Scientific Publishing in Continental Europe:

Notes on Its War and Postwar Status

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INCE 1940, MANY AMERICAN SCIENTISTS have been handicapped in their research activities by the lack of definite information concerning the publication and availability in this country of scientific periodicals emanating from Axis and Axiscontrolled countries, especially Germany. Some abstracts of articles published in Continental European journals for the war years appeared in Chemical Abstracts, Biological Abstracts, and other similar journals, but the coverage was far from complete, and often copies of the periodicals abstracted could not be located in the United States. Since scientists in most disciplines have been concerned chiefly with periodical and monographic publications, especially those published in Germany, this article emphasizes such serial publications. The number of scientific and technical journals published in Germany before the war was far larger than that of all other countries of Continental Europe combined.

In 1943 the Library of Congress issued a finding list of journals published in Axis and Axis-controlled countries in 1940-43 which contained many gaps; some periodicals known to have been published were not even listed. For Germany, lists of wartime publications have now become available. Copies of Halbjahrsverzeichnis for the years 1941-43, inclusive, were reproduced photographically by J. W. Edwards, Ann Arbor, Michigan, as were copies of Deutsche Nationalbibliographie for 1944. These volumes, now obtainable at many libraries, list scientific books and, to some extent, the individual numbers of scientific periodicals published in Germany during the years covered. In 1945, the publication of scientific books and periodicals practically ceased. During the latter part of 1946 and the early months of 1947, some scientific journals resumed publication, and a few new journals were started.

A purchasing mission under the auspices of the Library of Congress, organized in 1946, was able to obtain copies of certain scientific journals published during the war and postwar years. These issues, which are being shipped to a few American libraries assigned priorities by a national committee, will by no means be sufficient in number to satisfy the demand or even to furnish copies to libraries on the priority list. One library with priorities in physics, chemistry, botany, zoology, veterinary medicine, and animal culture has so far received as a result of the Library of Congress Mission only three or four issues of scientific journals published in 1946–47. Nevertheless, the work of the Mission will ensure the availability somewhere in this country of copies of scientific journals which later can be used for photographic reproduction if necessary.

A group of librarians has proposed a project which will indicate the location of all issues of periodicals published in Axis and Axis-controlled countries during the war years. The publication of such a much-needed list may have to await the publication of a second Supplement to the Union List of Serials. Sufficient information to justify the compilation of the list will not be available for many months. In the meantime, the Library of Congress is maintaining a card index showing the location of all copies of war issues of periodicals known to have been received from those countries.

Until the last few weeks, American librarians were unable to place orders for current German publications. In February of this year, the firm of Stechert-Hafner received permission from the Office of Military Government for Germany (U. S.) to send a representative to Germany to arrange for the purchase and shipment of the books and periodicals available there. The first shipments are now en route. It is probable that other American and foreign dealers will soon receive permission to send representatives to Germany to make similar arrangements. In so far as is known at the present time, no dealer except Stechert-Hafner has yet received such permission. Correspondence directly with German dealers and publishers to secure information as to titles, quantities, and prices may be conducted, but financial transactions must be cleared with the U.S.-U.K. Joint Import-Export Agency, Melitta House, Minden, Westphalia, British Zone, and remittances made as directed by that agency and not directly to German dealers. Under the Trading With the Enemy Act, orders involving financial commitments cannot at present be sent directly to any German publisher or dealer.

Some lists of Germany scientific periodicals are becoming available. The latest, compiled in part by Ferdinand Springer, of the firm Julius Springer, appeared in the April 15 issue of Stechert-Hafner's *Book News*¹ and

¹ Obtainable from Stechert-Hafner, Inc., 31 East 10th Street, New York City.

includes the titles of 177 scientific and technical periodicals classified as follows:

Natural Sciences	14
Physical Sciences, including mathematics,	
physics, chemistry, and pharmacy	24
Medicine and Public Health, including	
physiology	63
Technology	43
Agriculture and Forestry	10
Economics and Law	23

The list obviously should be revised and supplements published at frequent intervals. Letters from German publishers indicate that plans are now being made for many additions to the list already announced. Springer writes that he expects to resume publication of his many abstracting journals as soon as communications are re-established. Indeed, it is reported that a new volume of *Beilstein's Handbuch der organischen Chemie* is now ready for publication.

