

Technical Book Publishing in Europe, 1947:

Impressions From Visits to Eleven Countries

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CAN THE SWISS PUBLISHERS SUCCEED the German and dominate Europe as they did during the Reformation and in the 18th Century?

Will German publishers in science and technology, encouraged by the help of the U. S. and British governments in stabilizing the national economy, revive in this generation to their pre-Nazi status?

Will expanding use of English in Europe provide permanent new audiences for U. S. and British technical publishers?

With Britain spending \$18,000,000 annually through its Council to influence world-wide circulation of British books, what should the U. S. Congress appropriate for State Department aid to our Information Library program, in which science and technology are the leading subjects in demand?

These are only a few of a host of questions that stir the imagination of an American technical book publisher returning to New York after 9 stimulating weeks in 11 European countries.

Contacts with publishers, educators, librarians, and book dealers were made on a plane of reciprocal interest, which was well expressed in part of the letter of introduction from the late editor of *Science*, Willard L. Valentine, written just before his death: "We are anxious to know the progress of research in the various scientific fields, the plans for reviving scientific publishing, both in the book fields and scientific journals, and the extent to which faculties and laboratory facilities are now operating in comparison with prewar standards. The American Association for the Advancement of Science and its editors are most anxious to be of service to scientists everywhere, and we shall feel honored if you will give us the opportunity to be of assistance to you, your staff, and your organizations."

In presenting this report, which is necessarily brief because of travel time and space limitations, this correspondent wishes to record his awareness of probable omission of important items. Special thanks are due the Publishing Association executives who supplied statistical data, and also U. S. Embassy staff members. It is hoped that the material may be helpful in accelerating reciprocal relations, including translations, especially for the aid of those who may not be bilingual, and that this modest effort may also be helpful in the larger movement for better international understanding.

As in the United States, World War II has released a vast flood of energy and funds for research in Europe. Just before leaving England I noted that the British government had announced the appropriation of £250,000 (to rise later to £350,000) annually for research in mechanical engineering. In Sweden new plans were announced for coordination of bibliographical material on research. In France new publications, including one on research in nutrition, were discovered, and, as implied above, Switzerland is newly acclaimed in technical publishing.

GREAT BRITAIN

In Great Britain an American feels thoroughly at home in attempting to appraise the technical publishing situation. The paper shortage, the lag in numbers of scientific personnel, the surge of new subject matter to be published, and the postwar revival of book output are, in varying degrees, similar to our own problems.

Typical of this is the spirit of the program of the British Association for the Advancement of Science meeting at Dundee, August 27–September 3, 1947. The Council decided that, in order to emphasize the positive contribution of science to human progress, the program should conform to the general theme, Swords to Ploughshares. In the corridors there undoubtedly will be much discussion, as there would be at home, of the Government bill for original scientific work, with its appropriation of £74,000,000. The proportion for research is said to be more than the government prewar expenditure for education. Men of science are increasingly concerned about an imbalance in the proportion of government- to nongovernment-sponsored work, and there is an active body of opinion which calls on scientists and universities to refuse to accept contracts which include a ban on the publication of results.

British research programs will go forward rapidly with respect to equipment availability, according to Secretary Lowe of the British Association, but during the next 10 years, great effort will be expended in meeting the requirements of the Barlow Report: to double the rate of output of scientists and also to comply with the standards of the Percy Report on Higher Technological Education. As in the United States, problems of housing, buildings, and teacher personnel are serious.

International collaboration among scientists and the potential results for publishers are emphasized in current

meetings. Just now available, for example, is the first volume of the new annual series of Symposia of the Society of Experimental Biology, *Nucleic acid*. This comprises 19 papers presented at Cambridge in 1946, the authors of which are residents of Belgium, Denmark, England, Scotland, Sweden, and the United States. The second volume, to contain the papers presented at the 1947 symposium, will be entitled *Growth in relation to differentiation and morphogenesis*. In the preface the Society expresses indebtedness to Imperial Chemical Industries, Ltd., the Rockefeller Foundation, and the British Council for Financial Aid.

