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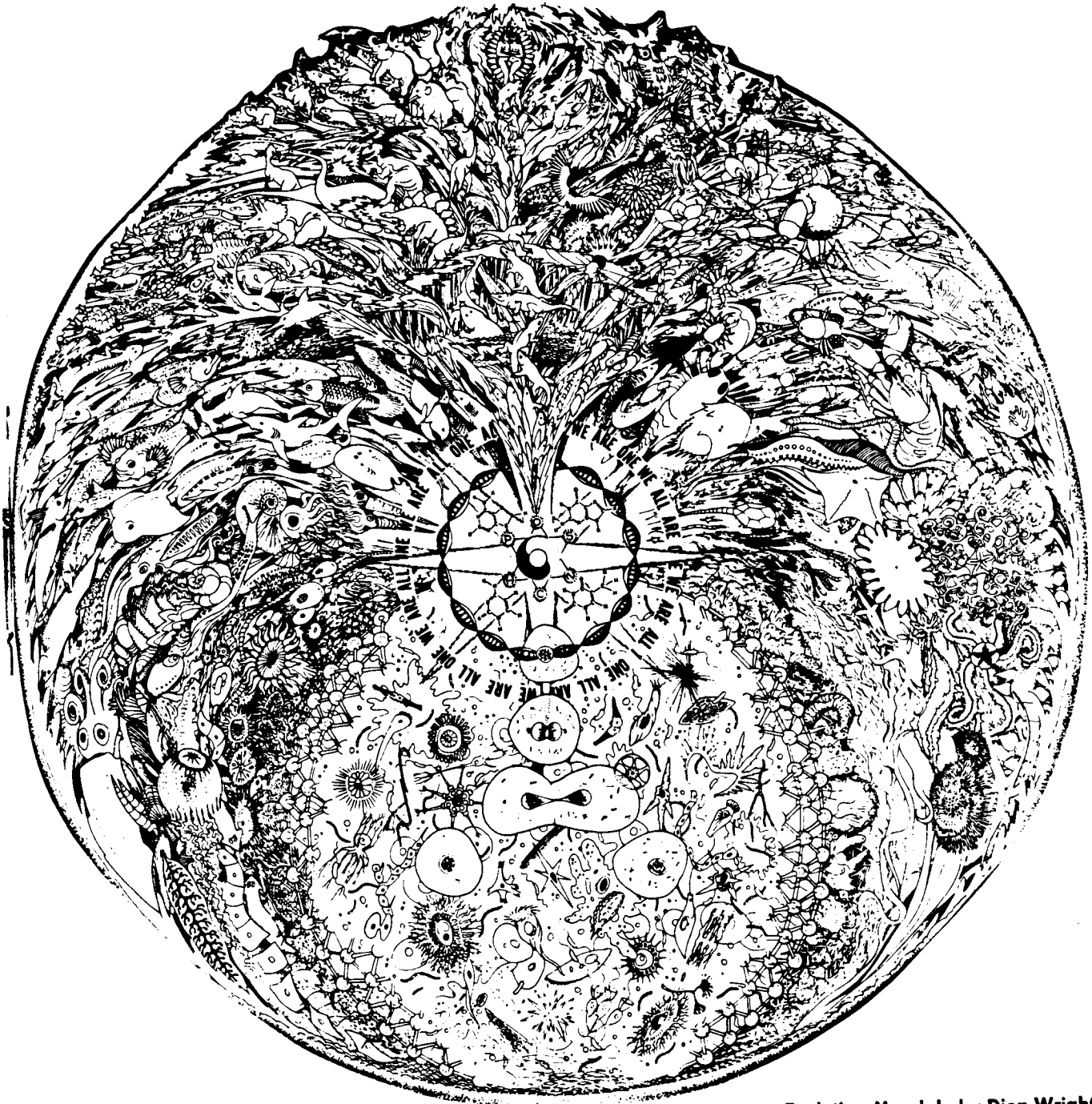
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Evolution Mandala by Dion Wright



Yin-Yang Mandala by Susan Frahn

CONTENTS

EDITORIAL.....	2
THE USE OF PSYCHEDELIC AGENTS WITH AUTISTIC SCHIZOPHRENIC CHILDREN	Robert E. Mogar & Robert W. Aldrich.. 5
PSEUDO-NARCOSIS	Inca Mandala..... 14
LONELINESS	Gary M. Fisher..... 19
LSD AND SEXUALITY	Richard Alpert 21
ORPHEUS AND EURYDICE	John Esam 26
THE EFFECTS OF CONSCIOUSNESS-EXPANDING DRUGS ON PRISONER REHABILITATION	Timothy Leary..... 29
LINES WRITTEN ON READING FATHER TEILHARD DE CHARDIN	Paul S. Frey..... 46
LSD, CHROMOSOMES AND SENSATIONALISM	Joel Fort & Ralph Metzner..... 47
HONGHI, MEESTER?	Nat Finkelstein 52
GATES OF EDEN	Harold Massoon 65
NOTES ON CURRENT RESEARCH	Ralph Metzner 70
LETTERS TO THE EDITOR.....	73
BOOK REVIEWS AND NOTES.....	75

FRONT COVER: Ed Lutz

BACK COVER: Photo of Siva, Courtesy National Museum, New Delhi

EDITORIAL

A psychedelic experience is different for each person. It is different from trip to trip. This journal has undergone analogous changes, trying to follow the progressive complexities of the psychedelic movement. During the year 1967, which saw the publication of only one issue (#9), we experienced three changes of management, and one major relocation—from the tradition-bound East to the liberating West.

Our goal and purpose continues to be primarily to serve as information source on all aspects of the consciousness revolution. Of necessity this implies dealing with drugs and of necessity it requires dealing with more than drugs: with the powerful magic of the ecstatic rock-shamans; with the rediscovery of the tribe as the basic social unit; with ecology, as the key science, the study of the interrelationships of phenomena; and with ground-breaking, vision-expanding developments in the natural sciences, the arts, philosophy, psychology.

In their response to the phenomena of psychedelic drugs the United States and countries in its cultural circle react with all the heavens-and-hells that the individual undergoes in his psychedelic trip. All the contradictions and paradoxes are revealed, the ambivalences magnified, the beauties and agonies sharply felt.

Take the government's attitude towards marihuana as an example. On the one hand we have continued harrassment by law-enforcement agencies at all levels, of writers (such as Timothy Leary, Leslie Fiedler), musicians (such as The Grateful Dead) and "hippies" (those who happen to express their altered vision of the world in modes of dress and hair-style). On the other hand we have groups such as USNSA (the National Student Association), which develops guide-lines for campus student-policies, recommending "repeal of all state legislation which prohibits the consumption and possession of marihuana for personal use" (USNSA Background Papers on Student Drug Involvement). The interesting thing is that NSA's program

of drug-education and reform is funded by NIMH, a branch of the Department of Health, Education and Welfare. Apparently the right hand does not know what the left hand is doing. Or perhaps it does. Perhaps it knows too well. Goddard's statement that he'd rather see his teen-age daughter smoke pot than get drunk was no slip of the tongue, but a calculated political remark. And in advocating the ratification by the Senate of an international treaty for control of "narcotics," Commissioner Anslinger cited the spreading movement towards legalization at home as grounds for controlling it by treaty. The Senate ratified the treaty (84-0) on May 8, 1967, after an unannounced, hence unopposed hearing in the Foreign Relations Committee. To thicken the web of contradictions even further, in February of the same year, the President's Commission on Law Enforcement and Administration of Justice strongly urged reevaluation of state and federal marihuana laws.

The immediate aim of the "marihuana lobby" is to move marihuana out of the Narcotics Bureau into the medical domain of the FDA. To the Narcotics Bureau, marihuana represents 30% of their budget and 90% of their publicity. Understandably they do not embrace the idea of legalization. The long-term aims of the lobby are to make marihuana legally available exactly as cigarettes, providing profits for the manufacturers and tax-revenue for the government. Rumors published in The East Village Other would have it that a major tobacco company has registered Acapulco Gold and Panama Red as trade names. Other reports would lead one to expect that the manufacturers of confectionaries will not be far behind in contributing simultaneously to human happiness and their own profits by developing cannabis candy, a la majoum. Marihuana seems well on the way to becoming an accepted and popular "recreational drug," according to a "secret" position paper circulated in Washington and reported in the San Francisco Chronicle. And are the 75% of American G.I.'s smoking pot in Vietnam, according to John Stein-

beck's son, going back to liquor when the war is over?

LSD and other hallucinogens are still regarded with a rather more jaundiced eye by most Americans. The panic-cry of "chromosome damage"—too technical for the man in the street to evaluate—is being used in exactly the same way as imaginary crime and perversion stories were used to suppress marihuana in the thirties. The predicted consequences of this suppression of LSD are already in evidence: (1) a drying-up of sources of genuine, high-quality LSD (LSD 'TYCOON' HELD AFTER ORINDA RAID, said the S.F. Chronicle two days before Christmas); (2) concomitant expanding use of impure chemicals and methedrine (a cheap, addicting, stimulant) as substitutes; (3) increasing involvement of gangsters in supplying demand no longer satisfiable legally; (4) arrest and harrassment of college students and other "white-collar," law-abiding Americans, for crimes without victims.

It is possible the country may have to wait 25 years, as with marihuana, before the lies are exposed and the new psychic instruments can be accepted. The LSD subculture will, in the meantime, as Professor Howard

Becker of Northwestern University has suggested, develop its own way of handling casualties. The fear of the unknown will gradually diminish. But even if, owing to pressure of outside world events, the hallucinogens never become legally available; even if the vast majority of users stop using, the impact of LSD on our culture, the arts, media, religion, values, has already been profound and cannot be legislated away. Even a bad trip can have good consequences.

But it is, after all, not LSD, the chemical, which is at issue. The point is that we have there an experience, a perception, which is as frightening to those concerned with preserving the status quo, as it is illuminating-liberating to those who are ready to look beyond. If LSD produces genetic damage (which is by no means established), then other, safer methods of changing consciousness will be found, and this particular substance relegated to use mainly in geriatrics.

The explosive spread of direct and indirect effects of psychedelics in this culture, the almost total conquest of the media by the consciousness-revolution (witness the transformation and visibility of The Beatles), all point towards an era of unprecedented and unpredictable changes in the minds of men during the coming decades.



From 17th century
Alchemical Treatise,
photo by Bob Beck



Drawing by Gayl Stenli

THE USE OF PSYCHEDELIC AGENTS WITH AUTISTIC SCHIZOPHRENIC CHILDREN

Robert E. Mogar & Robert W. Aldrich

Evidence from seven independent studies indicates LSD may help free the most severely imprisoned minds.

In recent years, a number of exploratory investigations have been reported involving the administration of psychedelic agents to young children suffering from severe forms of psychological disturbance (Abramson, 1960; Bender, et al., 1962; Bender, et al., 1963; Fisher & Castile, 1963; Freedman, et al., 1962; Rolo, et al., 1965; Simmons, et al., 1966). As either therapeutic or experimental undertakings, these studies are extremely fragmentary and suffer gross shortcomings. As a case in point, wide diversity along major dimensions known to influence drug response and treatment effectiveness characterize this work. These include the agent employed, dosage level, number and frequency of administrations, therapist expectations and previous experience with psychedelic drugs, and finally the setting and circumstances surrounding the drug-induced state. With regard to patient characteristics, the children treated were demographically varied and covered a broad age range. More importantly, the samples were markedly heterogeneous with respect to the nature, severity, and duration of modal symptoms. The major experimental shortcomings included small samples, subjective and vague criteria of drug effects and improvement, and grossly inadequate follow-up.

Despite their diversity and severe limitations, these seminal explorations in an extremely complex area of research seem worthy of wider reportage and more serious attention than they have hitherto received. Almost without exception, these reports have appeared in obscure publications or remain unpublished. A more significant reason for their relative neglect has been the polarized controversy surrounding psychedelic agents which has all but completely curtailed publicly-sanctioned research.

In this critique of the use of psychedelic agents with severely disturbed children, the various studies conducted thus far will be comprehensively reviewed and integrated. Particular attention will be given to their similarities and differences along known relevant dimensions in order to detect commonalities and possible reasons for inconsistent findings. While some attempt will be made to resolve seemingly contradictory results, the heuristic value of this work will be emphasized rather than its conclusiveness. Hopefully, the tentative conclusions derived from these initial efforts will point the way for more definitive studies into the therapeutic efficacy of psychedelic agents with childhood disorders.

PATIENT CHARACTERISTICS

A fairly exhaustive search of clinical and research reports revealed a total of 91 severely disturbed children who have been administered one or more psychedelic agents for experimental and/or therapeutic purposes. As detailed in Table 1, this collective group of patients ranged from five to fifteen years of age, with the large majority between six and ten years of age. Careful examination of the seven independent studies disclosed little basis for assuming a significant relationship between age and drug response. However, tentative relationships were suggested by both Bender (1963) and Fisher and Castile (1963). Bender noted that in contrast to pre-adolescents, younger children manifest consistently different reactions to a variety of medical and pharmacological treatments. For this reason, she hypothesized that her older patient group (12-15, N = 8) would not show the dramatic positive changes obtained with the younger children. Contrary to expectations, comparable favorable effects were found irrespective of age

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differences. Fisher and Castile, on the other hand, concluded that older children were better candidates for psychedelic therapy because verbal communication was possible and also because they tended to be less withdrawn, more schizophrenic than autistic, and displayed more blatant symptomology. While these patient features were obvious advantages for the particular therapy technique employed by Fisher and Castile, it is unlikely that this symptom picture consistently distinguishes older from younger psychotic children. Thus, on the basis of the available evidence concerning the immediate and subsequent effects of psychdelic drugs on children, age per se appears to be an inconsequential variable.

All of the patients treated in these studies were described as severely and chronically disturbed with a primary diagnosis of autism or childhood schizophrenia. With regard to duration of illness, most had been hospitalized for periods ranging from two to four years. Many were afflicted since birth. An apparent exception was the single patient studied by Rolo and his co-workers (1965). This twelve year old boy had been hospitalized for four months. No estimate of the duration of his illness was reported. At the opposite extreme, the twelve children treated by Fisher and Castile were probably the most severely disturbed with an average illness duration of 7.6 years.

The modal symptoms characterizing the majority of children given psychedelic treatment were well summarized by Simmons and his coworkers (1966): (1) preoccupation with and stereotyped manipulation of objects (toys, etc.); (2) isolation of the self from contact with animate objects (including minimal eye contact); (3) failure to acquire general social behaviors (including speech); and (4) bizarre rhythmic repetitive motor patterns. This syndrome conforms closely to the classical picture of infantile autism (see e.g., Rimland, 1964). As suggested earlier, the symptoms picture of the older children treated by Bender and by Fisher and Castile resembled adult schizophrenia more than infantile autism. This was also true of Rolo's single patient. Although autism was invariably present, the "schizophrenic" children were less withdrawn and manifested a

greater variety of symptoms including overt aggression, hallucinations, paranoid delusions, and psychosomatic disturbances. Almost without exception, long-standing mutism was characteristic of all 91 patients prior to psychedelic treatment.

Despite these significant communalities among the seven groups of children studied, individual differences in patient characteristics extended over a fairly broad range. Without discounting the possible importance of individual differences, there is little indication in the work reviewed here of differential response or benefit as a function of age, diagnosis, duration or severity of illness. As will become apparent in subsequent sections of this paper, the failure to detect such relationships seems partly due to fragmentary patient data and the crude estimates available of drug response and subsequent changes in behavior. Consistent with this hypothesis, the differential findings reported by Fisher and Castile appear to reflect their more detailed assessment of personal history information and individual differences in both pre- and post-treatment symptomology. They also applied more stringent criteria of improvement than the other investigators.

RATIONALE AND HYPOTHESES

Explicit hypotheses or theoretical bases for administering psychedelic drugs to disturbed children are almost completely absent in these exploratory studies. The lack of a definite rationale is hardly surprising when one considers the enigma surrounding both schizophrenic behavior in children and response to psychedelic drugs. Despite great diversity in expectations and technique, there was one point of departure shared by all investigators, namely, that all known forms of treatment had been attempted without success. Thus, the use of a potent experimental drug with the particular chronic patients selected seemed justified.

With regard to the purpose of these studies, all were to some extent exploring the therapeutic potential of psychedelic drugs rather than their psychotomimetic properties. This was least true of Freedman and his coworkers (1962) who viewed LSD primarily as a means of studying the schizophrenic

process by "intensifying pre-existing symptomatology." This orientation contrasted sharply with Bender's view. Noting that withdrawn children became more emotionally responsive while aggressive children became less so, she hypothesized that psychedelic drugs "tend to 'normalize' behavior rather than subdue or stimulate it." This basic difference in expectations seems at least partially responsible for Bender's extremely favorable outcomes and Freedman's rather poor results. Regarding all forms of psychotherapy, it has become a truism that "where there is no therapeutic intent, there is no therapeutic result" (Charles Savage in Abramson, 1960, p. 193).

Consistent with their explicit therapeutic intent, Bender, Fisher, and Simmons each offer essentially the same hypothesis based on a psychological interpretation of childhood schizophrenia: "The working hypothesis of this study is that the psychosis is a massive defensive structure in the service of protecting and defending the patient against his feelings and affectual states" (Fisher & Castile, 1963). Psychedelic drugs were viewed as a powerful means of undermining an intractable defense system and thereby making the patient more receptive to contact and communication with others. In attempting to explain the predominantly positive results in this area of research (see Table 1), it is worth emphasizing that the collective work of Bender, Fisher, and Simmons accounts for over 75 per cent of the 91 children treated with psychedelic drugs. Although their techniques differed considerably, these investigators shared a psychological conception of autistic symptoms and a psycho-therapeutic orientation to drug treatment.

Although Freedman was prompted to use LSD primarily as an experimental device to study psychosis, he did mention that he was influenced to some extent by the dramatic improvement in autistic children reported by Peck and Murphy (in Abramson, 1960) and by the apparent success of Cholden, Kurland, and Savage (1955) in their work with adult mute catatonic patients. As will become apparent in the discussion of results, a partial and often transient alleviation of mutism by LSD treatment has been one of

the most consistent effects reported in the children studies.

A final secondary objective worth mentioning is that the more recent studies (Rolo, et al., 1965; Simmons, et al., 1966) were influenced by Bender's earlier reports of successful LSD treatment. These studies were attempts to replicate Bender's findings using various control measures and other methodological refinements.

DRUG REGIME

As indicated in Table 1, LSD-25 has been by far the most frequently employed psychedelic agent in work with psychotic children. An exception was Bender's second study (1963) in which she gave one-half of her patients LSD-25 and the other half UML-491. The experimental drug UML-491 was described as a more potent serotonin inhibitor without the psychedelic properties associated with LSD-25. Based on a variety of biochemical indices and observations of differential behavior changes, Bender reported no apparent differences between the action or effectiveness of the two drugs.

Fisher and Castile employed LSD-25 and psilocybin at times singly and at times simultaneously. These investigators were unique in using a variety of dosage level-drug combinations both with the same patient on different occasions and with different patients on the same occasion. The specific drug regime adopted for a given session was determined by clinical criteria of the patient's particular defense structure and his expected resistance to psychedelic drugs. Stated differently, Fisher and Castile were the only investigators who attempted to optimize the psychedelic experience for a given patient rather than mechanically administering a constant dosage of the same agent to all patients. This feature of their method was consistent with the greater attention paid to individual patient differences and their general orientation to psychedelic therapy as a psychopharmacological process.

Concerning dosage level, most investigators settled on 100 micrograms as optimal. Although this was the average dosage used by Bender, she differed from the others

by starting treatment at a relatively low level (50 mcgs.) and gradually increasing the amount to as high as 150 mcgs. As suggested earlier, Fisher and Castile usually administered multiple agents and employed a wide range of dosage levels (with LSD, 50 to 400 mcgs.). As their work progressed, they developed a definite preference for the prolonged high dose psychedelic experience, especially with older schizophrenic children. Their most effective results were obtained with pre-treatment medication of 10 mg. Librium, 10 to 15 mg. of Psilocybin given approximately one-half hour later, followed by 250 to 300 mcg. of LSD administered twenty minutes later. In addition, Fisher and Castile often gave "boosters" during the session itself ranging from 25 to 100 mcg. of LSD. Boosting was considered beneficial "(a) when the patient seemed to be caught up in a problem area which he could not break through; (b) when the patient kept defending himself from new experiences; (c) when the patient increased his defensive, stereotyped behavior and the psychotic controls became intensified."

With regard to frequency and total number of treatments, the seven studies varied widely—from Freedman's single session per patient to Bender's daily sessions over periods as long as one year. Although more frequent and prolonged treatment was often impossible for non-clinical reasons, Fisher's group averaged five sessions per patient given preferably at two week intervals. With both Rolo's single patient and Simmons' pair of identical twins, experimental requirements precluded an optimal therapeutic regime. Both investigators attempted double-blind procedures and more objective observational methods. Rolo administered 100 mcg. LSD on 28 consecutive days while Simmons gave a total of nine 50 mcg. LSD treatments, approximately two per week, interspersed with inert placebo sessions and control (no-drug) trials.

After citing extensive evidence indicating rapid tolerance of LSD-25, Freedman concluded that repeated administrations would be ineffective with psychotic children. Bender, on the other hand, found little indication of either rapid or sustained tolerance to LSD using her method of continued daily admini-

strations over extended periods. With her relatively large group of patients, Bender did observe a leveling off of reactivity after several weeks or months of uninterrupted treatment. She considered it unlikely, however, that this effect was due to physiological drug tolerance. The impressive improvement rates obtained by Bender in contrast to Freedman's results offer support for a high frequency regime of moderately large doses. It is worth noting that Fisher and Castile arrived at a similar conclusion without knowledge of Bender's work. Parenthetically, the significance of a possible drug tolerance effect is further lessened by the findings of more recent experiments indicating that tolerance to LSD diminishes almost as rapidly as it develops (Hoffer, 1965).

PHYSICAL AND PSYCHOLOGICAL MILIEU

It should be emphasized that the findings obtained in these studies are the result of an interrelated set of determinants, only one of which is the ingestion of a particular chemical agent. The significance of seemingly contradictory results has often been obscured by the persistent search for static, "drug-specific" reactions to LSD. Inconsistent findings become more understandable if the psychedelic experience is viewed as a dynamic configuration of intimate patient-therapist-milieu transactions. In short, the administration of LSD is inextricably embedded in a larger psychosocial process which should be optimized in accordance with particular treatment goals.

Even a cursory examination of the work with autistic children clearly reveals that at least some important aspects of the physical and psychological milieu were considerably less than optimal. In the seven studies reviewed here, only Fisher and Castile attempted to create a specifically non-medical atmosphere that was minimally threatening to the patient. Modeled after the widely-adopted Saskatchewan technique (Blewett & Chwelow, 1959; Hoffer, 1965), the procedure developed by Fisher and Castile included the following key features: (1) a high dose, 7 to 10 hour session; (2) the use of a variety of therapeutically-meaningful or aesthetically-pleasing stimuli (music, flowers, pictures, food, etc.); (3) a positive



Detail of painting
by Allen Atwell

patient-therapist relationship formed prior to the session itself; (4) the presence of both a male and female therapist who "had thorough acquaintance with the phenomena of the drug through personal experience"; and (5) active therapist involvement with the patient including role-playing (e.g., father, mother). Importantly, these conditions have repeatedly been found to significantly enhance the personal value of psychedelic experiences.

In each study, the circumstances under which the session was conducted were consistent with the purpose and expectations of the investigator. Consistent with his psychotomimetic orientation, Freedman's patients were supervised by a familiar psychiatrist primarily for the purpose of careful observation and note-taking. No attempts to relate to the children or personal experience with the drug were reported. The same applies to Bender's group although the intent in this case was clearly therapeutic. She apparently administered LSD as a conventional daily medication that did not require any special conditions of preparation, therapist involvement, or setting. However, her reports are replete with descriptions of spontaneous interactions between staff and children. Supervision of Bender's patients was performed mainly by ward attendants. The adults present in the sessions conducted by both Rolo and Simmons were also

ward attendants.

The primary purpose of the studies reported by Rolo and Simmons was explicitly methodological. Both research projects employed the double-blind method and attempted to follow a predetermined, uniform procedure during each experimental and control session. As means of standardizing the sequence of events and increasing objectivity, both investigators systematically presented various playing objects, games, and tasks to the child. Rolo's single patient was encouraged to engage in quite simple, familiar activities such as throwing a baseball or playing cards. Simmons, on the other hand, created a far more elaborate series of game-like situations that were novel and intrinsically interesting, requiring sustained patient-adult interactions, and importantly were specifically designed to simulate or elicit normal social behavior and emotional responsiveness.

A number of probable effects of the physical and psychological milieu are suggested in these studies that bear a significant relationship to the investigator's orientation, on the one hand, and differences in benefit or outcome, on the other. As indicated earlier, the expectations of a particular research team seem highly related to various aspects of both drug regime and setting. With regard to differential improvement rates, a major determinant seems to be the

degree of active therapist-patient interactions permitted during the drug-induced state. Secondly, greater therapeutic benefit seems to occur in congenial settings offering some opportunity to experience meaningful objects and interpersonal activities. Finally, psychedelic therapy with psychotic children seems most effective in natural, flexible settings that are reasonably free of artificiality, experimental restrictions on spontaneous behavior, and mechanically administered procedures. Conversely, barren medical or laboratory environments seem clearly anti-therapeutic.

RESULTS

As emphasized previously, each of these exploratory studies suffered major shortcomings either as therapeutic or experimental undertakings. Almost without exception, the findings reported consist mainly of observational data obtained during the acute phase of drug reactivity. The use of pre-treatment baselines against which to measure change either during or after psychedelic therapy were generally absent. In most cases, follow-up data was not obtained. Although caution in interpreting results is certainly indicated, it should be pointed out that these limitations are shared by the bulk of research on drug- and psycho-therapies. Furthermore, objective evaluation of improvement in severely disturbed children presents unique problems due to the nature of autistic symptoms, especially the ubiquity of mutism. Even the few cases not suffering from a complete absence of speech were untestable by standard psychological assessment methods.

In their initial study, Bender and her co-workers (1962) administered the Vineland Maturity Scale at the beginning of treatment and again three months later. At the follow-up testing, ratings were qualitatively higher for all children. In the second study (Bender, et al., 1963), the Rorschach, Draw-A-Person, and Bender-Gestalt tests were given to the ten verbally responsive children on at least two occasions; before treatment and again after a three to eight month interval. In these aggressive, overtly psychotic patients, Bender reports that "there were two major changes observed: (1) There was a decrease in personalized ideation and a corresponding

gain in accuracy of response; and (2) An inhibition of strongly emotional or 'feeling' reactions to the cards." Other favorable changes reported included decreases in hallucinations, negativism, and regressive defenses with a corresponding increase in reality-contact. Similar types of improvement were found in the older children treated by Fisher and Castile.

