

# Psychedelic Psychotherapy: Insights From 25 Years of Research

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## Abstract

Presented at a conference titled “Psychedelic Science 2013,” highlighting the resumption of investigations with psychedelic substances (i.e., psilocybin, DMT, LSD, MMDA, etc.) in the United States and Europe after a dormant period of more than two decades, the author presents insights and perspectives gleaned from his 25 years of clinical research experience. After acknowledging the vastness and potential significance of this research frontier, the article focuses on the “cartography of inner space”; the unique therapeutic potential of transcendental states of consciousness; the entelechy of the interpersonally grounded psyche; the importance of integration in drug-free therapy sessions; the roles of expectation, religious education and faith; the role of music; and future research directions.

## Keywords

psychedelic research, consciousness research, psychedelic psychotherapy, psilocybin, entheogens

## Introduction: History and Scope of Observations

In writing this manuscript for presentation at the 2013 Psychedelic Science Conference, I found myself considering what I personally could contribute to this promising frontier of knowledge, whether innovative and unique, or simply

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supportive of content that would be presented by many of my colleagues. I realized that the privilege of actively participating in legal projects of psychedelic research with human subjects for 25 years carries with it a responsibility to communicate my observations and impressions.

I entered this field in 1963, when I was a graduate student at the University of Göttingen in Germany, first as a research subject and then as a research assistant. This fortuitous, literally mind-expanding opportunity, which gave focus to my subsequent career trajectory, occurred in the psychotherapeutic clinic of Hanscarl Leuner, who was pursuing investigations with psilocybin, its short-acting derivatives, and LSD (lysergic acid diethylamide). In 1967, I moved to Baltimore where I was privileged to contribute to a decade of psychedelic research, initially at the Spring Grove Hospital, and then at the Maryland Psychiatric Research Center. There was excitement in the air then and the feeling of being on the edge of a frontier that might not only rapidly affect various approaches to psychotherapeutic treatment, but that also might be found to have profound relevance to the study of consciousness itself, with significant implications for both science and religion. Colleagues there were many, notably including Charles Savage, Albert Kurland, Walter Pahnke, Stanislav Grof, Richard Yensen, and John Rhead. Together we pursued a variety of studies, using therapy assisted by either LSD, DPT (*N,N*-dipropyltryptamine), psilocybin, or MDA (3,4-methylenedioxyamphetamine), investigating their promise in the treatment of persons suffering from alcoholism, narcotic addiction, and personality disorders; in decreasing the psychological distress of cancer patients; and in the education of mental health and religious professionals. This research trajectory in Baltimore continued for 7 years after the passage of the Controlled Substances Act, but finally became dormant in 1977 due to administrative decisions on the state level—not, as many have assumed, due to prohibition by the federal government. I had the dubious honor of being the last to leave the sinking ship as all legal research with psychedelics and human subjects ceased in the United States.

At that poignant point in my career, it seemed wise to apply the mantra we often provided for research volunteers: Trust, Let go, and Be open. I turned my attention to teaching and private practice and hoped that research with psychedelics might come alive again during my lifetime. Then, after a 22-year hiatus, in collaboration with Roland Griffiths and Robert Jesse, I found myself contributing to its rebirth at the Johns Hopkins School of Medicine. In the now 13 years of research at Johns Hopkins, mostly with psilocybin, we have published a series of articles that have begun to explore the nature and therapeutic promise of various alternate states in studies with mentally healthy volunteers, notably in reference to personal and spiritual development (Griffiths, Richards, Johnson, McCann, & Jesse, 2008; Griffiths, Richards, McCann, & Jesse,

2006). We also have reactivated the earlier studies with cancer patients (cancer-insight.org) and with persons suffering from addictions, the latter currently focused on nicotine dependence (smoking-insight.org). Besides Roland Griffiths, my current colleagues onsite include Mary Cosimano, Matthew Johnson, Brian Richards, Katherine MacLean, Frederick Reinholdt, Matthew Bradstreet, Albert Garcia-Romeu, and other support personnel.

