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Flashbacks: Recurrent Intrusive Images After the Use of LSD

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Flashbacks are returns of imagery for extended periods after the immediate effect of hallucinogens has worn off. The most symptomatic form is recurrent intrusions of the same frightening image into awareness, without volitional control. The author compares flashbacks with other clinical phenomena; he believes that psychotherapy is helpful, especially if there is a focus on the traumatic and screening aspects of the imagery.

THE LARGE number of persons now using drugs to repeatedly induce a hallucinatory state of consciousness has led to increasing numbers of reports of flashbacks. These flashbacks are peremptory and recurrent intrusions into awareness long after the ingested drug has worn off.

The most common and clearest content of the flashbacks seems to involve the visual sensory system, but flashbacks have been reported in any sensory modality: taste, smell, touch, kinesthetics, vestibular changes, and auditory images. In addition, distortions of time sense, self-image, or reality sense may occur. This paper describes the visual forms of this symptom and compares it with known symptoms such as obsessive rumination, peremptory ideation, and recurrent pseudohallucinations.

Description of Flashbacks

Flashbacks (flashes, flashing) may persist for weeks or months after the last drug experience. The most important variety is repeated intrusions of frightening images in spite of volitional efforts to avoid them. However, two lesser variants can be described briefly.

Spontaneous Return of Perceptual Distortions

Distortions of perception experienced during the drug experience may recur long afterward, as previously reported(2). Subjective experiences include halo effects, blurred vision, shimmering, or reduplications of percepts, distortion of spatial planes, and changes in normal coloration.

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Micropsia, macropsia, and tunnel vision may also appear during the period "off" drugs. Examples of such perceptual distortions and elementary sensations are:

Patient A: Now I often see a bright shiny halo around people, especially at the dark edges—sometimes it's rainbow colors—like during the trip.

Patient B: Sometimes the sidewalk seems to bend as if it's going downwards—even when I'm not on anything—or it just kinda vibrates back and forth.

Increased Susceptibility to Spontaneous Imagery

Some persons report that after repeated use of hallucinogens they find visual imagery occupies a greater proportion of their thinking than formerly. They also state that their imagery now has a different quality—it is more vivid, seems to spring from some nonvolitional source, and is less readily suppressed than formerly. The incidence of this type of flashback appears related to total dose over time.

Patient C: I see this giant iguana, all the time, man. Green. In corners. Like under your chair.

Doctor: Are you putting me on about that?

Patient C: No—you mean about under your chair like? No. I see it all right—sometimes even when I want to. It used to be fierce; now it's friendly.

Doctor: Used to be fierce?

Patient C: Well, like when I first had it—it was a monster from the dark lagoon [laugh] and then it came at me sometimes. But now it's okay.

Doctor: Well, didn't you see stuff like that in your mind's eye all the time before any trips?

Patient C: Not like this, man. Not like this—it's real green.

Doctor: You mean, it's different?

Patient C: Oh, I see other things—this one's different—more so, I guess, more often, and clearer.

Patient D: Now I see things—walls, and faces, and caves—probably imprinted on my thalamus from the prehistoric past. Sometimes as clear as on a trip, but mostly not. My dreams sometimes are really spectacular now.

Recurrent Unbidden Images

Unbidden images are those that repeatedly coerce their way into awareness, demanding attention and resisting efforts to dispel them. They have been described by those who experience them as having "a will of their own." Some persons are frightened by their incapacity to dispel the images. Anxiety reactions, even psychotic reactions, may result.

Case Reports

The following three case reports clarify the recurrent and unbidden imagery of the flashbacks.

Case 1. This 17-year-old boy had taken marihuana, dimethyltriptamine (DMT), methedrine, LSD, and LSD with arsenic ("for that special kick"). Although his behavior was noted by his friends to be "freaky when he was flashing," he was able to deliver his thoughts in a rational manner. He described his theme song as "LSD and Speed Are All That There Is for Me" and spent most of his time drawing morbid and bizarre references to death. His costume was black with steel link chains. During a recent "trip" he hallucinated a dark scorpion on the back of his hand and experienced terror: "It had many legs, and I was worried it might sting me." In the past five weeks since the "trip" he claims to have ingested no drugs, but the scorpion continues as "flashings," sometimes in a changed position, but always brown or black in color.