With regard to her major group of young autistic children, Bender reported significant improvement in speech and verbal communication:

"...the vocabularies of several of the children increased after LSD or UML; several seemed to be attempting to form words or watched adults carefully as they spoke; many seemed to comprehend speech for the first time or were able to communicate their needs... Very few of these changes in communication had been noted previously in such a large number of children, and at such a relatively rapid rate" (1963, p. 91).

Since mutism is a cardinal symptom of autistic children and probably the major impediment to successful therapy, it is worth emphasizing that at least temporary speech improvement has been one of the most frequently reported effects of LSD in the work conducted thus far. Other commonalities include an elevated mood, less compulsive ritualistic behavior, and increased interaction with others. All investigators reported some favorable change in these major areas with the exception of Rolo's single patient. Rolo's group abandoned the attempt to estimate improvement since their judges could not distinguish between LSD and non-LSD trials. Bender, on the other hand, made the following observations:

"They appeared flushed, bright eyed, and unusually interested in the environment... They participated with increasing eagerness in motility play with adults and other children... They seek positive contacts with adults, approaching them

with face uplifted and bright eyes, and responding to fondling, affection, etc." (1962, pp. 172-3). "There is less stereotyped whirling and rhythmic behavior... They became gay, happy, laughing frequently... Some showed changes in facial expression in appropriate reactions to situations for the first time" (1963, pp. 90-91).

As indicated earlier, Simmons' patients were subjected to a uniform sequence of game-like situations that evoked a variety of measurable responses. During each LSD session and non-LSD session, a total of 20 specific behavioral measurements were taken by a recorder observing the patient through a one-way screen. The behaviors recorded included physical contact with the adult present, vocalizations, destructive acts, laughter, stereotyped movements, and eye-to-eye contact. In contrast to non-LSD trials, the most pronounced and consistent changes observed during LSD sessions were: "(1) An increase in social behaviors manifested by increased eye to face contact and increased responsiveness to adults, (2) An increase in smiling and laughing behavior generally considered an indication of a pleasurable affective state, and (3) a decrease in one form of non-adaptive behavior demonstrated by a reduction of self-stimulation."

Considering the wide diversity in these studies, the major findings of Bender, Fisher and Castile, Freedman, and Simmons are remarkably similar. Differences in orientation, patient attributes, drug regime, setting, treatment technique, research design, etc. seem to affect the frequency and stability of favorable outcomes (see Table 1). The types of improvement, when and if they occur, appear to be essentially the same in each study. In short, when LSD is effective with autistic children, it is effective in characteristic ways.

The influence of non-drug factors is well illustrated in the work of Fisher and Castile. Although they optimized the physical and psychological milieu, their patients were the most severely disturbed and displayed the greatest variety of symptoms. Furthermore they made conservative estimates of

improvement based on the extent and stability of favorable changes after treatment was terminated. In contrast, most of the findings reported by the other investigators concerned the immediate effects of treatment. These differences account in part for the relatively modest improvement rates reported by Fisher and Castile.

The lack of even short-term follow-up data on the majority of children treated with psychedelic drugs has been a major limitation of the work reviewed here. Follow-up information is particularly crucial because the available evidence strongly suggests that when used alone, LSD produces only transient alleviation of symptoms. In order to bring about enduring improvement, the drug-induced state requires active therapist-patient interaction and/or subsequent psychotherapy. In this connection, Simmons noted that:

"Therapeutic intervention in severely retarded or regressed children utilizes to a great extent close physical interaction to which the child must respond. In the usual state it is often difficult to intrude upon the child because of a general lack of responsiveness... The results of our experiments clearly demonstrate changes in exactly these areas with increased attendance to physical and face contact with an attending adult and concomitant reduction of competing self-stimulatory behavior... Thus, two possible criteria for the successful intervention into autistic children are met... A third piece of data which must be considered is the increase in smiling and laughing behavior..." (1966, p. 1207).

The collective work reviewed here supports the main conclusion reached by Simmons and his co-workers and argues strongly for more extensive and systematic applications of psychedelic drugs in the treatment of autistic schizophrenic children: "LSD-25 appears to offer a useful adjunct to psychotherapy because of its positive effect in the areas described which are closely related to the process of psychotherapy."

Table 1. Summary of Patient Samples, Drug Regime, and Improvement Estimates

Reference	No. of Patients	Age Range In Years	Agent Used	Dosage Level (in mcgs)	No. of Treatments Per Patient	Treatment Schedule	Effects of Treatment ^a		
							Excel.	Good	Poor
Abramson (ed.), 1960 1960	6	5-14	LSD	40	3-6 av. 4	Weekly	5	--	1
Freedman, et al., 1962	12	6-12	LSD	100	1	--	--	5	7
Bender, et al., 1962	14	6-10	LSD	100	45 ^b	Daily	7	7	--
Bender, et al., 1963	44	6-15	LSD UML	50-150 4-12 mg.	60 ^c	Daily	20	21	3
Fisher and Castile, 1963	12	5-13	LSD Psilo.	50-400 10-20 mg.	1-11 ^d av. 5	Biweekly/ Monthly	4	4	4
Rolo, et al., 1965	1	12	LSD	100	28	Daily	--	--	1
Simmons, et al., 1966	2	5	LSD	50	9	Twice Weekly	2	--	--
Total	91					Totals	38	37	16

- (a) Due to the paucity of follow-up data available, these extremely tentative ratings are based primarily on response during treatment.
- (b) In a later report, Bender reports continued daily treatments with this group over a 12 month period, i.e., each patient received a total of approximately 365 LSD and/or UML treatments.
- (c) With this second sample, one-half were given LSD and one-half were given UML.
- (d) Based upon estimates of patient resistance, a wide variety of dosage level-drug combinations were used both within- and between-subjects. Psilocybin and LSD were employed at times singly and at times simultaneously.

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SUMMARY AND CONCLUSIONS

1. Seven independent studies are reviewed involving a total of 91 autistic schizophrenic children who had been given psychedelic drugs for therapeutic and/or experimental purposes.

2. The large majority of children treated in these studies were between six and ten years of age and were completely refractory to all other forms of treatment.

3. There was only slight indication of any differential response or benefit as a function of age, diagnosis, duration or severity or illness.

4. A variety of psychedelic agents, dosage levels, frequency of administrations, and treatment schedules were employed. The most effective results were obtained with at least 100 microgram doses of LSD-25 given daily or weekly over relatively extended periods of time.

5. Concerning the physical and psychological milieu, greater therapeutic benefit was related to: (a) the degree of active therapist involvement with the patient; (b) an opportunity to experience meaningful objects and interpersonal activities; and (c) congenial settings that were reasonably free of artificiality, experimental or medical restrictions, and mechanically administered procedures.

6. The most consistent effects of psychedelic therapy reported in these studies included: (a) improved speech behavior in otherwise mute children; (b) increased emotional responsiveness to other children and adults; (c) an elevation in positive mood including frequent laughter; and (d) decreases in compulsive ritualistic behavior.

7. Differences in patient attributes, treatment technique, research design, and other non-drug factors seemed to effect the frequency and stability of favorable outcomes. The types of improvement found were essentially the same in each study.

8. Although each of these studies contained serious therapeutic and experimental flaws, it was concluded that the collective findings

argue strongly for more extensive applications of psychedelic drugs in the treatment of autistic children.

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PSEUDO-NARCOSIS

Inca Mandala

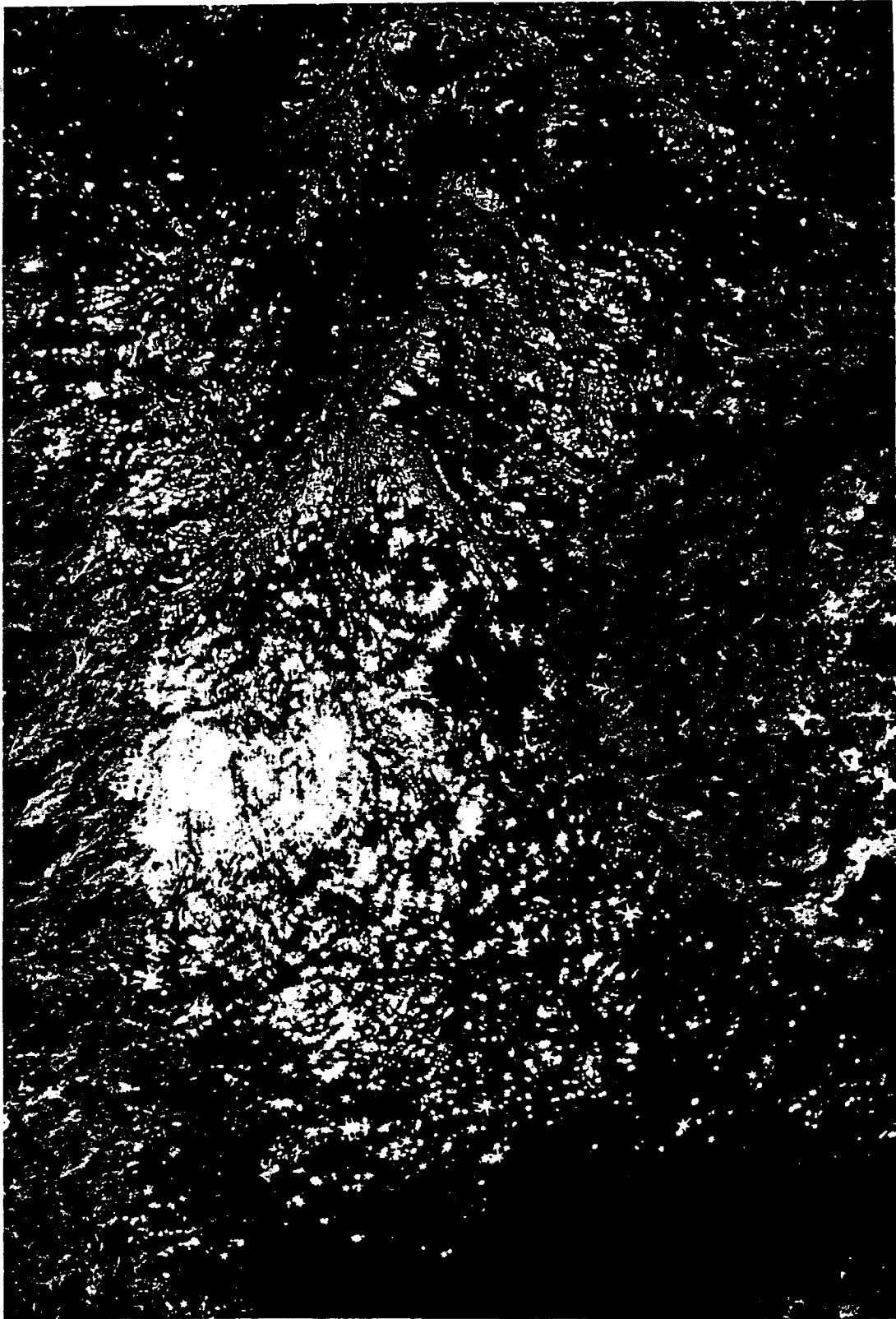
Submerged
In a deep and silent ocean.
Drifting; Numb;
Through soft green waters.
Oblivious to the deathly chill.
Parlyzed.
In an icy chamber of darkness
And the waters swirl about.
A whirlpool of Time and Space.
There is no Death.
No Pain.
No Reality.
Suspended in a frozen crystal
Contracting
Into fragile shell of
Pearlescent ice.
The warm snow flutters softly
And the blue-green flames
Are luminous in the twilight.
A thousand shimmering sparks
Melting, thawing
And the fire still is bright.
Glittering liquid,
Beads of violet water.
Gilded spangles falling;
Falling from the ceiling
Of the crystal cavern.
An earthquake of coloured lights
And moulten emeralds.
Neon flashes of pain
And tortured hell of opal shadows.

Phosphorescent.
The blinding mosaic of
A million kaleidoscopic prisms.
Throbbing in the white heat
Of translucent existence.
Grim and parched,
The desert shores—
And like a sea of platinum sand
The waves of air are thin
And half of black is white
Suffocating.
The bubble bursts;
Wisps of poison thick and green
Encompass the quivering leaves.
The dull sun spins across the air,
Plunging deeper
Into the choking lake of thought.
A blazing disc
And orange rays crushing the last moist vapor.
The very soul made then of Truth
Stabs the shattering brilliancy
With mirror-knife
And writhes in pain itself.
And the ideal transcends its purpose,
And the sea swallows up the desert,
The jungle; the diamond glacier;
And quenches the fires of hell.
There is no Death; no Pain;
No Reason to deny oneself
This solitary happiness.



Water photographs by Adger Cowans







LONELINESS

Gary M. Fisher

I became aware that a grain of sand was separate from the grains of sand surrounding it. Then another grain of sand became my focus of attention, and it too was separate from all those grains surrounding it. My attention then flew to another grain, and it too shared the same fate as the other two grains. Suddenly I realized that every grain of sand was distinct, separate, apart, and isolated from every other grain of sand. The billions of grains of sand of this beach were all separate from one another.

The surf gently bubbled over the beach. I looked at a bubble. I looked at all the bubbles. Each one was unto itself. The surf that gently bubbled over the beach simply bubbled over it and was part of another world—a world of bubbles. The bubbles were not of the grains of sand, and the grains of sand were not of the bubbles. Everything was isolated from everything else.

Then the rocks on the shore caught my attention, and even "one" rock was composed of so many miniscule parts which, although sharing some physical proximity to each other, were again distinct, with very hard, sharp, well-defined boundaries—boundaries which allowed no intruders.

The trees on the bluff were, each one, alone. The sky above was above and alone. The distant hills, remote and alone.

Wider and deeper, this isolation. Wider and deeper.

Then the humans entered and they were the loneliest of all. Each one alone. Some sensing the isolation and suffering from it; some angry because of the frustration in not being able to burst through it; some aching because of knowing it; some aching for others who knew even more of it; some, so dulled by it, ceasing to sense it, but simply being it and not knowing it. Everyone with it.

The past ages began to creep into my consciousness—all the humans that had traveled on this shore, partaken of the waters of this ocean, lived on this beach. And I knew each one's hollow separation from himself, from his fellowman, and from this nature which he touched but felt not. Timeless. Eternities of it.

My awareness spread over the here-and-now land to the peoples of this earth. All of humanity was suffering from isolation. Each human who existed was alone and his cry came from that loneliness. His anger, fear, self-importance, arrogance, tears, pain, sorrow, despondency, grief, and all of his madness—all were his cry of being alone. Then I knew that isolation, and I heard my own cry.

Silence.

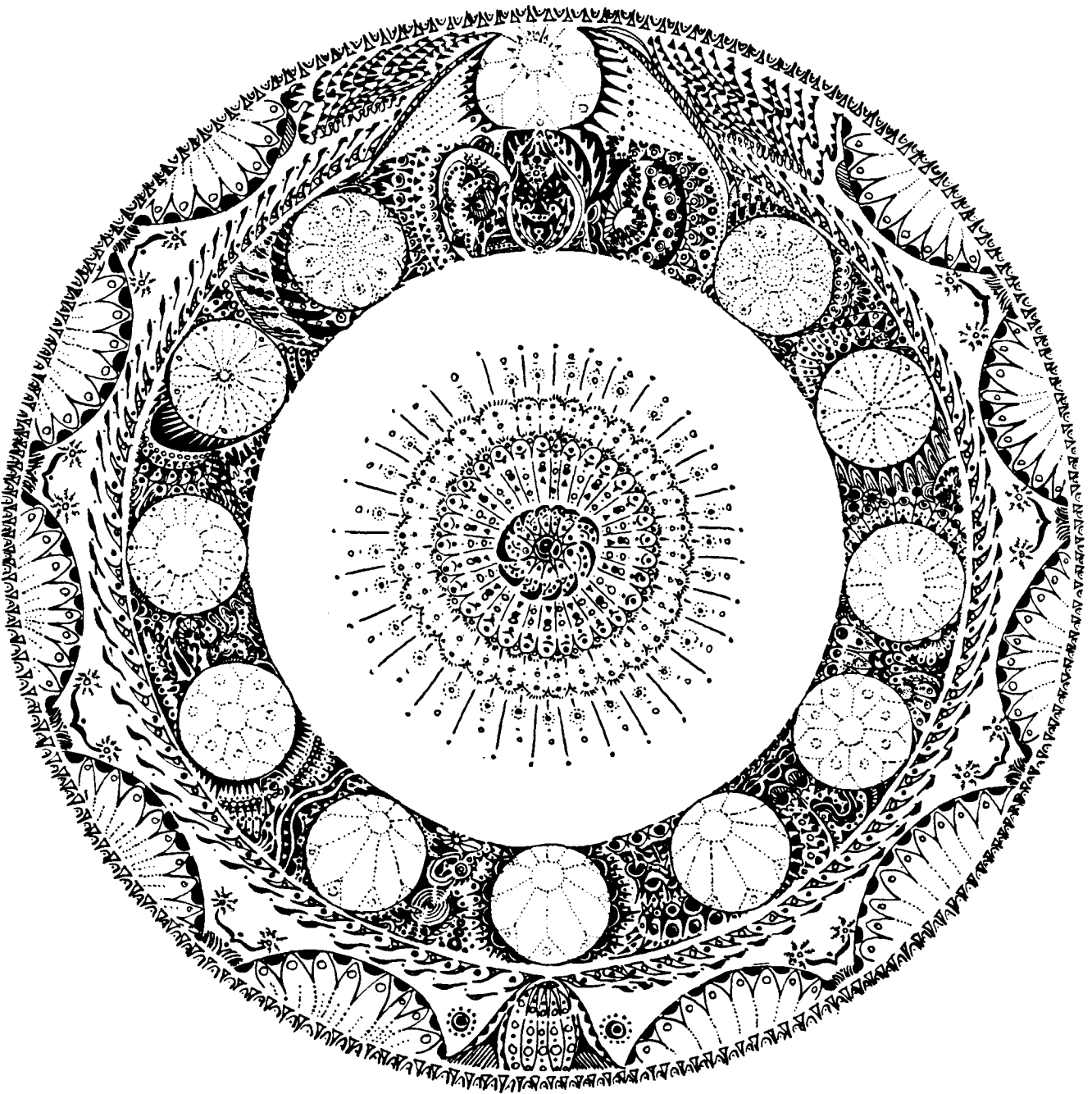
Out of that isolation formed a bridge—a bridge that leapt out to join every manifestation of being with every other manifestation of being. From the loneliness of each individual came forth a bond, and this bond was a bridge to everyman. Not in spite of, but because of this isolation was man able to leave his isolation and to journey to another's soul. Becoming aware of one's own isolation is the beginning of the journey to unity. The only road to another man's heart is this knowing of separateness. Each must walk alone on this path. Each must become profoundly knowing of his isolation from his fellow man which is himself. Only through isolation can one know oneness. The paradox of truth.

This experience relieved me of fear of other people. Their behavior — rejecting, reaching, arrogant, withdrawn, solicitous, threatening—is simply an expression of their loneliness and their attempt to do something about that loneliness as I attempt to do something about mine. My awareness of my loneliness forms a bond with every human I meet. I no longer need so much to judge

him, to compare myself with him, to feel more important than him, to envy him, nor to ponder his behavior. I can share myself more readily with him, and when I can, my isolation is lessened, the pain of loneli-

ness is gone, the cold hollowness is gone and warmth fills my being. And in those moments when he can share himself with me and I myself with him, the bridge is complete, we merge, and we finally love.

Gary Fisher, Ph.D., who also contributed an article on dosage levels to *Psychedelic Review* #2, is working as a psychologist in UCLA's School of Public Health.



Mandala Drawing by Isaac Abrams

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LSD AND SEXUALITY

Richard Alpert

Review of a case of homosexuality treated therapeutically with LSD and description of a male-female psychedelic session program.

This presentation is in the form of a clinical report and some speculations, regarding some of the relationships that we have noted between the use of psychedelic chemicals and sexual behavior. We shall consider two aspects of this relationship—one concerns the effect of psychedelics on marked sexual pathology, and the other their effect on normal sexual experience. In general, we have assumed that the sexual pathology with which we have been dealing is primarily psychogenic in nature, although the effects may be the result of intermediate endocrine action as well. Furthermore, we have leaned towards a Freudian model of the early development of sexual identity.

As for the manner in which the psychedelic chemicals affect the nervous system—we still do not actually know. It seems likely that LSD and the other psychedelics affect the serotonin at the synapses between neurons—most notably in the perceptual, cognitive, and affective areas of the brain. This effect is realized psychologically in alteration of association patterns.

The subjective experience of this alteration in association patterns is extraordinary. When a stimulus is presented, rather than experiencing only the most highly probable cognitive or affective associations (which, of course, may be pathological), one experiences perhaps all possible responses simultaneously—providing an experiential richness, freshness, and inter-relatedness which then, theoretically, allows for the possibility of the emergence of new external behavioral responses. The actual cognitive and affective richness of experience cannot, of course, find direct expression in conceptualized thought (the maximum speed of

which is about three concepts per second), but there is provided a new experiential base from which to act. It is impressive to experience the amazing richness of associative material which one's brain can process simultaneously.

Thus it is our working model that the psychedelics work as a therapeutic vehicle through perceptual-cognitive-affective reorganization. For example, if a man looks at a woman about whom he usually has certain highly fixed associative habits of perceiving, thinking, and feeling, after the ingestion of a psychedelic chemical he not only sees her in the habitual way but sees her in literally hundreds of other ways as well. This fresh perception allows for the development of a set of new mediating responses and ultimately an alteration in external behavior patterns. It is the myriad minimal cues in a human face which lead to the associational lushness—the set of a cheek bone, a wrinkle by the eye, the pinkness of skin, the depth of eye, the fullness of a lip, trigger off associations of ethnic, age, historical and social dimensions. Our male subjects report over and over again that to look at one woman is to see “woman”—the harlot, the virgin, the seductress, the juvenile, the matron, the mother and so on, with all feelings—lust, anger, love, kindness, protectiveness, vulnerability...and to look at any man is to see “man.”

LSD is very difficult to work with therapeutically. Extensive programming of sessions is required and there is a need for the understanding of the experience by the therapist. This means that every therapist or guide has to have had psychedelic experiences himself before considering the

Richard Alpert, Ph.D., until 1963 at Harvard University, has been prominently involved in the “psychedelic movement,” through lectures, articles, discussions, and books such as LSD (with Sidney Cohen and Larry Schiller; New American Library). He is now in India on a “journey to the East.”

ms

use of psychedelics as a therapeutic device. The case I'm going to review briefly concerns a thirty-eight year old male who's been acting out homosexual behavior since the age of fifteen. He has had literally thousands of homosexual encounters, all of one or two incident duration, and has during this time had sexual relations quite unsatisfactorily with three women. He considered himself "bisexual."

Prior to the first session with LSD there was a two-week preparation period; that is, a period of the guide and subject getting to know one another, a case workup, as well as directed reading to prepare the subject to help program his own experiences.

It is important in assessing critical variables involved in change to keep in mind the tremendous amount of time that the guide and the subject spend together. This time may indeed be all that accounts for the changes in behavior; it may not be the LSD at all. Those of us that have worked with the LSD, however, suspect otherwise.

Session I was primarily an orientation session, with 200 mcgms of LSD allowing the subject to get familiar with the experience of taking a psychedelic chemical. The session lasted 15 hours and was carried out in a comfortable, quiet place. Soft music and a psychologically safe and warm environment were provided to allow the subject to relax and go with the hallucinations and the associations without much direction other than a few short pre-arranged readings of a basically Taoist nature.

Keep in mind that the subject is a person who contacted me by letter and said, "I am primarily an overt acting-out homosexual and I don't want to be anymore. I've heard about LSD and I think it could help me. Would you work with me?" And yet it is only in the second session that we start to deal specifically with the symptom. Before the second session, the subject and I collaboratively picked the artifacts that we would use in the session. Using a Wolpian type approach to anxiety areas, we selected a set of slides of great paintings of women (such as the Mona Lisa and works of Rafael

and Titian) for presentation during the session.

The first two hours of Session II were quiet hours with soft music—a time during which the participants could relax and float free of encumbering identities. Then, the preselected slides were presented for about ten minutes each, enlarged to life size, for a total time of about one and a half hours. Following this period the subject was presented with a set of photographs (his mother, old girlfriends, and current women friends), which he had collected prior to the session for this purpose. He studied these photos for another two hours. (With other subjects an additional step has been used involving a mirror and the contemplation of the subject's own body.) Throughout the presentation of the slides and photos the guide had, for the most part, been silent, now and then gently asking such questions as "Who is that?" "Who else?" "What are the characteristics of that woman?" "What is woman?"

Later the subject reported that he had felt an initial panic reaction of withdrawal followed by increasing involvement, ultimately experiencing "how biologically obvious heterosexuality is." He reported experiencing an attraction, both sexual and otherwise, towards these women. This excited and encouraged him, for it was the first time he could consciously recall having experienced such feelings in connection with females.

Session III, a month later, could be called a Tantric session. Those of you who are familiar with Garrison's book on Tantric Yoga will understand what I'm talking about.* The subject chose a female companion—somebody who was close to him and who would like to have a relationship with him. She in turn collaborated in preparation for the session. Her main role (she did not ingest any chemical) was to just "be there" and to hold him through the session if he desired it. At first the subject experienced an intense panic reaction. He experienced impotence, shrivelling of the penis, and a cold fear. No demands were made upon him, and the eight or ten hours of the session allowed him to work through much of his

*Garrison, Omar, *Tantra: The Yoga of Sex*, Julian Press, 1966.

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Medieval Indian Drawing Representing Union of Fire and Water

anxiety. He was, however, left still very uncertain about his sexual identity. Between sessions, by the way, he was acting out homosexually, although the frequency and compulsivity was diminishing.

Session IV, which he was somewhat reticent to have after his panic of Session III along with my own discouragement after Session III, was again with the same woman. This time he experienced very strong sexual desire towards the woman almost immediately and they experienced sexual union, which she reported as the most profound sexual experience of her life. This encouraged him considerably.

One year later our subject is now living with a woman—it is another woman, unfortunately, or fortunately, I don't know. But he has been living with her for eight months. They have been having intercourse every night, except during her periods. He has had two homosexual experiences since that time and he did them, he said, mostly to test and find out "where he was at" and whether or not the changes were real. Now he finds he can still involve himself in homosexual experiences but he keeps returning to the heterosexual one and finds it indeed far more satisfying. This is a major change in his perceptual, cognitive, and affective organization. I can't tell you what will happen a half year from now. He may be

back out on the streets; I certainly don't guarantee a thing.

