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Drug, Set, and Setting

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1. Historical Perspectives on Controlled Drug Use

CARL IS AN OCCASIONAL HEROIN USER. He is a single, white male, twenty-six years old, a graduate student who emigrated to the United States from South Africa when he was eighteen. His father died when he was two years old, and his mother remarried eighteen months later. His stepfather, a physician, already had a son and daughter, and there were two sons from the new marriage. Carl regards them all as his own family. No one in the family evidences alcoholism or heavy involvement with drugs, including prescription drugs.

Carl's parents are both moderate social drinkers, as he is. They serve beer or wine at almost every evening meal, and Carl was permitted an occasional sip from about age ten or eleven. When he was twelve he tried tobacco and by nineteen had become the one-pack-a-day smoker he still is. At sixteen he tried marihuana and used it on weekends until he was eighteen. Now he uses marihuana up to three times a week but only in the late evening after completing his work or studies or on social occasions.

Amphetamines were popular with one group of Carl's friends, and between the ages of sixteen and eighteen, when he left South Africa, he used these drugs with them on social occasions about once every two weeks. He has used amphetamines only two or three times since then.

At seventeen, when Carl and his closest friend, whose father was also a physician, were experimenting with drugs, they took a bottle of morphine sulfate from the friend's father's office. They also took disposable syringes and injected each other intramuscularly. Both found the experience extremely pleasurable, and from then on they injected each other on weekends until the bottle was exhausted.

At eighteen, after moving to the United States, Carl entered a college in San Francisco, where he became friendly with a psychedelic-using group. His initial psychedelic experience was very pleasant, and for the next year he tripped about two or three times a month. Then his interest in that sort of drug experience waned. Now he uses psychedelics very occasionally—no more than twice a year.

At twenty, when Carl was teaching in southern California, he ran into a group of "hippies" with whom he snorted heroin. Upon returning to San Francisco he began to ask questions about opiate use. Within a short time his discreet inquiries turned up a group of occasional heroin users that included a close friend who had not told Carl about his use. Carl began using with this group once a month on average, but not on a regular basis.

The irregularity of Carl's heroin use was due entirely to his social life. If he was otherwise engaged and did not see his heroin-using friends, he would use less frequently; if he saw them more often, he tended to use more frequently. This pattern has continued except for two periods of two weeks each when Carl was visiting Amsterdam during a European trip. In that wide-open city he used virtually every day, but this had no effect on his using pattern when he returned to the United States.

After moving to Boston and entering graduate school, Carl, then twenty-two, met a new using group to whom he was introduced by friends from California. He likes two or three of them very much but sees them only occasionally. Neither his "best" friend, a fellow graduate student, nor his apartment mate, a thirty-one-year-old engineer who is not a particularly close friend, knows of his heroin use. "I don't want to be deceptive," Carl says, "but some people have an exaggerated fear of heroin and make a big fuss about it. I don't like to have to explain myself. I just like to get high that way once in a while. It's nobody's business what I like, and I don't want to be judged for it."

His use takes place only in a group, and he either "snorts" or injects intramuscularly. "The trick," he says, "is to get high with the least amount possible. If I take too much, I get nauseated, constipated, and have trouble urinating. " As a member of a doctor's family, he is fully aware of the possibility of infection, is meticulous about sterilizing his needles, and never lends them to anyone. At his current level of use the high price of heroin is no hardship. One of his friends with "good connections" procures the drug, and when a good buy is made, Carl purchases a little extra to keep for another occasion. He is not sure what he would do if his friend moved away. He hopes to be able to continue use at his current level, which he has maintained for six years.

Carl has a very active social life in which heroin and marihuana play only a small part. His parents are on excellent terms with him and have visited him recently in this country. When he first arrived in the United States, he thought he might have a problem with women because he was not aggressive; but he formed a long-term, satisfying relationship with a woman before he left California. Since moving to Boston he has dated a lot, including seeing one friend quite consistently for more than a year. When that relationship broke up, he was at loose ends for a while; but for the past three months he has been going with someone he thinks may be the most important person in his life.

Carl liked his college in America more than his secondary school in South Africa, which he did not enjoy either socially or intellectually. He likes graduate school even more. He has a tentative job offer in the Boston area that depends on his finishing his thesis before September, and he is working very hard toward that goal.

