Standing orders are placed with selected university presses and certain other presses. Their publications are channeled by the staff to the appropriate library. For some foreign publications needed in the special library, exchanges are established, as this is the only possible method of obtaining material from some countries.

The documents department, ever viligant, scans various listings of Federal, state, and international publications. Even though the University is a depository — which means there is a standing order for all Government Printing Office publications — it does not get all of these publications automatically. The documents staff makes certain that the University is put on departmental mailing lists; it also channels public documents to the special library where the material will be most useful. As a result of government sponsored research the staff is busy trying to keep up with the publication explosion.

No matter how fine a collection may be, it is of little value if bibliographical access is poor. It is the responsibility of the librarian to see that indexes and abstracts are available and to recommend reference aids, dictionaries, encyclopedias, handbooks, etc. It is also his duty to note book reviews, check publishers' catalogs, and suggest items to the faculty library representatives for consideration.

With several science departmental libraries on the University campus, duplication in orders is inevitable. Decisions have to be made as to whether duplication is necessary.

From the foregoing description it is obvious that the librarian and other staff members are involved in book selection for the University special library. The University is, indeed, fortunate to have specialists in every field, and it has benefitted greatly from their interest and cooperation.

1. Miss Johnson is librarian, Duke University Biology-Forestry Library, Durham, N. C.

THE TRANSLATING SERVICE FUNCTION OF THE INDUSTRIAL LIBRARY

By Robert E. Betts¹

Since the launching of Sputnik I on October 4, 1957 — less than a decade ago — there has been an explosion of ideas and tests in industrial and research laboratories all over the world resulting in a heavy fallout of technical reports, patents, books, periodicals, and other printed media in both the pure and applied sciences. A little over a year ago Professor Wesley C. Simton, director of the Center for Documentation and Information Retrieval, University of Minnesota Library School, estimated that there are 2,000,000 articles a year published in 30,000 scientific and technical journals, and the number of publications of course increases each year. In addition, there are approximately 100,000 technical reports issued annually, and this number is likewise growing.

To add to this enormous scientific and technological activity, these papers, reports, and books are written in many languages, creating a Tower of Babel confusion of tongues. It has been said that over one-third of all scientific publications are in Chinese, Japanese, and Russian, over another third in English, with the remainder in Arabic, French, German, Italian, Spanish, and other languages. It is thus readily apparent that languages in themselves create barriers in the world community of scientists. The amount of dupli-

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cation of research and studies on both sides of the Atlantic and Pacific must, in the nature of things, be very great as it affects every area of science and technology — agriculture, biology, botany, chemistry, engineering, geology mathematics, medicine, physics, and zoology — to name only the major subject fields. Buried under this mountain of paper are an infinite number of ideas in foreign languages which could result in new products and cost and/or time saving devices for American industry. For laboratory research is expensive, and there is also a wasteful time-lag in discovering something a second time.

Another source of waste is the time and energy spent on developing an idea, only to discover that another company or individual already holds a patent on it. Writing in Aircraft Engineering several years ago, Lionel Mote observed that the cost to British industry of abandoned patent applicants comes to several million dollars annually. He noted that the main cause of this state of affairs was unquestionably a lack of careful investigation into the pertinent literature at the outset, and over-emphasis on laboratory research at the expense of literary research, which costs a fraction of the money lost in unsuccessful patent applications. Here again much useful knowledge is lost or work duplicated because the patents are in French, German, Japanese, or some other language.

It has been said that engineers are not linguists, and by and large this is true. However, the engineering curriculum is unusually heavy and crowded with courses in the applied and pure sciences to such an extent that no time is left for one or two foreign languages.

In recognition of this need to know more about what was going on elsewhere a group working at first on a voluntary basis was formed in the Special Libraries Association in 1946 to accumulate and index translations obtained from non-governmental sources. Thus began what was to become the SLA Translation Center in 1953, a project housed in the John Crerar Library in Chicago. Today there are over 100,000 translations in the Center, collected from both domestic and foreign non-governmental sources. Most of the contributions have come, of course, from industrial librarians who have been willing to give translations to the Center in order to have access to such a large pool of translations on all kinds of scientific and technological subjects. All identification marks are removed from each translation as it is received at the center and it becomes a part of a large anonymous collection; this is as it should be, for from the start, it has been a cooperative venture.

In January, 1959 the Center began exchanging information about translations with the National Bureau of Standards Clearing House for Federal Scientific and Technical Information, which for some years had specialized in collecting translations from those of foreign and domestic governmental agencies, a very rich field in itself, as users of the fortnightly U. S. Government Research and Development Reports know.

The collecting and exchange of translations has also long been a problem in other parts of the world. In 1962 the European Translations Centre became a reality, with its collection being located near the Technological University at Delft, Holland. Participating in this undertaking are research and industrial libraries in Austria, Belgium, Denmark, France, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom; the United States and Canada are also participants in the program. The SLA Translations Center cooperates with both the Clearing House for Federal Scientific and Technical Information and the European Translation Centre. Thus it is in a position to give information on translations which are not in its own collection, such as location of a specific translation or where further information might be obtained.

All information about new English translations available in the SLA Center and the Clearinghouse is now collected and issued by the U. S. Department of Commerce in a semi-monthly publication called *Technical Translations*.

During the past several years an increasing number of cover-to-cover translations of Russian, Japanese, and Chinese periodicals have been appearing in this country and England, and this has helped enormously in alleviating the translation problem. Faraday Press, Pergamon, Plenum, and the American Institute of Physics are some of the publishers which have been issuing a number of these publications in English.

Translating a scientific paper from one language into another demands a high degree of exactness and precision of the translator. Not only must the language be known from which the translation is being made, but the translator must also know the English language well and the vocabulary of the discipline in which one is working. Thus, a good deal of skill and knowledge is expected of the translator working in science and technology. To help set higher standards of proficiency for translators and to give them an organization for the exchange of common ideas and problems, the American Translators Association was organized in 1960. This organization now has a membership exceeding 500; members can translate from thirty languages into English, ranging from Afrikaans to Yiddish. The association has just issued its first *Professional Services Directory*¹ which should prove useful to any one needing an untranslated article for which he cannot wait indefinitely. The *Directory* is indexed by language, subject and geography.

Last year the 2nd edition of *Translators and Translations*: Services and Sources in Science and Technology², ably edited by Miss Frances Kaiser and her associates, appeared This work lists freelance translators, translating firms, pools and information sources for translations, and bibliographies of translations: in short, it is indispensable to anyone who needs to secure translations or to find a translator.

In spite of the considerable progress which has been made in recent years in making translations available in English, one will still get requests for articles which have not yet been translated. If worse comes to worst and the librarian has studied the language, one can do a stop-gap translation which may quickly fill the need. It does point up the fact, however, that more and more industrial and research librarians should contribute the translations their companies have made to the SLA Translation Center, for it is only in this way that the translations pool will be sufficiently enlarged to provide better services for all.

Finally, the prospect of machine translation is the brightest spot in the translations picture. This will be the most revolutionary development in the universalizing of information and knowledge since the invention of the printing press by Gutenberg in the 15th century.

American Translators Association, P. O. Box 489, Macison Square Station, New York, N. Y. 10010, \$5.00 per copy.

^{2.} Special Librarias Association, 31 East 10th St., New York, N. Y. 10003. \$14.50 per copy.