Turning now to the enrichment of normal sexual behavior through the use of psychedelics, one can adopt a model that suggests that through perceptual reorganization the sexual encounter becomes immersed in a far broader biological as well as spiritual and social context—thus enriching it immeasurably. Students of sexual yoga already are familiar with this model. Through it, the partners transcend the subject-object relationship which characterizes much of the sexual practices in our country, and merge into the unitive experience which is dominant over the individuals involved. As part of this experience with psychedelics, sex is no longer genitally localized. The entire armamentarium of senses enter into the sexual experience in such a way that one experiences a total body orgasm. Those familiar with Eastern practices will undoubtedly associate this experience with its symbol — the thousand-petal lotus flower.

In exploration with people who are not presenting pathology we have arranged a number of sessions for married couples who wish to explore their relationship more deeply. From these experiences we have developed a manual for making a marriage new which was published in the book, "LSD," which I co-authored with Sidney Cohen and Larry

Schiller. I'll quote briefly from that section.*

It's important that participants be familiar with the psychedelic experience and it is assumed that both partners have previously had individual sessions to ensure a sufficient familiarity with the unusual aspects of the experience to allow them to collaborate in a programmed session. The guide and the couple should discuss the entire plan for the session in advance, including the music to be played, the words to be spoken by the guide, the artifacts to be used, the dosage, the timing involved, the exact schedule and contract of the session.

The setting should be quiet, with no possibility of disturbance, beautiful and comfortable for the participants. Two single covered mattresses are placed about six inches apart on the floor or two beds next to each other. Each partner lies on one of the mattresses with the guide sitting behind them, one candle is on either side of the couple. After ingestion of the psychedelic chemical the two partners relax quietly while familiar music is played interspersed with readings by the guide, and these readings can be anything chosen by the couple from prose or poetry, any kind of marriage manual they would like. As the chemical starts to take effect the guide places next to each of the participants a mirror, so that each participant can look into it and see his own face only. As agreed upon in advance, the two participants turn away from one another and each looks into his mirror. After a period of silence the guide speaks (it is agreed upon during the session that the partners will not speak at any time) and the guide asks the question, he asks them to ask of themselves, "Who am I?" At five minute intervals he repeats the question, "Who else am I?"

Now as you look into a mirror under LSD you see yourself as in all the ways you've ever known yourself, as a devil, as a wise man, as a promising young

person, as an irresponsible person, as a lover, as a child, as somebody growing old and so on. As the guide repeats the question over and over, the partners see themselves in all the familiar ways in which they know themselves, both ugly and beautiful. The guide recommends that they keep going behind each face until they each find their own calm center.

Stage II. He then moves one of the candles between the two mattresses and then removes the mirror and extinguishes the other candle. As agreed upon in advance the partners are now to look at one another. They are not to engage in any body contact or for that matter to make any social contact during this stage. They are merely to study one another.

The guide says, "Now look at your partner and see who he or she is, and who else—and who else. He is all men and she is all women. Keep looking behind each face until you find his or her calm center." And again, this goes on until the guide feels that they have completed this stage which is roughly about an hour.

Stage III. When the guide senses the time is right, he removes the single remaining candle, joins the hands of the couple and says, "Now listen carefully to one another's bodies. Through their merging you shall find a new calm center."

The guide, as prearranged, extinguishes the candle, leaves the room and remains on call in another part of the house. This ends one example of a manual for making a marriage new.

My own conclusion is that psychedelics offer the possibility of enriching the sexual life of the average individual and show some promise in alleviating sexual pathology. However, a tremendous amount of obvious research clearly must be done. I hope that in the near future the politics of the situation will allow for that possibility.

*LSD, Alpert, R., Cohen, S., and Schiller, L., New Amer. Library, 1966, pp 40-41.



"Medusa" by Dion Wright, photo by Neil Wolf

ORPHEUS AND EURYDICE

John Esam

A Book of Changes

Matter is Change
The restless fulfilling of possibility
Whose order is
The marvellous rider, Being,
One with his horse of Chance.
Wait not for another guide then—
Go hang your restless seed
Upon the restless ocean.
Each person is a natural law,
A sheath in the world
For the Sword of Nothingness, inscribed:
‘Take this and cut the puppet free!’

Let go the strings that jerk
And never fear the laughing winds,
There is a heaviness in being
That will hold you here.
Life is weighted with itself,
No more yours to stop undressing
Than is the season birds leave.
A great river stretches across
The universe
Where sun and worlds are whorls
Lasting a moment
As the water goes shallow over stones;
Wells walk in the streets

Where seeing pours from Nothingness
Into space
And breaks like a flock of diving pigeons
Sweeping past your head.

Remember yourself
As an empty door the wind
Blows about in like a sleepy dog in a yard;
Listen to the stones of seeing
Falling down your senses' wells.
Consciousness comes as a growing
emptiness

Like a man walking closer growing clearer
In your shape.
He will arrive and walk on
Within your body
Shining slightly from the void
As he goes into the distance.
Leave yourself there to turn
And follow him.

Seeing is an act that touches
The seen
And makes it move as leaves aware
That it is seen
And so hear itself
Coming constantly into being
Through the trees;
So the seer hears the seen
Working effortlessly within its selflessness,
And his long eyes make its spinning echo
Faster there so that the seen,
Feeling itself being seen through,
Knows that it comes into being
Through being seen,
And that in seeing, being
Goes like a woman stepping down
from a train

To knowing, and knowing smiles...
Yet becomes aware of itself
As an object
And looks back into the seer;

So the seer's self rises quietly
To the surface
Of his self-objective eyes
And looks out into the world.
Open to all seeing now he listens
To the forest think
In the wind's slight breathing,
Hears sound coming in from space
Blow out through the seed's old ear
Into the experience of the thing,
Matter as a kind of knowing,
And made, singing reason's riding song
come out

Through all that is...
The stars
Standing in their stirrups.

Follow yourself
Down through the world,
Your body full of creeks where
The hidden brightness the self is
clings
Is the way,
Has the power of the empty circle senses
Work like winds within.

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Walk, and let the ceaseless forms
 Rise up through your shape to break
 Upon the empty beach
 And leave their meaning lying there
 Like a man from some ship
 The light has wrecked. . .
 To walk is to think
 When your self walks as another
 In your body.
 You have all natures in your nothingness
 Like tongues that use
 Your eyes without confusion, speak
 To themselves as you walk by their stones
 And riverbushes, not burning with meaning.
 Learn to overhear yourself,
 To see what you are
 With what is, and
 The continuous intelligence existence is
 Will come through that silence that
 Plays about every thing
 As rocks far inland catch
 On the seawind's throat.

Become responsible for yourself here
 As a world hanging
 In your body's breathing space
 And all your seeing goes
 To knowing
 As the earth is curved out
 From gravity's bending of the light.

Mortality is necessary
 That things may continue;
 Matter stays the speed
 Of light
 That selves may bring their selves
 Out from the stony days' tower
 Of cracking bells,
 Until the sword of time must cut the
 sun's knot

And let the dusty light out;
 Like a dewy web bag of young spiders,
 Broken open by a boy, disappearing
 Down the dry grass,
 Edges break the light
 Shattering time into the mind's eye.

In matter's mirror pause between
 The spaces, the ever-moving line
 Of Time that flows both ways
 Echoes in itself, makes
 The planets mutter like old heads
 And breaks against the hollows
 of the suns.
 Time enters space lost in matter

Come through the edges of
 One universe whose beginning
 Seems to disappear somewhere beyond
 the speed of light into another,
 And shatter to the cosmic mirror there
 Time catches on again. . .
 So this world loses its origins
 Into the next, and on towards
 That centre in the past
 Where the bell is being struck. . .
 And there are even some who can still see
 Stars in the nostrils of horses . . .

Our birth's a stone dropped
 into emptiness,
 A confusion like a sound that echoes
 away
 In the next room

Made by something you cannot find
 When you go in
 Through which time goes
 Into the obscurity of a being as breath
 Disappears down the blood into
 the body.

This world is time gone
 Dark in space
 The sun's eye leaves its images
 Gathering in;
 Not desire to be too clear now
 If you are to be a seer,
 Everything here is a blind thing
 Some seeing troubles into being.
 Light must be held up
 By matter's cloudy places long enough
 For the world to grow clear,
 Hanging round its old horizons
 Where the brightness we see by
 Clings as lovers lying lost
 In each other's eyes
 Go through their blindness to
 Beaches behind the sun
 Origin breaks
 To selves upon.

Not only the sun
 why I fell,
 Orpheus,
 but the earth
 breathed me in. . .
 All those lives I left
 with no life
 that I might fly
 unless I gave them
 matter's chance

curled there
like airless mouths
dumb men's hands grew out...
and pulled me from
the air that they
might breathe
and walk among
themselves.

So I fell to watching
the soft decay
of actions
that once meant flight
in old men's bodies...
And saw
that they had never
known what
those strange movements
in them might have been...
Each one choked
with unknown lives deepening
to a duller matter
the earth would rather
not have,
but must use...
All become slower, fallen
out from the quickness
of the self

living in its centres,
losing the sun's
feathery, flying light from
their breathing,
and so
their upper blood...
Lost consciousness
of their bodies' power
to find a way
up through the days
to the light body
of the soul
through the circulation
of the light
from the heart between
the eyes...
And could not rise
nor die,
matter going heavier
with senseless lives
hallucinating bodies
until nothing moves
and this
a dead planet winged
with hopeless ghosts sunk
in their own
bodies' cells
that cannot fly much longer.



"Icarus and Daedalus" by Dion Wright, photo by Neil Wolf

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THE EFFECTS OF CONSCIOUSNESS-EXPANDING DRUGS ON PRISONER REHABILITATION

Timothy Leary

The first of two articles describing the Harvard-Concord Prison Project, in which the author's own version is flanked by official reports and newspaper accounts of the same story.

During the Fall and the Winter of 1960, much of my time and energy was going into the study of the effects of the psychedelic mushrooms. I was also carrying on an active program of lecturing, teaching, and field work in Clinical Psychology in the Harvard Graduate School. I had been brought to Harvard in 1959 in order to introduce existential-transactional methods for behavior change. After 15 years practicing psychotherapy and about 10 years of doing research on psychotherapy, I had come to the conclusion that there was very little that one person called a doctor could do for another person called a patient by talking to him across a desk, or listening to him as he lay on a couch.

I developed a lot of theories and a lot of methods on how behavior change could be brought about in ways more effective than the standard clinical interview method. There are two main points to the theories I developed; first, (transactional) I was convinced that the doctor had to throw away his role and status as a doctor, had to join the other person actively and collaboratively in figuring out the solution to his problem. As much as possible, the doctor had to turn over the responsibility to the man who knew most about the problem at hand, namely, the patient. I developed many techniques for getting patients to help each other.

The second point in my theory (existential) was that the doctor has to leave the safety of his consulting room and get out there in the field where the so-called patient is having his unique problems and where he is going to solve his problems. I saw the role

These articles by Dr. Timothy Leary are part of his book "High Priest," published 1968, New American Library. Reprinted by permission.

Second Annual Report:

Psilocybin Rehabilitation Project

*All the professional work on this project was volunteer. The expenses for clerical assistance and salaries for ex-inmate workers were covered by generous donations from the Uris Brothers Foundation, New York, Eileen Garrett, President.

Applications to three offices of the U.S. Public Health Service requesting support for continuing this project were refused.

Exactly two years ago the Harvard psilocybin project initiated a research program at Massachusetts Correctional Institution, Concord, designed to test the effects of consciousness-expanding drugs on prisoner rehabilitation.

The project was designed as a pilot study—necessarily exploratory—since little was known about the long range application of the substances.

The key issue was the use of a consciousness-expanding drug; but equally important was the philosophy underlying the research, which emphasized:

of the doctor as that of a coach in a game in which the patient was the star player. The coach can help, can point out mistakes, can share his wisdom, but in the last analysis, the guy who does the job is the guy out there in the field, the so-called patient.

I was enthusiastic about these theories because they worked, and because there is no joy in teaching that can equal that thrill which comes when you watch someone who's been hung up, and blocked, and confused, and making a mess of things suddenly learn how. All this had started happening before I got involved in the drug research, and I had already become a controversial figure around the Boston area, because everything that I was saying made a tremendous amount of sense to patients, but the doctors, the psychiatrists, the social workers, the psychologists, were not so quick to accept these theories. You see, I was asking them to give up the status and the omniscient position which they felt their training entitled them to. I asked them to turn over the authority and the star role in the game to the patient.

I was taking one day off a week to drive down to New Bedford, Massachusetts with two or three graduate students where we were working in an orphanage teaching social workers and nuns to set up groups in which older kids would help younger kids, and in which children at every age level were encouraged to take more responsibility for running the school and planning their lives.

We set up another project in a slum housing district in a Boston suburb. Here were hundreds of people who were bogged down socially and psychologically. They couldn't afford psychiatric help and there was none available for them. With another group of graduate students, I used to go down there one night a week with tape recorders and blackboards. We set up headquarters in one of the slum apartments and started teaching groups of the neighbors how they could help each other and become psychiatrists for each other and develop some facility for solving their own problems.

All this, of course, was very déclassé at Harvard. Universities are supposed to be

Democratic Collaboration:

Inmates were given responsibility for planning and evaluating the work. This was seen as preparation for assuming roles as responsible citizens in a democratic society.

Sharing of Information:

The inmates were given all information relevant to their treatment. This was seen as a necessary step in increasing trust and self-respect.

Spiritual Insight:

The transcendental experience provided by the drugs propels the subject beyond space, time, ego, culture, etc. The implications of this visionary experience were utilized in the program.

Interpersonal Trust and Closeness:

Evidence shows that when subjects share an ego-shattering experience together they develop strong positive emotional bonds.

Self-help and Mutual Help:

The most successful rehabilitation methods (A.A., Synanon, Group Dynamic "T" Groups, etc.) seem to those which turn over responsibility to the subjects themselves and which stimulate them to help each other. The drug experience facilitates this tendency.

Emotional and Practical Support:

The model used was not doctor-patient or expert-client but that of human beings who believe in each other and want to help each other.

The project developed the model of friends who are available to help group members stay out of trouble and maintain a responsible role in society.

research institutes and if you get too involved in service functions or helping people, you're considered a bleeding heart. I was able to justify the work in the orphanage, the work with alcoholics, the work in the slum projects, by using the phrase methodology. We weren't really trying to help these people. No sir, not us. We were trying to develop new techniques and scientific methods for changing psychotherapeutic theory. Of course, if people enjoyed it and got help, that was an interesting by-product which supported the method and the theory. It was all experimental, you see. It became a tradition in the center where I worked that any time they got a call from a do-good social service agency requesting Harvard's help in curing any sort of social disease, the request was likely to get bucked to me because they knew that this was my vice and my eccentricity.

One day I got a note in my box saying that two men from the Department of Legal Medicine were interested in enlisting Harvard's help in the psychological rehabilitation of prisoners. Now prison work is considered to be the least interesting, lowest status work you can do in the field of psychology, psychiatry, and sociology. The problems are hopeless. Criminals never change. The atmosphere is dreary and the academic rewards are slim. But when I found this little piece of paper in my box requesting an appointment from two officials from the Department of Legal Medicine, I let out a big grin and chuckled all the way to my office because this was just the chance I was looking for.

By this time, we had given the psychedelic mushrooms to about 100 people in a wide variety of circumstances and we had learned a lot about the process. In spite of the bungling, and the confusion, and our ignorance, we still hadn't caused any damage to anyone and there were a lot of mistakes that we'd never make again. By this time, we had learned a few things about how to run the sessions. About 90 percent of the people who were taking the magic mushrooms were reporting the most ecstatic and educational experience of their lives. The problem was, there was no way to get any measurement as to how much good we were

In our research we helped inmates get jobs, purchase union cards, made small loans and spent hours in friendly advising interaction.

Procedures

Since its initiation, the project has operated under the medical and psychiatric supervision of Dr. W. Madison Presnell.

Inmates received on the average four doses of psilocybin. Dosage ran from 20 mg. in early sessions to 70 mg. Now we employ 30 mg. as a standard, moderate dose.

Inmates were given personality tests before and six months after the program began. Significant decreases in hostility, cynicism, social delinquency and irresponsibility were registered.

There seems to be general agreement that the effects of the program in-the-institution were quite dramatic. The behavior and attitude of the project members became more mature and social.

The post-release events, however, involved a different set of factors and required several revisions in the program.

Post-Release Program:

The main conclusion of our two year pilot study is that institutional programs, however effective, count for little after the ex-convict reaches the street. The social pressures faced are so overwhelming as to make change very difficult.

We recognized very early in our work

doing. There was no way to keep score.

That of course, is the main problem in the field of psychotherapy. You can develop a completely effective method of treating people's psychological problems and there is no way you can prove it. You can work with 1,000 people and help every one of them change their way of thinking and their way of acting, but there are no statistics like hits, runs, and errors to tabulate your score. The problem is that half the people you help are going to get better jobs, and half of them are going to quit the jobs they have. Half of them may increase the intimacy and closeness and meaning in their marriages, but the other half may leave their wives. Changing a person's psyche is one thing, but measuring results in an observable way is another thing. Because who's to say which behavior reflects growth and change.

Here's where the prison came in. The prison is the ideal place to do a study in psychotherapy behavior change because when you try to rehabilitate prisoners you've got an iron-clad statistic you can work against. It's called the recidivism rate. When you are working with people outside, they may quit their job and join the Peace Corps, or they may quit their job and join the ministry, or they may quit the ministry and take up guitar, and you know about the growth of this person, but who else will believe it? But when you work with prisoners and you think you've helped them change, grow, and become more effective people, there's an easy way to tell. Where are they a year after you've finished with them? Are they back in jail, or are they making it on the outside. Prisoner rehabilitation presents the most effective check for someone who claims he can bring about change in behavior. In the prisons of Massachusetts the recidivism is about 70 percent. Seven out of every ten men who leave prison, return. If you develop a new and sure-fire way of changing man's mind, the prison presents the toughest and cleanest test of your effectiveness. Can you keep him out of jail? That's why I wanted to get into the prison.

Now, the reason why the prison psychologists wanted to get into Harvard is because

the advantages of a post-release program.

Our philosophic and theoretical orientation led us to encourage inmates to plan and execute their own program.

We fondly hoped for a halfway house run by ex-inmates along the lines of the successful Synanon program.

In June 1961 a non-profit organization, Freedom Center, was set up to administer the post-release program. Our hopes for a convict-run halfway house did not materialize.

We had too few men in the Boston area and they were too caught up in the desperate struggle to survive, to spare time to help others.

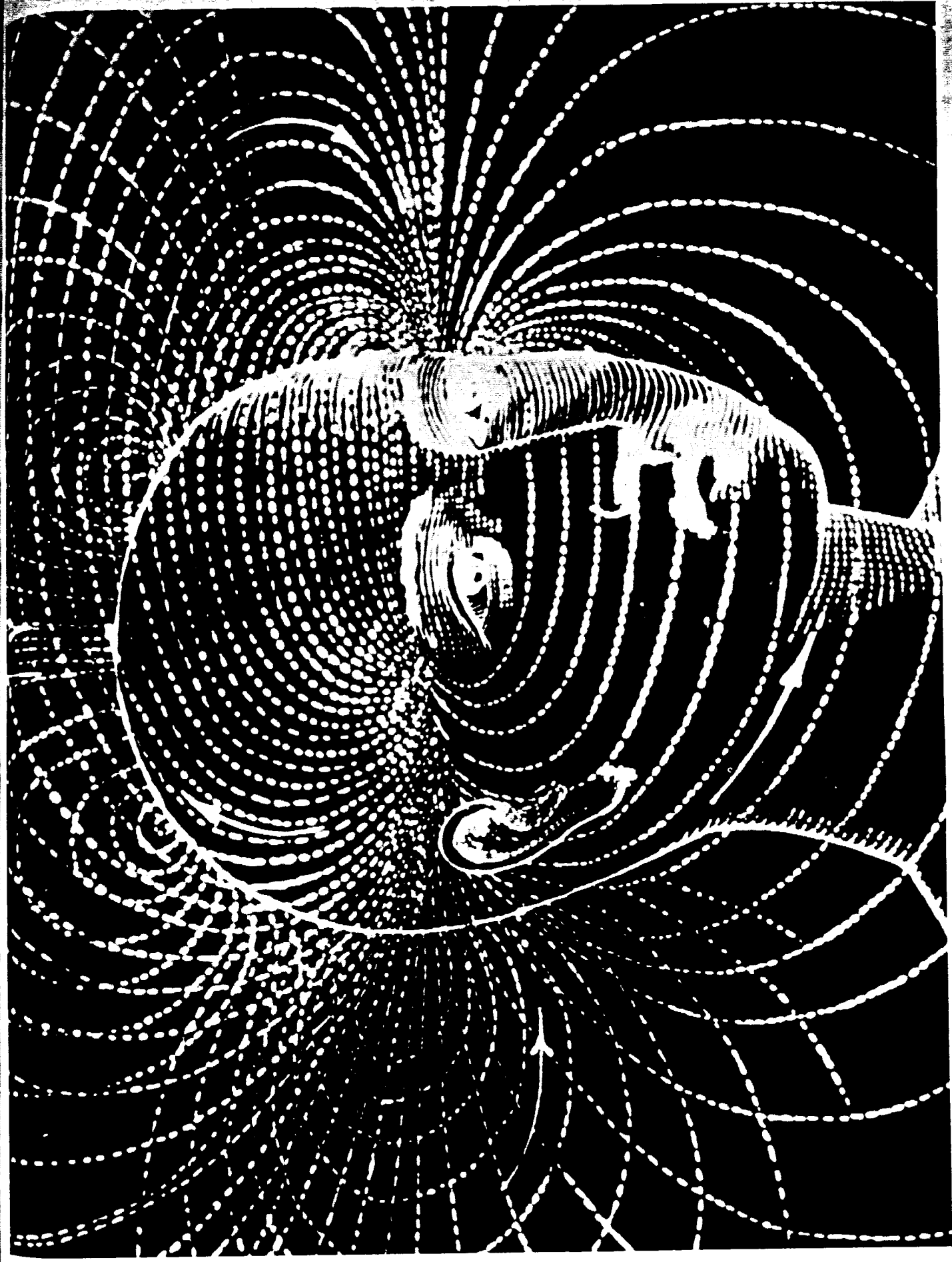
In 1961 as a beginning step towards a halfway house, we began "Project Contact." The purpose of this project was to keep in regular contact with all group members.

By these means we were able to reach ninety-one percent of ex-inmates living in Massachusetts.

A newsletter and personal letters also kept up contact and seemed to be effective in helping the rehabilitation spirit stay alive.

But increased contact only strengthened our convictions that an A.A. type organization of ex-convicts is necessary.

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everyone in any academic or professional activity in the Boston area has one way of measuring his success. Can he get on the Harvard payroll? The word Harvard in the Boston area is a powerful status symbol that operates at every level of society. There are several thousand janitors around the Boston area, but if you are a janitor at Harvard, you're a prince among custodians. The same with a cook, a gardener, and a psychologist.

A week later, I found myself host at a corner table in the Harvard Faculty Club with two officials from the Massachusetts Prison System. What they wanted was simple. They wanted to have Harvard graduate students assigned to the prisons as psychology interns with a possible long-range hope of getting themselves clinical professorships at Harvard. And what I wanted was to get Harvard graduate students into the prisons because that's where I felt that all embryonic psychologists should be-out in the field, dealing with real people and real problems. But there was something else I wanted—and that was the chance to show that we could rehabilitate criminals by using the sacred mushrooms. And so the deal was made. I agreed to get Harvard approval to send graduate students to internships in the prison and they agreed that if I could get the approval of the warden and the prison psychiatrists, I could give psychedelic mushrooms to prisoners.

About a week later I drove out to the prison. I wore my Harvard tweed suit and my button-down shirt. The warden was impressed and pleased. It wasn't often that Harvard professors came out to the prison proposing to do research and training with Harvard graduate students. But the whole thing hinged on the approval of the psychiatrists, because the sacred mushrooms were DRUGS and to work with DRUGS you had to have the medical O.K. So, we walked down the hallway to the metal cage that let us into the prison. We opened up the first steel door and we stood in the anteroom. Then we rang a bell, a slot opened, and a guard looked at us and opened up the second metal door. We walked into the middle of the guard room, across the prison yard to the hospital where we rang the bell and

The initial step of finding the small nucleus of men who are ready to make the dedication needed has not yet taken.

As a possible solution we hope to be able to send two ex-inmates to spend a month living at Synanon House, Santa Monica.

The director of Synanon, Mr. Chuck Dederich has expressed interest in this project.

The next step of selecting two ex-inmates to make the trip is waiting to be taken.

Upon their return, Freedom Center is prepared to offer its resources to support a local self-help residence program.

Results:
Plans and hopes are one thing but the actual score card of accomplishments provides the crucial evidence. What are the available results?

Psilocybin is safe:
Thirty-five inmates and ten Harvard staff members have had group Psilocybin experiences at Concord.

There were 131 inmate ingestions and 37 staff ingestions, a total of 168 experiences. There were no episodes of violence, lasting disturbances or negative after-effects.

Physically and psychologically there is clear cut evidence that in a supportive environment the drug effect is safe and positive.

got peered at through the slot, heard the metal hinges creak, and walked into the prison hospital. We walked down the corridor to the psychiatrist's office and knocked on the door.

After a minute, out walked one of the most entertaining and interesting men in American psychiatry. The first thing that struck me about the prison psychiatrist was that he was the best-dressed man I had ever seen. He was short, graceful, like a ballet dancer. The first negro psychiatrist I had ever met. I spent an hour talking with Dr. Madison Presnell. He was no intellectual; he mispronounced some of the polysyllabic words, but he had a light in his eye and a wise, cool way of looking at you which told you he was a man who had seen a lot, and suffered a lot, and was still looking for the funniest and wisest part of everyone he came in contact with.

In sizing up Dr. Presnell, I could say to myself a word which I had heard used quite often in recent months. He was "hip." It was obvious too, that he had had some experience with psychedelic drugs. Which ones he didn't make clear. He could have had LSD in medical school, or mescaline in psychiatric research, or maybe pot in the Village, but he knew what I was talking about.

