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LYSERGIC ACID DIETHYLAMIDE (LSD-25): XIX. AS AN ADJUNCT TO BRIEF PSYCHOTHERAPY, WITH SPECIAL REFERENCE TO EGO ENHANCEMENT

The Biological Laboratory, Cold Spring Harbor, New York, N. Y.

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LYSERGIC ACID DIETHYLAMIDE (LSD-25): XIX. AS AN ADJUNCT TO BRIEF PSYCHOTHERAPY, WITH SPECIAL REFERENCE TO EGO ENHANCEMENT*

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A. PURPOSE

It has been previously reported (1) that certain desirable reactions occur when LSD-25 is employed as an adjunct to psychotherapy. These included: (*a*) pharmacologic safety, (*b*) effectiveness in small doses, (*c*) conscious cooperation on the part of the patient, (*d*) elimination of the difficulties of narcosynthesis, (*e*) feasibility of repeated administration, (*f*) absence of addiction problems (3), (*g*) excellent recall of events and ideas during psychotherapeutic interview.

In these earlier papers the preparation and management of the ambulatory patient has been discussed in detail. Emphasis was placed upon the fact that the therapist should anticipate that the integrative functions of the patient's psyche will aid the therapist in regulating the procedure of the interview. Other details have been previously reported and need not be repeated here. References to pertinent papers are appended (2, 5, 6, 7, 8, 9, 10, and 11).

It is the purpose of this communication to lay stress on the nature of the ego enhancement which occurs simultaneously with the ego depression so that during the LSD-25 reaction advantage may be taken of the integrative functions of the ego to provide insight. It is the function of the therapist to recognize the process of ego reinforcement and to employ it for the benefit of the therapeutic goal.

All of the subjects and patients discussed here are non-psychotic and ambulatory.

B. EGO DEPRESSION

It has been repeatedly reported that ego depression occurs when the administration of LSD-25 produces a psychotic state. Undoubtedly this does occur, but in a therapeutic interview with small doses ego depression is not as marked as with higher doses. The depressive process may be readily counterpoised with small doses of LSD-25 if the therapist manipulates the

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interview situation to utilize the simultaneously occurring processes of ego reinforcement. With doses greater than 50 micrograms by mouth, the depressive processes may supervene. In the following verbatim report Subject *S*, who responds with very few symptoms when given 100-micrograms of LSD-25, shows marked ego dysfunction with withdrawal when this dose is increased. Following is a typical example of a verbatim recording of an experiment on Mr. *S* where ego depression is the main feature. However, the subject was being used in a psychological experiment and since no therapeutic intent was present during the LSD-25 reaction this may have influenced the nature of the ego response. This should be compared with the verbatim recordings elsewhere in this communication, of two other subjects who received smaller doses. In these two subjects, ego enhancement as part of the reaction is well illustrated.

Subject—Mr. S. LSD-25 (orally)
July 27, 1954 200 micrograms

(*The questioning was carried out in the presence of two observers, Mr. C and Dr. K.*)

Dr. When did you first notice your symptoms?

Mr. S. My first symptom was 15 minutes after ingestion of the drug when I was on Lexington Avenue and 59th Street.

Dr. You went out on an errand?

Mr. S. Yes, as soon as I took the drug.

Dr. This was the first time you had ever gone out on an errand while under the influence of the drug, wasn't it?

Mr. S. Yes.

Dr. You had previously been in a more protected environment.

Mr. S. Yes, that's true.

Dr. How did you feel when you were out at 59th Street and Lexington Avenue? How did you feel about the effects of the drug coming on?

Mr. S. Well, I was headed back here and I didn't feel anxious about the effects coming on.

Dr. When you were here, how did you feel?

Mr. S. Ah, well, I started feeling drowsy at the time.

Dr. Is that your usual reaction?

Mr. S. Usually, yes.

Dr. And you usually do feel drowsy.

Mr. S. That's true.

Dr. Let's see; it's four hours since you've had the drug now.

Mr. S. Right.

Dr. How do you feel now compared with your feeling three hours ago?

Mr. S. Oh, quite different now.

Dr. What is the difference?

Mr. S. Well, I feel more alert and able to think, and so on.

Dr. How did you feel at the height of your reaction?

Mr. S. Ah, everything seemed to be a void, shapeless forms, sort of amoebic in shape. And, ah, I felt as if I was, ah, suspended in their midst, neither moving, not being a bump on a log, nor a part of them, just suspended, and watching these shapes move around. There were no, no words had any significance of any kind.

Dr. Did you ever feel that way before?

Mr. S. Well, not usually.

Dr. You said that you—how did you feel about people? How did you feel about me?

Mr. S. There was no reaction at all. I felt completely inert.

Dr. Did you feel that way about Mrs. B. (secretary)?

Mr. S. Yes, the same way about her.

Dr. How about Dr. K.?

Mr. S. Same with him.

Dr. Would you say that you didn't give a damn about anybody, or that you couldn't give a damn?

Mr. S. I think it was that I couldn't give a damn because I didn't; the significance of the reality wasn't there to me at the time.

Dr. What do you mean, the the significance of the reality wasn't there? Would you mind describing that in more detail?

Mr. S. They were meaningless. I heard the words said, but I didn't know what they were. They were just meaningless.

Dr. You heard the words?

Mr. S. I heard the words, but they were just meaningless.

Dr. I asked you if you wanted to go down with me to the cafeteria about an hour ago, or an hour and a half ago, but you refused. Why did you refuse?

Mr. S. Well, I felt like staying up here and just lying down and resting.

Dr. So you had some feelings about things. You felt you didn't want to go down, so going away had some meaning to you, didn't it?

Mr. S. I don't know. It was quite confusing at the time, too.

Dr. In what way was it confusing?

Mr. S. Well, I couldn't orient my mind, for one thing, and mental confusion and, of course, the meaninglessness of things at the time.

Dr. What would you say was more meaningless, people or things?

Mr. S. I would say both. Everything was just shapeless.

Dr. Were you aware that you were doing a, were in the middle of an experiment?

Mr. S. I don't think I was at the time.

Dr. Oh, really? You mean you had really lost touch with what was going on?

Mr. S. Yes.

Dr. This happened to you once before, didn't it?

Mr. S. I don't recall now.

Dr. Remember the time you thought you were being washed down the toilet?

Mr. S. Oh, yes, but this wasn't that kind of reaction at all. There was nothing nightmarish at all about today's experiment.

Dr. Was this a pleasant feeling that you had, or was it unpleasant?

Mr. S. It was neither. It was just inert, "bump on the loggish" sort of feeling, with no emotion at all to it, vegetating, and so on.

Dr. Did you have any unusual fantasies?

Mr. S. No, this thing was an amoebic world, ah, the colors, well, there was no color either, just gray and black.

Dr. You mean you didn't see the colors in the room, the red books and the blue books?

Mr. S. No, I may have been asleep at the time.

Dr. Has your sense of color returned now?

Mr. S. Oh, yes, I know where I am now. I'm talking into a microphone.

Dr. And you had a good lunch?

Mr. S. Yes.

Dr. Or was it a good lunch?

Mr. S. It was good, yes.

Dr. Is that your dessert outside?

Mr. S. Yes, I'm going to have that.

Dr. How do you feel about Mr. C. being present at this time?

Mr. S. Well, I don't mind now, because I know who it is.

Dr. Did you mind him before?

Mr. S. Well, I probably wouldn't have paid any attention to him.

Dr. If you hadn't known who he was, would you have minded?

Mr. S. I don't think I would have had any emotion, one way or another.

Dr. How about now?

Mr. S. Well, now I wouldn't mind him being here. It's definite I wouldn't mind him being here.

Dr. Do you have any other questions?

Dr. K. I was just wondering; he said he may have fallen asleep. Did you say you were asleep at the time?

Mr. S. Well, I didn't know whether I was asleep. I don't think I was asleep at the time. I think Dr. Abramson was talking to me.

Dr. K. Would you say that you were slightly unconscious?

Mr. S. I would say slightly unconscious; we'll put it in that term.

Dr. K. And how often have you had LSD-25 before?

Mr. S. Oh, about 14 or 15 times.

Dr. K. Now, let's see, was it the same dosage each time, or did you increase the dosage?

Dr. Well, he's had a similar dose before.

(*Six hours after ingestion of the drug*)

(*The subject listened to the foregoing recording*)

Dr. It's now six hours since you've been given LSD. How do you feel about your reactions, now that you've listened to them on the recorder?

