - namely, through the construction of a central point to which everything is related." (Jung, 1959 b).

Our own use of mandala drawing was inspired by the work of Joan Kellogg, who was a member of the team at the Maryland Psychiatric Research Center in Baltimore, MD, conducting psychedelic therapy. When she had worked as art therapist in psychiatric hospitals in Wycoff and Paterson, New Jersey, Joan had given hundreds of patients a piece of paper with an outline of a circle and painting utensils and asked them to paint whatever came to their mind. She was able to find significant correlations between their psychological problems and clinical diagnosis and specific aspects of their paintings, such as choice of colors, preference for sharp or round shapes, use of concentric circles, dividing the mandala into sections, and respecting or not respecting boundaries of the circle.

At the Maryland Psychiatric Research Center, Joan compared the mandalas the experimental subjects were painting before and after their psychedelic sessions, looking for significant correlations between the basic features of the mandalas, content of

psychedelic experiences, and outcome of therapy. We have found her method to be extremely useful in our work with holotropic breathwork. Joan herself saw the mandala drawing as a psychological test and described in several papers the criteria for interpretations of their various aspects (Kellogg 1977, 1978). In our work, we do not interpret the mandalas, but use them in the sharing groups simply as a source of information about the breathers' experiences. We will describe the work with the mandalas in a later section of this paper.

An interesting alternative to mandala drawing is the method of "SoulCollage" developed by Seena B. Frost (Frost, 2001). Many participants in holotropic workshops, training, and therapy, experience psychological blocks when they are confronted with the task to draw or paint. As we mentioned earlier, this usually has its roots in some traumatic experiences that they had as children with their teachers and/or peers in art classes or in their generally low self-esteem that makes them doubt their abilities and paralyzes their performance. "SoulCollage" helps these people overcome their emotional blocks and resistances; it is a creative process which anyone can do, since it uses already existing paintings or photographs.

Instead of drawing and painting utensils, participants receive a rich selection of illustrated magazines, catalogues, calendars, greeting cards, and postcards. They can also bring their personal photos from the family album or pictures of people, animals, and landscapes they have themselves taken. Using scissors, they cut out pictures or fragments thereof that seem appropriate to portray their experience; they fit them together and glue them on pre-cut mat board cards. If they participate in ongoing groups, they end up eventually with a deck of cards, which have deep personal meaning for them. They can take these cards to a friend's house, to sessions of individual therapy or support groups, or use them as decorations in their home.

The Course of Holotropic Sessions

The nature and course of holotropic sessions varies considerably from person to person and in the same person also from session to session. Some individuals remain entirely quiet and almost motionless. They might have very profound experiences, yet give the impression to an external observer that nothing is happening or that they are sleeping. Others are agitated and show rich motor activity. They experience violent shaking and complex twisting movements, roll and flail around, assume fetal positions, behave like infants struggling in the birth canal, or look and act like newborns. Also crawling,

slithering, swimming, digging, or climbing movements are quite common.

Occasionally, the movements and gestures can be extremely refined, complex, quite specific, and differentiated. They can take the form of strange animal movements emulating snakes, birds, or feline predators and be associated with corresponding sounds. Sometimes breathers assume spontaneously various yogic postures and gestures (*asanas* and *mudras*) with which they are not intellectually familiar. Occasionally, the automatic movements and/or sounds resemble ritual or theatrical performances from different cultures –shamanic practices, Javanese dances, the Balinese monkey chant, Japanese Kabuki, or talking in tongues reminiscent of the Pentecostal meetings.

The emotional qualities observed in holotropic sessions cover a very wide range. On one side of the spectrum, one can encounter feelings of extraordinary well-being, profound peace, tranquillity, serenity, bliss, cosmic unity, or ecstatic rapture. On the other side of the same spectrum are episodes of indescribable terror, consuming guilt, or murderous aggression, and a sense of eternal doom. The intensity of these extraordinary emotions can transcend anything that can be experienced or even imagined in the everyday state of consciousness. These extreme emotional states are usually associated with experiences that are perinatal or transpersonal in nature.

