

UC Irvine

UC Irvine Previously Published Works

Title

Early Psychedelic Investigators Reflect on the Psychological and Social Implications of their Research

Permalink

<https://escholarship.org/uc/item/78f0n0hq>

Journal

Journal of Humanistic Psychology, 46(4)

ISSN

0022-1678

Authors

Walsh, Roger
Grob, Charles S

Publication Date

2006-10-01

DOI

10.1177/0022167806286745

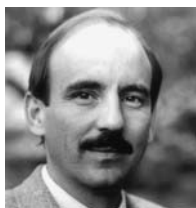
Copyright Information

This work is made available under the terms of a Creative Commons Attribution License, available at

<https://creativecommons.org/licenses/by/4.0/>

Peer reviewed

EARLY PSYCHEDELIC INVESTIGATORS REFLECT ON THE PSYCHOLOGICAL AND SOCIAL IMPLICATIONS OF THEIR RESEARCH



ROGER WALSH, MD, PhD, is professor of psychiatry, philosophy, and anthropology and adjunct professor of religious studies at the University of California at Irvine. His research interests include psychological well-being, meditation and other therapeutic and transformative disciplines, Asian psychologies and philosophies, transpersonal and integral studies, and religion and spirituality. His publications include *Paths Beyond Ego: The Transpersonal Vision* and *Essential Spirituality: The Seven Central Practices*.



CHARLES S. GROB, MD, is the director of the Division of Child and Adolescent Psychiatry at Harbor-UCLA Medical Center and professor of psychiatry and pediatrics at the UCLA School of Medicine. He is currently conducting a FDA-approved investigation on the safety and efficacy of psilocybin treatment in advanced-stage cancer patients with anxiety and was previously the principal investigator

AUTHORS' NOTE: The authors wish to acknowledge the generous financial support of the Fetzer Institute and Institute of Noetic Sciences and the support of the many individuals who lent their expertise and energy to the Oral History of Psychedelics Research Project. These people include Alise Agar-Wittine, Wink Franklin, Frances Vaughan, Betsy Gordon, and Jeremy Tarcher. People who assisted with interviewing include Gary Bravo, Rick Doblin, Robert Jesse, and Ralph Metzner. Finally, of course, we wish to thank the pioneering investigators for their work and their willingness to share their knowledge. The material in this article draws from their interviews and from summary chapters prepared for *Higher Wisdom* to be published by State University of New York Press. Please send correspondence to Roger Walsh, Department of Psychiatry, University of California Medical School, Irvine, CA 92697-1675.

Journal of Humanistic Psychology, Vol. 46 No. 4, October 2006 432-448
DOI: 10.1177/0022167806286745
© 2006 Sage Publications

of human research studies of MDMA in the United States and *ayahuasca* in Brazil. He is the editor of *Hallucinogens: A Reader*, published by Tarcher/Putnam, 2002, and the coeditor with Roger Walsh of *Higher Wisdom: Eminent Thinkers Reflect on the Continuing Impact and Implications of Psychedelics*, published by State University of New York Press, 2005.

Summary

In the brief period before it was legally terminated, considerable human subjects research was conducted on psychedelics. More than 1,000 clinical reports documented a wide array of psychological effects and therapeutic possibilities. The findings held major implications for disciplines as diverse as psychology, psychiatry, neuroscience, anthropology, sociology, and religious studies. Psychological and psychiatric findings included insights into states of consciousness, the unconscious, and the relationship of different schools of psychology, motivation, self-actualization, spirituality, psychotherapy, and adjunctive therapies. With further human subjects studies virtually impossible, the original investigators clearly constitute an irreplaceable resource of information. An interdisciplinary group of surviving investigators was therefore convened and interviewed to obtain an oral history of the findings and implications of their research. This article provides a summary of their conclusions, of the psychological and social implications of their research, and of the impact their research had on diverse academic disciplines.

Keywords: *psychedelics; entheogens; actualization; spirituality; healing*

Psychedelics have been part of human experience for thousands, if not tens of thousands of years, and have played a major role in a surprising number of cultures and traditions (Furst, in press). Historical examples include Zoroastrian *haoma*, Hinduism's *soma*, the Australian Aboriginals' *Pituri*, and the *kykeon* of the Greek Eleusian mysteries (Smith, 1964). Contemporary examples include Rastafarian *ganja* [marijuana], Native American peyote, and the South American shamans' *ayahuasca* (Harner, 1973; Walsh, in press).

