the human place within it, with significant methodological innovations.

Of course while the dominant themes of the Brazilian context – both the social and the environmental – shape to a considerable extent the theological reflection on the environment, the larger context also shapes this reflection. Thus the importance of human care for the natural world as care for God's creation, often expressed by the Pope, and the environmental interests of other parts of the Catholic Church from contexts beyond Brazil may play a role in shaping Brazilian Catholic environmental thought. A similar role is played by Brazilian participation in the larger arena of international Christian theological conversations, as well as interaction with secular thought and participation in secular social movements.

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See also: Amazonia; Ananda Marga's Tantric Neo-Humanism; Boff, Leonardo; Christianity (6a) – Roman Catholicism; Christianity(7c) – Liberation Theology; Gebara, Ivone; Rainforests (Central and South America); Rubber Tappers.

P Breathwork

The term "breathwork" refers to a broad array of practices and exercises that work specifically with the process of respiration. Practical techniques to intensify, control, or withhold the breath have been utilized for centuries in many cultures to awaken deeper levels of consciousness and spiritual awareness. Although breathwork has traditionally been practiced in a spiritual, religious, or therapeutic context, it has a strong capacity to awaken insights and awareness about nature, the Earth, and the mysteries of life itself. Hence, applications of breathwork are rapidly growing in ecological contexts.

Breathwork has a vast history in religious practice. Nearly every spiritual and religious tradition around the globe has utilized breathing exercises in one form or another. Examples of traditions that emphasize breathing practices include Kundalini Yoga and Siddha Yoga (bastrika), Raja Yoga and Kriya Yoga (pranayama), Tibetan Vajrayana Buddhism, Sufism, Burmese Buddhism (tummo), and Daoism. More subtle forms of breathing disciplines are also found in Theravadan Buddhism (vipassana), Zen, and certain Daoist and Christian prac-

tices. In all these cases, skillful breathing exercises serve to awaken interior levels of conscious awareness in the practitioner, and some practices activate powerful healing energies in the psyche.

In contemporary Western culture, Wilhelm Reich was perhaps the first to recognize the power of breathwork practices, and his clinical work revealed that psychological defenses and physiological tensions are often closely associated with restricted breathing. Since Reich's pioneering work, breathwork has emerged in a variety of contemporary forms. Numerous professional associations have been formed to promote and facilitate various forms of breathwork, including the Association for Holotropic Breathwork and the International Breathwork Foundation.

Over the past two decades, breathwork has experienced growing application in ecological circles. Australian rainforest activist John Seed began utilizing breathwork in his retreat programs for activists in the early 1990s. The Satyana Institute in Colorado has introduced breathwork to environmental activists in many regions throughout the United States, holding annual breathwork programs for environmental leaders in Colorado and Idaho. As one environmental leader Matt Baker characterized his breathwork experience, "it allowed me to let go of preconceptions, to root myself, and to experience deeply who I am" (Baker 2001: 3). William Blake once observed that "The tree, which moves some to tears of joy, is in the eyes of others only a green thing which stands in the way" (1906: 259). The latter perspective is epitomized in a timber executive's remark that trees are nothing but stumps with stacks of money on top. Breathwork and similar transpersonal or shamanistic practices have an uncanny power to transform such mechanistic perceptions of nature, and awaken in the breather a lived experience of the sacred mystery that inheres in every life form. In breathwork, trees are frequently experienced as Blake perceived them: a living embodiment of the unperturbed, centered, timeless consciousness of life itself, far beyond the turmoil of the world.

Readers unfamiliar with breathwork may understandably find it difficult to imagine that merely working with something as seemingly simple and ordinary as the breath could have much effect. Yet breathing practices are powerful methods for awakening deeper dimensions of consciousness and awareness, which is why they have been employed extensively in spiritual traditions. In the words of psychiatrist Stanislav Grof, "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" (Grof 1988: 171).

Breath is intricately fundamental to life, and thus to work with breath is to work with the intimate spirit and mystery of life itself. In many languages this is reflected etymologically, where the word for "breath" and "spirit" are the same, or have the identical root. *Prana* in Sanskrit

means both spirit and the energy of breath. Pneuma in ancient Greek has the same double meaning, as does ruach in Hebrew. The Latin spiritus also meant both breath and spirit, and has come down to us in English as the root of spirit and respiration.

Western Breathwork: Holotropic Breathwork

Perhaps the most clinically developed and tested mode of breathwork in the West today is known as Holotropic Breathwork, developed by psychiatrist Stanislav Grof and his wife Christina. The Grofs and their colleagues experimented for several years at Esalen Institute in California with many different kinds of breathing practices - drawn from ancient spiritual traditions as well as contemporary psychology. From this foundation, the Grofs developed the Holotropic methodology, and they have trained hundreds of practitioners around the world. The term "holotropic" means moving toward wholeness or totality of experience (derived from the Greek holos, "whole," and trepein, "to move toward").