Until quite recently it was not recognized that Carl and others like him could use illicit drugs in a controlled manner. But the studies that underlie this book on the controlled (moderate, occasional) use of marihuana, psychedelics, and opiates bear witness to the new interest in people like Carl that began to appear during the 1970s.[1] Before then it had been assumed that because of their pharmacological properties, the psychedelics, heroin, and, to a lesser extent, marihuana could not be taken on a long-term, regular basis without causing serious problems. The unfortunate condition of heroin addicts and other compulsive users was invoked as "proof' of this "pharmacomythology" (Szasz 1975). It was also widely held that these "dangerous" substances were almost always sought out by people with profound personality disorders. Most drug research was strongly influenced by the moralistic view that all illicit drug use was therefore "bad," inevitably harmful, or psychologically or physiologically "addictive," and that abstention was the only alternative (Zinberg & Harding 1982). Not surprisingly, studies of drug consumption, which burgeoned during the 1960s, tended to equate use (any type of use) with abuse and seldom took occasional or moderate use into account as a viable pattern (Heller 1972). To the limited extent that the possibility of nonabusive use was acknowledged, it was treated as a very brief transitional stage leading either to abstinence or (more likely) to compulsive use. Researchers sought first to determine the potentially harmful effects of illicit drugs and then to study the personality disorders resulting from use of these substances—disorders which, ironically, were considered responsible for the drug use in the first place.

Even before the 1960S, however, it had been known that in order to understand how control of a substance taken into the body could be developed, maintained, or lost, different patterns of consumption had to be compared. This principle had long been applied to the comparative study of patterns of alcohol use: alcoholism as opposed to social or moderate drinking. Not until after 1970 was the same research strategy rigorously applied to the study of illicit drug use, and only since the mid-1970s have the existence and importance of a still wider range of using patterns been recognized by the scientific community.

The New Perspective on Control

The new interest in the comparative study of patterns of drug use and abuse is attributable to at least two factors. The first is that in spite of the enormous growth of marihuana consumption, most of the old concerns about health hazards have proved to be unfounded. Also, most marihuana use has been found to be occasional and moderate rather than intensive and chronic (Josephson 1974; National Institute on Drug Abuse 1977; *Marijuana and Health* 1982). It has been estimated, for example, that 63% of all Americans using marihuana in 1981 were only occasional users (Miller & Associates 1983). These developments have spurred public and professional recognition of the possibility that illicit substances can be used in moderation and that the question of how control operates at various levels of consumption deserves much more research. A second factor responsible for the new research perspective is the pioneering work of a few scientists who have been more impressed by the logic of their own results than by the mainstream view of illicit drug use. The most influential work has been that of Lee N. Robins, whose research on drug use among Vietnam veterans (discussed in appendix C) indicates that consumption of heroin (the "most dangerous" illicit drug) did not always lead to addiction or dysfunctional use, and that even when addiction occurred it was far more reversible than had been believed (Robins 1973, 1974; Robins et al. 1979).

As the belief lessened that illicit drugs were in a class by themselves, they began to be compared with licit drugs and other substances. At the same time an inverse shift in attitude was taking place toward licit substances. Research indicated that a wide assortment of these substances—tobacco, caffeine, sugar, and various food additives—were potentially hazardous to health (Pekkanen & Falco 1975; Marcovitz 1969). Other research demonstrated that prescribed drugs, if not used in the way the physician intended, could also be hazardous and might constitute a major public health problem. Thus the public became increasingly aware that even with the advice of a physician, "good" drugs used for "good" reasons could be difficult to control. It seemed that just as the mythology that illicit drugs were altogether harmful was losing ground, so too was the mythology that most licit substances were altogether benign. The result has been a new interest in discovering ways of controlling the use of a wide variety of substances, both licit and illicit.

I came to appreciate these changes in perspective largely through my own research. In 1973, when The Drug Abuse Council gave its support to my study of controlled drug users, the conventional attitude of research agencies was that ways should be sought to prevent drug abuse, which at that time meant preventing all drug use (Zinberg, Harding & Apsler 1978). Since in 1973 marihuana, psychedelics, and opiates were causing the greatest concern, these were the drugs I chose to study. The year 1973 was crucial for several reasons. It just preceded the marked rise of cocaine use, as well as the enormous publicity given to PCP, although the use of PCP (under the pseudonyms of angel dust and THC) had long been fairly widespread. It just followed the year in which the National Organization for the Reform of Marihuana Laws (NORML) began formal efforts to decriminalize the private use of marihuana. It was also the last year in which psychedelic drug use increased at a great rate (131%, according to the National Commission on Marihuana and Drug Abuse, 1973). And finally, it marked the decline of overwhelming concern about a heroin "epidemic."

The two related hypotheses underlying this project were far more controversial in 1973 than they would be today, although they are still not generally accepted. I contended, first, that in order to understand what impels someone to use an illicit drug and how that drug affects the user, three determinants must be considered: drug (the pharmacologic action of the substance itself), set (the attitude of the person at the time of use, including his personality structure), and setting (the influence of the physical and social setting within which the use occurs) (Weil 1972; Zinberg & Robertson 1972; Zinberg, Harding & Winkeller 1981). Of these three determinants, setting had received the least attention and recognition; therefore, it was made the focus of the investigation (Zinberg & DeLong 1974; Zinberg & Jacobson 1975). Thus the second hypothesis, a derivative of the first, was that it is the social setting, through the development of sanctions and rituals, that brings the use of illicit drugs under control.