However, the story is very different in the West. Psychedelics were all but unknown, until in the 1960s they came crashing into a culture utterly unprepared for them. Psychedelics have now rumbled through the Western world for half a century, fascinating

youth, enraging politicians, seeding subcultures, and intriguing researchers, and their effects reverberate to this day. Tens of millions of people have used them; millions still do—sometimes carefully and religiously, often casually and dangerously. Psychedelics have affected culture and counterculture, art and music, and science and psychiatry. They continue to fuel spiritual practices such as meditation and yoga, to inspire raves and rebellion, to fertilize research on brain and behavior, and to suggest new understandings of topics as diverse as neurotransmitters, consciousness, creativity, and cults (Grinspoon & Bakalar, 1997).

It is not surprising that researchers quickly began investigating these drugs. In stark contrast to the panic attacks or worse that occurred with ill-prepared street users or unwitting CIA victims (Lee & Shlain, 1985), careful clinical and research use of psychedelics resulted in a surprisingly low incidence of serious adverse effects (less than 1%) and no deaths (Strassman, 1984, 1997).

Clinically, the drugs showed therapeutic promise for a wide array of difficult problems, such as chronic alcoholism, severe psychosomatic disorders, death anxiety in cancer patients, and even concentration camp syndrome (Grinspoon & Bakalar, 1997; Grob, 1998, 2002; Grof, 2001; Ka-Tzetnik 135633, 1998). However, some of these clinical claims must be regarded as tentative because many studies were relatively unsophisticated by today's standards. Nevertheless, the net effect of more than 1,000 publications in the clinical literature suggests that psychedelics may have considerable therapeutic potential and deserve further research. However, this research has not occurred because human subject's research was banned in the late 1960s. Without an ongoing research program, much of this research data has simply been forgotten—a case of institutional and historical amnesia.

Paradoxically, this makes the original surviving investigators a uniquely valuable resource. In their laboratories and clinics, these investigators observed and analyzed tens of thousands of psychedelic sessions. In doing this, they witnessed an unparalleled variety and intensity of human experiences, including some of the rarest, most painful, and most profound. In fact, perhaps no group in history has seen such panoply of experience. It is not a surprise that many researchers reported that not only their subjects, but also they themselves, were deeply affected by their work (Grof, 2001; Walsh & Grob, 2005).

In the late 1990s, several individuals and organizations realized that the surviving investigators constitute an irreplaceable reservoir

of knowledge, and the Oral History of Psychedelic Research Project was therefore initiated. A conference and individual interviews were organized of an interdisciplinary group—including psychologists, psychiatrists, anthropologists, pharmacologists and theologians—to obtain the widest possible range of perspectives.¹ Their interviews and discussions were distilled into a book (Walsh & Grob, 2005). Their major conclusions on psychological issues and the impact their findings had on diverse academic disciplines are summarized and discussed below. Their conclusions are not necessarily objective analyses, nor are they meant to be. Rather, they are in the oral history genre: subjective reports from people who devoted a significant part of their careers to these topics.

SUMMARY AND DISCUSSION OF INVESTIGATORS' CONCLUSIONS

These conclusions are summarized under the heading of dosage strategies, the nature of mind, spirituality, view of human nature, psychotherapy and transformation, and professional impact.

Dosage Strategies

Two distinct therapeutic approaches quickly emerged: low-dose “psycholytic” and high-dose “psychedelic” therapies. The low-dose psycholytic method particularly fostered the amplification and exploration of psychodynamic issues and levels of the unconscious. As such, it facilitated work with personal issues. However, during multiple sessions, deeper layers of the unconscious might emerge and produce transpersonal or even mystical experiences.

The high dose psychedelic approach, on the other hand, tended to quickly catapult subjects through the psychodynamic levels and on to transpersonal and even mystical experiences. Psychodynamic issues might emerge, particularly if severe, but might also be bypassed and transcended in powerful spiritual experiences. Researchers using the high-dose psychedelic approach concluded that therapeutic and growth benefits occurred in large part as a result of these transpersonal experiences. As such, they rediscovered Carl Jung’s (1973) conclusion that “the approach to the numinous is the real therapy, and inasmuch as you attain the numinous experience you are released from the curse of pathology” (p. 377).

The Nature of Mind

Investigators reported that their understanding of the mind deepened and transformed. They felt compelled to recognize the importance of altered states of consciousness, the multilayered nature of the unconscious, spiritual aspects of the psyche, and a positive view of human nature.

