

# LSD

Three letters, on a drawing of three cubes, appeared not long ago on a fence at the University of Wisconsin with the slogan: YOUR CAMPUS TRAVEL AGENT—ONE TRIP IS WORTH A THOUSAND WORDS. Just about everyone at Wisconsin knew what kind of "trip" that was: the voyage into "inner space," the flight into or out of the self, provided by LSD.

More than half a century ago, the noted American neurologist, Weir Mitchell, chewed some of the mescal buttons of the peyote cactus and reported that he felt "as if the unseen millions of the Milky Way were to flow in a sparkling river before my eyes." He predicted "a perilous reign of the mescal habit when this agent becomes attainable." To some, it seems that the perilous reign has begun—not through Mitchell's bitter buttons but through their enormously more powerful relative, lysergic acid diethylamide.

The U.S. has lately become familiar with the accounts of some users who report dazzling states of heightened awareness or mystical experiences worthy of St. Teresa of Avila; others claim insights that have changed their lives. In John Hersey's latest novel, *Too Far to Walk*, the Devil feeds Faustus LSD ("The closest equivalent to infinity in sheer living"). There have also been stories of "bad trips"—writhing nightmares that end in the nearest psychiatric ward. Occasionally LSD is a one-way trip. Since the recent flood of sensational publicity about LSD has let up somewhat, it is possible to assess the phenomenon more calmly. LSD is certainly not the means of instant, universal bliss that its most extreme and most ludicrous proponents make it out to be. Nor is it an indication of diabolical decadence or proof that, as Critic Leslie Fiedler predicted some time ago, the U.S. is changing from a "whisky culture to a drug culture." But LSD is considerably more than a mere ad.

The Food and Drug Administration estimates that "tens of thousands" of college students are using it or have tried it. In Los Angeles, a recent survey showed as many as 200 victims of bad trips in the city's hospitals at one time. In New York City, Dr. William Frosch of Bellevue Hospital and New York University Medical Center guesses that the number of steady users in the city has doubled from 5,000 to

10,000 during the past year. A Hollywood mogul, a Broadway producer and a noted drama critic all agree that 60% of stage and screen performers are using it. Los Angeles has a dance joint called The Trip, and until recently featured one called Lysergic a Go-Go. "Acid heads" are apt to "turn on" in walk-up pads and ride-up penthouses—but seldom in slums, where people want their escape straight rather than disguised as "insights" or "breakthroughs." LSD so far is strictly a middle-class phenomenon.

## The Supply

Last month two Senate committees held hearings on the uses and abuses of LSD. In testimony, the Food and Drug Administration and the National Institute of Mental Health opposed federal legislation that would have made mere possession of LSD a crime—although California and Nevada have since passed such statutes. Restrictive legislation, say Administration officials, would only cut off the supply for legitimate research. (This has already partially happened because of LSD's notoriety.) Besides, it is argued, the situation can be handled by merely sharpening existing rules, to prohibit the unregistered manufacture, traffic and sale of LSD and its basic ingredient, lysergic acid.

The acid, which is difficult to make (it is derived from ergot, a cereal fungus), continues to be smuggled in from Canada, Mexico and Europe. Given the acid to start with, LSD is relatively easy to cook up for anyone with a working knowledge of chemistry. Essentially, what is required is a batch of lysergic acid dissolved in some other chemicals plus a solution of diethylamine (a volatile liquid used in processes like vulcanizing). The two batches, cooled to freezing and stirred together, result in a solution that contains LSD. The trick is to extract the LSD from the solution. This can be done with the help of chloroform, benzene, a vacuum evaporator or steam bath, and a glass gadget known as a chromatographic column (available in any chemistry supply shop).

LSD is generally black-marketed in impregnated sugar cubes, costing from \$2.50 to \$5 for 100 micrograms, enough for an eight- to ten-hour trip. Another way of transporting small quantities is to mix them in water, soak the solution up in a handkerchief and let it dry—to be cut up later into squares, which LSD users chew. LSD is hard to track down because the compound is colorless, tasteless and odorless, and so potent that a gram, equal to one million micrograms, or 10,000 trips, could be stashed in a single cigarette. So far, illegal LSD is manufactured largely by amateurs, but potential profits represent a strong temptation for organized crime. Tougher legislation will probably make LSD scarcer and therefore more expensive.

## The Psychiatric Hope

Through the ages, men have sought out drugs to dull their physical aches and pains or to alleviate, like the nepenthe Homer describes, their mental ones. More treasured still have been the substances used to bring mortal flesh into the presence of the divine. Such was the mysterious soma, mentioned in a Sanskrit chronicle. Nomads on the Kamchatka Peninsula lofted themselves into the dazzling world of the gods with the mushroom *Amanita muscaria*, and discovered that the visions of one eater could be passed to as many as five others if each one drank the urine of the man before him. In South America, long before Columbus, witch doctors took cohoba snuff to converse with gods and the dead.

