(subjected to suggestion plus 1 hour of sensory deprivation) reported auditory, somesthetic, and cognitive experiences, and 12 reported visual effects and emotional reactions. Some of these subjects described very peculiar effects within the first few minutes of deprivation. Consequently, it did not seem to us that the quality and quantity of experiences reported by our subjects could reasonably be attributed to 1 hour of sensory deprivation per se.

Stern suggests using control subjects "who received no suggestion as to anticipated results." We understand, of course, that he is referring to the deliberate suggestions which we gave to the experimental subjects. We contend, however, that it is almost impossible to select, screen, instruct, and place in situations of experimental sensory deprivation normal, bright subjects, particularly college students or professional personnel, without creating a wide variety of anticipations, expectations, and sets through which experimental effects may be suggested. This view is elaborated elsewhere (*2*).

It is possible, of course, to vary the amount of suggestion, and we have done this in a more recent study (*3*). Subjects with 3 hours of sensory deprivation plus suggestion reported significantly more effects, and much more unusual effects, than subjects who received relatively neutral instructions plus 3 or even 8 hours of sensory deprivation. These findings support the conclusions drawn from our initial study.

Stern also suggests using a control group which receives suggestion but no sensory deprivation. This too would be interesting, but to accomplish this and still maintain a genuine control for our experimental group would be rather difficult. First, the suggestion that the subjects would have hallucinations within the next hour for no apparent reason probably would be rejected by them as absurd. In other words, we firmly believe that an experimental sensory-deprivation situation contributes considerably to an appropriate set for reporting unusual experiences, and that differences in experimental situations and experimental "atmospheres" partially account for differences in results from different studies. Secondly, even if it were feasible to use such a control group, without any form of deprivation or isolation, the normal environment is sufficiently engaging to divert the subjects' attention from the experimental task. Seeing real objects would lessen and probably eliminate any tendency to see hallucinations, thus impairing the usefulness of this comparison group as an experimental control.

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Patent Protection and New Drugs

A recent news item on the Kefauver hearings [*Science* **134**, 1349 (1961)] contains the following statement: "The American Institute of Chemists warned that federal regulation would delay the discovery of remedies for heart disease and cancer and added that the research

laboratories of pharmaceutical firms are the 'last havens' for professional chemists seeking solutions to numerous maladies. This last view no doubt comes as a surprise to chemists at universities, government laboratories, institutes, and other nonindustrial research facilities."

The fact is that of 79 products patented in the United States, as listed in Table 38 ("Listing of drugs according to place of discovery") of *Senate Report No. 448* (27 June 1961), the vast majority originated in the laboratories of the pharmaceutical industry. One, bacitracin, resulted from work done under a government military contract; so far as we have been able to ascertain, none resulted from government nonmilitary health research.

This seems to support our contention that the most congenial climate for the creative development of new remedies exists in the laboratories of the pharmaceutical industry, while the universities very properly have emphasized other aspects.

The central point of the stand taken by the American Institute of Chemists, however, is this: any weakening of patent structure will reduce the monetary value of what the chemist creates; therefore, it is bound to reduce funds available for research and for the remuneration and reward of creative chemists. For this reason, any reduction of patent protection is contrary to the interest of the membership of the American Institute of Chemists and, we submit, also contrary to the interest of other creative scientists.

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My intention was not to deprecate, in any way, the considerable achievements of the pharmaceutical laboratories, but rather to point out that it was perhaps inaccurate to describe them as the "last havens" for chemists interested in drug research.—D.S.G.

Newton and the Spectral Lines

Bisson and Dennen [*Science* **135**, 921 (16 Mar. 1962)] wonder why Newton did not see and report the absorption lines in the prismatic solar spectrum, since they find the lines reasonably clear in a duplication of his apparatus. They suggest that Newton might have thought of the lines as separating the different colors. That