All of these researchers concluded that we have significantly underestimated the variety, power, and potential of altered states, as well as their profound transformative capacities. So closely did their conclusions mirror those of William James (1936/1958) of a century earlier that it is worth repeating his famously eloquent statement on this topic, written after he had himself experienced the impact of nitrous oxide:

One conclusion was forced upon my mind at that time, and my impression of its truth has ever since remained unshaken. It is that our normal consciousness, rational consciousness as we call it, is but one special type of consciousness, whilst all about it, parted from it by the filmiest of screens, there lie potential forms of consciousness entirely different. We may go through life without suspecting their existence; but apply the requisite stimulus, and at a touch they are there in all their completeness, definite types of mentality which probably somewhere have their field of application and adaptation. No account of the universe in its totality can be final which leaves these other forms of consciousness quite disregarded. (p. 298)

James, who is widely regarded as America's greatest psychologist, captured the conclusions of psychedelic researchers who followed him a century later.

A second compelling recognition was the multilayered nature of the mind and the vastness of the unconscious. Layer after layer was often peeled away, to quote Betty Eisner (in press):

Like one can do with an onion[.] You can sit there and watch the Freudian or Jungian principles manifest themselves. Then you can go deeper and deeper and deeper, until finally the ego cracks completely and you transcend it . . .

No one theory or school proved adequate to account for all these layers. Rather, psychedelic sessions unveiled experiences consistent with psychodynamic theories as diverse as those of Freud, Rank, and Jung, and often in that order. From this perspective,

most schools of psychology and psychotherapy seemed incomplete, and Stanislav Grof (1985) summarized this dilemma as follows:

The major problem in Western psychotherapy seems to be that, for various reasons, individual researchers have focused their attention primarily on a certain level of consciousness and generalized their findings for the human psyche as a whole. For this reason, they are essentially incorrect, although they may give a useful and reasonably accurate description of the level they are describing, or one of its major aspects. (p. 142)

A third common conclusion concerned a fundamental capacity and drive of mind. The mind increasingly came to be seen as a self-organizing, self-optimizing system. Most of these investigators concluded that, given supportive conditions, the mind tends to be self-healing, self-integrating, and self-actualizing.

These innate tendencies for the mind to unfold and develop its potentials had been recognized before in both Eastern and Western psychology and philosophy. Long ago, Plato spoke of Eros and Tibetan Buddhism of the self-liberating nature of mind. More recent recognitions include neuroanatomist Kurt Goldstein's *actualization*, Karen Horney's *self-realization*, Carl Rogers's *formative tendency*, Carl Jung's *individuation urge*, Abraham Maslow's *self-actualization* and *self-transcendence*, Erik Erikson's *self-perfectibility*, philosopher Ken Wilber's *eros*, and Aldous Huxley's "*moksha drive*" (Wilber, 2000a, 2000b). These tendencies of mind had been repeatedly recognized throughout history, but they became unavoidably evident with the catalytic power of psychedelics. Stanislav Grof later coined the related term *holotropism* to describe the mind's tendency to move toward holotropic or transpersonal experiences and thereby heal and integrate.

One practical result of this recognition of holotropism was that these researchers came to emphasize a relatively noninterfering approach in therapeutic sessions based on a deep trust in the psyche's self-healing capacities. This is similar to the perspectives found particularly in humanistic and Rogerian therapies and now being rediscovered by therapists combining meditation with traditional psychotherapeutic approaches (Mahoney, 2003).

Spirituality

All the investigators concluded that psychodynamic experiences did not exhaust the layers and depths of the psyche. For after these

personal layers, there frequently emerged transpersonal ones. Here, experiences were consistent, not primarily with the theories of Western clinicians but rather with those of contemplative traditions. The personal layers of the psyche appeared to rest on still deeper transpersonal layers.

These transpersonal layers opened experiences and realms of mind comparable to those described by meditative and contemplative traditions (Goleman, 1988; Walsh, 1999; Walsh & Vaughan, 1993; Wilber, 2000a, 2000b). Some subjects, especially healthy ones in high dose psychedelic sessions, reported experiences of ecstasy, mystical union, pure consciousness, the void, or satori, which were suddenly transformed from esoteric mumbo jumbo into potent, life-changing experiences. The result, for many of the subjects and the researchers, was a new and deeper appreciation of the world's religious traditions, and many reoriented their lives accordingly.

For example, James Fadiman (in press) reported that his “disinterest in spiritual things was as valid as a ten-year-old’s disinterest in sex: it came out of a complete lack of awareness. . .” Likewise, when asked about long-term changes in his subjects, Myron Stolaroff (in press) concluded,

I think that the most distinguishing mark is accepting spirituality in their lives, a conviction that life has a spiritual basis. They fashioned their lives to live in harmony with that idea as much as they could, and because of this, they really stand apart from most folks.

