## LSD and Religious Experience

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THE relationship between LSD and religious experience is an issue that is quite complex and needs careful analysis to avoid a loose and uncritical association. It would be misleading to assume that the experiences are automatically identical.

LSD-type drugs have been called by many names. In the early 1950's the term *psychotomimetic*, *i.e.*, psychosis-mimicking, was generally used; but this rather negatively loaded term was seen by some as being too narrow and limiting to accommodate the wide range of experiences being reported and observed. In 1957 Dr. Humphry Osmond (Osmond, 1957) proposed the term *psychedelic*, *i.e.*, mind-opening or mind-manifesting, to encompass the full range of positive and negative experiences that he had seen in his work with such drugs. Psychedelic will be the term used in this paper to refer to the unique class of LSD-type drugs.

In this discussion a survey will first be made of the various kinds of psychedelic experiences with an especial examination of the mystical type, and possible reasons for this variety will be mentioned. Then we shall look at some of the evidence that psychedelic mystical experiences occur at all and discuss whether or not they can be considered "religious." The LSD churches that have grown out of the evangelistic enthusiasm associated with LSD will also be examined along with their possible impact on individuals and society. Finally, the future prospects for the investigation and use of psychedelic drugs will be discussed.

Psychedelic experiences can be divided into five types: psychotic, psychodynamic, cognitive, aesthetic and psychedelic peak or mystical. These have been described elsewhere (Pahnke and Richards, 1966), and a brief description of each will suffice.

The *psychotic* experience is described as very intense, negative, dysphoric and hellish by those who have been through it. Characteristic elements include fear to the point of panic, paranoid distrust, delusions of suspicion or grandeur, toxic confusion, impairment of abstract reasoning, remorse, depression, isolation and/ or somatic discomfort, all of which can be of monumental proportions. These words can perhaps be better illuminated by the following description written by a well-prepared subject who took LSD under medical supervision:

Time itself seemed to have frozen. I was sick way down inside. I had lost trust in the doctor and the judgment of part of my own mind. The terrible thing was that I was going insane and the normal part of my mind knew this was taking place. I was two people in the same body. The one with the insane mind was pulling the one with the sane mind over on his side. I think I was 95% insane.

Then things became even more confused and frightening. It seemed as if I had three minds, two that were insane and one perfectly normal. In other words, I was having the experience of having a front row seat watching myself who was insane.

Faces now looked distorted, eyes were of a cruel expression, and they seemed to have the power of looking through me and my very thoughts. The least amount of noise sounded one hundred times louder. Everything I heard was driving me into a living hell. The doctor looked like the devil to me. He had tricked me.

I didn't think either of us was sane now. As a matter of fact, I thought everyone was inhuman, and I would go through life in this situation and this would go on forever. There never even existed something as wonderful as death that could get me—body and mind—out of this horrible, unnatural life (Unger, 1964).

This account illustrates especially well the feeling of many people at some time during an LSD session that something has gone wrong and that they never will be the same again. Such feelings only increase the panic and hopelessness. Adequate preparation and skilled handling, however, do make a crucial difference in the outcome of most cases. In this particular instance, the patient was guided through an extremely frightening and unpleasant part of his experience to a very positive and helpful climax. Unfortunately, such a happy ending is quite uncertain in uncontrolled settings.

The second type of experience is the *psychodynamic*, in which material that had previously been unconscious or preconscious becomes vividly conscious. We see abreaction and catharsis in the reliving of traumatic incidents from the past or in the experiencing of symbolic material. The use of LSD in Europe employs what has been termed the psycholytic method, which emphasizes the uncovering of psychodynamic material. Suggestion certainly plays a role, because the patients of Freudian therapists produce incidents from the stages of psychosexual development, whereas archetypal symbols are often encountered by patients of Jungian therapists. Essential to this method, however, is the support and guidance of a skilled therapist, both while the patient is having the experience and while he is between drug sessions. A detailed description of the psycholytic method has now been published in the papers presented at an international LSD conference in 1965 (Abramson, 1967).

The third type of experience, the cognitive, is characterized by

astonishingly lucid thought. The mind seems subjectively to be able to view things from a new perspective and to see the interrelationships of many levels or dimensions all at once. Such experiences usually occur when the drug effects are waning. The very existence of such states of mind led people to speculate that creativity research might be aided with psychedelic drugs. Harman and his co-workers (Harman, McKim, Mogar, Fadiman and Stolaroff, 1966) have already published a pilot study in which twenty-seven professionally employed males underwent a single moderatedose psychedelic session in a small group setting. Each subject had a particular problem on which he could not obtain closure and hoped to gain some new perspective through the psychedelic experience. The setting was structured so that expectation was maximized, and the sessions were run with a minimum of interruption. The results in terms of problems actually solved were promising (9 out of 44 attempted problems yielded practical solutions), but not conclusive because of the lack of a control group. Certainly this is an area that merits further investigation.

The fourth type of experience is the *aesthetic*. Perhaps the reported increase in all sensory modalities is what attracts some people to take LSD for "kicks." These reports do not exaggerate. Fascinating changes in sensation and perception do occur: synaesthesia in which sounds can be "seen;" objects such as flowers or stones that appear to pulsate and become "alive;" ordinary things that seem imbued with great beauty; music that takes on an incredible emotional power; and visions of beautiful colors, intricate geometrical patterns, architectural forms, landscapes or almost anything imaginable.

