traumatic events, release of repressed material could be at times therapeutic. In many instances, however, they are not. We should not forget the psychotic individual does all this quite often spontaneously as part and parcel of his clinical manifestations without showing any improvement. Furthermore, in many instances the transference relationship during the drug-induced state is markedly distorted and is not too conducive to psychotherapy. It has to be emphasized that psychotherapy is not only a process of analysis, but also of synthesis. Unfortunately, the latter is the more difficult to accomplish, especially in psychotic individuals. We, therefore, believe that LSD, mescaline and many other drugs can be used as adjuncts to psychotherapy, but it has not been proven that they are superior to drugs already in use. In our experience they cannot be compared with psychotherapeutic results obtained in patients where tranquilizing drugs were used to reduce instead of to stir up the patient's symptoms. Further investigations in this field, however, are very much in order. The understanding which could be gained into psychodynamics and the relationship of psychodynamics to physiodynamics are of utmost value and will influence indirectly our therapeutic understanding.

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VERBATIM RECORDING AND TRANSFERENCE STUDIES WITH LYSERGIC ACID DIETHYLAMIDE (LSD-25)

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Previous reports have stressed the value of LSD as an adjunct to brief and intensive psychotherapy (1–4). This communication concerns a three-hour verbatim recording, illustrating its use in connection with the emergence of the transference and the concomitant countertransference. While verbatim recordings do not generally include the almost endless number of variables required for a "total" study, it does provide verbal interactions of the total process. The delicate doctor-patient relationship expressed through interrelated groups of words is carefully delineated, and their meanings thus conveyed to different observers.

During the reaction with 25 to 50-microgram doses of LSD, ego enhancement occurs simultaneously with ego depression. Advantage may be taken of the reconstructive potential and integrative functions of the ego to provide insight into conflict situations not hitherto readily accessible to the patient (1). Our results with 100 micrograms or more of LSD indicate that the processes functioning in the personality structure of the non-psychotic subject may be modified as follows (5): (a) Awareness and recall of the experimental setting, (b) increased fantasy with limited emergence of autistic ideation, (c) facilitated interpretation of symbolic processes, (d) acute awareness of need to maintain conscious volitional control of self, (e) regressive modes of defense and self-preoccupation, (f) mounting anxiety, (g) dysfunction of affect control, (h) depressive processes exceeding the euphoric components, (i) alternating periods of disturbance in perception, (j) rarely hallucinatory phenomena with some awareness of reality simultaneously, (k) intensification of interpersonal bonds with members of the group or group leader either with distorted dependence or hostility, or both, (l) paranoid structuring of both people and circumstances, (m) psychosexual stimulation induced by either external events or by the other items listed here, and (n) rare improvement in performing under specific test situations.

If the foregoing changes of behavior were all modified by the word "slight", we would have a better picture of the patient who has received therapeutic amounts of LSD (25–50 micrograms). Here the forces of ego enhancement are supported by the intense relationship with the therapist. While the patient reacts

to both LSD and the therapist, the latter plays the major role during a therapeutically focused LSD reaction.

The verbatim recording represents three of five continuous hours of interview with an allergic 35-year-old male who had previously had 250 psychotherapeutic sessions without LSD.

Transference-Countertransference

This communication illustrates also the conduct of an analytic session with a patient having received LSD. The elaborate condensations of psychiatric reports more often indicate only the attitude of the therapist toward the illness under discussion, toward the patient, toward his therapeutic results and the opinion of his colleagues. All of these condensations are highly contaminated by the reporter through symbolic processing, both conscious and unconscious. The first necessary step in attempting to achieve a total or transactional view of the psychotherapeutic process is lost without verbatim data.

The verbatim recording directly exposes, in part, the nature of the countertransference through an accurate record of the verbalizations. This important but rarely studied aspect of the usual psychiatric report is protrayed by the interaction of the transference-countertransference. Thus, the system is isolated and a true fragment of the transaction is made available for study. A complete report of this process will be published *in extenso* elsewhere.

Summary of the Verbatim Transcript (250th Session)

A patient who realized that a threatening problem created an impasse in his analysis requested that he be given LSD, and received 50 micrograms orally. At the beginning of the session the underlying problem was unknowingly revealed. "One of the first thoughts that came to my mind as I held the glass of LSD was, 'I wonder if this is really anything. . . . I thought anything that's medicinal should taste'."