This interest in spirituality could emerge even in people who had previously been intensely hostile to it, as Stanislav Grof observed:

It would appear that everybody who experiences these levels develops convincing insights into the utmost relevance of the spiritual dimension in the universal scheme of things. Even positivistically oriented scientists, hard-core materialists, skeptics and cynics, uncompromising atheists and antireligious crusaders such as Marxist philosophers and politicians, suddenly become interested in the spiritual quest after they confronted these levels in themselves. (Grof, 2001, p. 70)

All the researchers therefore ended up at least sympathetic to and, in several cases deeply committed to, a spiritual worldview. A striking feature of this worldview was its nondenominational or perhaps transdenominational perspective. Even those originally committed to a specific tradition—such as Huston Smith to Christianity or Rabbi Zalman Schachter to Judaism—clearly honored the value of other traditions.

A Positive View of Human Nature

It is not a surprise that these investigators found their previous views of human nature and possibilities challenged. All of them concluded that we have seriously underestimated human nature, creativity, and consciousness, and this led to a more positive view of human nature.

Several researchers, such as Stanislav Grof and Gary Fisher, had been trained in psychoanalysis and had adopted its view of the psyche as inherently conflictual. However, this perspective did not survive for long. It was not that they found Freudian descriptions necessarily incorrect. Rather, the aspect of the psyche that Freud described seemed to them to be only one level among many. Certainly, researchers saw all too clearly the inner sources of incalculable human savagery and suffering. However, they also concluded that these were produced largely because of alienation from a deeper, more benign nature, and that this deeper nature, when recognized, tended to reframe and heal the sources of pathology.

Psychotherapy and Transformation

All those researchers who employed psychedelics clinically found their views of psychotherapy and transformation significantly altered. All of them concluded that in selected clients, treated under appropriate conditions, beneficial change could sometimes occur more quickly and deeply than with conventional therapies, and in occasional cases, more quickly and deeply than usually assumed possible. Clinical literature on psychedelics contains accounts of dramatic—even single session—alleviations of major and even seemingly intractable disorders (e.g., Grinspoon & Bakalar, 1997; Grob, 2002; Grof, 1985, 2001; Walsh & Grob, 2005). Needless to say, dramatic transformation from a single experience—which is now called “quantum change”—is very rare under ordinary circumstances (Miller & deBaca, 2001).

The list of disorders that were found amenable is long. It includes chronic alcoholism and drug addiction, depression and assorted neuroses, personality and psychosomatic disorders, the emotional and physical suffering in people approaching death, and concentration camp syndrome (Grinspoon & Bakalar, 1997; Grof, 1985, 2001; Ka-Tzetnik 135633, 1998; Walsh & Grob, 2005).

Of course, these claims need to be accepted cautiously. As previously described, many studies were not rigorously designed or

controlled, and most were only case histories. Nevertheless, the number, variety, and extent of transformations that these researchers describe are dramatic. All the clinical investigators felt that given the changes they saw plus the limitations of conventional therapy, further clinical research on psychedelics seemed warranted.

The researchers also reached intriguing conclusions about therapeutic approaches and exactly what is beneficial in therapy. As in practically all therapies, a trusting relationship proved crucial—"the basic element of LSD therapy is *trust*," concluded Betty Eisner (in press). However, dialogue between client and therapist, which most therapies view as central, appeared less important. Indeed, in high-dose sessions, it sometimes seemed more distracting than beneficial.

Rather, what seemed most healing and actualizing was a deep experiencing and acceptance of whatever experiences arose. Crucial above all else was the capacity of awareness to metabolize, transform, and heal the experiences brought to it.

Psychedelic researchers therefore independently discovered a crucial principle of healing and growth at the core of diverse therapies. For Jungians, it is the principle that "Therapeutic progress depends upon awareness; in fact the attempt to become more conscious is the therapy" (Whitmont, 1969, p. 293). Fritz Perls (1969), the founder of gestalt therapy summarized it as "Awareness—by and of itself—can be curative" (p. 16), whereas the psychosynthesis writer Piero Ferrucci (1982) went further to claim that "Awareness not only liberates, it also integrates" (p. 54). For humanistic psychologist Carl Rogers, fully experiencing is crucial for transformation and for what he called a "moment of movement" (Raskin & Rogers, 2000).