The fifth type of experience is the focus of interest in this presentation and has been called by various names: psychedelic peak, transcendental or mystical. For the sake of this discussion we shall refer to it as the psychedelic mystical or experimental mystical experience. Its psychological characteristics have been described elsewhere (Pahnke, in unpublished thesis) and will be only briefly summarized here.

These characteristics, nine in number, were derived from a study of the literature of spontaneous mystical experiences reported throughout world history from almost all cultures and religions. In studying accounts of these strange, unusual experiences, an attempt was made to extract the universal psychological characteristics as free from interpretation as possible. Scientific evidence indicates that these universal characteristics derived from spontaneous mystical experiences also precisely describe experimental psychedelic ones. The nine characteristics can be listed as follows:

1. Unity is a sense of cosmic oneness achieved through positive egotranscendence. Although the usual sense of identity or ego fades away, consciousness and memory are not lost; instead, the person becomes very much aware of being part of a dimension much vaster and greater than himself. In addition to the route of the "inner world" where all external sense impressions are left behind, unity can also be experienced through the external world, so that a person reports

that he feels a part of everything that is (e.g., objects, other people, nature or the universe), or, more simply, that "all is one."

- 2. Transcendence of time and space means that the subject feels beyond past, present and future and beyond ordinary three-dimensional space in a realm of eternity or infinity.
- 3. Deeply felt positive mood contains the elements of joy, blessedness, peace and love to an overwhelming degree of intensity, often accompanied by tears.
- 4. Sense of sacredness is a non-rational, intuitive, hushed, palpitant response of awe and wonder in the presence of inspiring realities. The main elements are awe, humility and reverence, but the terms of traditional theology or religion need not necessarily be used in the description.
- 5. The noetic quality, as named by William James, is a feeling of insight or illumination that is felt on an intuitive, non-rational level and has a tremendous force of certainty and reality. This knowledge is not an increase in facts, but is a gain of insight about such things as philosophy of life or sense of values.
- 6. Paradoxicality refers to the logical contradictions that become apparent if descriptions are strictly analyzed. A person may realize that he is experiencing, for example, an "identity of opposites," yet it seems to make sense at the time, and even afterwards.
- 7. Alleged ineffability means that the experience is felt to be beyond words, non-verbal, impossible to describe, yet most persons who insist on the ineffability do in fact make elaborate attempts to communicate the experience.
- 8. *Transiency* means that the psychedelic peak does not last in its full intensity, but instead passes into an afterglow and remains as a memory.
- 9. *Persisting* positive changes in attitudes and behavior are toward self, others, life and the experience itself.

The reasons for the great variety of psychedelic experiences (characterized here under five headings) have provided a fascinating research problem and are now generally recognized to be caused by dosage and the extra-drug variables of set and setting. Of course, most sessions do not contain just one kind of experience. In fact it is not uncommon for all five types to be present in a single psychedelic experience, though in varying proportions.

Dosage appears to be a crucial variable. Each individual has his own range of tolerance and response to any drug, and no absolute figures can be

quoted. In the low dose range, for most people, below 200 mcg of LSD, the probability is great for the emergence of aesthetic, cognitive and psychodynamic experience. At somewhere between 200 mcg and 400 mcg of LSD, there appears to be a critical level beyond which psychedelic mystical experience becomes possible, which can be compared to the minimal amount of thrust needed for a rocket to launch itself into orbit. Psychotic experiences are possible at any dosage level, but are much more probable at the higher doses.

The presence of the drug at a certain dosage is a necessary but not sufficient condition, because the extra-drug variables of set and setting play a crucial role in determining the kind of drug response. Psychological set is here defined as factors within the subject, such as personality, life history, expectation, preparation, mood prior to the session and, perhaps most important of all, the ability to trust, to let go, to be open to whatever comes. The setting is here defined as factors outside the individual, such as the physical environment in which the drug is taken, the psychological and emotional atmosphere to which the subject is exposed, how he is treated by those around him and what the experimenter expects the drug reaction to be. A person who has taken a psychedelic drug seems to be much more sensitive to non-verbal cues, perhaps because of an increase in suggestibility, but the exact role of suggestibility is a problem that needs to be further investigated.

It seems clear that the drug is only a trigger, a catalyst or facilitating agent. The kind of psychedelic reaction is largely dependent upon extradrug variables. Also, at the present state of knowledge, the exact content is impossible to predict with certainty. Psychotic reactions are the easiest to produce; mystical experiences are the hardest, certainly not automatic, even under optimal conditions. Much more needs to be learned.

We turn now to an examination of the evidence that psychedelic mystical experiences actually occur. Most researchers who have worked with LSD in either a therapeutic or a supportive setting have reported the occurrence of mystical experiences in varying degrees of frequency. Some workers, especially most of the European psycholytic therapists, have not been very much interested in such experiences and, in fact, have tried to discourage their occurrence as an unwanted distraction. The frequency with that kind of set and setting is much less, but, even so, these experiences are still reported. As time has gone on, some of the European psychiatrists who have heard about the work done in Canada and the United States have become more interested (Arendsen-Hein, 1967; Johnsen, 1967).

