

DR. OSCAR JANIGER'S PIONEERING LSD RESEARCH A FORTY YEAR FOLLOW-UP

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An exclusive report on the findings of a

major experiment coordinated and funded by MAPS.

**The paper itself is accompanied by personal statements
from Dr. Janiger, the interviewer and the analytical transcriber.**

News articles discussing this project

have already appeared in the LA Weekly

(www.laweekly.com/ink/98/32/news-whalen.shtml),

several other weekly papers around

the United States, and the Utne Reader.

**Personal Statement
by Dr. Oscar Janiger**

IT WAS IN 1954 that I had my first experience with LSD. Soon afterwards, I began my inquiries into its effects. My initial contact with the drug was so remarkable that it moved me to spend the next 45 years of my life in studying it.

While it is gratifying that there is continued interest in my studies, I am saddened to say that little progress has been made in clarifying and extending some of the initial findings. This is not entirely surprising. As I conducted my investigations in the face of growing controversy, I realized that a shutdown was inevitable. As a result, I decided to winnow as much information as presented itself over a wide range of topics. My objective was to gather preliminary data and impressions that would highlight promising areas of research, hoping that any fruitful leads might be explored in the future by other workers when the foreseeable reaction against psychedelic research would have run its course. My approach was like the fabled fox rather than the hedgehog in that I chose to examine a wide terrain rather than burrow down deep just into one area. Little did I realize that the political reaction against LSD research would persist up to the turn of the century.

My primary area of investigation was a large naturalistic study of the phenomenological effects of LSD in a representative sample of human volunteers. I took pains to minimize the amount of interference from outside sources that would tend to influence the subjects. My interest was focused more on an attempt to define the nature of the LSD experience as a special state of consciousness than on any specific content. For example, specific characteristics can be assigned to different conscious states such as sleep, wakefulness, hypnotic trances, coma, etc.

OUR RESEARCH was conducted in the following manner. The subjects were requested to take notes and compose a detailed report of their LSD experience as soon as they were able to do so. These reports were analyzed for content and significant elements were extracted and placed on index cards. New reports resulted in the creation of additional cards only for experiences not previously reported. Each subject was asked to sort the cards created at that time by placing them in one of three

categories; the experience is identical to my own, has some features of my own, has no similarities to my own. The process was repeated with each respective subject until the data had become so voluminous that we were only capable of processing it for about the first 100 subjects. Unfortunately, I began this research before computers were in widespread use.

All data emerged naturally from the reports. In this way, I began to derive the nature of the essential LSD state as opposed

to the widely varying and individualistic content of that state which reflected the subject's personal life experiences. There were a relatively small number of cards in the first group representing the commonality of experience. Some examples of these common, intrinsic elements were that everything seemed connected; time was not perceived normally; the experience came in waves; there was an intensification of color; and music had a special significance. The world according to LSD is an idiosyncratic one. The nature of the individual drug experience reflects the basic psychophysiological action of the substance interacting with the total life experience that one brings to it. Understanding the relative contributions that are made by the drug or by the individual is a fascinating and formidable challenge, like attempting to distinguish a dream from the dreamer. My evolving understanding of the core nature of the LSD experience is that it does

adept working under the influence of LSD. The artists somehow found a way to draw inspiration from the LSD state for the creation of art and were able to increasingly control the physical expression of their subjective vision. The artists who were most able to represent in their art their subjective LSD experiences were those who had most developed their technical abilities, so that they had the rigor to bring back to consensual reality their artistic vision which one artist stated, "was more creative than a dream, more original than a madman."

I am reminded of conversations that took place around 1958-59 among a small group including Aldous Huxley, Gerald Heard, Alan Watts, Anaïs Nin, Sidney Cohen, Keith Ditman, Betty Eisner, and others who had early exposure to LSD. Our discussion led to the question of how psychedelics might find a place in our culture that could be socially accepted and institutionalized. We thought that the ritual

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not necessarily favor any particular psychotherapeutic, mystical or spiritual notions, nor does it necessarily involve any specific group of systematized ideas. LSD seems to produce a marked a shift in our fundamental perceptual frame of reference, upon which rests our ongoing concept of reality. This change in our habitual way of being in the world may lead to a profound psychic shake-up and may provide startling insights into the nature of reality and into how our personal existence is fashioned.

The second largest study I conducted involved an examination in artists of the contribution that LSD could play in the creative process. The artists reported that in their LSD experiences they had gained the ability to generate original insights, fresh perspectives and novel, creative ways to express themselves through their art. One artist reported that he "broke the tyranny of form." To my surprise, I found that there was a substantial learning curve and that artists gradually become more

created by the Greeks at Eleusis could serve as an instructive model. For the ancient Greeks, participation in the ritual was voluntary, open to men, women and slaves, and said to be for many the most profound experience of their lives. The psychedelic experience at Eleusis was administered by guides for two thousand years in a socially sanctioned, supervised context. Perhaps such a context can be recreated in the new millennium in a manner suitable for our culture.

Even 45 years after I started my studies, no scientific consensus has emerged clearly defining the core elements of the LSD state. Nor has research illuminated the specific mechanisms by which LSD can be used to stimulate creativity. It is my hope that this follow-up study to my research will help in some small way to encourage and make possible further research with LSD so that my initial explorations are a beginning and not an end. •

AFTER THE DISCOVERY of the psychoactive effects of d-lysergic acid diethylamide (LSD) by Albert Hofmann in 1943 (Hofmann, 1980), physicians such as Humphry Osmond (Osmond & Smythies, 1952), Sidney Cohen (1960; 1964), Sanford Unger (1963), Abram Hoffer, (1965), Walter Pahnke (1969; 1970) and Stanislav Grof (1980) conducted and popularized research describing the effects of LSD and other psychedelics on perception, cognition, emotion, and behavior. In their comprehensive review of psychedelic research, *Psychedelic Drugs Reconsidered* (1997), Grinspoon and Bakalar report:

Many people remember vaguely that LSD and other psychedelic drugs were once used experimentally in psychiatry, but few realize how much and how long they were used. Between 1950 and the mid-1960s there were more than a thousand clinical papers discussing 40,000 patients, several dozen books, and six international conferences on psychedelic drug therapy. (p.192)

Today, psychedelic drugs cannot be used in clinical practice but only in research, and only under a special license from the federal government. A few institutions still have the necessary licenses; but lack of money, restrictive rules, and public and professional hostility have made it almost impossible to continue the work. In rejecting the absurd notion that psychedelic drugs are a panacea, we have chosen to treat them as entirely worthless and extraordinarily dangerous. (p.232)

Dr. Oscar Janiger's Pioneering **LSD** Research: A Forty Year Follow-Up

Rick Doblin, Jerry Beck, Ph.D., Kate Obata, and Maureen Alioto

THE FOLLOWING REPORT constitutes a forty-year+ follow-up interview study of 45 people who participated in the LSD research of Dr. Oscar Janiger, a psychiatrist who conducted studies in Los Angeles. Beginning in 1954 and continuing until 1962, Janiger conducted his own examinations of the effects of LSD. In an agreement with Sandoz Laboratories, which held the patent on LSD and manufactured it, Janiger administered a monitored dosage of Sandoz LSD to roughly 900 subjects, as part of a naturalistic experiment intended to illuminate the phenomenological nature of the LSD experience. The standard dose of LSD administered was 2 micrograms per kilogram of body weight administered orally; a moderate dose that would produce a powerful effect but is less

than what was generally used in a psychedelic psychotherapeutic context. Subsequent to their LSD experience, subjects wrote a personal narrative. A month later, they completed questionnaires and compared descriptions of their experience with that of other subjects. Much of Janiger's data went unanalyzed, and only limited results were published (Janiger, 1960; Janiger & de Rios, 1989, McGlothlin et al., 1969; 1970; 1971).

The primary goal of this follow-up study is to describe the long-term effects of study respondents' LSD experiences, both beneficial and harmful. We will begin with a brief discussion of study methodology, then summarize the primary findings and conclusions which emerged from the interviews. Despite the fact that new clinical research with LSD is not at present occurring anywhere in the world, new questions can still be asked about old research. Some forty years hence, what do those who initially created and participated in

Note: Quotations from respondents are followed by respondent number and page number in the interview transcript. Quotations from Dr. Janiger are followed only by page number in the interview transcript.

original LSD research from the 1950s recall? How do respondents view their LSD experience in that early research? Do they now note any positive or adverse reactions? In other words, in the much larger context of their lives, how do they view their participation in this early research?

This follow-up study is important for two reasons. First, it constitutes an unprecedented long term view into the self-reported influence of LSD experiences in the lives of the participants in Janiger's research. Second, this work—in concert with other MAPS-assisted studies—serves, at least partially, to renew the field of psychedelic research. This study is the third in a series of long-term follow-up studies of classic psychedelic research projects conducted by a co-author of this paper (Doblin, 1991; Doblin, 1998).