When I reflect back on the hundreds of persons with whom I have served as therapist or guide, many of whom received multiple psychedelic sessions over time, I experience profound gratitude for the privilege of encountering each of them in the depths of existence. Almost all these persons had no prior experience with psychedelics and would not have agreed to receive them outside of a legal context that provided a pure drug in known dosage in a context of maximum support and safety. With each of them, I usually spent 8 hours developing a therapeutic relationship before administering the psychedelic substance, and also hours in the days and weeks after each psychedelic session dedicated to the initial integration of the experiential content that had occurred. A rapid slide-show in my memory of the faces of these persons includes men and women of all races, educational levels, and an incredible variety of vocational identities, varying in age from the early 20s to close to 80 years. Religious orientation has varied from dedicated atheism to deep commitment within the structure of one or another of the great world religions. Some have been in robust physical health; others have been in both physical and psychological pain in close proximity to physical death. The experience I have accumulated usually has come from administering psychedelics to individual people, one person at a time, with the volunteer reclining on a couch with closed eyes and headphones, supported by carefully selected classical music and engaged in an introspective journey during most of the period of drug-action. We often have noted that it is indeed amazing how much one can see with one's eyes closed.

So I offer observations from many diverse case histories. I also acknowledge that the perspectives presented in this article inevitably are influenced by the experiential insights I personally have encountered in alternate states of consciousness, whether facilitated by psychedelics, by meditation, or by other technologies. My perceptions and interpretations of what I have observed, undoubtedly are colored by my own cognitive structures and linguistic preferences.

## **The Vastness of the Entheogenic Frontier**

At the outset, I want to try to communicate to you the utter vastness of the realms of alternative states of consciousness, their promise in advancing both

scientific and religious knowledge, and their potential implications for personal and spiritual evolution. Psychedelics, wisely and responsibly employed, indeed are valuable tools in the exploration of consciousness, akin to the telescope in astronomy or the microscope in biology. Sometimes I have felt akin to Columbus, just having landed in the West Indies with his primitive maps, and then having somehow been placed in a supersonic jet and shown the vistas of the entire New World, stretching far beyond the wildest fantasies of his imagination and leaving him almost speechless with a profound sense of awe. Sometimes, when sitting silently beside research volunteers, when their everyday consciousness has been transcended and mystical experiences are occurring, it is no exaggeration to say that I humbly feel as though I am sitting beside the Buddha under the Bo Tree as enlightenment is dawning, or sitting beside St. Paul on the road to Damascus, or beside Isaiah during his temple vision. What we are beginning to study, here on this frontier where science and the sacred are meeting, truly is profound in its magnitude, its vivid intensity, and its potential relevance. With the best experimental designs we can devise as we begin to probe this multifaceted field, we are at best novices with very limited conceptual tools and linguistic frameworks.

I think of Alan Watts's (1962) suggestion that one reason we have tended to avoid this field of enquiry arises out of "the taboo of knowing who you are"—that we tend to fear too much knowledge about the mysteries of our own being. As I know many appreciate, it is common for volunteers during the action of psychedelics in relatively high dosage to report phenomena that do not appear to arise from their personal life histories and that entail different perspectives on time and space—experiences that call into question some of the most basic assumptions that undergird our normative, consensual definition of "reality" and the manner in which we customarily define ourselves and orient ourselves in the world. As expressed by Thomas Kuhn (1962), whether as scientists or philosophers, we really are in the midst of a major "paradigm shift" at this point in history.

## **The Cartography of Inner Space**

It is clear that there indeed is a multidimensional "Cartography of Inner Space" with many discrete alternative forms of consciousness. They seem to form a continuum that is influenced by dosage, by personality structure and the capacity to relinquish ego-control, and by the growing edge of a person's unique personal and spiritual development. Simply expressed, the continuum begins with mild alterations of perception, may deepen to unravel the psychodynamics of personal life, may deepen further to invite participation in visionary or archetypal dramas—the realm of mythology as presented by

Joseph Campbell and Carl Jung, and may deepen even further into transcendental realms of awareness in which the everyday self, or ego, is encompassed into unitive–mystical dimensions of mind that usually are experienced as profoundly sacred and eternal. In addition to these main stages on this continuum, there are many unique states of consciousness about which we know very little.

