# THE PSYCHEDELIC EXPERIENCE—A NEW CONCEPT IN PSYCHOTHERAPY

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#### **ABSTRACT**

The authors, by the simultaneous administration of massive doses of lysergic acid diethylamide (LSD) and mescaline, tried to produce a unique experience for the patient which is to be so profound and impressive that it changes the patient's own evaluation of his past life experiences and consequently may lead him to establish new values and a more realistic frame of reference than had been established before. The experience, in a broad sense, is not unlike a religious conversion. The preparation of the patients for this experience, the mode of administration and dosage, and finally the modalities of experience under the drug are described. A few short illustrative cases are presented.

A variety of agents currently available (including LSD [lysergic acid diethylamide], mescaline, psilocybin, and many others), which have also long been known in natural forms—certain mushrooms, cactus buttons, seeds, etc.—have the property of permitting experiences of expanded consciousness. Osmond introduced the term "psychedelic," defined as mind-manifesting, to designate such agents. LSD in particular, has been used in contemporary psychotherapy, most often as an adjunct to conventional therapeutic procedures. The therapeutic results with these materials are dependent not only

upon dosage, but upon the intention of the subject as he submits himself to the experience, the kind of preparation he has had prior to the taking of the material, the setting of the session, and the help of a therapist who has himself explored deeply in these unfamiliar regions of the mind. Because of this dependence, reports and opinions in the literature vary widely.

Perhaps the most favorable results have been obtained using procedures developed by Hubbard, and reported by Blewett, Chwelos, MacLean, et al., 2. 3. 4 the predominant characteristic of which is that the patient is given an overwhelming dosage in an environment in which measures have been taken to make the atmosphere one of permissiveness, friendliness, and psychological safety. Contact with the therapist may be limited to the one all-day session, plus a few preparatory and follow-up interviews.

The concept underlying this approach is that an individual can have a single experience which is so profound and impressive that his life experience in the months and years that follow become a continuing growth process. That such a single overwhelming experience can have such results

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is not an idea commonly accepted by psychotherapists, although studies of religious conversion have suggested the possibility. Nevertheless, experience of the above-mentioned investigators over a period of ten years involving hundreds of cases has clearly demonstrated that this can happen. The change in behavior is most easily observed in the case of chronic alcoholics; in the above studies roughly half of those treated have completely stopped drinking (over periods of several years) often following a single LSD experience. This behavioral change has apparently been intimately related to deep changes in values and motivational patterns which followed profound insights into the individual's essential nature.

The work summarized here began as an attempt to duplicate the reported results of Hubbard and others using LSD with this specific procedure. The results have been so encouraging that it seems advisable to report them even though these studies are still in their preliminary stages.

The apparent dynamics of the psychedelic experiences.

Because the dynamics of these changes are so important to this investigation, and because the discrepancies between results reported in the literature are so puzzling, it is necessary to describe briefly some of the types of experience encountered with the psychedelics: (1) the stage of evasive maneuvers, (2) of symbolic perception, and (3) of immediate perception.

(1) Evasive Stage. Typically when one of the psychedelic materials is used to give access to the unconscious, the result is often overwhelming at first. The reaction may be an attempt (of which the subject is not necessarily consciously aware) to control the effects of the drug. If adequate material has been administered this attempt cannot completely succeed, but it may lead to psychosomatic symptoms of various sorts such as localized pain or numbness or possibly nausea. The strangeness of the new feelings and perceptions which come flooding in

may, particularly if he tries to cope with them by rationalizing them and fitting them into his old and inadequate conceptual framework, throw the subject into an uncomfortable state of confusion in which the intellectual processes are swamped and attempts to establish order fail. This state may become quite frightening and distressing, and may resemble a schizophrenic state. Any distrust of others may become magnified into a paranoidal sort of suspicion and anxiety. (The frequent appearance of these symptoms when the subject has inadequate trust in the environment and in his own organism, or when the subject expected a psychotic-like experience, led to the earlier use of the designation "psychotomimetic" for these agents.)