Mr. S. Well, I seem very, very far away now, and I'm glad that I recorded it before rather than now, when they aren't as vivid as they were at that time.

Dr. Why are you glad you recorded it then, rather than now?

Mr. S. Well, to record the results of how I felt at the time.

Dr. You mean, you would have been unable to describe the feelings now?

Mr. S. Well, I think, as clearly as I did then.

Dr. I don't understand.

Mr. S. I don't think I'd be able to describe it now as clearly as I did at that time.

Dr. Why not?

Mr. S. It seems to be quite different now, far away and now that I'm back here in the room—

Dr. You were here in the room when you described them.

Mr. S. But it was closer to the time when the reaction was taking place, at that time.

Dr. How far over the effects of the drug do you think you are now?

Mr. S. I think I'm about all over them now.

Dr. Really? All over them?

Mr. S. Except for some residual drowsiness.

Dr. Well, this is your typical drowsiness.

Mr. S. Yes, the effects of the drug.

Dr. The severe withdrawing sensation which you've had before?

Mr. S. Yes, I think so.

Dr. K. Was this a typical LSD effect for you?

Mr. S. No. I think it was different.

Note: This experiment differed from preceding experiments. In previous experiments Mr. *S* had always been in a protected environment during the onset of the LSD-25 response. Here his symptoms began rather rapidly. Fifteen minutes after he had ingested the drug he was alone on the street and noticed the onset of the LSD-25 response.

Study of the preceding verbatim interview discloses that the subject was essentially incapable of communicating effectively with the interviewer during the height of the LSD-25 response. This is an extreme example of ego depression under a fairly large dose of LSD-25. A similar withdrawal reaction has been observed in another male subject following 150 micrograms given orally. The short answers of Mr. *S* depend upon the prodding given to Mr. *S* to answer the interviewer. Study of his responses discloses that no one response contains more than 33 words. On interviewing Mr. *S* a year later he was able to recall spontaneously most of his general feelings and his experiences connected with the withdrawal process but he had to be reminded of the details from the verbatim recording.

C. Ego Enhancement

The following verbatim recording is from a well educated, psychoanalyzed subject who was emotionally upset because of her relationship with her divorced husband. The dose of LSD-25 was in the therapeutic range (20 micrograms). Mrs. *X* ordinarily would not speak as freely of her personal affairs. Under the drug, however, *stimulated by the questions of the interviewer,* she was able in the first part of the interview to kill off her former husband with a great deal of gaiety and subsequently in the interview she stated that he was of no concern to her. At the end of the interview, as well as three weeks later in the follow-up, Mrs. *X* volunteered that she had a feeling of complete relaxation never before experienced during the LSD-25 reaction. Compare this type of reaction with that of Mr. *K* which follows later in this communication. In Mr. *K*'s interview, analysis of a dream led to ego reconstruction with new developments of a favorable nature in his personal and business life, whereas in the case of Mrs. *X*, the therapeutic process was more in the nature of catharsis.

Subject—Mrs. X. LSD-25 (orally)
20 micrograms

Dr. Would you like to talk about Poppa (a nickname for the patient's divorced husband)?

Mrs. X. I don't know whether I would or not. I've talked about it and it's silly. I'm curious, because I'd like to know what's wrong with him. I'm sure there's something wrong with him. I'm sure he has some kind of mental disorder. I'd just like to know what it is.

Dr. Why would you like to know what it is?

Mrs. X. I'm just curious.

Dr. But what difference would it make?

Mrs. X. I don't know. I just want to know. I want to be able to name it.

Dr. Well, how do you feel about him aside from curiosity and wanting to give it a name?

Mrs. X. I hate him.

Dr. You hate him?

Mrs. X. I certainly do. I hate him with a venom (chuckles).

Dr. What kind of a venom?

Mrs. X. I can kill him off with pleasure.

Dr. Let's hear about that!

Mrs. X. I don't think it would be any great loss to anyone, even himself (coughs). He's a very unhappy person, and anybody that comes in contact with him is made unhappy, so—

Dr. So?

Mrs. X. He would be no great loss (laughs) to the world in general.

Dr. How do you know everybody feels about him the way you do?

Mrs. X. Well, I don't know about everybody, but I do know an awful lot of people who do.

Dr. Why do you hate him? Since we're conducting an experiment, I think we ought to find out why you want to kill him off. Or would you rather not talk about it?

Mrs. X. Oh, I don't care.

Dr. After all I might be very much interested in finding out what kind of venom you'd like to use.

Mrs. X. Well, I'd just like to kill him off. It would make my life much simpler.

Dr. Would it make your life simpler if you killed him off?

Mrs. X. I think so.

Dr. In what way?

Mrs. X. I don't seem to be able to get rid of him. He's always hopping into the picture in some unexpected way; never bringing happiness, never bringing anything pleasant, not to anybody in the family, particularly people of the family. Nobody in the family can ever have any contact with him without getting upset. He's a very upsetting influence, everywhere, anywhere, any time. And he is to me, too.

Dr. In what way is he upsetting to you, if you're willing to talk about it?

Mrs. X. He keeps fighting me through the children and through friends and acquaintances, and he puts the children in a very bad light with outsiders which I think is very unfair. And I can't understand it. I don't know what he's trying to gain by it. It's stupid. He's constantly losing; I simply cannot understand his point, the way he works. He confuses me and makes me very unhappy, because he's making life very difficult for the children. Whether he does it maliciously or not, I don't know. I've been able to give him the benefit of the doubt most of the time in the past, but now I question it. He talks a great deal about integrity and his code of ethics which is extremely strong according to him. And yet, he's done some of the most unethical things in the last few years, and I don't get his reasoning at all. He's very childish and creates a lot of trouble when there needn't be any at all. He gets everybody in an uproar for no reason.

Dr. Why is he able to do that? You've been divorced, now, how long?

Mrs. X. Well, actually five years, but I've been away from him seven or eight years.

Dr. How do you account for the fact that, although a long time has elapsed, you're still turned topsy turvy by him?

Mrs. X. Because he injects himself into our lives in a most unpleasant way, and it still upsets me emotionally when he does. There's such complete misunderstanding on his part. There's always a misinterpretation of motives and thought processes that I don't know how to

deal with him. Nobody knows how to deal with him. He's so unnatural and abnormal in everyday life reactions that you don't know how to take him.

Dr. What would you call abnormal in his reactions?

Mrs. X. Well, he hasn't a natural reaction to anything.

Dr. He hasn't a natural reaction to anything?

Mrs. X. Well, practically anything.

Dr. Well, would you give me an example of what you would call an unnatural reaction?

Mrs. X. Yes. People have congratulated him on being a grandfather. He has two reactions and they're pretty standard. One is, "I don't know anything about it." and, "They told me, I didn't know that I was a grandfather."

Dr. (Laughing) That's rather whimsical, isn't it?

Mrs. X. And at a great length he goes explaining to people that he didn't know he was a grandfather, that he didn't know where the children are living, that he didn't know anything about them at all, which of course is untrue.

Dr. You don't think he has his tongue in his cheek?

Mrs. X. Possibly, but I think he uses very poor judgment in pulling that kind of thing in the wrong place, at the wrong time, with the wrong people.

Dr. Well, maybe it's the right place, and the right time, and the right people for him.

Mrs. X. Possibly.

Dr. I don't see why that's unnatural. I can see that it's peculiar.

Mrs. X. Well, maybe that's what I meant. Then the other reaction is, "What's there to be excited about? It's just another kid. None of them are attractive till they're two or three years old. Maybe by then I'll be interested." Which I think is camouflage. He is really much more interested than he really will own up to.

Dr. But don't men very often take that point of view?

Mrs. X. Yes, I think so, but they don't carry it to the degree that he does. When it comes to the family, his children, the parents themselves, it's a little unusual, I think, to carry it to that extreme.

Dr. Couldn't one take his remarks as an example of understatements rather than an unnatural reaction? Couldn't that be his reaction?

Mrs. X. No, I don't think so. I think it's more than that. It's more than an understatement. There's always something added to it.

Dr. (Humorously) I don't think he deserves death at your hands for those feelings though, do you?

Mrs. X. Well, I only want to kill him because he only made me unhappy, that's all. And he makes my children very unhappy. Because of him they're pretty much distressed. They don't want to see him and they don't want anything to do with him. They have to, but they dread

it when they know he's coming. Just as I dreaded being around him the last few years.

Dr. You had the drug about an hour ago. How do you feel now?

Mrs. X. Well, like *I* did a little while ago; the edges of everything have been smoothed out.