## How Little Is Known; How Much Awaits Discovery

Although we like to think spatially and attempt to speak a language that may correlate the phenomena encountered in consciousness with neuronal structures and biochemical activity to some extent, it continues to make sense to stress that the experiential content of a particular foray into the world of alternative states is to be found not “within the drug,” but within the human mind itself. What the human “mind” is, continues to remain a tantalizing mystery, especially as there is good reason to question the reductionistic philosophical assumptions that have tended to prevail in the community of Western scientists in spite of quantum physics. It is time to take a fresh look at the writings of philosophers such as Henri Bergson, who viewed the human brain more like a television set that receives, processes, and limits information than as the primary source of mental phenomena (Barnard, 2011). Perhaps, psychedelic drugs still may best be understood simply as skeleton keys that, if wisely used, provide access to other realms of human consciousness. The experiences reported, therefore, are not “in the drug,” but rather in and through the mind of the person who is experiencing.

There is a lot of ignorance and lore here, even among those who possess a reasonable personal cache of psychedelic experience. All too often a person has taken a particular dose of a particular substance, had a particular experience, and then concluded that whatever occurred is “what that substance does.” It is highly probable that, even if the person took the same dose of the same substance at another time, there would be a different experience to report, even if it further revealed or extended the themes encountered earlier. The major substances with which I have worked appear to differ from one another, not in terms of the experiential content they reveal, but in terms of factors such as required dosage, rapidity of onset and termination, and duration of action. If any particular molecule has a higher probability of facilitating a particular state of consciousness, that only will be established in time as well-designed double-blind research projects are implemented and published. Does mescaline produce more vivid colors? Does the DMT (*N,N*-dimethyltryptamine) in Ayahuasca really produce more images of anacondas? Is the onset of psilocybin more gentle than LSD? Only patient research will provide the answers we seek.

## The Unique Therapeutic Potential of Transcendental States of Consciousness

It is now understood that the promise of psychedelic substances in accelerating psychotherapy and spiritual growth is not a simple biochemical response independent of set and setting. One does not ingest a psychedelic as a simple medication, such as when one takes aspirin to relieve a headache. Rather it appears to be the unique phenomenology encountered during the period of drug-action that determines whether the substance will prove helpful, harmful, or neutral. Experiences of personal psychodynamic resolution, of archetypal visions and of mystical consciousness may well contribute to life-enhancing results. Experiences of panic, paranoia and confusion, rendered more probable when one is inadequately prepared and/or when insufficient skilled guidance is available, may well prove harmful, especially if such experiences remain unresolved. Mild experiences of changes in sensory perception, perhaps accompanied by intriguing, though generally meaningless mental imagery, may well prove neutral.

The potential therapeutic significance of psychodynamic phenomena, in the context of the Jungian “personal unconscious,” including themes such as grief and attachment, guilt and forgiveness, anger and love, theoretically is congruent with many well-established systems of psychotherapy. The therapeutic potency of transcendental states may prove harder for some to comprehend, as it goes beyond the didactic content of many mental health education programs. By “transcendental,” I refer both to (1) alternate states of consciousness characterized by archetypal visions of gods and goddesses, of sacred architecture and art—often resplendent with gemstones and precious metals, and vast inner panoramas and landscapes, and also to (2) mystical consciousness. Mystical consciousness, as we have come to define it for research purposes, includes the six categories of Unity, Transcendence of Time and Space, Intuitive Knowledge, Sacredness, Deeply Felt Positive Mood, and Ineffability and Paradoxicality (Pahnke & Richards, 1966; Richards, 2003; Stace, 1960). These transcendental states are similar, if not identical with states of consciousness described in the world’s great religions, such as samadhi, nirvana, sekhel mufla, the beatific vision, fana, and wu-wei.