This recognition is not confined to psychotherapies. It is also central to most major contemplative traditions, which urge students to give careful awareness to each moment. For example, Judaism urges "attend to this moment here and now" (Shapiro, 1993, p. 88), and in Islamic Sufism, "The best act of worship is watchfulness of the moments" (Abu Bakr Muhammad Al-Wasiti, 1995, p. 84). Likewise, Christian contemplatives are urged, "Above all, guard the intellect and be watchful" (Abba Philemon, 1993, p. 97), whereas Buddhists are told, "The best instruction is always to watch the mind" (Patrul Rinpoche, 1998, p. 254). In fact, the central contemplative practice of Buddhism is called "mindfulness meditation." Researchers came to a similar appreciation of the importance and therapeutic power of awareness, and many

subsequently turned to contemplative practices for insights into some of the experiences that emerged with psychedelics, for clues about how to best work with them, and for nondrug means to induce them.

Researchers also came to appreciate the value of several adjunctive therapies. Music, particularly classical music, became an inherent part of most psychedelic therapy, and artistic expression and representation of important experiences proved helpful as well.

Somatic approaches also found a place. The ancient yogic art of modulating breathing was found to soothe or intensify the therapeutic process. Movement could help express emerging energies, whereas physical therapies such as massage relaxed muscle spasm and chronic holding patterns, thereby releasing the psychodynamic conflicts they expressed. Psychedelic therapists therefore rediscovered, and some specifically drew on, psychoanalyst Wilhelm Reich's concept of "character armor" and the muscular tension which expresses and maintains it (Grof, 2001). They also rediscovered the therapeutic power of relaxing this muscle armor. Reich (1973) wrote that,

It never ceases to be surprising how the loosening of a muscular spasm not only releases the negative energy, but, over and above this, reproduces a memory of that situation in infancy in which the repression of the instinct occurred. (p. 300)

Combined with prolonged hyperventilation, these adjunctive therapies proved so effective that they would become, in the hands of Stanislav and Christina Grof, a novel and potent therapeutic approach: holotropic breathwork (Grof, 1988, 1998).

In the course of their work, the Grofs were approached by people experiencing significant psychological or spiritual difficulties related to practices such as meditation, yoga, or shamanism. In many cases, these crises seemed similar to both classic difficulties described in spiritual traditions for centuries, and also to some of the experiences that emerged in psychedelic or holotropic therapy.

Drawing from both the classic resources and their own experience in working with such difficulties, the Grofs were able to create a systematic description of, and approach for working with, these transpersonal crises. Many of these apparent pathologies turned out to be potentially valuable developmental crises that,

if treated skillfully, could open new areas and stages of growth. This potential has been recognized in contemplative traditions by terms such as *purification* or *unstressing* and in psychology by terms such as *crises of renewal*, *positive disintegration*, *creative illness*, and *spiritual emergence* (Grof & Grof, 1989). The result was a new clinical area and international organization for studying and treating what have most commonly been called “spiritual emergencies” or “transpersonal crises” (Grof & Grof, 1989, 1990).

These researchers therefore came to an understanding of, and therapeutic approach to, psychological difficulties and even crises precipitated by psychedelics that is strikingly different from the views held by most contemporary clinicians. The usual emergency room response to psychedelic crises such as a severe panic attack is, quite understandably, to view them as pathological and to suppress them as quickly as a possible with medication. By contrast, the researchers came to view most psychedelic crises as psychologically meaningful, and potentially therapeutic if engaged by an adequately trained therapist (Fisher, in press; Grof, in press, Grof & Grof, 1989, 1990). This in no way denies the extent or severity of psychedelically precipitated crises in ill-prepared users. In fact, all the researchers lamented the tragic individual, social, and research problems that resulted from psychedelic misuse outside carefully controlled clinical and laboratory settings.

Professional Impact

In some areas, the impact of psychedelics, both positive and negative, on Western society is well known. Art and music, culture and counterculture, meditation and yoga, and Eastern religions and spirituality are but a few of the social arenas they influenced.

Not so well known is the extent to which some professional disciplines have also been affected. Indeed, many of the researchers had a significant impact on their own professions. Anthropology, religious studies, pharmacology, and mental health disciplines were all affected.

For example, James Fadiman and Stanislav Grof played a major role in founding transpersonal psychology (Walsh & Vaughan, 1993). They were concerned that the psychology of the time was dominated by psychoanalytic and behavioral approaches, which focused primarily on pathology. Having seen experiences and potentials beyond those acknowledged by prior approaches, they urged psychology to expand to recognize and research these potentials.