Dr. Arnold Ludwig, of the Mendota State Hospital in Madison, Wisconsin, has purposely programmed his LSD sessions to focus on psychodynamic issues and has definitely not encouraged mystical experiences, as he has informed me personally. Interestingly enough, this kind of experience has occurred anyway in some patients, who then often sought out the hospital chaplain for discussions of religious issues.

Houston and Masters (Masters and Houston, 1966) report a series of 206

subjects with whom they have worked, but of whom little more than 3% were considered to have had true mystical experiences. Such figures need to be interpreted cautiously unless a careful definition with some kind of method for quantifying the experience is established.

A questionnaire has been developed that is based on the nine characteristics of spontaneous mystical experiences outlined above (Pahnke, in unpublished thesis). For any subject the percentage of the maximum possible score for each category can be determined. Varying degrees of completeness are possible, but to be counted as a mystical experience it was decided that both the total score and the score in each separate category must be at least 60% to 70%. This questionnaire has been used in two studies that I have conducted.

The first was carried out on Good Friday in 1962 to test the hypothesis that persons who were given psilocybin would have experiences similar to those reported by spontaneous mystics. Twenty theological students from relatively similar religious and socio-economic backgrounds, after medical and psychiatric screening, were carefully prepared in groups of four with two leaders for each group. All thirty participants listened over loudspeakers to a meditative Good Friday service in a private basement chapel while the actual service was in progress in the church above. The experiment was so designed that half of the subjects received 30 mg of psilocybin and the rest, who became the control group, got as an active placebo 200 mg of nicotinic acid, which causes no psychic effects, only warmth and tingling of the skin. From our preparation all the subjects knew that psilocybin caused autonomic changes. Those who got nicotinic acid thought that they had received psilocybin, and suggestion was thus maximized for the control group. The drugs were administered double-blind, so that neither the experimenter nor the participants knew the specific contents of any capsule. Data were collected by tape recording, written account, the mystical-experience questionnaire and personal interview. When all the data were analyzed, the scores of psilocybin subjects were higher to a statistically significant degree in all categories than those of the control subjects. In regard to degree of completeness, only three or four of the ten psilocybin subjects reached the 60% to 70% level of completeness. whereas none of the control subjects did.

The second series of experiments was performed at the Massachusetts Mental Health Center during 1965 and 1966, an account of which is now being prepared. Forty carefully screened normal volunteers were selected. Most of the subjects were over thirty and held responsible positions in the community as professional people. The sensational publicity about LSD in the popular press added difficulties to our recruitment. We rejected more than 50% of our volunteers on the basis of medical and psychiatric history, physical examination, psychological testing and psychiatric interview. After three hours of preparation, psilocybin was administered to four subjects at a time in a carefully prepared room with cut flowers, pictures of nature scenes, candlelight and a place for each subject to recline and relax. Silence was maintained during a six-hour program of classical music. The

setting was supportive, and there were no interruptions for testing during the session. We encouraged the subjects to relax and to let the music carry them. At the present time, the data are not completely analyzed, and all that can be reported are some preliminary impressions. First, the procedure seemed safe for carefully screened normals. No one suffered physical or psychological harm even after a one year follow-up. Second, 20% to 40% of the subjects had a mystical experience, depending on the level of completeness desired. Third, 95% of the subjects said that they would be willing to take the drug again, perhaps sometime in the future, but not too many were eager to do so right away. Having had such powerful experiences, they expressed a desire for time to integrate what had been learned.

In comparison to the 3% of mystical experiences reported by Houston and Masters, and the 20% to 40% in our two studies, some 75% of over 100 patients from the alcoholism project at the Spring Grove State Hospital in Baltimore have had intense mystical experiences during their first session with LSD. It should be remembered that of these patients each had between twelve and twenty hours of individual therapy before his session, which was run individually. In our sessions we had only three hours of preparations, and the sessions were run in groups of four. Individual monitoring seems to help guide someone toward a positive experience. At Spring Grove everything is done to ensure optimal conditions (Kurland, Unger, Shaffer and Savage, 1967). An important consideration is whether or not such mystical experiences are religious. A simple identification of religious experience with mystical experience fails to take into account the many definitions of religion. Religions vary in their emphasis upon mysticism, although there is a tendency to make the mystical element the most important characteristic of religion, especially among psychologists of religion who have been interested in the dramatic phenomena of the mystical experience. William James reflected this attitude by his preference for religion that is an "acute fever" rather than a "dull habit." Not all religious experience is necessarily mystical in the sense of our definition of mystical experience given below. Pratt, for example, divides religion into four kinds or aspects, of which the mystical is only one, the other three being the traditional, the rational and the practical or moral (Pratt, 1921). Even when guite emotionally meaningful, participation in a particular religion by observing religious laws, through intellectual belief in a certain creed or theology or in institutional membership and attendance at rites and rituals may not result in or be the product of mystical experience.

On the other hand, all mystical experience is not necessarily religious. Again much depends upon how one chooses to define religion. If one makes the concept of a "personal God" central to the definition of religion, many forms of mystical experience could not be considered religious. The phenomena of mystical experience may occur outside the framework of any formal religion with no reference to an articulated theology.

