

102. Lilly, John C. 1967. Basic Problems in Education for Responsibility Caused by LSD-25. Proc. of 17th Conf. on Science, Philosophy and Religion in their Relation to the Democratic Way of Life. Clarence H. Fause, Ed. Paper presented in section on Character Education of Scientists, Engineers and Practitioners in Medicine Psychiatry and Science with Strategies for Change. Loyola Univ., Chicago, Ill. 1966

10

DS

Reprinted from *Approaches to Education for Character*, edited by Clarence H. Faust and Jessica Feingold. Published for the Conference on Science, Philosophy and Religion by Columbia University Press. Copyright © 1969 by the Conference on Science, Philosophy and Religion in Their Relation to the Democratic Way of Life, Inc. Printed in the United States of America.

*Chapter 17. BASIC PROBLEMS IN
EDUCATION FOR RESPONSIBILITY
CAUSED BY LSD-25*

by John C. Lilly

THE RISING number of young persons taking LSD-25 (lysergic acid diethylamide) brings in its wake many of the older problems faced by parents and educators in regard to the development of those factors which we epitomize in the word "responsibility." One view of responsibility is that of an inner discipline which directs the activities of the self toward attainable and idealistic goals. These goals may be directed so as to be strictly personal or they may be directed for others than one's self. The goals may be connected with only a few persons or large numbers of persons.

In the matrix of our civilization each one of us has multiple exchanges and responsibilities for many different aspects of that civilization. Each of us has a more or less fluid reference point within the structure of society. Most of us are regulated in detail by taxation, by income, by available work, by husband, by wife, by children, by parents, by governments, large and small. Each of these separate agents and agencies exacts its toll of time, effort, and money from each of us. Each of these agents and agencies has ways of enforcing its toll upon each one of us in the absence of a response and continuing responsibility from each one of us toward each one of them.

As each human being grows from the nonspeaking little animal that is born into this world to the responsible adult with his own family, he is required to expand his responsibility to the outside world again and again. Only when responsible people judge him to be unfit to accept further responsibility does the pressure to expand the areas of his responsibility decrease. There are times when one has the feeling that

irrespective of the desires of the individual this inexorable process continues throughout his life.

Inside each person there is an answering to these external calls to duty. At each stage the individual tests the system to see what its limits are and how much he must respond with appropriate action, thinking, and dedication. At each young stage the various kinds and forms of evasions of responsibility are tried to the limits possible to that particular person and either rejected or further espoused depending upon the inner satisfaction generated by the evasive action.

The evasions for the young usually take the form of pursuing the most pleasurable paths and staying away from those which are found to be unpleasant or painful. However, as one grows older and more experienced, the pleasure and pain have become more than physiological experiences and have begun to attach themselves to concepts, to persons, to institutions, to real things, and to distant goals. Then one's brain has enlarged enough and become experienced enough in controlling the algebraic sign of the emotional value (plus or minus) of various systems of thinking and successes within those systems; the basic structure for responsibility has been achieved. The responsible strong self-directed individual with dedication and interest in improvement of self and in widening his areas of responsibility is the person we should keep in mind in the rest of this discussion.

Let us look at a distribution curve of responsible persons; at one end those of minimal responsibility and the other end those of maximal responsibility. This curve of the number of people with each degree of responsibility varies with quite a large number of parameters. It varies with age, with economic level, and with educational level achieved. Some of these individuals are selected by the educational system for the very factor which we are discussing; *i.e.*, the more responsible individuals with intelligence will either continue their education and complete it or will have found what they are looking for outside this system of education and have accepted responsible jobs on which they start their life's work. As John Gardner says in his book, *Excellence* (Harper & Row, New York, 1961) there is no *a priori* reason that all those with intelligence, responsibility, and dedication should pass through the college system. There are other means of reaching social and national responsible positions than through college. Gardner

points out that we have people on arbitrary scales of value, placing those who have loafed their way through college higher than those who have achieved in large measure through a self-education regime. The latter makes a more valuable person than the former.