Dr. What do you mean by that?

Mrs. X. Nothing seems quite as clear-cut as it was before; everything is a little, not exactly hazy, but instead of being squared off, things are rounded off.

Dr. For example?

Mrs. X. Angles don't seem quite, they seem just a little, to be a little less accurate.

Dr. Would you go around the room and describe it just as you see it now?

Mrs. X. Oh, everything looks perfectly natural. I don't mean that, it's just, like I feel often when I've had one drink too many, everything seems just a little hazier than usual. Otherwise, I see perfectly clearly.

Dr. Everything?

Mrs. X. I think so. Everything has a softer look. Colors aren't quite so strident. And the angles aren't quite as pointed. I just altogether have a softer feeling (chuckles).

Dr. Is it a good feeling?

Mrs. X. I don't know; I haven't decided yet. I'm not sure whether I like it.

Dr. Well, take something with an angle and describe it to me. Something that has lost its point and has become rounded as you put it.

Mrs. X. Well, they haven't actually become rounded. And I have to concentrate on an angle much more than I usually do to be sure that it's an accurate angle.

Dr. For example?

Mrs. X. Well, looking at the ceiling, the corner for example, I have to concentrate that they really are good angles.

Dr. Well, how do they look if you don't concentrate?

Mrs. X. Well, blurry, I mean everything just seems all white up there if I don't look very carefully. It's just the general feeling.

Dr. Well, would you mind describing the room without concentrating —just how things look if you don't concentrate?

Mrs. X. Well, the general feeling is one of warmth: the pink in the walls which means warmth; books that are very colorful; the lights. The whole room at the moment makes me feel warm. Otherwise, it looks very much as I've always seen it.

Dr. But you said that things are rounded.

Mrs. X. Well, not actually. My vision is still perfectly clear.

Dr. Would you like to walk and see that there is no great difference?

Mrs. X. I can assure you there isn't. That much I'm absolutely certain of. No. I would feel it if—

Dr. Would you like to walk some more?

Mrs. X. No.

Dr. Why not?

Mrs. X. I'm just quite content to sit. I feel a little lethargic. But that sometimes happens after I've had a drink.

(*Five minute pause*)

Dr. You didn't seem to walk very well.

Mrs. X. Well, it's an effort. I mean, I can walk a straight line, but it's an effort to do so. I feel tight, high, and I'm not interested in food at all. My lids feel very, very heavy. I'm liable to get very gay by the time this is over. I very often get that way when I'm high. I love to feel that way. But this feeling I don't particularly like. This is just the way I felt before I got seasick. My stomach isn't happy at all right now. I'm a little dizzy.

Dr. Could you walk, or would you rather not? I notice you have your eyes shut.

Mrs. X. My lids are very heavy. It seems I can hardly keep them open.

Dr. Well, do you want to sleep?

Mrs. X. I could, easily.

Dr. But yet you feel high, and you want to sleep at the same time. How do you account for that?

Mrs. X. I don't know. Of course I can keep my eyes shut, open, but it's with an effort. It's difficult to describe. I feel as I often do when I've had a little too much to drink. But I don't feel as exhilarated as I usually do. I feel a little more depressed in a way. I feel heavy and yet light-headed. I find this stimulated heartbeat quite unpleasant. I have the tendency to feel as though I were going to be short of breath. There's a slight numbness in my fingers. I think I can lift something up, but I think it would take an effort on my part to hold anything tight . . . This really has hit me. I feel very heavy and I don't like that feeling either.

Dr. Yet, you smile quite often when you say, "I don't like that feeling." So, it must not be all unpleasant.

Mrs. X. No, it isn't. It's pleasant in that I'm completely relaxed. I don't think there is anything about my entire body that is tense. I'm completely relaxed. But I can hardly keep my eyes open. It's very hard.

Dr. Well, if you shut your eyes, how do you feel? Does that make it easier to accept the effect of the drug?

Mrs. X. No. I think I feel it more with my eyes shut than with my eyes open. I generally feel very much gayer when I'm like this, and now I don't feel gay at all.

Dr. Yet, you were smiling when you said that.

Mrs. X. I know, but I'm not really gay. I don't feel sick or anything of the sort. I just don't care.

Dr. You just don't care about what?

Mrs. X. Anything.

Dr. Well, how do you feel about Poppa (divorced husband) now?

Mrs. X. He doesn't really disturb me. There's only one thing I want to say about him—to hell with him (laughs)! He really isn't worth worrying about.

Dr. Well, that isn't the way you felt about him 20 minutes ago.

Mrs. X. I know.

Dr. Well, how do you feel about him now?

Mrs. X. That's just the way I feel—to hell with him!

Dr. What do you mean to hell with him?

Mrs. X. Right now he couldn't worry me very much. He's really too far removed. I allow myself to get disturbed on the surface occasionally, foolishly, but actually he can't harm me any and he doesn't mean anything to me. I get annoyed with myself when I do get upset.

(*Five minute pause*)

Dr. Do you feel all right?

Mrs. X. You're really bothering me you know. If you would only leave me alone, I could be very comfortable and happy.

Dr. Why do you want to be left alone?

Mrs. X. I just want to relax; I feel perfectly comfortable. I don't particularly want to talk; I don't want to think. I'm completely relaxed, and I just don't want to be bothered.

Dr. You feel better lying down than you did sitting up, is that right?

Mrs. X. Yes.

Dr. What's the difference do you think?

Mrs. X. I think I'm more relaxed this way. . . . Do you know it's an effort for me to talk? It really is. I just want to be left alone (laughs). I don't want to be bothered talking or thinking.

Dr. Is it because there are many things that you'd like to say and you don't want to say? Do you think that has something to do with it?

Mrs. X. No. Definitely not, because why would I hesitate to say them here?

Dr. Well, because everything is being recorded.

Mrs. X. Oh, that wouldn't make any difference. I don't object to that at all.

Dr. Well, how do you feel about Poppa now?

Mrs. X. The same way I did a few minutes ago. He isn't worth worrying about.

(*Short pause*)

Dr. You've had the drug about an hour and 40 minutes ago. How do you feel?

Mrs. X. Very relaxed. Almost numb you might say, except that my eyelids still feel very heavy. It's very difficult for me to open my eyes and look around.

Dr. Would you like to stand up? I'll turn on the light.

Mrs. X. I don't like the light on.

Dr. Why?

Mrs. X. It hurts my eyes.

Dr. In what way?

Mrs. X. I have the tendency to open my eyes and I don't want to. They're much more comfortable shut.

Dr. It took you a long time to answer. Ordinarily you answer immediately.

Mrs. X. I feel settled down. I'm very relaxed but definitely slowed down. My mental processes feel that way too. It's much more of an effort for me to talk and to think and to express my feelings in detail.

Dr. Are you aware of everything going on around you?

Mrs. X. Perfectly.

Dr. What's your attitude toward taking the drug?

Mrs. X. I think it's an interesting experiment.

Dr. Why?

Mrs. X. I didn't think it would be able to produce an effect, this effect in a person. And I'm aware of everything that's going on.

Dr. Would you like to stand up now?

Mrs. X. I don't seem to be as sure-footed as usual.

Dr. Can you read all right?

Mrs. X. Oh yes, everything is perfectly clear. Except that I feel heavy-headed. I feel as though there were a load on my chest and I want to lie down again.

(*Short pause*)

Dr. . . . It's two hours now. How do you feel?

Mrs. X. I'm beginning to feel much more normal.

Dr. What's the difference?

Mrs. X. Well, I'm more tense than I was, and things are becoming sharper in my vision. It's less of an effort to think and much less of an effort to talk, and I'm slowly coming back to normal, and I don't know if I like it. I'm not nearly as relaxed as I was. I can feel myself getting tense. There's a kind of sense of disappointment in coming back. I'm coming back to reality so to speak. I felt a little unreal before. I felt floaty, as though I had taken a kind of a trip to the moon, and now I'm back again. It's a little disappointing to see everything as it was.

Dr. Why are you disappointed in reality?

Mrs. X. (Laughs) Well, it's a lot easier to feel the way I did before. I didn't care so very much about many things. I'm much more intense this way than I am the other way. It's a very comfortable feeling not to feel so intense.

Dr. But at one time you said you'd like to kill Poppa. At another time you said that you didn't care about him. Which was the intense feeling?

Mrs. X. The killing, of course.

Dr. Maybe the 'not caring' was just as intense.

Mrs. X. Maybe.

Dr. Do you think the drug's effect is wearing off?