Transpersonal psychology was not designed to dismiss or replace earlier schools. Rather, it aimed to complement them and set them in a larger context. This context was open to topics such as states of consciousness, exceptional health, well-being, and maturity, as well as to the practices that cultivate them, and to the contributions of Eastern disciplines such as meditation and yoga. These topics were famously summarized as “the farther reaches of human nature” by another cofounder, Abraham Maslow (1971), who was himself significantly affected by a personal psychedelic experience (Schacter, 2005). Maslow (1968) described the aims of this new psychology with the words,

This point of view in no way denies the usual Freudian picture, but it does add to it and supplement it. To oversimplify the matter somewhat, it is as if Freud supplied to us the sick half of the psychology, and we must now fill it out with the healthy half. Perhaps this health psychology will give us more possibility of controlling and improving our lives and for making ourselves better people. (p. 5)

Psychotherapy was also affected. Some of the general principles they discovered found their way into mainstream practice, especially humanistic therapies. They also explored nondrug alternatives, from which new therapies emerged, the best known probably being Stanislav and Christina Grof’s holotropic breathwork (Grof, 1998).

Anthropologists such as Michael Harner and Peter Furst added new dimensions to their discipline. Their studies of psychedelic use among tribal cultures helped to widen anthropology’s understanding of consciousness and culture, from which came the fields of transpersonal anthropology and the anthropology of consciousness.

Altered states of consciousness were now recognized as central to many cultures and practices. Anthropologists began to study the methods (including psychedelics) for inducing them, healings and rituals for applying them, religions and myths derived from them, and beliefs and worldviews for explaining them.

It became increasingly apparent that societies approve and institutionalize some states of consciousness while disparaging and prohibiting others, and that societies differ in the number and variety of states they value. Western culture came to be recognized as relatively monophasic, meaning that we privilege the usual waking state, derive our worldview almost entirely from it, and marginalize other states, a bias that Michael Harner (1982) calls “cognocentricism.”

By contrast, most societies are more polyphasic, drawing their knowledge and worldview from additional modalities of consciousness, such as drug, trance, shamanic, meditative, or yogic states (Laughlin, McManus, & Shearer, 1992). Likewise, their psychologies and philosophies tend to be multistate, drawing on and analyzing multiple states of consciousness and sometimes, though less often, also multistage: drawing on and analyzing multiple stages of adult development (Walsh, 1989; Wilber, 2000a).

These recognitions raised serious concerns about the extent to which Western researchers could adequately comprehend multistate cultures and disciplines. Limiting factors such as state-specific learning and state-specific communication suggested that researchers who had not themselves experienced these other states might be seriously handicapped in cross-phasing. The result? Much of the meaning and richness of these states might be missed. These psychedelic researchers, and subsequently a growing number of researchers in other areas, therefore argued that we may need state-specific scientists, yogi-scientists, or meditative philosophers who are experts in both multiple states and conventional Western disciplines (Tart, 1972).

In subsequent years, shamanism became a vital spiritual practice for a surprising number of people throughout the Western world, and the spread of this ancient tribal discipline is largely attributed to Michael Harner. While doing field studies in the Amazon, he was formally initiated into shamanism with ayahuasca (Harner, 1973, 1982, in press). Harner's appreciation of shamanic cultures was so affected that he undertook extensive shamanic training himself and subsequently taught thousands of others. In a striking cultural reversal, he and his students have even reintroduced shamanism to some societies where it had been lost or suppressed.

Other investigators affected other spiritual traditions. Rabbi Zalman Schachter was moved to deepen his study of Jewish mysticism and then played a major role in inspiring the Jewish Renewal movement.

Richard Alpert traveled to India searching for people and traditions to help make sense of psychedelic experiences and there took up contemplative practice. He subsequently returned to the West as Ram Dass to become a major popularizer of Hinduism and Buddhism, meditation and yoga, eventually becoming one of the 20th century's best-known spiritual teachers.

Psychedelics also led to new interest into the role of drug experiences in religions. It became clear that drugs have played a

major part throughout history in multiple traditions and continue to do so today in ones such as shamanism and the Native American Church.

Huston Smith's influence was key in this regard. His writings were among the first and most persuasive to question the initial tendency among religious scholars to dismiss psychedelic experiences as necessarily pseudospiritual and insignificant. After Smith's (1964, 2000) writings, it was hard for any serious scholar to hold these positions.

Stanislav Grof's research also illuminated religious practices and studies. His many contributions defy brief description. However, they include the rediscovery of Jung's (1968) principle that "the deeper layers of the psyche. . . become increasingly collective until they are universalized" (p. 291) and that these deeper layers are associated with religious experiences that have been goals of spiritual practices the world over.

