# Letters

## LSD: Tamed for Research

Henze presents justifiable support for the Sandoz Foundation's position on LSD (Letters, 12 Aug.). Henze and Sandoz had a tiger by the tail. With NIMH now taking responsibility for distribution of LSD, the situation will improve. More research will be authorized than in the recent past, since Sandoz only felt free to give the drug to government sponsored projects.

Lowinger (Letters, 2 July) asks for "carefully designed double-blind study" of the merits of LSD as an adjunct to psychotherapy. Our group at this Institute has been conducting just such a project for the past year under a grant which NIMH was farsighted enough to give us. We hope to have significant results in another three years.

The hysteria certainly exists, as I have discovered by corresponding with about 30 of my colleagues working with LSD. In the wake of recent publicity, projects have been called off, doctors have been attacked by hospital associates as "kooks," and I have been diagnosed (the psychiatric method of character assassination). Lowinger will be relieved, however, to hear that almost all of the work on LSD is proceeding as planned.

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## Language Requirements for the Ph.D.

An unresolved issue in graduate education is the foreign language requirement for the doctorate. Language requirements have never been universally fixed, and there are many proposed solutions, which vary from discarding foreign languages, and substituting mathematical, statistical, or computer language, to strengthening skill and use requirements in one language. Local enforcement methods vary, but the traditional requirements of French and German appear to be the most frequent. One argument supporting the language requirement is based on issues of cultural sophistication, general education, and technical needs.

A suggestion is offered here which may not only be sensible for the sciences, but useful in all areas of scholarship and research. Our proposal recognizes that the decisions about relevant languages should not be arbitrary, that each specialized area may have its own needs, and that foreign language specifications are not inflexible but may need updating at intervals.

From citations in recent literature in any area of science, it is possible to determine where the activity is high. Studies of the primary language of scientific reports are now being carried out in the life sciences. For example, in the area of biochemistry and endocrinology, a review of primary and secondary languages in the world's serial literature (2617 journals) shows that English is used in almost 50 percent of the reports, followed by French, German, Russian, Italian, Spanish, and Japanese. In the pediatrics literature the order is English, Spanish, French, German, and Italian, with English constituting one-third of the total. In 1627 aquatic biology serials, the order is English, German, French, Japanese, and Russian; in 1066 dealing with drugs (pharmacology, toxicology, and cosmetics), the five most frequently used languages are English, French, German, Spanish, and Japanese.

Such data can reveal a nation's scientific and technological progress. In aquatic biology, for instance, the country of origin of 1627 serials shows the U.S. has 392 publications, Japan 148, U.S.S.R. 92, Canada 78, and the United Kingdom 65. In a study of Russian literature citations, 2100 U.S. scientists were asked to estimate their ability to describe to a colleague the content of an article in a foreign language. Ability in French (1517) and German (1498) accounted for 68 percent of the total who reported (*1*).

From such analyses a small group of relevant foreign languages can be determined, in addition to a larger group of currently irrelevant languages. Diversity is to be anticipated across the various sciences and specializations. We propose that each faculty group involved in Ph.D. training analyze its area in relation to national contributions, activity, and trends, and then recommend acceptable and unacceptable foreign languages to the graduate dean. We see three major advantages to the proposal. First, it should bring language requirements up to date. Second, it offers a rationale for acceptable and unacceptable languages. Third, it is empirically based on the leadership and responsibility assigned to the involved scientists, scholars, and teachers. Fourth, the requirements are subject to change. The final characteristic is that enforcement can remain the responsibility of the present administrative officers and university structure.

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**Note**

These findings have been reported in the BSCP Communiqué series from 1963–65 of the Biological Sciences Communications Project, George Washington University, Washington, D.C.

## Oleomargarine Territory

My attention has been called by R. K. Boutwell, associate professor of oncology at the University of Wisconsin, to an error in my article "The ethical basis of science" (3 Dec. 1965, p. 1254). In speaking of the need to defend the freedom of scientific investigation, I coupled the fate of Mendelian genetics in the U.S.S.R. and the nutritive qualities of oleomargarine in Wisconsin. It is evident from a consultation of *Time*, 11 October 1943 and 27 March 1944, that I pointed the finger at the wrong state. It was in Iowa, at Iowa State College, that the unfortunate suppression of a pamphlet by Oswald H. Brownlee by the college president, at the insistence of the Iowa Farm Bureau, occurred. Brownlee, in what *Time* called a "frank and popularly written [study] of wartime farm economics," had stated that "margarine is as palatable and nutritious as butter,