The Stechert-Hafner list is probably not complete. A correspondent from Germany mentioned, possibly inaccurately, the revival of Zeitschrift für Kristallographie, which is not included. However, a comparison of lists received from German scientists indicates that the Stechert-Hafner list is reasonably complete as of February 1947. In general, it does not contain publications of universities and learned societies, and it seems probable that universities and scientific societies have not yet resumed publication.

An earlier, more general list of periodicals appeared in the German publication, *Kultur-Archiv*, for October-November 1946. *Kultur-Archiv* apparently is a section of *Europa-Archiv*—not to be confused with other publications of a similar name. The "Europa" list, which contains a few titles of agricultural and technical periodicals not included in the Stechert-Hafner list, is of more value to humanists than to scientists.

On the Stechert-Hafner list, over half of the titles represent revivals of earlier periodicals. In some cases, titles have been changed. The Berichte der deutschen chemischen Gesellschaft, for example, is now known as Chemische Berichte. The extent of the resumption of publication of German scientific and technical periodicals is indicated by a check of the periodicals received by one, library before the war with those in the Stechert-Hafner list. Of 409 scientific and technical journals, not including medical, of which issues were received in 1939, only 37 appear on the present list. The list however, contains many old friends, such as Pflüger's Archiv, Liebig's Annalen der Chemie, Zeitschrift für analytische Chemie, Annalen der Physik, Hoppe-Seyler's Zeitschrift für physiologische Chemie, and Mathematische Annalen. Revivals in the pure sciences are few in number compared with those in medicine. Revivals in physiology, which include some outstanding journals, are listed under Medicine in the Stechert-Hafner list. Only one

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botanical periodical, *Planta*, appears. During the war, medical, agricultural, and industrial periodicals seemed to have been given priority. During the occupation, a very considerable number of periodicals in the field of religion and theology arose, possibly, in part, as a reaction to the strict censorship existing during the Hitler regime.

It is too early to evaluate the content of the German scientific publications of 1946-47. During the Nazi regime, the value, from a scholarly standpoint, of publications in ethnology and the social sciences almost disappeared, although these publications are of some value in indicating ideologies and the mental reactions of the German sociologists and ethnologists remaining in Germany during this period. In the field of the pure sciences, however, many articles in German scientific periodicals published during and after the war are being eagerly requested by scientists and are reported to contain articles of first importance-not, however, on a scale comparable as to quantity or quality to articles published in Germany in earlier years. In many disciplines, the deterioration can be traced back to the first years of the Hitler regime. Evaluation of the periodicals which have recently started publication in Germany is not possible at present, since few, if any, copies are available for examination.

Many current bibliographic publications are now available. The issues of Deutsche Nationalbibliographie, published at Leipzig, are a "must" for all American research libraries. Theoretically, this periodical lists all currently-issued German publications, but since it is published in the Russian zone, some German publishers in the western zones may not desire to send as complete information of their publications to Leipzig as formerly. A tendency to separate the publishing activities of the western zones of Germany from those of the Russian zone has developed, possibly because of the different publishing restrictions prevalent in the various zones. The well-known Börsenblatt für den deutschen Buchhandel, published in Leipzig, represented before the war the entire book trade of Germany. A new periodical under the same title, published at Frankfurt am Main, in the American zone, represents the book trade of the western zones. In addition, a periodical entitled Mitteilungen für den Buchhandel in der französischen Zone is being published in Freiburg, in the French zone, and one with a similar title, published at Munich, represents the book trade of Bavaria in the American zone.²

² After this article was in proof, word was received from Germany of the publication in Frankfurt of a periodical entitled *Bibliographic der deutschen Biblio'hek*, which duplicates to a considerable extent the material contained in *Deutsche Nationalbibliographic*. Another illustration of the unnecessary duplication of German bibliographic periodicals is the recently announced publication of two periodicals both known as *Chemisches Zentralblatt*, one published in Berlin in the Russian zone, the other in Heidelberg. Both of these periodicals continue the volume number of the original publication.

Committees of the American Chemical Society and the American Library Association are studying the unnecessary duplication of bibliographical periodicals, apparently caused by the rivalry of publishers in the Eastern and Western zones of Germany. Conditions in Germany are not favorable to scientific publishing. The Armies of Occupation in the various zones have issued rigid, but differing, regulations. Each publisher must acquire a license, which is subject to revocation. The greatest hindrance at present, however, is the lack of paper. One German publisher reports that he has been able to obtain only 10 per cent of the paper stock needed. Furthermore, since Germany is still technically at war, any German scientific publication theoretically may be reproduced photographically in another country and sold at a reduced price. Hence, some manuscripts are being held until assurance is received that copyright will again be enforced.