TABLE 1
BRITISH TECHNICAL BOOK PRODUCTION: OUTPUT FIGURES*

Subject	1939	1940	1941	1942	1943	1944	1945	1946
Aeronautics.....	53	90	118	159	148	88	67	66
Archaeology.....	58	39	21	12	17	14	9	18
Astronomy.....	41	29	15	19	21	16	18	27
Botany, horticulture, & agriculture.....	200	95	92	76	58	56	73	102
Chemistry & physics.....	120	101	43	62	52	72	69	102
Engineering.....	168	139	91	158	101	132	112	198
Geology.....	48	32	12	19	18	11	20	17
Mathematics.....	54	32	35	28	46	18	37	64
Medicine & surgery.....	498	374	238	303	212	238	256	321
Philosophy & science.....	145	143	71	90	62	61	79	96
Nautical.....	84	51	32	15	14	22	19	41
Technical handbooks.....	228	132	103	110	104	118	123	253
Veterinary farming & stock-keeping.....	33	24	37	46	73	67	60	96
Wireless.....	23	26	17	40	34	31	20	33
Totals.....	1,753	1,307	925	1,137	960	944	962	1,434

* From Whitaker's Cumulative Book Lists, which are cumulations of the weekly and monthly book lists appearing in *The Bookseller* of London, the British book trade paper. The figures refer to books published at 6d. and over.

Similar possibilities for publishers are apparent in the report in *Nature* (April 26, 1947) of the revival in Paris, in January 1947, of the International Union of Physics. Fifteen European countries were represented, plans were made for a September 1948 meeting in Holland, liaison with UNESCO was indicated, and Commissions with personnel representing also the United States were appointed as follows: (1) Cosmic Rays, (2) Units of Radioactivity, (3) Symbols, Units, and Nomenclature, (4) Thermodynamics, and (5) Optics. Representatives were also appointed to Joint Commissions on Physicochemical Data, Viscosity, The Ionosphere, and Radiometeorology. Prof. Fleury, director of the Institut d'Optique, is secretary.

These international projects compare with similar developments in the United States. For example, there

is the new *Review of Applied Mechanics*, a project for abstracting the world's literature on the subject which is to serve as a successor to the German publication, *Zentralblatt*, published before the war by Springer in Berlin. Sponsored by such bodies as the American Society of Mechanical Engineers, the U. S. Navy, and the National Research Council, under the editorship of Stephen Timoshenko for its initial issues, and with correspondents throughout the world, it aims to fill an important gap in a field of great importance today.

According to Edmond Segrave, editor of *The Bookseller*, British book publishers in the period 1939-1946, inclusive, reflect in the statistical record (Table 1) a trend toward technical book developments similar to that in the United States. In 1939, out of 14,904 books published, 1,753 were classed as technical and scientific. In 1946, out of 11,411, there were 1,434. The most significant gains were in the fields of engineering, mathematics, technical handbooks, and veterinary science, farming, and stockkeeping; the greatest declines, in botany, horticulture, and agriculture; medicine and surgery; and geology.¹

Over-all figures of British book production show the effects of the war. For the years 1939-1946, inclusive, these are: 14,904; 11,053; 7,851; 7,241; 6,705; 6,747; 11,411.

Shortages of labor and materials, emphasized by the fuel crisis, continue to plague the industry and cause frustration in the effort to meet the great postwar demand for new books, particularly of a technical and educational nature. Prior to the fuel crisis of last winter, publishers' allotments had been increased to 90 per cent of prewar, but conditions this spring required another 10 per cent reduction. On the other hand, just as in the United States, increased book production costs, with resulting increase in prices to the public, were thought to be a probable cause of reduction in public demand and an automatic solution of the problem of shortages.

Limitations for another two years were anticipated by the president of the Publishers' Association in his annual address in March. In the quota control, the attitude toward relative value in different fields of publishing is given in the following percentages of tonnage allotments of paper in the 12-month period prior to February 1947: medical, 15; general, 14; scientific and technical, 15; educational, 30; religious and dictionaries, 11; legal, 3.

Participation of the British publishers in the national export drive is shown by the fact that in 1946 book sales abroad exceeded £5,000,000, compared to £3,000,000 before the war. Representatives of Ernest Benn, Ltd., stated that British technical publishers with

¹ Since there is no standardization of publishing terminology, of classification of subject matter, or as to when a pamphlet becomes a book, these and succeeding statistical materials cannot be used to compare records of production in different countries.

substantial stocks report an unprecedented world demand for British technical books.