Methods: Subjects

Given the exceptional length of time that had elapsed between the initial experimentation and the current follow-up research, longer than in any other psychedelic follow-up study of which we are aware, contact had been lost between virtually all of the subjects and Janiger. Nevertheless, Janiger was able to refer for follow-up interviews twelve subjects with whom he had stayed in contact. These subjects cannot be considered a random selection from among those who participated in the study. They presumably valued both their LSD experience and their relationship with Janiger and could compose a sample of subjects who had a more positive experience than the average.

To re-initiate contact with other subjects, a private investigator hired by MAPS was able to locate nine of the subjects interviewed for the follow-up study. The investigator used information such as names, addresses, ages and professions noted in the original case report forms from roughly forty years earlier that had been saved by Janiger in his files. The interviewer herself located the additional twenty-four subjects in the follow-up study primarily through the use of Internet white pages. The subjects located through her search were restricted to those living in the general vicinity of Los Angeles to make it possible for in-person interviews to be conducted. The subjects located by the private investigator and the interviewer compose over 73% of the subjects in the follow-up experiment and are quite likely to represent a random selection of the subjects in the original experiment.

Following successful location of subjects, a member of the research team contacted them and requested an interview. Only one subject who was located refused to be interviewed. This subject gave no indication as to whether his experience was positive or negative. In all, 47 subjects as well as Janiger agreed to participate in taped interviews. One interview tape was returned blank and one could not be transcribed for technical reasons. Including Janiger, 46 interviews were conducted and analyzed. The average age at interview was 70.3 years with a range of 61 to 85. Of the

45 respondents, 34 were males and 11 females. At the time of the original study, subjects were chosen to represent a wide demographic variety and included housewives, clerical assistants, a Deputy Marshall, attorneys, counselors, engineers, medical personnel, dentists and physicians. Highly represented in this group were professional artists. All respondents who agreed to be interviewed for the follow-up study were promised anonymity. However, some were willing to have their real names used in the final report. Where names are used, they are genuine.

Data collection and Analysis

Once the respondent gave written informed consent, audiotaping of the interview began. One interviewer conducted all the interviews, which lasted between 30 minutes and one hour or longer. Participants were informed that they could end the interview at any time. These interviews were transcribed and formed the basis for data analysis.

The interview questions consisted of a broad semistructured instrument devised to determine people's perceptions of their LSD experience in the context of Janiger's research and its consequences for their lives over a roughly forty year period. The data was then sent for "analytical transcription." Analytical transcription is defined by simultaneous data analysis and transcription. The transcriber provides a brief analysis of the emerging data, efficiently alerting other researchers to important data issues such as confirming or disconfirming evidence regarding hypotheses.

After data was transcribed, it was analyzed using the constant comparative method arising from the grounded theoretical approach (Glaser & Strauss, 1967; Strauss & Corbin, 1990). This method is designed to allow assertions to emerge and evolve as data are compared, ultimately resulting in findings "grounded" in data. Including the analytical transcriber, two researchers independently analyzed all data by constantly comparing statements within and between interviews. In this process they determined similar or dissimilar respondent statements about beliefs and behaviors regarding their LSD experiences. Through categorizations of such statements, researchers gained an understanding of the subjects' LSD experiences and perceived effects.

Findings Part 1:

Context(s) of the original research

In any follow-up research for which the elapsed time extends from the 1950s to 1997-98, a key factor is establishing the context of the original study. Several factors, here shaped in the form of questions, emerged in the data as being relevant to describing the study context. How did subjects come to participate? What kinds of people participated? What was the nature of the information they were presented with before their participation?

Janiger's interview also provides essential data as to the study itself as well as other ongoing research at the time, thereby delineating key context(s) for this study. The

following contextual information is interesting in and of itself, and it is important because it allows us to situate our current respondents in the original study context.

How people came to the research

In concert with most people describing their study participation, this respondent explains how he came to participate in the study with Janiger (I=Interviewer, R=Respondent):

R: Actually, Oz [Janiger] was a teacher at the Osteopathic College. One day he invited Aldous Huxley to give a lecture on LSD. It was right after *The Doors of Perception* had just been published. He asked me if I was interested. I came, and he was talking about his LSD experience. Afterwards, Oscar indicated that he was going to apply for a grant, and I told him I'd like to be a guinea pig. And that's how it all got started.

I: How did you know Oscar?

R: I was in therapy with Oscar. [#005, p.1]

Some respondents described their study participation as originating through word of mouth from friends:

I: How did you first hear about the LSD experiment?

R: P.L. was working for Dr. Janiger. She was a friend of ours and she told us about it.

I: And what did you know about psychedelics or LSD before?

R: Oh, I'd heard vaguely that there were some drugs that altered one's state of mind. But, I didn't have any specific information except what P. told us. She said that Janiger was conducting a series of investigations, and that we might be interested to participate. So, that's about all we knew. [#027, p.1]

And one respondent couldn't remember but thought perhaps he had read an article about the study:

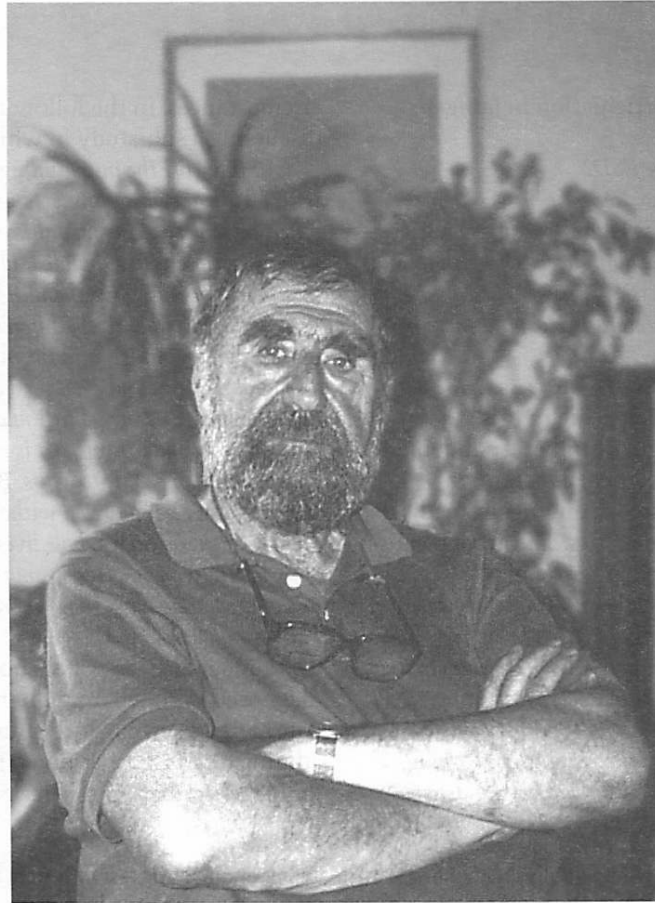
I: How did you first hear about the original study?

R: It's difficult to remember. It's been so long. But, I must have read it somewhere, probably in the local paper. Something about what he was doing, or what he was attempting to do with LSD. I saw something in there, it must have said something in there about how it could conceivably even help someone who stuttered.

I: Help your stutter?

R: Yeah.

I: And so, you took it thinking it might help your stutter?



Ed Spiegel, #004

My experience was to see myself as terribly infinitesimally small and insignificant, and also incredibly grand. ...I would say that the LSD began a process. Or the LSD was itself a continuation of the process, an intense acceleration of whatever process I was going through towards individuation, as Jung would say.

something out... Namely that the people who had had the experience would bring people [to whom they talked about their experience]. So, we got them through them. We also got them through UCI [University of California - Irvine] for example. And some of them were students in my class. [pp.2-3]

Later in the interview Janiger states that there was no solicitation for study subjects:

I: How did they come to you? Did they come to you, or did you approach them?

R: Oh, they came to me. We didn't solicit anybody!

I: They came to you?

R: I didn't solicit a single person in that study. They came to me! I made it a point. For one thing, I didn't have to because we had so many. At the end we were busy turning them down, more than anything else. [p.11-12]

Approximately 25% of the study respondents connected at least one of their experimental LSD ingestions with several psychologists gathering data for Janiger: either Robert Davidson, Murray Korngold or Art Janoff. All were clinical psychologists who needed Janiger to administer the drug to their patients, as Janiger had an M.D. In exchange, they would offer the subject data to Janiger for his study. One respondent reported participating in an LSD study

R: Right. [#026, p.1]

From this data, we see that respondents discussed different ways in which they came to participate in the original study. This included being in counseling with Janiger or one of his colleagues, finding out about the research through word of mouth and perhaps by responding to news reports. This evidence is supported by the independent interview with Janiger:

I: So some were patients? Some were friends?