The patient then related a dream, described as having an "Oriental" atmosphere, in which he was a student sitting in a classroom. He felt that a course would have to be completed before he would be released to return home. The professor in the dream was characterized as the Soviet type, who answered his questions pertaining to release with only a smile. In reluctantly discussing the dream, the patient tried to discern what was meant by "Oriental" and said, ". . . suddenly the word *distrust* came out. . . . I don't fear you! *I fear what you may uncover! Or, I fear what we may uncover in myself!*"

He then brought up an important symptom, previously consciously withheld from the therapist, the return of itching and scratching; the onset of which he connected with problems encountered in his work. He finally realized that his allergic reaction may have been caused by a disagreement with his wife's psychiatrist whom he regarded as pompous, smug, and unyielding.

The patient recounted a second dream: He was in an arena rehearsing for a show. A news columnist told him afterwards that his performance was highly praised. Associations: ". . . this particular columnist is in reality very arrogant, has very little, if any, feelings for his fellow man, and does everything for effect and show and whatever will make exciting news. He has to blackmail, pressure, influence. . . set himself up as a sort of god." This led into a disordered account of experiences and incidents connected with show business. Finally, the patient realized that he had evaded discussion of the second dream and decided to return to "that columnist thing." He said, "This must be Dr. Abramson. . . it wasn't until this very day that I could actually think it, let alone say it. . . . It wasn't until LSD. . . that I was able to come up with the words 'arrogant' and 'self-centered'."

As the session continued the patient's insight became evident, and feelings and emotions hitherto camouflaged were brought out without the intense guilty fears that had kept them submerged. He said that a tremendous amount of aggression in him was wasted because he did not know where to "aim it".

The patient related a third dream. He was a student in the Navy, being taught how to bail out of an aircraft flying over water. He and another man were out on a pole which extended from the aircraft. The other man jumped off first. He was afraid to jump, and as the aircraft flew closer and closer to the ground, he

simply walked off the pole onto the beach. The naval officers marking him were displeased. The patient said it may have represented an unconscious fear on his part with regard to taking LSD.

Near the end of the session he brought out that, for the first time in his life, he was able to "sell himself"—his talents. In other words, he was no longer as hostile toward the figures of authority.

Discussion

Analysis of the transference distinguishes psychoanalysis from other forms of psychotherapy. Concepts of the transference are derived from a vast source of psychoanalytic literature. But, raw data of the doctor-patient interview are very rare.

I have noted in the past five years of work with LSD given hundreds of times that an intensification of the relationship with the patient or subject has developed. This has been especially true when LSD has been administered during psychoanalysis. The patient with one hundred or more interviews and considerable dream analysis before receiving LSD has acquired some insight into the mechanisms of the unconscious. It is my belief that administration of therapeutic doses of LSD to such patients may expedite advantageously analysis of parts of the transference.

Mobilization of the Unconscious Homosexual Conflict

In the first meeting following the LSD interview outlined in the foregoing, the patient was reminded that, although he had touched on his relationship with the therapist from time to time, he had never before consistently and definitely consolidated his position. In the preliminary portion of the verbatim recording of this session, there was no word or statement regarding homosexuality.

Patient: Well, this brings us back, I think, to the time I started with these mysterious or undefinable fears that I have regarding my masculinity. . . . I had certain fears or anxieties regarding my masculinity or perhaps lack of it, or of certain forms of homosexual tendencies that are not outright but subtle in act or thought. So now, two years later we are right back at this point, and I still don't know what this "X" is. But I know a little more about how things came about so that "X" took place in me. I know a little more about it as far as development is concerned, but as far as the actual mystery itself, the "X", I don't know anything more now than I did then. And that, to me, is the thing which I am probably most afraid to face.

Doctor: You just said, though, that you distrust me and have fears in relationship to your masculinity.

Patient: What was that again? I distrust you with relationship to my masculinity?

Doctor: That's right. There are two things that you talked about, one following the other. We know that during your LSD session on Wednesday it became quite clear that in certain areas you distrusted me, unconsciously. This now came to the foreground. Today you say that you are back where we started; that although your fears of masculinity are better understood by you, and realistically eliminated because of your improved heterosexual behavior, you still have them nevertheless. And I asked, now in relationship to me, to the analyst, but specifically in relationship to me, whom you distrust—

Patient: I'm all in a cloud now.