In the middle band of the experiential spectrum observed in holotropic breathwork sessions are less extreme emotional qualities that are closer to what we know from our daily existence - episodes of anger, anxiety, sadness, hopelessness, and feelings of failure, inferiority, shame, guilt or disgust. These are typically linked to biographical memories; their sources are traumatic experiences from infancy, childhood, and later periods of life. Their positive counterparts are feelings of happiness, emotional fulfillment, joy, sexual satisfaction, and general increase in zest.

As I mentioned earlier, in some instances faster breathing does not induce any physical tensions or difficult emotions, but leads directly to increasing relaxation, sense of expansion and well-being, and visions of light. The breather can feel flooded with feelings of love and experiences of mystical connection to other people, nature, the entire cosmos, and God. More frequently, these positive emotional states arise at the end of the holotropic sessions, after the challenging and turbulent parts of the experience have been worked through.

It is surprising how many people in our culture, because of strong Protestant ethics or for some other reasons, have great difficulties accepting ecstatic experiences, unless they follow suffering and hard work, or even then. They often respond to them with a strong sense of guilt or with a feeling that they do not

deserve them. It is also common, particularly in mental health professionals, to react to positive experiences with mistrust and suspicion that they hide and mask some particularly painful and unpleasant material. It is very important under these circumstances to assure the breathers that positive experiences are extremely healing and encourage them to accept them without reservation as unexpected grace.

A typical result of a holotropic breathwork session is profound emotional release and physical relaxation. After a successful and well-integrated session, many people report that they feel more relaxed than they have ever felt in their life. Continued accelerated breathing thus represents an extremely powerful and effective method of stress reduction and it is conducive to emotional and psychosomatic healing. Another frequent result of this work is connection with the numinous dimensions of one's own psyche and of existence in general. This is also frequent occurrence in ritual and spiritual practices of many cultures and ages.

The healing potential of breath is particularly strongly emphasized in Kundalini yoga. There episodes of faster breathing are used in the course of meditative practice (*bastrika*) or occur spontaneously as part of the emotional and physical manifestations known as *kriyas*. This is consistent with my own view that similar spontaneous episodes occurring in psychiatric patients and referred to as the *hyperventilation syndrome*, are attempts at self-healing. They should be encouraged and supported rather than routinely suppressed, which is the common medical practice.

Holotropic breathwork sessions vary in their duration from individual to individual and, in the same individual, also from session to session. It is essential for the best possible integration of the experience that the facilitators and sitters stay with the breather as long as he or she is in process and has unusual experiences. In the terminal stage of the session, good bodywork can significantly facilitate emotional and physical resolution. Intimate contact with nature can also have a very calming and grounding effect and help the integration of the session. Particularly effective in this regard is exposure to water, such as a stay in a hot tub or swim in a pool, a lake, or in the ocean.

Mandala Drawing and the Sharing Groups

When the session is completed and the breather returns to the ordinary state of consciousness, the sitter accompanies him or her to the mandala room. This room is equipped with a variety of art supplies, such as pastels, magic markers, and watercolors, as well as large drawing pads. On the sheets of these pads are

pencil drawings of circles about the size of dinner plates. The breathers are asked to sit down, meditate on their experience, and then find a way of expressing what happened to them during the session by using these tools.

There are no specific guidelines for the mandala drawing. Some people simply produce color combinations, others construct geometrical mandalas or figurative drawings or paintings. The latter might represent a vision that occurred during the session or a pictorial travelogue with several distinct sequences. On occasion, the breather decides to document a single session with several mandalas reflecting different aspects or stages of the session. In rare instances, the breather has no idea what he or she is going to draw and produces an automatic drawing.

We have seen instances when the mandala did not illustrate the immediately preceding session, but actually anticipated the session that followed. This is in congruence with C. G. Jung's idea that the products of the psyche cannot be fully explained from preceding historical events. In many instances, they have not just a retrospective, but also a prospective aspect. Some mandalas thus reflect a movement in the psyche that Jung called *the individuation process* and reveal its forthcoming stage. A possible alternative to mandala drawing is sculpting with clay. We introduced this method when we had in our group participants who were blind and could not draw a mandala. It was interesting to see that some of the other participants preferred to use this medium, when it was available, or opted for a combination mandala/three-dimensional figure.