All of these considerations are relevant to the present fashion for taking LSD-25. The recent spate of bad press having to do with college students taking LSD, the withdrawal of the Sandoz Company from supplying the drug, and the new controls of the Federal Food and Drug Administration and the National Institute of Mental Health underscore this problem. One might ask: who *is* responsible with regard to LSD? *Where lies the responsibility for educating for responsibility with regard to LSD itself?*

This is a very difficult problem. In my opinion the abdication of responsibility for LSD and similar substances started in the early days (in the 1950s) when certain people began to take these substances and report their experiences in the scientific and nonscientific literature. Using the "20/20 vision of hindsight" let us reconstruct what seemed to have happened with regard to LSD over the past fifteen or so years.

First of all the effects of these substances have been known for a long time. The naturally occurring plants and fungi which are the biochemical factories for these substances have been around literally millions of years. Man has incorporated some of these into past religious rites and certain "pagan" groups have used them with telling effect in their religious rituals. In so far as we can discover, each of these groups has had to face the problem of discipline with regard to the use of these substances. A current and cogent example of the achievement of discipline in order to control the use of these substances is the Native American Church, with the peyote cult. The history of this group has been recounted many times. From the published accounts we can deduce that responsible use was achieved within the confines of a religious setting.

It may be that responsible use of these substances cannot be achieved without some sort of strictures in the direction of the religious aspects. A religious transformation of the individual may be a step on the way toward achievement of inner responsibility to himself. Let us move from the religious viewpoint to what one might call a more basic philosophical viewpoint in which one attempts to explore the basic

beliefs that a given individual has and on which he really operates. In this context we will try to ignore the tendency of most persons to say that they believe certain things, whereas in reality they act as if they believe quite something else. In this context we are speaking of only those basic beliefs which are operationally, demonstratively existent in the behavior and in the accomplishments of the individual.

Basic beliefs are here defined as that set of basic postulates which can be demonstrated to be operative through long study and careful analysis of the behavior, writings, and vocal productions of a given individual. It is this basic structure of the individual and of his feeling-thinking machinery in which we seek the basis for responsibility and the education for responsibility.

It is this basic set of beliefs which controls the effects of LSD on the person and on what he does, thinks, and produces during the LSD state. It is these basic beliefs which can apparently be unearthed (and possibly even changed) during the LSD state. This is the desirable and at the same time the perilous aspect of LSD and of its control. The temptation to elicit, to control, and to change the beliefs of others and even of one's self at times is a seductive goal. *Apparently* LSD puts this power in the hands of those who use LSD. But this may be a delusion. LSD may release mechanisms for the construction of self-deluding beliefs.

LSD allows a person to take himself apart, as it were, and look at separate areas of belief independently of beliefs about those areas, *i.e.*, independently of his meta-beliefs. For example, if one believes, even temporarily, that one is a god in the LSD state, one becomes a god in his own imagination. One becomes one's concept of a kind of god, how powerful, how omniscient, etc., how knowledgeable a god one can be. Under the LSD state one is no longer influenced by the usual meta-belief, "I am in a class of animals known as *Homo sapiens*, not in a class above the animal class and known as gods." In the LSD state one can ignore what one knows in one area and construct a belief about another area contradicting the first and have freedom to carry out many of the logical consequences. It is of no matter how irrational or how out of step the belief is with reality or with other belief systems nearby in self. In this sense LSD can be thought of as facilitating the genesis of psychosis itself rather than causing mimicking of psychosis.

The ability to hold a very powerful nonrational belief in mind and

act as if it is true within one's own mind is one aspect of psychosis. If and when the LSD state or similar states persist beyond the expected limits of six to ten hours with the known pure diethylamide substance, then may one begin to suspect that other biochemical and neurological mechanisms are activated which might possibly be similar (if not identical) to those occurring during "true psychosis."

However, since LSD-25 has been called "psychotomimetic" quite early in the analysis of its effects, we are left with this history of the "psychotomimetic drug." This judgment acts as a programming agent for all subsequent work with LSD-25. This is embedded in the literature, it is embedded in the guiding agencies for its investigation, it is embedded in the public mind and wherever one turns one is faced with this tradition of "psychotomimesis."