FRANCE

The record of intellectual production to a total of nearly 9,000 volumes in 1946, or more than any year since 1938 and double the low period of Occupation in 1941, is shown in Table 2. Science and technology have maintained a steady, if not impressive, rate. The statistics, however, do not reflect the struggle to secure paper and binding materials.

TABLE 2
FRENCH INTELLECTUAL PRODUCTION*

Subject	1938	1940	1941†	1942	1943	1944	1945	1946
I General works.....	353	153	56	80	131	334	641	31
II Religious literature..	558	377	260	603	529	676	475	781
III Philosophy.....	238	158	176	325	410	367	236	359
IV Pure sciences‡.....	424	371	319	531	520	564	310	425
V Medicine‡.....	501	391	234	409	1,023	688	300	371
VI Techniques, games, & sports‡.....	1,044	882	458	803	1,272	1,361	910	1,129
VII Juridical & social science‡.....	1,140	690	530	1,090	1,227	1,080	716	1,135
VIII History & geogra- phy.....	1,158	864	558	947	998	1,053	828	1,400
IX Archaeology, fine arts.....	411	199	159	265	258	351	231	279
X Literature, lan- guage.....	2,297	1,315	1,138	955	1,550	2,206	2,341	2,982
Total.....	8,124	5,400	3,888	6,008	7,918	8,680	6,988	8,892
Translations of foreign works.....	1,056	676	119	322	130	81	190	421

* Statistics furnished by the Cercle de la Librairie.

† In occupied zone of France only.

‡ Additional figures on translations taken from the *Bibliographie de la France*, February 21-28, 1947:

	IV	V	VI	VII	Total of IV-VII	Grand total
German.....	2	1	1	3	7	49
English.....	2	1	5	6	14	237
Spanish.....	1	—	—	—	1	13
Russian.....	—	—	1	9	10	59
Total on above 4 languages.	5	2	7	18		
" " all languages.....	6	2	7	22		

Beranger, though publishing more new technical books than before the war, is concerned primarily with getting the old books back into print. In subject matter his program is about as before. There is a heavy demand for both new and old books, but high prices probably will cause reduction in circulation. The number of translations is greater than before the war.

Dunod is publishing more than before the war and exploring new fields as demands arise. Some foreign paper is purchased, but when this is allocated to a publisher, he must in turn agree to export a certain percentage of the books in which it is used.

Le Soudier reports that demands for technical books exceed supply and that new subjects are being covered. He feels that there is a strong tendency for English to become the second language in France.

At the Centre Nationale de la Recherche, where J. Wyart directs the publication of the well-known *Bulletin Analytique*, a periodical which attempts to abstract or review briefly the world's literature of science and technology, both books and periodicals, announcement has recently been made of two new journals of technical bibliographical materials: *Archives des sciences physiologiques*, edited by a committee of which G. Schaeffer is president, and *Annales de la nutrition et de l'alimentation*. The editorial committee of the latter is headed by Emile F. Terroine; the editor is Georges Kersaint. Both offices are at Centre de Documentation du C.N.R.S., 18 rue Pierre Curie, Paris 5.

It is Prof. Wyart's committee of professional people in technology which in 1946 prepared the agenda for an ideal program of translation of the best U. S. literature of industrialization. Another professional committee, selected in New York by USIBA, submitted an ideal bibliography in the winter of 1946-47, and the publishers involved thereafter forwarded to the Wyart committee sample copies and terms. Having been chairman of the original USIBA committee of publishers and responsible for the contacts in Paris in 1945, I am pleased to report that although shipping difficulties greatly delayed examination of books, work on the project is in process, and developments later will indicate whether this plan for putting large-scale translation programs in the hands of professionals is practical or whether it is better to leave to technical publishers, on the usual commercial or competitive basis, the whole question of selectivity.