Later during the day, breathers bring their mandalas to a sharing session, in the course of which they talk about their experiences. The strategy of the facilitators who lead the group is to encourage maximum openness and honesty in sharing the experience. Willingness of participants to reveal the content of their sessions, including various intimate details, is conducive to bonding and development of trust in the group. It encourages others to share with equal honesty, which deepens, intensifies, and accelerates the therapeutic process.

In contrast with the practice of most psychotherapeutic schools, facilitators abstain from interpreting the experiences of participants. The reason for it is the lack of agreement among the existing schools concerning the functioning of the psyche, its principal motivating forces, and the cause and meaning of the symptoms. Under these circumstances, any interpretations are questionable and arbitrary. Another reason for staying away from interpretations is the fact that psychological contents are typically overdetermined and are meaningfully related to several levels of the psyche. Giving a supposedly definitive

explanation or interpretation carries the danger of freezing the process and interfering with therapeutic progress.

A more productive alternative is to ask questions that help to elicit additional information from the perspective of the client who, being the experiencer, is the ultimate expert as far as his or her experience is concerned. When we are patient and resist the temptation to share our own impressions, participants very often find their own explanations that best fits their experiences. On occasion, it can be very helpful to share our observations from the past concerning similar experiences or point out connections with experiences of other members of the group. When the experiences contain archetypal material, it can be very helpful to use C. G. Jung's method of *amplification* – pointing out parallels between a particular experience and similar mythological motifs from various cultures - or to consult a good dictionary of symbols.

Follow-Up and Use of Complementary Techniques

On the days following intense sessions that involved a major emotional breakthrough or opening, a wide variety of complementary approaches can facilitate good integration. Among them are discussions about the session with an experienced facilitator, writing down the content of the experience, drawing additional mandalas, meditation, and movement meditation, such as hatha yoga, tai-chi, or qi-gong. Good bodywork with a practitioner who allows emotional expression, jogging, swimming, and other forms of physical exercise, or expressive dancing, can be very useful, if the holotropic experience freed excess of previously pent-up physical energy. A session of Dora Kalff's Jungian sandplay (Kalff and Kalff, 2004), Fritz Perls' Gestalt therapy (Perls, 1973), Jacob Moreno's psychodrama (Moreno, 1948), or Francine Shapiro's eye movement desensitization and reprocessing (EMDR) (Shapiro, 2001), can be of great help in refining insights into the holotropic experience and understanding its content.

Therapeutic Potential of Holotropic Breathwork

Christina and I have developed and practiced holotropic breathwork outside of the professional setting –in our monthlong seminars and shorter workshops at the Esalen Institute, in various breathwork workshops in many other parts of the world, and in our training program for facilitators. I have not had the opportunity to test the therapeutic efficacy of this method in the same way I had been

able to do in the past when I conducted psychedelic therapy. The psychedelic research at the Maryland Psychiatric Research Center involved controlled clinical studies with psychological testing and a systematic, professionally conducted follow-up. (Grof, 1980, 2006).

However, the therapeutic results of holotropic breathwork have often been so dramatic and meaningfully connected with specific experiences in the sessions that I have no doubt holotropic breathwork is a viable form of therapy and self-exploration. We have seen over the years numerous instances when participants in the workshops and the training were able to break out of depression that had lasted several years, overcome various phobias, free themselves from consuming irrational feelings, and radically improve their self-confidence and self-esteem. We have also witnessed on many occasions disappearance of severe psychosomatic pains, including migraine headaches, and radical and lasting improvements or even complete clearing of psychogenic asthma. On many occasions, participants in the training or workshops favorably compared their progress in several holotropic sessions to years of verbal therapy.

When we talk about evaluating the efficacy of powerful forms of experiential psychotherapy, such as work with psychedelics or holotropic breathwork, it is important to emphasize certain fundamental differences between these approaches and verbal forms of therapy. Verbal psychotherapy often extends over a period of years and major exciting breakthroughs are rare exceptions rather than commonplace events. When changes of symptoms occur, it happens on a broad time scale and it is difficult to prove their causal connection with specific events in therapy or the therapeutic process in general. By comparison, in a psychedelic or holotropic session, powerful changes can occur in the course of a few hours and they can be convincingly linked to a specific experience.