The Holotropic technique combines sustained rhythmic breathing with evocative music and focused bodywork. The practice typically activates an "inner journey" in the breather, a form of introspective exploration in which breathers become aware of deeper dimensions of their own consciousness, often evoking experiences of tremendous insight, healing, or psychological or spiritual significance.

As usually practiced, Holotropic breathwork is generally done in pairs in a group context, supported by carefully selected music. Each "breather" has a designated "sitter" who gives undivided attention to the breather, and provides logistical or emotional support as needed. The sitter's role is crucial, and often proves to be a powerful and moving experience in its own right. Trained facilitators oversee the process, and provide focused body work and other individual interventions when necessary. Breathers lie on mats with their eyes closed and breathe intensively, and the sessions generally last between two and three hours.

Outwardly, the process of breathwork may at first seem to be a deliberate activation of the respiratory syndrome known as "hyperventilation." Yet among the Grofs' key findings - after conducting intensive breathwork sessions with more than 30,000 people - is that this traditional clinical understanding of rapid breathing is fundamentally mistaken. The Grofs conclude,

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 ... are released and become available for peripheral discharge and processing . . . 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 commonly practiced in mainstream medicine (Grof 2000: 192).

Two principles are of central importance in Holotropic Breathwork. First, there is no "correct" or prescribed experience that breathers are supposed to undergo. The innate wisdom of each individual is recognized as the authority or guide for the breathwork session, so that each participant's inner process is honored and supported in its natural unfolding as non-directively as possible. The second principle is that emotional and physical expression is encouraged during the breathwork session, including the release of painful or negative emotions that normally might be repressed or avoided. A sense of spontaneous psychological and/or physical healing often occurs naturally as a consequence of full experience of such emotions or unconscious material that had been previously blocked. After breath sessions, people often report a sense of expanded awareness, fresh insights, an open heart, and renewed creative energy.

Breathwork Experiences

Participants' experiences in breathwork are often quite vivid and psychologically impacting, spanning a broad spectrum of personal, psychological, archetypal, spiritual, and mystical dimensions. These experiences may include unresolved personal issues, past traumatic physical or emotional experiences, birth memories and experiences, death and rebirth sequences, awakening of compassion or ecological consciousness through identification with other beings or life forms, and a wide variety of transpersonal and mystical experiences that touch mythological, archetypal, and universal dimensions.

Grof has mapped out a general classification of these diverse experiences into what he calls a "new cartography of the human psyche" (Grof 1988: 1). Breathwork experiences are grouped into three broad domains of qualitative character: biographical, perinatal, and transpersonal realms. The biographical realm refers to the breather's personal life history, the perinatal realm refers to experiences relating to birth and death, and the transpersonal realm relates to experiences that transcend ordinary space, time, and personal identification, including mythological and spiritual experiences. Of particular interest is a whole category of experiences relating to ecological consciousness and the natural world. Experiential identification with animals is not uncommon and can be extremely authentic, including direct insights into physiological sensations, instinctual habits and drives, and detailed perception of the natural environment from within the animal's perceptual framework. Some of these insights have been later verified in the research literature by people who had no prior knowledge of them. Identification with plants and trees are also common, as well as rivers, mountains, oceans, and the Earth itself.

The rich breadth and depth of breathwork experiences is analogous to what emerges in deep meditation, dreamwork, and contemplative spiritual disciplines, all of which entail non-ordinary states of consciousness. Such experiences can have a profound potential healing or transformative effect on consciousness. Grof emphasizes that modern Western society is the only culture in the world that has held the view that people can transform their limited consciousness and psychological or spiritual perspectives by simply thinking about or analyzing them. All other cultures – both ancient and contemporary – recognize that some form of non-ordinary state of consciousness is essential to catalyze the development of expanded awareness and authentic spiritual insight.

When done in groups, breathwork serves as a powerful catalyst for the dynamics of group process, and often opens the group to deeper shared perceptions of life and nature. This happens in several ways. First, breathwork facilitates deep inner work within each individual, often characterized by new insights or healing experiences. Second, the process naturally cultivates a unique form of bonding and intimacy between the breather and sitter, which often becomes a powerful dimension of the overall experience. Third, the breathwork process creates a subtle field of collective presence and "healing energy" in the group – often quite palpable – that enables all participants in the group to bear compassionate witness to one another and to the larger context of which they are a part. This intensified bonding experience often extends beyond the immediate human community to include larger circles of life, including ancestors, other life forms and ecosystems, and a palpable sense of interconnection with the Earth and the cosmos.

Breathwork and Nature: Some Examples

Three examples are given below to illustrate how breathwork can awaken ecological insights and profound experiences of the natural world.