SWITZERLAND

In Switzerland, an impressive record of developments in new book publication has occurred since 1938. Grand totals of 2,162 and 3,949 for the years 1938 and 1945, respectively, include for science totals of 239 and 472, or slightly more in percentage of growth than for the nontechnical fields. Officials in both publishing and bookselling believe this growth will continue. Representative of the Swiss viewpoint is the following statement by a prominent librarian in Zürich:

Since the 19th Century the printing and the sale of most of Swiss scientific literature had been in the hands of well-known German publishers. They disposed of means and organizations which enabled them to make the work of their authors popular in a far wider circle than Swiss publishers in their isolated country ever could do. Only a few authors of their international importance—for instance, the famous psychologist, C. G. Jung, or the master of modern architecture, Le Corbusier—did stick to Swiss publishers. But in most cases the powerful German publishers surpassed their modest Swiss colleagues. With the

advent of the war, things began to change. The production of Swiss books began with publication of books about law, economics, philosophy, theology, and medicine, which promised a satisfying market in their own country, as addressing themselves to a large circle of interest. During the war people came to realize that books, and especially scientific books, are a mighty weapon in the defense of independence. So the older and some of the newly-founded publishing houses in Switzerland began with a serious and vast planning of literary production also in all sections of exact and technical sciences. For 1946 the statistics are not yet available, but a further rise in quantity and quality is expected. The Swiss publishers are anxious to export a part of their production to help the international exchange of knowledge.

Among the leading Swiss publishers of technical books are the following: Verlag Hallwag A. G., Breitenrain 97, Bern; Verlag Leemann & Co. A. G., Stockerstr. 64, Zürich; Schweiz. Druck- & Verlagshaus, Klausstr. 35, Zürich; Verlag Birkhäuser A. G., Elisabethenstr. 15, Basel; Orell-Füssli-Verlag, Nüscherstr. 22, Zürich; Archimedes-Verlag, Kreuzlingen; Editions Rouge & Cie. S. A., rue Haldimand 6, Lausanne (French); and Editions Payot S. A., rue Bourg 1, Lausanne (French).

HOLLAND

In Holland, where the ravages of Occupation are outwardly, at least for the visitor, being obliterated and the industrious citizens are most actively at work to restore the national economy, book publishing is no exception to the rule. In 1938 publications totaled 6,172 and in 1939, 6,554. In 1944, only 1,847 titles appeared and in the following year, 2,436. It is officially estimated that for 1946 the 1939 total will be repeated and also that the number of translations will be increased. Statistical reports for 1939 show that, in scientific and technical subjects, total numbers of titles issued were as follows: geography, 102; physics, 199; biology, 85; anthropology, 143; physical training, 96; and psychology, 126. In 1939, in the total of 730 translated works, 421 were from the English and 144 from German sources. It is significant that in the total output of translations from other languages the percentage of those from the German was 2.2 in 1939, 12.5 in 1944, and 2.1 in 1945, *i.e.* after the liberation.

In 29 cities in the Netherlands there are well over 100 publishers, the number involved in technical publishing being relatively small. Muelenhoff of Amsterdam is currently publishing a series of technical manuals prepared especially for the 25,000 employees of the great Phillips works at Eindhoven, manufacturers of X-ray and other forms of electronic equipment.

Unique in Dutch publishing circles is the current appearance in English, from the press of H. Stam (Haarlem), of *Ballistics of the future*, by Kooy and Uytenbogaart, which is based on data collected by the authors at The Hague, where the Germans manufac-

tured and launched the V-2 bombs. The American edition will be distributed in early autumn of 1947.

In Holland, as in many European countries, the publishing and book-distributing organizations provide an excellent example of cartelization, in successful operation for over 100 years. Rules for pricing, converting foreign to domestic book prices regardless of bank rates, permitting newcomers to establish a business, and similar controls which in the U. S. are prohibited by Federal laws are here accepted as a sound social philosophy. The conflict in their and our concepts of business ethics or business influences on a national economy provides interesting subject matter for debate.

In many respects, the Dutch show more evidence of industry and vigor in recovering from the enormously costly and tragic period of Nazi Occupation than certain other countries, and, in publishing, their record will warrant constant study.