These unpleasant episodes can be minimized by support and guidance from the therapist, by the subject's trust in those around him and by his willingness to relinquish his previously-held concepts and opinions in order that he may perceive himself and the world in a new and unaccustomed manner. The subject comes to see that he can profitably view any disagreeable aspects of the LSD experience as manifestations of something he is doing to himself, and which he can learn to stop.

He may enter next (with eyes closed or with low illumination in the room) upon a succession of hallucinatory experiences. Brilliantly colored geometrical patterns present a constantly changing spectacle of aesthetic delight. It is as though the ego, having lost the battle to divert attention through unpleasantness, seeks to charm and distract the conscious mind by throwing up a smokescreen of hallucinations to hide the inner knowledge which it fears. The visions may portray scenes and incidents, as in a technicolor dream, or they may take the form of abstract symbols, and may become fraught with meaning as the individual passes into the second stage of symbolic perception.

(2) Symbolic Stage. The most diverse experiences are encountered here, often coupled

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3q xwith significant meaning which may be immediately apparent or which may come only with subsequent pondering. The unconscious mind employs visual and other symbolic representations with seemingly endless variety to convey insights to the conscious mind. They may represent to the individual some aspect of his own picture of himself, or some characteristic of his specific approach to life. Again, the insight may be a more general one of a philosophicalreligious nature. This may come, for example, in the form of a newly deepened significance to a familiar phrase such as "We are all one," or in an awareness of a greatly intensified feeling or relationship to others and to the entire universe. (Both of these stages are described in more detail by Blewett, et al. 2.3)

Through the above processes, the subject constantly works off repressed material and unreality structures, false concepts, ideas, and attitudes, which have been accumulated He experiences. Thus a form of through psychological cleansing seems to accompany the subjective imagery. This results in considerable ventilation and release almost independent of intellectual clarificaton. Gradually the subject comes to see and accept himself, not as an individual with "good" and "bad" characteristics, but as one who simply is. By relinquishing his concepts and surrendering himself to the experience he finds he can move beyond the state where knowledge is mediated in symbolic form, to a totally new condition in which it appears directly.

(3) Stage of Immediate Perception. In this stage, the psychosomatic symptoms, the model psychoses, the multicolored hallucinatory images tend to disappear. The individual develops an awareness of other aspects of reality than those to which he is accustomed. He is convinced that, somehow or other, this other realm (which he feels he apprehends directly, in contrast to the usual space-time world of practical experience and of physics which he perceives with his phys-

ical senses) is "really" there, in a manner similar to that in which he is convinced in ordinary life (without being able to demonstrate) that he and other personalities with whom he interacts exist in reality. He perceives what he may attempt to describe as "levels" of consciousness, as "other dimensions" of space, as "traveling in time"; and yet as he tries to describe these he recognizes the effort to be as doomed to partial failure as the effort to describe being in love to someone who has not experienced it.

Above all, he comes to experience himself in a totally new way and finds that the ageold question "Who am I?" does have a significant answer. He experiences himself as a far greater being than he had ever imagined, with his conscious self a far smaller fraction of the whole than he had realized. Furthermore, he sees that his own self is by no means so separate from other selves and the universe about him as he might have thought. Nor is the existence of this newly experienced self so intimately related to his corporeal existence.

These realizations, while not new to mankind, and possibly not new to the subject in an intellectual sense, are very new in an experiential sense. That is, they are new in the sense that makes for altered behavior. The individual sees clearly that some of his actions are not in line with his new knowledge and that changes are obviously called for. Behavior patterns, worn in with many years of usage, are not easily nor quickly changed. Nevertheless, because the individual's new knowledge of himself results from deeply felt experience and is not merely intellectual, with the passage of time his behavior does tend to change to become more appropriate to his expanded picture of himself.

It is necessary to emphasize at this point that what has been described is the most favorable case; with our present knowledge perhaps only one subject in ten will have such a complete transforming experience, at least with a single LSD session. Nevertheless, repeated experience seems to indicate that the above tends to be the underlying pattern of psychedelic therapy, which pattern will be approached to greater or lesser extent in a given individual case.