"Hallucinogenic" or "psychedelic" (literally, "mind-manifesting") drugs come in three groups. The mild ones are morning-glory seeds, nutmeg and marijuana. The moderately potent ones are the mescaline of Weir Mitchell's experiment, psilocybin (derived from the Mexican Indians' "sacred mushroom"), bufotenine (a constituent of *Amanita muscaria*, and dimethyltryptamine (found in cohoba). By itself on the third level is LSD. It has 100 times the potency of psilocybin and 7,000 times that of mescaline, which is itself considerably more powerful than marijuana.

The pharmacology of LSD is not yet fully understood. The tracing of injected radioactive LSD shows that only an infinitesimal amount ever reaches the brain—and that is gone before the effects begin to be felt. It is generally thought, therefore, that LSD does not act directly but triggers an unknown series of metabolic processes. These in turn somehow affect the midbrain, seat of the intimate interchange between emotional response, awareness of external and internal stimuli, and the sympathetic and parasympathetic nervous systems. Tranquilizers or barbiturates halt LSD's effects, while stimulants like amphetamine tend to elevate them. LSD is no aphrodisiac. It is not physically habit-forming, but it can be psychologically habituating.

The drug was developed in 1938 by Dr. Albert Hofmann, a research chemist at the Sandoz laboratories, at Basel, Switzerland, who was trying to find a new stimulant for the nervous system. He did not know what he had done, however, until five years later, when he accidentally inhaled a minute amount and became dizzy and delirious, with "fantastic visions of extraordinary vividness accompanied by a kaleidoscopic play of intense coloration."

One of the first theories about LSD was that it was a psychotomimetic—a mimicker of psychoses. The idea offered hope of finding a chemical cure for schizophrenia, as well as of increasing the psychiatrist's empathy with a schizophrenic by giving himself "mad-

ness in miniature" and thereby knowing what his patient was going through. Some of the LSD-induced symptoms are indeed similar to psychoses—the feeling of being outside one's body, for instance, or of coming apart. But the all-important difference is that the LSD taker almost always knows that the hallucination he is experiencing is caused by the drug and is not real.

The psychiatric hopes for LSD were followed by the spiritual ones. British-born Orientalist Alan Watts, who spent six years as an Episcopal priest, says flatly that "LSD is quite emphatically a new religion. The God-is-dead thing is not unconnected. The standard brands have not been delivering the goods. This is technological mysticism."

The first big impetus toward this sort of mysticism came from the late writer-mystic Aldous Huxley, who in *The Doors of Perception* (1954) furnished a superseductive account of his experience under the influence of mescaline. Huxley recalled that earlier mystics had used fasting or self-flagellation to achieve a spiritual state. Nowadays, he argued, such measures are no longer necessary, since we know "what are the chemical conditions of transcendental experience."

Fasting and flagellation, sensory deprivation and repetitive prayer, may indeed have produced chemical or metabolic changes as preconditions of samadhi, satori, or the beatific vision. It has even been suggested that many extremes of asceticism were developed because, for some reason, drugs ceased to be available. But, to the orthodox Christian, "technological" or "chemical" mysticism is either blasphemous or absurd. The man who gets to a mountaintop in a funicular has the same view as the man who climbs the peak, but the effort of getting there is important too; the vision is not all, and manuals of contemplation often advise against paying too much attention to "beauty." Indeed the Christian concept of grace—never earned, never under man's control—seems to nullify the idea that a man can attain a mystical experience by taking a pill. Psychedelic mystics tend to look toward the Eastern religions, in which, as one puts it, "you rap [have rapport] with the world; you rap with dogs and trees and everything makes sense."

## Dropping Out of life

The leading American psychedelic guru—and martyr—is Timothy Leary, 45, who began to experiment with the drugs in 1960 when he was a psychologist working at Harvard's Center for Research in Personality. Harvard fired him and an associate when their project seemed to get out of hand. Leary then moved his experiments to the vicinity of Acapulco but was expelled by the Mexican government. Early this year a Texas judge sentenced him tentatively to 30 years in jail and a \$40,000 fine for transporting half an ounce of marijuana and failing to pay tax

on it (he is out on bail). He still runs the International Foundation for Internal Freedom (I.F.I.F. for short), which is dedicated to making LSD and psilocybin as available as chewing gum.

Leary calls himself a Hindu, and he uses Eastern symbolism along with psychedelic experience to reject the outward-looking, "goal-directed" American attitude (disciples like to quote him to the effect that "Buddha was a dropout"). Leary is overfond of using the word "game" to put down the concerns men usually take seriously. Not that he would eliminate game playing; he says he only wants the games recognized for what they are. In practice, however, this requires a degree of judgment far beyond the capabilities of most mortals. Many a youthful LSD user, newly impressed with what suddenly seems to him the irrelevance of his activities, has dropped out of school a few weeks before he is due to graduate, soon thereafter he is dropping out of life as well, cultishly convinced that he and his psychedelic set are superior because they have Seen and they Know.