ITALY

For the following report, I am indebted to Carlton Washburne, director of the U. S. Information Service at Milan, and his staff, including Mr. Castellani and Miss Ferguson:

During the war all the Italian publishers, and in particular those specialized in scientific and technical publications, experienced serious difficulties. Many firms were damaged by air raids: We mention, among the most important, Hoepli and A. Vallardi of Milan, which were completely ruined; UTET of Turin and F. Vallardi of Milan, which were seriously damaged. Besides this, the shortage of paper and electric power considerably hindered the continuance of publishing, and the division of Italy in two parts (north and south of the Gothic line) further complicated the situation. As soon as the war ended, the Italian publishers immediately started supplying the country with the cultural equipment necessary for the reconstruction. Thanks to the help of the Psychological Warfare Board of the Allied Forces it was possible to overcome the initial difficulties due to paper shortage. Today paper production is almost normal, but its cost has greatly increased (about 1:63 in respect to prewar prices). At the same time (see Fig. 1) printing and other costs have increased 1:50, while the capacity of absorption of the market does not permit an increase in sale price of more than 1:35, and generally even less (25-30 times). The consequence is a considerable reduction of the publishers' profits.

It is quite natural that in these conditions the production of books has decreased in Italy. From 1938 the general total of 9,736 publications descended in 1945 to 4,068 units (the lowest figure being the total of 1,795 units for the year 1944), and, though complete information on 1946 is still missing, it seems that the total of 1945 has not been surpassed. In 1945, however, the proportional number of technical and scientific books issued (1,336) marks a little progress in comparison with that of prewar years (33 per cent of the total, instead of the constant prewar percentage of 30). This fact indicates that the present demand for such books in Italy is comparatively rather higher than before.

Among the most important books recently issued one must mention, above all, reprints of works that had become unavailable during past years as a result of war damages as well as for other reasons, *i.e.* racial laws, political persecution, etc. But also the publication of new works marks a satisfactory revival. . . In the total of production, translations represent a low percentage, owing to the difficulty of obtaining translation rights at satisfactory terms.

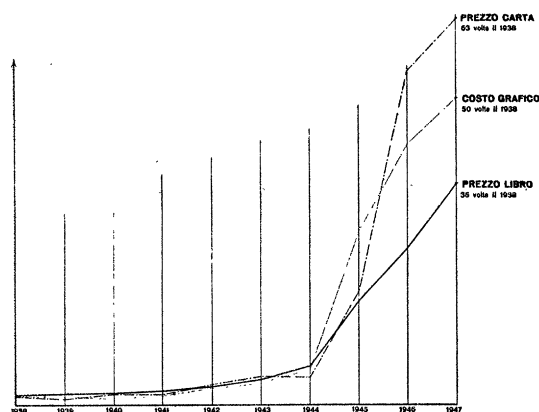


FIG. 1. Graphical presentation showing relationship of price of paper — · — · —, cost of printing., and selling price of books ———, 1938–47 (from *Gornale della Libreria*).

The situation is much more difficult in the branch of scientific and technical reviews and periodicals. Their number has diminished considerably. A firm of Milan, which before the war published a dozen periodicals, now publishes only one.

Besides the above-mentioned firms, and other smaller but well-known publishers of technical and scientific books (like Zanichelli and Cappelli of Bologna, CEDAM of Padua, Tamburini of Milan, Pozzi of Rome, the young firm CEA of Milan, and many others), there are also large companies specializing in the sale of such books and periodicals, such as the Hoepli Bookstores of Milan and Rome and Sperling & Kupfer of Milan.

The Hoepli firm, which is in its third generation of family operation, sponsored a list of 5,000 titles before the war, 70 per cent of which were technical. All plates were lost when the entire plant was destroyed by bombs. Today the list, including 500 "restorations," totals 1,200, of which 95 per cent are technical. In attempting to meet current needs for books on construction, small manufacturing, road building, and other timely subjects, the firm confesses to the necessity of following a policy of "practical idealism" more than heretofore. Unique in use of modern technique is a new set of art books in which color photography of famous ancient frescoes reproduced by offset printing will greatly aid art and architectural students throughout the world in studying early Italian art work.

Publisher Villardi, also a victim of bombing, shows courage in investing, under the circumstances, in a new 7-volume work on building construction.

SWEDEN

Extensive industrial utilization of scientific research is an outstanding current development in Sweden, and plans for publication of results in monograph form were recently announced by Ely Velander, chairman of the Royal Swedish Academy of Engineering Research.