It will be noted that an outstanding characteristic of this method of therapy is that it places major responsibility clearly on the patient and tends to discourage any sort of long-term dependency or transference relationship with the therapist. The therapist is not called upon to analyze or to interpret except in a most minimal sense. The subject is encouraged to discover that his own resources are more than adequate to his needs, and the therapist's function is to provide support and guide him toward discovery.

Selection, preparation, and processing of subjects.

The procedures used in these studies follow those described by MacLean et al., <sup>4</sup> differing primarily in ways dictated by the difference between an out-patient and a hospital setting. For example, an attempt was made to screen out pre-psychotic cases, although LSD therapy may be appropriate even for these cases if appropriate hospitalization facilities are available.

The preparation time in our studies is two or three weeks at a minimum, which is considerably longer than that used in the Canadian studies. In some cases a preparation period of one to three months is felt to be desirable. During this time, the subject is encouraged to consider seriously what it is that he hopes to accomplish through this experience, and the particular problems, questions, or relationships which he wishes to examine. This is facilitated through review of auto-biographical material, and discussion by the subject of personal problems.

The subject is helped to understand that what he experiences and the values he realizes depend a great deal upon what he wishes to discover. The effectiveness of his

quest hinges upon his willingness to surrender old concepts and preconceived ideas. He is particularly encouraged to examine his willingness to relinquish his usual self-concept and to look without prejudgement at whatever is revealed to him in the experience. Willingness to surrender to the experience, not limiting it by expectations, preconceptions, and evaluations, and to face honestly any new insights, whether or not they are in accord with what he may have previously believed about himself or others, is an attitude and an ability which can be developed over the weeks or months preceding the treatment session day.

Critical, along with the subject's willingness to learn the new knowledge he is seeking, is the degree of trust he has in the process, in his supporters, and in his deeper self. He is encouraged to discover for himself that he has his own inner organism in which he may put his faith—that whatever unconscious control took care of getting his body functioning when he was born, and takes care of his breathing, circulation, and digestion while he is asleep, will take care of him during this experience, so that it will be safe for him to relinquish conscious controls and let an unfamiliar mode of functioning take over. The development of a belief that it is safe and desirable to entrust the care of the self he knows to the self he does not yet know would seem to be a prime prerequisite to a profitable LSD session.

All of the pre-treatment contacts aid in the development within the subject of these key factors, willingness and trust, which are essential to the movement into and most effective use of the psychedelic experiences. If a prospective subject appears to be poorly motivated and to lack the desired degrees of trust and willingness, he may be advised to postpone the LSD experience until after he has done further work at the conscious level.

The inhalation of 30%-carbon-dioxide—70%-oxygen mixture as prescribed by

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Meduna has been employed in these preparatory interviews. It gives the subject an opportunity to "practice" the sort of surrender which will be called for on the day of the LSD session, with time to examine his resistances and alter his attitudes before that day. It provides a certain amount of ventilation and abreaction which is in itself valuable therapy. It helps in the establishment of nonverbal communication between subject and therapist. Also, it permits the therapist, by observing the subject's reaction to the treatment, to evaluate the subject's defense structure, which is a useful guide to the amount of drug that must be administered. Finally, it is useful in the detection of pre-psychotic subjects for whom special precautions are desirable.

The psychedelic session is held in the congenial surroundings of a tastefully furnished room containing a tape recorder, record player console, and various carefully chosen works of art. The patient arrives at 8:30 A.M., having had only a light breakfast. After a relaxing, informal discussion, the LSD is administered at approximately 9:00 A.M.

The dosage required is estimated for each subject on the combined basis of body weight and apparent degree of self acceptance. Typically the initial dosage is 100 to 200 mcg of LSD\* with an additional 200 to 400 mg of mescaline\*\* administered half an hour later, both by mouth.