The use of any drug involves both values and rules of conduct (which I have called social sanctions) and patterns of behavior (which I have called social rituals); these two together are known as informal social controls. Social sanctions define whether and how a particular drug should be used. They may be informal and shared by a group, as in the common maxims associated with alcohol use, "Know your limit" and "Don't drive when you're drunk"; or they may be formal, as in the various laws and policies aimed at regulating drug use (Zinberg, Harding & Winkeller, 1981; Maloffet al. 1982). Social rituals are the stylized, prescribed behavior patterns surrounding the use of a drug. They have to do with the methods of procuring and administering the drug, the selection of the physical and social setting for use, the activities undertaken after the drug has been administered, and the ways of preventing untoward drug effects. Rituals thus serve to buttress, reinforce, and symbolize the sanctions. In the case of alcohol, for example, the common invitation "Let's have a drink" automatically exerts some degree of control by using the singular term "a drink." By contrast "Let's get drunk" implies that all restraints will be abandoned.

Social controls (rituals and sanctions together) apply to the use of all drugs, not just alcohol, and operate in a variety of social settings, ranging all the way from very large social groups, representative of the culture as a whole, down to small, discrete groups (Harding & Zinberg 1977). Certain types of special occasion use involving large groups of people—beer at ball games, marihuana at rock concerts, wine with meals, cocktails at six—despite their cultural diversity, have become so generally accepted that few if any legal strictures are applied even if such uses technically break the law. For example, a policeman may tell young people drinking beer at an open-air concert to "knock it off, " but he will rarely arrest them; and in many states the police reaction would be similar even if the drug were marihuana (Newmeyer & Johnson 1982). If the culture as a whole fully adopts a widespread social ritual, it may eventually be written into law, just as the socially developed mechanism of the morning coffee break has been legally incorporated into union contracts. The T. G. I. F. (Thank God It's Friday) drink may not be far from acquiring a similar status. But small-group sanctions and rituals tend to be more diverse and more closely related to circumstances. Nonetheless, some caveats may be just as firmly upheld: "Never smoke marihuana until after the children are asleep," "Only drink on weekends," "Don't shoot up until the last person has arrived and the doors are locked."

The existence of social sanctions and rituals does not necessarily mean that they will be effective, nor does it mean that all sanctions or rituals were devised as mechanisms to aid control. "Booting" (the drawing of blood into and out of a syringe) by heroin addicts seemingly lends enchantment to the use of the needle and therefore opposes control. But it may once have served as a control mechanism that gradually became perverted or debased. Some old-time users, at least, have claimed that booting originated in the (erroneous) belief that by drawing blood in and out of the syringe, the user could gauge the strength of the drug that was being injected.

More important than the question of whether the sanction or ritual was originally intended as a control mechanism is the way in which the user handles conflicts between sanctions. With illicit drugs the most obvious conflict is between formal and informal social controls—that is, between the law against use and the social group's approval of use. The teenager attending a rock concert is often pressured into trying marihuana by his peers, who may insist that smoking is acceptable at that particular time and place and will enhance his musical enjoyment. The push to use may also include a control device, such as "since Joey won't smoke because he has a cold, he can drive, " thereby honoring the "don't drive after smoking" sanction. Nevertheless, the decision to use, so rationally presented, conflicts with the law and so may cause the user anxiety. Such anxiety interferes with control. In order to deal with the conflict the user may display more bravado, exhibitionism, paranoia, or antisocial feeling than would have been the case if he or she had patronized one of the little bars near the concert hall. It is this kind of personal and social conflict that makes controlled use of illicit drugs more complex and more difficult to achieve than the controlled use of licit drugs.

Of course, the application of social controls, particularly in the case of illicit drugs, does not always lead to moderate use. And yet it is the reigning cultural belief that drug use should always be moderate and that behavior should always be socially acceptable. Such an expectation, which does not take into account variations in use or the experimentation that is inevitable in learning about control, is the chief reason that the power of the social setting to regulate intoxicant use has not been more fully recognized and exploited. This cultural expectation of decorum stems from the moralistic attitudes that pervade our culture and are almost as marked in the case of licit as in that of illicit drugs. Only on special occasions, such as a wedding celebration or an adolescent's first experiment with drunkenness, is less decorous behavior culturally acceptable. Although such incidents do not necessarily signify a breakdown of overall control, they have led the abstinence-minded to believe that when it comes to drug use, there are only two alternatives—total abstinence or unchecked excess leading to addiction. Despite massive evidence to the contrary, many people remain unshaken in this conviction.