R: Some were patients, some were friends. The other people were through word of mouth, through talking to people. It was a mysterious process. We issued no call for volunteers, per se. People would call regularly and say, 'We understand you're doing some experiments with LSD and we wonder if you have any room? We'd like to get on the list.' And before long we had hundreds of people calling. I don't know where they came from, to tell you the truth. Later, we put

with Sidney Cohen prior to his participation in Janiger's research:

I: *So how much later did you take LSD?*

R: *Well, it must have been around 1953 or '4.*

I: *[surprised] Nineteen fifty-three? Four? That was pretty early! So you heard Sidney Cohen was doing research with it, and you volunteered to be one of his subjects?*

R: *Yeah. He was doing it at the Veterans Hospital there in Brentwood. [#033, p.2]*

Who participated in the Janiger Research?

The inclusion criteria for participating in this study were broad. At the time of the original study respondents reported working as housewives, clerical assistants, a Deputy Marshall, attorneys, counselors, engineers, medical personnel, dentists, physicians and artists. The artists were represented more than the others. Janiger reports:

R: *The artists were especially exceptional! They told each other, and before long we had hundreds of artists. Well, we couldn't use them all... the artists, I suppose, were so enamored and so interested in the experience that they were recruiting each other. [p.3-4]*

R: *Our criteria for the artists were they had to be working, professional artists. They were not Sunday painters. An artist*

circumstances. In the following passage, we find Janiger discussing a sub-study in which LSD was used with twins:

R: *[One of] the outstanding sub-studies that we had was with identical twins of nineteen years of age. They never left each other, were very close, just alike in mannerisms; what you'd expect from very closely tied, bonded, identical twins. We put them each in different rooms, gave them the equivalent amount of LSD, and they both reacted entirely differently to the drug. One was withdrawn and quiet, and the other was very active and explosive, and talking, and even peed on the floor... A few things we didn't expect. But the point I'm certainly making is they were different. The important part is that after the experiment they both went their separate ways. Before that, they both vowed that they wouldn't get married without the other one, they wouldn't go here or there, their whole lives were intertwined. After the experiment, we got letters from them, following up, saying that one of them took a job somewhere else. In short, their lives took on individual paths. [p.3]*

Janiger also describes sub-studies related to people diagnosed with what might, in the context of the 1950s, be considered psychiatric dysfunction. He subsequently administered LSD and noted the behavioral changes. Janiger describes one such case:

Some forty years hence, what do those who initially created and participated in original LSD research from the 1950s recall? Do they now note any

meant an artist! Somebody who was working as a professional artist. The head of an art department, or the head of a studio, and so on, or a salon artist who drew and painted. [p.11-12]

A handful of subjects in the original experiment were children of adult subjects, or children of adults very familiar with the research. The children all participated in the research with the consent of their parents. None of the children who participated were located for the follow-up.

I: *There were some children in this?*

R: *Yes, that's right. The thing was to look at the demographics. We tried to get as wide a distribution as possible, by age, by education. So we did have studies of children. We had about five or six children between the ages of about six or seven and older. Then we had some older people. I particularly wanted ministers, rabbis, that kind of thing. I think we had one nun! I don't remember. We had religious people, because it [the LSD experience] was thought to be religious. And then, of course, we had the notables—the fancy ones, the movie picture ones. And the rich ones, and the notable ones.*

I: *Were they already patients of yours?*

R: *No. They were mostly acquaintances of other people. [p.11]*

Sub-studies

Janiger describes several sub-studies and perceived outcomes related to those sub-studies:

I: *You had a lot of little sub-studies?*

R: *Oh, yes! We had about five. [p.3]*

Janiger was seeking to determine the effects of LSD on a variety of different kinds of people in a variety of different

R: *We gave a man very small doses of LSD for a year. He was a fireman, very socially retarded. Lovely man, but he was quiet and so socially maladapted that he almost never talked at all. He was very self-conscious, he was known in the fire station as Mr. Negative or something, signifying his complete absence from social activity. The drug changed him enormously. By the end of the year he was outgoing, his expressions and behavior were that of a socially adept man. He was really amazing! Underneath, he was not that abnormal. He was just excessively shy and self-conscious. And there was nothing remarkable about his background. He had his tendency, but the LSD certainly helped him on that one. [p.3]*

The sub-studies largely focused on the administration of LSD to individual subjects. One notable exception occurred when Janiger administered LSD to a group of medical students who were gathered together and were simultaneously under the influence of LSD.

I: *You had group studies?*

R: *The group was medical students, in one instance. We tried to monitor their interaction under the drug. There was a kind of a group dynamic test that we gave, with a statistician. One of the interesting things that I suggested was to play a game of cards. They were going to play poker, because everybody knew poker... they played and after a while it was chaos! They couldn't play at all. They were altogether enamored, saying, 'Did you ever see anything like this?' [laughs] One had been looking at the queen of spades, and get lost in it. So, it was clear to me that a group activity under LSD was very difficult to maintain. Which is very much like the way you see things in mental hospitals. You can get no coordination. Everybody's lost in their own reflections, their*

own reveries... and that is why you never hear of a coordinated breakout from a mental hospital. [p.5-6]

In another observational sub-study, the context was not the same kind of thinking involved in task oriented behavior, such as the linear thinking involved in a poker game. Rather, Janiger worked with artists where the goal could be a creative or more emotional one, creating art. In this extended story Janiger describes his "favorite" sub-study:

I: So, then you did the creativity study? Which was the largest sub-experiment?

R: Oh, that was my most favorite of all. The one with the artists. That was the most fun. During the big experiment, about the fifteenth or twentieth person was an artist. They came in from every direction! This guy was an artist, and during the experiment he said to me, 'I want to paint something.' Well, I was totally taken by surprise. For one thing, I didn't know that anyone could paint under LSD. And since he had a standard dose, [two micrograms per kilo] along with everybody else, I assumed that he would have a reasonable amount of incoordination. But, no. He said, 'No, I want to paint.' His training must have allowed him some ability to keep control, even under the acid. I happened to have a Kachina doll—by accident, it was just that I had been interested in Kachina dolls—so I took it down and I showed it to

physiology of pain blocking. This study was examining whether LSD could act like a dissociative anesthetic:

R: For example, we took him to this man who was a professor of dentistry at UCLA, who extracted his tooth. He didn't use any anesthesia. And the subject had no pain. The dentist said later that he was astonished because he had touched the man's nerve with his instrument and he didn't respond. He said it was the only time he'd ever seen that a person was able to tolerate that, when there was no anesthesia.

I: How large of a dose did he get?

R: About a thousand micrograms. [pp.3-4]

In several other sub-studies, we see that Janiger was looking to block the uptake of LSD, in order to better understand its mechanism of action:

R: And then we did another one on blocking LSD. We loaded the subject with different substances to see if we could block the action of the LSD. We failed in a number of cases, but two outstanding cases were that high doses of niacin blocked LSD and—this was a surprise—high doses of progesterone were a buffer against LSD.

I: Large doses of niacin blocked LSD?

R: Large doses, yes. I think a thousand or two thousand milligrams. [p.7]

positive or adverse reactions? In other words in the much larger context of their lives, how do they view their participation in this early research?

him. He went right to town! He had some stuff in his briefcase, and he started to do some painting, a drawing of the thing. And when it was over he was so taken by the experience, such that I've never seen, he said, 'Every artist should have this experience!' ...

I: Did you arrive at any personal conclusions?

R: Yes. This artist said that he was going to tell everybody in town, which he did. I think he was a teacher at one of the art schools. Well, we got flooded with artists, and some very good ones, well known artists. They came in droves. I had to make a decision; they were going to flood out my demographic study. So, I made a sub-project with artists, and built another room that was really lovely. I bought an easel, and had everything just like an artist's studio. It was really a nice thing. And they came there and did everything the others did, except they were in a studio. Their objective was to render the doll when they first came and hadn't taken the drug yet. Then they went under the drug and rendered the doll again. They were only permitted one deviation: they could use whatever medium that was comfortable for them. That was up to them, [the medium] was the only thing that was optional.

About two or three hours later, or more—some people would be painting until the evening. They just wouldn't stop—when they finished, they would [give their] impression; a sheaf of their statements about what they felt, what they thought of it... I would say ninety-nine percent, if not all of them were positive! Ninety-nine percent expressed the notion that this was an extraordinary, valuable tool for learning about art and the way one learns about painting or drawing. Almost all personally agreed they would take it again. [pp.10-11]

Janiger also describes a sub-study related to the psycho-

To summarize, the context of Janiger's research was demarcated by two themes; (1) A wide variety of study respondents, and (2) different kinds of sub-studies. Regarding the first theme, subjects representing a wide variety of professions, especially artists, participated in the research. They reported coming to participate as a result of being referred from counseling with Janiger or one of his colleagues, or word of mouth. Regarding the latter theme, Janiger's LSD clinical research included individual and group sub-studies in the psychological as well as psychophysiological realms. This work included the exploration of LSD from several perspectives: catalyst for creativity, group dynamic behavioral observation, pain blockage, mechanisms of action, therapeutic adjunct.