The problem is by-passed or merely indicated, rather than solved, by broadening the definition of religion to include any experience that would

qualify as mystical by our criteria. Tillich, for example, considers an experience religious when it gives ultimate meaning, structure and direction to human experience, or when one is concerned "ultimately" (Tillich, 1951). Better, perhaps, is Huston Smith's definition in an unpublished address. He has defined as a religious experience one that elicits from the experiencer a centered response from the core of his being. Since his being includes feelings, thoughts and will, a religious experience triggers in the experiencer a triple movement—a movement of the emotions in awe, of the mind in belief and of the will in obedience. Here we return to the important ninth characteristic of mystical experience. What changes are there in the person's life? What does he do about it in terms of some religious discipline? If we accept Smith's definition of religious experience and compare it with the nine characteristics, we can perhaps say that such a psychological definition of mystical experience has at least something religious about it. Whether or not mystical experience is religious depends upon one's definition of religion.

Rather than labor the point, the following examples of actual experimental mystical experiences may help the reader to decide whether such experiences would fit his personal definition of religion. The first is the experience of a Christian ministerial student who took a compound from the psilocybin series in a carefully controlled experiment that was conducted in a German research institute under the supervision of an experimenter who was not particularly interested in mystical experiences.

I hesitate to attempt a summary of my drug experience as I am acutely aware of the inability of linguistic symbols to contain, or even accurately reflect, the dynamics of 'mystic' consciousness. In the words of the Russian poet Tyutchev, I feel as though 'A thought that's spoken is a lie'. To seek to condense any of my experiences into words is to distort them, rendering them finite and impure. In so acknowledging the profound ineffability of my experience, I am not trying to write poetry—although in the final analysis this may well be the only possible means of verbal expression—but intend only to convey the feelings of frustration and futility with which I begin this report.

Now, four days after the experience itself, I continue to feel a deep sense of awe and reverence, being simultaneously intoxicated with an ecstatic joy. This euphoric feeling... includes elements of profound peace and steadfastness, surging like a spring from a depth of my being which has rarely, if ever, been tapped prior to the drug experience. The spasmodic nature of my prayer life has ceased, and I have yielded to a need to spend time each day in meditation which, though essentially open and wordless, is impregnated by feelings of thanksgiving and trust. This increased need to be alone is balanced by what I believe to be a greater sensitivity to the authentic problems of others and a corresponding willingness to enter freely into genuine friendships. I possess a renewed and increased sense of personal integration and am more content simply to 'be myself' than previously.

... Relatively soon after receiving the drug, I transcended my usual level of consciousness and became aware of fantastic dimensions of being, all of which possessed a profound sense of reality.

... It would seem more accurate to say that I existed 'in' these dimensions of being as I had not only transcended my ego, but also the dichotomy between subject and object.

It is meaningful to say that I ceased to exist, becoming immersed in the ground of Being, in Brahman, in God, in 'Nothingness,' in Ultimate Reality or in some similar religious symbol for Oneness....

The feelings I experienced could best be described as cosmic tenderness, infinite love, penetrating peace, eternal blessing and unconditional acceptance on one hand, and on the other, as unspeakable awe, overflowing joy, primeval humility, inexpressible gratitude and boundless devotion. Yet all of these words are hopelessly inadequate and can do little more than meekly point towards the genuine, inexpressible feelings actually experienced.

It is misleading even to use the words 'I experienced,' since during the peak of the experience (which must have lasted at least an hour) there was no duality between myself and what I experienced. Rather, I was these feelings, or ceased to be in them and felt no loss at the cessation. This was especially evident when, after having reached the mystic peak, a recording of Bach's 'Fantasia and Fugue in G Minor' was played. At this time it seemed as though I was not M. R. listening to a recording, but paradoxically was the music itself. Especially at one climax in the Fantasia, the 'love' I was experiencing became so overwhelming as to become unbearable or even painful. The tears I shed at this moment were in no sense those of fear, but ones of uncontainable joy.

... During the height of the experience, I had no consciousness of time or space in the ordinary sense. I felt as though I was beyond seconds, minutes, hours, and also beyond past, present, and future. In religious language, I was in 'eternity

... Let me affirm that even with my acquaintance with mystic literature of both east and west, coupled with the profound appreciation of natural and artistic beauty I have always enjoyed, I know I could never have understood this experience, had I not lived it myself. The dimensions of being I entered surpassed the wildest fantasies of my imagination and, as I have said, leave me with a profound sense of awe.... In no sense have I an urge to formulate philosophical or theological dogmas about my experience. Only my silence can retain its purity and genuineness.

It may be objected that a divinity student would obviously have such an experience because of his familiarity with mysticism and religious language. In the Good Friday experiment, however, the control subjects with the same

amount of suggestion did not have mystical experiences. Also the next several examples were written by chronic, hospitalized alcoholics who had received LSD treatment and who did not have the same interest in religion and mysticism. The accounts are perhaps even more vivid in their simple straightforwardness. Following are excerpts of accounts from four different patients (Unger, 1965).