It is difficult to speak or write about these profound transcendental states, as when they occur often there is no observing ego and the content is felt to surpass the limits of language and the structures of cognition. I have long been fond of the verse from the Chinese scriptures, the *Tao te Ching*: “Those who know do not speak; those who speak do not know.” Nonetheless, these experiences usually do remain in memory and the reborn ego is able to recall them as sacred touchstones that radiate spiritual knowledge and a feeling of

ultimate security. Among the intuitive insights that remain for many persons are (1) a conviction of the reality of an eternal structure or principle greater than our individual egos for which people have many names: Most common is “God”; some may prefer “The Ground of Being” (Tillich 1967) or the “Nothingness that contains all reality” or even “the purposive properties of protoplasm” (Sinnott, 1957); (2) an intuitive awareness of the indestructibility of consciousness—that many would call “immortality”; (3) a feeling of interrelatedness to others within the great unity, sometimes called “the brotherhood of man” or “the net of Indra”; (4) an appreciation of love as an ontological power beyond the limits of human emotion; and (5) a sense of awe at the intrinsic beauty of the imagery and thematic content of what has been experienced (Richards, 2009).

The presence of a memory of this magnitude appears to constitute a powerful therapeutic resource. For the cancer patient approaching death, the memory provides a feeling that ultimately somehow all is well, which makes it possible to live the time that remains more fully, with less anxiety, depression, isolation, and pain (Richards, 1978; Richards, Grof, Goodman, & Kurland, 1972). For the alcoholic, the narcotic, or nicotine addict, or for any person struggling with depression or anxiety, the memory may testify to inner resources waiting to be more fully tapped, enhanced self-worth, and an awareness of interpersonal connectedness that can decrease feelings of alienation and estrangement (McCabe, Savage, Kurland, & Unger, 1972; Rhead et al., 1977). In summary, *there is knowledge to be had* in archetypal and mystical states of consciousness. The term *getting high* is simply irrelevant here, unless one understands it in the context of “Glory to God in the Highest.”

## The Entelechy of the Interpersonally Grounded Psyche

In preparing volunteers for psychedelic sessions, we emphasize the decision to trust one’s own mind as unconditionally as possible, the intent to be open and receptive, and the courage to approach and confront content that initially may appear frightening. We rarely suggest specific content, such as regressing to a particular age or exploring a particular area of personal conflict. That is because we have learned that there is a remarkable wisdom within the minds of most, if not all, persons. Usually the content of a session proves to be much more skillfully and artistically choreographed than any agenda we could have planned in advance. This supports the belief that there indeed are wise, healing, and intentional forces within human consciousness beyond the limits of the everyday personality. It is common after a session for a volunteer to say, “I didn’t experience what I wanted, but I experienced what I needed.”

The philosophical term *entelechy* well reflects this process of a meaningful unfolding of content. It appears to work best when the volunteer feels grounded in a respectful and secure relationship with the therapist or guide.

On the day prior to a psychedelic session, when I am completing preparatory work with a volunteer, I often imagine that the person's own creative unconscious has composed a three-act opera and cannot wait for it to be experienced. When the lights dim and the curtain rises on the following day, the volunteer not only will observe the drama but will discover himself or herself in stage center as his or her unique drama unfolds.

## The Interrelatedness of the Personal and the Transpersonal

In the history of research with psychedelics, the term *psycholytic* sometimes has been used to focus on personal, psychodynamic forms of experience in contrast to the term *psychedelic* that may focus more on transcendental forms of experience. More probable with relatively low dosage, psycholytic experiences may entail abreaction, catharsis, and meaningful suffering that often lead to positive feelings of resolution, forgiveness, and rebirth. Most would not consider such experiences to be "spiritual" or as having religious import unless it is in the context of a belief that the resolution of psychodynamic conflicts for many is an important phase in the journey of spiritual development; the actual content of these experiences, however, typically does not include an awareness of the sacred, visions of deities or mystical insights.

