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## Books, Libraries and Languages.

THE work of the third conference of the Association of Special Libraries and Information Bureaux (A.S.L.I.B.) held recently at Oxford had many points of contact with the world of science, and among the more interesting papers in this connexion was one read by Dr. J. E. de Vos van Steenwijk on the subject of international scientific bibliographies and information bureaux. The author is assistant-chief to the Section of Scientific Relations of the International Institute of Intellectual Co-operation, which acts as a permanent bureau to the International Commission of Intellectual Co-operation set up by the League of Nations. Both the Commission and the Institute are working on the compilation of analytical bibliographies of current scientific literature; physics was the first science to be taken up, economics is now being approached, and the biological sciences are to be considered next. In the last-named subject Dr. de Vos stated that in the United States the publication entitled *Biological Abstracts* expects to give yearly about 50,000 abstracts derived from 4000 to 5000 periodicals; and by this means it is hoped to save much unnecessary duplication or multiplication.

The second important task which the Institute has set itself is to inquire into the ability and readiness of libraries to act as information bureaux. It has issued a circular to some 2000 libraries in different countries with the object of finding out which of them contain collections on special sciences, and are able and willing to answer inquiries of a bibliographical nature. The use to which this information will be applied has not yet been decided, but it is suggested that the Institute might act as an international clearing-house for distributing the information collected. In Dr. de Vos' opinion, some central organisation, national or private, should be appointed in each country to collect information concerning the present position of its libraries and, in addition to ascertaining the locations of special collections, to find out where the necessary specialists are to be obtained.

The question whether an international organisation should undertake the production of bibliographies is one that merits consideration, and also one upon which opinion is likely to be divided. Since the International Catalogue of Scientific Literature ceased publication, no work of its kind has, so far as we know, been done, and many will want to know to what extent such work is needed. In this respect different sciences appear to have different requirements. In chemistry so many abstracts are produced by chemical societies throughout the civilised world that the necessity for another organisation appears to be negligible; in fact,

the International Catalogue has scarcely been used at all by chemists. Chemistry, however, is exceptional; some other sciences are far less well served, and unless the societies concerned, or private bodies, intend to undertake the work of abstracting or of compiling bibliographies in a comprehensive way, there appears to be scope for an international effort of this kind.

Related to this subject of abstracts is that of the use of scientific and technical libraries. We greatly appreciate the action of those learned societies which open their doors to students and to others who are not members. For example, in 1919, as a result of a conference of chemical and allied societies, the Chemical Society extended the chemical equipment of its library and admitted as readers the members of the Association of British Chemical Manufacturers, the Biochemical Society, the Faraday Society, the Institute of Chemistry, the Society of Chemical Industry, the Society of Dyers and Colourists, and the Society of Public Analysts. The effect of this wise policy is partly shown in the number of books borrowed during the year. This has risen from 2905 in 1918 to 4950 in 1925. During the year 1925, there were 6994 attendances of readers in the Library of the Chemical Society, of which 4746 were made by fellows and 2248 by members of contributing societies.

There is, of course, a difficulty in opening the doors of a library too widely: there may not be seating accommodation for all who would come in. As time goes on, many scientific libraries find their shelves fully occupied and are at a loss to know how to provide room for the new volumes.

Some libraries contain many volumes they do not really need which would be much more appropriately placed in some other institution. The Association of Special Libraries will be doing good work if it takes this matter in hand and induces each library to exchange or dispose of such works as it does not need and thus make room for books or periodicals more directly connected with its own special subject.

It is by no means desirable that all the older scientific books should be destroyed on the ground that they are out-of-date, for many of these books are valuable historical evidence of the state of scientific knowledge and theory at the time they were written. Indeed, some of them contain original observations which have since been overlooked. But provided that it was assured that a certain number of copies of these works would be preserved, the remainder might cheerfully be removed.

The Association of Special Libraries is not, however, concerned alone with the use of books: its object is "to facilitate the co-ordination and systematic use of sources of information in science, industry,

commerce, public affairs, etc." It was appropriate, therefore, that in a paper entitled "A National Intelligence Service," Mr. J. G. Pearce should raise the question as to what is the most efficient method by which scientific and technical workers throughout the country may receive early information about new discoveries and new developments in the subjects with which they are concerned.

A central institution of the kind would have classified index-cards, each bearing the full reference to a book or paper, with a summary of its contents. When it is remembered that some 24,000 periodicals which may contain scientific articles are published throughout the world, and that to this number pamphlets and books must be added, it will be seen that the number of index-cards required to be prepared every year would be very large, probably at least a quarter of a million. The work of selection and indexing must be done by experts in each subject, and then the cards must be written, typewritten, or printed. When an inquiry was received, the staff of the institution would look up the index-cards bearing upon the subject, and would send copies of these, obtained either by typing or by photography.