I found myself drifting into another world and saw that I was at the bottom of a set of stairs. At the very top of these stairs was a gleaming light like a star or jewel of exceptional brilliance. I ascended these stairs and upon reaching the top, I saw a gleaming, blinding light with a brilliance no man has ever known. It had no shape nor form, but I knew that I was looking at God himself. The magnificence, splendor, and grandeur of this experience cannot be put into words. Neither can my innermost feelings, but it shall remain in my heart, soul, and mind forever. I never felt so clean inside in all my life. All the trash and garbage seemed to be washed out of my mind. In my heart, my mind, my soul, and my body, it seemed as if I were born all over again.

A feeling of great peace and contentment seemed to flow through my entire body. All sounds ceased and I seemed to be floating in a great, very very still void or hemisphere. It is impossible to describe the overpowering feeling of peace, contentment, and being a part of goodness itself that I felt. I could feel my body dissolving and actually becoming a part of the goodness and peace that was all around me. Words can't describe this. I feel an awe and wonder that such a feeling could have occurred to me.

At the peak or climax of my experience, I realized a great scene was about to unfold within myself. I actually shook and shuddered at what I felt. A tremendous earthquake feeling was building up in me. There was a tremendous force, and I came and saw a glorious beauty of space unfold before me, of light, color, and of song and music, and not only of one thing good and beautiful, but of a oneness in fellowship, a wanting to belong to this greatness of beauty and goodness that unfolded before my eyes, and that I felt.

Suddenly, I could see my family handing me great love. It seemed to be pouring out of their hearts. I cried, not bitter tears, but tears of beauty and joy. A beautiful organ was playing in the background, and it seemed as if angels were singing. All of a sudden I was back in eternity. There was music and beauty. Peace and happiness, tranquillity—could not possibly describe my feelings. My heart was filled with joy that was overwhelming. Just a beauty and peace that I have never known. At this point, I felt that time was thousands of years ago, thousands of years from now, and now.

The profound emotional impact that these experiences have on people can be sensed. The promising possibility that such positive experiences may have therapeutic value is one implication. Another is the usefulness of such a tool for investigating profound mystical experiences that heretofore have been hard to study scientifically because of their rarity.

The basic psychological experience goes beyond any particular framework, but does lend itself to many possible interpretations afterwards, since the rational mind inevitably goes to work and tries to understand. For example, the mystical experience of union or fusion with its concomitant characteristics has been interpreted in many ways: fading or melting into the universal pool, boundless being, the void, *satori*, *nirvana*, *samadhi*, the *atman-Brahman* identity; the awareness of a "Beyond," "More" or pure "Self;" or union with God. Yet in spite of the particular interpretation, the psychological experience itself is the basis.

This experience of encounter with what is felt to be a divine dimension deep within a person is not new. It has been reported throughout the centuries in the history of man's spiritual quest. It should be remembered that there are psychotic states of mind in which people also speak in religious metaphors, such as, of meeting God or of being God. The similarities and differences between psychosis and mysticism form an interesting area that needs much more serious study and analysis, for the answers are by no means worked out as yet.

One objection sometimes raised against calling these drug-facilitated experiences mystical or religious is that the accomplishment of something usually considered so rare and unattainable except by extraordinary effort or great merit now seems too easy. What seems like a short-cut causes a feeling of uneasiness. Perhaps the Puritan ethic, so pervasive in our culture, is the psychological explanation. Pleasure is supposed to be earned through hard work and painful struggle.

Indications are, however, that what one *does* with a psychedelic experience may be more important than merely *having* it. Without integration into the on-going life of the individual, the experience may be only an irrelevant memory, no matter how beautiful. Much work is needed to integrate the insights from LSD when used as a part of psychotherapy. The analogy might be drawn of a trip to a new country. If the traveler knew nothing about the history and culture of this country, he might have an interesting trip, but only a fast-fading memory would remain. If, on the other hand, before he departed, he learned as much as possible about the country, its language and customs, talked with people who had been there before him and prepared himself fully, he would probably not only enjoy the experience more, but could utilize it to enrich his life afterwards by thinking, reading and talking about it with others who had made such an experience an integral part of their lives.

At the present time there is a growing ferment of excitement and alarm caused by the religious movement that has been inspired by psychedelic drugs. Already there are four major psychedelic churches, which have been founded by persons who are convinced that their psychedelic experiences have religious implications. These four churches are The League for Spiritual Discovery, The Neo-American Church, The Native American Church and The Church of the Awakening.

The League for Spiritual Discovery, or L.S.D., is the most recent, having been founded by Timothy Leary in September of 1966, and it already claims from three hundred to five hundred members. The psychedelic celebrations that have been performed in some major cities throughout the country have received considerable publicity. These "light shows" have attempted to portray some psychedelic phenomena, but people who have actually had an LSD experience seem to agree that only a crude facsimile is produced. Leary has used these occasions to give psychedelic sermons about his church. The central message has been summarized as "Turn on, tune in and drop out." In essence, the message is of withdrawal, but not from everything, not from all social life, with nothing in its place. The withdrawal is from the meaningless games in which we are involved, to allow full-time commitment to spiritual exploration, which Leary feels is the most important reason for living. An attempt is made to criticize modern American culture.

