

ment on how best to determine answers to these questions. It was apparent from the discussions that verbal communication (at conferences and symposia, at table, or in the hall) is relied upon much more than is commonly supposed. Abstracts are relied upon less, and critical, comprehensive review articles of broad segments of the literature are desired very much. This does not necessarily indicate that more conferences or more financial support for existing systems will solve the problems; instead, it may emphasize the need for improved or even fundamentally new systems.

Centralization versus decentralization of services was considered in very interesting discussions in which the protagonist of centralization was A. I. Mikhailov, director of the All-Union Institute of Scientific and Technical Information of the Soviet Academy of Sciences. Mikhailov's institute has performed remarkable feats of service; nevertheless, there were many who regarded such a mammoth, government-operated organization as an impractical means for solving the problem in the United States.

A middle position was described by a Polish participant, A. Majewski, who is director of the Central Institute of Scientific and Technical Documentation in Warsaw. The scanning and abstracting of the world's literature in Poland is divided among some 80 specialized research centers there and is carried on by working scientists and engineers. A central headquarters, under Majewski's direction, controls the machinery for assembling, duplicating, and distributing information from the specialized centers and carries out a number of services, such as preparation of card indexes for distribution, that could be done locally only with much repetition and inefficiency.

These discussions will no doubt be of great interest to those considering the several proposals for a national scientific and technical information service in the United States, one such proposal having been made by the Council for Documentation Research to the Academy-Research Council.

Trends

Two quite different trends in the thinking at the conference were apparent in discussions of how to deal with the steadily increasing flow of information. What might be called the classical approach demands self-restraint at all levels, for in this view less should be published in the first place and more should be eliminated from the retrieval systems; editors should reject more papers, and abstract services should become more critical and should process only what is worth while.

The other approach would regard the classical position as one to be approved in principle, but hopeless in practice. In-

stead, we must develop mechanized systems with such capacity, speed, and selectivity that they can absorb all that is produced and serve up to their users only what they want. The designers of large-scale, high-speed computers were more sanguine about the future of this trend than the librarians and the using scientists, although the evidence of progress that they presented was encouraging.

Certainly the need for cooperation among using scientists and librarians on the one hand and mathematicians, engineers, linguists, and logicians on the other was made more evident. As C. W. Cleverdon, a participant from England, put it:

"These people who are trying to find out what we, the librarians, are doing, and trying to find out how we should do it, are working toward the aim of eliminating any necessity for us to do it at all. . . . Yet, as librarians, we should not abrogate our right and duty to tell all who come into documentation from outside what are our problems, and try to direct their efforts toward the solution."

Perhaps the conference laid the basis for closer cooperation of this kind. Certainly Sir Lindor Brown made us feel that in this respect the conference had been worth while when he interjected very nearly the last remark in the conference record. He said:

"We started this week speaking about *your* conference. We finished by speaking about *our* conference. What better praise could there be?"

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Cloud Cover Satellite

A small satellite, designed to produce pictures of the earth's cloud cover, has been put into orbit at an altitude ranging from 929 to 2086 miles. This is the first of the space vehicles designed for meteorological purposes. The satellite, weighing 20½ pounds and having a diameter of 20 inches, was launched from Cape Canaveral 17 February as a part of Project Vanguard, a program originally set up for the International Geophysical Year, which ended last December.

The sphere carried two transmitters, a receiver, a recorder, and batteries in addition to the two photocells which alternately scan the earth's cloud cover during daylight hours. Solar cells operate a switch which halts the recording tape when the satellite is in the shadow of the earth.

Clouds and sea and land masses have different qualities of reflection which can be translated into electrical impulses. As the satellite's photocells sweep the sunlit side of the earth, the intensity of sunlight

reflected from the cloud areas (80 percent) will differ from that reflected from the land (15 to 20 percent) and sea (5 percent) areas. These reflections, converted to electrical signals, are stored in the tape recorder within the satellite for telemetering to ground stations in compressed form when the satellite is "interrogated"—that is, the transmitter is activated by a ground signal.

The Vanguard program, originally a Navy activity, was transferred last fall to the National Aeronautics and Space Administration. T. Keith Glennan, administrator of NASA, announced the successful shot and relayed President Eisenhower's personal congratulations to the scientists responsible for it.

National Manuscript Catalog

The Council on Library Resources, Inc., Washington, D.C., has made a grant of \$200,000 to the Library of Congress to initiate work on a National Union Catalog of Manuscript Collections. It is hoped that this catalog will eventually record all collections of manuscripts in libraries and archives in the United States. The immediate goal is to bring together uniform descriptions of some 24,000 known collections in approximately 75 cooperating repositories, in addition to some 3000 collections in the Library of Congress itself, and to print and sell separate catalog cards for each of these collections so that any library that wishes to do so may maintain a similar record.

A need for a central national inventory of manuscript collections has long been felt by people involved in studies which depend upon such sources. These studies include not only civil, military, and social history but also literary history and criticism, history of the arts, biography and genealogy, paleography, business and economic history, history of science, and legal history and inquiries.

Grants, Fellowships, and Awards

Literature of science. The Phi Beta Kappa Senate has established an annual prize of \$1000 for an outstanding contribution to the literature of science. The first award will be made next December to the author of the best book on science or the interpretation of science published between 1 July 1958 and 30 June 1959.

The purpose of the award is to stress the need for literate and scholarly interpretations of the physical and biological sciences and mathematics, and to symbolize the importance of science as a part of humanistic studies. Such books as *Deserts on the March*, by Paul B. Sears; *The Immense Journey*, by Loren

Eiseley; *Of Stars and Men*, by Harlow Shapley; and *Mathematics: Queen and Servant of Science*, by Eric Bell, are examples of the kind of scientific scholarship the award is to cover. It will go to a scientist, rather than to a science writer, and the book will be one written for the intelligent general public, not for other scientists.