Findings Part 2: Conducting the research and participant experiences

In Part 2, respondents provide evidence of the interpersonal dimension of how Janiger administered his research and how they recall their participation in it. This illuminating passage from Janiger summarizes the nature of the research perspective at the time of the study:

Now, mind you—and this is what's so important, I think, more than anything else—we had no preconceived idea. In other words, we didn't editorialize any of this. Whatever I learned, they told me—I didn't tell them! I didn't tell the artists what to say, I didn't tell them what to do or how to behave; they told me. I can say with complete conviction that every study I've ever done has been without a bias of trying to indoctrinate the person who was doing it. I had no idea... to us in 1954, it was a tabula rasa, it

was a clean slate. I had no idea what these people would want to tell me. [pp.9-10]

While here Janiger is addressing artists, from our analyses the main theme of the social context of this research was that the knowledge of the LSD experience and its impact was a "tabula rasa." Consequently, for "normals," the subject of Janiger's main naturalistic phenomenological research, the goal was to listen to what "these people would want to tell me" and observe.

Study inclusion/exclusion criteria

In his interview, Janiger notes several factors for inclusion/exclusion in the study:

I: What were your inclusion criteria?

R: Well, we didn't want any frank psychos, obviously. No liver trouble or heart trouble [or kidney trouble]... We didn't rule out people who had allergies. But people who had serious illnesses, or could have serious illnesses, or had episodes of them in the past we would rule out. I didn't want anyone, for example, with epilepsy. I wouldn't take people who had had severe depressions. That would be a whole different group of people. That was true for Korngold's and Davidson's [subjects]. They all had to funnel through the original processing, and then they went to their respective places. [p.17]

Here, Janiger clarifies that this was to be an observational study, and although there might be a therapeutic benefit, the purpose of the research study was clearly not therapeutic:

I: What if somebody was coming to you for therapy?

R: I didn't take anybody for that purpose.

I: For that purpose?

R: This was not represented as a therapeutic experience. There were people in therapy, they'd ask me [about it], I said, "It's up to you. Whatever you get out of it, you get out of it." I would not designate it. I didn't tell them it was for anything. [pp.17-19]

In concert with the standards in place in the 1950s, a short written statement called the "Authorization for Experimentation" was signed by all subjects in the study. Outside of brief conversations with the researchers and discussions with other subjects, little was disclosed to them before the study began so as not to influence their experience. In research conducted today, subjects participating in studies are provided with a very detailed written informed consent form that they must sign that describes the full range of experiences they might have and all the known risks and negative side-effects they might incur.

The study setting(s)

When discussing the study setting with respondents, the evidence revealed that most sessions took place in Janiger's office:

R: It would be at his office...

I: So it was like a home?

R: It was like a home. It was a very nice setting where you could sit up, or walk around, do whatever you wanted to do. But, you were in that room. And it wasn't a bad room. Light filtered in and it was conducive to having a good experience. I can't talk for anyone else because whatever someone else wants to do is their

own prerogative. [#009, p.25]

According to Janiger, there were several different settings in his office:

R: I had several settings. They could choose the one with the living room and the garden. They could choose the garden and stay in the garden if they wanted, and they were the ones who decided. The artists, of course, were in the studio. [p.16]

In this passage, Janiger describes how study colleagues upon several occasions added elements that they thought might prove particularly meaningful to subjects.

I: I understand that your methodology was a little different than Murray Korngold's? And also, Robert Davidson's was a little different?

R: Nobody administered the drug but me.

I: Right. But as far as sitting through the experience, Robert Davidson would always play people classical music?

R: Yes, he would play music... But, yes. They were treated a little differently. [p.16]

In certain circumstances, the study setting took place outside of an office. A psychologist who gathered data for Janiger described the setting he established:

I: What about the setting? You wanted to make sure they were comfortable, right?

R: Yes. I was really relying on my own experience, which was to just be out in the world and in nature. And listen to music or just experience what was going around in your neighborhood, so to speak. Patients would come to my office and then we'd go down to Oz's office and take the acid. Then I'd spend the day with them. Go drive somewhere, or talk or walk; go to their house, or have lunch. [#006, p.11]

In the following passage the respondent, a professional scuba diver, reports participating in the study in a most unusual location:

R: I had taken it one time under supervision with my complete diving gear, and I was lying underneath the water on the bottom of a swimming pool. Just watching the patterns of the filtered water circulating, you know, on the surface. I was the only one in the pool. And this was, oh, gosh, this must have been in '57. That was really something! And listening to my breathing... [#014, p.9]

We also find descriptions of different geographical locations:

I: So their Palm Springs place [Janiger's] was kind of aside from where they usually lived at times?

R: His Palm Springs place? Yes, he had a house in town. Palm Springs was strictly the desert house. And we went there because it was secluded, very private, great atmosphere. He told me to bring along my favorite music. [#015, p.5]

As the research evolved, so too did the enhancement of the setting. In the following passage, one subject describes two different settings for two different experiences:

R: My impression was it would have probably been one of the warm months because I remember we took it at the office. [laughs] And then I drove home. That was weird. That was fun, though.

I: If you had to pick a year, if it was '58 or '59, which one of them would it be?

R: '59. Give or take, I don't know. One time we did it at the office and one time we did it up at the cabin in Big Arrowhead. [#018, p.14-15]

The data regarding the setting indicates that most of the experiences took place in Janiger's offices with a range of supervised settings within the offices that included listening to music, the availability of art materials, or strolling through a garden. Some experiences took place outside of these office settings.

Dose and route of administration

In the following passage, Janiger describes administering a standard dosage of LSD to study subjects:

I: How much were they typically given?

R: They were given two micrograms per kilo of body weight. That was what we arrived at.

I: And they all had sitters?

R: Yes.

I: What were the rules?

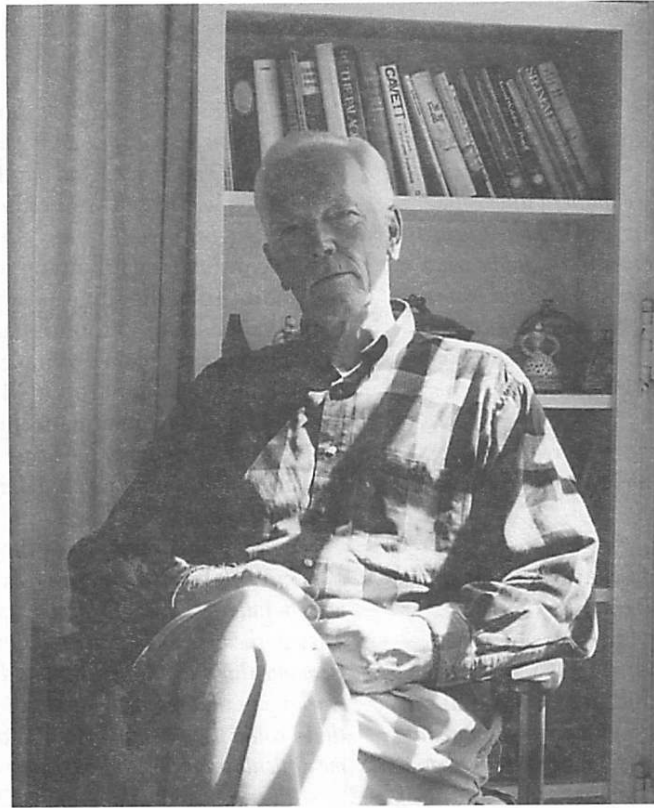
R: No rules.

I: No rules?

R: They could do anything they wanted. [p.16]

The amount of LSD generally administered in this experiment was 2 micrograms per kilogram of body weight given orally. Only two subjects reported that their LSD was administered by injection (#024, #012). The highest dose reported by any subject (#024) was an injection of 500 micrograms. The highest dose Janiger reported administering was 1000 micrograms to a subject (not located for this follow-up study), who participated in the pain reduction sub-study discussed above.

The generally administered dose schedule of 2 micrograms per kilogram resulted in the subjects receiving a moderate sized dose that was just a little less than one microgram per pound. For example, a person weighing 140 lbs would receive 127 micrograms while a person weighing 200 lbs would receive 182 micrograms. The dose generally used in psychedelic psychotherapeutic contexts was 250-400 micrograms. The average dose of LSD sold today on the street is in the range of 60-80 micrograms. Clearly, subjects received a dose of LSD sufficient to catalyze a profound reaction.



Ernest Pipes, Jr. #025

LSD triggered what has been a subsequent thirty-five year study in human consciousness. That has been the field in which I have done my work... As a minister I write a seven or eight page essay every week to make a sermon. I'm sure that the consciousness out of which I write has been broadened by this little experience of mine.