The Neo-American Church was founded in 1964 by a psychologist, Arthur Kleps, who calls himself Chief Boo-Hoo, the Patriarch of the East. Kleps states that the purpose of this title is to remind him not to take himself too seriously. Membership now allegedly numbers over six hundred. LSD is their sacrament, and one of their main beliefs is that alteration of consciousness with LSD is a religious right of any citizen.

The Neo-American Church should not be confused with the Native American Church, which has deep historical roots going back to the religious practices of the Aztecs in Mexico before the time of Christ. When the Spaniards came, they tried to stamp out the use of peyote, but the custom persisted underground. Sometime between 1700 and 1880, the religious use of peyote spread across the Rio Grande River into the southwestern United States and from there to the Plains and then all the way into Canada and as far east as Wisconsin and Michigan. The church has been legally incorporated in Oklahoma since 1918. At present membership has been estimated at anywhere from 50,000 to 250,000 Indians, with only a few white members. Peyote is used in a religious ceremony as their sacrament, which they feel is essential to their church.

Some important features of the ceremony are constant among different groups. The rite is an all-night affair extending from about 8:00 p.m. on Saturday until about 8:00 a.m. on Sunday. It usually takes place around a central fire in a teepee and is led by four or five Indian officials. The ritual begins with prayer, followed by the singing of songs by each participant in turn accompanied by the water drum, ingestion of the sacramental peyote and contemplation. Although the contents of the individual prayers and songs are spontaneous, the ritual as a whole follows a definite pattern. At midnight there is a water-drinking ceremony, and at dawn parched corn in sweetened water, fruit and dried sweetened meat are eaten. [For a detailed description of the ritual with diagrams of the arrangement of participants, see Omar C. Stewart's Washo-Northern Paiute Peyotism, Volume XL, Number 3 of the Publications in American Archaeology & Ethnology of the University of California (1944); and compare to Weston La

Barre's *The Peyote Cult*, Number 19 of Yale University Publications in Anthropology, an enlarged edition of which was published in 1964 by The Shoe String Press of Hamden, Connecticut.].

Because the ceremony is regarded as very sacred by the Indians, preparation for the rite is taken seriously. Proper preparation includes being physically clean, spiritually pure, psychologically humble and in a mood for concentrated meditation (Slotkin, 1956). The participants feel that peyote aids contemplation by increasing their powers of introspection, sensitizing their consciences and producing visions of great meaning. Throughout the ceremony the participants conduct themselves with due solemnity. White men who have attended these worship services as observers or as participants have taken peyote with the Indians in a receptive manner and have been impressed by the serious and sacred nature of the ceremony (Osmond, 1961; Schultes, 1963; Slotkin, 1961).

The Church of the Awakening was founded in 1958 by two married physicians, John and Louisa Aiken from New Mexico. The church has grown slowly but steadily and has at present about 350 members. Only people who have demonstrated a serious interest in spiritual awakening have been encouraged to join. The members claim that their spiritual lives have been deepened because of participation in psychedelic ceremonies using their sacrament peyote. The use of the sacrament is restricted to once every three months, if even that often. The major emphasis seems to be on integration of spiritual insights into the on-going life of the individual member.

There are certain legal problems posed by the existence of psychedelic churches. Both natural products, like peyote, cactus buttons, mushrooms or morning glory seeds, and synthetic chemicals, like LSD, psilocybin or mescaline, are considered drugs by the law when taken into the human body and thus requiring medical supervision. Because this is the way our society has defined things, there is really no legal mechanism or social sanction for a church to use these substances for spiritual exploration. Unwillingness to accommodate to this fact has caused legal difficulties for Timothy Leary, Arthur Kleps and some of their followers. But the issue becomes clouded because the religious use of peyote in the Native American Church has been permitted by the Food and Drug Administration and by the Supreme Court of California. The matter becomes even more complex when Dr. John Aiken, a licensed physician, seeks to administer peyote for what he considers bona fide religious purposes. If he is not allowed to do so, and the Indians are, does this constitute discrimination against white people? Undoubtedly, religious freedom and related issues will receive much publicity in the years ahead as test cases reach the courts. If the matter is decided by outlawing all religious use of psychedelic substances, even by the Native American Church, it may turn into another sorry example of the white man's disregarding the sensitivities and cultural heritage of the American Indian.

In the meantime there is an increasing need for organized religion to consider the impact of the psychedelic religious movement. If instead of the

collapse of a fad, as some predict, there is continued interest, growth and enthusiasm, what might be the effect on religion in America? Persons having had powerful psychedelic mystical experiences may well feel that organized religion, in contrast, is moribund and irrelevant to their needs. Such a trend could be perceived as a threat, and the churches might feel a need to encourage suppression of psychedelic drugs. On the other hand, it can be speculated that with an imaginative and creative approach to an increasing amount of mystical experience, revitalization of religious life in the churches could occur. The churches could help people to integrate such profound experiences with the aid of meaningful and appropriate religious symbols. Such people do tend to talk about their drug experiences in religious terms. In our experimental work with divinity students and ministers, those who had a meaningful religious framework were much helped in using positive psychedelic experiences to understand their faith more existentially.