Mrs. X. Yes, I think so. I don't think entirely, but some.

Dr. I see you are responding more quickly to my questions.

Mrs. X. I feel much more normal.

(*During the third hour after ingestion of the drug*)

Dr. How do you feel about Poppa now?

Mrs. X. I feel about him now the way I usually do.

Dr. How is that?

Mrs. X. I still hate him (laughs). And I still say it wouldn't be any great loss to anybody else or to himself if he were killed off.

Dr. It's two hours and ten minutes that you have been under the influence of the drug. Does it seem that long?

Mrs. X. No. It seemed like a much shorter time. And I don't feel the effect of it nearly as keenly as I did a while back. I don't recall ever having felt as completely relaxed as I did at a certain period after taking the drug, physically and psychologically.

Dr. Even after alcohol?

Mrs. X. Yes, even after alcohol. This was more complete. It was everything from my toes to the top of my head, physically and mentally too.

Dr. Why do you think you were mentally relaxed?

Mrs. X. I don't know, unless it goes along with the physically relaxed. I don't know. It must be the effect of the drug. I found it a little hard to concentrate.

(*The subject returned to the office three weeks later*)

Dr. It's about three weeks since you've had LSD-25. Looking back what would you say the most important reactions were?

Mrs. X. A feeling of complete relaxation which I have never felt before.

Dr. Even when you've had three or four cocktails?

Mrs. X. This was an entirely different kind of feeling. I've never experienced it before.

Dr. Was it pleasant?

Mrs. X. Very.

Dr. Would you like to re-experience it?

Mrs. X. Yes, I would.

Dr. Would you mind describing again what the type of relaxation was? It's perfectly all right to repeat what you said when you had the drug. I don't think any restrictions should be placed on your words.

Mrs. X. I wish I could describe it more minutely. I don't think I have anything further to say, except that it was so complete, that I was a little surprised by it. Never having felt that way before, I don't think I realized how complete it was until the tenseness began to come back again. It was a physical reaction. The tenseness began to come back in my fingertips and my toes and gradually through my body.

Dr. It was a pleasant experience would you say?

Mrs. X. Well, it wasn't unpleasant enough to have made it an unpleasant experience. I'd be quite willing to take it again.

The reports in the literature on the LSD-25 reaction have in general emphasized the disturbing effect of the drug on the subject's adaptive functions. According to most reports the ego structure which to all intents and purposes had been functioning suitably, after the ingestion of 50 micrograms of LSD-25, is disturbed by the more primitive parts of the subject's adaptive processes.

In the following experiment, Mr. *K*, who was a 35-year-old scientist working in a local hospital, and was charged with the construction of scientific equipment, took 50 micrograms of LSD-25 by mouth. He was the subject of an experiment lasting most of the day. The subject fell asleep after lunch and upon awakening described a dream he had about a greenhouse composed of spider webs. This dream led to recall of a repetitive dream of spider webs, which he had been having since he was 15 years old. This in turn led to the development of an important situation in connection with *K*'s work problems. It appeared that at the hospital where he was employed he was unable to communicate easily with his superiors. A project would be assigned to him by his supervisor and without discussing the matter further he would vanish for a few months and then suddenly appear with the completed project. This led to difficulties in his work relationships. These difficulties carried down the line to his subordinates who also felt the uncertainty of his position.

The reader should bear in mind that the interview occurred in 1952, when I was not as certain as I am now of the safety of dealing with *K*'s reaction to LSD-25 and the accompanying dream. If the dream had been reported by a patient in analysis without the LSD-25 reaction the procedure would have been somewhat different. Primarily, here the safety of *K* was the most important problem. Although *K* had had LSD-25 several times previously, I still wished to proceed extremely cautiously in exposing unconscious material. However, I do not believe that my anxiety about the interview was too great because I had been using LSD-25 for more than a year.

Subject—Mr. K — LSD-25 (orally)
August 1, 1952 — 50 micrograms

(*Time of interview was two hours after the ingestion of LSD-25*)

Mr. K. I've just been sitting here sound asleep after lunch. I put my head on the table and dozed off into a sound sleep until I was awakened by the sound of the telephone buzzer or the doorbell. After I heard the buzzer, I woke up enough to know that I had been dreaming and realized that it was important for me to remember what that dream was. It's going (the dream) rapidly, so here's what it was.

I FELT THAT I WAS TAKING PART IN SOMETHING IMPORTANT. I WAS IN A

TROPICAL CLIMATE AND I WAS OUT IN THE FIELDS OR IN THE JUNGLE WHERE THERE WAS A LARGE CLEARING, VERY BRIGHT OVERHEAD. AND ON THIS CLEARING THERE WAS SORT OF A GREENHOUSE COMPOSED OF SPIDER WEBS AND IT LOOKED LIKE A TENT. AND IT HAD A WOODEN RAILING AROUND IT, VERY LARGE. IT EXTENDED ABOUT 30 OR 40 FEET ON THE SIDE, I MEAN AROUND IT, MADE OF VERY WEATHER-BEATEN OLD BOARDS. AND IT WAS A TENT-LIKE STRUCTURE. AND THERE WERE TWO OTHER PEOPLE WITH ME; I DON'T KNOW WHO THEY WERE. WE STARTED TO WALK INTO THIS TENT AND THE LIGHT, FILMY MATERIAL LOOKED LIKE MOSQUITO NETTING. WE STARTED TO WALK INTO IT. IT WAS THICK AND TENUOUS AND IT HAD THREE DIMENSIONS. AND THE WHOLE INSIDE OF THE TENT WAS MADE UP OF LAYER UPON LAYER OF MATERIAL. WE STARTED TO WALK INTO IT, WAVING OUR ARMS, SLICING THROUGH IT, BREAKING THE SHEETS OVER OUR HEADS SO WE COULD GET INTO IT. AND AS WE GOT INTO IT I SORT OF HAD THE FEELING THAT WE HAD SOMETHING ABOVE US. WE CUT THROUGH LAYERS AND LAYERS OF THIS MATERIAL. IT WAS ABOUT 20 OR 30 FEET HIGH AND WE MOVED TOWARD ONE OF THE SLOPING SIDES. WE WERE APPROACHING NEARER THE TOP SURFACE OF THE TENT. WE GOT INTO IT WITH OUR ARMS. AND THERE WERE SPIDERS THERE. THEY LOOKED LIKE GRASSHOPPERS THOUGH, JUST GETTING CLOSER, SAY WITHIN FIVE OR SIX FEET OF THESE SPIDERS; THEY MUST HAVE BEEN ABOUT A FOOT HIGH. AND THEN THE DOORBELL RANG AND I STARTED TO WAKE UP. I STAYED IN THIS SORT OF STAGE AND THE DREAM WENT FURTHER. WE CUT MORE AND MORE AND WE GOT CLOSER AND CLOSER TO THE SPIDERS, UNTIL FINALLY THERE WERE JUST ABOUT TWO MEMBRANES SEPARATING ME FROM THEM.

Then the secretary walked into the room and I woke up entirely.

Dr. Were you frightened in this dream?

Mr. K. I wasn't frightened.

Dr. You called it a nightmare when I asked you if you had been sleeping. You said you had a nightmare.

Mr. K. Yes, I would call this a nightmare. It was not a pleasant dream. Cutting through the material wasn't good. I tried to stay half asleep when I was telling the story. You asked if I was frightened. No, I wasn't frightened but it was unpleasant, coming so close to those spiders. It was just unpleasant, the tenuousness of and the feel of the material we were cutting through. Already the dream is fading. I'm almost forgetting it now. I just remembered I wasn't frightened; it was just unpleasant.

(*The subject became quiet and had to be questioned actively.*)

Dr. You were cutting something, the spider webs or the material, with nothing in your hands?

Mr. K. No, nothing in your hands, just sort of tearing it apart with your own hands, using the arms and hands rigidly extended like they were sticks of wood.

Dr. Are you tired now?

Mr. K. No.

Dr. Do you feel worried or concerned? You seem to be sighing as if you were pretty exhausted.

Mr. K. This sighing I think doesn't necessarily connote exhaustion. It's something that you do. Exactly this minute, I feel very relieved. I feel like I've rested. My hands and legs are not shaking as they were before. Since I'm not fully awakened I feel rather refreshed.

Dr. You said there was something bright overhead.

Mr. K. The bright overhead I think was the tropical sun. I saw it when I was in Central America.

Dr. You want to look up to the ceiling?