- 1) A scientist had been intensively researching the habitats of elk for an ecological protection campaign, and attended a retreat where he experienced breathwork for the first time. During his breathing session, he suddenly experienced himself transformed into an elk. He vividly felt himself as a large elk, galloping across a high mountain meadow amidst a herd of fellow elk. This experience was so uncanny and viscerally compelling, he reported, that in some real sense he had somehow actually become an elk during that time, and he described feeling "elkness" as his own very being. In this non-ordinary state of transpersonal identification, he had a flood of insights into what elk actually experience living in the wild. Similar experiences of identification with animals and plants and even the entire Earth are widely documented in breathwork literature.
- 2) A woman experienced herself in breathwork as the Great Mother Goddess, Mother Earth, and then from this shifted into the following experience of planetary consciousness:

The experience of being Mother Earth then changed into actually becoming the planet Earth. There was no question that I – the Earth – was a living organism, an intelligent being trying to understand myself, struggling to evolve to a higher level of awareness, and attempting to communicate with other cosmic beings.

The metals and minerals constituting the planet were my bones, my skeleton. The biosphere – the plant life, animals, and humans – were my flesh. I experienced within myself the circulation of water from the oceans to the clouds and from there into little creeks and large rivers and back into the sea. The water system was my blood and the meteorological changes – the evaporation, air currents, the rainfall, and the snow – ensured its circulation, transport of nourishment, and cleansing. The communication between plants, animals, and humans, including modern technology – the press, telephone, radio, television, and the computer network – were my nervous system, my brain.

I felt in my body the injury of the industrial insults of strip mining, urbanization, toxic and radioactive waste, and pollution of air and water. The strangest part of the session was that I was aware of rituals among various aboriginal peoples and experienced them as very healing and absolutely vital for myself. It seems somewhat weird and bizarre to me now, when I have returned to my everyday rational thinking, but during my experience it was extremely convincing that doing rituals is important for the Earth (in Grof 1988: 66–7).

3) The final example illustrates how breathing practices have the potential to open the heart, and release the practitioner from ordinary consciousness into the vast expanse of mystical or spiritual rapture:

It felt like I was on a ride as I twisted and turned, always pushing forward. I heard the music but did not feel connected to the group or the room. Then it began to feel like birth. I pushed and pushed – through this small narrow tunnel, with much effort. After what seemed like a long time I finally pushed through this place. And then I just exploded out – into the most love I have ever felt. I cried and cried in love and profound gratitude. It felt very sacred. Here I relaxed into expansiveness and love. There was no sense of body, no me. Only love. (This account of the breathwork experience, as is the first one, is drawn from the author's client files.)

Breathwork provides a profound vehicle for in-depth exploration of the spectrum of human and ecological consciousness. Breathing practices span a vast array of

A sample entry from the

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© 2005 All Rights Reserved specific techniques that have not been touched upon here. The literature on breathwork is extensive and profound, yet no words can substitute for actual experience, and readers who wish to experience breathwork are advised to seek instruction and guidance from competent practitioners. The sages who developed breathwork maintain that the deepest secrets of breathing practice can never be conveyed in words or concepts. As the Indian mystical poet Kabir muses:

What is God? He is the breath inside the breath.

Will Keepin

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Breeding and Contraception

The natural environment has always set the outer limits for human fertility. Archeologists and anthropologists who examine Cro-Magnon, Neanderthal and early Neolithic artifacts suggest that concern for fertility, both in animals and plants as well as in humans themselves, was central to early human religions. Following the agricultural revolution, as human settlements became larger and more complex, religions also became more complex, with rituals and deities connected with a broader range of human productive activities. Specific deities were worshipped as guardians of human fertility, others as mistress or master of animals, some as the embodiment of natural forces such as storms, rivers and springs, and yet others as goddesses and gods of grain and other crops. Virtually all religions until relatively recently in human history have tended to pronatalism as a result of human insecurity during millennia of fairly substantial fluctuations in human population levels. Until the modern period, human population expanded and then contracted in response to famines, epidemics and wars, increasing only incrementally over long periods of time. While some religious cults of the late Neolithic prescribed castration for the priests of some individual deities, pronatalism was the standard for the masses, though of course specific groups and families periodically limited fertility to the level of resources available.

Evidence for deliberate human control of fertility begins in societies with written records. The most common ancient practice of fertility control around the world was certainly infanticide. Many local religious traditions accepted infanticide, though under circumstances that varied from group to group. Among Vikings, for example, newborns were formally presented to fathers that they might decide whether the child would live or die; weak or defective children were frequently exposed, and the necessity for their deaths was legitimated in religious myths. In some societies such as ancient Arabia, female infanticide was common, both as a way of limiting the population of some nomadic bands, and to spare families the expense of raising daughters. The story of Onan in the Hebrew Torah demonstrates that primitive contraceptive practices such as coitus interruptus were used in the ancient world. Some parts of the ancient Gnostic movement espoused celibacy in the belief that incarnation, and materiality itself, corrupted the soul and prevented it from unity with divine energy. Buddhism and, later, Christianity introduced the idea that monastic celibacy, in order to devote one's self totally to the pursuit of salvation, was the most perfect vocation. Neither religion expected all to take up this superior path; for both religions, those who chose the secular path linked to materiality had chosen limited (and in Buddhism, illusory) goods over ultimate good; in both traditions, reproduction and supporting