Memory of the experience

In conducting the interviews, we were struck by the remarkable fact that all respondents claimed to remember vividly at least some aspects of their LSD experience from four decades before. The following passage is from a subject whose memory for the experience was more complete than most of the subjects:

I: What do you remember about the experiment itself?

R: Well, I remember everything about it. There's a community of about twenty or thirty people that, they were the only people then, sort of in the world, that I knew about! There may have been some in England, who did that experiment in England. But, other than that, these were people who were all talking to each other about a kind of an experience which no one else

dreamed of! I mean that literally. The extent of experience that people could talk about was their waking, and their sleeping experience. The third category of a dramatic hallucinatory experience was not in the vocabulary of anyone. Nobody was even aware that it was in the repertoire! [#002, p.13]

This respondent also illustrates a critical point; the respondents had no precedent in their vocabulary for describing the subjective effects of LSD.

Positive descriptions

All but one of the respondents felt that taking LSD was, on balance, a positive experience. Positive affective descriptions related to the senses—primarily visual, auditory and tactual—were mentioned most frequently. Quite typically, respondents linked some sensory element with their positive interpretation of that experience. In this case, a focal point was music:

R: Janiger let you bring anything you wanted. I was going to bring my phonograph and listen to some music.

I: You brought your music?

R: Yes.

I: What music did you bring?

R: I brought some jazz and some classical music that I liked.

I: Did it change the way you listened to the music?

R: Yes. It seemed to intensify the hearing acuity. Probably the concentration was increased, too. And of course, it sounded profoundly beautiful, too. Emotionally I responded to it as being

especially beautiful. [#033, p.5]

One respondent felt that his visual acuity and hearing were enhanced by LSD:

R: *My visual acuity was enormously enhanced under the drug. As was my hearing. I told you about walking on Wilshire Boulevard with this guy who was my baby-sitter. And hearing the sewage under Wilshire Boulevard. I heard the world more precisely, and it was a little more dramatic for me to hear it than to see it.* [#027, p.4]

Another subject spoke about his experience in terms of pure feeling:

R: *My God, I'm glad I had the experience. It really did, it changed my life to the extent that I'd never had any experience like that before, and I was totally grateful.*

I: *It changed your life?*

R: *Yes. It gave me an appreciation of feelings that I never had before. That they were that tangible.* [#015, p.11]

Data reveal a consistent pattern of linkages between affective and cognitive domains (Brown, 1996). A succinct summary of these linkages can be found in one respondent:

R: *I was doing psychotherapy. [pauses] I learned a lot about myself, and I found when I was high I was a much better person than when I wasn't! And I could see that my conventional way of*

R: No, it wasn't going to contribute anything significant.

I: Do you feel satisfied with your experience that you did have?

R: Yes. Oh, I'm very glad that I had it! Oh, yes, very much so.

I: So, it was like, "I've already been there?"

R: [laughs] Been there and done that! Right. [#035, pp.7-8]

In contrast, the following respondent is from among the one-third of the subjects who reported persisting benefits. This subject found that his LSD experience enhanced his problem solving capabilities on a long-term basis. This respondent reported that LSD provided a benefit directly related to an enhancement of his work:

R: *I was working in the Space Age. I was working for Howard Hughes and I was building some of the prototypes for the first space vehicles.*

I: *And what exactly was your profession?*

R: *Well, I started out just as a machinist. And then I applied myself. I didn't have any formal training in it, I just had talent. They pushed me up because I didn't make any mistakes; I could go from one thing to another. It was during the time that I was working in that research lab that I went through this. I found that I could put my mind right into a problem. They would give me difficult problems that no other machinist had ever had.*

I: *Is this before taking the LSD?*

Only one subject reported persisting long term negative effects, in this instance these were mildly negative flashbacks that lasted six months

looking at the world, and my characterological defenses and such, cut me off from a lot of the richness. The psychedelic would open me up to the richness, both aesthetically and... [new voice] Emotionally? Emotionally, and ideationally. I found that it stimulated creativity for me, in my thinking. [#001, p.13-14]

Specifically, in the last passage the subject links "creativity" (affective domain) and "thinking" (cognitive domain). The respondent reinforces this linkage when he says the LSD "would open me up to the richness 'emotionally' (affective) and 'ideationally' (cognitive)."

Long term benefits

Slightly over one-third of the respondents clearly describe persisting beneficial changes subsequent to the immediate influence of LSD. Almost two-thirds were not profoundly influenced by their LSD experience. Many of these subjects found the experience primarily to be curious and inexplicable, like *Alice in Wonderland*. The following example is from among the two-thirds of subjects who reported an experience that did not catalyze any significant life changes:

I: *Did you notice any changes in your creativity?*

R: *No. I really can't pin down any significant changes in any way. It was an interesting experience, it fostered my belief in the idea that we are just in touch with so little of reality! I remember once, someone had some LSD that they were going to get for me if I wanted it, and I remember thinking about it, and I thought, "No, I don't have any interest in having that experience again."*

I: *So, you felt you didn't really need to?*

R: *Yes, just after it, too.*

I: *Did it affect the way you saw your work, the way you would think and solve problems?*

R: *Yes, because these were problems that nobody really knew anything about. They were dealing with materials that nobody had had any experience with at all.*

I: *For that type of work you need a lot of insight?*

R: *Yes. Or intuition, or whatever it is. You have to be able to put your mind right into what you're doing, and try to analyze what is happening there, either on a chemical basis or on a physical basis.*

I: *So, would you say that it changed the way you focused on things?*

R: *Yes.* [#030, p.4]

In addition to the contribution that LSD made to this subject's work abilities, he also reported that his LSD experiences helped him to clarify his career goals. The following career path fits the stereotypical changes associated with psychedelic users and hints at some of the causes of the cultural turmoil surrounding the use of LSD that emerged in the 1960s:

I: *Do you think the LSD had any affect on your career change [to being a musician]?*

R: *I think it probably did. I think it made my whole life kind of come into focus. I realized that what I had been doing over at the research lab was building war machines. I really didn't have any interest in building war machines because I believe in peace. [emphatic] I wanted to do whatever I could do. So I thought how better [than] to jump at this opportunity to go to work at*

Disneyland and make people happy... I spent fifteen, seventeen years out there. [#030, p.5]

Numerous other subjects discussed their long-term benefits in the context of enhanced insight, emotionality and personality development. The following example is from a woman who, ten years after the birth of her son, had a daughter who was born "retarded." She reported that the LSD experience gave her the ability to become her daughter's advocate, to have more patience and emotional openness with her children:

I: Do you think that when you felt happy and carefree during your LSD experiences, did that carry into your life afterward?

R: Yes, it did. I'm by nature a very shy person. That's how I used to be. When my daughter was born in sixty-six, I found that I couldn't trust [mental health care providers]... They have a place called Regional Center. This is where information comes in... You take your child in and sign 'em up, and they find different things like speech therapy. They also become advocates. I found they were very lacking, as far as being an advocate, because they weren't helping my daughter. I've ended up being her advocate. I've been it ever since! This is what Dr. Janiger, taking the LSD, has done for me. It's helped me to see myself, that I can do things. I'm not as stupid as people tell me I am!

my thinking about myself and the people around me. [#032, p.10]

Another psychological opening is reported by a male respondent:

I: But you feel that it was important that you took it?

R: Incredibly important, life changing, direction changing. Probably I don't know of anything I've ever done that was as significant as that [LSD] trip was... I began to question certain things that I had not allowed myself to question before [his first marriage]... I did fall in love with someone else and we've been married now thirty years. I can't tell you how happy I am. It is just a wonderful union. Without being able to prove it or illustrate it point by point, making a point by point bridge, I would say that the LSD began a process or the LSD was itself a continuation of the process. It was an acceleration of, an intense acceleration of whatever process I was going through towards individuation as Jung would say... that made me finally able, both to know when I met someone I could love fully and to have the courage, which was violently opposed to my so called old scruple, to separate. You know, it was a tough one." [#004, p.22-23]

The following report is among the most spiritual of the slightly more than one-third of the subjects who reported

to a year and then disappeared. No other negative physiological or psychological aftereffects reported to be linked to LSD were noted in the data.

I: So you found more of a power within yourself?

R: Yeah. I found that I can't trust other people to do for my child what I can do for her. If I have to find the resources, then that's what I'll do... [#009, p.10]

This same subject reported another intriguing important long-term benefit she experienced:

R: When I used to dream, I never dreamed in color. After taking LSD, I dreamed in color.

I: For the rest of your life?

R: Yeah. I can still dream in color! [#009, p.5]

The following report is another example of long-term benefits being described in terms of empowering a previously shy woman:

I: Psychologically, did you learn anything about yourself?

R: A great deal.

I: Such as what?