Acta Polytechnica is the name of the new periodical and, since it will be published in English, French, and German, world-wide circulation is planned. As a non-profit enterprise, its circulation will be largely on an exchange basis. It will aim to present the most important contributions made by Swedish scientists in engineering research. Unique among its features will be inclusion of library index cards. This development is part of a large national plan, sponsored by the government and in process of organization since World War I, for providing a technical information service on a large scale. It would seem to command definite interest on the part of technical editors and librarians throughout the world.

Of the 5,298 books published in Sweden in 1939, 2,284 were technical, medical, and scientific. In 1945 the total was 5,509, including 2,319 in these categories.

Outstanding in current technical book publishing is the appearance of the Swedish edition of the 5-volume engineering handbook, *Hütte*, edited by A. C. Stromberg and published by Nordisk Rotogravyr. An edition of 7,000 copies at \$10.00 per volume, excellently printed and bound, is a splendid example of publishing courage for a market that is relatively limited.

In the outstandingly attractive bookshops, in the extensive library of the Polytechnic High School, and from second-hand information about the various research laboratories in Stockholm and Upsala, it was clear that since World War II American technical book authors have firmly established themselves where formerly German authors were predominant.

BELGIUM

An orgy of spending immediately following the liberation resulted in overexpansion of book publishing and distributing facilities in Belgium, and the necessary rebound is affecting book publishing. Since few technical books are produced here, the authors preferring French imprints, since the trade association has no statistical information, and since registration of new books is not required as in other countries, our report is comparatively valueless.

POLAND

Although Warsaw was not visited on this trip, we are indebted to the March 29 issue of the *Bookseller* (London) for the following information on Polish book production last year. As will be seen, over one-third of

the new titles are in the several branches of science and technology:

Book production in Poland during 1946 totaled 3,248 titles. Although this figure is only 51 per cent of the 1937 total, it nevertheless represents a remarkable achievement, if the technical difficulties and the shortage of paper and plant are taken into account. The 3,248 titles have been classified as follows:

Books on general subjects	170
Philosophy	44
Religion	235
Social science	708
Languages and philology	29
Science	83
Technology	444
Art	164
Belles Lettres	600
Children's books	330
History and geography	320
Textbooks	121

What the category "Books on General Subjects" contains is not clear, and it seems rather odd that the classified statistics, which are official ones, make no mention whatever of fiction.

The publishers have been divided into the following classes:

- (1) Publishing Cooperatives (Ksiazka, Czyteknik, Wiedza, Nasza Ksiegarnia and others), 550 titles.
- (2) State publishing institutes, 712 titles.
- (3) Social organisations, trade unions, etc., 572 titles.
- (4) Private publishing firms, 1,414 titles.

CZECHOSLOVAKIA

Conditions of restoration in Prague are different from those in any other country visited. An official of the Ministry of Information reported that in 1946 approximately 8,000 titles were published, but the percentages of technical books and of pamphlets were not indicated. The great total was due to the fact that, during the 6-year "blackout" (1939-45), nothing was published, and since only a few books appeared in the period 1934-39, an enormous thirst and backlog was created. It was assumed that in 1947 the total would equal that of the preceding year.

With new publishing permissible only on government licenses for each book, conditions are far from normal in the opinion of an American publisher. Furthermore, with Russian the official second language, as a substitute for the German to which the adult population is, of course, well accustomed, there is for the time being some difficulty in the training of the younger generation.

In the Ministry of Education and among native industrialists and several active book dealers it was evident that educational and scientific literature from the United States was in active demand among the Czechoslovakian people.

GERMANY

Technical publishing in Germany has been discussed with respect to chemical literature by Rogers Adams (*Chem. eng. News*, February 25, 1946, p. 454; March 25, 1946, p. 790).

My brief visit to Gen. Clay's headquarters on June 1, 1947, permitted discussion only of general policy on translations from English and contractual relations between the Army Military Government and the publishing industry. Until there is a peace treaty between the United States and Germany, direct financial agreements between German and U. S. publishers become violations of the Trading With the Enemy Act. In view of the extreme shortage of paper and the priority involved in book needs for the general public, it is unlikely that problems of translation of U. S. technical books into German will be under consideration for a considerable period in the future.

DENMARK

Conferences with Nils Bohr, of the Research Laboratory of Applied Physics, and Henrick Dam, of the Biological Laboratory of the Technical High School, indicated that these men, both holders of the Nobel Prize, were definitely interested in my report of attempts to develop, through both memberships in professional societies and the exchange of literature, closer relationships between Danish and U. S. scientists.