Conversely, as is more probable with higher dosage in a supportive setting, profound visionary/archetypal and/or mystical forms of experience may occur that, at least initially, appear to have little connection with the everyday historical life of the ego who may behold the vision or become encompassed within it. When this form of experience occurs, the therapeutic impact appears to derive from the death and rebirth of the ego, quite without regard for the details of childhood development and current interpersonal struggles at home and work.

Some persons who experience a series of psychotherapy sessions facilitated by psychedelics gradually work through content of a personal–psychodynamic nature and then finally "break through" into transcendental forms of awareness. Others encounter profound transcendental content in their first forays into alternative states and subsequently, in light of the *noetic* (James, 1902) knowledge attained in archetypal and mystical realms, "return to earth" to address issues of traditional psychodynamic import. I wish to stress that both trajectories work well. It appears probable that, if the person who gradually is progressing through psychodynamic content continues to pursue quality therapy, with or without psychedelic facilitation, eventually he or she will

discover a transcendental dimension of awareness. Such awareness appears to await any member of the human species who earnestly seeks it.

For persons who experience transcendental content in an initial session, it would be an error to assume that such a blessed experience has confirmed his or her sainthood and that there is no psychodynamic work to be done. Actually, especially in the case of alcoholics and narcotic addicts treated with psychedelic psychotherapy, this trajectory works especially well because, with the enhancement and strengthening of their self-concepts nurtured by memories of transcendental forms of consciousness, it becomes easier for them to explore areas of personal failure without undue loss of self-worth.

It therefore appears that, if one seeks to facilitate optimal personal growth with the aid of psychedelics, sessions in both low and high dosage would prove useful. The Dutch psychiatrist, Hemmo Arendsen-Hein, supported this approach in what he called "Psychodelytic Therapy." Typically, he gave his patients a series of low-dose sessions in small rooms in the clinic he designed in Ederveen Holland until he judged that sufficient resolution had occurred in the domain of personal psychodynamics. Then he would lead his patients into a large, beautifully appointed room and administer high dosage in hopes of facilitating transcendental experiences. Mystical and archetypal experiences thus were viewed as rewards and a way of celebrating the culmination of a difficult process of personal, psychodynamic exploration.

There is a core point I wish to underscore here that focuses on the importance of the everyday self, or ego—that part of each of us that moves through the world from birth until death with our proper names. Even though mystical forms of consciousness, however eternal and vivid they may be, are incredibly meaningful, especially insofar as they often leave a sense of being at home in the universe in their wake, I have become convinced that our personal, everyday lives in time also have their significance and reason for being. This is well reflected in spiritual teachings and traditions. In Zen, the enlightened man "chops wood and carries water." The Bodhisattva—even the apprentice Bodhisattva—leaves the mountaintop and descends into the marketplace to manifest compassion. In Isaiah, the person close to the divine moves in the world as a servant who vicariously suffers. Meditative disciplines that intend to "kill off the ego," in my judgment, may well generate more depression than enlightenment; the ego is perhaps best transcended through acceptance, forgiveness when appropriate, and unconditional love.

## **Integration: The Importance of Drug-Free Sessions**

Huston Smith (2000), a highly respected scholar of comparative religions and one of our esteemed colleagues, first articulated the important distinction

between *religious experiences* and *religious lives*, or between *states* of consciousness and *traits* of behavior. This also appears to be true of insights in more conventional forms of psychotherapy. A revelatory experience may provide an initial impetus toward behavior change, apparently more strongly for some persons than for others; however, once one returns to ordinary, everyday consciousness, there is integrative work to be done if the knowledge acquired in the alternate state is to result in personal or spiritual growth instead of remaining simply a memory of an interesting experience that happened one day—or perhaps a comforting awareness to recall when one discovers oneself on one's deathbed.