R: I was very, very quiet. What I want to say is that I was always reluctant to speak out, to speak my mind, to express myself... I finally opened up and nobody's been able to shut me up since then! [laughs] It did have, maybe for me, a good effect. For the people around me, they may be sorry I ever came out of my shell! [laughs] I don't know. I think it gave me tremendous insight, tremendous insight and an ability to perceive things in the people around me. The only ones I could never get down to the nitty-gritty were my kids!...

I: So you feel that it had an opening effect?

R: It released me. I think it did. Oh, definitely. Maybe not instantly. It took time, but I know in my mind and in my heart that it played a large part in reshaping, reforming my personality,

long-term benefits. This respondent describes a sensory experience and then links it with spirituality:

R: It was the most extraordinary experience of my entire life! It was the greatest experience of my entire life! Nothing before or since has ever come near it I can only describe it as this; like the first time you taste chocolate or the first time you have an orgasm—it was close to those! And your first peak experience, it was a genuine peak experience! [#044, p.4]

R: I remember leaving my body and becoming a tree. I became a tree, went all through the roots, all through the earth. And was down in the earth, and then came up through the earth and went into the night sky. And I felt at that point that I'd died and been reborn. But not in a Christian sense! [laughs] I was raised without religion, and I was not spiritual until I took LSD. I've been spiritual ever since.

I: It was a spiritual experience for you?

R: Oh, yes. It changed my life. I think it changed my life forever! I mean, it was a turning point. [#044, p.6]

R: [The LSD experience] took all fear of death away. One hundred percent. [#044, p.9]

Another respondent also used the language of spirituality to describe the long-term benefits that he felt resulted from his LSD experience:

R: It opened up my mind to other religions, other thoughts, other beliefs... I became very interested in Zen... I would say that it was an opening. A rebirth. I was born again, you might say, in knowing who I am and what makes me tick, to some extent. [#022, pp.7-8]

Perhaps no one summarized the perceived positive

aspects of LSD use better than Janiger himself, when summarizing the perceptual benefit that he gained from his own LSD experiences. We conclude this section with his statement:

My personal experience is that I've opened the door to some other extension of my mind, or my sensory equipment or perceptual apparatus, whatever you want to call it. That gave me access to a kind of world that was vastly enlarged, vastly expanded. My senses were made most acute. My mental capacity led me to think in terms of breaking away from familiar—what I called obligatory—reality, where I had to be a certain way. It was the first time I clearly saw the influence of society and culture on my development. In other words, I saw how I was literally molded into the person that I was, by being told subtly what to see, what to think, what to feel. The culture did that subtly. It started with "No" and "Yes" and "No" and "No" and "No." And I broke out of that completely. I was able to see, that was the most astonishing thing. [p.21]

Adverse effects

The discussion on adverse effects will focus on three different types. The first type occurs when the entire LSD experience was considered by the respondent to be, on balance, negative. There was only one instance of this. The second type occurs when a respondent reports that there were negative aspects of the LSD experience but that, on balance, the experience was positive. About five respondents reported their experiences in this way. The last type of adverse effects is persisting long-term negative effects resulting from the LSD experience. Only one subject reported persisting long term negative effects, in this instance these were mildly negative flashbacks that lasted six months to a year and then disappeared. Other than flashbacks, no other negative physiological or psychological aftereffects reported to be linked to LSD were noted in the data.

The one respondent who described an overall negative LSD experience had this to say:

R: I was put into what was a very cottage kind of room with every conceivable kind of art material available, and music selections, and a button for the nurse. About a half an hour or so after I had swallowed those big blue horse pills, nothing had happened at all. So, I rang for the nurse. They thought they might have given me the placebo. They did not. They then came in and injected it, and it all hit at once!

I: Wow! So, you got a double dose?

R: I had a double dose, and it was dreadful. And I have never discussed it, nor will I ever discuss it. I did write fourteen or fifteen pages for Janiger. [#012, pp.3-4]

This is the only time in any of the interviews that a placebo implying a typical experimental study is discussed [placebo was not part of the experimental design], and is one of only two times in which it is mentioned that the LSD was administered by injection. He continues:

R: I felt a lot of terribly confusing, very, very aggravating, very miserable things. I remember only at the end saying to them,

"Please get my wife, I want to go home." I never did have any recurrence of it. Somebody did have the audacity to ask me to do it again. Which I did, with the vow that if it became uncomfortable they could stop it immediately. It became uncomfortable, I had it stopped and left. [#012 p.5]

It is when the interviewer continues exploring the nature of this "dreadful" experience that a key issue is revealed:

I: You don't really recall much else about the experience?

R: Oh, I do. I recall many specifics, but I don't talk about them.

I: So, would you say that it's as clear and sharp a memory today, as when it happened?

R: [answers quickly] No, it's much vaguer. It was a very long time ago.

I: But, there were a lot of problems that surfaced?

R: Yes!

I: Did you feel that you had these problems before?

R: Yes. [#012, p.5]

When the interviewer tests the assertion that the respondent did not recall specifics of the experience, the respondent replies that although the memory of the experience is "vague," he does remember many details: "Oh, I do. I recall many specifics, but I don't talk about them." Most importantly, when the interviewer asks if "there were a lot of problems that surfaced" during the experience, the respondent confirms this and then critically confirms the interviewer's probe that he had these issues before his LSD experience:

I: Did you feel that you had these problems before?

R: Yes.

I: Do you feel there are any changes in your life as a result of the LSD experience? Small changes? Large changes? Short term, long term...?

R: Might have been. I don't recall.

I: So, you didn't feel any different of a person?

R: No. I felt very, I was very angry. And I was very fearful of having aftereffects, which I did not. I wasn't sure that I liked it at all. I think it did some good work for me psychologically. But, I may not have been ready for it.

I: So, in some small way, even though it was a bad experience, it may have helped you?

R: Well, I would say a minimal amount of good came out of it. It was an absolutely, horrifyingly, dreadful experience! Dreadful!

I: Do you feel that you learned anything from it?

R: Maybe.

I: Maybe? About yourself?

R: Maybe. [speaks softly, barely audible] [#012, pp.9-10]

No other interviews were qualitatively like this one, in which the respondent felt the overall experience was a negative one. At the same time, in his subsequent interpretation of that experience, he concludes that it did "some good work for me psychologically." This report begins to reveal a pattern; a description of a negative aspect of the LSD experience, followed by a positive interpretation of the

overall experience.

In the following passage, a respondent notes what would be considered to be a major cause for concern, namely "tremendous physical pain" associated with participation in the research:

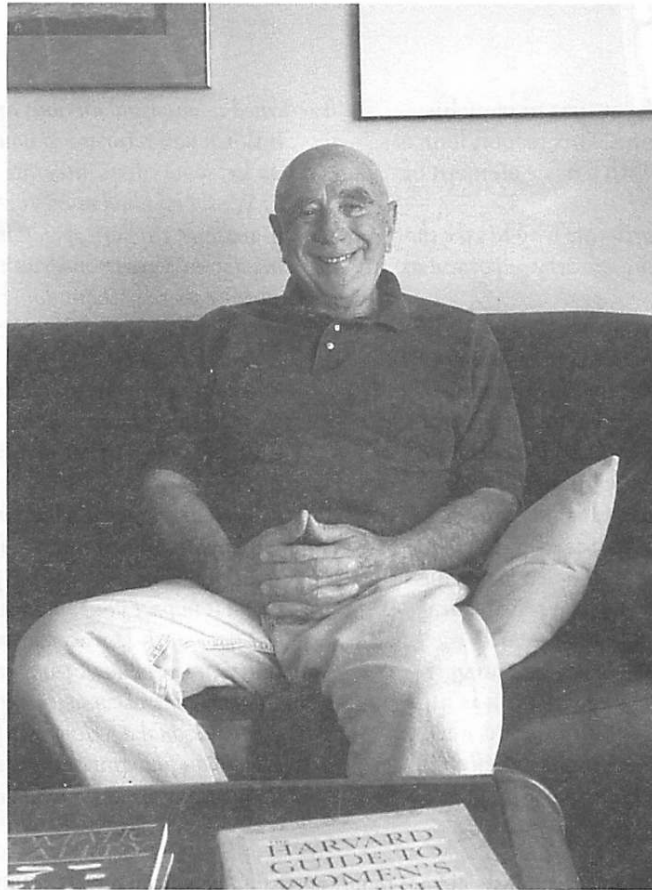
R: Cramping and tremendous physical pain because I was in the hallucinatory stages. I regressed, I thought I was in the womb. It was amazing!

I: So you independently had this regression back to the womb?