A few days later Dr. Presnell came over to Harvard to meet some of my bosses, and the following Sunday, he brought his beautiful and intelligent wife and his two lovely children over to my house for cocktails. It was on a Sunday afternoon. We had a straightforward and honest discussion. He sat down on a chair in my study, thought for a minute and said, The plan you propose to get the psychedelic drug to prisoners is the best idea I've ever heard for dealing with an impossible problem. If you're smart enough and dedicated enough to know how to do it, this could be the best plan for the treatment of prisoners I've heard proposed. There's one chance in a hundred you can pull it off, but if you do, you will have accomplished more for American society and for prisoners rehabilitation than has been done in the last four thousand years since the code of Hammurabi. But, it's risky business. You're bound to run into trouble.

Those interested in using psilocybin for research or therapy purposes can proceed with confidence if their program is open, supportive, collaborative.

Psilocybin produces temporary states of spiritual conversion, interpersonal closeness and psychological insight.

Forty-five percent of the entire inmate group clearly underwent a mystical, transcendent, death-rebirth experience.

This figure should be modified, however. The results for running sessions improved so that 100% of our recent groups were undergoing transcendent experiences.

The life changing therapeutic effects of the psilocybin experience do not last for more than 72 hours unless the subject is in a situation which encourages him to maintain his emotional and spiritual insights.

Therefore, psilocybin must be used in on-going programs of therapy or self-help. When employed in such programs psilocybin is a dramatically useful, educational and rehabilitative instrument.

If the subject shares time and space subsequently with those who have had the experience his chances of maintaining the insights are increased.

As a matter of fact, the more successful you are, the more trouble you're going to stir up. Because one thing I've learned as a prison psychiatrist is that society doesn't want the prisoner rehabilitated and as soon as you start changing prisoners so that they've discovered beauty and wisdom, God, you're going to stir up the biggest mess that Boston has seen since the Boston Tea Party. I'll give you medical coverage and I'll be glad to serve as psychiatric consultant and I'll back you up all the way with the wardens, with the guards, with the mental health department, but sooner or later as soon as they see the thing you do working, they're going to come down on you—the newspaper reporters, the bureaucrats, and the officials. Harvard gives drugs to prisoners! And you're going to have to do the impossible—you're going to have to cure prisoners with your left hand, and that's something that's never been done before and you're going to have to hold off the entire bureaucracy of the state of Massachusetts with your right hand and that's never been done before, not even by Kennedy. So, I'll back you all the way, until you make a mistake, and when you make that mistake, and they all start coming down at you, exactly at that point, I'm going to walk out because I'm not you. I'm not the new Freud and I have no ambitions to play that game. I'm a Negro from the South with a degree from a second-class medical school, with a wife and two kids whom I'm trying to support and educate in an insane society, and I'll help you all the way to win, but I'm not going to lose with you.

And so it was settled. Dr. Presnell would line up volunteers in the prisoner population for the sacred mushroom project and I would go back to Harvard and get graduate students who would volunteer their time and energy and their nervous systems to take drugs with maximum security prisoners at the penitentiary.

A few days later, I was in my office when a knock came on the door, and I was visited by a graduate student named Ralph Metzner. Metzner had a reputation for being one of the smartest students in the department. He was a graduate of Oxford, an experimentalist, a precise, objective, and apparently very academic young man. He said he had heard

The actual score board is difficult to interpret. The aims of this project were: 1) to help keep men on the street and 2) to help them in constructive contact with each other.

Result Percentages:

January 15, 1963

Percentage of men released who are now on street 73

Percentage of men now back for technical parole violation 19

Percentage of men now back for new crimes 8

If ex-convicts who have had a psilocybin experience in a supportive environment meet regularly after release (these statistics suggest once a month) the chances of their remaining on the street will be dramatically improved.

The Harvard staff members—Dr. Ralph Metzner, Gunther Weil, Dr. Ralph Schwitzgebel, Johnathan Clark, David Kolb, Michael Hollingshead, Kathy Harris, Dr. Timothy Leary—who contributed several thousands of hours each to this work cared deeply and suffered keen disappointments as they witnessed the failures.

But the results summarized in this report offer some consolation that the time shared in psilocybin experiences, and the meetings in and out of Concord were educational and somewhat effective.

about the prison project and he wanted to work with me on it. My first reactions were that Metzner was too academic, too dainty-British, too bookish, too ivory tower, to walk into a prison and roll up his sleeves, and take drugs that would put him out of his mind, with rough and tumble prisoners. Metzner said he wanted to learn how. Then I said, Before you can give drugs and take drugs with anyone else, you have to have some experiences yourself. Are you ready to take mushrooms? He was ready. As a matter of fact, that's exactly what he wanted to do, to have a session.

And so it happened that on March 12, 1961, at my home in Newton, Massachusetts, I ran a session for Dr. Presnell and his beautiful wife, for Ralph Metzner and his girl friend, another graduate student, and Gunther Weil and his wife, Karen. This was the 52nd time I had taken psilocybin with other people. The notes on the session say, This training session was designed to introduce several new subjects to the sacred mushroom experience under supportive circumstances.

The session took place in my study. Since this was an exploratory training session, I told the participants that they should relax, have a good time, be entertained, and learn what they could. Dr. Presnell was the dominating factor in this session. His joking and warm attitude created a benign atmosphere. Each new subject had his spouse or a trusted friend present. After a long period of happy relaxed giggling, the joking became more and more philosophic. Members of the group would leave the room periodically to be by themselves or to talk in pairs, but my study operated as the center for the session. There were no discordant notes, no anxiety, depression, or friction. We were finally getting to the point where we knew how to set up a pleasant session. Each member of this six-person group reported a deep ecstatic, educational experience.

A few days after this session, Ralph Metzner, Gunther Weil, and I drove out to the concrete prison and met with the six volunteers who had been selected by Dr. Presnell. Sitting around a table in a dreary hospital room, with grey walls, black asphalt floor, bars in the windows, we told six sceptical

Summary

Thirty-one inmates of MCI Concord participated in a rehabilitation program combining:

----Psilocybin administered in a supportive setting, and----volunteer contact of inmates after release.

The evidence after two years of operation suggests that the drug is safe, that the experience temporarily provides personal and spiritual insight, and has some effect in keeping inmates out of prison.

A listing of the major mistakes and improvements in method will be found in two publications, one in press and one in preparation.

Convicts gains cited by study.

Insight drugs called boon.

IFIF is the Internal Federation for Internal Freedom, a non-profit organization involving the use of consciousness-expanding drugs.

The supply of the drug has, temporarily at least, been cut off because the medical supervision required by Federal regulation in the administration of drugs for research has been withdrawn.

and suspicious men about an experience that could change their lives.

The first psychedelic session in the prison was well-planned. The first thing we did was to tell the prisoners as much as we could about the psychedelic experience. We brought in books for them to read, reports by other subjects, articles that described both the terrors, as well as the ecstasies of the experience. We spent most of the time describing our own experiences and answering groping questions. We made it very clear to the prisoners that this was nothing we were doing to them. There was no doctor-patient game going here. We would take the drugs with them. We were doing nothing to them that we wouldn't willingly, happily have done to us.

We also made a research contract with the prisoners. We said something like this, "We want to find out how and how much you change during this experience. For this reason, we want you to take a battery of psychological tests before you eat the mushrooms. Then, after three or four sessions with the sacred mushrooms, we'll give you the tests again. The aim here is to find out how you change, like you weigh yourself on a scale before and after you go on a diet. But, after you've taken the tests before and after the sessions, we'll give you the results. We'll go over the tests with you and explain how you were before and how you changed. Nothing in this project is going to be a secret. We've told you everything we know about the drugs before you take them and we'll tell you everything we know about you after you finish your sessions." That sounded like a good deal to them and the following week, each prisoner was administered a long and complicated battery of psychological tests.

And so it happened that on March 27, 1961, in the large ward room in the prison infirmary in Concord, Massachusetts, five prisoners and three Harvard psychologists met for a trip. In the morning I would turn-on with three convicts and the two other prisoners and the two graduate students would act as observers. Then in the afternoon, Gunther Weil and Ralph Metzner from Harvard and the two observing prison-

Backing withers.

But troubles or no, IFIF and the zealous psychologists dedicated to the proposition that widespread use of drugs such as psilocybin will pretty much cure the intellectual ills of mankind are news.

And the group has been asked to vacate the medical building in Charles River Park for lack of medical affiliation.

In addition, the supportive backing at the academic level, principally at Harvard, has been withering.

The latest concerns a study made on the religious impact the drug ingestion made on some 33 convicts at the Concord Reformatory in which eight Harvard psychologists worked on the pilot program.

Dr. Timothy Leary, one of the co-founders of IFIF, wrote the report on the pilot program which began in mid-March of 1961 and continued for almost two years.

Beginning with six convicts a senior investigator and two graduate students, the study came to include 33 convicts and eight psychologists. All participated in the drug ingestion.

In Dr. Leary's opinion, the experiment was an unqualified success. Ingestion

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ers were to take the drug and the rest of us were to act as guides.

We brought a record player, tape recorder, and some books of classical art with us. Otherwise the room was bleak in decor with four couches, a large table, and a few chairs. At 9:35 in the morning the bowl of pills was placed in the center of the table. I was the first one to turn-on in the prison project. I reached over, took fourteen milligrams of psilocybin. Then I handed the bowl to the prisoner next to me and he took twenty milligrams and passed it on to the guy next to him who took twenty and the next man. Then we pushed the pills into the middle of the table and sat back to see what would happen.

I'll never forget that morning. After about half an hour, I could feel the effect coming up, the loosening of symbolic reality, the feeling of humming pressure and space voyage inside my head, the sharp, brilliant, brutal intensification of all the senses. Every cell and every sense organ was humming with charged electricity. I felt terrible. What a place to be on a gray morning! In a dingy room, in a grim penitentiary, out of my mind. I looked over at the man next to me, a Polish embezzler from Worcester, Massachusetts. I could see him so clearly. I could see every pore in his face, every blemish, the hairs in his nose, the incredible green-yellow enamel of the decay in his teeth, the wet glistening of his frightened eyes. I could see every hair in his head, as though each was as big as an oak tree. What a confrontation! What am I doing here, out of my mind, with this strange mosaic-celled animal, prisoner, criminal?

I said to him, with a weak grin, How are you doing, John? He said, I feel fine. Then he paused for a minute, and asked, How are you doing, Doc? I was about to say in a reassuring psychological tone that I felt fine, but I couldn't, so I said, I feel lousy. John drew back his purple pink lips, showed his green-yellow teeth in a sickly grin and said, What's the matter, Doc? Why you feel lousy? I looked with my two microscopic retina lenses into his eyes. I could see every line, yellow spider webs, red network of veins gleaming out at me. I said, John, I'm

of the drugs produced "sudden insight that one has been living in a narrow space-time-self context."

"It's all a game, Doc, cops and robbers—we're such tough guys," he quotes one convict as saying. "We take it all so seriously as though that's all there is to life."

He reports also of frequent mystical insight among the convicts, particularly the death-rebirth experience.

"I felt helpless and wanted to murder you guys who did it to me; then I realized it was my own mind doing it; it's always been my own mind imagining troubles and enemies," he quotes one convict.

Return rate drops.

Over half the hardbitten convicts displayed a sudden swing towards increased religious understanding and need, according to the study report.

More important, perhaps, in the long run is the fact that the recidivism rate among the convicts who have been discharged dropped sharply.

"Seventy-five percent are holding their own against stiff winds and treacherous currents," Dr. Leary says.

The expected return rate of ex-con-



"Three Cows" by Diane Bolton

afraid of you. His eyes got bigger, then he began to laugh. I could look inside his mouth, swollen red tissues, gums, tongue, throat. I was prepared to be swallowed. Then I heard him say, Well that's funny Doc, 'cause I'm afraid of you. We were both smiling at this point, leaning forward. Doc, he said, why are you afraid of me? I said, I'm afraid of you, John, because you're a criminal. He nodded. I said, John, why are you afraid of me? He said, I'm afraid of you Doc because you're a mad scientist. Then our retinas locked and I slid down into the tunnel of his eyes, and I could feel him walking around in my skull and we both began to laugh. And there it was, that dark moment of fear and distrust, which could have changed in a second to become hatred, terror. We'd made the love connection. The flicker in the dark. Suddenly, the sun came out in the room and I felt great and I knew he did too.

We had passed that moment of crisis, but as the minutes slowly ticked on, the grimness of our situation kept coming back in microscopic clarity. There were the four of us turned-on, every sense vibrating, pulsating with messages, two billion years of cellular wisdom, but what could we do trapped within the four walls of a gray hospital room, barred inside a maximum security prison? Then one of the great lessons in my psychedelic training took place. One of the four of us was a Negro from Texas, jazz saxophone player, heroin addict. He looked around with two huge balls of ocular white, shook his head, staggered over to the record player, put on a record. It was a Sonny Rollins record which he'd especially asked us to bring. Then he lay down on the cot and closed his eyes. The rest of us sat by the table while metal air from the yellow saxophone, spinning across copper electric wires bounced off the walls of the room. There was a long silence. Then we heard Willy moaning softly, and moving restlessly on the couch. I turned and looked at him, and said, Willy, are you all right? There was apprehension in my voice. Everyone in the room swung their heads anxiously to look and listen for the answer. Willy lifted his head, gave a big grin, and said, Man, am I all right? I'm in heaven and I can't believe it! Here I am in heaven man, and I'm stoned out of my mind, and I'm swinging like I've

victs to the Concord Reformatory would be between 50 and 70 percent.

But even in his claimed success among the convicts, Dr. Leary runs up against a Doubting Thomas in the Reformatory Superintendent Edward Grennan.

Control questioned.

Grennan feels that study was done without a control and was therefore unscientific.

"These men received an extremely high degree of personal attention," he said. "The psychologists even set up a kind of criminal AA for the paroled prisoners in Cambridge. They made themselves available to them around the clock."

"I feel that the same rate of recidivism might have been achieved if the same concentration and attention were given to any parolee by highly-placed members in any community."

Commenting on the religious aspects of the survey, Prof. Walter Houston Clark of the Andover-Newton Theological Seminary had this to say:

"The student of religious behavior who studies phenomena such as those described in the study cannot but be struck by the similarities to intense religious groups of an evangelistic nature."

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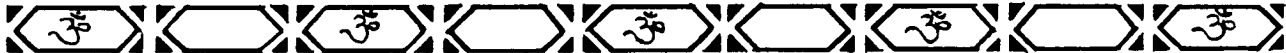
their car and drove back to Cambridge and I got in my car and drove to Newton.

As I rode along the highway, the tension and the drama of the day suddenly snapped off and I could look back and see what we had done. Nothing, you see, is secret in a prison, and the eight of us who had assembled to take drugs together in a prison were under the gaze of every convict in the prison and every guard, and within hours the word would have fanned through the invisible network to every other prison in the state. Grim Walpole penitentiary. Grey, sullen-walled Norfolk.

Did you hear? Some Harvard professors gave a new drug to some guys at Concord. They had a ball. It was great. It's a grand thing. It's something new. Hope. Maybe. Hope. Perhaps. Something new. We sure need something new. Hope.

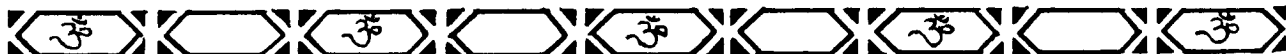
experiences of a few convicts. But enough has been done to suggest creative possibilities in the drugs, the most constructive seemingly to lie in the field of religion and moral regeneration. The use of the substance, however, is very much in the experimental stage, and must have medical and scientific psychological supervision. But its results cannot be ignored by scholars, theologians or leaders of organization.

Such, then, is the latest triumph of the IFIF oriented group. Or are the nay-sayers correct in holding to their deep doubts?



In the evaluation of the dominant moods of any historical period it is important to hold fast to the fact that there are always islands of self-sufficient order — on farms and in castles, in homes, studies and cloisters — where sensible people manage to live relatively lusty and decent lives: as moral as they must be, as free as they may be and as masterly as they can be. If we only knew it, this elusive arrangement is happiness. But men, especially in periods of change, are swayed by alternating world moods which seem to be artificially created by the monopolists and manipulators of an era's opinions, and yet could not exist without the highly exploitable mood cycles inherent in man's psychological structure. The two most basic alternating moods are those of carnival and atonement: the first gives license and leeway to sensual enjoyment, to relief and release at all cost; the second surrenders to the negative conscience which constricts, depresses, and enjoins man for what he has left unsolved, uncared for, unatoned. Especially in a seemingly rational and informed period like our own, it is obvious how blithely such moods overshadow universally available sets of information, finding support for luxurious thoughtlessness at one time, for panicky self-criticism at another. Thus we may say that beside and beyond a period's verifiable facts and official doctrines, the world image "breathes". It tends to expand and contract in its perspectives, and to gain or lose solidity and coherence.

Erik Erikson



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' never been before and it's all happening in prison, and you ask me man, am I all right. What a laugh! And then he laughed, and we all laughed, and suddenly we were all high and happy and chuckling at what we had done, bringing music, and love, and beauty, and serenity, and fun, and the seed of life into that grim and dreary prison.

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' The session went on. There were high points and low points, ecstasies and terrors. My friend John, the Polish man, got sick and vomited. We all got pretty thoughtful. Why are there prisons? Why do some men put the warm cellular envelopes of their fellowmen in metal cages? What were we doing here? Then after a few hours, Ralph and Gunther and the two other convicts turned on. Gunther was silly and acting like a hipster and Ralph fell down on the bed and experienced visions of Blakean terror. Two prisoners came and held his hand and guided him through. Dr. Presnell would check in every now and then, walk around the room like a dainty, graceful cat, not saying much, but taking it all in. And the guards came in bringing metal trays of food which we all looked at with disbelief, the way you'd look at a plate of worms or a pot of sawdust served up to you on a plate, and someone said, Man, do they call that food? Since we Harvard people weren't allowed to eat prison food at the expense of the state. Dr. Presnell went out and got milkshakes and sandwiches which we all shared and never tasted food so good.

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Then at 5:00, there was a bang on the door, and we opened it and the guards came in and said, Time is up men. Back to the prison ward. Ralph, Gunther, and I went with the five prisoners back to lock-up part of the hospital and sat there on beds, and smoked, and laughed, and compared notes on what we'd seen, and where we'd been. Then it was time for us to go. We shook hands, said we'd be back tomorrow, and Ralph and Gunther and I walked out of the prison, across the dark yard, rang the bell, and waited until the iron doors opened to get into the guard room, and then across the guard room, through the two metal doors, and down the metal stairs, past the clanking, steaming, old-fashioned radiators, and then we were outside. Ralph and Gunther got into

"As with them, the experience tends to be dramatic; individuals are changed as to their life goals and the experience tends to be individualized, for while some are greatly helped, there are others on whom the experience seems to have very little permanent effect."

Similarities noted.

"However, it may not be without significance that 62 percent of one group, as indicated in the study, reported their lives were changed for the better; for studies have indicated that roughly the same percentage find help in MRA and AA."

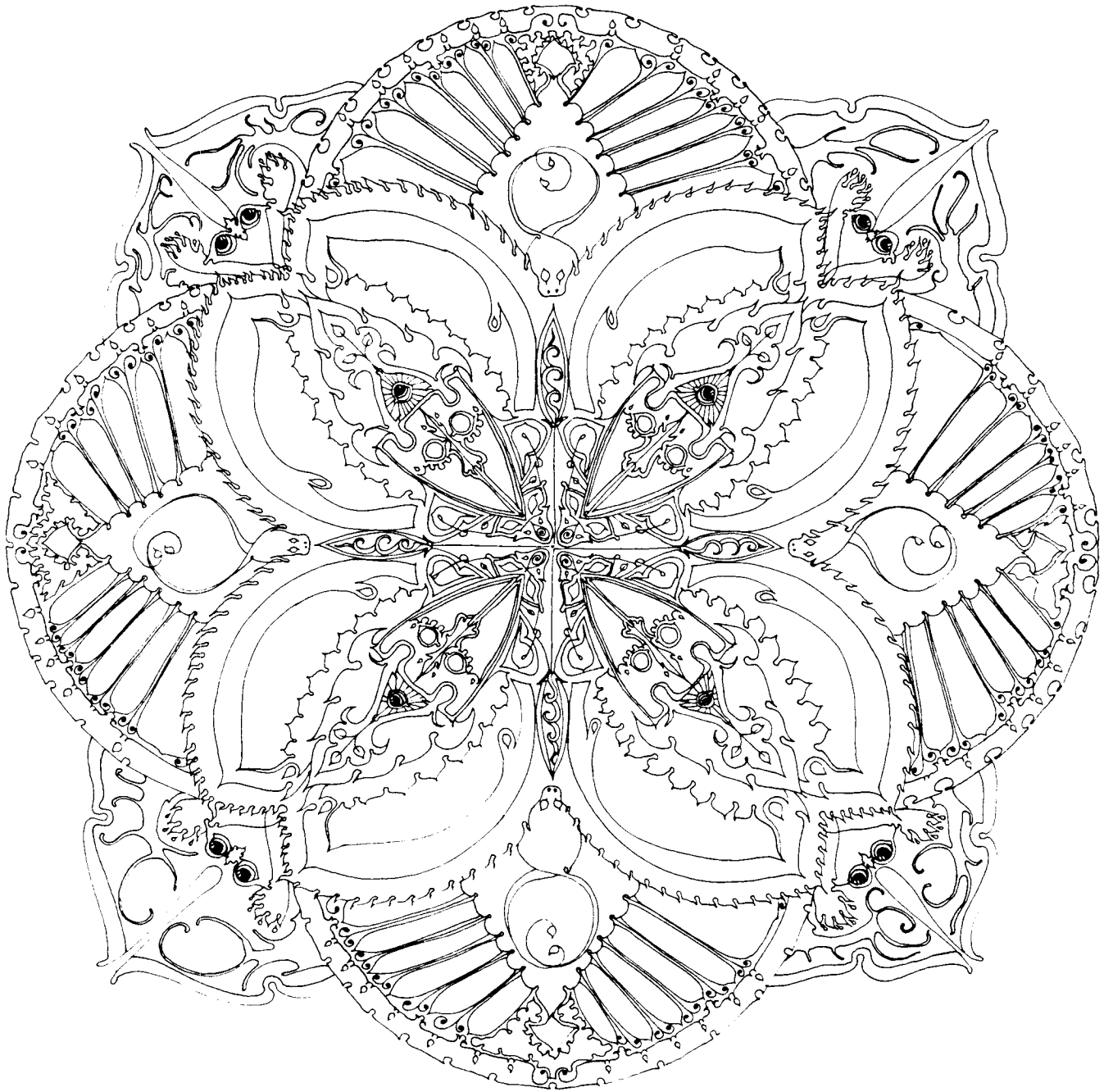
On the basis of the study report, Prof. Clark finds the psilocybin experience to be mystical in nature. As such, and administered with proper setting and preparation, he feels it may release latent religious sensitivities to make possible an experience closely akin to a truly religious experience with a profound change in attitudes and values resulting.

He sees the drugs as useful also in the reform and rehabilitation of convicts (and all others) to more wholesome life aims, a factor which religion could not ignore. But he ends on a note of caution.

"We have been speculating quite freely, basing our speculations largely on the

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Mandala Drawing by Susan Frahm



LINES WRITTEN ON READING FATHER TEILHARD DE CHARDIN

Paul S. Frey

And the light became flesh

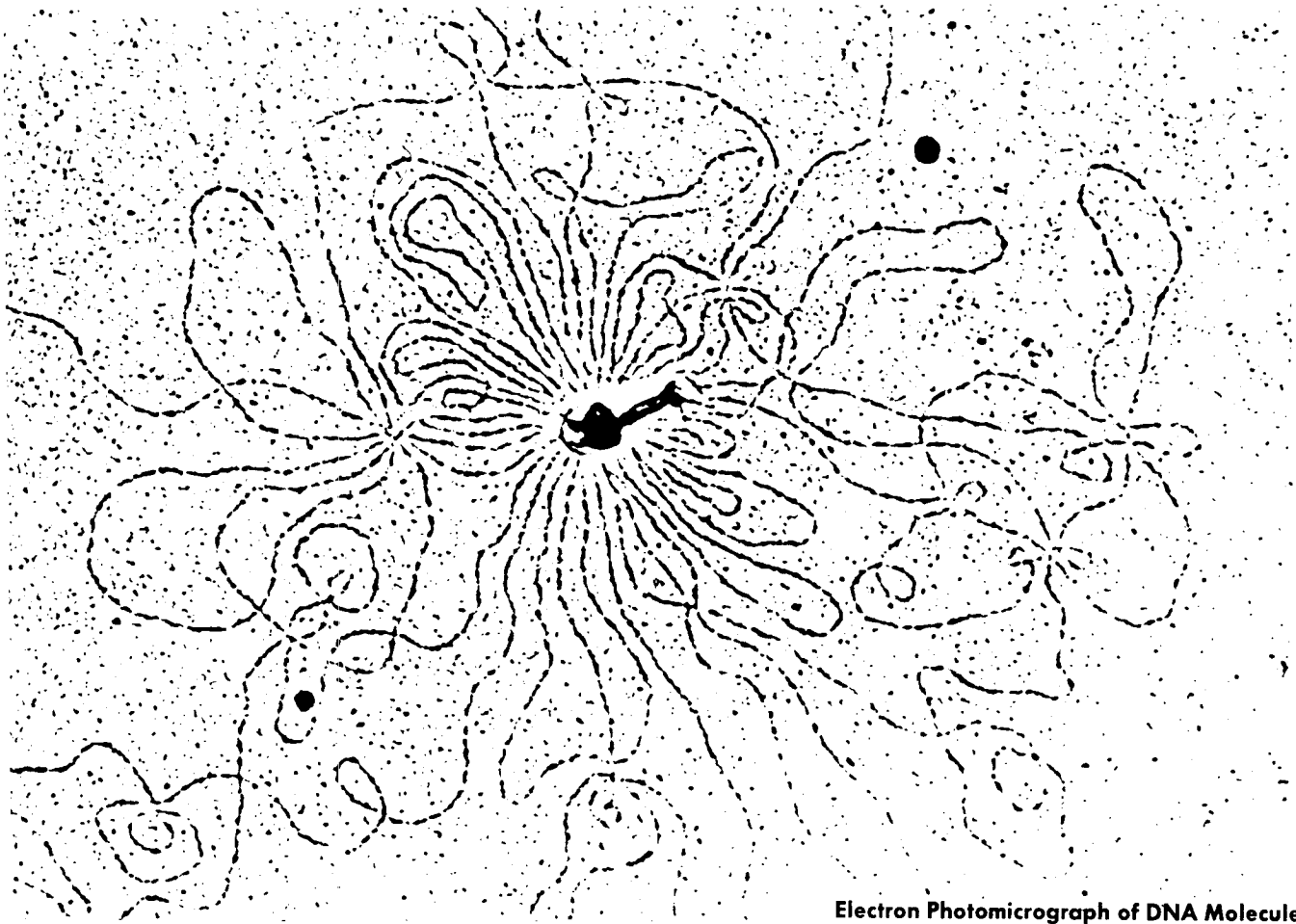
See them! The shining, eternal interfaces
Sparkling and crackling,
Pleistocene lightning bolts
In the gray, cold glacier clouds.
And down below a silent, fur-clad early mind substrate—
Tongues of fire in his head
Of the far future,—
Stares into the flames and the flashes,
The hot red curlings and spirals leap thru his eyes into his head
Just one spark
And the fire-echoes sweep thru icy charged brain furnaces
Ignition incarnate. Incarnation!
A leap of light into a flesh net,—
Caught, taut, orderly chaos of frozen gases,—
Crystal flames locked and shining in the lower Kelvin
Superconductivity at room temperature,*
The ionized frozen—
New, snow-petaled hexagon flowers locked on the glass
The new interface where reflection supervenes,
Here begin the limitless inner mirrors, polished and cold,—
Here the children of the liquid helium frictionless crawl up the sides
of their natal chamber
Here the mass-quantum invasion* by the mind monads begins its ascent,
Here in a head in the glare of a
Pleistocene lightning bolt campfire.