Drawing on the deepest experiences of his several thousand subjects, Grof (1998) synthesized their insights into a comprehensive anthropology and ontology. This psychedelically derived theory shows clear similarities to aspects of the Perennial Philosophy, especially to the variant found in Kashmir Shaivism (a mystical form of Hinduism). It offers numerous unique observations, especially into the deep roots of psychopathology.

Of course, there are major epistemological challenges for such a theory and for all theories based on psychedelic experiences. Among other things, the epistemological method used for obtaining information sets inherent limits and potential biases on the types of information acquired, and this is obviously true of information obtained by observations of psychedelic experiences. But whatever verdict history may pass on its validity, his work places Grof among the grand theorists attempting to present a comprehensive, synthetic theory of the psyche.

The impact of these investigators on their professions was clearly significant, but it was not limited to these professions alone. Many of their findings and ideas spread out across the culture, fostering new disciplines, practices, and areas of interest.

For example, most of the investigators took up practices such as meditation, contemplation, and yoga in their subsequent search for nondrug methods of transformation, and then played a significant role in popularizing these practices. These practices have led in turn to furthering and continuing cultural changes in areas as diverse as medicine, psychiatry, and education (Murphy & Donovan, 1997; Walsh, 1999). The ripple effects from early psychedelic

research continue to affect us in ways we are still struggling to fully understand.

NOTE

1. Participants included the psychologists Betty Eisner, James Fadiman, Gary Fisher, and Ram Dass (formerly Richard Alpert); the psychiatrist Stanislav Grof; the theologians Huston Smith and Rabbi Zalman-Schacter; the anthropologists Michael Harner and Peter Furst; the pharmacologists Alexander Shulgin and Albert Hofmann (discoverer of LSD); the engineer Myron Stolaroff; and the social critic Laura Huxley, all of whom did pioneering analyses and wrote extensively on the topic.

REFERENCES

- Abba Philemon. (1993). *Prayer of the heart: Writings from the Philokalia* (G. Palmer, P. Sherrard, & K. Ware, Trans.). Boston: Shambhala.
- Abu Bakr Muhammad Al-Wasiti. (1995). In L. Vaughan-Lee (Ed.), *Travelling the path of love: Sayings of Sufi masters* (p. 84). Inverness, CA: Golden Sufi.
- Eisner, B. (in press). The birth and death of psychedelic therapy. In R. Walsh & C. Grob (Eds.), *Higher wisdom*. New York: State University of New York Press.
- Fadiman, J. (in press). Transpersonal transitions: The higher reaches of psyche and psychology. In R. Walsh & C. Grob (Eds.), *Higher wisdom*. New York: State University of New York Press.
- Ferrucci, P. (1982). *What we may be*. Los Angeles: J Tarcher.
- Fisher, G. (in press). Treating the untreatable. In R. Walsh & C. Grob (Eds.), *Higher wisdom*. New York: State University of New York Press.
- Goleman, D. (1988). *The meditative mind*. Los Angeles: JP Tarcher.
- Furst, P. (in press). Ancient altered states. In R. Walsh & C. Grob (Eds.), *Higher wisdom*. New York: State University of New York Press.
- Grinspoon, R. L., & Bakalar, J. (1997). *Psychedelic drugs reconsidered* (2nd ed.). New York: Lindesmith Center.
- Grob, C. (1998). Psychiatric research with hallucinogens: What have we learned? *Heffter Rev Psychedelic Research*, 1, 8-20.
- Grob, C. (Ed.). (2002). *Hallucinogens: A reader*. New York: Tarcher/Putnam.
- Grof, S. (1985). *Beyond the brain: Birth, death and transcendence in psychotherapy*. Albany: State University of New York Press.
- Grof, S. (1988). *The adventure of self-discovery*. Albany: State University of New York Press.
- Grof, S. (1998). *The cosmic game*. Albany: State University of New York Press.
- Grof, S. (2001). *LSD psychotherapy*. Sarasota, FL: Multidisciplinary Association for Psychedelic Studies.