The changes observed in holotropic therapy are not limited to conditions traditionally considered emotional or psychosomatic. In many cases, holotropic breathwork sessions led to dramatic improvement of physical conditions that in medical handbooks are described as organic diseases. Among them was clearing of chronic infections (sinusitis, pharyngitis, bronchitis, and cystitis) after bioenergetic unblocking opened blood circulation in the corresponding areas. Unexplained to this day remains solidification of bones in a woman with osteoporosis that occurred in the course of holotropic training.

We have also seen restitution of full peripheral circulation in twelve people suffering from Raynaud's disease, a disorder that involves coldness of hands and feet accompanied by dystrophic changes of the skin. In several instances, holotropic breathwork led to striking

improvement of arthritis. In all these cases, the critical factor conducive to healing seemed to be release of excessive bioenergetic blockage in the afflicted parts of the body followed by vasodilation. The most astonishing observation in this category was a dramatic remission of advanced symptoms of Takayasu arteritis, a disease of unknown etiology, characterized by progressive occlusion of arteries in the upper part of the body. It is a condition that is usually considered progressive, incurable, and potentially lethal.

There are many instances, when the therapeutic potential of holotropic breathwork was confirmed in clinical studies conducted by practitioners who had been trained by us and independently use this method in their work. A significant number of clinical studies was also conducted by psychiatrists and psychologists in Russia who have not participated in our training for facilitators. Some of the studies in both of these categories, among others, are listed in a special section of the bibliography of this paper.

On many occasions, we have also had the opportunity to receive informal feedback from people years after their emotional, psychosomatic, and physical symptoms had improved or disappeared after holotropic sessions in our training or in our workshops. This has shown us that the improvements achieved in holotropic sessions are often lasting. I hope that the efficacy of this interesting and promising method of self-exploration and therapy will be in the future confirmed by well-designed extensive clinical research.

Physiological Mechanisms Involved in Holotropic Breathwork

In view of the powerful effect holotropic breathwork has on consciousness, it is interesting to consider the physiological and biochemical mechanisms that might be involved. Many people believe that when we breathe faster, we simply bring more oxygen into the body and the brain. But the situation is actually much more complicated. It is true that faster breathing brings more air and thus oxygen into the lungs, but it also eliminates carbon dioxide (CO₂) and causes vasoconstriction in certain parts of the body.

Since CO₂ is acidic, reducing its content in blood increases the alkalinity of the blood (so called pH) and in an alkaline setting relatively less oxygen is being transferred to the tissues. This in turn triggers a homeostatic mechanism that works in the opposite direction: the kidneys excrete urine that is more alkaline to compensate for this change. The brain is also one of the areas in the body that can respond to faster breathing by vasoconstriction. Since the degree

of gas exchange does not depend only on the rate of breathing, but also on its depth, the situation is quite complex and it is not easy to assess the overall situation in an individual case without a battery of specific laboratory examinations.

However, if we take all the above physiological mechanisms into consideration, the situation of people during holotropic breathwork very likely resembles that in high mountains, where there is less oxygen and the CO₂ level is decreased by compensatory faster breathing. The cerebral cortex, being the youngest part of the brain from an evolutionary point of view, is generally more sensitive to a variety of influences (such as alcohol and anoxia) than the older parts of the brain. This situation would thus cause inhibition of the cortical functions and intensified activity in the archaic parts of the brain, making the unconscious processes more available.

It is interesting that many individuals, and entire cultures, who lived in extreme altitudes, were known for their advanced spirituality. We can think in this context of the yogis in the Himalayas, the Tibetan Buddhists in the Quinzang high plateau, and the Incas in the Peruvian Andes. It is tempting to attribute it to the fact that, in an atmosphere with a lower content of oxygen, they had easy access to transpersonal experiences. However, an extended stay in high elevations leads to physiological adaptations, for example, hyperproduction of red blood cells in the spleen. The acute situation during holotropic breathwork might, therefore, not be directly comparable to an extended stay in high mountains.

In any case, there is a long way from the description of the physiological changes in the brain to the extremely rich array of phenomena induced by holotropic breathwork, such as authentic experiential identification with animals, archetypal visions, or past life memories. This situation is similar to the problem of the psychological effects of LSD. The fact that both of these methods can induce transpersonal experiences in which there is access to accurate new information about the universe through extrasensory channels, makes it difficult to accept that such experiences are stored in the brain.