The Association proposes to make use of the special libraries and information bureaux which already exist in Great Britain. There are several hundreds of these, including the libraries of learned societies, universities, colleges, public libraries, libraries of research associations and libraries of manufacturers and business firms. The first step is the preparation of a Directory of Special Libraries in Great Britain and Ireland. The general editor for this Directory is Mr. G. F. Barwick, late keeper of printed books at the British Museum, whose name is a guarantee that the work will be well done. It is hoped to publish the directory in the summer of 1927. Such a directory will indicate the library or libraries where information on a given subject is likely to be found. Apart from this directory, the Association proposes to answer inquiries from its members as to the literature on a particular subject by giving the names of those libraries that are likely to be able to give the information required.

There are divergent opinions concerning the desirability and practicability of special scientific libraries undertaking the work of information bureaux. Libraries undertaking this work would require greatly enlarged staffs. Information-hunting is a long and arduous pursuit, and we are informed by two experts in this business that the average time required to answer a single inquiry is about two days. On the other hand, the expense should not be prohibitive, for, as Dr. de Vos remarked, an information service should be made to pay for itself: firms and individuals could

afford to pay high fees if they were relieved from doing the work themselves. A second difficulty would be to find the personnel. Information work demands very special qualifications, both in regard to knowledge of books and other sources of information, of at least one science, and a natural *flair* for finding things out. Special training might solve this difficulty to some extent, and a real demand would probably create a supply. Large firms and institutions would, however, probably continue to employ their own information officers, so that the work of information bureaux set up in connexion with special libraries would consist mainly in serving the needs of individuals and small institutions. A further hindrance to the realisation of the scheme would be found in the inability of scientific libraries owned by learned societies to undertake work for outside firms and individuals; charters of incorporation would have to be carefully scanned before action was taken.

The language difficulty is a perennial one in the sphere of the dissemination of scientific knowledge, present methods being prodigiously wasteful in time, effort and money. Translators who possess the qualification of expert knowledge of science and language, including its idioms and technical terms, are exceedingly rare, and as a rule the work is badly remunerated. At the Oxford meeting, Mr. P. K. Turner, of the Research Department of Burndepth Wireless, Ltd., spoke in no exaggerated terms of these difficulties, and his suggested solution—the adoption of an international auxiliary language—though old, is one that cannot be overlooked.

Following closely on the lines of the International Auxiliary Language Committee of the British Association, Mr. Turner considered the rival claims of a dead language, a modern national language, and an invented language, and came to the conclusion that Latin is too difficult for the purpose, a modern language would inevitably raise international jealousies, and that an invented language, easy to learn, precise, and capable of providing new words for new concepts, would be best. Of the artificial languages now current, only Esperanto, its offshoot Ido, and Interlingua (Latin without inflexions) are of serious importance, and of these Esperanto has undoubtedly made the greatest headway. We have recently read a scientific treatise on the elementary principles of radio-communication written in Interlingua, the language sponsored by Prof. G. Peano, of the University of Turin, and were much impressed by its ready intelligibility and its brevity; but probably any of the three languages named would serve, with or without modifications, for international abstracts and bibliographies.

The fact remains, however, that none of these in-

vented languages has made any progress in the scientific world. Whenever they are suggested they seem to raise a perfect *furor* among partisans of the dead and national languages. We hold no brief for any one of these linguistic devices which, like shorthand, mathematical, chemical and musical notations, have been invented to serve a special purpose, but in view of the very great advantages that would follow the adoption of a suitable medium for international communications in science, we think that the subject should not be allowed to drop. If the world were ruled by reason (which it is not, and probably never will be) an international auxiliary language would have been adopted many years ago; it remains to be seen how far civilisation will succeed in promoting the dictates of reason against the opposition of instinctive tendencies and age-long prejudices.

### Propaganda and Philosophy.

- (1) *The Gist of Evolution*. By Prof. Horatio Hackett Newman. Pp. x + 154. (New York: The Macmillan Co., 1926.) 6s. net.
- (2) *Selected Articles on Evolution*. Compiled by Edith M. Phelps. (The Handbook Series.) Pp. liii + 283. (New York: The H. W. Wilson Co.; London: Sir Isaac Pitman and Sons, Ltd., 1926.) 2.40 dollars.
- (3) *Science as Revelation*. By John M. Watson. Pp. 303 + 7 plates. (New York: The Macmillan Co., 1925.) 10s. net.
- (4) *God and Evolution*. By the Rev. W. R. Matthews. (Liverpool Diocesan Board of Divinity Publications.) Pp. ix + 58. (London: Longmans, Green and Co., Ltd., 1926.) 3s. net.

SO far as one can see from current apologetic literature, England and America present rather a strong contrast. The religious problem across the Atlantic seems merely to be the limited one of evolution *versus* the book of Genesis, an issue which engaged the attention of Englishmen half a century ago, when Americans were getting over their disastrous civil war. The three volumes from America before us all deal more or less directly with the Fundamentalist controversy, the seriousness of which is not understood in England, where we are inclined to laugh at it. It is, however, no laughing matter. It is already being converted into a political issue; the "Bible Schools" where non-graduates are trained for the ministry are engaged in an industrious propaganda, and in some places no political candidate would stand a chance of election who did not profess 'Biblical' views, and no teacher in a public institution could retain his position if he favoured evolution.

- (1) In his volume, Prof. H. H. Newman, who