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In Response

Reasoning about Hallucinations

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With other private events, the phenomena labeled hallucinations raise a variety of questions in ontology, epistemology and methodology. Unfortunately, hallucinations are often treated as easily identified dysfunctional behaviors which can be explained in terms of simple variables. It is this tendency in Burns, Heiby and Tharp (1983) which occasions this response.

Assuming for the moment that hallucinations are covert events, what are the necessary and sufficient conditions for the hallucination label to be applied? How does one tell a hallucination from a daydream, from a hypnagogic experience, from deja vu, or from simply "hearing something in your head?" Burns et al. give no help here. They do not define hallucinations as an operant class or even as a response class. Because that has not been done, we must rely on analyses of behavioral topographies which have been occasioned by a wide and poorly specified range of variables.

Burns et al. cite studies in which mild aversive stimulation was effective in suppressing hallucinations. It is likely that the controlling variables for these behaviors were weak and highly generalized. When such variables are strong, specific and not manipulable in the therapeutic setting, it is unlikely that the mild aversive stimulation employed would suppress hallucinations. In cases where the controlling variables for hallucinations are themselves clinically important, subjects should be trained to acquire repertoires for dealing with those variables directly (see Goldiamond, 1974). Merely to suppress disruptive behaviors is to ignore more important objectives of intervention, such as building a decent life after release from a hospital. In some cases, suppressing hallucinations may cut off fruitful lines of clinical inquiry and intervention (Cahoon, 1968; Karon, 1981; Wynne, Brey, Clark, & Williamson, 1983).

The private events labeled hallucinations may be unusual more in quality than in kind. Burns et al. mention this in referring to Skinner's (1936) article on the verbal summator, but they do not develop the topic. Hallucinations are probably similar to some of the covert behaviors of almost everyone, but of what variables are these behaviors a function? While Burns et al. refer to "motivational variables" (p. 137), their emphasis is on echoic processes, physiological noises and ambient sound. These seem unlikely candidates for the variables responsible for hallucinations, and the studies cited offer tenuous support. This author agrees that the key to a scientific understanding of hallucinations may lie in the work of Skinner (especially 1945, 1957, 1980), but disagrees that it is contained in his sections on echoic and intraverbal relations and automatic writing.

Reports of hallucinations can serve a variety of functions, and these may be determined largely by the social context in which a report is given. If it is the case that identical reports in other cultures would be regarded as normal and even desirable (Al-Issa, 1976), then the definition of hallucinations must include not only characteristics of the private event and its report, but also of the situation

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in which the report is given and of its hearers. This dimension is neglected by Burns et al.

It may be helpful to offer a tentative list of factors which contribute to the labeling of an event as a hallucination:

1. The social status of the subject.
2. The discriminative stimuli for the private event and for its report.
3. The private event ("volume," duration, content, accompanying visceral events).
4. The report (volume, duration, content, accompanying visceral events).
5. Relevant autoclitics for controlling variables (how the subject accounts for this event).
6. Non-report verbal behavior (e.g., talking to the ceiling).
7. Non-verbal behavior (e.g., rocking, staring, pacing).
8. Frequency of reports.
9. Context of report (general setting and audience control).
10. Subject's relationship to the recipient of the report.
11. The role of the recipient of the report in the mental health industry (see Magaro, Gripp & McDowell, 1978).
12. The behaviors preempted by the hallucinatory behavior.

There are conceivably many instances in which a slight alteration in one of the above factors would result in the hallucination label not being applied. For example, if an outpatient whose mother recently died said to his counselor, "I talked to my mother last night," it would probably be labeled a hallucination. It might not, however, if the subject went on to say, "I was falling asleep. I guess it was a dream," or if the subject were the counselor's banker rather than his client.

If the above list is even partly accurate, it should be clear that the labeling of hallucinations is a complex enterprise, and that a review along the lines of the Burns et al. article is misguided.

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