Case 2. This 21-year-old man had numerous trips on LSD and marihuana. He described himself as preoccupied with life and death. After taking 2.5-dimethoxy-4-methyl amphetamine (STP) for the first time, he had repeated visual and kinesthetic images of himself crashing through the window of his car. He had never had such an accident in reality, yet during the flashbacks he felt fear at the vividness of the experience. He was sensitive about his flashback and said it was *not* a symptom but a "release of the within" from the drug. The image appeared symbolic of repressed fears of losing control and of self-destructiveness.

Case 3. A 16-year-old male high school dropout living in the Haight-Ashbury community reported an estimated ten LSD trips and 100 marihuana smokings. He denied use of other drugs. Generally, during LSD trips he experienced interesting, wild, intense, and usually pleasant visual imagery. Recently, however, he had a "bad trip" with images of a human figure being sucked into the vortex of a

whirlpool. This image began returning three weeks after the LSD trip and persisted for about three additional weeks. Five to ten times a day the vivid black and white images interrupted whatever he was thinking. These images were more pressing when he was "high" on marihuana. Whenever he had the flashback, he felt frightened and unsuccessfully tried to get rid of it. Although the time seemed very long, he knew that after approximately 15 to 20 seconds the image would leave of its own accord.

Since leaving home a year previously, he had stayed in various places, having incidental sexual and drug experiences without forming any intimate emotional attachments to anyone. However, in the "pad" [living place] where he had been staying most recently, he had formed a close relationship with a particular boy and girl. Further discussion revealed that he had recently been asked to leave this pad. While denying that this had had any emotional impact on him, his tone of voice and facial expression indicated his sadness.

He later began to talk of his loneliness and feelings of rejection with considerable feeling. Thereafter he reported no more flashbacks. Possibly this symptom relief was due to working through his feelings and having a positive (substitute) relationship. The flashback seemed to symbolize three trends of his feelings: 1) his loneliness, despair, and helplessness on being removed from a homelike situation; 2) his feelings of being sucked down by drugs and lack of plans or structure in life; and 3) his dread of being overwhelmingly incorporated by getting too close to others.

Incidence of Flashbacks

Assessment of the frequency of flashbacks is difficult because the phenomenon is subjective, difficult to describe, and not always inquired into by professional interviewers. In their 1967 review of the literature, Smart and Bateman(7) reported only 11 cases of spontaneous recurrence of LSD effects. In contrast, a recent questionnaire survey of professionals revealed a very high rate of reports of "flashbacks" in patients who had used LSD(8). Robbins, Frosch, and Stern(6) found that 11 of 34 patients admitted to a psychiatric ward because of LSD had some kind of reappearance of LSD effects after the drug had worn off. Keeler(4) states that spontaneous recurrence of marihuana effects are relatively common and, when associated with severe anxiety, constitute a psychiatric emergency.

My best source of information on the general incidence of flashbacks has been older hippies who function as fantasy guides during trips and as wise men to the community at large. They estimate conservatively that flashbacks occur in about one out of 20 users, at least in the milder form of recurrence of perceptual distortions. The more severe forms appear to be more common with repeated use of hallucinogens, although any kind of flashback has been reported after a single drug experience.

Recently, in cooperation with the Haight-Ashbury Research Project,[1] a detailed study of the flashback phenomenon has begun. While only preliminary data are now available, they are consistent with the above remarks. Thirty-one persons, not contributors to the clinical data reported above, were interviewed as representative members of the drug-using community. As it happened, these persons split into three rather discrete groups with reference to use of hallucinogens—22 had massive drug use, defined as a history of more than 15 LSD "trips" and considerable use of other agents, three had between three and eight LSD "trips," and six had used various drugs such as marihuana and amphetamine but not LSD, DMT, or other hallucinogens.

Of these 31 persons, eight reported one or more of the three types of flashbacks described in this paper. Seven of these eight persons had massive drug intake; the remaining person was from the group that had not used hallucinogens. Diagnostically, of the eight persons with flashbacks, two received diagnoses of ambulatory schizophreniform psychosis, four received personality pattern or neurotic diagnoses, and two were felt to have no evidence of psychiatric pathology sufficient to merit diagnosis. (These data are summarized in table 1).

Use of any of the major hallucinogens may be followed by flashbacks. The phenomenon was not reported after repeated

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TABLE 1

Incidence of Visual Flashbacks in a Sample of 31 Persons with Chronic Drug Use

TYPE OF FLASHBACK	MORE THAN 15 HALLUCINATORY TRIPS (N = 22)	FEWER THAN 8 HALLUCINATORY TRIPS (N = 9)	TOTALS
Perceptual distortion	3	0	3
Heightened imagery formation	4	1	5
Recurrent unbidden images	1	1	2
Totals	8 (in 7 persons) *	2 (in 1 person)	10 (in 8 persons)

* The preponderance of flashbacks in the massive drug use group was not statistically significant (chi-square for contingency table).

marihuana usage earlier in my subject sample, but now, with more potent forms of marihuana, cases are emerging. Keeler also has reported similar events in four users of marihuana(4). Marihuana, secobarbital (Seconal), physical fatigue, or stress may produce a state in which flashbacks from previous LSD "trips" are more likely to recur. I have only two reports of such recurrence with alcohol intoxication.