LSD has two major effects. For one thing, it tends to shatter and dissolve the usual web of associations and habit patterns. A telephone, for instance, is suddenly nothing but a black plastic object of a certain shape—how outrageous and funny to see someone pick it up and talk to it as though it were a person. The boundaries that normally separate things from each other, or from oneself, may be dissolved also. This may cause the impression that one's limbs and torso are liquefying and flowing away (horror!); or that one is in such close rapport with others in the room that one can read their thoughts (love!); or that the barriers of logic have disappeared to reveal a tremendous insight, for instance, that death and life are the same (truth!).

The other major effect of psychedelic compounds is a vastly increased suggestibility. Say "I'm so happy!" and savor the ecstasy; say "Miserable me!" and feel the hot tears of self-pity. This souped-up sensitivity may account for the apparent vividness of ordinary colors under the influence of the drugs, though tests show that vision is actually impaired slightly. It certainly reinforces the horrors.

LSD cultists say that sessions should be carefully prepared, under the guidance of an experienced "leader." Leary calls this "perhaps the most exciting and inspiring role in society. A leader is a liberator, one who provides illumination, one who frees men from their lifelong internal bondage."

### Diagnostic X Ray

Such rhapsodizing is pure, pretentious guff to most of the psychiatrists and psychologists who have worked with LSD, psilocybin and mescaline; they consider it the kind of happy talk that exerts a strong

appeal on just the sort of unstable people most likely to be injured by the drugs. Under the influence of LSD, nonswimmers think they can swim, and others think they can fly. One young man tried to stop a car on Los Angeles' Wilshire Boulevard and was hit and killed. A magazine salesman became convinced that he was the Messiah. A college dropout committed suicide by slashing his arm and bleeding to death in a field of lilies. Says Los Angeles Psychiatrist Sidney Cohen, one of the country's leading LSD experts: "If we can tolerate unsupervised use of LSD, why not Russian roulette? Or why not let children play with hand grenades?"

Chicago Psychiatrist Dr. Marvin Ziporyn, who has administered LSD to some 50 patients since 1960—besides taking it himself, along with his attorney wife—sees LSD's laying bare of the personality in purely diagnostic terms. "LSD is, if you like, a psychiatric X ray," he says. "With LSD you have no greater vision of the universe than you did before. It no more expands your consciousness than an X ray expands your lungs when you see them on the screen. All you do is get a better look."

Some researchers, while sneering along with Dr. Ziporyn at the view of LSD as instant mysticism, feel that the psychedelic drugs may eventually do more than merely give the psychiatrist a better look. There is evidence that it may be effective in rehabilitating alcoholics and narcotics addicts. Several doctors, among them Eric Kast of the Chicago Medical School, have reported LSD useful in relieving both the pain and anxiety of dying patients. Kast theorizes that the dissolution of anticipation, the concentration on the present moment, which may be beneficial to the dying, is also what appeals to some of the young, for whom so much of life is deferred. "LSD impairs anticipation, and that's the sole characteristic that puts us on top of the animal heap," says Kast. "If people no longer feel the need to calculate the necessary delays before acting, then chaos could result." Often, relief over the lifted burden comes into conflict with a lingering sense of responsibility, and this, Kast suspects, is the cause of many a bad trip.

No responsible authority favors use of LSD without close scientific supervision. On the other hand, no responsible authority wants to stop research into the potentially vast possibilities of LSD and other "mind drugs." New substances are already forecast, notably a "smart pill," derived from RNA, to speed up the learning process; this has given rise to the slightly uneasy crack that in a few years "people won't ask you what books you're reading, but what drugs you're taking." Some of the drugs may be bubbling even now in the retorts of Dr. Hofmann, who was back in the Basel lab last week after receiving from Stockholm's Karolinska Institute an honorary degree for the discovery of lysergic acid diethylamide.

*For Discussion and Writing*

1. As a door into the past, "LSD" gives us a sense of the thinking during the early days of what has become a national drug culture. What do you notice about the content, attitude, and tone of this essay that indicates how people felt about experimental or "recreational" drugs in 1966?
2. The author of "LSD" claims that the drug has two major effects. What are these? Why has the essayist included so much background information in the piece? What does this add to your understanding of the drug?
3. Does this essay take a strong stand for or against the use of LSD? What is the writer's attitude toward medicinal or therapeutic drugs?
4. What is your sense of the drug culture in the late 1960s to early 1970s? What influences did drugs seem to have on music, behavior, styles of dress or popular art? Write an essay in which you give your impressions of that period as they have been formed by your exposure of music, popular history, and the stories of friends and acquaintances.