The prospects for the acquisition of war issues of German scientific books and periodicals are not good. The stocks of many scientific publishers, including those of Julius Springer and Akademische Verlagsgesellschaft, have entirely disappeared. The book trade journals previously listed include many pages of advertisements for wanted publications. The chief hope of American libraries for completion of sets of German war periodicals depends on cooperative plans for photographic reproduction, now being discussed. Even the postwar issues, because of their limited editions, are becoming difficult to obtain. Scientists and librarians who desire any of the periodicals on the Stechert-Hafner list should place their orders immediately. Even now, it is too late to obtain readily issues of some journals published in the fall of 1946.

German publishers, in general, prefer the western zones. Some of them, notably Julius Springer, have established offices in several cities. One publisher writes that he desires to relate his publishing activities to the scholarship and research of the "Western World" scientists and hopes to place his scientific journals on an international basis. Undoubtedly the restrictions on Russian publishing and exports account in part for this point of view. Some consideration is being given to issuing some scientific publications in both the English and, the German languages. In the minor countries of Europe, several periodicals contain more articles in the English language than was the case before the war. The titles and content of some periodicals, more popular than scientific, are of interest as indicating a point of view. The British and American influence is revealed by such titles as Neues Abendland, Neues Vaterland, Stimmen der Völker, Volkswacht, and Zeitwende.

The war has brought about a shift of many publishing activities from Germany to Austria, Switzerland, Holland, and the United States. New publications have started in these countries which may replace older German serials and monographic works. Publications of such firms as Elsevier Publishing Company (Amsterdam and New York), Academic Press (New York), and S. Karger (Basel) are examples.

In France, scientific publishing never entirely ceased

as it did in Germany and, after the liberation, was much more quickly resumed on a prewar basis. Of 93 French scientific periodicals, excluding medical, received by one library before the war, at least 46 are now being published. Of 55 publications of societies and universities, 33 are now being issued. Some of the most notable are the following, well-known to scientists in the various disciplines: Académie des Sciences, Comptes Rendus; Annales de Chimie; Archives de Biologie; Archives d'Anatomie Microscopique et de Morphologie Expérimentale; Institut Pasteur, Bulletin; Journal de Chimie Physique; Journal de Physique et la Radium; Journal de Mathématiques Pures et Appliquées; and Société de Biologie, Comptes Rendus. The subscription prices have been greatly increased, in some cases as much as 8 or 9 times the prewar price. French periodicals which apparently are not being published include such publications as Annales de Physiologie; Matières Grasses; Revue de Chimie Industrielle; and Revue Générale des Matières Colorantes.

In proportion to the number of prewar periodicals, France seems to have emphasized somewhat more than has Germany publications in the pure and natural sciences. On the other hand, not so great emphasis seems to have been given by France to publications in technology and medicine. Possibly the need for increased agricultural and industrial production was more keenly felt in Germany.

There is great need for a comprehensive list of current French scientific periodicals as well as a list of discontinued titles, with volume and number of the last issue published. Any dealer except an enemy alien can arrange for importation of books from France and other European countries, with the exception of Germany.

Italy, as was to be expected, has been slow in the resumption of publishing activities. With the exception of publications of institutions, few periodicals in the pure and natural sciences published before the war have reappeared. Among the casualties are the well-known publications of the Naples Zoological Station, Rendiconti of the Circolo Matematico di Palermo; Bollettino and Memorie of the Società Entomologica Italiana; and Clinica Veterinaria. The list could be greatly extended. On the other hand, Annali di Chimica Applicata; Annali di Matematica; Annali d'Igiene; Archivio di Fisiologia; Bollettino of the Istituto Sieroterapico Milanese, Bollettino of the Unione Matematica Italiana; Giornale degli Economisti; Rivista di Biologia; Scientia; and Bollettino of the Societa Italiana di Biologia Sperimentale have been resumed. Unconfirmed reports have been received of the resumption of publication of the highly-esteemed Memorie of the Reale Accademia dei Lincei.