R: Yes. There were people on hand, the nurse and the doctors, and therapists, were there at all times. Except for one or two times I said, "Just leave me alone. I wish to be alone." I wanted to really feel, after the first time I wanted to really experience where the drug could take me. The first time was frightening at some point or other. Then there was the pain, the physical pain. It's like when you have the flu and every bone in your body aches. That's what it was like. But, rather intense. And I learned just after the first dose that something could come of this. It was almost a spiritual experience, and I'm not an overly religious person. I have certainly been to church, had communion, whatever you wish, but nevertheless, it was a very revealing experience. And I felt even at that point that some tremendous insights could be derived from this. In other words, if I could look at a piece of fabric, a wall hanging, the curtains at the windows, and I could see almost to the origins of the fabric! [raises her voice, emphatic] I could see every little fiber with my naked eye! Which of course would be like looking at it under a microscope. So, I had to be able to translate this to mean, "Well, if I can see that much in a piece of cloth, what can I learn about myself and my own feelings and thoughts?" It didn't take too long for that to occur to me. After the initial experience I was going to perhaps experience the racking pain, I wasn't as fearful of that, either. Well, that too shall pass! [#032, pp.3-4]

While this respondent was in the "hallucinatory stages" she reported that she had "regressed" back to "the womb." And during this pain which she likened to having "the flu and every bone in your body aches," she asked the sitters to "Just leave me alone." But then the data takes a major turn. She resolves her descriptions with a now familiar conclusion, "It was almost a spiritual experience," "a very revealing experience."

In the following passage we find an individual who



Murray Korngold, clinical psychologist
Korngold referred many of his own patients to participate in Dr. Janiger's experiment, and oversaw a number of sessions.

during "the most intense part of her experience" reported that she lost her "identity":

I: Did you have visions or dream-like things?

R: No. I didn't have visions. But what I did have was, at the most intense part of the experience, I lost my sense of identity. And I remembered hearing somebody crying in the next room. And I wasn't sure if that was me crying in the next room! And I remember later I discovered that there was somebody crying in the next room.

I: Did this bring you down? This is how you had a negative experience?

R: Well, it was really very uncomfortable and frightening. And I remember asking Dr. Janiger that I wanted to come out of the drug. I wanted to take something, and at that time he urged me to stay with it. Because he said I was so near the peak of the experience that it would taper off by itself. [#027, p.10]

From this passage, it is clear that many years later, this respondent clearly recalls a negative aspect to participation in the study. Yet when we continue examination of her interview the following important exchange takes place:

I: Did you eventually begin to feel better?

R: Yes. Yes.

I: What was that like?

R: Well, I remember that I was very stimulated, and very excited. And that the early part of the experience, when I had these incredible visual things, was quite thrilling.

I: It was thrilling? It was more visual distortions of...?

R: Well, it was everything. It was a different way of perceiving all of the physical elements.

I: Did it change the way you think about things in any way?

R: Well, I think this discovery that I could be so near the edge emotionally, that there wasn't this big wide area between sanity and insanity, it made me feel that indeed it's a thin line. And it was, I think, a major kind of experience for me.

I: A major experience?

R: Well, yes. I think in terms of perceiving the nature of altered states.

I: Did it affect you in the long-term in any way?

R: That's very hard to say. Yes. It was one of the high points of my experiences. And I loved it! [#027, pp.10-11]

Another respondent also seemed at first to view his experience as a primarily negative one. This respondent, a clergyman, discussed his “quarrel” with a basic element of the study, the “set and setting”:

R: *In retrospect, it was a most unfortunate way to take the drug for me. As you know, set and setting are very important as to what the effects will be.*

I: *Were you not happy with the setting?*

R: *The setting was horrible. If I may say so, the setting was his group of offices. The waiting rooms around his offices, with Muzak playing. And we were turned loose, having taken the little granules, to sit around and do what we would. There was no setting that was conducive to religious or spiritual or inner investigations, except listening to Muzak! Either as pairs or individually. I happened to be with another friend, a clergyman at the time, other ministers and their wives. One had a marvelous experience because he clustered with his wife in a private area. And with her consolation and assurance and the security she provided, and the temperament he had, he had a life changing experience! I, on the other hand, and the fellow that I was sitting with, who was a minister of the Ethical Culture Society, an older man, the first effects were some slight nausea. The second effect was like nitrous oxide, we laughed. [#025, pp.3-4]*

Slightly less than two-thirds of the subjects did not report persisting beneficial effects resulting from their LSD experience(s).

As Janiger reported, without independent knowledge of the content of this respondent's interview statements:

R: *The most difficult reactions we had of all were the psychiatrists. Might not be big enough to make a thing out of it, but they had a rough time. And a couple ministers had problems. The ministers and rabbis. [p.20]*

Upon deeper analysis of this respondent, we find that although he had trouble with the set and setting, he goes on to describe a mood change resulting from his LSD experience that he referred to as a “powerful tranquilizer”:

R: *I did have several days of aftereffects. The drug worked as a very powerful tranquilizer.*

I: *Tranquilizer?*

R: *Yes, mood change. And I can remember being driven home by my wife, and I tend to be one who likes a neat house, you know? Things in their place, supper on time. [laughs] And none of that was taking place; the house was messy, the kids were running around, the dishes were unwashed, and it didn't matter to me at all!*

I: *Was this a positive change?*

R: *Yes! To my wife particularly. And to me, it reduced my customary ego demand for order and control. So, I did lose a little control, evidently. But, it didn't happen until I got home. And after it was all over.*

I: *Would you describe this as an effect on your emotional health?*

R: *I imagine it was a positive effect. I was certainly less anxious. Because I had anxiety about nothing at all. Not the messed up house, not bills unpaid, or whatnot. I was in a kind of euphoria. It wore on for some time, maybe a couple of days, before*

I returned to my usual anxious and busy way of life.

I: *When you returned to your usual, anxious, busy way of life, did you feel some effects integrate into your life from the experience?*

R: *Well, I had had my first real taste of, how should we call it? A non-anxious, euphoric, being in the world without anxiety or fear or being driven. I was non-driven. Non-acting. Being there and content to be there without doing anything. So, I experienced a new way of being that was not obsessed with doing. If you get the point?*

I: *Yes.*

R: *And that probably would be that for which I had subsequently most longed and sought.*

I: *Would you say that in any way it affected your life in the long term?*

R: *Well, it triggered what has been a subsequent thirty five year study in human consciousness. That has been the field in which I have done my work. [#025, p.6]*

I: *Did it impact your understanding of yourself or other people?*

R: *Enormously. I was made vividly aware of how rigid my ego boundaries are, and how strong my ego commitment, self-identity commitment, control commitment was. I evidently had mastered that part of my personal development [laughs]. [#025, p.8]*

I: *Did you find any changes in your creativity?*

R: *Well, I write. As a minister, I write a seven or eight page*

essay every week to make a sermon. I'm sure that the consciousness out of which I write has been broadened by this little experience of mine. The release of creativity is very often breaking through the boundaries of ego, getting into another mindset. [#025, p.12]

The negative elements discussed by respondents ranged from experiencing physical pain to a temporary perceived loss of identity to an inhospitable set and setting. After close scrutiny of the data, we found only one respondent (#012) who may have regretted participating in the research. In the few circumstances in which negative aspects of the LSD experience were noted, with the one possible exception noted above, nearly every negative element was resolved by the respondent with an ultimately positive interpretation of that experience.

Post LSD flashbacks

In the 26 interviews in which information about the nature and scope of flashbacks was explicitly established, the majority of respondents (19) reported nothing they would consider to be flashbacks. Five respondents reported flashbacks that they interpreted as beneficial, one case was mildly negative, and in another case flashbacks appeared to be neutral.

This respondent reported the mildly negative flashbacks:

R: *Yes, I would say for quite a while—six months or a year—I had occasional experiences of relapses of the LSD experience.*

I: *Like a flashback?*

R: *Flashback implies that it's a momentary thing. For a period of time, I'd be looking at something and it would do that same undulating, you know, fanciful moving.*

I: *Do you feel that you were losing control at that point?*

R: Yes, I did. And it made me unhappy, but it was not painful. You know? It made me intellectually unhappy that this happened. But anyway, I understood that this kind of flashback happens, and so it didn't bother me. [#019, pp.11-12]

In contrast to the previous report, this respondent reported a series of what she considered to be "happy" flashbacks:

R: Yes, I did [have flashbacks] at the beginning, after I was done with Dr. Janiger.

I: The next following days?

R: Yes. For a year afterwards I would have like a flashback.

I: What was it like?

R: I'd be sitting there and all at once I'd start visualizing the things that I had seen when I had taken LSD.

I: But was this more like a day dream? Or was this like it was actually happening?

R: I could be in bed and I'd turn over on my side to go to sleep, and would just happen.

I: Was it a good thing?

R: Oh, yes! Like I said, nothing happened that I remember now that was bad!

I: So this is like with your eyes closed? Not like when you're driving in traffic?

mescaline and peyote on her own in an unsupervised environment:

I. Okay. How did you finally convince Oscar to include you in the study?

R. Oh, that's the best part of it. [laughs] I tried peyote but didn't like that because I threw up.

I. You tried peyote before the LSD?

R. Yes. Then I tried the mescaline and that was very good... [#021, p.4]

R. He [Janiger] said, "If you're taking mescaline unsupervised up in the hills, I'd better get you in this program!"

One of the mental health problems reported by this subject was drug abuse. Rather than exacerbate her symptoms, this subject reports that her problems with addiction were reduced during the period that she was in the LSD experiment and for several months afterwards:

I: How long did this last that you stopped taking the other drugs because of the LSD?