This stolid attitude inhibits the development of a rational understanding of controlled use and ignores the fact that even the most severely affected alcoholics and addicts, who may be grouped at one end of the spectrum of drug use, exhibit some control in that they actually use less of the intoxicating substance than they could. Moreover, as our interviews with ordinary citizens have shown, the highly controlled users and even the abstainers at the other end of the spectrum express much more interest in the use of intoxicants than is generally acknowledged. Whether to use, when, with whom, how much, how to explain why one does not use—these concerns occupy an important place in the emotional life of almost every citizen. Yet, hidden in the American culture lies a deep-seated aversion to acknowledging this preoccupation. As a result, our culture plays down the importance of the many social mores—sanctions and rituals—that enhance our capacity to control use. Both the existence of a modicum of control on the part of the most compulsive users and the general preoccupation with drug use on the part of the most controlled users are ignored. Hence our society is left longing for that utopia in which no one would ever want drugs either for their pleasant or their unpleasant effects, for relaxation and good fellowship, or for escape and oblivion.

The cultural insistence on extreme decorum overemphasizes the determinants of drug and set by implying that social standards are broken because of the power of the drug or some personality disorder of the user. This way of thinking, which ignores the social setting, requires considerable psychological legerdemain, for few users of intoxicants can consistently maintain such self-discipline. Intoxicant use tends to vary with one's time of life, status, and even geographical location. Many who have made heavy use of intoxicants as adolescents slow down as they reach adulthood and change their social setting (their friends and circumstances), while some adults, as they become more successful, may increase their use. For instance, a man born and bred in a dry part of Kansas may change his habits significantly after moving to New York City. The effects of such variations in social circumstances are readily perceived, but they have not been incorporated into a public understanding of how the social setting influences the use and control of intoxicants.

Enormous variations from one historical epoch to another can also be found in the social use of intoxicants, especially alcohol, in various countries. From the perspective of alcohol use, American history can be divided into three major epochs, differing in the power of the mores to moderate the use of alcohol. In considering these epochs it is useful to bear in mind the following social prescriptions for control, summarized from cross-cultural studies of alcohol use (Lolli et al. 1958; Chafetz & Demone 1962; Lolli 1970; Wilkinson 1973; Zinberg & Fraser 1979).

1. Group drinking is clearly differentiated from drunkenness and is associated with ritualistic or religious celebrations.
2. Drinking is associated with eating or ritualistic feasting.
3. Both sexes and all generations are included in the drinking situation, whether they drink or not.
4. Drinking is divorced from the individual effort to escape personal anxiety or difficult (even intolerable) social situations. Moreover, alcohol is not considered medicinally valuable.
5. Inappropriate behavior when drinking (violence, aggression, overt sexuality) is absolutely disapproved, and protection against such behavior is exercised by the sober or the less intoxicated. This general acceptance of a concept of restraint usually indicates that drinking is only one of many activities and thus carries a low level of emotionalism.

During the first period of American history, from the 1600s to the 1770s, the colonies, though veritably steeped in alcohol, strongly and effectively prohibited drunkenness. Families ate and drank together in taverns, and drinking was associated with celebrations and rituals. Tavern-keepers had social status; preserving the peace and preventing excesses stemming from drunkenness were grave duties. Manliness and strength were not measured by the extent of consumption or by violent acts resulting from it. This pre-Revolutionary society did not, however, abide by all the prescriptions for control: "groaning beer," for example, was regarded as medicine and consumed in large quantities by pregnant and lactating women.

The second period, from the 1770s to about 1890, which included the Revolutionary War, the Industrial Revolution, and the expansion of the frontier, was marked by alcoholic excess. Men were separated from their families and in consequence began to drink together and with prostitutes. Alcohol was served without food, its consumption was not limited to special occasions, and violence resulting from drunkenness became much more common. In the face of increasing drunkenness and alcoholism, people began to believe (as is the case with regard to some illicit drugs today) that the powerful, harmful pharmaceutical properties of the intoxicant itself made controlled use remote or impossible.

Although by the beginning of the third period, which extended from 1890 to the present time, moderation in the use of alcohol had begun to increase, this trend was suddenly interrupted in the early 1900s by the Volstead Act, which ushered in another era of excess. American society has not yet fully recovered from the speakeasy ambience of Prohibition in which men again drank together and with prostitutes, food was replaced by alcohol, and the drinking experience was colored by illicitness and potential violence. Although the repeal of the prohibition act provided relief from excessive and unpopular legal control, it left society without an inherited set of clear social sanctions and rituals to control use.

Social Sanctions Internalized

Today this vacuum is gradually being filled. In most sectors of our society informal alcohol education is readily available. Few children grow up without an awareness of the wide range of behaviors associated with alcohol use, learned from that most pervasive of all the media, television. They see cocktail parties, wine at meals, beer at ball games, homes broken by drink, drunks whose lives are wrecked, along with all the advertisements that present alcohol as lending glamour to every occasion.