Some definite dangers, however, are posed by the growing use, religious and otherwise, of psychedelic drugs. The possible dangers to the individual have been fully discussed at this conference. It should be emphasized that unsupervised and unskilled use will inevitably lead to psychiatric casualties in a certain, as yet unknown, percentage of cases. The most obvious reasons are lack of screening, inadequate preparation, unskilled handling during the drug reaction, and little or no help with useful integration after the experience. The dangers to society have also been mentioned. If more and more people drop out and withdraw, can society continue to function?

If psychedelic drugs really can change people's goals, values, motivations and needs for achievement, the impact could be considerable on our society, in which there is so much stress on money, power and status. Less emphasis on these traditional goals, coupled with the availability of more leisure time, could alter our style of life. Some argue that such changes in moderation might be healthy, yet it is possible that widespread adoption of a radical change in outlook might be disastrous to a society that wants mainly to multiply its Gross National Product and to compete successfully. Such issues need realistic and sensitive consideration.

There has been too much heat and perhaps not enough light propagated by the psychedelic drugs. Because of mass-media coverage, certainly everyone today has heard of LSD. Interestingly enough, almost everyone has a definite opinion, no matter how little or how much he knows about the field. These opinions, pro or con, usually have a deep emotional basis. Certainly the reason is more than just an abhorrence of drug taking, because other drugs such as tranquilizers, sleeping pills and alcohol are taken freely with no such emotional reaction. The dangers of negative consequences such as psychological breakdown appear to be a logical reason, but since most drug experiences are positive, there must be an additional explanation. A deeper reason may lie in the nature of the profound emotional experiences, often considered religious, which seem to have the power to change a person's values and to generate enthusiasm and inspiration in a direction perhaps not shared by society in general. Such

consequences may be seen as a threat when considered logically, but felt even more powerfully to be so at a subliminal or non-rational level.

Our society is faced with the fact that the use of psychedelic drugs is spreading rapidly. Do we have the capacity and wisdom to deal constructively with this problem, or will we seek a solution by restrictive legislation and police force? In this instance, suppression has much less a chance of succeeding than in the illegal use of narcotics, which has not been stopped. Throughout history when enough people have really wanted something, no restrictive measures have worked. Laws did not stop the introduction of coffee into Europe, nor the consumption of alcohol in the United States during Prohibition.

What will undoubtedly result, however, from a rigid suppression of psychedelic drugs is a severe inhibition of research in this area. The more laws that are passed, the more the public identifies the drugs with something negative. People in power, in both the public and academic realms, are influenced by public reaction and the mass media, and when research is proposed, there is hesitation and lack of support. The decline of research with psychedelic drugs has already occurred. Dr. Harold Abramson, one of the early pioneers in LSD research, has commented that an interested layman can use LSD more easily in our society today than can a doctor who wants to do legitimate research. The joint committee now set up by the N.I.M.H. and the F.D.A. to screen proposals will possibly enable more research to begin in the near future.

Research is especially important in regard to the individual and the societal problems caused by the growing use of psychedelic drugs. Education rather than suppression would seem a more effective solution, and more research is needed to learn the unknown facts about many aspects of these drugs. We need more knowledge about their biological and psychological mechanisms of action, their therapeutic possibilities, dangers and long-term effects. Valid statistics about chance of harm would be useful in calculating a realistic pleasure-to-risk ratio.

An important area for more research is the effect of psychedelic drugs on relatively stable, well-adjusted persons. Many of the people who have taken LSD and upon whom some of the conclusions about its dangers are based were already drop-outs before encountering the drug. For purposes of education and guidance it is important that we base our facts on drug effects in normals rather than on retrospective analysis of drop-outs. No one knows how many successful people who did *not* drop out or withdraw from their place in society have found that psychedelic experience can be an enriching part of their total lives, without eclipsing other interests and responsibilities.

There are many questions that can only be answered by careful and well controlled research. For example, what are the exact conditions responsible for the production of aesthetic, cognitive or mystical experiences? All the extra-drug variables of set and setting need to be studied intensively. An

interesting project would be to follow a group of persons who would have LSD sessions at regular intervals for three to five years, or to do a longitudinal study on a group of persons who had only a few sessions and then were followed over a period of time. In a small group who might take LSD together, other phenomena such as the effect on group discussion, group interaction and group cohesion could be measured.

The sociology of religion has an extraordinary opportunity for research in the psychedelic religious movement. Here is a chance to study the formation and growth of what may become an important form of religion in the United States. The small cult-like groups, the evangelistic ferment, the utopian ideals, the struggle for survival—all these elements can be studied for better under standing of what has gone on when other religious movements emerged in the past. Dr. R. Blum (Blum *et al.*, 1964) has made a start in this area, but other points of view would also be helpful. Participant-observers, who would be more in rapport with those in the movement, might add valuable additional data to the field.

With regard to the future, psychedelic drugs seem to be here to stay as a fact of our present existence. The experiences are much too powerful and have too many implications to be dismissed as a passing fad. Indications are that the use will increase rather than decrease and may have more influence on American life than we now imagine. Certainly researchers with LSD even ten years ago would not have predicted what has happened. More surprises may be in store for us. Work needs to be done with these drugs without delay in a disciplined scientific way rather than permitting a blackmarket underground to undertake experiments by default.