* slow, orderly (hence Erotic) mass parlor antientropicity

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Electron Photomicrograph of DNA Molecule

LSD, CHROMOSOMES AND SENSATIONALISM

Joel Fort & Ralph Metzner

The growing literature on this explosive subject is critically examined with a view to sifting fact from sensationalism.

Much attention has been focused by the mass media on the alleged damaging effects of LSD on chromosomes. The initial "scientific" report by Cohen et al. (4), which appeared in *Science* in March, 1967, was followed within 24 hours of its publication by press statements which translated the inconclusive and ambiguous findings into flat assertions that abnormal offspring would be produced by LSD use. Evoking memories of the 1963 Thalidomide disaster, in which

a widely-used "tranquilizer" was found to produce malformed babies, such statements injected a strong current of fear into the chaos of contradictory opinions and passions already surrounding the topic of LSD. In such a charged atmosphere few people are willing or able to examine impartially the actual scientific evidence.

Typical of the often shameless disregard for objectivity manifested by the media is

Joel Fort M.D., is co-author of *Utopias and Problems and Prospects of LSD*; former Consultant on Drug Abuse to the World Health Organization and United Nations; former Lecturer in the Departments of Criminology and Sociology, University of California, Berkeley and Davis; and founder and former Director of the Center for Special Problems, San Francisco Health Department. Ralph Metzner, Ph.D., is co-author of *The Psychedelic Experience* and has been engaged in LSD research for the past six years; he is former holder of an NIMH Fellowship in psychopharmacology at the Harvard Medical School.

The Saturday Evening Post's cover story on "The Hidden Evils of LSD" (7). Replete with uncaptioned, unidentified photographs of persons apparently in states of fear or confusion, the article features also a photographically distorted picture of a baby (again uncaptioned), with the obvious implication: if you take LSD your baby will look like this. The (true) statement at the beginning of the article, that "the scientific evidence linking LSD with the baby's deformities, the broken chromosomes, the leukemia-like chromosomal abnormality and the convulsions is still circumstantial" is forgotten as the rest of the article goes on as if that statement had not been made. Page-headings such as "If you take LSD, your children may be born malformed or retarded" are known to logicians as vacuous. Since the second half of the proposition is true, anything can be said in the first half; e.g. "if you drink Coca Cola before breakfast, your children may be...etc." Of course logic has never been of prime concern to the mass media or politicians. The studies in the scientific literature finding no chromosomal abnormalities from LSD fail to receive any attention from the popular press.

REVIEW OF FINDINGS

Trenchant methodological criticisms of the Cohen study were made by Prince (12) who pointed out that only three examinations were done—white blood cells (from two "normals") exposed in test tubes to high concentrations of LSD and white blood cells from one schizophrenic who had received LSD therapy; that no germ cells or embryos were involved; that the dose-response curve was highly irregular, suggesting a high degree of random experimental variability; that a single control figure was used rather than simultaneous normal controls; and that the general culture technique and cytogenetic methodology left much to be desired. The most damaging criticism of their study is the authors' own published statement that the purpose of their study was to prove the harmfulness of LSD, a goal at odds with the commonly accepted canons of scientific impartiality.

Irwin and Egozcue (9) found a significant difference in chromosome breaks in the white

blood cells of six out of eight LSD users as compared to control subjects who had not used LSD. The breakage rate seemed to be correlated with the doses taken. Two subjects had chromosomes similar to those seen in leukemia. One control also had breakage attributed to X-ray therapy. In a magazine interview one of the authors enumerated various possible consequences of chromosomal abnormalities, which had in fact no relation to the actual findings presented in their scientific paper.

In contrast to these results are two studies with human subjects finding no chromosomal abnormalities. One, by Loughman et al., (10) examined the lymphocytes of eight persons with recent exposure to large doses of LSD (up to 4000 micrograms), and found no significant damage. The authors suggest that other tissues of the body must also be examined. These findings are confirmed by those of Petrakis (11), who found no difference in chromosome breakage between five normal controls and five LSD users. Bender and Sankar (3) have recently reported that the children of their study, some of whom received weekly doses of LSD for over a year, showed no chromosomal abnormalities. This is the only one of these studies in which the LSD ingested is of known purity. The possibility that earlier results are attributable to impure black market substances should be investigated.

A second report by Cohen and his collaborators (5), published in the New England Journal of Medicine along with a dark editorial on the "radiomimetic" properties of LSD, deserves close scrutiny for its rather cavalier handling of data. A group of 22 LSD users is reported to have a mean of 13.2 chromosomal breakage, compared to a mean of 3.8% in a group of 12 non-users. However, we note that of the 22 "LSD-users" not one had used only LSD; all except 3 had used amphetamines, most had used heroin and many phenothiazines (tranquilizers used to treat mental illness and to counteract LSD). We also find that the original control group contained 14 persons, two of them being eliminated from the data because they had viral infections shortly after the blood sample was taken. These two individuals had a very high rate of chromosomal breakage.

and if they are included in the calculations, the mean for the control group jumps to 18.4%, which is higher than the "LSD group." Cohen et al. also give data on a group of 6 persons who had used drugs other than LSD (amphetamines, opiates, phenothiazines), whose man breakage rate (not shown by the authors) was 12.6%. One must conclude that by their own data, LSD users do not have a higher rate of chromosomal breaks than anyone who uses common tranquillizers or stimulants, or who has had viral infections.

Cohen et al. (5) also report broken chromosomes in 2 children of mothers who had taken LSD in the first third of pregnancy, although no breaks if the LSD was taken later in pregnancy. There were no physical abnormalities in the children themselves. Brecher (3) states that several unreported studies of babies born to LSD-using mothers find essentially the same results.

Several animal studies of the effects of LSD injected during pregnancy have been reported. Alexander et al. (1) have reported finding arrested or stunted growth in four out of five litters of rats given LSD. Auerbach and Rugowski (2), in an undergraduate study, found that 57% of mice embryos had brain malformations when the females received LSD injections seven days after mating (said to be equivalent to days 16-22 in human pregnancies); control litters had 10% abnormalities. LSD injections in later stages of pregnancy had no significant effect on embryos. Geber (8) finds mescaline and LSD producing fetal malformations in hamsters injected on the 8th day of pregnancy. This period is stated to be "effective... for the evaluation of the ability of a variety of compounds to cause teratogenesis." Warkany and Takacs (14) on the other hand report failing to find foetal damage in rats following LSD.

These animal studies essentially confirm common medical knowledge that during the period of gestation almost any drug or treatment can interfere with normal embryonic growth.

The most serious finding here is the one by Zellweger (13) who describes a baby with a deformed leg born to a woman who had

taken LSD on the 25th and the 45th days after her last menstrual period, plus two more times later. Although no definitive causal statement can be made on the basis of one case, the suggestion of a link is strong because the 7th week (days 42-47) is the critical period for leg deformities, according to studies carried out with Thalidomide users.

Contrary to this finding is the personal knowledge of one of the authors of at least two women who took LSD several times during pregnancy, including the first three months, and produced perfectly healthy children.

GENERAL COMMENTS

Quite apart from the factual question of whether chromosomal breakages are produced by LSD in vitro or in vivo, which is by no means decided, there is the further question of the significance of such changes. It is not at all clear what, if any, is the relationship between chromosomal changes in white blood cells and genetic changes in mother or offspring. Germ cells are very different from blood cells in characteristics and life-cycle and no studies have shown chromosomal changes in germ cells, which are the transmitters of the genetic blueprint. The studies in animals or men showing abnormalities of embryonic growth after drug injections in the early months of pregnancy have essentially no relevance to the chromosome question (6), since these are most likely direct effects of the drug on the fetus.

In interpreting journalistic accounts about possible relationships between the use of LSD by pregnant females and birth defects, bear in mind the National Foundation estimates that 250,000 American children are born each year with such defects, few of which can be attributed to any specific external causes.

Many drugs, conditions, forms of radiation etc. are known to produce chromosomal breaks or even genetic changes. This includes measles or measles vaccine, other viruses, amphetamines, chlorpromazine, caffeine, X-ray therapy—all of which are

much more prevalent than LSD. Nuclear radiation has certainly demonstrated its capacity to produce harmful effects on genes and newborn infants. Yet few scientists or newspapers seem concerned, or support jail sentences for those who use or disseminate these clear dangers against the wishes of the recipients. The situation is very different for LSD or other drug-medications, where after all, no one has to be exposed who does not wish to be.

The concept of "damage" being used in public discourse has a social rather than a scientific definition, as one can readily see by noting that there exists proof, not conjecture, of the lethal effects of drugs such as alcohol or tobacco, yet these facts are not viewed with nearly as much alarm as the inconclusive evidence for possible chromosomal damage from LSD. There is also ample evidence that indiscriminate use of unknown doses of impure LSD can lead to psychological and social damage so that one does not have to resort to false or hysterical arguments to demonstrate this.

It should be pointed out that chemicals very closely related to LSD, namely lysergic acid amide as contained in certain types of morning-glory seeds, as well as other indole psychedelics such as the psilocybe mushrooms, have been in use in certain parts of Mexico from before the time of the Spanish conquest, that is for at least 18-20 generations. If significant deleterious genetic changes were occurring the users of these plants might well have died out, or we would have seen congenital abnormalities in the descendants of these people. Observers of the psychedelic cults in Mexico have never noticed such abnormalities. LSD-25 has itself been used since 1943 by probably more than a million people without foetal abnormalities being noted!

Finally, we must consider the question of whether all genetic changes, assuming they do occur, must necessarily be harmful or whether they might be irrelevant, or even beneficial. It is commonly assumed that since the present human species has been selected out over many millenia of evolution, any mutation must necessarily be "bad" in the sense of mal-adaptive. This assumption

is, however, based on the idea that the physical environment in which we presently find ourselves does not change. On the other hand, considering the fact that our world is subject to both slow-gradual and sudden changes, resulting from natural causes as well as man's increasing tampering with the planet's ecology, the possibility of beneficial (or irrelevant) mutations must not be overlooked.

CONCLUSIONS AND RECOMMENDATIONS

1. At the present time, the question of whether human chromosomal breaks (or genetic changes) occur as a result of LSD ingestion is undecided scientifically.

2. Malformed embryos have been shown to result in lower animals (and possibly in one human case) where the females received LSD by injection early in pregnancy. This may be due to direct physiological effect of the drug, rather than chromosomal or genetic changes.

3. Women in the first trimester of pregnancy would be wise to avoid the use of all drugs, particularly those which affect the brain and mind including alcohol, caffeine, and nicotine.

4. The mass media, politician-bureaucrats, and drug police tend to sensationalize certain drugs in a self-serving manner with a callous disregard for truth or logic. Readers should look with a critical eye at statements or articles appearing in the popular press (and the training, experience, and biases of those being quoted) on the subject of chromosomal or other effects of LSD (and other drugs).

5. If scientific evidence should later indicate that LSD does produce genetic damage, research should be directed towards finding chemicals which are capable of producing the same psychological results without affecting genes; and LSD be made available only to the elderly or others who have definitely decided not to, or are unable to, produce further offspring.

6. Drug usage can only be decreased through educational and preventive pro-

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grams. Continued sensationalism and criminalization of users will only increase usage and problems.

Additional Note: Very recently, Fitzgerald and Dobson, in a letter published in *The Lancet* (16), raised several of the same points made in this article. They point out that "many agents...cause both chromosome breakage and give mutation, but it is by no means certain that all chromosome-breaking agents are mutagenic." They also indicate that the level of irradiation commonly used in diagnosis "cause both increased chromosome breakage and increased gene mutation."

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POSTSCRIPT

Since this article went to press, reports of apparently contradictory results continue to multiply in the scientific literature. Skakkebaek et al. (a) reported breakage in the

meiotic (germ cell) chromosomes of LSD-treated mice; the dosage used was 1 mg per kg. of body weight. In the average 70 kg man this would be equivalent to a dose of 70,000 mcg — somewhat higher than the standard dose of 300-500 mcg. Browning (b) reports mutagenic effects of LSD in *Drosophila* males; but again the dose here was several thousand times the highest human dose, so high in fact that only 15 of the 75 animals so treated survived. Even so, another study of *Drosophila* germ cell chromosomes, by Grace et al. (c), also using enormously high doses, failed to find mutations or chromosome breaks. Court Brown (d) has questioned the report by Zellweger (15), cited in the article, of chromosomal abnormalities in the mother of a deformed child: "the findings in the mother may not differ significantly from what has been found in women, aged 15-24 years, in a randomly selected sample from the ordinary population." Jarvik and Kato (e) have similarly questioned the validity of inferring that LSD is teratogenic from its effects on leucocytes: many substances, including aspirin and caffeine, produce chromosome breaks when added to cultures of human leucocytes. "Let us not forget however, that leucocytes are expendable, as any infection will demonstrate. The human organism is capable of eliminating damaged cells, be they somatic or gametic." Sparkes et al. (f), of UCLA Medical School, found no significant chromosomal damage in a group of 8 LSD users.

Clearly a great deal more research needs to be done before any definite conclusions are warranted, and the case for genetic damage of LSD must be regarded as so far unproven.

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HONGHI, MEESTER?

Nat Finkelstein

A memorable visit to Huautla de Jimenez, encounter with the magic of the Mexican mushroom and the curandera Maria Sabina.

Huautla de la Jimenez is many things to many people. To the casual observer flying south from Mexico City it is a haphazard collection of shacks spilling over a mountain 9,000 feet high in the Sierra Mazateca range of Mexico. The pilot doesn't bother to announce it. It is pronounced "what la." To the tourist, if he ever heard of it, it is a place to be avoided at all costs—inaccessible, squalid, possessing no hotel, no spa, no native industry, no shopping save innumerable 5 and 10 peso straw hats and has nothing to offer other than discomfort, dirt, dysentery and a non-Spanish speaking population of money grubbing Gringo haters. To the Mazatecan, it is a combination battleground and goldmine. It is, to him, a bastion against the encroachments of a civilization and religion he neither wants nor understands. He is besieged by an ever increasing invasion of "Meesters" who arrive on the once-a-day bus dressed in everything from pith helmets to bandanas, business suits to chinos, Madison Avenue to Delancey Street. They are all seeking one thing—Honghi. They are all carrying one thing—money. It is a goldmine for digging that money out of those pockets by charging exorbitant prices for bad food and dirty, uncomfortable lodgings on mud floors, for selling warm coca-cola and rotgut mescal and for acting as guide, too, and supplier of Huautla's only home-grown product, an improbable fungus called Teonanacatl. And so, to a host of psychologists, mystics, philosophers, scientists, visionaries, and beatniks, it is the new mecca—for Teonanacatl is the world-famous magic mushroom, the hallucinogenic plant that, for millenia, has served the Central American Indian as the mediator between man and god, the keys to extra-sensory perception, the repository of knowledge hidden from men in their normal minds.

It was at Huautla in 1936 that Roberto Weitlander became the first white man in



modern times to obtain or even see Teonanacatl; two years later, his daughter became the first white person to witness a mushroom rite there. Still, the mushroom remained a secret guarded by the Mazatecans and a handful of esoteric ethnologists and anthropologists. Since pre-Columbian times, the Indians kept the mushroom a secret hidden away from the repressions of church and state. Led by their "curanderos" (doctor-priests), who gathered the mushroom, officiated the re-

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Maria Sabina and one of her grandchildren, photo by Nat Finkelstein

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ligious ceremony, healed the sick, and presided over this holy communion of man, god, and plant, the Indians kept their rites away from the desecrating eyes of the outside world.

Then, in 1953, R. Gordon Wasson and his wife Valentina heard of the existence of a 16th century mushroom cult near Oaxaca, Mexico and came to investigate. On June 29, 1955, Wasson and Allan Richardson, under the supervision of Maria Sabina, the

head curandera of Huautla, became the first Americans to partake of the magic mushrooms. Coincidentally, in 1953, Aldous Huxley, in not so primitive Berkeley, California, drank a potion containing mescaline, a powerful consciousness expanding drug. In 1954, Huxley published his essay, "The Doors of Perception," recounting that experience. In 1957, the news of Wasson's work burst on the world with the publication of their book, "Mushrooms, Russia

and History” and an article in LIFE magazine.

The stampede was on, and the mushroom was the goal. Alan Watts called it “instant Zen,” Huxley, “the gateway to the antipodes of the mind,” the beatniks regarded it as the newest kick, and the “Harvard Group” psychologists hailed it as one of the great, mystico-psychological discoveries of the western world. It became the shortcut to the supreme transcendental experience, a cleansing of the soul and a healing of the mind.

I had started out alone but in Oaxaca I met a young American couple, Sam and Jill Rashow. Sam was an electrical engineer, studious and analytical; Jill was a graduate in Latin American economics and, like too many American women, was bossy and prone to histrionics. They had never turned on to anything before but had met another American writer who had taken the mushroom and they had become intrigued by the idea. When I explained to them the purpose of my trip, they asked whether I would take them along and volunteered the use of their Volkswagon. In Oaxaca, we met 2 girls from California who had been to Huautla and told us how to get there: Oaxaca to Teohaucan, bus to Teotlatlan, 4:00 AM truck to Huautla. We also met Mark, a young Englishman who had read of the mushrooms and started his own hunt. Finally, just before leaving Oaxaca, we met Alan Watts who warned us of trouble in Huautla caused by a beat who tried to eat a live turkey on the main street, after an orgy of unsupervised mushroom eating. We took the Volks from Oaxaca to Teohaucan, a rather fashionable resort-spa populated with all sorts of European tourist types who come to drink the mineral water.

We checked into the bus station. The ticket vendor looked at us, smiled, “Honghi” and wrote out tickets to Teotlatlan. When we reached Teotlatlan, we made our way to the Huautla bus station and were informed that four other Americans were in town. The waiting room was packed with Mexicans sleeping on the floor, so the ticket vendor trotted out a cot for Sam and Jill. I contented myself with some burlap bags stretched out on the street. All night long I was

awakened by Huautlans who came to tell me of the wonders of Huautla and its mushrooms, the hallucinations I would undergo, the colors and forms I would see.

At 4:00 AM, the bus pulled in and our four paisanos came running up the street. The girl was tall, lean, blonde, and somewhat good looking; the other three looked like Salvation Army “before” ads. They wore the tribal costume of jeans, T-shirts and dirt, and carried a figurative banner reading, “Death to Squares.” Gats, the ring leader, was tall, thin, blond, mustachioed, and bore an old duffle bag. Cherokee was negroid, large, muscular, silent, and covered with tattoos. Rob wore a blue banadana on his head a la Mississippi pirate and immediately made himself at home by rolling a joint, which they gaily passed around. They started the party off by calling Sam and Jill squares and bumming cigarettes from me. The Mexicans chilled up against us and there was no more friendly conversation. We were lumped together in one unhappy “gringo” group, and it seemed apparent that the turkey episode was causing repercussions.

At 4:15, the '49 Dodge started on its 40 mile trip, and at 12:20 we reached Huautla. On the way, we had to travel a one lane mud road that dipped 3,000 feet in five miles and then climbed 5,000 feet in six miles sans brakes, sans tire tread and sans all hope of survival. Waves of heat and hostility greeted us as we disembarked from our rolling sauna. We asked about a hotel but there was none. We went into the restaurant but they were “out of food.” Half of the people we approached couldn't speak Spanish but out of every other door we heard the cry, “Meester, HonghiMeester. Honghi” We would charge for the source, always an imp's face beckoning through the white noon heat out of a cool mud house and always the same end to the expectations, “Honghi? No hay ahora. Manana.” There were no mushrooms, there were no curanderos. There were only the federales who came to town after the turkey-eating episode.

“Maria Sabina . . . where is she?”

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A finger points to a mountain in the distance: "She's far away... muy lejos. She charges 100 pesos for the consultation, 50 pesos for the mushrooms and no one knows where she lives."

It was more money than we could afford. We asked where the other curanderos were.

"Very far away. They all left. There are no others."

We asked where we could buy the mushrooms.

"There are no mushrooms. It's the full moon. You can't pick mushrooms till the new moon. It hasn't rained. There are no mushrooms without rain."

"But, look... it rained yesterday...."

"That wasn't a good rain."

We were haunted by every gringo oppressor, from Cortez and the Inquisition, TR and United Fruit, all the way to the looney who ate a turkey on the street and always a maddening, tantalizing Greek chorus of "Meester, Honghi, Meester." Finally, after hours of searching, we were able to rent an empty house for the night—no beds, no light, no water; but mats, a roof, and a place to stay. Sam and I went out and bought some coconuts and tomatoes, as well as dysentery in the form of cantaloupe juice. When we got back, Rob and Gats had smashed the only closet so that they could use the nails to hang a hammock.

"Hey, man, look... Cherokee's rolled 14 joints. That's better than mushrooms, man. We don't need no mushrooms."

I told them that we were going out to find a curandero and offered to take them along.

"Look, man. You can go for that curandero shit if you like but it's not in my bag. I don't need an old hag mumbling in Mazatecan to turn me on. I don't dig this Indian doctor jazz. I turn myself on. It's not my culture. You just score the mushrooms... we'll do the rest."

I reasoned with Sam and Jill that the best thing for us to do would be to wander up in the general direction of Maria's to see if we could find someone who would sell some mushrooms to us. In the back of my mind was the hope that once started in that general direction inertia would carry us along and I could cozen them into going the rest of the way. Somewhere in this excuse for a town I knew there were both mushrooms and curanderos and I wasn't going to be stopped by three miles of mountain. From every other run-down mud shack and hat store came the familiar "Honghi, meester." Kids followed us down the street chorusing, "Honghi... tee hee hee... honghi, honghi..." but every time we stopped to question we were answered with a giggle and a blank stare. Then, after about a mile, we met one of the Indians who had spoken to me in Teotlatlan. Yes, he knew where we could get mushrooms — a kilometer up the road there was a tailor who also sold mushrooms. As if we were in a Bogart movie, he was called "El Gordo," the fat one. We tramped on asking for El Gordo and then we found him. Maybe it was nature imitating life, maybe it was my fertile imagination or tired mind, but he did look like Sidney Greenstreet. Yes, he did have some mushrooms; they were old, black, and shriveled, and looked as appetizing as the rest of the town, but they were the first tangible sign that we were getting somewhere. Then he reached under the counter and picked out an old copy of Life magazine with an article on Huautla and the mushrooms. He showed me some illustrations and told me to come back the next day for "fresh mushrooms of the best variety." There was a customer in his store who offered to guide us to Maria's for 10 pesos.

"Is it far?"

"No, no, soon. Maybe two kilometers."

We, four this time, started off again. I trotted beside our guide. Sam and Jill started to give out; the heat and strain were too much for her. They fell further and further behind.

"Don't fall too far behind; these people are hostile. Stick close to me. If this guy

pulls a knife, we'll both jump him."

They caught up quickly. We were out of town marching up a small dirt path through a cornfield.

"How much further?"

"Soon soon."

The cornfield turned to forest, the sun was almost gone and the early evening rain was falling.

"How much longer?"

"The top of this mountain."

The top looked very far away indeed. Jill was crying; Sam looked like he was about done in. I was about to give up myself; my feet just wouldn't listen to my brain.

"Soon," he said, "soon."

I was gasping for breath. I was going to give up and then . . .

"There it is. Over there. Maria's house."

Revitalized, we ran through a web of chickens and pigs and banged on the door of the wood frame shack teetering at the edge of the mountain.

"Maria Sabina?"

The woman could have been 50 or 150. Constant taking of the mushrooms tends to speed the aging process. Her face was an incredible maze of lines. It was dark, possessed two of the deepest eyes I've ever seen, and was framed by knee-length jet black hair. She looked at us as if she had been expecting us all along, always knew we'd be there at precisely that time. I felt awed, as if I were in the presence of a very wise witch or a very holy demon. The one-room house was lit by four candles. It appeared spotlessly clean yet happily lived in. There were a number of mats spread out on the floor on each of which there appeared to be between three and five bundles, which in turn became people of various ages and sexes. Maria couldn't speak any Spanish so she

called over her son, Marcellito, who could speak enough Spanish to act as our interpreter. I explained the purpose of our visit (which, of course, they already knew) and Marcellito walked over to the cupboard and produced a handfull of "psilocybe mexicana," the pink umbrella-shaped mushroom most highly prized by the Indians. He waved them under our noses and allowed me to hold them in my hand. These unimpressive looking parasites were what we had searched all over Mexico to find and my mouth was drooling like one of Pavlov's dogs.

"Maria says it will be 125 pesos for the consultation and 50 pesos for the mushrooms."

Sam and Jill blanched; they were on short budget.

"We don't have that much money. It's too expensive."

"Maria says that is her price, nothing less. The mushrooms are very difficult to find."

We argued for about a half an hour, then I gave up. We couldn't afford it; we were beat. Then, like a second wind, it came rushing out of me. I was going to tell them off for every god damn Mexican who came following us down the street yelling, "Mee-ster, honghi . . .," for every gringo who was overcharged for being a gringo, for the maddening attitude of every idiotic Mexican that every gringo he ever saw was a rich man, voted for Teddy Roosevelt, killed Pancho Villa, and owned stock in United Fruit.