The subject is urged to postpone analyzing his experience until after the session and to accept the experience as it occurs without labeling or evaluating. He will be, during the session, particularly sensitive to unconscious prohibitions by the therapist, so that it is essential that the therapist be free of attachments to particular conceptual frameworks. This quality is far more important to the therapist using psychedelic agents than in some other forms of therapy.

A light lunch is available at the middle of the day, although most frequently the subject does not care to eat. He is encouraged to have fruit juice or candy during the second half of the day to bolster his energy. Generally around 2:00 to 3:00 P.M., 10 mg of methamphetamine hydrochloride (Methedrine\*) is administered orally, which appears to intensify the LSD effect and increase the subject's ability to integrate his experience in the remaining hours. The session is terminated at 5:30 P.M., or as soon after as practical. The subject is released in the custody of an experienced person who will drive him home and spend the remainder of the evening with him. (The subject is not allowed to drive for 24 hours.) Very often much fruitful work is done by the subject in the evening hours. At bedtime, the subject is administered 3 to 6 grains of amobarbital sodium and seco-

<sup>\*</sup> Manufactured by Sandoz Pharmaceuticals, Division of Sandoz, Inc., Hanover, New Jersey.

<sup>\*\*</sup> Manufactured by Mann Research Laboratories, Inc., 136 Liberty Street, New York 6, New York.

<sup>†</sup> We have not attempted to use a blind methodology in this research for many reasons. The psychedelic drugs are used because of the experience given to the subject. Any other comparison drug which gives a similar experience should give similar results. We were not concerned with comparing one psychedelic drug against another even though this might be an interesting study. It would be a trivial procedure to use placebo because with these dosages no in-

vestigator with the slightest understanding of these drugs would fail to detect within thirty minutes whether placebo or drug had been given. Furthermore, blind studies which are in fact comparison studies, not necessarily controlled studies (Hoffer and Osmond 6), have never produced new therapies—they have merely corroborated what had been observed by skillful clinicians to be true. In general, double blind studies work best for compounds of proven efficacy where they are least needed. Hoffer and Osmond 6 have suggested that blind studies can be used successfully only for studying chemicals which have no immediate subjective discernible effect, i.e., produce no sedation, euphoria, confusion, etc. Such substances include vitamins, hormones, and antibiotics.

<sup>\*</sup> Manufactured by Burroughs Wellcome & Co., Inc., Tuckahoe, New York.

barbital sodium (Tuinal\*\*), depending on his original LSD dose, to shut the reaction down and permit sleep. Under no circumstances is the subject left alone until the following day.

Certain situations develop often enough to merit mention here. Rather violent reactions in the form of extreme hostility, paranoidal behavior, or schizophrenic-like confusion possibly accompanied by panic have occurred with approximately 1 out of 5 cases. These are most instructive if the patient is given whatever restraint is necessary and the reactions are allowed to run their course. Perhaps the most important factor contributing to the subject's being able to extricate himself from such a predicament is the self confidence and assurance he perceives in the therapist. (Such a subject tends to be acutely aware of feelings of alarm on the part of the therapist, no matter what attempt may be made to conceal them.) We have felt it best not to "shut off" the action of the LSD with a counteracting agent, but to allow such a subject to work through his feelings and obtain the rewards of the very beneficial release that results. However, again it must be emphasized that the therapist must be very confident of his ability to see the subject through these trying experiences.

One unusual situation may develop infrequently. A subject whose psychedelic experience has been beatific, and whose life situation appears dismal, intolcrable, or hopeless, may resist the wearing off of the drug's effect in various ways. This may take the pattern of withdrawal, refusal to take food or any counteractive agent, or an attempt to get away from the therapist or his assistants. In such a case, efforts must be made to redirect the subject's attention, supply food and, if necessary, counteragents to bring the subject back into com-

### Therapeutic Consequences.

While approximately 50 normal volunteer subjects underwent the psychedelic treatment here described over a two year period of preparatory investigational work, the present study is based on 25 patients who comprise the entire group processed during a five month period of operation of the clinic. While it is too early to present a complete analysis of the results, evaluations of the status of these 25 patients at this time are tabulated in Table I.