R: Oh, two or three months, I guess. As long as I was taking it. And even after that for a while. It took a while before it built up again. Too much of the old scared self came back. It [LSD] really did give me self-confidence in a lot of ways. [#021, p.9]

This data then, although at first appearing to be

...slightly more than one-third of the respondents reported long-term benefits.

R: No. I was in control.

I: So you had much more vivid dreams, daydreams?

R: Yes. I could close my eyes when I lay down and I could see it. See the ship going, and these sparklers, and everything. And I just felt happy. It was happy. [#009, pp.19-20]

Adverse effect?

One subject reported some brief moments of paranoia during the last of several LSD experiences, paranoia that caused her to stop taking LSD. She also reported a very troubled life history that included auditory and visual hallucinations ever since she was a child, as well as struggles with addiction after the time period of her participation in the LSD research. This respondent did not, however, link those problems with her participation in the LSD research or to the transient paranoia she experienced in her final LSD experience. She specifically indicated that her psychological dysfunction preceded her participation in the LSD research.

R: Dr. Janiger was my psychiatrist at the time. And he didn't really want me to participate in it. He thought I was a little schizoid. [#021, p.1]

This subject—who describes Janiger as believing she "was a little schizoid" and who would therefore fall outside of the original study inclusion criteria—was, in fact, included in the LSD research. There were no other respondents for which this was the case. According to this subject, she was accepted into the research project on a seemingly compassionate basis because she was already taking

possible evidence of harmful long-term effects, does not seem to be attributable to LSD. Nevertheless, evidence from other studies demonstrating that LSD may exacerbate preexisting psychopathology supports the idea that at least in an outpatient setting without an explicit therapeutic orientation, the exclusion criteria for major mental illness is appropriate.

Conclusions:

Limitations and Generalizations

The conclusions of this investigation are limited in three important respects. First, there is uncertainty as to whether the sample that was available to the researchers was a random selection from all the subjects in Janiger's study. Generalizations beyond this sample of LSD users should be considered speculative. Second, the reliability of the data is limited by our need to rely on the memory of subjects nearly forty years after their initial study participation, which was accepted without seeking independent verification. Third, the dose of LSD administered was generally 2 micrograms per kilogram of body weight given orally, a moderate dose that would produce a notable effect but is less than is generally used in a psychedelic psychotherapeutic context. Since the effects of LSD vary considerably as a result of dose, the results of this study apply only to the use of moderate amounts of LSD.

The first issue concerns whether the sample we interviewed is representative of all the subjects in the experiment. Interviews were conducted with the first 45

people located from the original research. Janiger recommended 12 subjects with whom he had maintained contact over the years. These subjects may represent a group that is skewed toward people who had experiences that were more positive than the norm. The remaining 33 subjects were located by searching through the master list of original study respondents for everyone we could locate who remained in the Southern California area, where we would be able to conduct in-person interviews. Thirty-four of the follow-up respondents were male, 11 were female. The average age at follow-up was 70.3 years. These subjects appeared to compose a good cross-section from among the original group. Only one subject who was located declined to participate in the follow-up study.

With regard to the reliance on the subjects' memories, the forty-year time lapse between initial study participation and follow-up interview poses a significant threat to validity and reliability of some of the data. Fortunately, the most important data were not the subjects' descriptions of their original LSD experiences but rather their discussion of the consequences of that experience in the course of their entire lives up to the time of the interviews. Considering the subjective nature of the information we sought on long-term effects, the attempt to seek independent corroboration was not considered necessary or practical in this follow-up study. Independent raters should be used, however, in the context of new clinical trials.

In regard to dose, the amount generally used in this experiment was 2 micrograms per kilogram of body weight given orally. Rarely, larger doses or different routes of administration were used. Subjects clearly received a dose of LSD sufficient to catalyze a profound reaction, though less than the dose generally used in psychedelic psychotherapeutic contexts. The results of this research should not be generalized to the use of larger doses.

Summary of findings:

perceived benefits and minimal harm

The goal of the initial research was to observe what happened to individuals under the influence of LSD in a



A.R. Hibbs, #046

I am very glad I did it (LSD). I have no urge to do it again, I think I have learned that lesson so I don't have to repeat it, but it was very significant.

non-directive naturalistic setting and to attempt a phenomenological characterization of the essential nature of the LSD state, as contrasted with descriptions of the content of that state. Although therapeutic benefits were reported by some subjects, the objective of the original study was not directed toward therapy. As the original research developed, other projects emerged such as the exploration of artistic creativity, a study of twins, and other sub-studies.

Forty-four out of the 45 respondents in the follow-up study described their LSD experience(s) as being, on balance, positive. The one exception is discussed in the body of the paper. This subject described his overall experience as negative and would not discuss many details of it except to say that he had a "double dose" of LSD and "it was dreadful."

The respondent also noted that he had experienced psychological "problems" before ingesting LSD. This subject did not report experiencing long-term negative consequences such as flashbacks or continuing adverse experiences resulting from his participation in the experiment. He even reported that it did some "good work" for him psychologically.

In approximately five interviews, adverse effects were reported during the LSD experiences, even though these experiences were considered, on balance, positive. These adverse effects ranged from having physical pain to a temporary loss of identity to psychological discomfort with a perceived inhospitable set and setting. In each case, these adverse effects did not preclude these respondents from reporting that the LSD experience was, on balance, positive.

Only one subject reported long-term negative effects linked to the LSD. These effects consisted of mildly disturbing but not "bothersome" flashbacks that lasted from six months to one year after the experiment, and then stopped.

One subject reported struggles with psychological dysfunction after her participation in the LSD research. However, this subject did not attribute these problems to her use of LSD. As she explained, she had experienced serious mental problems and visual and auditory hallucinations from childhood. She was admitted into the study only because she was a patient of Janiger's and she had already

started to experiment with mescaline and peyote on her own in an uncontrolled manner. This subject reported that her experimental LSD experiences had a beneficial short-term effect in reducing her addictive behaviors (Mangini, 1998).

Slightly less than two-thirds of the subjects did not report persisting beneficial effects. To most of these subjects, their LSD experience seems to have been similar in impact to interesting entertainment. In contrast, slightly more than one-third of the respondents reported long-term benefits resulting from the LSD experience(s). These benefits consisted of tangible perceptive/cognitive and behavioral changes. In several cases, reflecting on the experience itself, respondents saw study participation as "transformative." Perceived long-term positive effects included creating a more positive life outlook, empowering previously shy subjects, catalyzing changes in career and relationships, and creating permanent openings to spirituality, emotions and insights.

Discussion

From 1954-1962, Janiger conducted research that involved the use of moderate doses of LSD in about 900 mostly healthy subjects in a non-directive supervised environment. The evidence from this study in 45 of those subjects suggests that the FDA could feel comfortable about safety issues if it were to approve the administration of moderate doses of LSD to healthy human subjects by psychotherapeutically trained researchers working within the context of a scientifically meritorious protocol design.

Cross-study validation takes place to the extent that the results of this study compare favorably with previous research on this topic. In harmony with previous reviews of LSD studies, especially the Cohen (1960), Malleon (1971) and Strassman (1984) findings, relatively few adverse persistent symptoms were reported, even though many of the studies reviewed treated severely disturbed individuals as opposed to "normals" in Janiger's study.

The Janiger subject pool represents a diminishing and time valuable research population. The average age of subjects in this study was over 70. In searching for subjects for this follow-up, we discovered that many of the original participants have already died. Further research with more subjects may substantiate and extend these initial findings. Given the extensiveness of his records, and the availability of further respondents, the Janiger database represents an invaluable opportunity to rekindle and further our understanding of the effects of LSD. Similarly, important lessons have been learned from this and other follow-up studies of early psychedelic research projects (Doblin, 1991; Doblin, 1998).

Janiger has, however, made a more important contribution than the creation of a pool of subjects available for long-term follow-up interviews. The preliminary findings he made about the use of LSD in facilitating artistic creativity and about the nature of the LSD state as distinguished from its content provide a glimpse of fascinating research

hypotheses that remain to be investigated with modern research tools and methodologies. This follow-up study confirms the lost opportunity suffered by science, medicine and religion when psychedelic research was shut down for essentially political, symbolic reasons. Research can be conducted safely, can generate important contributions to knowledge and can provide long-term benefits to a significant fraction of the subjects. We hope the results of this follow-up study will make a contribution to the renewal of psychedelic research. What better gift could we offer to the pioneers of this research than for them to see with their own eyes the resumption of their interrupted lines of inquiry? •

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