(A rather amusing sidelight occurred with respect to this particular view of the perils of LSD. A well-known psychiatrist was approached by a woman who was worried about what LSD might do to her mind and brain. She had been reading the literature and had read the work of this particular man. She questioned him. He answered, "I have written that LSD causes psychosis and I am sure that it does for a period of at least four to eight hours." She said, "And what do you mean by psychosis?" At that point the psychiatrist's wife interrupted and said, "let me tell you a little story which will illustrate what he means by the word 'psychosis.' One night he came home from the laboratory complaining that he was getting some sort of virus disease. I asked him to describe his symptoms in detail: as he began to describe the symptoms it suddenly occurred to him that these were the symptoms of the LSD state. He then thought back during the day and discovered that by accident he had apparently absorbed some LSD. At this point he said, 'Oh, it's just an LSD psychosis. I am going to bed and sleep it off,' which he did.")

This story illustrates what a strong-minded self-disciplined and responsible individual thinks about the effects of LSD on himself. There are weaker individuals who are precipitated into a "real," difficult-to-reverse psychosis by the drug experience; there are many such persons and we cannot be too careful with such individuals.

Another idea which has grown up around the use of LSD was started about the same time the psychotomimetic viewpoint was promulgated. This is the "religious revelation" aspect of the drug. This

aspect has done as much of a disservice to our understanding of what is going on as has "psychotomimesis." We cannot take responsibility for "religious transcendental experiences" scientifically. Each of these phenomena is placed a little bit beyond the reach of proper scientific investigation.

But once again this is the state of our present knowledge. "LSD causes mimicking of psychosis, LSD can cause religious transcendental experiences."

Support has been given to both of these points of view by innumerable books writing up personal experiences under LSD-25. I call your attention to the books by Jane Dunlap, Constance Newland, M. G. Bishop, those by Aldous Huxley, and by Timothy Leary, Richard Alpert, and Ralph Metzner.

If only LSD-25 and its effects could be accounted for fully by these points of view, the scientific work would not be as difficult as it is. If we could only go along with these "wishful thinking" views of the effects, if we could go along with those who saw only these things when they took the substance, then our work would not be very difficult. We could agree that the explanations were adequate and we could drop the whole subject. But somehow these explanations are scientifically unsatisfactory. Somehow they seem to have led to "mental absolutes" which, to this author at least, seem unreasonable. What I see in the writings of these two aspects of the effects of LSD on the human mind is that I am reading *long accounts of the details of the wishful thinking* of each of the authors. I do not say that this is irresponsible reportage of inner events. I believe that these people are sincere, straightforward, and disciplined along their own lines. However, each one of them is giving us that which they wish most to be true.

One can summarize my viewpoint of this literature by saying that these elaborate constructs reflect two things from each of these persons: 1) the contents of their own memory recombined in a free associational way, and 2) the realization of their most secret and hoped-for set of goals with regard to their own basic beliefs, in so far as these could be accomplished within their own heads (Jerome S. Bruner and C. C. Goodman).

The social effects of these writings and others like them include a rather devastating and widespread seduction of young minds toward

the taking of LSD-25. The promise of "ecstasy" and "religious transcendence" to some of the youngsters is very seductive. To others the promise of "psychotic experience" is equally seductive. Let us not forget that today adventure still beckons to the young and that this rather old frontier of the mind is now being opened up by LSD and other such substances for the perusal of those seeking adventure, both for pleasure and for danger.

According to the clinical reports from various psychiatric out-patient departments connected with universities, most of the people who are getting into trouble with LSD and similar substances are between the ages of approximately seventeen years and twenty-five, *i.e.*, college and graduate students. A sufficient number of these students have read the writings above and have established a peer mythology with regard to these writings to the point where there is a subculture built up around these substances. I have spoken with several of these youngsters and was left with the impression that the motives involved are quite complex and worthy of a good deal of further study. In the light of this kind of experience, it is high time that we instituted a thorough and widespread scientific investigation of what is going on among these youngsters.