Appeals are being received daily from Italian academies, universities, and experiment stations for a resumption of exchanges with American institutions. Most of these letters bemoan the fact that, unfortunately, the would-be recipients although hopeful of resumption of Italian publications at some future date, have nothing at present to offer in exchange. Most of the universities in Italy, as well as in many other countries, have received no American publications for the last five or six years and are naturally eager to obtain foreign scientific publications issued during that period. Because of financial conditions, purchases are not possible. Shipments by the American Library Association and the American Book Center have necessarily been limited chiefly to allied and neutral devastated countries.

A majority of Austrian scientific periodicals have now resumed publication, but these never compared in number with those issued in Germany or France. Lists from such dealers as Urban and Schwarzenberg and Springer Verlag, in Vienna, are obtainable from any American importer. It is reported that some periodicals formerly published in Germany are now published in Vienna. Not many such cases could be found, with the exception of periodicals published by firms with offices in both countries. Some periodicals, such as Mikrochemie. formerly issued by Springer in Berlin, are now being issued by Springer in Vienna. Among the typical Austrian periodicals which can be obtained through any dealer except an enemy alien are: Monatshefte für Chemie, Wiener botanische Zeitschrift (formerly Oesterreichische botanische Zeitschrift), Wiener klinische Wochenschrift, and Wiener tierärztliche Monatsschrift.

A number of new journals have started publication in Austria, chiefly in Vienna, but these are concerned more with industry and building than with the sciences. *Oesterreichische Bibliographie*, now available at many libraries and from any importer, lists periodicals, but cites titles of periodicals in lists of books under subject classification. Such citations are not convenient for checking by American libraries for ordering purposes. The compilation of lists of scientific periodicals now being published in Austria is desirable. The revival of publication in Austria, as in Germany, seems to be much more extensive in the field of the humanities and in medicine than in the sciences.'

The Viennese book trade journal, entitled Anzeiger für den Buch-, Kunst- und Musikalienhandel, is of value to librarians and scholars interested in Austrian publications, partly for the information it gives concerning publishing activities. Advertisements of Swiss, British, and American books appear. One dealer lists for sale Benjamin Franklin, Yankee from Olympus, and George Washington Carver. Another advertises that he has just received copies of the journal Britain today. If the Anzeiger represents accurately the thinking of the Viennese, Austria, or at least Vienna, is also looking toward the West for the resumption of its cultural relations.

Reports from Russia are most discouraging and, in some cases, conflicting. Many Russian periodicals cannot be exported. A list entitled 1947 Periodica U S S R, obtainable from any importer, contains the titles of 202 periodicals, chiefly scientific, which are available for export. Reports indicate that the Russian Government may forbid at any time the export of single issues of any periodical. It is therefore difficult, if not impossible, for a library to obtain complete volumes of any Russian serial, although in some cases the missing issues may have been obtained through personal channels. Some scientists have reported that, through personal correspondence with their colleagues in Russia, they have been able to obtain numbers of periodicals not available for export. Institutions having publications to offer on exchange have found that Russian academies and societies have been liberal in exchanging their publications.

Even less information with regard to scientific publications can be obtained from the Russian satellite countries than is available from Russia. Probably the most valuable scientific publications received before the war from Poland, Rumania, and Bulgaria were issued by universities and learned societies. At present not much is known definitely of the revival of any of these publications. The little information which has been received came as a result of personal correspondence. Requests for information on the availability of scientific periodicals in the Russian satellite countries have not met with entirely satisfactory responses. Undoubtedly, more information will be available within the next year or two. Especially in the case of both Russia and her satellite countries. the chief hope seems to lie in the eagerness of institutions and societies in these countries to receive American publications on exchange. This fact has much significance. not only for the acquisition of their scientific publications but also as a means of developing cultural relations with countries with which international understandings are most desirable.

Letters have been received from Czechoslovakia requesting exchanges, but few Czechoslovakian publications seem to be available for such purposes. It seems probable that scientific periodicals have not been revived or started to any considerable extent. One noted exception, however, is the valued *Collection des Travaux Chimiques de Tchecoslovaquie*, which ceased publication in December 1939 and resumed in 1947. The volume numbers indicate that no issues were published for the 7 intervening years.

Note should be made of the great increase in the publication of scientific books in Switzerland. The transfer of German periodical publication from Germany to Switzerland, anticipated by so many, apparently has not taken place, but several anti-Nazi scientists who formerly contributed to German medical periodicals are now found as contributors to similar Swiss publications.