"Look, Marcellito. Ten years ago Maria was a poor, humble curandero. Her only desire was to treat the sick. Then Prof. Wasson came and then Dr. Hoffman and others. Maria showed them how to heal. They went away and wrote of Maria, the mushroom and her work. They made her a very famous woman. She didn't charge them 175 pesos. She was content only to heal the sick, to be a good woman. Now she is famous. Now people come from all over the world to see her and take the mushroom but Maria is no longer interested in them. She is no longer a woman of San Pedro and San Martin. She



"Annunciation" by Mati Abdoul Klarwein

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is no longer a woman of God, a giver of good. She is only a gatherer of money. We are poor people, like many others who came here. We didn't fly here; we came by bus. We didn't come to be entertained, to make jokes, to vacation. We came to be healed. I have been sent by my magazine so I could write of Maria and her work. Should I write that Maria treats only the rich, not the poor? We are gringos, that is true, but why do you think that all gringos are rich? We are poor people like you. There are many other poor people like us who come here but they are forced to wander those hot streets to take the mushrooms without supervision and get into trouble. The federales are here now. More will come and possibly the taking of the mushroom will become illegal. We will go now but we are not proud to have met you."

As we reached the door, Marcellito said, "Maria will treat you for 50 pesos plus 25 for the mushroom. Come at 1:00 tomorrow."

We made our preparations and started out at 11:00 the next morning. Rob and Gats came along with us to buy some mushrooms for private consumption. The way seemed shorter this time and we weren't bothered by the "Honghi meester" kids. It was as if the town knew of our appointment. Sam and Jill were quiet, their fear and nervousness manifesting itself in a strangely silent yet affectionate bond. They held hands like a couple of teenagers sneaking off to their first tryst. Rob and Gats marched in a clique of their own and I was alone up front leading the parade. About three-quarters of the way there we came upon Marcellito perched on a large flat rock, grinning and elvish he was missing only a flute. He led us the rest of the way via a new but extremely roundabout and tortuous path. Maria was out gathering mushrooms and the bundles on the mats of the previous night had metaphorphosized into about 15 young kids and 4 young women. I asked Marcellito whose they were. He proudly said, "mine." We asked about what time we would be taking the mushrooms. He said about 8:30.

"Why did you ask us here so early?"

"To make sure you wouldn't eat."

So we settled down for the 7 hour fast which was going to precede the ceremony and found ourselves the prizes in a happy game played by the kids. They pulled at us, played with us, jabbed at us, and continually competed with one another for our attention. As the hours passed, hunger and tension grew. They got more and more annoying until we found ourselves disliking them and each other intensely. At about 5:00 Maria returned, sold some mushrooms to Rob and Gats, and sent them on their way. The tension was getting unbearable. Then, one of the kids, Benito, proudly presented me with a small sprig of flowers. My tension broke. Someone cared. At 8:00, Maria, now in a ceremonial dress with her hair brushed and combed, clapped her hands and the kids disappeared for food and bed. The smell of the food tortured and teased our empty stomachs and I understood why that guy tried to eat the live turkey. At 9:00 Marcellito motioned to us to sit on a bed in one corner of the room. He pulled a bench up in front of us, separating us from the rest of the household and Maria came in carrying four large plates of mushrooms. She lit four candles and placed them on the altar. She started chanting in Mazatecan but I could make out invocations to the Father, the Son, and the Holy Ghost. San Pedro and San Martin, the patron saints of curanderos, were also called upon. The house, which only an hour before had throbbled with children, was death-silent now, filled only with that eerie Catholic-pagan-Spanish-Mazatecan-Latin wail. Then it stopped and she brought us the mushrooms. Maria sat with her back to us eating from her plate.

Marcellito instructed, "Eat them one at a time, very slowly. Chew very carefully."

They had a gritty, slightly rancid taste but were not at all bad. Jill bawled out, "Oh, I can't eat them. They're disgusting."

"Shut up," I snapped.

Sam comforted her, "Easy, honey. Eat them a little at a time."

We chewed on until they were all gone. Then Maria began to chant, slowly, lowly at first but with increasing speed and volume

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until the chant filled the room and dominated the universe. Suddenly, Jill screamed and fell on her side, writhing, "Oh, oh it's horrible...oh, oh it's beautiful...look at those colors. Oh, you're not with me. I'm alone...alone...it's wonderful." And then she started to cry. Maria reached back and touched our cheeks to test our temperatures. She patted Jill on the rump and continued her chant. Sam started questioning me incessantly. His engineer's mind had to analyze everything going on around him;

"How does it feel? Do you see colors? What colors? Do you hear the music?"

Everytime I felt myself starting to get high, his questions would interfere and bring me back down. I complained to Marcellito that it wasn't working.

"Un poco?" he asked.

"Poco, poco," I said.

"Poco, poco?" he replied.

"Si-i-i-i-i-i....."

...and a great feeling of well being came over me. Still, I felt cheated, duped. It wasn't working for me. I wanted to be alone, away from Sam's constant questioning. I wasn't seeing weird visions, I wasn't entering cathedrals of color, and everytime I began to feel good, another of those damned questions would come to shatter the spell. The room seemed greatly enlarged. Time slowed down considerably. It was like a hashish high but less soporific. Then I realized that my fingers, detached from the rest of my body, were running up and down my pants' leg. The texture of the material was furrowed by deep grooves, mountains and valleys. A swirling overlay of color was on my eyes. I was being borne away on Maria's chant. Then I felt myself leave my body and I was floating on Maria's voice. Marcellito became very large in my presence and I began to laugh. I knew that this imp was leading me; he became my brother and my best friend.

I felt a strong feeling of attachment to everybody in the room. The room changed

to a wondrous castle of brotherhood, love and warmth.....and the chant.....always that chant. I looked at my watch but it smashed into crystals and patterns and time no longer had any existence. Waves of energy coming from all of us were mingling and merging until we had no earthly forms. We were composed of energy waves of pure love. Jill started to scream. I reached over and tried to comfort her but she floated away by herself. My soul watched my body sitting on the bed. It got up, floating once around the room, and settled on my shoulder.

"Marcellito, my brother, you look sad. Marcellito, compadre, eat mushrooms..." and the galaxies burst into laughter. The chant stopped; Marcellito turned the portable radio on. I had entered a state of no-mind, no-body. The music solidified and filled the room. I could see the notes dancing in the air and my soul climbed aboard. My no-body mind observed my no-mind body shaking and quivering gleefully in time to the music. Then my no-body mind merged with the rhythm and became a no-mind of song. Jill screamed and cried again. Sam moved close to her and they embraced as he comforted her. They merged into one, as two people in love should. I was alone again. Maria's youngest daughter floated to me. She was infinite beauty. Marcellito was infinite kindness. We all became one person. We all had one god. We all were love. Jill and Sam sat on the bed huddled together. I felt apart from them in a way that was tender and good. I wanted them to savour their love and I felt that my place was with Maria. I was close to God but not close enough. I was still somewhere between heaven and hell, not quite reaching heaven, not quite falling to hell. I needed her help to leap that final barrier. I asked Marcellito if I might sit next to her. He nodded his assent and I got up. My legs turned rubber. The swirling mass of colors flooded my eyes. From out of the brilliant maze came Sam's voice:

"Nat, don't leave us. We want you here with us. Please."

"I must go my way, Sam. I must go to Maria."

I kneeled in front of Maria as a knight to his lady. I looked into her face, a face that was the Garden of Eden lined with rivers and valleys, etched with the ineffable landscape of Heaven. I entered her eyes and found God sitting on his throne. She was that essence of woman, kindness, and love that Dante followed on his journey. She smiled her understanding and I assumed the Yoga lotus position, she my Buddha; I, awaiting death and transfiguration. My eyes never leaving hers, I held out my hands. Energy waves were swirling from both our bodies. The cosmic emanations from her eyes met mine and we became one. She reached out and grasped me firmly by the elbows. Her fingers were probing and giving strength as they kneaded their way down my arms until she reached my fingers. Then she pulled my fingers one by one and my soul shed my body as if it were a glove. She grasped my hands firmly and the cosmic emissions from our eyes and our hands merged. They mixed in the swirls of color and our bodiless souls now transcended all plastic substance. We became a crystalline tinkling and we reached the gates of Nirvana together. A nothing like nothingness of bliss and contentment. An eternity of peace and always that face, those eyes, leading me on. Bright light becoming steadily brighter and brighter until finally a cataclysm of light and warmth and peace and then sublime darkness. Her daughter's voice.

"He is San Pedro."

Marcellito:

"San Pedro has entered him; he has become San Pedro."

And I floated back to earth bearing no regrets. Our eyes met again and we started to laugh, pure mirth, our laughter filling me and the room with a more earthly sort of joy. Maria's daughter and Marcellito broke into beams of light which later re-formed as their faces, Marcellito's, wise and happy; the girl's, sensuous, alluring and, at the same time, purely beatific. We roared and surged in an ocean of laughter, our bodies joyously convulsed in an orgasm of glee. I looked at Sam and Jill; he started laughing

with us and we five became a stormy Atlantic of mirth until Jill, still within her own manufactured hell, broke the spell with:

"Sam, he's down there and we're up here. We're much higher than he is."

"No," Sam said, "we're all together. We're with him; he took us here. He, as much as Maria and the mushrooms."

We sat stonily silent for awhile. My eyes were still locked with Maria's. Again, I gave her my hand. Again, she squeezed strength into it. I asked Marcellito if I might take pictures. He handed me a camera and I pointed it at Maria:

"I am a curandero now. With a camera I become the curandero."

I pointed the camera at Maria's eyes and began to shoot.

"What's he doing, Sam?"

"Taking pictures but I can't imagine why."

And we all burst out laughing again. I took out my light meter but the blues and greys of it melted in my hand and became a river. The plastic became like a chunk of melting butter flowing down my arm. I sat for what seemed to be an hour watching the numbers on the dial doing their own private dance. Marcellito and Maria's daughter were standing over my shoulder admiring the meter. The meaninglessness of the whole thing suddenly struck me. The meter became not an instrument or a tool but a pretty artifact with a life of its own:

"What in God's name am I doing with this stupid thing?" I yelled. "Here, Sam. You're an engineer. You have fun, now..." and threw it to him. I broke into hysterical laughter again. I stood up:

"I'm going outside."

Sam stood and fell flat on his back. He tried again, wobbled, stumbled, and exclaimed:

"It's like being born again. It's like learning how to walk."

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We bumped into each other like a pair of drunken sailors and fell laughing and rolling on the floor. We got up; I looked at his wife on the couch and for the first time I could see her with compassion. "That poor thing. She needs the attention. It's no fun being a plain looking little girl." Sam shook my hand and we walked out of the shack, brothers.

The moonlight was blinding. I blinked my eyes and color swirls returned. When they cleared, I was standing in a large enchanted painting. The trees were pillars, the rocks gems. Sam was bubbling with excitement and running aimlessly around...

"Look, Nat. The stars! The trees! The corn!"

He was seeing for the first time in his life.

"Oh, Christ. Now I know why people believe in God."

The stars were hanging from the branches of the trees like translucent crystals imbedded in water. The mountains had a two-dimensional quality and I realized that we had walked into a Vermeer.

"That's it, Sam. We're part of a Vermeer now. He was the greatest artist. He knew everything."

"Sam Nat it's beautiful! It's magic!"

Jill had appeared. I turned to her:

"Of course it's magic, honey. It's Oz. Look down the path."

Sure enough it was Oz right around the bend of the path and I had to take them.

"Here. Take my hand. I'll lead you."

Jill looked to Sam...

"Sam, should we?"

"Yes, honey. Let's go to Oz."

I took their hands and we started skipping

down the path...

"we're off to see the Wizard, the wonderful Wizard of Oz, a wonderful whiz of a whiz he was, the wonderful Wizard of Oz."

We skipped down the path, turned the corner and ran straight into an outhouse. Then we fell to the ground in a laughing exhilarated mass. I felt hungry now and asked them if they'd like to go home and eat. It was 1:30; the hours had flipped by like cards riffled in a pack but the day of fasting was beginning to take its toll. Jill decided she was feeling too weak as yet and went back into Maria's house. Sam and I wandered outside a little while longer communing with nature, God and each other. He pointed at the window:

"Look," he said, "there's a scene going on in there."

Painted in the yellow of the candlelight, we could observe a silent Noh play unfolding in the shack. At 2:00 a.m., we stepped back inside. Sam and Jill said goodbye to Maria. I shook Marcellito's hand, thanked him and then, going to Maria, I knelt, took her hands in mine and kissed them. She lifted my hands to her lips and we started back down the mountain. Our trip wasn't finished yet. The mushroom high comes in waves and we were just in the trough of one. The landscape was still an eerie, magical painting and the town far below looked like a giant collection of white marbles embedded in the mountainside. We felt very grave and daring to attempt a trip back at this point but, still bound by the fellowship of the mushroom, reasoned that we could do anything. We started down the path which was muddy and slippery, it having rained heavily while we were at Maria's. Every so often one of us would discover a new and beautiful vision to share with the others: a rock, a stalk of corn, a ray of light or the stars; each assumed a new importance, a new beauty. We carefully stared at each new discovery for immense periods of time, each one yielding new delights. Suddenly, Jill started to whimper.

"I'm sick... I'm sick... I'm going to throw up..."

She walked over to the side of the path and doubled over retching.

"Honey," I called, "you have nothing to puke. We haven't eaten for 15 hours. Don't worry. We'll pay more attention to you. You don't have to play at that game so straighten up and come along."

She looked up and smiled, "You're right. It is a silly game."

We continued our trip back. We got lost several times but were never afraid; each new path led us to a new garden of delights, a new adventure. The town's numerous stray dogs and pigs were barking and grunting at our heels. We found them a constant source of amusement. At length, we came to some houses on the outskirts of town and sat down to rest. I found a wall which was constructed of a corrugated stucco-like material. Its pattern was the same as that on the ancient Mayan and Zapotecan ruins at Mitla and Monte Alban. I studied the zig-zag furrows and weaves. Then, I felt myself drawn to the wall. I stood next to it. The wall became my entire existence, became cosmos, universe. Fingers feeling texture cool rock inviting. Each stone, each pebble had a life of its own. I was a part of it, it was a part of me. I clung to the wall by my fingers and toes. I pressed my mouth against it and sucked in its texture and taste. My tongue explored its field. There was nothing but the wall. The wall was earth, the wall was heaven, the wall was love, the wall was God, the wall was me, the wall was everything. Love! Rapture! Revitalization! Birth! Rebirth! I knew there was one thing more. I felt that my death was accomplished; now I must be reborn and could only do this alone.

"Look, people. Please forgive me. But I must leave you now. I must go on alone. There's something I must do."

And I walked off, leaving them behind. I've always had a fear of loneliness. I've always been afraid to do things by myself. There have been other fears mixed in: fear of strangers, fear of darkness, fear of failure and fears of my own capacity to make do. I knew that only by conquering these could I prove myself a man. This would be my test,

my initiation, my proving ground. The first 100 yards were difficult. I kept looking back, hoping somehow that they would call out and catch up to me. I turned a bend and was really alone. The dogs were barking furiously. The perspective became exaggerated; ominous...

"Now if you'll let it, the Vermeer will become de Chirico. Don't let it."

I willed myself to be brave. "Dogs will always bark; they bite only cowards." And I walked on, unbitten. I decided to look at the stars, to use them as my guide. I fell into a puddle of mud. "One must remember the stars but keep your eyes on the road." I threw away the star crutch. Then I saw two Indians approach me, machetes in their hands. "Now you must face this test; they fear you; fear breeds violence."

"Buenos noches..." I called out.

They looked startled. "Buenos noches..." they called back.

I was free; I had no fear. Now you must find your way home. "If you lose your way you must not panic but think it out and find the right path." I lost my way but straightened myself out. I found the house; my fears had obeyed my will; I was home, free.

The room was a shambles; holes in the walls, litter on the floor. The four beatniks were smoking pot again and lying around in various states of semi-consciousness. There was a large bowl of flowers on the floor.

"Hey! The other people are back."

"No, it's only me."

"Hey, it's Nat. Where did you leave your little square children?"

"They'll be along soon."

"What happened? Did they flip out?... Did she go into a crying-bag....Tell us."

"Look man they took their trip, I took mine, you took yours; leave them alone, right?"

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Sam and Jill came in. The Beats started to roust them. I felt protective; they were my wards. I picked a hunting knife up from the floor, and stationed myself between the Rashows and the Beats. I started digging the knife into the floor. Rob put his bare foot into the bowl of flowers.

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“You people think you know what’s real, huh? Like the flowers are real, my ugly, dirty foot is real. Look at it, squares. That’s reality. We didn’t need a curandero. That’s phony. Gats was our curandero. We danced and Gats chanted in English. That woman is a whore. She’ll take anyone who’ll come with money. But we’re selective. We curandero in English. Everyone can understand. No religion, no crap, nothing but reality, selected clientele only.” I was fed up and ready to kill if I had to but I had to shut these morons up. Thump! went the knife, into the floor.

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“These flowers are beautiful because they are...(Thump!)...you’re ugly because you fear. Your foot wasn’t born ugly. It wasn’t born dirty...(Thump!)...it was born in pain but you’re afraid of pain. It wasn’t born ugly. It wasn’t born dirty...(Thump!)...it’s dirty because you just don’t choose to wash...(Thump!)...no other reason.....(Thump!)...you don’t dig Maria. You don’t dig me...(Thump!) You don’t dig these people ... (Thump!) ...Well, that’s your bag. Stay in it. We pay our dues, you don’t...

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(Thump!). So we’ll play our gig and if you choose to play a solo riff, go ahead... (Thump!)...but I dig flowers and comfort and cleanliness...(Thump!)...I want to belong to that union, you don’t...(Thump!) So stay outside, baby, if that’s where you belong. Just don’t bug us. And don’t throw rocks and dirty feet at those inside... (Thump!)”

By the time I had finished, the floor was a chopped-up mess but they left Sam and Jill alone. I crawled over to my mat. A beam of moonlight coming from the window formed a solid purple cube of light next to my head. I curled inside of it and went to sleep.

We woke next morning an hour before the bus was ready to leave. We said goodbye to the other four and stopped off at our landlord’s to pay our rent.

“You people are good. We like you. But the others. Why did you bring them? They make noise, they make trouble. Why do they come?”

The bus pulled in. Mark, the English boy from Oaxaca, got off. I gave him advice on where to stay and how to reach Maria. We made a date to meet in New York. He trudged off into the noon heat. As he walked the street, I could hear the kids calling after him, “Honghi, meester, honghi?”



The evolution of the higher animals and of man, and the awakening of consciousness at a particular level. The picture is something like this: though the ether is filled with vibrations the world is dark. But one day man opens his seeing eye, and there is light.

Ludwig Wittgenstein

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GATES OF EDEN

Harold Massoon

This extraordinary account of the ecstasies experienced during a psychotic episode suggests that "when these things are better understood and controlled, good may be realized out of what we know as insanity."

FIRST LETTER TO: INTERNATIONAL FEDERATION FOR INTERNAL FREEDOM, CAMBRIDGE, MASS.

Gentlemen: Recently I chanced to read an article dealing with the activity of your group. To myself it was heartening, in a sense, to read that the LSD experiments produce sensory experiences of great beauty. I do not believe that the average layman's concept of mental illness includes any knowledge or recognition of the fact that the "disturbed" individual may enter realms of such exquisite beauty as to upset his normal values and reactions. Since the individual is clearly the victim of delusions any such gratifying experience may be chalked off as an escape mechanism—a psychotic dream. This may be so, yet having myself undergone a psychotic experience, a portion of which involved sensory experience and feelings of breathtaking beauty, it is hard for me to accept the idea that the things which happened to me could be explained away so simply. The unconscious mechanisms of man are doubtless of enormous complexity. Man may well be a far more amazing creature than even his inflated conceptions of his contemporary self would indicate. The hallucinogens may prove a valuable tool for the eventual creation of more enlightened populations—indeed, for a better race of men.

For what it may be worth I would like to touch on certain aspects of my own psychosis which occurred some four years ago. My experience was, at one end, a vista into a state of unparalleled beauty and peace, but at the opposite end there were experiences and thoughts of darkness and terror. My hallucinations, when they finally made their appearance, were terrifying; it was as if, at one stage, I stood at the portals of paradise and, at another, felt and experienced the dark gate of hell.

At the outset, while my experience had religious connotations, it should be men-

tioned that I am neither a church goer nor a bible addict. In fact, I will acknowledge that I am a little afraid of the old book—I had an insane theory as to why this is so—and perhaps in my own instance it is just as well. A sensitive, imaginative, and evidently weak-minded person, I have had no wish to tangle with a book that has produced such a bumper crop of fanatics, zealots, and religious maniacs, recognizing that I was prime material. Nonetheless, I suppose I am, in a sense, a religious individual who sees religion as a matter of values to be lived up to; true religion should be an approach to life and a thing more to be lived, or attempted, than preached. However, I have learned quite a bit about the old book and what it contains, from readings as well as from conversations and from observing life itself. In my psychotic state—and somewhere I have read that this is a familiar pattern—the informations and observations gleaned throughout a lifetime **seemed** to fall neatly into place as if a lifetime had provided me with, so to speak, the keys to the kingdom in which I found myself. In my deluded state I believed that I was supposed to write the book, or formula, which would enable others to enter this realm—a realm of great inner beauty, of sensory awakening, and with utter abandon I dismissed all other considerations to plunge excitedly to the task. In the course of matters I made the dangerous mistake of letting my wild and disordered imagination be my guide, believing that I was being inspired by Divine sources and, oh brother, what a trip to the moon that was—culminating, as you might suspect, in a nuthouse.

No doubt there were several causative factors contributing to my particular psychosis and here again, for brevity's sake, I can only suggest the mechanisms which altered my interior chemistry and triggered my psychotic explosion. Heredity? A strong

likelihood, I suppose. My father before me was in and out of mental institutions a number of times and I had opportunity to observe his strange behavior during his "spells." (What may have happened to the inner man is less of a mystery to me now.) Overwork, perhaps;—unrequited love (I was a 43-year-old bachelor at the time—unable to "break the ice"); and a very powerful and provocative book, Philip Wylie's **Generation of Vipers** which I had read before and was in the process of re-reading and which was an influential if not causative factor in my psychosis. But I have no intention to attempt diagnosis—why the hell, I've but a high school education.

It all began in a subtle way with a feeling of wellbeing and abundant good nature that was not unlike a continuous alcoholic "glow." In my work, I became tireless. Each day, ordinarily dull to a degree, became an adventure—my mind sharpened—my wit keened—a feeling of camaraderie enveloped me. With the passing days the feeling grew and I recognized that something (I supposed, wonderful) had happened to me. I was a man transformed. God, I felt marvelous.

In a world that grew more beautiful day by day I recognized one significant fact: no one—but no one, could feel as wonderful as I and wish to do anything but **live!** Here, within myself I had discerned—or been shown—the brotherhood of man, the pure true beauty of existence. A growing conviction took hold of me—this must be put into words. Thinking back I can see the egotism of it—just the shade of an idea that I, yes **I**, would be exalted, glorified, famous.

Well, suffice it to say I blew my job, leaving behind a few good-natured but pointed allusions to the company's greedy ways, withdrew my thousand odd from the credit union and set out to write "The Book of Life." Somebody had to write this, deriving it from the "Tree of Life" in the Garden of Eden, which I came to regard as a symbolism, a simple tale but fraught with hidden meaning. Legendary "Eden" never existed, but the story was written with a clever reversal and put at the front of the book instead of the back where it rightfully belonged, by a force representative of the dark half of man's

heritage and symbolized in the figure of a man with some of the appurtenances of an animal. For if the old black book were purportedly a manual for man's guidance someone surely erred in disregarding the opposites in man's nature, not realizing that the devil himself might have had an equal hand in the assembly of the book. This must, of course, be regarded as an insane theory but some of these heresies bear mention. It may not be too far-fetched to suggest that the old book may have done a lot of harm as well as good, if hypocrisy, fanaticism, etc., are taken into consideration.

So I plunged into writing and the imagination soared and the words flowed freely. Each day was a continual joy and my ecstasy was unlimited. Nights I would sometimes leave the apartment and drive through the velvet dark, and the city was an enchanting place. Sometimes I drank—not that I desired liquor—only to be around people and where there was music. Liquor seemed to have a special effect on me—I was continuously "high." I began to experience feelings of rapture in my lower belly, exquisitely sweet feelings of pleasure, some so piercing and keen as to make me want to cry out, others soft and gentle like little fingers, constantly changing, never alike and this, during the height of my ecstatic feeling, was almost continuous.

Once on retiring I had an erection and began to experience climax after climax, some lasting for minutes and this continued for two or three hours, with no manipulation on my part. I could visualize an act of love of pure beauty and feeling, bodies joined in quiet dignity, no animal movements required. A breath-taking experience, even alone, and with a woman similarly attuned—oh God what it would be! I recall feeling a vast relief—so this was how it was and sex was not eliminated but here was an act of love a thousand times more beautiful. Small wonder that man's animal sex act has "dirty" connotations—I might note here that I have found pleasure in **that** as well, I image as much as anyone—but what I experienced was unbelievable.

I continued with my writing believing that when my work was done I would ultimately

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be led to "Eve" for what I was experiencing was meant to be shared and the prospects were exciting—well, that is a mild word for it.

I had been in this state of "Eden" for perhaps a couple of weeks or thereabouts when I had my first hallucination. Following a session of writing I went into the bedroom to lie down and rest a bit. Suddenly there before my eyes there was the blackest of blacks and I saw my mother's face, crying out, imploring—as she was sucked into a black vortex. I was terrified—I almost went to the phone to place a long distance call home. What did this mean? Had my mother died? There was a feeling of malevolence accompanying the hallucination that was terrifying. Then I calmed. I'd met the Great Deceiver—it was all a clever trick to try and drive me out of my mind. And it came to me that no man "attains" Eden without doing battle with this jealous force. If one lost this psychic battle, the devil would have his kind and he'd end up in an asylum—a hopeless gibbering idiot. Terrifying prospect. Somehow I recalled what I knew of the Lord's Prayer—"Yea, though I walk through the valley of the shadow of death, I shall fear no evil" and I was vastly relieved. Let the clever sonofabitch bring on his bag of tricks—I wasn't going to be afraid.

My writing concluded, I drove my car out of the city late one night. I would just start out driving through the enchanted night and somewhere we would meet and I would know. Paradise. I stopped at a market to get some cigarettes, and noticing some large delicious apples there, I bought one. Amusedly I thought about it—a wedding present, the symbolic apple—well, by God, I'd give it back to the faithless bitch and she would understand and we'd both laugh uproariously. For we would be free and wild and uninhibited and Eve a lovable shameless bitch.