TABLE I

	No. of Cases M F		Results		
Major Problem Area for which Treatment Sought			No Improvement	Improved	Much Improved *
Marital Problems	2	3	0	2	3
Alcoholism	3	0	0	6	3
Ineffectual Personalit	y 4	5	1	٢	3
Neurosis					
a. anxiety	1	1	0	0	2
b. compulsive	1	0	0	1	0
c. unspecified	4	0	3	1	0
Near homicidal	0	1	0	0	1
	15	10	4	9	12

<sup>\*</sup> Resolution of the problem for which treatment sought.

The amount of improvement can generally be correlated with the subject's willingness to face himself during his session, and with his acceptance of the material encountered as indicated by the extent to which he is

munication. An effective counteragent is 100 mg. of chlorpromazine (Thorazine\*\*\*) intramuscularly, with up to 200 mg. employed if necessary in the event a subject becomes acutely disturbed or agressive. In our current series, use of this drug has not been necessary.

<sup>\*\*</sup> Manufactured by Eli Lilly and Company, 740 South Alabama St., Indianapolis 6, Indiana.

<sup>\*\*\*</sup> Manufactured by Smith Kline & French Laboratories, 1500 Spring Garden Street, Philadelphia 1, Pennsylvania.

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288 th willing to act upon it. In general, the changes may be characterized as movement away from resistiveness and defensiveness toward an increasing sensitivity and openness to all experience, increasing awareness of his deeper needs, developing confidence in his own inner reactions as a trustworthy guide to behavior, and increasing ability to form new relationships. The most pronounced changes typically occur when the subject is able to move into the third stage of psychedelic experience as described

Typical examples of such cases are presented below:

Case A: Female, age 25, married, 2 children. This patient was deeply disturbed emotionally and had suicidal tendencies. She was a compulsive smoker, had a fear of men, of darkness, of police, and had threatened her husband with a shotgun. She was full of self-hatred, guilt and resentment, directed primarily at her 5-year-old son. She requested commitment to a mental institution shortly after violently beating the

The first half of her session was full of horror as she struggled through all the traumatic incidents of her past life. These were symbolized as terrifying events-trees falling, rocks being thrown, and snakes strangling her. Throughout her experience, she saw a shining light ahead, which she struggled desperately to reach. Finally, after reaching a state of exhaustion, she let go and was able to reach the light. "I looked around and everything was beautiful, bright and clean. I felt like I had gotten washed clean, like a flower that just started to bloom. I didn't have to run anymore, because what I was running to was God, and I found Him... I felt like I was just born... I then went home and could see everything perfectly clean and beautiful."

Subsequent to her session, this patient exhibited considerable subjective and objective changes in her life. She felt "completely different in every way." Where before she

was afraid of people and hated them, she now relates with them easily. Despite not having graduated from high school, she has avidly read books on psychology from the library with reported good understanding. Although over a four months period subsequent to her session, she has had problems and lapsed into emotional disturbances primarily through conflict with her husband, her relationship with her son has continued to be good, with no return of the feelings of resentment and animosity. More important, she feels that she now has an approach to life which makes it possible to meet difficulties and solve her problems.

Case B: Female, age 34, married, 2 children. This patient's marriage was near dissolution. Her motivation for taking LSD was to find "freedom to love without fear, freedom from the burden of self... to know what my true self is." "I do not like myself-because of self-deception, deceiving others, cruelties I have inflicted on those I cared for... I am very moody... I am afraid of almost everything. I am in desperate and constant need of approval and reassurance... I am sick at some of my own motivations... I do not think I am capable of love."

Her session was revealing, although not all pleasant; the early portion had in part to do with facing some of the many things she feared, and with coming to terms with her own guilt. Some of her most significant insights are best communicated in her own words: "Our misery comes from within, not without... Forgive yourself for what you did in ignorance, blindness, and fear, and let go- and you will find death not a thing to fear but a new and exciting experience, merely another level of Reality and Existence... I am the universe, I am all men... I was blind before; all the things I did were only a desperate search for meaning to my life and trying to discover my self. I regret past errors, cruelties, lies, faithlessness, etc. But I have lived with self-loathing and guilt always and find it accomplishes

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nothing. I find I can forgive myself and not spend time weeping over spilt milk. What was done was done. I did them. It is over—I am reborn. I have punished myself enough. It is time to live—and do better in the light of what I have learned... These thoughts seem to hit with absolute truth from nowhere—not the result of analysing."