Doctor: You've been talking about two things: one, about the analysis, and two, about your masculinity. Put them together.

Patient: I don't get it, except for this threatening feeling that I have with regard to exposure by you. You're implying, I gather, that my fear of masculinity is now linked with this?

Doctor: I'm implying that I might be a threat to your masculinity; to your being a male; to your developing heterosexually; and that these fears might have originated in your childhood and now could be hooked up to some of the dreams that you had which were plainly homosexual.

Patient: I don't know.

Doctor: Well, there's no hurry about your getting the connection. It's a rather subtle connection and I might be wrong.

Patient: Unless it's the "father thing".

Doctor: Well, of course, it's the "father thing"!

Patient: Well, I mean, this was—I thought this was so basic. Isn't this generally the case,

that the analyst and the patient is the "father thing"?

Doctor: The analyst can be many people, but here, in what way are you specifically afraid of—

Patient: Well, now I see what you's getting at—the sexual feelings toward my father, or fears of my father, or competing with my father. I don't know what I'm talking about; I'm just going along according to what you said up to now.

Doctor: Do you remember you got quite upset when we had to start the analysis and you had a dream of men lying over as if they were going to get rectal examinations? Does that ring a bell?

Patient: Well, I remembered the dream and I remembered discussing the fact that it reminded me of my father and the way he died. I mean the whole session was about that; the type of operation my father had and so on. But as far as the memory is concerned—

Doctor: But there was a fear in you connected with that.

Patient: A fear in me?

Doctor: That's right! You got quite anxious.

Patient: I don't remember. That was some time back. I remember the dream and I remember the—

Doctor: At that time I said it would be better not to discuss it too much. Do you remember?

Patient: Yes. So what was that?

Doctor: Well, maybe some of the fears about your own masculinity were involved in that dream.

Patient: Well, did I say that I was sexually excited in the dream?

Doctor: No, no. I'm not speaking about sexual excitement; I'm speaking about fears now.

Patient: Well, wouldn't the fear be produced, or more highlighted, by a feeling of some excitement—this sexual stimulus or stimulation or whatever it is, that was producing fears?

Doctor: It may or it may not.

Patient: Couldn't it be the conflict, in other words, the feeling wanting to take place and the—I can't put into words what I'm trying to say, but I have an idea of what I want to say. In other words, what you're saying about his particular dream and—

Doctor: And many dreams like it that you had, because you had quite a number. And many dreams you've had regarding your father have given rise to a great deal of anxiety and many of them had to do with the genitals or the rectum, remember that?

Patient: Yes. Or bandaged hands.

Doctor: That's right, bandaged hands.

Patient: Some form of violence.

Doctor: Or using the hands—preventing the hands from being used.

Patient: Hmmm. Could I have been beaten or something?

Doctor: I don't know.

Patient: As a very young child, playing with myself or something like that?

Doctor: It happens.

Patient: Yes, I know, but a thing like this I certainly would remember.

Doctor: Not necessarily.

Patient: It didn't happen in the years that I can remember. Unless it may have happened in some subtle way that I wasn't aware of it. In other words, I may have been getting—just now that "Roman galley slave thing" came back to me. Remember that dream I had a long, long time ago? One of the slaves looked like my father, and they had bandages on their wrists. Also, circumcision has been coming up, or did lately—what with the memory of that circumcision I went to where everybody was fainting and so on. And a lot of these people were present at my sister-in-law's party. Remember that? Maybe when I'm criticized I feel that I'm being castrated, to a degree. Maybe I feel that whatever masculinity I have is in my ability to perform, and if this is threatened, in a sense I'm being circumcised or castrated. Is that possible?

Doctor: It's possible that there is a connection.

Patient: Because look how much importance I put into reaction. My whole life up until very recently went much further than just my job, see? Before I cared very much about —up until quite recently my whole life was that way, to impress and so on. It's an old typical thing! Now, I'm very happy to say that most of that has been changed. In fact, a lot of it

has been changed. But yet that feeling is still very strong when I'm performing.