Mr. K. Well, there's the bright, not too bright, yellow glow overhead (electric light fixture). Here's another thing I didn't say before. I was standing underneath green trees, looking out into a bright, sunlit field which was covered with this tent.

(*The subject continues to refrain from speaking spontaneously.*)

Dr. Have you ever been in the tropics?

Mr. K. Yes.

Dr. Did you enjoy it?

Mr. K. Yes, I think I did. I always said that I enjoyed it and I think of it as being enjoyable.

Dr. Did you see any spiders?

Mr. K. No.

Dr. These weren't really spiders were they?

Mr. K. These were big, green spiders, like grasshoppers. I don't know why these didn't look like spiders, yet I called them spiders. I felt as though they were spiders and I assigned this name to them. It seems to fit.

Dr. What gave you the spider feeling?

Mr. K. The spiders had built this tent, this tent shaped structure; the whole thing was filled with this material. Although there were thick spider webs, they were just resting at the top surface of the tent.

Dr. Were they crawling?

Mr. K. No. I wish I could quickly sketch what this tent was like. I haven't described it too well.

Dr. Would you like to draw it?

Mr. K. I can't draw it. I wish I could. I wish I could paint it. I can't draw it though. I'd be too concerned with the technicalities of drawing. I wouldn't get the impression down. The material was woven thick like cotton and they were at the top of it.

Dr. Well, the idea was to get to them?

Mr. K. Well, it started out, I didn't know they were there. I started clearing out the tent and as I got closer to it, I realized there was something up there. I remember I just had to cut three or four membranes to get to them. I remember them as being like cotton wool stretched over the whole tent. The whole thing was this material we were cutting through. And I deliberately cut closer to them so I could see what they were.

Dr. Have you ever lived in a tent?

Mr. K. Yes, I've gone camping in tents.

Dr. Were you afraid to sleep in a tent?

Mr. K. No.

Dr. In the dream there were some other people with you.

Mr. K. The people with me, I think there was one on my left and one on my right.

Dr. You don't know who they were?

Mr. K. I don't know who they were. I didn't see their faces. I don't know what they were, men or women. I feel as though it was an exciting dream, a lot of action in it.

Dr. What does the dream bring to your mind?

Mr. K. There was one person on my right and one on my left. It was either the feeling that I knew I was waking up and I knew it was important for me to remember what the dream was. I didn't realize at the moment where I was. I did and I didn't.

(*Since so few data are available on sleep during the LSD-25 reaction, it seemed desirable to obtain details of the waking process.*)

Dr. Did you suddenly wake up when you heard the buzzer?

Mr. K. No. I heard the buzzer ring twice, I think, and I woke up slowly because I immediately tried to put myself back into this dream. I went back into it so that I would remember it.

Dr. Did you ever have a similar dream?

Mr. K. No. If I have similar dreams, and I've had them, they're identical dreams. But I've never had one like this.

Dr. And you don't feel disturbed and you don't feel relieved?

Mr. K. No.

Dr. How do you feel now?

Mr. K. I don't feel anything specifically. I still feel I'm willing to do anything and I'm in a very relaxed position as to my head and shoulders.

Dr. Are you very warm?

Mr. K. No, not particularly.

Dr. Were you warm in your dream?

Mr. K. Not consciously, not uncomfortably at least.

Dr. You're not warm, yet you seem to be gasping for breath.

Mr. K. I'm not warm, yet I am gasping for breath. This seems to be a reaction for which I'm looking.

Dr. Do you sometimes do that?

Mr. K. No.

Dr. Not even when you're nervous?

Mr. K. Not unless it's due to some physical exertion.

(*The anxiety of the subject appeared to decrease. It appeared safe to proceed with free association and to attempt the interpretation of the dream.*)

Dr. Now, anything that comes into your mind.

Mr. K. This I always find difficult. So many things come into your mind and you have to pick out one. The word "tent" reminds me of when I went camping down at Lake ——— last October with my wife

and two friends and another married couple that we know. This tent in my dream was similar to that except very, very much larger. The tents we slept in there had regular wood platforms and for sleeping there were cots. The tent in the dream was much larger although the same shape. Spiders bring to mind the identical dream I said I have had, not in the last few years, but possibly five times I've had this identical dream.

I AM IN THE UPPER CORNER VERY, VERY HIGH UP IN A VERY, VERY LARGE WEB. THIS IS A TWO DIMENSIONAL WEB, AND I AM AT THE APEX OF IT. ALL THE STRANDS ARE COMING TOGETHER TOWARD ME AND I'M ENTIRELY ALONE. THE WHOLE THING IS LIKE IN THE TOP CORNER OF A LARGE, GREAT BOX. I CAN SEE NOTHING OUTSIDE OF ME AND THIS WEB IS STRETCHING OUT FROM ME IN SLOPES, OUTWARD AND DOWNWARD IN 45 DEGREE ANGLES, AND IT GOES THOUSANDS OF FEET AWAY. IT IS A VERY, VERY LARGE NET AND WAY DOWN IN ONE CORNER—I CAN HARDLY SEE THEM—THERE'S A TERRIFIC TURMOIL OF PEOPLE, VERY, VERY CLOSE TOGETHER AND ALL STRIVING AND CLAWING AND MILLING AROUND TOGETHER, JUST LIKE YOU SEE ANTS IN A NET WHEN YOU TURN IT AROUND. AND ALL OF THEM DOWN THERE, THOUSANDS OF THEM, THEY'RE PILED HIGH. THEY SEEM TO BE ON TOP OF ONE ANOTHER, THERE'S NO FLOOR THAT THEY'RE ON; JUST A BIG BUNCH OF PEOPLE DOWN THERE, ALL PUSHING AND CRAWLING ALL AROUND EACH OTHER.

This is an identical (repetitive) dream which I've had. The earliest I remember it is somewhere about when I was 15. And this dream has been recurring probably once every three or four or five years. The jungle sky, or the Central American placement of the dream I possibly attribute to having lived in Guatemala for three years during the war. My stay there I think was very rewarding and very satisfactory. I enjoyed it there. I would not hesitate to return. The hot sun, the tropic sun is something you don't experience in a more northern climate. It's a close and warm feeling. The sunlight is brilliant, white, couldn't possibly confuse it with the yellow globe overhead. I don't have any particular feeling about the weather-beaten board railing around these which was about a foot off the ground. The impression is very clear in my mind; I could almost see the knots of the wood. I can't draw anything from the spiders and grasshoppers. Maybe we have a few spiders around the house and we have to kill them, step on them, sweep them out. I have a revulsion toward spiders, no more than usual.

Dr. The spiders weren't spiders?

Mr. K. No. I said I gave them that name; they felt like spiders. Perhaps it was the association with the spider web. I still think the name fits. A grasshopper is a descriptive term; a spider is not necessarily an evil thing or a horrible thing. It's an insect, something of the insect kingdom. They looked like grasshoppers. I could only definitely see the upper halves of their bodies; typical large grasshopper head, the short foreleg tucked under them, something like a praying mantis has—short forelegs. I would say it was undesirable to touch them. The end of the dream was at about 3:20.

Dr. There's one inconsistency in what you've told me. The time you were in Guatemala, you had your wife with you?

Mr. K. Yes.

Dr. You said your life in Guatemala was enjoyable, but from other things you've told me, you wanted a divorce from your wife during that period?

Mr. K. Yes. We had had a disagreement before we left this country for Guatemala. One of the things that I wanted to do before I left the country was to learn Spanish and the Company had arranged for a teacher to teach us. I was interested in taking it as much as time would allow, but my wife was not interested at all and she stated flatly she did not want to learn the language. She just didn't want to be inconvenienced to that extent. This was the time when we were disagreeing on almost everything. I had felt, although not actually, I had felt separated from my wife at that time and had been traveling in Maryland quite a bit for the Company and only returning home on weekends. During this period immediately preceding our departure about six months, we did feel very compatible. During the time we were in Guatemala she lost, I think it was, two of her pregnancies. She's had quite a bit of trouble holding a pregnancy in the past few months. I remember definitely her losing one there, and I think there must have been two. In spite of this I think that during my whole three years in Guatemala, generally speaking, my wife and I were staying together more for social and economic reasons than just because it was too difficult to break up.

Dr. 'Cotton wool,' what does that bring to mind?

Mr. K. I used the word 'cotton wool' to describe the layer upon layer characteristic of this tent. I've been using cotton wool recently in sterilizing areas of skin before giving a hypodermic injection to my wife so she can maintain the pregnancy she now has. Cotton wool is a very common tool in our house. I scrubbed my hands off with cotton wool the other day after a cat had bitten me. I got involved in a cat and dog fight. I had to separate the two animals and the cat bit me, and I cleaned it off with the cotton wool.