Several months after the session, the subject reports that the new insights have resulted in marked improvement in all the areas of her life where she sought help. "Some changes have automatically occurred in me; others I must work at all the time... I would give up anything rather than lose what I have learned."

Case C: Male, age 37, married, 3 children. Although this patient was keenly intelligent, he was a very controlled personality with deeply buried feelings, functioning almost solely on an intellectual level, unaware of the feelings of others. He sought treatment because his marriage was about to collapse, after a number of stormy years. While externally appearing calm, internally "the fires of Hell were raging." He was extremely tense and for two years had suffered from diarrhea and indigestion.

Although the subject arrived for the session in a state of intense anxiety, he seemed relaxed under the LSD and gave way to it completely. He had complete acceptance of the experience, which allowed him to enter deeply into it and explore every aspect of his inner reality to which he turned his attention. Personal problems and relationships were examined and resolved; music, color, and other sense data were experienced as never before; transforming symbols were deeply explored for their profound meaning. "The whole world and life itself is contained in the Latin word 'SUM; I am.'"

In this case, the impact of the experience was almost overwhelming. The patient felt himself to have been transformed, freed of fear, guilt, and doubt. He felt as though he

had come to life, and could feel and experience as never before. He has found his awareness and sensitivity to be considerably heightened as well as his understanding of other people. Most important, he felt a strength within himself which he now knows that he can rely on in facing any situation, free of anxiety. "I left a whole man, unafraid, secure in belief in myself, and the God who is within me. I was reborn, with an awareness that I have much to give to the world and my fellow man." The difficulties in the marriage relationship have been resolved (the wife also took the LSD treatment) and the relationship is now a happy one, with both partners able to express their feelings freely in a give and take relationship. At work he has felt free of the need to strive for perfection and to strive for the approval of others, so that the work goes more freely. He thinks that his work has also been more successful. The diarrhea and indigestion have completely disappeared.

Not all patients are willing to face themselves, and consequently limit their experience and the consequent benefit that may derive from it. The following case is such an incident, and is the single patient in our study who reported no improvement as a result of the psychedelic experience.

Case D: Male, age 29, immigrant. This patient was extremely sensitive, self-conscious, afraid of darkness, terrified of nightmares. His father (deceased) was an alcoholic. His mother is a strong, ignorant, dominating person. Contact with authoritarian personalities has often prefaced bouts of vomiting and/or diarrhea. The patient was desperate, contemplating suicide before coming to America in 1957. He had a history of sexual impotence.

In his session, the patient felt himself enter a region of beauty and euphoria, which constituted paradise. He very much enjoyed this, and stayed in this state for the first three hours. When confronted with a photograph of his mother, he became ill and vomited. He worked on his problems

for about an hour, and then proceeded to

shut the reaction off. At the end of five

hours, he had pulled himself out of the

effect of the drug. (Most patients operate

well for eight to ten hours, and are still able

to move in and out of the drug experience

until bed time.) He became suspicious of

the therapy personnel and the whole pro-

cess, and did not wish any further self in-

vestigation. He has had no interest in trying

to derive any further meaning or benefit

Many subjects find that after several

months, without conscious effort or di-

rection, a change comes over them which

produces a feeling of well-being, inner

strength and confidence, and renewed ener-

gy and vitality. This has happened in five

cases where the session was originally

thought to be not particularly fruitful.