The attitude of the patient following this type of verbalization changed in a favorable direction. His unconscious fears, so well portrayed in his dreams, apparently diminished. The unconscious components of homosexual drives became less conspicuous in his dreams. Eczema definitely associated with unconscious fears of homosexuality diminished or disappeared. The influence of LSD on analysis of the transference was of utmost significance in expediting this phase of the patient's recovery.

Relationship with Minority Groups

Another one of the important aspects of the patient's personality structure uncovered by LSD was his unconscious hostility toward minority groups. The patient's professional work brought him into contact with colored show people. His relationship with them improved markedly as indicated by a recorded excerpt from a session some months after the LSD interview.

Patient: But one thing I did notice on my last tour; I used to have the habit if I was with a colored band, and I was eating with them or chatting with them, I'd become one of them. I almost talked like them, not too obviously, because then they would say, "Oh, man, what are you doing?" I'd try so hard to be like one of them and say, "See, I'm one of the boys!" This time the big difference was that I didn't go out of my way to be with them. If I was with them, fine. I didn't search them out. I didn't look for them.

Doctor: Do you know why?

Patient: Well, because for one thing I understood my feelings.

Doctor: But specifically, why?

Patient: *I didn't have to soothe my guilt.*

There are other minority groups, symbolically speaking. In the case of this patient, his relationship with his wife and children, I believe, improved as a result of the resolution of the unconscious forces of hostility toward minorities.

The Transference-Countertransference as Part of a Transactional Process

Grinker (6) discusses in detail integration of the individualized whole organism in terms of field theory. The functioning of the organism cannot be understood except by a study of its transactional process as occurring in a total field. A frame of reference in which the organismic-environmental gestalt can be subjectively perceived is not within the activity of the psychotherapist under usual conditions. The psychotherapist is just as much a part of the system in process with the environment as is the patient. Transactional relationships develop not only with the patient, but also with the psychotherapist who is part of the environmental whole. For example, he interacts during the interview with the attitudes of his own social and professional group.

Cantril, Ames, Hastorf, and Ittelson (7) stress the transactional point of view in psychological research. Spiegel (8) states, "If the concept of the field is to be employed as the basis for representing the interconnections between the various aspects of human behavior, then all these aspects just occupy nonhierarchical positions within the field."

The Need for Scientific Data in Psychodynamics

It is a necessary condition for the study of the psychodynamic features in a transactional process that the verbalizations of the participants comprise part of the raw data to be studied. Verbalizations of the type of communication presented here are limited by their descriptive nature. This very limitation, although lacking the ideal and almost infinite complexity of the necessary features (for a more complete study) outlined, for example, by Kubie (9), provides a definite system for evaluation. This system can usually be made pertinent to a realistic goal. We can only hope to achieve our purpose by restricting our operations and by lifting the restrictions only as the meaning of the limitations originally imposed becomes clear. The verbalizations of a verbatim recording are not weighted by condensations and distortions and are available for interpretation and analysis by investigators outside the framework of the interview itself. It has been said by some that a verbatim recording is "incomplete" and that "all of the conscious and unconscious activity of the analyst as well as of the patient would be required for a truly scientific procedure." This attitude is, of course, a particularly

destructive type of scientific nihilism and does not apply to investigations at any level, even the most purely scientific. It is even maintained that notes taken during the psychotherapeutic procedure will influence the course of the analysis. From an operational point of view this, of course, is correct. Certainly, with some patients, note-taking would interfere; with others it may enhance the progress of the analysis. The same is true of verbatim recordings; but it is hard to visualize how scientific psychodynamics can be built only on recollections of the observer. To ascertain what a physician means by the term transference or countertransference it is necessary to know not only what he says about it, but what he does with it. That is, how does he function in the transference-countertransference system? It is difficult to understand how the basic process of scientific procedure has been neglected so long in one of the most important aspects of man's study of man. Certainly, if a sufficient number of analyses had been recorded, published, and studied by the usual scientific procedures and found wanting in their contribution to psychodynamics, then the value of verbatim recordings could reasonably be denied under the conditions that they were studied. At present the tragic paucity of suitable raw data in psychodynamics makes it urgent that means be found to publish verbatim data so that multi-disciplined studies of psychodynamic theory may be made possible. Too often, spectacular coincidences and anecdotes which confirm a given psychodynamic theory take the place of the basic process occurring in the transference-countertransference segment of the transaction between patient and therapist. The anecdotal procedure must give way to content analyses with emphasis on the transactional nature of the psychotherapeutic process. Only in this way can the basic framework of psychodynamics be ultimately formulated, undistorted by unknown accidental factors.