Buttressed by movies, the print media, observation of families and family friends, and often by a sip or watered-down taste of the grown-ups' potion, young people gain an early familiarity with alcohol. When, in a peer group, they begin to drink and even, as a rite of passage, to overdo it, they know what the relevant sanctions are. The process of finding a limit is a direct expression of "know your limit." Once that sanction has been internalized—and our culture provides mores of greater latitude for adolescents than for adults—youngsters can move on to such sanctions as "it is unseemly to be drunk" and "it's OK to have a drink at the end of the day or a few beers on the way home from work or in front of TV, but don't drink on the job" (Zinberg, Harding & Winkeller 1981).

This general description of the learning or internalization of social sanctions has not taken into account the variations from individual to individual that result from differences in personality, cultural background, and group affinity. Specific sanctions and rituals are developed and integrated in varying degrees by different groups (Edwards 1974). Some ethnic groups, such as the Irish, lack strong sanctions against drunkenness and have a correspondingly higher rate of alcoholism. In any ethnic group, alcohol socialization within the family may break down as a result of divorce, death, or some other disruptive event. Certainly a New York child from a rich, sophisticated home, accustomed to having Saturday lunch with a divorced parent at The 21 Club, will have a different attitude toward drinking from that of the small-town child who vividly remembers accompanying a parent to a sporting event where alcohol intake acted as fuel for the excitement of unambivalent partisanship. Yet one common denominator shared by young people from these very different backgrounds is the sense that alcohol is used at special events and in special places.

This kind of education about drug use is social learning, absorbed inchoately and unconsciously in daily life (Zinberg 1974). The learning process is impelled by an unstated and often unconscious recognition by young people that drug use is an area of emotional importance in American society and that knowledge about it may be quite important to their personal and social development. Attempts made in the late 1960s and early 1970s to translate this informal process into formal drug education courses, chiefly intended to discourage use, have failed (Boris, Zinberg & Boris 1978). Such formal drug education, paradoxically, by focusing on drug use has stimulated such use on the part of many young people who were previously uncommitted, and while acting to confirm the fears of many who were already excessively concerned. Is it possible for formal education to codify social sanctions and rituals in a reasonable way for those who have been bypassed by the informal process, or does the reigning cultural moralism preclude the possibility of discussing reasonable informal social controls that may condone use? This question will remain unanswered until our culture has accepted the use not only of alcohol but of other intoxicants so that teachers will be able to explain how these drugs can be used safely and well. Teaching safe use is not intended to encourage use. Its main purpose is the prevention of abuse, just as the primary purpose of the few good sex education courses in existence today is to teach the avoidance of unwanted pregnancy and venereal disease rather than the desirability of having or avoiding sexual activity.

Whatever may happen to formal education in these areas, the natural process of social learning will inevitably go on for better or for worse. The power of this process is illustrated by two recent and extremely important social events: the use of psychedelics in the United States in the 1960s and the use of heroin during the Vietnam War.

Shortly after Timothy Leary's advice to "tune in, turn on, and drop out" was adopted as a counterculture slogan in 1963, the use of psychedelics became a subject of national hysteria. The "drug revolution" was seen as a major threat to the dominant cultural values of hard work, family, and loyalty to country. Drugs, known then as psychotomimetic (imitators of psychosis), were widely believed to lead to psychosis, suicide, or even murder (Mogar & Savage 1954; Robbins, Frosch & Stern 1967). Equally well publicized was the contention that they could bring about spiritual rebirth and mystical oneness with the universe (Huxley 1954; Weil 1972). Certainly there were numerous cases of not merely transient but prolonged psychoses following the use of psychedelics. In the mid-l960s psychiatric hospitals like the Massachusetts Mental Health Center and New York City's Bellevue Hospital reported that as many as one-third of their admissions resulted from the ingestion of these drugs (Robbins, Frosch & Stern 1967). By the late 1960s, however, the rate of such admissions had dropped dramatically. At first, many observers concluded that psychedelic use had declined in response to the use of "fear tactics"—the dire warnings about the various health hazards, the chromosome breaks and birth defects, that were reported in the newspapers. This explanation proved false, for although the dysfunctional sequelae had radically declined, psychedelic use continued until 1973 to be the fastest growing drug use in America (National Commission on Marihuana and Drug Abuse 1973). What then had changed?