While perhaps the most difficult to explain

in terms of psychological or psychiatric

theory, this type of outcome has been one

of the most gratifying results of this treat-

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Our experience to date tends definitely

to confirm the reports of the Canadian in-

vestigators regarding the efficacy of the

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What may well be the most significant

result of the investigation reported in this paper is not, because of its present tentative nature, given detailed discussion in the body of the paper. This is the observation that, both in the earlier referenced work and our own, there appears to emerge a universal

central perception, apparently independent

Many of the beneficial effects of LSDinduced experiences have been reported elsewhere. 7 These include the abreaction of significant early life experiences, with the accompanying release of pent-up emotions, and increased psychological understanding. There is, however, an additional aspect of the large dose technique which seems to play a most significant role in producing personality transformation: the discovery by the subject of the vast extent of his own being, that he has understanding and abilities far greater than he previously imagined. (Similar psychotherapeutic consequences of spontaneous "peak experiences" are studied by Maslow. 8 He mentions "mystic or oceanic experiences so profound as to remove neurotic symptoms forever after.")

The individual's conviction that he is, in essence, an imperishable self rather than a destructible ego brings about the most profound reorientation at the deeper levels of the personality. He perceives illimitable worth in this essential self, and it becomes easier to accept the previously known self as an imperfect reflection of this. The many conflicts which are rooted in lack of self acceptance are cut off at the source, and the associated neurotic behavior patterns begin to die away. Consequently the individual experiences less anxiety in connection with situations previously painful. Incapacitating feelings of inadequacy and guilt, re-examined in the light of this new self-discovery, seem inappropriate and are relinquished.

## APPENDIX

### THE SEEMING UNIVERSALITY OF PERCEPTION IN THE PSYCHEDELIC EXPERIENCE

of subjects' previous philosophical or theological inclinations, which plays a dominant role in the healing process. Similar insights appear in the various religious traditions of

the world. This central perception, apparently of all who penetrate deeply in their explorations, is that behind the apparent multiplicity of things in the world of science and common sense there is a single reality, in speaking of which it seems appropriate to use such words as infinite and eternal. All beings are seen to be united in this Being; in our usual state we are not consciously aware of this and see ourselves and the objects of the world as individual and separate entities. (In an attempt to forestall offense, let us plead that we are here attempting to describe things as the subject sees them, not to discuss the metaphysical significance of his experiences. Such words as Self, Being, and Reality are used, not as defined concepts in any final sense, but as desperate endeavors to communicate a quality of experience which borders on the incommunicable.)

The perception of this in the psychedelic experiences is an immediate one, somewhat like the immediate perception upon awakening in the morning that I am the same "I" that went to bed here last night. It is not inconsistent with rational examination of our more usual experiences, but it does not arise from such rational examination.

This entrance into seeming awareness of the nature of reality may take various forms. It is a realization of union with the higher Self, of union with all beings and with the universe, and of the union with the transcendent Being beyond all the selves and things. One or the other of the aspects may predominate. Thus at one time the experience may take the form of an exquisitely pleasurable and complete identification with a flower, a rock, a sunset, or a mountain. Again it may be a suspension in timeless bliss, a "peace that passeth understanding," or an apparent realization that all knowledge is potentially available, as well as all necessary resources for meeting any situation. Or these partial realizations may be combined into one, and in a moment the self may know without knowing how it knows, the single Reality. After such an experience, the person is never the same: in a sense he is born anew, even if it occurs just once, since never can he completely forget the knowledge of the underlying reality which he has glimpsed.

Such experiences as these are not peculiar to the use of chemical mind-manifesting agents, of course. Explanations of the states of "satori" in Zen Buddhism" and "samadhi" in Vedanta 19, 11 seem to be descriptions of essentially the same basic insight as the above paragraphs report. Stace, 12 in a particularly helpful analysis of mysticism in various cultures, introduces the terms "extrovertive" and "introvertive" mystical experience which aptly distinguish the outward- and inward-directed aspects of the psychedelic insight. The English poetscientist Edward Carpenter, 13 writing half a century ago, testifies to the universality of the self-discovery experience:

"Of all the hard facts of science, I know of none more solid and fundamental than the fact that if you inhibit thought (and persevere) you come at length to a region of consciousness below or behind thought, and different from ordinary thought in its nature and character—a consciousness of quasi-universal quality, and a realization of an altogether vaster self than that to which we are accustomed. And since the ordinary consciousness, with which we are concerned in ordinary life, is before all things founded on the little local self, and is in fact selfconsciousness in the little local sense, it follows that to pass out of that is to die to the ordinary self and the ordinary world.