The Countertransference in Verbatim Recordings

From the point of view of the writer the science of psychodynamics cannot be adequately developed and the data cannot be suitably evaluated without verbatim recordings on a much larger scale than that presently available. It was significant that this need was stressed recently by Gill, Newman, and Redlich (10). They point out some of the difficulties encountered with respect to the therapist's attitude. When I first used the technique of verbatim recordings about 10 years ago, it was surprising to find that many supported Glover's view (11), that even taking notes in the presence of the patient was detrimental to the therapeutic process. The microphone, according to this notion, would be much more detrimental. This point of view may hold for some patients, particularly paranoid personalities. While the transference may be impaired by recordings, it is most important that the physician's attitude toward recordings be considered in terms of the countertransference. Little data on this subject are available at present.

One cannot deny that a very important part of psychotherapy is the interaction between therapist and patient. *The motivations of the therapist, therefore, are of great significance.* A study of these motivations can no longer be neglected. The therapist is constantly confronted by his own defects when listening to the recordings or when he reads the transcripts. He is, therefore, confronted with unresolved problems of the countertransference, which may be threatening to him and anxiety producing. Both patient and therapist are on the same tape recording. The therapist becomes a patient, so to speak, when the countertransference is the subject of scrutiny. He, himself, becomes a patient not only in his own eyes, but also in the eyes of the outside observers, to whom exposure of the therapist-patient relationship may be disclosed. Further, if we consider Lewin's (12) views of the dynamics of the countertransference, of the hostility and even death wishes toward the patient, problems connected with verbatim recordings may become intolerable to the therapist. Indeed, the possibility exists that this hostility may be turned onto the therapist himself. The psychodynamics of this process may account for what I believe to be the scientifically unreasonable positions taken by others. With changing ideas and availability of recording equipment, I hope that the analysis of the patient-doctor interaction will become a more integrated part of the psychotherapeutic relationship.

SUMMARY

1. Fractions of a three-hour verbatim recording of a patient under the influence of LSD are presented to illustrate its use in connection with the transference-countertransference process in therapy.

2. The technique of conducting psychiatric interviews with patients under the influence of LSD is outline.

3. On the basis of the foregoing data, it is believed that LSD intensifies the relationship with the physician during the state produced by LSD. The transference-countertransference process is brought out in bold relief against the analysis as a whole.

4. The nature of the transference-countertransference as part of a transactional process is discussed, and the need for verbatim recordings is emphasized.

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SUMMARY OF DISCUSSION

The papers were discussed by the panel and following members of the audience:

Dr. Silvano Arieti
Dr. Hassin Azima
Dr. Frank Freemont-Smith
Dr. Frieda Fromm-Reichmann
Dr. Warren C. Johnson
Dr. Alexander H. Milne
Dr. Martin A. Ruona
Dr. Werner A. Stoll
Dr. Esther B. Tietz

The participants, ranging from biochemists to psychoanalysts, not only paid attention to the chemical effects upon the brain and central nervous system, but also to the effects of therapy upon the therapist. The introduction pointed out that only with a multifaceted and coordinated approach through the disciplines of anatomy, physiology, biochemistry and psychology will psychic phenomena become more understandable. Mescaline and LSD produced certain changes in the central nervous system, either directly or via an intermediary metabolite. Elucidation of these biochemical mysteries may clarify our knowledge of the naturally occurring disorders.

One of the major points was the question as to whether LSD causes schizophrenia: It was argued emphatically that no one had made such an assertion, and the final consensus was that LSD produces symptoms that are schizophrenic-like. As is the usual procedure in uninhibited discussion, it went far afield. Although the discussion primarily concerned LSD, mescaline was also considered. Its effects are not strictly comparable with those of LSD.

In the argument about toxic psychoses and schizophrenia, one difficulty was found in the effort to compare chronic schizophrenia with the temporary effects of the drugs that produce schizophrenic-like symptoms. While similarities of the effects of mescaline and LSD