- Grof, S. (in press). The great awakening: Psychology, philosophy, and spirituality in LSD psychotherapy. In R. Walsh & C. Grob (Eds.), *Higher wisdom*. New York: State University of New York Press.
- Grof, S., & Grof, C. (Eds.). (1989). *Spiritual emergency*. Los Angeles: J Tarcher.
- Grof, C., & Grof, S. (1990). *The stormy search for self: Understanding spiritual emergence*. Los Angeles: J Tarcher.
- Harner, M. (Ed.). (1973). *Hallucinogens and shamanism*. New York: Oxford University Press.
- Harner, M. (1982). *The way of the shaman*. New York: Bantam.
- Harner, M. (in press). Tribal wisdom: The shamanic path. In R. Walsh & C. Grob (Eds.), *Higher wisdom*. New York: State University of New York Press.
- James, W. (1936/1958). *The varieties of religious experience*. New York: New American Library.
- Jung, C. G. (1968). The psychology of the child archetype. In the *Collected Works of C. G. Jung* (Vol 9, Part I, Bollingen Series XX, 2nd ed.). Princeton, NJ: Princeton University Press.
- Jung, C. G. (1973). *Letters*. Princeton, NJ: Princeton University Press.
- Ka-Tzetnik 135633. (1998). *Shivitti: A vision*. Nevada City, CA: Gateways.
- Laughlin, C., McManus, J., & Shearer, J. (1992). *Brain, symbol and experience*. New York: Columbia University Press.
- Lee, M., & Shlain, B. (1985). *Acid dreams: The CIA, LSD and the sixties rebellion*. New York: Grove Weidenfeld.
- Mahoney, M. (2003). Minding the heart: Cognitive science and process spirituality. A review of S. Zindel, M. Williams, & J. Teasdale. Mindfulness based cognitive therapy. *Contemporary Psychology*, 48, 745-748.
- Maslow, A. (1968). *Towards a psychology of being* (2nd ed). Princeton, NJ: Van Nostrand Reinhold.
- Maslow, A. (1971). *The farther reaches of human nature*. New York: Viking.
- Miller, W., & deBaca, J. (2001). *Quantum change: When epiphanies and sudden insights transform ordinary lives*. New York: Guilford.
- Murphy, M., & Donovan, S. (1997). *The physical and psychological effects of meditation* (2nd ed.). Sausalito, CA: Institute of Noetic Sciences.
- Patrul Rinpoche. (1998). *The words of my perfect teacher*. Boston, MA: Shambhala.
- Perls, F. (1969). *Gestalt therapy verbatim*. Lafayette, CA: Real People Press.
- Rabbi Jacobs. (1993). In R. Shapiro (Ed.), *Wisdom of the Jewish sages: A modern reading of Pirke Avot* (p. 88). New York: Bell Tower.
- Raskin, N. J., & Rogers, C. R. (2000). Person-centered therapy. In R. Corsini & D. Wedding (Eds.), *Current psychotherapies* (6th ed.). Itasca, IL: FE Peacock.
- Reich, W. (1973). *The function of the orgasm*. New York: Touchstone.
- Schacter, Z. (2005). Transcending religious boundaries. In R. Walsh & C. Grob (Eds.), *Higher wisdom: Eminent thinkers explore the continuing impact and implications of psychedelics* (pp. 195-205). New York: State University of New York Press.

- Shapiro, R. (Ed.). (1993). *Wisdom of the Jewish sages: A modern reading of Pirke Avot*. New York: Bell Tower.
- Smith, H. (1964). Do drugs have religious import? *Journal of Philosophy*, *LXI*, 517-530.
- Smith, H. (2000). *Cleansing the doors of perception: The religious significance of entheogenic plants and chemicals*. New York: Tarcher/Penguin.
- Strassman, R. (1984). Adverse reactions to psychedelic drugs: A review of the literature. *Journal of Nervous and Mental Disease*, *172*, 577-595.
- Strassman, R. (1997). Biomedical research with psychedelics: Current models, future prospects. In R. Forte (Ed.), *Entheogens and the future of religion* (pp. 152-162). San Francisco, CA: Council on Spiritual Practices.
- Tart, C. (1972). States of consciousness and state specific sciences. *Science*, *176*, 1203-1210.
- Walsh, R. (1989). Can Western philosophers understand Asian philosophies? The challenge and opportunity of states of consciousness research. *Crosscurrents*, *XXXIX*, 281-299.
- Walsh, R. (1999). *Essential spirituality: The seven central practices*. New York: John Wiley.
- Walsh, R. (in press). *The spirit of shamanism* (2nd ed.). St. Paul, MN: Llewellyn.
- Walsh, R., & Grob, C. (Eds.). (2005). *Higher wisdom: Eminent thinkers explore the continuing impact and implications of psychedelics*. New York: State University of New York Press.
- Walsh, R., & Vaughan, F. (Eds.). (1993). *Paths beyond ego: The transpersonal vision*. Los Angeles: J. Tarcher.
- Whitmont, E. (1969). *The symbolic quest*. Princeton, NJ: Princeton University Press.
- Wilber, K. (2000a). *Integral psychology*. Boston: Shambhala.
- Wilber, K. (2000b). *Sex, ecology, spirituality. The collected works of Ken Wilber* (Vol. 6). Boston: Shambhala.