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"It is to die in the ordinary sense, but in another sense, it is to wake up and find that the 'I,' one's real, most intimate self, pervades the universe and all other beings—that the mountains and the sea and the stars are a part of one's body and that one's soul is in touch with the souls of all creatures...

"So great, so splendid is this experience, that it may be said that all minor questions and doubts fall away in face of it; and certain it is that in thousands and thousands rs ly 1g

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e, is d of cases the fact of its having come even once to a man has completely revolutionized his subsequent life and outlook on the world."

The experience is breathtakingly and wonderfully new, whatever the individual's previously held beliefs, religious or non-religious, may have been. The prosaic, scientific terminology of William James 14—that one contacts, in the depths of the psyche, the "germinal higher part" of himself, in some sense identifiable with a "MORE of like quality" which pervades the universe—seems, although accurate, quite inadequate to convey anything of the quality of the event.

One might feel rather dubious about a therapeutic procedure which seems to lead toward a sort of otherworldliness. Such a tendency has not been observed in our subjects; on the contrary, their experiences have usually led to the discovery of added meaning and zest in their life in this world.

A significant clue to understanding how the therapeutic changes take place seems to be provided by Rokeach 15 with his concept of the person's total belief-disbelief system -what he really believes as inferred from all the things he says and does: "an organization of verbal and nonverbal, implicit and explicit beliefs, sets, or expectancies... Every person may be assumed to have formed early in life some set of beliefs about the world he lives in, the nature of the 'self' and of the 'generalized other,' the validity of which he does not question and, in the ordinary course of events, is not prepared to question. Such beliefs are unstated but basic. It is out of some such set of 'pre-ideological' primitive beliefs that the total belief-disbelief system grows."

In these terms, the direction of therapeutic gain is away from the closed belief-disbelief system—"the total network of psychoanalytic defense mechanisms organized together to form a cognitive system and designed to shield a vulnerable mind"—toward the open, healthy belief system.

But this movement can take place only to the extent that the individual perceives that he no longer needs his closed system to ward off threatening aspects of reality.

The remarkable therapeutic efficacy of the psychedelic experience appears to lie in its making possible the re-examination and alternation of primitive beliefs (the universe is unfriendly; other people are to be feared; authority figures punish; I am without worth, or inadequate, or driven by dangerous urges of sex and hostility which must be kept under control at all times; I am destructible, etc.). Changes in these deep, underlying strata of the belief system ultimately become manifest in the entire belief structure, and hence in the personality and behavior.

A feature of psychedelic therapy which has been disturbing to some critics is the shifting of basic beliefs in a direction which appears to be opposed to the trend in Western thought since the Copernican revolution. Specifically, it is found that subjects tend toward more open-minded attitudes on such subjects as extra-sensory perception and various religious hypotheses, and toward more tolerance of ambiguity in basic concepts and of multiplicity of models of the universe other than the conventional. This may be less an indication of the peculiarity of LSD subjects than of what the noted physicist Erwin Schrödinger 16, 17 terms "the peculiarity of the scientific world view."

The nature of the changes in values and the therapeutic gains which may follow even a partial glimpsing of the basic psychedelic-mystical perception have been discussed in the main body of this paper. They are suggestive of the part the psychedelic experiences may have to play in helping us to discern the true meaning of the verb "to be."

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Radical instability and absolute immutability are therefore mere abstract views taken from outside of the continuity of real change, abstractions which the mind then by postasizes into multiple states on the one hand, into thing or substance on the other. The difficulties raised by the ancients around the question of movement and by the modern around the question of substance disappear, the former because movement and change are substantial, the latter because substance is movement and change.

Henri Bergson, The Creative Mind, Philosophical Library, p. 156.