Dr. Have you and your wife had cat and dog fights?

Mr. K. Unfortunately, not too much cat and dog. Generally they have been more bitter and more subdued than an out and out scrap. We have never slapped each other's face—nothing ever physically. Very seldom do we even come to harsh words—spiteful, mean words. In fact, I don't think we've ever called each other names. For instance, we've had subdued, long standing arguments—feelings, emotions prolonged for days on end.

Dr. How about your relationship with your mother?

Mr. K. With my mother? That's hard to describe.

Dr. When you first had these dreams; when you were in the web.

Mr. K. Oh, I remember I was just a young boy, very young, about ten or fifteen, around there. My relationship with my folks has always been

pretty good. They've never resorted to harsh discipline and they've never beaten me.

Dr. But what was your relationship with your mother?

Mr. K. I always felt that she exerted a very strong moral influence on me, in that *children must be seen and not heard.* I must always do right, go to church, shouldn't lie or steal. I looked upon her as being a good woman, not utterly right in everything she says.

Dr. But if you were seen and not heard, you were restricted.

Mr. K. I was restricted but restriction is only teaching your children manners.

Dr. I think it's restriction. I have a feeling that in the dream you're going back in part to the characteristic repetitive dream which you had in childhood. It goes back to your relationship with your parents, probably your mother, to the time you were brought up to be seen and not heard. Maybe that accounts for the fact that you work as you do, quietly, you're seen and not heard; you don't like to talk to your superior about what you do. That was your pattern of adaptation which you've carried over into your life's work. And your relationship with your wife, in all probability, is influenced by your attitude toward your mother which you've never been able to face—your love for her. She restricted you. In a way you were in a spider web.

Mr. K. I was in the web; I was very remotely away in that corner, very alone. Utterly alone.

Dr. And I think this dream reflects your present difficulty at work. And as a matter of fact, I wouldn't be at all surprised if your anger at being dominated to a certain extent by your mother's attitude to be seen and not heard is carried over in your relationships with your wife, your mother-in-law and your supervisor, because that's exactly what your supervisor is complaining of: you're seen and not heard. Do you see?

Mr. K. Yes. Not that I'm not working, but that I'm not working the way he'd like me to.

Dr. You're alone in a web of your own. And the spider not being the spider—

Mr. K. Is my mother.

Dr. No. I wouldn't say is your mother. I don't have enough evidence for that, but if all—

Mr. K. It's the frustrations that I feel, the things, the troubles that I run into.

Dr. And everybody is making a web around you. Even I weave a web about you, and you feel—you remember that song, "Don't Fence Me In"?

Mr. K. Yes.

Dr. You're fenced in by your marriage, by your mother-in-law and—

Mr. K. I don't like to be restricted.

Dr. That's it. And that's what this dream represents. You feel a lot better now, I think, because you can see that that's one of the things

you've never been able to face; that you dislike the things you also want. You've been brought up to be fenced in. If you're not fenced in, you'll get panicky.

Mr. K. What do you mean, if I'm not fenced in I'm panicky?

Dr. Well, if a child is brought up to adapt himself to life in a certain way and if he gives up that way of life, he has a new type of adaptation to develop, and if you're alone and without your previous technique of adaptation, you'll worry, "How will I do?" For example, I think your relationship with your supervisor comes in. You're not so much concerned with discussing things with other people, but it's how your discussions will go, "Will you conduct yourself in a civil manner?", or will you, as you told me before, know when the fences may be removed?

Mr. K. There's a clue in what you've been saying. The thought is perhaps best represented in that if you took away my fences I'd become panicky. I know myself that I want to get rid of my fences; I wish I had the means. This thought occurred to me earlier today. I wish I were powerful enough sometimes so that I could overthrow authority around me, that I could tell people, "Beat it, I don't want to see you; you bother me; go away." I don't have that authority. I don't have that power. There are many things I wish I could do.

Dr. Many people would like to do that.

Mr. K. I'm certain of that. I'm glad there are not more of us. We can't all go and do it. I feel perhaps that I'm also trying too hard to be a success now, although I don't want to stop doing anything that I'm doing. There is something else I noticed. Immediately after this dream had been recorded, all my muscular tensions stopped. My hands and legs stopped shaking. Then I listened to the recording of it. Now I don't think I'm living through it as much, as time elapses, because after that I began to feel these symptoms again—the muscular tiredness. Before I went to sleep, while you were in the other room dictating some letters, I walked up and down through the corridor, and I know my emotions were very mixed but I can't describe them now.

Dr. Your emotions were mixed up about me, and about being a guinea pig and that you were in this web of psychological—?

Mr. K. No, but there was a little—

Dr. Do you think I was the beetle who was going to take you apart?

Mr. K. No. I don't look upon it as that. When I said at lunch time I enjoy, not necessarily company, but good company, a question arose as to what did I think of you and your secretary. And my reaction then, as I recall it, was that these people are friends. Not that these are people that I have to please, that I'm working for. These are people that I owe a debt to, such as parents, these people are friends. As much as some of the people with whom I work and whom I call friends.

Dr. But still you were in this web of the experiment and of therapy!

Mr. K. Well, this is a web of my own choosing.

Dr. So is the web of your marriage.

Mr. K. Yes, and I think that was chosen from lack of experience and lack of knowledge of people and a fear of being alone. I think if you listened to my record of last week—

Dr. I don't think I've seen it transcribed as yet.

Mr. K. Well, in one part there I said the reason I think I married my wife is that she was the first girl that had returned my love and affection, and that I married because I was afraid of losing her forever. If I had gone to Seattle to work as I did immediately when I got out of college—this was when we were married—that if I had left at the time without marrying her, I would not have seen her again in all probability, and she would have been lost to me. I think this is the deep seated reason that I got married at that time. I was afraid of losing the first person who had loved me.

Dr. You didn't want to be alone in that web anymore?

Mr. K. It might have been that. I think I wanted to be free of that web. You see, when I say this other personality of mine is watching what I'm doing and counting to see how far I can lose my temper, this is the one that's up in the corner of the web, watching the people fight down below—that's exactly the same feeling. Actually, it's a part of me up at the top, watching myself fighting with myself down below.

Dr. Then you possibly could be the spider in the dream?

Mr. K. We're not spiders. We're on a spider web, but we're people.

Dr. Yes, but you also describe the spider as a praying mantis.

Mr. K. No. I was searching for a descriptive term there.

Dr. How do you feel now? How are your eyes?

Mr. K. I can see things fairly well. I still notice effects of the drug in my eyes. I'm feeling warm. Some of the tension has returned to my arms and legs—not so much. I'm still breathing rather fast.

Dr. I think we'll modify your reaction with phenobarbital. Rest your eyes.

Although the emphasis has been placed upon ego reinforcement it must be understood that the reinforcement is not only due to the processing by the unconscious of the material supplied by the drug, but also to the activity of the therapist. In order to emphasize the therapeutic relationships, excerpts from the same eight-hour experiment of *K* during which therapy was not emphasized or stressed show that ego depression can occur with the same dosage of 50 micrograms.

Subject—Mr. K. LSD-25 (orally)
August 1, 1952 50 micrograms

Mr. K. . . . I find that I am annoyed by something. In putting these cards back into the box, the secretary has stacked them so that the cards with a similar cut on the corner have been stacked together, possibly two or three hundred at a time. And in going through these questions, I find I'm really annoyed by the fact that I've perhaps answered fifty or

one hundred in a row 'true' and the next fifty or one hundred 'false'. So I'm now taking the cards out and shuffling them up a bit to make them more interesting.

Dr. Why were you annoyed?

Mr. K. I don't know why I was annoyed, but I know that I was annoyed enough that I wanted to change them by shuffling them thoroughly. This brings something to mind. You mentioned that I might resent authority. Of course, it might be that I resent making the same choice that somebody else has previously determined for a different reason.

Dr. Did that feeling of annoyance come on you suddenly?