It has been found that neither the drugs themselves nor the personalities of the users were the most prominent factors in those painful cases of the 1960s. Although responses to the drugs varied widely, before the early 1960s, they included none of the horrible, highly publicized consequences of the mid-1960s (McGlothlin & Arnold 1971). Another book, entitled *LSD: Personality and Experience* (Barr et al. 1972), describes a study made before the drug revolution of the influence of personality on psychedelic drug experience. It found typologies of response to the drugs but did not discover a one-to-one relationship between untoward reaction and emotional disturbance. In 1967 sociologist Howard S. Becker, in a prophetic article, compared the current anxiety about psychedelics to anxiety about marihuana in the late 1920s, when several psychoses had been reported. Becker hypothesized that the psychoses came not from the drug reactions themselves but from the secondary anxiety generated by unfamiliarity with the drug's effects and ballooned by media publicity. He suggested that the unpleasant reactions had ceased to appear after the true effects of marihuana had become more widely known, and he correctly predicted that the same thing would happen in the case of the psychedelics.

The power of social learning also brought about a change in the reactions of those who expected to gain insight and enlightenment from the use of psychedelics. Interviews (ours and others') have shown that the user of the early 1960s, with his great hopes of heaven or fears of hell and his lack of any sense of what to expect, had a far more extreme experience than the user of the 1970s, who had been exposed to a decade of interest in psychedelic colors, music, and sensations. The later user, who might remark, "Oh, so that is what a psychedelic color looks like," had been thoroughly prepared, albeit unconsciously, for the experience and thus could respond in a more restrained way.

The second example of the enormous influence of the social setting and of social learning on drug use comes from Vietnam. Current estimates indicate that at least 35% of enlisted men (EMs) tried heroin while in Vietnam and that 54% of these became addicted to it (Robins et al. 1979). Although the success of the major treatment modalities available when these veterans became addicted (therapeutic communities and civil commitment programs) cannot be precisely determined, evaluations showed that relapse to addiction within a year was a more common outcome than abstinence, and recidivism rates as high as 90% were reported (DeLong 1972). Once the extent of the use of heroin in Vietnam became apparent, the great fear of Army and government officials was that the maxim, "Once an addict, always an addict," would operate; and most of the experts agreed that this fear was entirely justified. Treatment and rehabilitation centers were set up in Vietnam, and the Army's slogan that heroin addiction stopped "at the shore of the South China Sea" was heard everywhere. As virtually all observers agree, however, those programs were total failures. Often servicemen used more heroin in the rehabilitation programs than when on active duty (Zinberg 1972).

Nevertheless, as Lee N. Robins and her colleagues have shown (1979), most addiction did indeed stop at the South China Sea. For addicts who left Vietnam, recidivism to addiction three years after they got back to the United States was approximately 12%—virtually the reverse of previous reports (DeLong 1972). Apparently it was the abhorrent social setting of Vietnam that led men who ordinarily would not have considered using heroin to use it and often to become addicted to it. Still, they evidently associated its use with Vietnam, much as certain hospital patients who are receiving large amounts of opiates for a painful medical condition associate the drug with the condition. The returnees were very much like those patients, who usually do not crave the drug after the condition has been alleviated and they have left the hospital.

For some individuals dependence on almost any available intoxicating substance is likely. But even the most generous estimate of the number of such individuals is not large enough to explain the extraordinarily high rate of heroin use in Vietnam. The number of addiction-prone personalities might even have been lower than that in a normal population because the military had screened out the worst psychological problems at enlistment. Robins found that heroin use in Vietnam correlated well with a youthful liability scale. This scale included some items that are related to set—that is, to emotional difficulties (truancy, dropout or expulsion from school, fighting, arrests). But it also included many items related to the social setting, such as race or living in the inner city, and even then it accounted for only a portion of the variance in youthful heroin use.

A better explanation for the high rate of heroin use and addiction in Vietnam than the determinant of set or personality might be the drug and its extraordinary availability. Robins noted that 85% of veterans had been offered heroin in Vietnam, and that it was remarkably inexpensive (Robins et al. 1979). Another drug variable, the method of administration, must also have contributed to widespread use in Vietnam. Heroin was so potent and inexpensive that smoking was an effective and economical method to use, and this no doubt made it more attractive than if injection had been the primary mode of administration. These two drug variables also help to explain the decrease in heroin use and addiction among veterans following their return to the United States. The decreased availability of heroin in the United States (reflected in its high price) and its decreased potency (which made smoking wholly impractical) made it difficult for the returning veterans to continue use.

Although the drug variable may carry more explanatory power in the case of Vietnam than the various set variables, it also has limits. Ready availability of heroin seems to account for the high prevalence of use, but it alone does not explain why some individuals became addicted and others did not, any more than the availability of alcohol is sufficient to explain the difference between the alcoholic and the social drinker. Availability is always intertwined with the social and psychological factors that create demand for an intoxicant. Once a reasonably large number of users decide that a substance is attractive and desirable, it is surprising how quickly that substance becomes plentiful. For instance, when the morale of U. S. troops in Germany declined in 1972, large quantities of various drugs, including heroin, became readily available, even though Germany is far from opium-growing areas. In the early 1980s cocaine is the best example of drug availability.