Aldous Huxley, after having experienced psychedelic states, came to the conclusion that our brain cannot possibly be the source of the rich and fantastic array of phenomena that he had experienced. (Huxley, 1959). He suggested that it is more likely that the brain functions like a reducing valve that shields us from an infinitely larger cosmic input. The concepts, such as "memory without a material substrate" (von Foerster, 1965), Sheldrake's "morphogenetic fields" (Sheldrake, 1981), and Laszlo's "psi field" or "akashic field" (Laszlo, 1993, 2004) bring important support for Huxley's idea and make it increasingly plausible.

Conclusions

In conclusion, I would like to compare psychotherapy using holotropic states of consciousness, in general, and holotropic breathwork, in particular, with talking therapies. Verbal methods of psychotherapy attempt to get to the roots of emotional and psychosomatic problems indirectly by helping the clients to remember relevant forgotten and repressed events from their life or reconstruct them indirectly by analysis of dreams, symptoms, or distortions of the therapeutic relationship (transference).

Most of verbal psychotherapies also use a model of the psyche, which is limited to postnatal biography and to the Freudian individual unconscious. They also employ techniques that cannot reach the perinatal and transpersonal domains of the psyche and thus the deeper roots of the disorders they are trying to heal. The limitations of verbal therapies are particularly obvious in relation to memories of traumatic events that have a strong physical component, such as difficult birth, episodes of near-drowning, and injuries or diseases. Traumas of this kind cannot be worked through and resolved by talking about them; they have to be relived and the emotions and blocked physical energies attached to them have to be fully expressed.

Other advantages of holotropic breathwork are of economic nature; they are related to the ratio between the number of participants in breathwork groups and the number of facilitators. It was estimated that a classical psychoanalyst was able to treat about eighty patients in his or her entire lifetime. In spite of all the changes psychotherapy has undergone since Freud's times, the ratio between the number of clients needing treatment and the number of professional therapists required for this task continues to be very unfavorable.

By comparison, holotropic breathwork utilizes the healing potential of group members, who alternate in the roles of breathers and "sitters." Participants do not have any special training to be good sitters. A typical group requires one trained facilitator per eight to ten group participants. Although it might be objected that traditional group psychotherapy has a similar or even better therapist/client ratio, it is important to take into consideration that in breathwork groups each participant has a personal experience focused specifically on his or her problems. Sitters also repeatedly report what a profound experience it was for them to assist others and how much they had learned from it.

In addition, many people who had experienced verbal psychotherapy before they came to holotropic breathwork often compared favorably the results of a small number of breathwork sessions with what they

achieved in years of talking therapy. I hope that in the near future these impressions will be confirmed by well-designed controlled clinical studies.

Notes

1. This composite word (*holotropic*) means 'oriented toward wholeness' or 'moving toward wholeness', from the Greek *holos* = whole, and *trepein* = moving toward or in the direction of something. (Grof and Grof, 2010).

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- *Stanislav Grof, M.D., Ph.D.**, born in 1931 in Prague, is a psychiatrist with more than fifty years experience researching the healing and transformative potential of non-ordinary states of consciousness, induced by psychedelic substances and various non-pharmacological methods. Currently, he is professor of Psychology at the California Institute of Integral Studies (CIIS) in San Francisco, and at Wisdom University in Oakland, California. He has organized large international conferences throughout the world, and continues to lecture and teach professional training programs in Holotropic Breathwork and transpersonal psychology worldwide. Dr. Grof is one of the founders and chief theoreticians of the transpersonal psychology, and is also the founder of the International Transpersonal Association (ITA). In October 2007, he received the prestigious *Vision 97* award granted by the Foundation of Dagmar and Vaclav Havel, in Prague. Among his publications are more than 140 papers in professional journals, and many books, including: *Realms of the Human Unconscious*; *LSD Psychotherapy*; *Beyond the Brain*; *The Adventure of Self-Discovery*; *The holotropic mind*; *The cosmic game*; *Psicology of the future*; *The final journey*; *Spiritual Emergency*; *The Stormy Search for the Self*, and *Holotropic Breathwork* (the last three with Christina Grof).
Web: www.stanislavgrof.com