Review Articles

Where Facts Are

Scientists' Approaches to Information. By Melvin J. Voigt. Chicago: ALA, 1961. 81p. (ACRL Monograph No. 24) $2.50.

"Information storage and retrieval" is a phrase with a futuristic ring, but it denotes processes which have been carried on, in one way or another, for ages. Only lately has the sequence of file now, find later been dignified by such an impressive title, and one tends still to associate the phrase with mechanized information processing. This small volume considers information retrieval as it is now practiced by scientists, using the abstracts, indexes, journals, and other tools which are available. Not enough time, the author feels, has been spent in asking basic questions about the ways scientists find the information they need. A study of current usage might give useful hints for the improvement of older tools and the design of new ones.

The aim of the study was to determine how and where scientists locate needed facts; the method was a series of interviews with individual scientists and groups of scientists, some 225 in all. To eliminate possible language bias, the study was caried out in Scandinavia, where most scientists can use English, German, and French—the languages of the principal information sources—with nearly equal facility. Three different "approaches to information" were identified: The current approach, or "keeping up with the literature;" the everyday approach, or the search for specific facts in the course of the researcher's daily work; and the exhaustive approach, in which all pertinent information on a topic is desired.

All of the existing reference tools in the field were used, but their importance varied according to the scientist's approach—his reasons for making the search. For the current approach, or learning of new developments, contact with other scientists either in person or by correspondence was found to be quite important. Finding the information rapidly seemed to be the determining factor in choice of sources for the everyday approach, since the scientist's associates and the standard handbooks, reviews, encyclopedias, etc., were most widely used. The exhaustive approach, predictably, made much use of articles in periodicals, journals, and printed reports, as well as indexes and abstracts to locate them.

The author points out that no single source of information can be adequate for all approaches and suggests that the perfection of mechanical tools for exhaustive literature searching is less important than improvement in sources used for the current approach. These sources might be made more useful by adding more specialized indexing and abstracting services for the narrower fields, by the further use of mechanical methods in the preparation of bibliographical services, and by international cooperation in the production of information sources within a given field. Machines alone will not save the scientists and librarians from burial beneath the increasing mass of published material, but a combination of old and new techniques should enable them to keep pace.—*Richard W. Ryan, Library of Congress.*

Machine Translation

Computers and Common Sense—the Myth of Thinking Machines. By Mortimer Taube. New York: Columbia University Press, 1961. 136p. $3.75.

A number of weighty subjects are discussed in this slender book: machine translation, learning machines, man-machine relations, the meaning of meaning, and the need for criticism in science. Much of the book deals with attempts to formalize, i.e.