In the case of both heroin use in Vietnam and psychedelic use in the 1960s, the setting determinant, including social sanctions and rituals, is needed for a full explanation of the appearance, magnitude, and eventual waning of drug use.

Control over the use of psychedelics was not established until the counterculture developed social sanctions and rituals like those surrounding alcohol use in the society at large. The sanction "The first time use only with a guru" told neophytes to try the drug with an experienced user who could reduce their secondary anxiety about what was happening by interpreting it as a drug effect. "Use only at a good time, in a good place, with good people" gave sound advice to those taking the kind of drug that would make them highly sensitive to their inner and outer surroundings. In addition, it conveyed the message that the drug experience could be a pleasant consciousness change instead of either heaven or hell. The specific rituals that developed to express these sanctions—just when it was best to take the drug, how it should be used, with whom, what was the best way to come down, and so on—varied from group to group, though some rituals spread between groups.

It is harder to document the development of social sanctions and rituals in Vietnam. Most of the early evidence indicated that the drug was used heavily in order to obscure the actualities of the war, with little thought of control. Yet later studies showed that many EMs used heroin in Vietnam without becoming addicted (Robins, Davis & Goodwin 1974; Robins, Helzer & Davis 1975). Although about half of the men who had been addicted in Vietnam used heroin after their return to the United States, only 12% became readdicted to it (Robins et al 1979).

Some rudimentary rituals do seem to have been followed by the men who used heroin in Vietnam. The act of gently rolling the tobacco out of an ordinary cigarette, tamping the fine white powder into the opening, and then replacing a little tobacco to hold the powder in before lighting up the OJ (opium joint) seemed to be followed all over the country even though units in the North and the Highlands had no direct contact with those in the Delta (Zinberg 1972). To what extent this ritual aided control is impossible to determine, but having observed it many times, I know that it was almost always done in a group and that it formed part of the social experience of heroin use. While one person was performing the ritual, the others sat quietly and watched in anticipation. Thus the degree of socialization achieved through this ritual could have had important implications for control.

My continuing study of various patterns of heroin use, including controlled use, in the United States confirmed the lessons taught by the history of alcohol use in America, the use of psychedelics in the 1960s, and the use of heroin during the Vietnam War. The social setting, with its formal and informal controls, its capacity to develop new informal social sanctions and rituals, and its transmission of information in numerous informal ways, is a crucial factor in the controlled use of any intoxicant. This does not mean that the pharmaceutical properties of the drug or the attitudes and personality of the user count for little or nothing. All three variables—drug, set, and setting—must be included in any valid theory of drug use. It is necessary to understand in every case how the specific characteristics of the drug and the personality of the user interact and are modified by the social setting and its controls.

Illicit Drugs and Social Learning

Our culture does not yet fully recognize, much less support, controlled use of most illicit drugs. Users are declared "deviant" and a threat to society, or "sick" and in need of help, or "criminal" and deserving of punishment. Family-centered socialization for use is not available . Parents, even if they are willing to help, are unable to provide guidance either by example (as with alcohol) or in a factual, nonmoralistic manner.

If parents tell their sons or daughters not to use drugs because they are harmful, the youngsters disregard that advice because their own experiences have told them otherwise. Their using group and the drug culture reinforce their own discovery that drug use in and of itself is not bad or evil and that the warnings coming from the adult world are unrealistic. If parents try a different tack and tell young people that some drugs are all right but others have a high risk component and should be avoided, their position again is vulnerable. "They were wrong about marihuana; why should I believe what they say about cocaine?" think the youngsters (Kaplan 1970). Moreover, by counseling their children that some illicit drugs are "more all right" than others, parents are placed in the position of having to approve an illegal activity. Thus their role as conveyors of the public morality becomes glaringly inconsistent.

The interviews conducted by my research team have indicated that if parents try to obtain first-hand knowledge of the drug experience by smoking marihuana, taking a psychedelic, or shooting heroin, similar difficulties occur. At the very least, they not only are condoning but are themselves engaging in a deviant act. This problem pales, however, before those that arise when the parents try to find out where to get the drug and then how to interpret the high. If they ask their children to get the drug for them or to be with them while they are experiencing the high, the traditional roles of instructor and pupil are reversed. While the youngsters may enjoy this novel authority, it places them in an extremely difficult caretaking role. Above all, such a situation creates enormous anxiety for the parents. Many parents interviewed by my team had never achieved a high because of the dynamics of the social situation, and others had experienced a major panic reaction that convinced them the drug was bad and their children were indeed on the road to destruction (Jacobson & Zinberg 1975). Parents could avoid this pitfall by obtaining the drug in question from their own peers, but even then they would be placed in the position of participating in an illegal activity. In short, illicit drug use is a no-win situation for everyone, even for those trying to plan and teach useful drug education courses .