Scandinavian, Belgian, and Dutch publications are rapidly returning to the prewar basis. Many of the scientific publications never suspended publication, although issues were somewhat irregular. Libraries quite generally are now able to obtain complete files of the scientific and technical journals received before the war.

As Continental Europe recovers from the war, and as more paper stock becomes available, scientific publishing should be resumed on a greatly increased scale. Avenues of communications are now being opened. The development of exchanges of scientific publications is most desirable; closer relations between American scientists and those of foreign countries will make the international exchange of scientific information more widespread than would be possible if the exchanges were on an entirely commercial basis. American scientists, together with our academic institutions, can contribute much to the future peace of the world.

NEWS and Notes

On July 15 the steel ketch Atlantis sailed from Woods Hole, Massachusetts, its destination being the mid-Atlantic Ridge, some 1,200 miles east of Bermuda. On board were Maurice Ewing, of Columbia University, and a corps of assistants, who will survey the topography of the Ridge and attempt to discover the character of its rock and the nature and depth of its sedimentary covering. From the data accumulated by the expedition, which is sponsored by the National Geographic Society, Columbia University, and the Woods Hole Oceanographic Institution, these scientists hope to ascertain how and when the Ridge was formed.

The Ridge, with peaks rising over two miles above the ocean floor. stretches from Iceland almost to Antarctica. The depth of the portion under survey will be measured by echo-sounding-recording the time required for a sound wave produced at the ship to travel to the ocean floor and back, and utilizing the velocity of sound in water to calculate the distance to the bottom. In addition, cross sections of sediment will bill, H.R. 4102, introduced into the be collected by means of 10-foot-long house by Rep. Wolverton of New steel tubes equipped with 850-pound Jersey on July 7 and reported out by lead weights, which will be dropped the Committee on Interstate and over the side. By this means the ages Foreign Commerce, is scheduled for of the various layers may be deter- debate on the floor as Science goes to mined and changes in the earth's press. This bill, although carrying magnetic field may be shown. But essentially the same provision as

recent portion of the sediment. To shall be appointed by the Foundation determine the entire thickness sonic of 24 members instead of being apmeasurements will be used. Still pointed by the President after conanother interesting piece of equip- sultation with the Foundation and ment is the Nansen bottle, which, approval by the Senate (see Science when lowered, fills with water at any May 30). The bill omits specific desired depth, water from other mention of the social sciences and levels being kept out by a series of allotment of research funds to states. valves. These bottles enable the It authorizes establishment of special study of microscopic life and salinity commissions on cancer research, heart far below the surface. A special under- and intravascular diseases, poliosea camera perfected by Prof. Ewing myelitis, and such others as deemed and his students will also be used.

Reservations are available for several of the Chemical Research Conferences sponsored by the AAAS and being held this summer at Colby Junior College, New London, New Hampshire. Increase in facilities at the College has permitted a larger attendance than in previous years at About People Gibson Island.

Conferences for which reservations are available are: Medicinal Chemistry, July 21-25; Vitamins, July 28-31; Food and Nutrition, August 4-8; Cancer, August 11-15; and Instrumentation, August 18-22. Requests for attendance should be addressed to W. George Parks, Colby Junior College, New London, New Hampshire.

The final program for the Conferences was published in the May 2 issue of Science.

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these cores will sample only the most S. 526, stipulates that the director necessary. Its patent provision prohibits individuals from obtaining patents for any invention resulting from their activities with the Foundation. Such individuals may, however, apply for patents to be assigned to the government or its nominee.

E. A. Vuilleumier has resigned as dean of Dickinson College, Carlisle, Pennsvlvania, in order to devote full time to his professorship of chemistry. Dr. Vuilleumier, who has been head of the Department of Chemistry since 1920 and dean since 1933, will be succeeded by Russell I. Thompson as dean.

Lorus J. Milne, who since 1942 has been working in the field of aviation medicine at the Johnson Research Foundation, University of Pennsylvania, has been appointed associate professor of zoology at the University of Vermont, effective in August.

I. H. Quastel, British scientist known for his work in enzyme chemistry, has been appointed professor of biochemistry at McGill University and associate director of the Montreal General Hospital Institute for Special Research and Cell Metabolism. Dr. Quastel will also serve as director of the enzyme research division of the Institute.