Persons with flashbacks insist that the imagery of the flashback has a different quality from thought images experienced prior to drug use. Usually the content of the flashbacks is derived from frightening imagery experiences during drug intoxication; less commonly, new images may be produced.

Explanatory Theories

Several theories can be proposed to explain why recurrent unbidden images, often of identical content, may intrude into awareness for an extended period after the immediate effects of drugs have worn off.

The Release Theory

The release theory suggests that psychedelic agents may produce changes at the neurophysiologic level in the processes underlying imagery formation and suppression. Repeated toxic effects may lead to enduring changes in such processes, although blood levels of LSD rapidly diminish (1). The neurophysiologic changes, just as in brain stimulations, may create a situation in which imagery formation is disinhibited. Recently it has been suggested that a psychoactive drug, chlordiazepoxide, might result in release of imagery formation processes leading to hallucinations(9).

The content of the flashbacks lends some support to the release theory. Hallucinatory constants, such as those described by Kluver(5) and Horowitz(2), are common (the spiral shapes of the whirlpool, the radiating lines of the scorpion, and the broken windshield). Elementary sensations, such as these forms, and perceptual distortions, such as those of the first examples, are also reported during the auras of epilepsy or migraine and on electrical stimulation of the eye or brain(2, 3). When the same object-depicting image occurs repeatedly, however, this suggests the presence of a meaningful set of psychologic motives in addition to whatever neurophysiologic "release" may be in operation.

Deconditioning Theory

During the drug experience the person becomes aware of certain subjective sensations, such as visual images, to a heightened degree. Once such sensations have been noted, it is not quite so easy to ignore lesser degrees of the same event(4). As in the release theory, the substrates of attention may be altered, leading also to lessened capacity to ignore imagery formation(4). In addition, the repetition of frightening images could be an automatic attempt at desensitization.

Psychodynamic Theory

Even if the release and the deconditioning theories are correct, it would be necessary to construct a psychologic theory that considers both cultural and personal factors.

Interest in imagery is great in the drug community. Various means of promoting imagery experiences are experimented with. The richness of imagery experience, induced by hallucinogens and reinforced by the values of the subculture, probably enhances both the capacity to form images (through training) and the attention given to such forms of psychical representation. Also, some persons turn away from the external world and relationships with persons and preoccupy themselves with the inner world in the mind's eye.

Psychotherapeutic study of persons with recurrent unpleasant images suggests that cultural style, however influential, is not the only determinant. In some flashbacks the imagery content seems to be a symbolic depiction of an affect state or situational crisis (e.g., despair and hopelessness). In some flashbacks the recurrent images seem to be a return of traumatic perceptions—images of the drug experience that were overwhelmingly frightening at the time they were hallucinated. When the trauma is worked through by repeated discussion of the affects involved or when the repressed ideas are worked through, the flashbacks cease. It is quite possible, however, that elimination of the symptom is accomplished through establishing a positive relationship rather than resolution of trauma or lifting of repression per se.

Recurrent flashbacks thus seem to resemble other clinical phenomena such as peremptory ideation, obsessive rumination, and repetitive visual pseudohallucinations (as in hysterical psychosis). Like related phenomena, the experience is felt as a loss of volitional control over the contents of awareness, and this sensation of loss of control contributes greatly to the attendant anxiety or loss of reality sense. As in the other symptoms, the contents seem to be returns of traumatic perceptions, breakthroughs of repressed ideas or affects, or screen images to symbolize but conceal emotional conflicts. In particular, many of the images reported symbolized feelings of disintegration or impending doom, fears characteristic of persons undergoing an identity diffusion.

The Mystical Theory

The hippies believe that the mind has imprinted upon it memories of all ages past and possibly projections of the future as well. These prehistoric and archetypic perceptions are released, it is thought, by psychedelic experience. Once the images have learned the route to awareness, they press for remembrance. Perhaps if we substitute "childhood" or "unconscious fantasy" for "prehistoric," "archetypic," and "ages past," this mystical theory is not as incompatible with psychological theories as it might seem.

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