

Letters

Antarctica: Behavioral Studies

With regard to Nelson's succinct analysis of research on Antarctica (26 Jan., p. 407), the continent most hostile to man, it should be pointed out that there is a fairly good explanation of why the study of behavior of men wintering over on the ice has lagged behind the physical, geological, and meteorological studies which the National Science Foundation has funded. In a situation where danger to life is great, then survival, initially, is the prime concern. Thus, on Mount Everest ascents, in Sealab experiments, and in space journeys, the overriding consideration is to get the men back alive and well and worry later about their socialization. Where survival is at stake, physicians, not psychologists, are most essential. The Navy has always stationed a physician at Byrd and Pole Stations; psychologists have gone there only to collect information.

Moreover, there is a fair body of literature, under Navy rather than NSF funding, the result of work carried out at the Navy Medical Neuropsychiatric Research Unit, mostly by Eric Gunderson and Paul Nelson. The 1966 volume of *Antarctic Bibliography* (Library of Congress) lists 17 published papers on psychological adjustment in Antarctica by one or the other of these two.

Finally, whether psychiatrists, psychologists, and sociologists are more or less likely to leave the comforts of the temperate zones than are geologists, physicists, or even plumbers could be tested on campuses or in industries as well as on the ice. Intrepidity may be associated with scientific discipline, but the Antarctic data do not provide proper validation of such a notion.

WALTER L. WILKINS
Navy Medical Neuropsychiatric
Research Unit,
San Diego, California 92152

The fine work of the University of Oklahoma group on sleep patterns is not "the first and only project in the behavioral sciences which NSF has

sponsored in Antarctica." In 1958, with the support of four NSF grants, I began work on personnel selection as well as on properties of group structure in Antarctic populations. During these investigations, I spent the 1958-59 summer in Antarctica and in 1950-60 was a member of the Victoria Land Traverse party.

These studies resulted in a doctoral dissertation, two monographs, and one paper (1), a symposium on polar research at the 1962 meeting of the American Psychological Association, a paper delivered at the 1961 Joint U.S.-Canadian Conference on Cold Weather Physiology, comparative data for a paper delivered at the 1967 meeting of the Western Psychological Association, and comparative data for a paper to be given at the 1968 meeting of the Western Psychological Association. Indeed, the research I am presently conducting as well as all my subsequent work on structural properties in small interdependent isolated groups has evolved from these initial undertakings.

WILLIAM K. SMITH*
Division of Neuropsychiatry,
Walter Reed Army Institute of Research,
Washington, D. C.

References

1. W. M. Smith, *Psychol. Rep.* 9, 163 (1961); — and M. B. Jones, *Aerospace Med.* 33, 162 (1962); W. M. Smith, *Psychol. Rep.* 19, 475 (1966).
* Present address: Naval Arctic Research Laboratory, Barrow, Alaska 99723.

Personalized Subscriptions

In the article "The future of scientific journals" (1 Dec., p. 1153), Brown, Pierce, and Traub "... propose that journals stop binding papers into issues and, instead, distribute to each subscriber a personalized stream of papers, abstracts, and titles." The proposal is unrealistic on several counts:

1) A scientist would have to choose a unique vocabulary for each journal of possible interest, select and "submit his request list to the editor" of each jour-

nal, revise these lists by adding, deleting, and replacing terms to optimize the type of papers he receives, and keep up with periodic vocabulary revisions published by each journal. It would be an unusual scientist who has time to prepare and continuously revise request lists for several dozen journals that might contain papers of interest to him.

2) Results of evaluations from 103 cancer research scientists who received over 6000 summaries of published articles indicate that even when several thousand highly descriptive categories in a limited specialty field (cancer research) are used for precise identification of relevant documents (1), about half of these carefully indexed articles are rated "of little or slight use" or "of no significant use" by the scientist. If these detailed, analytical index categories were replaced by a few hundred terms as Brown, Pierce, and Traub suggest, the scientists would be overwhelmed by articles of little or no use.

3) The authors imply that a few hundred simple terms, from a hierarchical classification, can be used without roles or links, without weighting techniques, and without preordinating terms into precise concepts. This is surprising in view of the widespread use of these refinements in information systems and the oft-stated and demonstrated need for them.

4) Space does not permit comments on the enormous cost to publishers who would have to send out thousands of different packages to individual users. What about the librarians who would need to handle, process, and bind individual papers and drafts?

Contrary to the oft-repeated clichés used by the authors to justify the need for a new system, the present journal publications arrangement is remarkably free of problems and is widely accepted by the scientific community. Publishers have found ways to increase income by advertising, by page charges, by charges for reprints, by raising subscription prices, and by starting what the authors refer to as "... younger and more vigorous journals of narrower scope ..." (which are actually an excellent and valuable form of selective dissemination). It is unlikely that any system can be developed which would be as acceptable to either scientists or publishers as the present basic system of journal publication.

There is certainly room for improvement in the present system, and a real