Well, gentlemen, I'm running up the pages here and there are many things recalled but not gone into. Suffice it to say, I followed my deluded imagination to a motel alongside the highway and my imagination told me "he" had her there in one of the units and I went in and there he was, the fiend incarnate,—bald head, hooked nose,

swarthy complexion and glittering brown eyes—a vicious looking specimen with what appeared to be two fangs for lowers. I am a slightly built fellow but I damned near tore that motel unit apart with my bare hands and it took about five state police to subdue me. Later, in the back of a police car, steel cuffs biting into my wrists, my jaw fractured—a figure walked by and it was the bald headed one only this time he was wearing a felt hat. He looked at me in the back of the police car and his face lit up with a saccharine grin of such sweetness that I had to smile back. How neatly he'd done me in—the bastard. He disappeared down the path to the cabins and shortly thereafter I smelled the unmistakable odor of sulphur in the police car—strong, penetrating—an olfactory hallucination, I suppose. There were some terrifying moments in the asylum but even so my cheerful glow continued for some time, gradually diminishing, the rapture fading. Released in about three months. There isn't a helluva lot that I can say about a state institution that is very commendable however and if LSD can help some of those poor devils—well, that's a great deal. And it may even be found some day that there are hidden resources in man's psyche which is not an economic push-button gadget but full of a vivid and beautiful life that has nothing to do with worldly goods.

Back in society and with a different company, two years ago I awoke one morning with a great feeling of indescribable joy. I tiptoed to the window to see that about ten inches of new snow had fallen during the night and somehow the whiteness, the purity, and the beauty of feeling seemed to go hand in hand. I went through another experience involving moments of great beauty and sensory delights as well as some pretty dark times. This time I subdued, with quite an effort, my inclinations to abandon my job, and somehow I made it through about four months of insanity, though I was very nearly deceived into answering auditory hallucinations during one hectic week. But I am a reticent person—thank God for that—and I pretty much kept my wild thoughts to myself, a not inconsiderable feat. Possibly the knowledge that all this had its beginning and end in the self was a help. Again I had a compulsion to write—I wanted to bring this

beauty of feeling to others—and this time I guess I did some 200 odd pen-written pages. I've never been inclined to re-read them—I suppose they are a curious mixture of truths, delusions, and fantastic heresy. During this "illness," I did manage one constructive thing that it may be significant to mention. Always a heavy and compulsive cigarette smoker and never quite able to quit, I abandoned the weed with an ease that was really astonishing. Gave nearly a carton away after they lay around a couple of weeks untouched. After about three months abstinence, my psychosis faded, and like an ass I bought a pack and it seems I haven't been able to quit since. So it may just be that when these things are better understood and controlled that good may be realized out of what we know as insanity.

Since my last episode I've gotten along quite well. I have no special desire to flirt with another session in the booby hatch and I try and keep both feet on the ground and I don't, at my intelligence level, propose to know all the answers as to what happened to me. It may be that there is enough integrity within me, and that my personal values—not always coincident with those of society—are true enough that I am very close to something. There is no doubt that there is inner conflict and dis-integrity within my psyche and I suppose that is my "devil." But oh, God, if a man could capture and control the other feeling—I would want it always. And if numbers of men could find the route, I could foresee the beginnings of man's dream of peace.

Philip Wylie indicted society and science, and his writing bears scrutiny. The greater efforts of science, he declares, "have gone to implement man—not to enlighten him. Egotistical man assumes that he knows all there is to know of himself whereas he and his truth seekers actually know relatively little of inner of spiritual man because so little effort has been devoted to that end." What occurred to me subjectively seemed much too profound to be designated an escape mechanism, but even if it was—take a hard look at your society and your people who flock by the millions to the bar rooms each night for a little "escape" and perhaps, in instances, a little human warmth, and I'll

tell you there's just a great deal to want to "escape" from.

I have no special feelings of shame for my psychotic escapade and episode in the nut factory—as I've told friends, jokingly, well, it's not everyone gets the first hand experience. But I've made little effort to tell, as I have attempted here, of the exquisite beauty I experienced—after all I was "sick," "I didn't know what I was doing," etc. If my acts were incomprehensible, I recall pretty well what I did and the motivations at the time, and I readily acknowledge and recognize that my mental apparatus played tricks on me.

I suppose I have written because someone it seemed should hear my tale and perhaps your experiments have provided the only people with sufficient insights as to possibly appreciate it.

SECOND LETTER

Dear Doctor: In reply to your letter of April 30 may I say that I have no objection if you see fit to make use of my account of a psychotic adventure in your periodical.

It is very seldom that I have gone so far as to write as I did; though on occasion I have felt like writing a "letter to the editor" as regarding one thing or another. I customarily stifle the urge, recognizing that after all there was probably nothing especially profound or startling about my own particular digressions and the letters were as well left unwritten. Having undergone an interval of psychosis it was gratifying and even exciting to discern from what reading I have done relative to the effects of hallucinogens, that there was apparently a striking resemblance between the perceptions realized under the drug and insanity—or, at least my own particular encounters with it. Appreciate the dilemma of an individual such as myself who has undergone a profound experience—an experience which, while it held intervals of terror, was of indescribable beauty, followed by the painful return to "normalcy." The recognition that one has been deluded, made an ass of himself, and that this was insanity is inescapable—what is there to say that

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might find understanding in his fellows? Unfortunately the experience is very much a subjective one and recognizing the futility of words one may as well be reticent. The point I am trying to make is that the terms "mental illness," "nervous breakdown," "delusionary," "lunacy," while doubtless carrying in their essence elements of truth seem so damnably inadequate and to me it seems that there was more to it than this—that in the heightened senses, the quickened mind, the keened emotions there was something dynamic and an illumination of a kind. It would be sheer conjecture to suppose that some chemical change or whatever takes place in that ultracomplex psychic organ, the brain, perhaps prior to its time in evolutionary development and, since the subject has not grown up to the utilization of this new set of feelings and this quickened mental faculty, he becomes insane, abandoning his normal values and disregarding the common sense dictates of his environment. He would be limited to his own particular grasps of current knowledges and plagued with his own peculiar set of delusions, beliefs, superstitions and fantasies even though his psychic organ transcended the normal state. *Life Magazine* recently carried some material relative to LSD. I can appreciate the account of a normally level-headed business man who saw himself as God and I can likewise appreciate the feeling of the young man who walked in front of a speeding automobile convinced of his own invulnerability. There is such a positiveness—such a feeling of absoluteness. Normally I am not an individual of strong convictions nor am I particularly inclined to be a staunch "believer" but in psychosis I not merely "believed"—I **knew**. Somehow it seemed that more than just a sickness of the kind might be involved if one could employ discrimination and that a "fool" might just possibly, though it were beyond his ability to comprehend it, discern the glimmering of a higher state. This much I **do** suggest—if mankind is to survive through the ages without annihilating his species and reconcile his planetary differences into some manner of peaceable co-existence, somewhere in the millenia ahead one might hopefully anticipate psychic evolution for the better.

At any rate it was gratifying to learn that folk of more education and doubtless greater stability than I can claim, had undergone, though provoked by chemical means, similar adventures. Truly would I like to possess the quick mind, the compassion, the capacity for loving, the zest, the tirelessness, the human warmth, the humour—the things I **felt** while in a psychotic state, for to do so would be to **live**—and how very wonderful it seemed that life could be. But there is that word of course—"seemed."

I might mention that coincident with my writing of my experience to you people, possibly as the result of aroused feelings and the recalling of past adventure, I lapsed forthwith into another enraptured interval of psychosis. I did, in fact, awaken the morning after I had written the account, and the euphoria lasted many weeks though it was interposed with occasional terrifying thoughts. How very very sure was I **this** time that I had somehow discovered the essence of vivid life and, of course, how very very deluded I turned out to be. I abandoned a good job, went through a modest savings and was obliged to sell my (all paid for) late model automobile. It was a matter of some six months before I was re-employed—sadder, older and, it is to be hoped, possibly a trifle wiser. No nuthouse this time—I was smart enough to manage appearances, curb the tendency to loquaciousness, keep bills paid and exercise some restraint and actually I had quite an exhilarating experience, if an expensive one. Since I am a bachelor no one was particularly harmed and I have apparently emerged from the experience satisfactorily. Still and all I hope I am done with it for although it is a terrific adventure it is not a happy thing for an individual with some intelligence and a sensitive nature to be obliged to emerge from. At least I think I have shed some of my delusions in the process and perhaps the outlook is not unfavorable. My personal orientation has ever been inclined toward life and living as above personal gain and advancement so I can be philosophical about the matter—at least I have savored the heights and the depths of feeling and encountered a very crafty personal devil.

NOTES ON CURRENT RESEARCH

Ralph Metzner

Molecular Structure of Hallucinogenic Drugs

Explanations of the action of hallucinogenic drugs have been offered on the psychological level (e.g. "de-activation of perceptual filters"), on the physiological level (e.g. "interference with functioning of midbrain reticular activating system"), or on the biochemical level (e.g. "competition with neural transmitter substances such as serotonin"). Recent work by Snyder and Merrill at NIMH focussed on the electronic configurations of hallucinogenic drugs, and attempted to determine the nature of the relationship between chemical structure and hallucinogenic potency.

Substances known to differ in hallucinogenic potency, such as mescaline, TMA, TMA-2 and TMA-3; or DMT, Bufotenine, 6-hydroxy-DMT, psilocin; were compared on a variety of electronic parameters such as "pi charge," "free valence," "energy of the highest filled molecular orbital" (HFMO), "frontier electron density" and "superdelocalizability." Significant relationships were found between hallucinogenic potency and HFMO, which is considered to be an index of the propensity of a molecule to donate electrons.

Few conclusions can be drawn from this work though it is certainly suggestive. . . . The correlation of HFMO energy with hallucinogenic activity only implies that these compounds may act as electron donors, but does not describe a mechanism for hallucinogenesis."

The research is reported in: Snyder, S.H. and Merrill, C.R. "A Relationship between the Hallucinogenic Activity of Drugs and their Electron Configuration," Proc. Nat. Acad. Sci., 54 (1), pp. 258-266, 1965; and in: Snyder,

S.H. and Merrill, C.R. "A Quantum-Chemical Correlate of Hallucinogenesis" in *Amines and Schizophrenia*, Pergamon Press, New York, 1966, pp. 229-245.

STP and Other Compounds Related to Amphetamine and Mescaline

The appearance of a mysterious psychedelic drug, named after a fuel additive, on the underground market touched of a wave of widespread amazement and confusion. It was rumored to be related to a lethal nerve-gas and, most terrifying, the common LSD-antidote thiorazine was said to fatally potentiate its effects.

Since the FDA's statement, as it appeared in the New York Times (Aug. 3, 1967), it is clear that STP, or DOM as it is labeled in establishment chemistry, is one of a whole family of compounds which are structurally related to both mescaline and amphetamine. This group, on which a considerable literature has already been published, includes several variants of TMA, MMDA, MDA, DMMDA and others whose pharmacologic properties still remain to be explored.

Table I gives the average effective dosage (in mg), computed for a 70 kg adult, and the approximate potency relative to mescaline equals 1. The toxicity (LD50) is derived from studies in rats or mice, and is expressed as the dose (in mg per kg) which is lethal to 50% of the experimental population.

In duration most of these chemicals are similar to the mescaline pattern (8-12 hours), except for STP, which lasts around 16-24 hours. STP is not related to toxic nerve-gas, although it

is possible that tablets containing atropine-like substances appeared temporarily on the market under the label "STP". It is this pseudo-STP which could interact unfavorably with thiorazine.

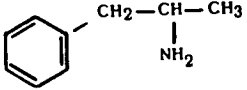
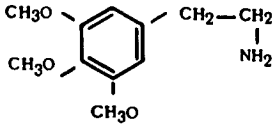
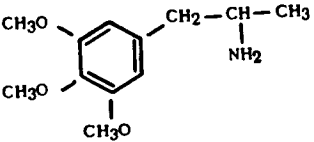
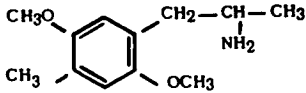
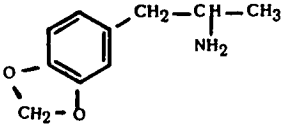
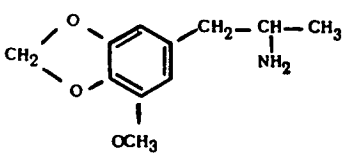
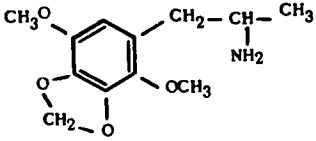
Discontinuance of the use of thiorazine as an antidote to LSD or STP "freak-outs" must in any case be regarded as a positive consequence of this whole episode. Thiorazine is equivalent to a temporary chemical lobotomy and is known to damage brain and retinal cells. Psychologically, it does not allow the person to assimilate and "work through" the experiences triggered off by the LSD.

It can be seen that changes in the mere positioning of the methoxy groups can lead to appreciable changes in potency. For example, TMA-2 is six times as potent as TMA, whereas TMA-3 is not active at all, even in doses exceeding those adequate for TMA or MMDA.

Qualitatively, these compounds seem to be similar in some respects, different in others. According to Shulgin(12) "as a generalization, the MMDA series leads to the more emphatic and pleasant responses, whereas personal anxiety and restlessness are common with TMA." It is suggested of TMA "that its characteristic property is one of causing projection, in the psychological sense, by the subject."(15)

Studies on MDA have "shown modest, if any, distortion or change of either visual or auditory perception, but rather a pronounced increase in emotional affect, which has proved to be of considerable value in psychotherapy."(6) MMDA appears to be similar to MDA, "but in addition some 30% of the subjects reported rather vivid and well-structured images appearing when the eyes are closed,

Table 1*. Amphetamine-Related Compounds

			Toxicity (LD50), mg/kg	Dosage, mg	Relative Potency (Mescaline = 1)
	Amphetamine	phenylisopropylamine	---	---	---
	Mescaline	3,4,5-trimethoxyphenethylamine	370	250	1
	TMA TMA-2 TMA-3	3,4,5-trimethoxyamphetamine 2,4,5-trimethoxyamphetamine 2,3,4-trimethoxyamphetamine (not active)	260 120 ?	120 20 N.A.	2 12 0
	STP (DOM)	4-methyl-2,5-dimethoxyamphetamine	?	5	50
	MDA	3,4-methylenedioxyamphetamine	?	100	2-3
	MMDA MMDA-2 MMDA-3a	3-methoxy-4,5-methylenedioxy-amphetamine 2-methoxy-4,5-methylenedioxy-amphetamine 2-methoxy-3,4-methylenedioxy-amphetamine	150 130 40	100 13 15	2-3 20 17
	DMMDA DMMDA-2	2,5-dimethoxy-3,4-methylenedioxy-amphetamine 2,3-dimethoxy-4,5-methylenedioxy-amphetamine	? ?	18 42	12 5

*Note that the toxicity given is not directly comparable to the dosage. Toxicity is determined for rats and mice, as mg per kg of body weight. Dosage is determined for adult humans of average (70 kg) weight.

although there are virtually no changes in eyes-open perception.”(15) With DMMDA “there were only mild perceptual distortions, and in common with MDA, there were increased generalizations of the thought process, increased emotional affect and empathy, as well as euphoria and a lack of anxiety.”(16) These qualitative differences have led some authors to suggest that MDA and DMMDA should not be classified as “psychotomimetics”.(16)

The following hitherto unpublished observations may be added to the statements from the literature quoted above. They are based on reports of between 20 and 30 persons familiar with the effects of LSD and other more widely known psychedelic compounds.

MDA's effect is primarily on the emotions and body-sensations, and produces a state of “centeredness” free from the perceptual and mental distortions and hallucinations so common with LSD. One does not go “out of the mind,” one “comes to the self.” Acceptance, honesty, openness, “here-and-now” feeling, affirmation, confrontation—these are terms typically used to describe the subjective effects of MDA. Anxiety and confusion are almost totally absent. Its application in psychotherapy and personality change seems much more promising than LSD. It is a different type of compound and deserves a different name, perhaps “affect-amplifying.”

As a cautionary note, the physiological effects of MDA are not yet completely understood. Recently, in the San Francisco Bay Area, one person died while on MDA. This person was taking Eutonil, a hypotensive agent which is potentiated by amphetamine-type compounds. Anyone for whom amphetamines are contraindicated should avoid MDA (or STP). STP is not unlike mescaline in its time-course and feelings of visceral involvement. It

seems, in doses of 5 mg and above, to produce a state of heightened present-functioning energy, as well as the oft-described multidimensional visionary cosmic kaleidoscope. These generalizations should be regarded as very tentative first approximations only. Of the many apocryphal stories circulating about STP, there is one which relates how a psychic medium took it and asserted that it originated in the laboratory of an alchemist from Atlantis and was not suitable for consumption by humans of the present degenerate age.

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LETTERS TO THE EDITOR

on. J.

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Dr. Sampurnananda in his article, "Notes on Soma," admits his lack of extensive knowledge about soma. Tracing back historically to the past when certain so-called rishis indulged in soma-taking and quoting passages from little-known Vedic texts gives us some information, but the most practical question, "What would soma do for me?", is never answered by the author. For the answer to this question (and any others we might have) we must turn to the Bhagavad-Gita, or Geetopanishad, since being the essence of all the Upanishads, it is considered by the learned to be the highest authority.

Lord Sri Krishna, the Supreme Personality of Godhead, tells his devotee Arjuna the benefit of soma.

The knowers of the three vedas who drink the soma juice and are cleansed of sin, worshipping Me with sacrifices, pray for the way to heaven. They reach the holy world of Indra (the Lord of heaven) and enjoy in heaven the pleasures of the gods.

Heavenly delight is in store of the soma-taker, but these delights, alas, are only temporary. The very next verse states:

Having enjoyed the spacious world of heaven, they enter (return to) the world of mortals, when their merit is exhausted, thus conforming to the Doctrine enjoined in the three vedas and desirous of enjoyments, they obtain the changeable (what is subject to birth and death.).

This material world is so dissatisfying for us, because we hunger for happiness that is completely unconditioned by time, environment, and mental and physical well-being. This is bliss. Yet our every attempt through sex, drugs, palatable food, music, great novels, and even nature, meditation,

thought, and soma yield pleasure that comes but goes. Sri Krishna tells us the folly of mundane, sensual pleasures.

Whatever pleasures are born of contacts with objects are only sources of sorrow, they have a beginning and an end. No wise man delights in them.

Eternal Bliss is Lord Sri Krishna Himself. He is Sat-Chit-Ananda-Vigraha, All Knowledge, Eternal, and All Blissful with Absolute Form. To achieve just a fragment of His Bliss for ourselves, we simply have to go to Him.

Having come to Me, these great souls do not get back to rebirth, the place of sorrow, impermanent, for they have reached the highest perfection.

Krishna says in the Bhagavad-Gita how to go directly to Him.

This Yoga has been declared to thee by Me; for thou art My devotee and My friend; and this is the supreme secret.

Of all yogins, he who full of faith worships Me with his inner self abiding in Me, him, I hold to be the most attuned to Me in Yoga.

The supreme secret is lost to speculative investigators who insist on interpreting the Vedic scriptures. Dr. Sampurnananda says we have "lost the key to Vedic interpretation" because he is looking in the wrong place. Instead of trying to fit the Absolute Truth into our own limited mental concoctions, we should approach the Vedas with open minds and try to perfect ourselves so that we can understand its Absolute quality. This is what the Absolute Truth is; it cannot be improved upon and is its own, and the highest authority.

But he who discards the scrip-

tural law and acts as his desires prompt him, he does not attain either perfection or happiness or the highest goal. Therefore let the scriptures be thy authority for determining what should be done and what should not be done. Knowing what is declared by the rules of the Scripture, thou shouldst do thy work in this world.

Being a friend and servant of Krishna and worshipping Him with devotion is bhakti yoga, the only yoga system of the four presented in the Bhagavad-Gita which Arjuna concedes he can do sincerely. Bhakti yoga yields the most exalted state of consciousness a human being can achieve — Love of Godhead. The process is to glorify the Lord by the sublime chanting of His Holy Names:

**HARE KRISHNA HARE
KRISHNA KRISHNA
KRISHNA HARE HARE
HARE RAMA HARE RAMA
RAMA RAMA HARE HARE**

Chanting of this Great Mantra for Deliverance purifies our consciousness so that we no longer identify ourselves as being our bodies, and our real identity of eternal spirit soul is immediately uncovered. We can then understand that our relationship with the Supreme Lord is that we are His eternal servants and that our perfection of life is to serve Him with love and devotion.

This transcendental process is practical and simple and the public is cordially invited to chant HARE KRISHNA with us at our temples, and to purchase Swami Bhaktivedanta's beautiful recording of this Mahamantra which can be used to practice this sound vibration. It is available from us by mail @ \$3.25.

Respectfully yours,

Brahmananda Das Brahmachary
(disciple of Swami A.C. Bhaktivedanta)
Pres., International Society for
Krishna Consciousness, Inc.,
26-2nd Ave., New York, N.Y.

BOOK REVIEWS AND NOTES

THE PRIVATE SEA; LSD AND THE SEARCH FOR GOD

by William Braden. Chicago: Quadrangle, 1967, Pp 255, \$5.95

THE MARIJUANA PAPERS

by David Solomon, Indianapolis: Bobbs-Merrill, 1966, Pp 448, \$10.00

Although dissimilar in their effects and pattern of use, both cannabis (marijuana) and LSD have proved ideal as "Roman circuses" for politicians, medical bureaucrats, and the mass media to distract the American people from the dangers of alcohol and guns, poverty, racial discrimination, crime, bureaucracy, war and other major problems. With the deliberate promulgation of the myths of the dope fiend and of alcohol as a harmless beverage, American people have "learned" the following falsehoods: marijuana is more dangerous than the atomic bomb, leads to heroin addiction and insanity, causes degeneration of the brain and morals, and its use requires dismissal from school and more years in prison (often without possibility of suspended sentence, probation, or parole) than many thefts, burglaries, manslaughters, and even some degrees of murder. A receptive hard-drinking Congress and state legislatures have hypocritically and self-righteously approved millions upon millions of dollars to establish and escalate this American system of unsuccessful and harmful drug "control."

Against this background the two books reviewed here assume far more importance than they ordinarily would, because in the midst of a climate of hysteria the authors dare to intelligently present some positive and balanced viewpoints on the two drugs and their users.

As more and more self-appointed experts call instant press conferences to titillate a sensation-craving public about the dangers of the (more than one hundred already known natural and synthetic) psychedelic substances, thereby rising from well-deserved ob-

scurity, it is refreshing to have *The Private Sea*. It begins with a terse summary of the potential dangers of LSD (bad trips, it needs pointing out, are increased by indiscriminate, non-specific use of unknown doses of impure black-market LSD, taken without guidance and in fear of arrest) but immediately goes on to perceptively outline a potentially greater danger to society: the good trip, leading to immanence and pantheism, the indwelling nature of God combined with the Eastern view that God equals Man equals Universe. Thus the drug movement challenges middle-class values, the churches, and modern psychology. The metaphysical quest for identity and meaning goes on, through Learyian explorations of consciousness. Since drug effects (whether from alcohol, marijuana, or LSD) depend primarily on the personality and character of the taker, interacting with the setting and the physical properties of the drug, it is highly unlikely that most Americans, secular, unintellectual, and achievement-oriented, would be turned on to mysticism and contemplation by taking LSD (or psilocybin, mescaline, or STP). Braden's book is less "acid" than it is a unique compendium on new and old theology, East and West. However, his is one of the rare non-pathological descriptions of a trip. Man's life by bread (money) alone has not been seriously threatened by conventional religion and is unlikely to be altered by the psychedelic drugs, now mainly used by Indian members of the Native American Church, relatively small numbers of middle-class youth, and those formally or informally affiliated with Leary's League for Spiritual Discovery. Selective focusing of attention and consciousness, self-deception, and a slogan, cliché-oriented mentality are not in danger, unfortunately; nor is the unexamined life of the masses about to be examined, in spite of the hopes of the author. Our institutions and leaders are not changing and in all probability mixing LBJ and LSD (as dreamt of by some psychedelicists) would result only in an escalated LBJ. The ethics of expediency and amorality of the

bureaucrat-politician are likely to remain impervious to LSD or "natural" metaphysics.

Braden properly stresses the need for a psychology of thought and an epistemology which can encompass love and conscience. As he says, panic legislation (as with marijuana) has led to drying up of (significant) research, far more drug use than before, and more harm to society through the implementation of these misguided laws.

Perhaps unfortunately few readers will immerse themselves in the author's discussions of a primary state of being, natural morality and ontological freedom, or the interesting convergences of LSD, radical Christian theology, self-actualization psychology, and Eastern philosophy. The dangers of apathy, indifference, and alienation outweigh the dangers of LSD to our society. The drug, its proponents, the related hippie phenomenon, and even its critics raise basic questions about the nature of man.

Contrary to the views in the above book, Indian hemp (cannabis, grass, weed, pot, marijuana, hashish) does not produce effects identical to LSD and in its natural pattern of use throughout the world it is sought for pleasure-giving properties (as alcohol) rather than as a psychedelic.

It is impossible to adequately review *The Marijuana Papers* as individual papers but not enough praise can be given to the editor and publishers for the demythologizing already alluded to above, and mainly for making available the essence of 90% of contemporary knowledge of the drug, information maliciously ignored and suppressed by police and politicians for decades. This encyclopedic volume will remain the basic modern reference on the subject. Its contributors constitute an illustrious list: Lindsmith, Becker, Taylor, Carstairs, Bowman, Stockings, Walton, McGlothlin, and Leary; they are creatively

blended with the La Guardia Report and literary figures from Baudelaire to Ginsberg. The blend is cool, biting, and shocking, although the selections mix large doses of pure cannabis (hashish) and ordinary marijuana. One is bound to ask: what manner of men live by ignorance alone, lying, distorting, and persecuting? Is this twentieth-century America or the Dark Ages? No greater obscenity exists than to deliberately foster drug use and persecute the users whether it be marijuana or alcohol, simply to increase one's profit or power.

To summarize the key findings of the writers: This product of the female cannabis plant which we have been brainwashed to think of a combination of arsenic, the hydrogen bomb, and Satan, is used or has been used by several million Americans and hundreds of millions in other countries for euphoria, relaxation, relief of fatigue, escape, and as a medicine. It has a relatively low potential for psychological abuse or social harmfulness and unlike drugs such as alcohol does not produce addiction or physical damage to the body. The limited association with heroin or with crime are entirely an effect of our laws, not an inherent property of the drug. Research or even rational discussion have been all but banned by vice and narcotics police and those under their influence or power. As long as most use was by left-outs and have-nots such as Negroes, Mexican-Americans, bohemians, musicians, and that most dangerous group of all, intellectuals, not served as an ideal scapegoat and smokescreen to obscure the country's going to pot and to obscure burgeoning criminality, poverty, racial discrimination, war, and an overwhelming leadership and institutional gap. It is ironic that only when "good" middle and upper class people begin using grass, does America begin to recognize the fraudulent nature of our social and legal policies on drug use and the urgent need for reform.