In the case of the mass media, most of the information provided is dramatically opposed to drug use and to the possibility of controlled use. Heroin consumption is viewed as a plague, a social disease. Stories about bad psychedelic trips resulting in psychosis or suicide have served for years as media staples, and more recently there has been a new spate of marihuana horror programs. In the early 1980s, when extreme care is being taken not to offend any ethnic group, it seems that drug users and peddlers, along with hopeless psychotics, are the only villains left to be featured in the innumerable "cops and robbers" serials and movies shown on television.

When parents, schools, and the media are all unable to inform neophytes about the controlled use of illicit drugs, that task falls squarely on the new user's peer group—an inadequate substitute for cross-generation, long-term socialization. Since illicit drug use is a covert activity, newcomers are not presented with an array of using groups from which to choose, and association with controlled users is largely a matter of chance. Early in their using careers, many of our research subjects became involved either with groups whose members were not well schooled in controlled use or with groups in which compulsive use and risk-taking were the rules. Such subjects went through periods when drug use interfered with their ability to function, and they frequently experienced untoward drug effects. Eventually these subjects became controlled users, but only after they had realigned themselves with new companions—a difficult and uncertain process. Unfortunately, many adolescent users never make this transition.

Cultural opposition complicates the development of controlled use in still another way: by inadvertently creating a black market in which the drugs being sold are of uncertain quality. With marihuana, variations in the content do not present a significant problem because dosage can be titrated and harmful adulterants are extremely rare; the most common negative effect of the black-market economy is that the neophyte marihuana user pays more than he should for a poor product. For the other drugs there are wide variations in strength and purity that make the task of controlling dosage and effect more difficult.. Psychedelics are sometimes misrepresented: LSD, PCP, or the amphetamines may be sold as mescaline. With heroin, the potency of a buy is unknown and the risk of an overdose is thus increased. If adulterants are present, the risk of infection may be heightened when the drug is injected.

The present policy of prohibition of drug use by legal means would be justifiable if it persuaded some people never to use drugs and led others to abandon them. Undoubtedly prohibition discourages excessive use, a goal with which I sympathize. But no one knows whether the number of users would be increased if prohibition were to be suspended. Would many people who had not tried illicit drugs choose to use them? Would many who had tried them go on to become compulsive users?

Aside from its questionable effect on the number of drug users, the prohibition policy actively contributes to the prevailing dichotomy between abstinence and compulsive use. It makes it extremely difficult for anyone who wishes to use drugs to select a moderate using pattern. This outcome may have been acceptable before the 1960s, when there were few potential drug experimenters, but it could prove catastrophic in the 1980s when adolescent experimentation approaches statistically normal behavior. Since 1976 more than 50% of high-school seniors report having tried marihuana or hashish at some time in the past, and over 44% have tried within the past two years (Johnston, Bachman & O'Malley 1982).

Although the opportunities for learning how to control illicit drug consumption are extremely limited, rituals and social sanctions that promote control do exist within subcultures of drug users. Our interviews have shown that these controlling rituals and sanctions function in four basic and overlapping ways.

First, sanctions define moderate use and condemn compulsive use. Controlled opiate users, for example, have sanctions limiting frequency of use to levels far below that required for addiction. Many have special sanctions, such as "don't use every day." One ritual complementing that sanction restricts the use of an opiate to weekends.

Second, sanctions limit use to physical and social settings that are conducive to a positive or "safe" drug experience. The maxim for psychedelics is, "Use in a good place at a good time with good people." Two rituals consonant with such sanctions are the selection of a pleasant rural setting for psychedelic use and the timing of use to avoid driving while "tripping."

Third, sanctions identify potentially untoward drug effects. Rituals embody the precautions to be taken before and during use. Opiate users may minimize the risk of overdose by using only a portion of the drug and waiting to gauge its effect before using more. Marihuana users similarly titrate their dosage to avoid becoming too high (dysphoric).

Fourth, sanctions and rituals operate to compartmentalize drug use and support the users' non-drug-related obligations and relationships. For example, users may budget the amount of money they spend on drugs, as they do for entertainment; or they may use drugs only in the evenings and on weekends to avoid interfering with work performance.

The process by which controlling rituals and sanctions are acquired varies from subject to subject. Most individuals come by them gradually during the course of their drug-using careers. Without doubt the most important source of precepts and practices for control is the peer using group. Virtually all of our subjects had been assisted by other noncompulsive users in constructing appropriate rituals and sanctions out of the folklore and practices circulating in their drug-using subculture. The peer group provided instruction in and reinforced proper use; and despite the popular image of peer pressure as a corrupting force pushing weak individuals toward drug misuse, our interviews showed that many segments of the drug subculture have taken a firm stand against drug abuse.

Footnote

1. For a survey of previous research on drug addiction, abuse, and controlled use, see appendix C. (back)