I recall working with a person who believed herself to be “trapped in the womb”—what Stanislav Grof (1975) has labeled the second basic perinatal matrix. In spite of the cautions Grof has well articulated, she believed that, if she took psychedelics enough times, she would work her way out of the birth canal and experience freedom and rebirth. Unfortunately, she also was trapped in a job she strongly disliked and a marriage she described as dead, but she was unwilling to examine either of those problem areas in her life. She just wanted to take psychedelics until she became free. Clearly, it is not hard to understand that, until she did some work in drug-free sessions, addressing issues of vocation and marriage, it is improbable that any breakthrough would occur during the action of a psychedelic drug. Sometimes, it appears that the lever that opens the door to transcendental forms of consciousness is to be found in very mundane details of ordinary living.

Most persons appear to require a minimum of 8 hours of shared time with a therapist or guide, usually spread over a period of at least 2 weeks, in preparation for a productive psychedelic session. While sharing the joys and struggles of one's particular life, including the current frontiers of personal development, not only is trust established with the guide, but an atmosphere of honesty and openness is clarified within the mind of the research volunteer. Then, should interpersonal grounding or reassurance be needed during the period of drug-action, the simple warmth of the guide's hand or a few brief words often will suffice to circumvent potential panic and paranoia and to maximize the probability that the content of the session will prove beneficial.

Drug-free sessions then, of course, continue to be of importance during the weeks following a psychedelic experience. Over and over, one moves one's awareness back and forth from the memory of the experience to the decisions and strategies required in daily living, gradually progressing toward the integration of the insights gained and the implementation of actual changes in attitudes and behavior. In addition to person-to-person, psychotherapy-style appointments, disciplined meditative procedures also may be of significant assistance to many persons in this phase of personal and spiritual development.

As is often said, after having glimpsed the top of the mountain, it is easier for many to maintain the motivation to struggle through the swamps, thickets and rocky terrain on the path that leads to the summit. In the words of Alan Watts (1962), “When you get the message, you hang up the phone.”

## **The Roles of Expectation, Religious Education, and Faith**

In my experience, faith as the capacity to trust some structure, concept, or entity greater, or more fundamental than one’s everyday personality constitutes an important variable in increasing the probability that transcendental forms of consciousness will occur. Even more sharply defined, the important factor appears to be the conscious choice of a healthy, mature ego to trust in an unconditional manner. The Harvard theologian Paul Tillich (1952), who at the end of his life was working on a systematic theology of world religions, called this type of faith “The Courage to Be.” In this framework, one must have a self to lose a self, which may be why persons with a mature sense of personal and vocational identity may be more likely to experience profoundly mystical states than persons in the midst of adolescence.

My strong impression is that it is not the content of religious faith in terms of acceptance of the tenets of a creed or system of belief that matters, so much as the act of faith, that is, unconditional trust. Persons who have grown up in a tradition that includes devotion and dialogue with a deity through prayer or meditative disciplines may well find it easier to entrust themselves to deeper levels of reality as consciousness opens up during the action of a psychedelic.

Expectation, however, appears to have little import in determining which experiences will occur. I have worked with Roman Catholic priests who hoped to glimpse the Beatific Vision, but instead spent their sessions wrestling with traumatic sexual experiences in their childhoods. Similarly, I recall an Australian physician who thought he was essentially “uncontaminated” (his word) by Christian teachings and hoped for insight into his aboriginal roots who found himself vividly experiencing the death and resurrection of the Christ. I recall a culturally deprived narcotic addict from the inner city of Baltimore with a junior high school education who found himself experiencing what he called “strange, partially-naked people dancing with strange hats on their heads.” A few days after his session, having found a book of Hindu Art with pictures of Vishnu and the Dancing Shiva in the waiting room, he rushed breathlessly into my office, saying, “This is what I saw. This is what I saw.”

I suspect that rigid, fundamentalistic belief systems, whether atheistic, theistic, or otherwise can make it hard for one to navigate well in the depths of human consciousness, especially if one wants to “prove a point.” If, however,

one is open and capable of trust and honest curiosity, the phenomenon religious scholars call “revelation” can and does take place. Honest agnosticism, especially if coupled with courage and curiosity in the context of a well-grounded human relationship, often has proved to facilitate the constructive exploration of alternative states of consciousness.