Let us now turn to some other possibilities with regard to LSD-25 and the state that it produces. Let us try to arrive at objective and scientific views of its effect upon the mind. This is indeed not easy but I believe that it is important to try.

The objective, dispassionate, and thorough investigation of states of mind induced by these substances is a primary requirement for science for the next few years. We cannot eliminate the subjective report as a source of data. We should not allow subjective reportage to become merely an artistic and romantic medium for use only by novelists and artists. The science of a mentality as reported by that mentality has been neglected in academic science for many years. The encouraging increase in cognitive psychology within certain academic institutions is to be applauded, and, hopefully, expanded.

The subjective aspects of one's own mental functioning in adolescence is incredibly important to one's self. Many youngsters seek guidance, seek help and seek education in this world of the subjective and do not obtain much help from science.

The failure of science to explore this area is expressed in the present problem with LSD-25 among these same youngsters. The only maps of the territories they have are those of the artists, theologians, and psychiatrists who preceded them in the LSD-25 state. *I feel these youngsters do not need maps so much as they need a catalog of possible maps and an estimate of the probabilities of the occurrence of certain kinds of maps in this area, and maps of the dead ends and lethal traps.*

In order to construct a set of ideas which may be of help to us in educating the young in regard to the inner life with special reference to the LSD-25 state, first of all let us say that the species of *Beings* (beasts, plants, and other living intelligent and non-intelligent creatures) which one may come upon in the LSD state, have a much more flexible "zoological science" to them than does the zoology of real animals. Since the "creatures seen, felt, heard," and the "beings thought to and thought from" under LSD are literally constructs of one's own mind, the limitations in the "mental zoology and botany" are only those of one's own imagination and of the elements stored within one. From the multitude of materials in one's own memory, one can construct through imagination any conceivable apparently living breathing kind of creature. One can construct thinking machines or thinking beings or other people with any desired set of characteristics and any desired set of powers, within the limits of one's own conceptions.

So in essence how does the LSD state differ from ordinary dreaming, ordinary daydreaming, and wishful thinking in general? It differs in the greater brilliance and the greater intensity of the projected visual images and in the greater intensity of the feelings aroused, coupled with these images, sights, and sounds. It is as if this substance puts a noisy amplifier in one's computer, an amplifier of the emotive and cognitive processes of one's mind, by means of LSD-25. This noisy amplifier gives one the subjective impression of increased powers of control over one's own thinking processes. But this is a false impression caused by the energy of the added random noise. One may not have such control but one has the impression that one does. This effect under the influence of this drug may be caused by the forced turning inward of one's self, away from a less interesting external reality and paying more attention to one's own highly active inner processes excited by the noise. A primary effect seems to be as if one's rewarding brain systems are stimulated and the punishing systems inhibited.

The important cautions, then, are that LSD-25 has a seductive history, and causes states of mind which are so seductive the subject wants to return for further experiences. Importantly the subject is wide open to influence, is very vulnerable in this state. He becomes very programmable by other persons. He is quite at the command of his own pleasurable desires and his own wishful thinking in greater measure than is comfortable to contemplate.

Long-term subtle psychological damage may result; such damage may long be hidden by the pleasure and enthusiasm engendered by the substance. It is possible that in the long term use brains are structurally damaged. Thus subjects may be weakened by this substance—attacked literally where they live. Subjects are being seduced by a chemical rewarding of mental life without working for the reward. The new stimuli for the new lotus-eaters are subtle and subtly evasive, hiding insight itself under unearned chemical rewards given gratis.

Is education for responsibility possible with the use of such chemicals? I don't know. I'm interested, and am trying to understand. Who has taken responsibility? No one, so far. A phantasy of attaining a goal, a mental imagining of achieving a goal, fully biochemically rewarded, may become a fixed belief, a way of life. I don't like the feel of it. It's wrong, somehow.