The potential for medical use is a further emphasis of the book. In my studies in Asia for the World Health Organization I found cannabis to be extensively used in indigenous medical

systems, and some of these uses (as well as its use for depression, poor appetite, etc.) more than justifies immediate availability for prescribing by physicians.

To discuss the key reforms needed would require another book. They should include re-defining drug use as a sociological and public health matter, and taking the user (possessor) out of the criminal law entirely. Criminal sanctions should be reserved for antisocial behavior such as drunk driving, and narcotics agencies such as the F.B.N. abolished (as recommended by the President's Commission on Narcotic and Drug Abuse in 1963) with their personnel reassigned to help deal with real crime. Regulation and selective controls of manufacture, distribution, and advertising of mind-altering drugs, combined with extensive public health education about their effects and potential dangers, would go a long way toward reducing the massive turning on with drugs in this society.

My own manifesto is that man can live a meaningful, creative, full life and be able to see the "tricking and lying going on in the world" (as Terry Southern's C.K. does with gage) without drug use but it is readily understandable why so many cannot relate or be happy without them. Let us not fear individualism, dissent and non-conformity, or, for that matter, pleasure. A switch from puritanism (Mencken: "the haunting fear that someone, somewhere may be happy") to tolerance (Mrs. Patrick Campbell: "I don't care what people do as long as they don't do it in the streets and scare the horses") will reduce our drug obsession and hopefully lead to more people, young and old, turning on to the world, tuning in to knowledge and feeling, and dropping in to reforming society.

Joel Fort, M.D.

THE POLITICS OF EXPERIENCE

by R.D. Laing. New York: Pantheon Books, 1967, Pp 138, \$4.95

Ronald Laing's writing has that quality once singled out by Artaud as the only

appropriate one for the "modern" artist—the victim at the stake, wildly signaling through the flames. Here is one of England's leading psychoanalysts, post-Sartrean existentialist, innovator in the treatment of schizophrenia, behind-the-scenes guru to numerous London hippies, writing with the accents of an angel about the chaos of our inner lives, the degradations and spoilage of our experience, the violence done to the truly human potential of me and you, "a half-crazed creature more or less adjusted to a mad world." It is gut-writing and requires gut-reading. No orderly exposition here of thesis and arguments, though Laing is quite capable of these forms. More akin to McLuhan, he approaches his subject matter—the mutual-violence-alienation that we perpetrate on one another in the name of normality and love—like a hunter stalking his prey: around and around, illuminating it from different sides, showing it in different images, caricaturing, satirizing, exaggerating, always trying to get at the underlying sense or taste of what we are doing, pushing the reader to question his assumptions, re-examine his premises. "I want you to taste me and smell me, want to be palpable, to get under your skin, to be an itch in your brain."

The first chapter, "Persons and Experience," highlights the overall situation: alienation as the norm, "the ordinary person is a shriveled, desiccated fragment of what a person can be." Our experience is destroyed by cultural imprints, our behavior is destructive. Education is repression. Violence is normality. To the average reader of the New York Times, paradoxes; to the person who has had even a glimpse beyond the veil, precious statements of intuited awareness. "Normal men have killed perhaps 100,000,000 of their fellow normal men in the last fifty years." Varieties of normal alienation, fantasy, negation, the interlocking web of our experiences of each other.

In the second chapter, "The Psychotherapeutic Experience," Laing again provokes us gently into questioning our assumptions—The Normal Doctor and the Sick Patient—to recognize that

PSYCHEDELIC REVIEW

"the therapists too, are in a world in which the inner is already split from the outer." Therapy is the attempt to re-establish human-ness, based on mutual recognition that "The Dreadful has already happened."

The Mystification of Experience: not only must we destroy experience, blind ourselves and others, we must also cover up this destruction, this blindness. "We are effectively destroying ourselves by violence masquerading as love." Family and school are illusion-manufacturing-plants, "reality" is a socially shared hallucination, "sanity" our collusive madness. "We have all been processed on Procrustean beds."

"Us and Them," is the least "meaty" chapter, being a fairly abstract analysis of two- or multi-person interaction, in terms of interlocking fields of experience.

"The Schizophrenic Experience" is probably the most exciting chapter in the book. Laing represents one pole of a dichotomy of views that splits contemporary psychiatry. The other pole is represented by Abram Hoffer and Humphry Osmond, who have argued and campaigned hard to get schizophrenia accepted as a disease with a medical cure (niacin). Laing, like Szasz, Bateson and others, would prefer to see schizophrenia out of the medical game altogether. Madness is not an illness, it's a trip. A trip on which the voyager, for good reasons, got lost. Schizophrenia is "a special strategy that a person invents in order to live in an unliveable situation." Laing's description of the political act of having someone diagnosed as a schizophrenic is gruesome. Hoffer and Osmond, with their chemical theory of schizophrenia, have undoubtedly helped people. One need only read Gregory Stefan's *In Search of Sanity*. Laing has undoubtedly helped people also; furthermore he is certainly aware of the role of biochemistry and highly sophisticated in his approach to psychedelic drugs. One may ask: why does Laing leave out of his account of schizophrenia any mention of the chemical aspect? Describing the process of "going mad," he says: "some people wittingly, some people

unwittingly, enter or are thrown into more or less total inner space and time." But how does this happen? What makes one person able to overcome the pathogenic "double bind" by leaving or laughing, and another succumb to it in madness? I suspect the reason for Laing's omission is strategic rather than theoretical. He is concerned to make us aware of the social process of "mental illness." Unlike Hoffer and Osmond he does not think defining the schizophrenic as "ill" is helping him. They do, because they believe they have found the "cure." The institutional degradation rituals associated with hospitalization as a mental patient, based on the assumption that schizophrenia is not curable, are presumably as repugnant to Hoffer and Osmond as they are to Laing.

Strategy is presumably also the reason why Laing does not mention psychedelics at all in his book, although their signatures are etched between the lines. Even the book jacket somewhat coyly admits "Laing leads us to experience the kind of emotion often linked to the taking of drugs." By avoiding explicit discussion of psychedelics, he avoids being categorized as "another book about those drugs."

The last section of the book is entitled "Bird of Paradise," and is a visionary poem, a dream of hope, nightmare memories of Glasgow medical school, glimpses of transcendent beings, stinging, bitter-sweet images of many realities, a celebration of the dance of love... "these words, atoms each containing its own world and every other world. Each a fuse to set you off... If I could turn you on, if I could drive you out of your wretched mind, if I could tell you I would let you know."

A magnificent book.

R.M.

THE USE OF LSD IN PSYCHOTHERAPY

By Harold A. Abramson. Indianapolis: Bobbs-Merrill, 1967, Pp 698, \$17.50

This huge volume contains the complete papers plus transcripts of group discussions of the 1966 Amityville conference on the therapeutic uses of

LSD. The psychiatric establishment meets in closed session to evaluate this strange product grown too big for its categories. Reports are positive but hedged with caution. The 36 papers included are very uneven in quality of work and clarity of communication. Editorial selectivity might have made the book more interesting and readable. Roughly, two forms of therapy using LSD are emerging: One, "psycholytic," European, psychoanalytically oriented, provides a series of low-dosage sessions tied to intensive therapy; the other, "psychedelic," American, more often religiously oriented, involves one massive "transcendent" experience with a high dose. About a dozen papers exemplifying both approaches are presented. Dr. Stanislas Grof presents an outstanding discussion of the psycholytic approach; at his center in Prague, "bad trips" are followed by another session as soon as tolerance permits. Some of the European psychiatrists, including Dr. H. Leuner, are finding other psychedelics—especially CZ 74 (4-hydroxy-N-diethyltryptamine) — more useful than LSD, because of the shorter (3-4 hours) duration. Dr. Abram Hoffer provides an excellent summary of the work on the treatment of alcoholism. The book also includes a brief fascinating report by Dr. John Lilly of some of the work with dolphins and LSD: these animals communicate more with each other and with humans, under the effects of LSD. In general, most of the papers reflect a marked increase in the sophistication and skill with which LSD-therapy is approached, over the somewhat crude beginnings reported in the first conference in 1960.

LSD: THE PROBLEM—SOLVING PSYCHEDELIC

By P.G. Stafford & B.H. Golightly. New York: Award Books (London: Tandem Books), 1967, Pp 288, 75¢

This paperback is an extraordinarily good summary of the present state of knowledge about psychedelics. Butressed by pre- and post-matter by Drs. Humphry Osmond, Duncan Blewett, and Stanley Krippner, it emerges as one of the strongest and most informative statements on the market. The authors have gleaned their infor-

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mation from a wide variety of published and private sources and have done an admirable job of condensation and presentation. A brief introductory chapter on the nature of the drug effects is followed by a chapter on creative problem-solving. Most of the work on therapeutic applications of LSD is surveyed, as well as preliminary data on skill acquisition and religious phenomena. A section on guiding has useful advice and a final chapter discusses present and future trends. Written in a factual yet vivid style, the book should do much to dispel some of the ignorance and fear which envelops psychedelics in a cloud of negative attitudes. A book for mothers and others.

DRUGS, MEDICAL, PSYCHOLOGICAL AND SOCIAL FACTS

By Peter Laurie, Penguin Books, 1967, Pp 174, 95¢

This little book is a competently written survey of the field of mind-changing drugs—opiates, barbiturates, stimulants, marijuana and hallucinogens—from the English point of view. Its restraint and good sense are in marked contrast to the breathless, hysterical tone of similar "drug paperbacks" in the United States. "Legalization of cannabis—as the Lancet pointed out—would offer considerable revenue in taxation. My own impression is that the Home Office would be happy to be quit of the problem—except that legalization of cannabis would be the political suicide of the incumbent Home Secretary." A book for conservative uncles.

G BOOKS RECEIVED

lightly. **Ethnopharmacologic Search for Psychoactive Drugs.** Proceedings of a Symposium held in San Francisco, Jan. 28-30, 1967. Edited by Daniel H. Efron, Bo Holmstedt and Nathan Kline. Public Health Service Publication No. 1645, U.S. Dept. of Health, Education and Welfare. Available from Superintendent of Documents, U.S. Govt. Printing Office, Washington, D.C. 20402. 468 pp. \$4.00. A very reasonably priced volume containing excellent and important papers on piper methysticum (kava), myristica fragrans (nutmeg),

South American Snuff, ayahuasca (caapi, yage), amanita muscaria (fly agaric). Contributors include R.E. Schultes, R.G. Wasson, A.T. Shulgin, Claudio Naranjo and many others.

Psychotropic Drugs and Related Compounds. Sponsored by Pharmacology Section, National Institute of Mental Health, 1967. Public Health Service Publication No. 1589, U.S. Dept. of Health, Education and Welfare. Available from Superintendent of Documents, U.S. Govt. Printing Office, Washington, D.C. 20402. 365 pp. \$2.75

This is a very useful reference volume which lists 690 different mind-altering drugs, gives their chemical structure, toxicity, human dosages, synonyms, trade names, manufacturers and distributors. 985 references are given, a 40-page index of compounds, and addresses of manufacturers.

Molecular Psychobiology. A chemical Approach to Learning and Other Behavior. By John Gaito, Ph.D. Springfield, Ill.: Charles C. Thomas, 1966, Pp 259, \$9.50

Explorations in Human Potentialities. Edited by Herbert A. Otto, Ph.D. Springfield, Ill.: Charles C. Thomas, 1966, Pp 558, \$17.00. Papers by Gardner Murphy, J. L. Moreno, J. B. Rhine, Margaret Mead, Ray Birdwhistell, Adrien Van Kaam, Willis Harman, Robert Mogar, Charlotte Selver, Frederick Perls, and many others.

Neo-American Church Catechism and Handbook. Millbrook N.Y.: Kriya Press, Sri Ram Ashram, \$3.00. Contains: "Dogmatic Pronouncements" of the Chief Boo-Hoo (Art Kleps) on LSD, marijuana, sex, Revolutionary Politics, Synchronicity and the plot/Plot, The Bombardment and Annihilation of the Plant Saturn, Divine Toad Sweat, Reformation of the New Jerusalem; Neo-American Church Gives 'Em Hell (from the East Village Other), 95-Item Test of Neo-Psychopathic Character, Chief Boo-Hoo's Senate Testimony, Complete Lists of Boo-Hoos, Cartoons.

Start your Own Religion by Timothy Leary, Ph.D. Millbrook, N.Y.: Kriya

Press, Sri Ram Ashram, \$1.00. Contains: Basic Philosophy and Purpose of the League for Spiritual Discovery, Illustrative Procedure for Formalizing a Psychedelic Religion, By-Laws of League for Spiritual Discovery, Minutes of the First Meeting of the Board of Guides, Photographs.

The Handbook of Prescription Drugs. Official Names, Prices and Sources for Patient and Doctor, by Richard Burack, M.D. New York: Pantheon Books, 1967, Pp 181, Paperback price \$1.95. "Most of the prescriptions doctors write for brand-name drugs cost more than is necessary. This book tells exactly how to obtain essentially the same drugs for less money by using the generic names."

Edgar Cayce—The Sleeping Prophet by Jess Stearn, New York: Doubleday, 1967, Pp 280, \$4.95.

Great Ideas in Information Theory, Language and Cybernetics by Jagjit Singh. New York: Dover, 1966, Pp 338, \$2.00.

The Love Book by Lenore Kandel. San Francisco: Stolen Paper Review Editions, 1966, Pp 6, \$1.00.

LSD, Man & Society ed. Richard C. DeBold and Russell C. Leaf. Wesleyan University Press, Middletown, Conn. Pp 219. \$5.00.

**PERIODICALS
 ROCK MUSIC**

The explosively flourishing field of rock has an excellent, informative, well-designed, highly articular magazine: **Crawdaddy**, which has recently (Oct. 1967) switched from quarterly to monthly. Editor is Paul Williams, writers include Richard Meltzer, Don McNeill. Contains highly philosophical record reviews. Subscription is \$5 for 12 issues, 319 Sixth Ave., New York, N.Y. 10014. Single copies 50¢. And a newspaper,

Rolling Stone, appears weekly, lists the San Francisco Chronicle's jazz and rock critic Ralph Gleason as Consulting Editor, recently featured a long rare interview with Dylan, has a

distinctive West Coast breeziness compared to Crawdaddy's East Coast intellectualism. Subscriptions are \$5.00 for six months (26 issues), from Rolling Stone, 746 Brannan Street, San Francisco, Calif. 94103. Single copies 25¢.

COMMUNITIES

The Modern Utopian is a bi-monthly magazine which reports on major activities and progress of liberal social-change agencies, intentional communities, utopian movements. A recent issue featured sections (articles or digests) on "Walden Two and Mateship," "Sons of Levi Community," "The Right Side," "The Hips Side," Music World, Experimental Church News, Conscientious Objector, Training for Intentional Community, Straight Look at Millbrook, and others. It is edited by Richard Fairfield, published at Tufts University, P.O. Box 44, Medford, Mass. 02144. Subscriptions are \$4.00 for one year. Single copies 75¢. The Modern Utopian also publishes a Directory of Communities and Churches, for \$1.00.

ECOLOGY

Feraferia is the name of an organization and of a newspaper, created, edited and illuminated by visionary-ecologist - poet - mystic - botanist Fred Adams. Its contents include "Nature Oriented Poetry and Poetic, Tribal Folk and Fearie Lore, Festival Forms, Magic, Esoteric Religions, Erotic Sytems of Spiritual Development, Ecstasy and the Vision Quest, Divinations, Enchantments, Seasonal and Regional Nature Communion, Wild-food Gathering Information, Organic Horticulture and Ecology, Nature Blending Arts and Crafts, Research into Communication Between all Forms of Life and Nature, Golden Feast Diet, Paradisal Life Styles and Social Patterns." Subscription "for one solar cycle" is \$2.00, from Feraferia, Inc.,

3737 Canyon Crest Road, Altadena, Calif. 91001. Fred Adams' drawings alone make it worth while.

RECENT LITERATURE ON MARIHUANA

SYNTHETIC MARIHUANA

Four separate projects have now succeeded in synthesizing the active principle of marihuana and have published their results:

Den, Hughes, and Smith "Total Synthesis of Δ^8 -($\Delta^1(6)$)-Tetrahydrocannabinol, a Biologically Active Constituent of Hashish (Marihuana)" J. Am. Chem. Soc. 89, 4551 (1967)

Mechoulam, Braun, and Gaoni, "A Stereospecific Synthesis of (-)- Δ^1 - and (-)- $\Delta^1(6)$ -Tetrahydrocannabinols" J. Am. Chem. Soc., 89, 4552 (1967)

Taylor, Lenard, and Shvo, "A Total Synthesis of dl- Δ^1 -Tetrahydrocannabinol, the Active Constituent of Hashish" J. Am. Chem. Soc., 87, 3273 (1965)

Petrzilka, Haefliger, Sikemeier, Ohloff, and Eschenmoser, "Synthese und Chiralitat des (-)-Cannabinols" Helv. Chim. Act., 50, 719, (1967)

Taylor, Lenard, and Shvo, "Active Constituents of Hashish. Synthesis of dl-3,4-trans-Tetrahydrocannabinol" J. Am. Chem. Soc., 88, 367 (1966)

BOOKS

Hark, Hark, the Narc. California Narcotics Laws and Criminal Procedures, by Thomas J. Sammon and Boyd E. Horner. Unicorn Pamphlet No. 2. Pp 32. (An excellent guide, written by two lawyers, to the intricacies of Cali-

fornia's narcotics laws and enforcement practices. Published as a public service by the Unicorn Book Shop, 905 Embarcadero Del Norte, Goleta, Calif. 93017. Available free, though donations welcome.)

The Book of Grass, edited by G. Andrews, and S. Vinkenoog. Anthology. London: Peter Owen, 1967

The Marihuana Papers, edited by D. Solomon. Indianapolis: Bobbs-Merrill, 1966, Pp 448, \$10.00 (reviewed in this issue)

Pot: A Handbook of Marihuana John Rosevear. New Hyde Park, N.Y.: University Books, 1967, Pp 160, \$4.95

Marihuana Myths and Realities, edited by J.L. Simmons. N. Hollywood: Brandon House, 1967, Pp 239, \$1.25. Chapters by Simmons, Boughey, Cahn, Mandel, Arnold, Oteri, McClothlin, and Cohen

Background Papers on Student Drug Involvement. United States National Student Association. Edited by Charles Hollander. Pp 162. Contributions by Allan Ginsberg, James H. Fox, Ph.D., Howard Becker, Ph.D., Joel Fort, M.D., Richard Alpert, Ph.D., William McGlothlin, Ph.D., and others. Available from: Publications Department, USNSA, 2115 S Street, N.W., Washington, D.C. 20008.

PERIODICAL ARTICLES

An excellent series of four articles on marihuana by David Sanford appeared in April, June and July of 1967, in **The New Republic**; and are available from The New Republic Reprint Service, 1244 19th Street, N.W., Washington, D.C. 20036

The **LIFE** magazine article "Marihuana: Millions of Turned-On Users," appeared in the July 7th, 1967, issue.



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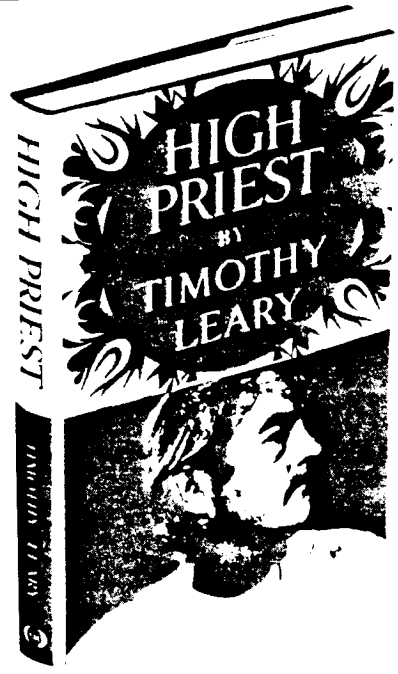
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1967, issue.



**"In the beginning was the TURN ON.
The flash, the illumination. The electric trip.
The sudden bolt of energy that starts the
new system. The TURN ON was God. All things
were made from the TURN ON and
without him was not any thing made."**

The high priest of the psychedelic religion takes his first book-length trip.

LEARY SPEAKS:

I first went out of my mind in Cuernavaca, Mexico, August 1960. I ate seven of the Sacred Mushrooms of Mexico and discovered that beauty, revelation, sensuality, the cellular history of the past, God, the Devil — all lie inside my body, outside my mind.

The success of the psychedelic movement was guaranteed. The energies released by the sacred drugs were too great to suppress. We began to see it as a question of time. The movement would grow like everything organic grows, cell by cell. Friends turning-on friends. Husbands turning-on wives. Teachers turning-on students . . .

The raw, electric shuddering sensitivity of the psychedelic experience! We were dealing with a powerful aphrodisiac, probably the most powerful sexual releaser known to man . . . The psychedelic drugs exploded sex right off the pages of *Playboy* into new dimensions of union that my mind wasn't ready to handle . . . I was too much an Irish Catholic, too prudish to deal with it. Too Western Christian to realize

that God and Sex are one, that God for a man is woman, that the direct path to God is through the divine union of male-female.

I did not wander barefoot forth from Mexico preaching the word. I flew back to Harvard University and started a research project.

The slow invisible process of becoming a guru, a holy man, had begun. It would be four years before I could openly admit it. Accept my divinity, my divine election.

The present generation under the age of 25 is the wisest and holiest generation that the human race has ever seen. And, by God, instead of lamenting, derogating and imprisoning them, we should support them, listen to them, and turn on with them.

In a most extraordinary and compelling autobiographical book, Timothy Leary writes his bible of the religion he founded, and chronicles in fascinating detail its discovery and early practice, its prayers and invocations, its gospels and holy sacraments. His book is a sacred testament to LSD and its miracles. He takes the reader on 16 separate trips as he unfolds the story of his escape from the conventional world of Harvard University to discover new and unmeasured levels of consciousness. He describes his disciples, their conversions and religious ecstasies. The reader meets William Burroughs, Allen Ginsberg, Arthur Koestler, Aldous Huxley, and many other prophets, oracles, followers, and converts — on

campus, on the streets, in the underground all across America.

Leary tells the parables of his arrests, his trial, the hysteria in the press and legislation about LSD and the other vision-producing drugs. He illuminates the medical and legal aspects, the researches, his famous "turn on" experiments among convicts in a psychiatric prison.

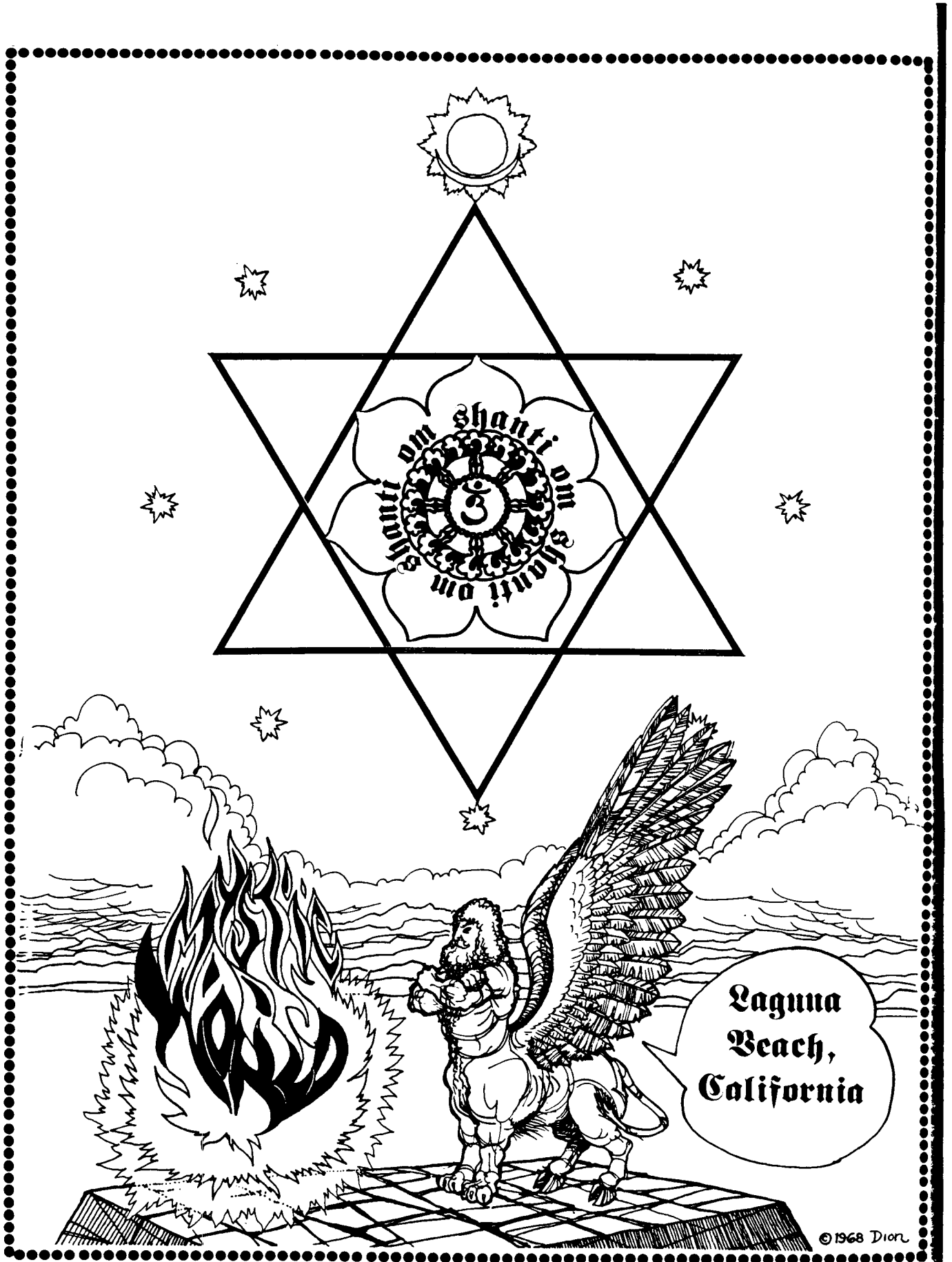
HIGH PRIEST is a turn-on book. It is required reading for anyone interested in psychedelics — devotees, doctors, psychiatrists, clinical experimenters. 32 pages of extraordinary illustrations provide a vivid hallucinatory trip. \$7.95 at bookstores, or direct from the publisher.

TIMOTHY LEARY

HIGH PRIEST

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