Mr. K. No. When you say suddenly that involves a time sense. It seemed to be building up, but the building up time was short. It didn't appear to be suddenly. A little while ago I was sitting in the chair and feeling a great lassitude. The thought came to me, to describe how it felt to move. If I relax and do nothing but only think about the feeling, I become very conscious of myself. I feel very reluctant to do anything. Reluctant to move! To think or to read a magazine! I just want to sit. I just want to sit and be conscious of myself. I think that if I had a more comfortable chair, I would sink about four feet deep in it. Yet, at the same time that I had the feeling that I've just expressed, a small part of my mind is quite restless, and I want to read a magazine, if I could summon the physical energy to do it. I'm wondering how fast time is passing for me. Every time I take a distinct memory of everything I'm doing and saying and the peculiar instant that I'm living in, is very, I don't know. It gets rather vague. My time sense diminishes. If I try to figure something ten minutes back, I'll probably be only about sixty per cent accurate. If I try to figure something five minutes back I'm only ninety per cent accurate. If I try to think of something within one second of this particular moment, as I did a second ago, of what I will do in the next second, it is very real to me, and I think in the appropriate time sense. Whereas, if I get anything fairly away from that particular instant, I get very confused. If I had to do something five minutes from now, I don't know if I would do it. I'm feeling very depressed. I have a much lower hope for the world than generally.

Dr. Yet, you smiled when you said, "I'm feeling very depressed." You smiled broadly.

Mr. K. I think that at the same time I'm talking I have an inferiority feeling. What does one man's opinion matter! I feel that I'll never make any earth-shaking changes or have any pronounced effect on anything. You know how it is. You sometimes make a profound statement, yet smiling, just trying to sort of disarm your statement. I don't know why people do it, but they do. You try to emphasize a point and at the same time to de-emphasize it.

Dr. How about your attitude toward authority now?

Mr. K. At the moment and at the moment only, I think I'm very submissive to authority. I might mentally fight it, but I think I would go along with anything that anybody told me to do.

One week later when Mr. *K* took 50 micrograms of LSD-25 orally, he fell asleep in the office waiting room and had a dream in which he was underground in a tunnel. A study of the verbatim recording of this dream which follows, illustrates how the process of ego reinforcement has continued in Mr. *K*, how he rapidly developed insight into his adaptive mechanisms, and how well he was able to understand what was happening to him under the influence of LSD-25.

Subject—Mr. K. LSD-25 (orally)
August 8, 1952 50 micrograms

Mr. K. I had a dream. The duration of the dream was only about two or three minutes.

IT SEEMED I WAS UNDERGROUND IN A TUNNEL PERHAPS SIX FEET HIGH AND SIX FEET IN DIAMETER. IT WAS DARK, DIRTY, AND POORLY LIGHTED. THERE WERE SOME PEOPLE WITH ME. THEY WERE MEN AND WE WERE BREAKING OUR WAY OUT OF PRISON. WE HAD JUST DRILLED A HOLE IN THE ROCK FACE OF THE TUNNEL WITH A HAMMER AND CHISEL, AND WE HAD JUST LOADED BLASTING CAPS INTO IT. WE HAD JUST FINISHED LOADING THE BLASTING CAPS INTO IT WHEN I HEARD YOU SAY, "ALL RIGHT, YOU CAN GO BACK TO YOUR ROOM NOW."

That was the full extent of the dream. It was very short. I was standing in the background. I wasn't actively participating in the dream. In other words, I hadn't been swinging the hammer. I just seemed to be present. It didn't affect me whether we broke out of prison or not. I wasn't looking for the guards and I wasn't looking to break out. I was a spectator. I wonder if I am always a spectator. I wonder if I'm a spectator in watching other people do things, unless I am working alone. That is the only time I can work, when I am alone. I'm free associating now.

Dr. That's all right. Go right ahead.

Mr. K. It suddenly occurred to me that whenever there are discussions or talks about technical matters, I prefer to listen to the opinions of others. I form my own opinions but I don't voice them. I merely form them for my own reference. And I think that it is only under direct stimulus that—under a direct question, or if somebody definitely asks my opinion on something, well, I give it and then I have no trouble giving it. If I have an opinion I express it all right. I get the point over, but I won't do it unless I'm invited to. It's very—not rarely, but I think it's unnatural with me to, in a formal group, to spontaneously do anything by myself. Although I can remember instances where I have. I went to a town meeting, about a variance in a building code which I had been asked for by a neighbor, and I remember spontaneously getting up and saying what I thought about the matter in front of people. There were perhaps forty or fifty people who were total strangers to me. I knew nobody there. In general, in everyday life, in business, I will not venture

an opinion unless it's asked for. But this is only in formal meetings, particularly where there are superiors present. With my—I find it easier —I find it easy to associate with those men who are working under my supervision. I feel able to get close to them. In other words, if there were a superior and inferior and if I am the superior, I feel it very easy to break down any barriers and become very free and easy to associate with the men who are working for me. I suppose in this way I am always identifying myself with the underdog. I wonder if I am the one who feels discriminated against, but only in this battle between myself and my superiors, or myself and authority. And yet, if there is always a battle between myself and authority, it is never a battle between people working under my supervision. I'm never conscious of taking or being on the side of authority. I would invite some questions or leading remarks at this time, doctor.

Dr. You don't need any. Go right ahead.

Mr. K. I always have the feeling that I am working for the men under me; that I am working for the men that I'm responsible for. In other words, I have a foreman and anywhere between three and fifteen men working for me on technical work. I feel that I am a buffer for them, between them, and I'll use the word again—authority—that I should protect them from changes in managerial opinions from week to week; that I should protect them from the worries of budgets; from the worries of whether we're going to run out of work or have too much work coming up. I feel I should always work for them and see that they have the proper instructions and tools and the proper safety equipment. I feel that the work should be outlined for them and yet, on the other hand, I know that this is seldom done for me, and I realize that it doesn't have to be done for me. I mean, I say it now, as a logical opinion; logic tells me that this work doesn't have to be done for me, but somehow I resent it. I have the feeling that I do more for other people than they do for me. I think of people under me more carefully than the demands that are put upon me. I feel I am more reasonable than the people above me.

Dr. In the dream, you were underground?

Mr. K. Oh, yes, in this dream. I started quite a long discussion there about why I was a spectator.

Dr. You were brought up that children are to be seen and not heard.

Mr. K. Yes, but this was a long time and a lot of experiences ago. I can't see that—I'm not too sure that that would be exerting a strong influence on me. But something definitely is exerting a strong influence.

Dr. That you should be seen and not heard. Remember that was what your boss told you, that you were not heard enough? So that means that you are adapting yourself to life by being seen and not heard.

Mr. K. I've been trying to adapt myself the other way this last week and really have been giving him the treatment. Now why did I put it that way—giving him the treatment? I've been asking him every ques-

tion that came into my mind and he seemed to like it. He liked it very much. He told me to take the day off. I have the feeling, though, that I can't stand it too long, because I know that I'm not sincere about it.

Dr. Well, don't you think that there is an intermediate position?

Mr. K. Yes, there must be, but at the moment I don't. I feel antagonistic toward him, very antagonistic. The thing to do is not to find the intermediate position, but to want to find it. I would feel satisfied if I did find it. I just can't believe, somehow, that being a brain picker as he is, and a seeker after other people's ideas, that that is the right way to do things. The right way to get a job done, that is, until I have been convinced, or have seen, or something has been proven to me that there is a better way of doing it—I find it very hard to camouflage my feelings, to operate this way.

Dr. It may not be the best way, but under the circumstances it may be one of the effective ways. It all depends on what you mean by the word 'best'.

Mr. K. Momentarily, I mean for a matter of days, when he explains to me that the spreading out of information was what the laboratory wanted, I was convinced. I wanted to be convinced and I believed it and I felt it for a short time, but the old habit of working seemed to come back again and I can't get on to this new area of spreading ideas far and thin. I guess I tend to work by taking all the ideas and concentrating them into a single line or a small area so that they will be effective. I get them down on paper to get them made into metal—to get them produced. I don't think I'm essentially a talker or perhaps I am a talker and never developed the habit.

Dr. You're doing very well now.

Mr. K. I think a lot to myself.

Dr. In discussing your dream you said that your friends were blowing up things under you.

Mr. K. Yes. We were digging this tunnel, trying to blow our way out of this prison we were in. We were trying to escape; trying to get away from it. No! They were trying to get away from it. I was there. I seemed to be taking no active part in it. The duration of the dream was only three or four minutes.

Dr. You don't think that you could have been the other people in the dream?

Mr. K. No.

Dr. Who were they?

Mr. K. I don't know. Total strangers. I didn't know them. I hadn't known them in the dream. Yes, I did too! In the dream I had known them. I had been associated with them. I don't know how much. I knew nothing about them. I didn't know their names. I didn't know what they looked like nor how they felt.