If these drugs are ever going to be used legitimately, training centers will have to be established, because specialized training under supervision is needed to insure maximal safety. The work thus far at the Spring Grove State Hospital has indicated that even very unstable people can be treated with LSD in relative safety if specific procedures are employed. These centers can be used for the training not only of psychiatrists, but also of psychologists, social workers, ministers or any one else who might have a role in treatment with these drugs. Some day it may even be possible to establish places where interested, serious people could go to take LSD in maximal safety under the supervision of trained personnel. Such a suggestion is utopian at present and may take a long time in being developed, but it is possible in the future.

Some people, however, and especially students, are not content to wait and are asking themselves the existential question "Should I take LSD now, on my own?" It is obvious that anyone who really wants to obtain the drug and take it can do so. No amount of admonition to the contrary from college administrators can really stop anyone. It remains a personal decision, but anyone contemplating such a course of action would be wise to consider some basic facts.

First, there is a definite risk, which is certainly greater in uncontrolled

than in controlled conditions. The work at Spring Grove and elsewhere has demonstrated that with skilled handling the risk is minimal. Psychedelic drugs are like other powerful tools in that the risk is greatly dependent upon the way they are used. For example, for eye surgery a skilled surgeon is needed, not a watchmaker, no matter how skilled he might be in the use of fine instruments. The use of psychedelic drugs also requires specialized training for maximal safety. At the Spring Grove Hospital, three to six months, or longer, are needed to train a therapist. The fact that safe procedures have been worked out, however, is not much help at present to someone who would like to take a psychedelicdrug under supervision, because at present no authorized research in the United States is being done with normal persons.

Another thing to consider is the time of life. Many persons in college are going through an identity crisis and are trying to decide where they are really going with their lives. Because a psychedelic drug experience may affect judgment, it is probably not a good idea to make a major life decision within three months after a drug session. People undergoing intensive psychotherapy or psychoanalysis are given the same advice. Decisions made at such a time may turn out to be regretted later, especially when no guidance is available during and after the drug session. People who have a psychedelic experience when they are older and have successfully settled some of the crucial issues of their lives probably have a better chance for an enriching experience. It would seem that the more life experience a person has had, the better, just as the program fed to a computer is the basis upon which the results are produced.

It is a misconception to imagine that LSD is the magic answer to anything. Hard work is needed to utilize the experience, and follow-up therapy with the therapist who guided the drug session can be very helpful. Persons who take a psychedelic drug to "work out their own problems" not only may be disappointed but also may unearth additional conflicts. More than a few people have been unpleasantly surprised by what emerged with great force from the unconscious.

In spite of the very real dangers in self-experimentation, anyone with a serious and scientific interest in this fascinating area of research would not be discouraged about the prospects of legitimate research. There is much work to be done, and people of the highest caliber will be needed in the near future if we are to gain new knowledge about these drugs and their possible applications. Ideally, an interdisciplinary approach should be used involving the joint efforts of psychiatrists, psychologists, social workers, clergymen, theologians and philosophers.

Anyone interested in this field should get the best possible training in the discipline of his choice. It has been said: "Turn on, tune in and drop out." This can be paraphrased a bit as follows: Turn on your motivation in the most concentrated way possible; tune in to everything that's relevant to equip yourself in the way of training for the work you want to do in the field; and then, instead of dropping out, you will be ready to drop into a

worthwhile and interesting career, one that may be full of great satisfactions and a sense of accomplishment, because this is an exciting area.

A striking example of a future psychedelic research possibility is the work with terminal-cancer patients. This area is relevant to a discussion of religion and LSD, because the experience of death has a crucial place in almost all religions. In spite of much talk and concern, and perhaps guilt about the way terminal patients are treated, not much has really changed in this anxiety-ridden situation in our culture. Many times there is a growing isolation from meaningful interpersonal involvement, as all efforts are bent toward making the patient "comfortable."

Psychedelic therapy may have a role to play to make life more livable for terminal patients. LSD was first tried for its analgesic effect, which was found to be considerable (Blum et al., 1964; Kast, 1963; Kast, 1964a; Kast, 1964b). More important, perhaps, was the finding that fear, anxiety and apprehension were lessened in some cases (Kast, 1966). By working with patients and their families, the opportunity for an increase in interpersonal closeness was afforded, especially in the wake of a powerful psychedelic experience (Cohen, 1965). Current research to explore these initial leads is only in the pilot stage, but it appears to be a promising approach to help ease the agony and isolation of death, both for those who will be left behind and for the one who must face the end of his life.

In conclusion, let us ponder the wide influence that the accidental discovery of LSD in a Swiss pharmaceutical laboratory has exercised throughout the world. There have been far-reaching effects in all kinds of research, especially in biochemistry, pharmacology, psychiatry, psychology, sociology, philosophy and religion. The interdisciplinary implications seem broad indeed. In spite of the dangers that are certainly potential in the use of this powerful tool, it has always been man's destiny to push ahead in order to increase his knowledge. This area is no exception, but those who undertake such research bear a heavy responsibility.

See also the Discussion which followed the presentation of Dr. Pahnke's paper.

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