## **The Role of Music**

Especially in high-dose psychedelic sessions, carefully selected music reliably has been found to increase the probability of potentially constructive outcomes and to decrease the probability of unproductive anxiety states (Bonny & Pahnke, 1972). Although the choice of music in itself constitutes an important research frontier, at this point some guidelines have become clear, especially if the intention is to facilitate the occurrence of transcendental states.

In this regard, music choices during drug onset, the ascent to peak activity, and peak activity appear of maximal importance; in the latter hours of a session, most any form of music can be explored and appreciated. In these early hours, music appears to provide a nonverbal support structure, akin to the net of a trapeze artist. It is there when needed, and does not interfere when it is not needed. Strong, flowing, reliable structure appears most helpful, without unexpected changes in rhythm or words that would engage intellectual functions. So it is that any fine collection of psychedelic music should include some well-chosen classical selections from Bach and Brahms—and more recent composers such as Barber and Gorecki. The music that proves most facilitative often is not music that the volunteer ordinarily would select and describe as a preference. In the wake of transcendental forms of awareness, it is not uncommon to encounter claims of having been drawn in and through states of mind similar to what the composer well may have experienced and immersion in the nonverbal content that the composer may have been trying to express.

## **Future Research Directions**

We now know that there are many psychedelic substances that can facilitate the occurrence of fascinating and meaningful states of human consciousness, and also that many of them can be administered safely when adequate screening of volunteer subjects is conducted and when the substances are administered in accordance with the knowledge we have acquired about the responsible structuring of set and setting (Johnson, Richards, & Griffiths, 2008). There are many frontiers awaiting exploration in the field of medicine,

examining neural correlates (Carhart-Harris et al., 2012) and how psychedelics may accelerate psychotherapy for different populations—initially focusing on addictive (Krebs & Johansen, 2012) and mood disorders. The promise of finding an effective intervention for posttraumatic stress disorders (Mithoefer et al., 2013; Mithoefer, Wagner, Mithoefer, Jerome, & Doblin 2011) and depressive disorders is especially hopeful. One area yet basically untouched relates to the use of psychedelics in the treatment of personalities with strong sociopathic traits.

The promise of these substances however extends beyond medical applications. They have promise in education (Tupper, 2003), with applications in the training of both religious and mental health professionals, and even in fields such as philosophy, literature, music, biology, and physics. But above all, these substances have promise in helping us progress in deciphering and honoring the mysteries of our own being—of progressing in our understanding of what we are, of what the nature of consciousness might be. It is at this point that the growing edge of science and the realms of knowledge traditionally owned and managed by the world's religions meet and interact. It is my hope that the dialogue that is beginning to open up will prove mutually enriching.

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### Author Biography



**William A. Richards** (Bill) is a psychologist in the Psychiatry Department of the Johns Hopkins University School of Medicine, Bayview Medical Center, where he and his colleagues have been pursuing research with psilocybin, the active molecule in the so-called “sacred mushrooms,” for the past 16 years. His graduate degrees include MDiv from Yale Divinity School, STM from Andover-Newton Theological School, and PhD from Catholic University, as well as studies with Abraham

Maslow at Brandeis University and with Hanscarl Leuner at Georg-August University in Göttingen, Germany, where his involvement with psychedelic research originated in 1963. From 1967 to 1977, he pursued psychotherapy research with LSD, DPT, MDA, and psilocybin at the Maryland Psychiatric Research Center, including protocols designed to investigate the promise of entheogens in the treatment of alcoholism, severe neuroses, narcotic addiction and the psychological distress associated with terminal cancer, and also their use in the training of religious and mental-health professionals. From 1977 to 1981, he was a member of the psychology faculty of Antioch University in Maryland. His publications began in 1966 with “Implications of LSD and Experimental Mysticism,” coauthored with Walter Pahnke. His book, *Sacred Knowledge: Psychedelics and Religious Experiences* has just been released by Columbia University Press.