SEATO. The South-East Asia Treaty Organization research fellowship program for 1959-60 is designed to encourage the study and research (preferably leading to publication) of such social, economic, political, cultural, scientific, and educational problems as give insight into the present needs and future development of the treaty area, viewed against a background of SEATO objectives. A limited number of advanced research fellowships is offered for 1959-60 to candidates from member states (Australia, France, New Zealand, Pakistan, the Philippines, Thailand, the United Kingdom, and the United States). A candidate must be a national of a member state and should plan to undertake his research in SEATO countries situated within the treaty area. Study in other countries may be authorized only under exceptional circumstances. The applicant's project should be of interest to SEATO and, preferably, to two or more SEATO member countries, rather than to a single one.

Grants are intended for well-established scholars. Candidates will be selected on the basis of their special aptitude and experience for carrying through a major project of research. Academic qualifications (preferably the doctoral degree or its equivalent), professional experience beyond the completion of training, and published material will be taken into account.

Preliminary screening of American candidates will be by the Committee on International Exchange of Persons of the Conference Board of Associated Research Councils, which will recommend candidates to the Department of State and the President's Board of Foreign Scholarships. The board in turn will nominate a small panel of scholars for consideration, along with similar panels from the above-named countries, by the SEATO Selection Committee in Bangkok. The awards will be made from this total list of candidates from all the member countries. Final selection of candidates will be announced by the Bangkok committee in August 1959. It is expected that only one or two grants will be available to candidates from the United States.

The grant will provide a monthly allowance of \$400 and tourist-class return air travel to the country or countries of research. Grants may be authorized for periods of from 4 to 10 months. Application forms and additional information

may be obtained from the Conference Board of Associated Research Councils, Committee on International Exchange of Persons, 2101 Constitution Ave., Washington 25, D.C. Applications should be submitted *no later than 15 April*.

News Briefs

Sweden has decided to postpone the development of her own uranium resources for her atomic power plant. Instead, the government proposes to study the possibility of importing the necessary fissionable material, which is expected to be less expensive than exploiting the plentiful but low-grade Swedish deposits.

The U.S. Atomic Energy Commission has recently inaugurated a revision sheet service for keeping the Trilinear Chart of Nuclides up-to-date. This service is available on a subscription basis from the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C.

About 438 million acute illnesses, involving either restricted activity or medical attention or both, occurred among the American people during the year ending 30 June 1958. The number of such illnesses averaged 2.6 for every person in the population. The figures are from the newest report of the U.S. National Health Survey, which shows also that the incidence was highest in the youngest age groups and decreased progressively in each older age group. The rates ranged from an average of four illnesses among children under 5 to 1.6 illnesses per person 65 or over. The incidence among females was slightly higher than it was among males.

The Endocrinology Study Section, National Institutes of Health, has announced that it is prepared to distribute, free of charge to qualified investigators, limited amounts of purified sheep pituitary follicle-stimulating hormone. The preparation has been packaged in two forms: (i) vials containing 5 mg for use only as a standard in assay procedures; (ii) vials containing 25 mg for experimental use. Application for supplies, either of the standard or of the experimental lots, should be made by letter to Dr. R. T. Hill, Executive Secretary, Endocrinology Study Section, National Institutes of Health, Bethesda 14, Md.

The General Electric Company has received the American Meteorological Society's annual Award for Outstanding Services to Meteorology by a Corporation for work carried out at the Hanford Atomic Products Operation at Richland, Wash. The award, in the form of

a citation, was presented to Herbert M. Parker, manager of the Hanford Laboratories operation, at the society's annual dinner.

General Electric, which has operated the Hanford plant for the Atomic Energy Commission since 1946, has promoted a continuing program of meteorological research and service at Hanford specifically designed to assist in such operation problems as the safe disposal of small amounts of radioactive gases in the atmosphere.

A new Mormon College was recently dedicated at Laie in Hawaii, Honolulu. Three years under construction, the \$3¼ million college comprises 20 buildings with accommodations for 1000 students. It is surrounded by 6000 acres of sugarcane land purchased by the church in 1865.

The Placement Committee of the Association of American Geographers has announced a new publication, *Jobs in Geography*, a monthly news letter that is mailed to all members of the association who are interested in new or better positions and have registered with the committee. Any one who wishes to have an opening listed in *Jobs in Geography* should write to the AAG Placement Committee.

The Health Information Foundation reports that the maternal mortality rate in this country has dropped 93 percent in the last 40 years, from 61 deaths per 10,000 live births in 1915 to 4.3 deaths in 1957. In its statistical bulletin, *Progress in Health Services*, the foundation points out that one maternal death occurred in approximately 2300 live births today, compared with one maternal death for each 165 live births in 1915. Last year 4.2 million babies were born in the United States; there were 1600 maternal deaths. Had the rate of one generation ago still prevailed, the number of maternal deaths would have run as high as 28,000.

To encourage educational travel by students, the United Nations Education, Scientific and Cultural Organization has issued the tenth edition of *Study Abroad*, which this year lists more than 75,000 fellowships, in contrast to 15,000 offers contained in the first edition. Each listing in *Study Abroad* includes complete details on where to apply for fellowships and scholarships, who is eligible, the field of study, the length of course, the amount of the award, and other pertinent data. The publication is available at \$3 per copy, paper-bound, from the UNESCO Publications Center, 801 Third Ave., New York; the Columbia University Press, 2960 Broadway, New York; and the United Nations Bookshop.