The integrative processes which occurred with Mr. *K* slowly developed to the point where he was able to utilize in his daily life the insight which

he developed through these and other psychotherapeutic interviews. At present he has an executive position in which he is both seen and heard, his salary has increased more than 50 per cent, and the adaptive processes are better than they have ever been.

D. Discussion

1. *Transference*

In the foregoing verbatim recordings there were no subjects or patients undergoing prolonged psychoanalysis. Psychoanalytically oriented brief therapy was the technique employed by the writer. The results of the use of LSD-25 in investigations with more formal psychoanalytic procedures has, in three cases studied, provided a technique of facilitating the elimination of psychic blocks related to the transference. Both unconscious and preconscious negative and/or sexual guilt provoking attitudes toward the therapist have emerged so that more rapid progress in reconstructive therapy was feasible. For example, during the two hundred and fiftieth interview of Mr. *L* under 40 micrograms of LSD-25 taken orally, the stationary state of the analysis was favorably modified by the patient's understanding his deep distrust of the therapist. This distrust had prevented the patient from disclosing his feelings toward the therapist, much less understanding them.

> *Dr.* Now, to go back to your dream. Do you feel the fact that you've converted me into an oriental tyrant. . . .
>
> *Mr. L.* (Interrupts) With a smiling face.
>
> *Dr.* . . . means that you feel that my attitudes are unjustified?
>
> *Mr. L.* Well, I know what it really means now; *I didn't until this very second, I think.* That is, just now, as you were speaking, it may have been wrong of me, but I was listening to you with half of my mind, and the other half of my mind was saying, "Now, just what the hell did I mean by the 'oriental'—what is meant by the 'oriental'," and then suddenly the word *'distrust'* came out! And there I am doing the very thing I condemn and hate so much in other people. I can realize now why the feelings are so strong, because they some way reflect or blanket my own feelings to a degree. Ah, now, not trusting you is also another way of not trusting what I, or we, may find in what we uncover as we go along in our work, in what I say, in what you say, and so on. In other words, I don't fear you! *I fear what you may uncover. Or, I fear what we may uncover in myself.* It's actually saying the same words again and again. So the classroom scene is so clearcut. I wonder if that's why I asked if there's such a thing as being too clearcut. You know, it was so obvious it meant something else, but I doubt it. It doesn't, in light of what we have been discussing, the plan, using LSD and so on. And yet, I'd like to know why I've been so anxious to use LSD.

> You know, if you can remember, I sort of have been hinting at using this for, well, for quite some time. I've been very anxious to use it.

The foregoing excerpt is taken from 33 pages of a single spaced typewritten recording of a four hour interview under the influence of LSD-25. Although the patient had previously hinted that he distrusted me, the brilliant manifestation of his underlying fear of me was utilized effectively to develop insight into his homosexual fears of his father. The details of this interview will be reported elsewhere.

2. *Group Therapy Possibilities in Non-Psychotic Patients*

Many of our experiments were performed in groups of two to five subjects who were not patients but were volunteers paid $20 per day. When the same subjects (non-psychotic) met repeatedly, irrespective of the dose up to 100 micrograms, a relationship developed amongst them which has apparently *always* led to some insight and better adaptive techniques both at work and in community activities on the part of the subjects. It is realized that a basic need for psychotherapy may have led these subjects to repeatedly volunteer. But the problem here is not the motivation for taking LSD-25 but rather the results of taking it. The production of euphoria in doses between 25 and 50 micrograms gives this dose range (preferably 25 micrograms, orally) unique properties (4). The therapist or group leader often need only catalyze the activity of the group. He may even withdraw from the room and permit the group to function under his control, but without his direct leadership. Surrogate leadership rapidly develops. It is of interest that acting out of hostilities by subjects within the group does not lead to the loss of their social status within the group. I believe that this is different from group responses if alcohol were the euphoriant. LSD-25 then, assumes a directing force, which through modification of the ego as discussed in the foregoing, results in a therapeutic process. The disadvantage in the use of LSD-25 as an adjuvant is the length of the session which may require three to four hours. However, with doses of 25 micrograms, no important changes occur for about 30 to 60 minutes. The group leader may, therefore, safely begin 40 to 60 minutes after the administration of the drug and discontinue at about three-and-a-half hours after administration of the drug. Precautions have been previously described (1).

3. *Effect on Reassociation of Dreams* (2)

I have previously reported that earlier concepts and techniques of Freud may be amplified by the use of verbatim recordings of dreams.

The repetitive dream and its significance have been of importance in theory and in therapy. The command dream following hypnosis has also been the subject of considerable investigation. By commanding the patient under light hypnosis to reassociate a dream already recorded verbatim, ego development occurring during psychoanalysis may be utilized at later stages of therapy. The verbatim transcripts of the first dream and three subsequent reassociations of the same dream were the basis of the previous study reported. The patient is commanded to redream the dream which is repeated verbatim to the patient who then relates the dream as if he had dreamed it, while awakening from light hypnosis under which the dream was "redreamed."

Dream reassociation offers several advantages: (*a*) The patient may be regressed by the therapist at will to an earlier stage of the analysis. (*b*) The negative transference at times may be readily investigated. (*c*) As ego development proceeds, unconscious material previously threatening to the patient may be more freely discussed and evaluated.

It must be emphasized that the therapist's notes cannot take the place of the verbatim technique of dream reassociation. Each word expressed by the patient represents almost an infinite number of symbolic processes. The introduction of a word not used by the patient will alter the process of dream reassociation and contaminate the procedure by the therapist's screened summary of the dream. Verbatim records are of unique importance in the use of LSD-25 which I have employed as an adjuvant to facilitate dream reassociation. The same dream is reassociated without and then with LSD-25. Verbatim data of this type have been obtained and will be the subject of future communications. It is my present belief that LSD-25 offers a safe and effective way of simultaneously producing sufficient ego depression to enable new unconscious material to enter consciousness, and sufficient ego enhancement to enable the patient to make rapid and effective use of the insight developed so that reconstructive processes may be expedited.

4. *Length of Time Required for Therapeutic Interviews*

The "50-minute hour" is not adequate if the therapist desires to use LSD-25. With therapeutic doses of LSD-25 between 25 and 50 micrograms it is desirable to keep the patient in the office at least five hours after the ingestion of the drug. The patient, knowing that there is almost limitless time compared with the ordinary 50-minute hour is able to face the consequences of dealing with preconscious and unconscious material that hitherto could not be readily tolerated. Several patients after four-hour LSD-25 interviews, desired planned sessions lasting two hours without LSD-25. It is

the purpose of psychotherapy not to provoke anxiety, but rather to utilize the anxiety induced by psychotherapy to aid the ego to adapt to the emergence of preconscious and unconscious cathexes and hypercathexes. It is my belief that LSD-25 in the hands of the therapist who understands the nature of the psychopharmacologic action of the drug can organize the therapeutic interview to achieve this desirable goal of ego reconstruction.

E. Summary

1. Previous data on the nature of the ego enhancement occurring during the LSD-25 reaction is amplified by making a direct comparison with the ego depression simultaneously occurring. During the LSD-25 reaction advantage may be taken of the integrative function of the ego if the therapist recognizes the presence of the processes of ego reinforcement.

2. Although ego depression may occur during the LSD-25 reaction to produce a psychotic state, this state is associated primarily with doses greater than 50 micrograms by mouth. The nature of the ego depression is shown by a verbatim recording. The subject was essentially incapable of communicating effectively with the interviewer during the height of the LSD-25 response.

3. The nature of the integrative processes during ego enhancement with small doses of LSD-25 (20 to 50 micrograms) is illustrated by verbatim recordings. It is emphasized that during the LSD-25 reaction, the integrative functions of the ego often operate effectively to utilize preconscious and unconscious material during therapeutic interviews lasting as long as four hours and covering periods of observation lasting six hours. Whether or not the LSD-25 reaction develops into one where ego reinforcement or one where ego depression is emphasized depends to a great extent upon the relationship of the therapist to the patient. During the same therapeutic interview the therapist can manipulate the nature of the responses.

4. It is believed that LSD-25 may be utilized to more effectively mobilize psychodynamic vectors during the analysis of the transference.

5. In non-psychotic groups studied, important relationships developed amongst groups consisting of two to five members. These always led to some insight and better adaptive techniques both at work and in community activities on the part of the subjects who met repeatedly. This suggests the possible use of LSD-25 as an adjuvant to group therapy.

6. Preliminary data are reported on the effect of LSD-25 on the reassociation of dreams. It is stressed that verbatim recordings are a necessary condition for the successful utilization of dream reassociation.

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