Another interesting development was in meeting Ejnar Munksgaard, publisher of the famous Facsimile Series of volumes containing reproductions of original manuscripts dealing with early periods of civilization. The object of these volumes is not only to make accessible to researchers the chief literary sources but also to preserve them in the best reproductions it is at present possible to produce, should a catastrophe occur.

Publications emanating from research work in pure and applied science in Denmark, as well as volumes reflecting the developments in the social sciences in this part of the world, are providing an important new literature.

In providing the accompanying table of scientific book production for Denmark (Table 3), Dr. Munksgaard added the following statement:

As to the extent of publishing scientific works in English, it is a rather difficult question. Nearly all scientific Danish papers have a summary in foreign languages, either English or German, if they are published in Danish. This has always been the rule. I should say that there is a definite tendency to publish in a foreign language in order to give the book a wider scope.

He comments on the influence of paper shortage and labor difficulties as follows:

The lack of paper during the past years has certainly influenced the output of books in a decisive way. In 1947 the

output will be even smaller because of the strike of the typesetters which has now lasted for three months. All the planned books in either English, French, or German—about 90 per cent

TABLE 3
SCIENTIFIC WORKS* PUBLISHED IN DENMARK

	1939	1940	1945	1946
General works on books, bibliography, library economy, archives...	5	8	10	10
Encyclopedias, collected essays, periodicals, societies, museums.....	8	12	11	7
Philosophy (logic, psychology, ethics, philosophy of religion, history of philosophy, history of science).....	7	8	10	10
Religion (bible; dogmatics, mission, history of Christian Church, Christian Churches and sects, non-Christian religions).....	26	15	15	17
Social science in general, statistics, political science.....	9	7	4	15
Insurance and public aid.....	3	3	2	16
Economics.....	16	15	9	13
Law.....	23	15	15	23
Administration.....	1	0	1	1
Education.....	10	7	8	6
Folklore.....	11	12	4	5
Geography and topography.....	53	54	46	45
Reports of the Greenland Administration.....	32	18	14	16
Pure science.....	2	4	2	4
Mathematics.....	2	5	9	5
Astronomy.....	4	4	5	8
Physics.....	4	7	21	15
Chemistry.....	4	7	3	6
Geology, meteorology, hydrography..	14	15	12	10
Biology.....	17	8	8	5
Botany.....	11	15	3	16
Zoology.....	14	20	18	14
Ethnography.....	1	1	0	3
Medicine.....	59	48	56	58
Agriculture (incl. reports from the State Research Laboratory).....	53	38	32	36
Useful arts (engineering, trade, business, chemical and mechanical technology).....	10	19	16	15
Fine arts (architecture, sculpture, painting, engraving).....	11	5	10	14
Theatre and music.....	6	8	4	4
Literature (general and single countries).....	32	29	20	19
Philology.....	13	11	7	10
History.....	31	20	21	23
	492	438	396	449

* Only scientific works in the strictest sense are included.

in English—will be printed, however, so that 1948 will be a record year as regards publication, as the typesetters cannot go on striking indefinitely.

NORWAY

Publishing in Norway is distinctly for the large number of works in English. A unique feature of one of the new books by Tanum is the inclusion, in a series of vertical marginal notes for the Norwegian whose bilin-

gual ability is limited, of the translation of key words.

Mr. Moller, of the Tanum store, and Mr. Raabe, of Cammermeyer's, publishers as well as operators of two outstanding book distribution agencies of the Scandinavian countries, are well known to American publishers and distributors. It is their opinion that, until Norwegian authors have been able to complete research work which was stopped during the war, there will be few original technical manuscripts for publication. Similarly, Norwegian publishers are operating under a handicap due to paper rationing, shortage of labor, and worn-out machinery.

Secretary Harald Aars, of Den Norske Forleggerforening, Oslo, reported book production, prewar and current, as follows: 1938: of 1,233 titles, 16 technical; 1939: of 1,429 titles, 25 technical; 1945: of 1,437 titles, 26 technical; and 1946: of 1,893 titles, 21 technical. He did not qualify as to the scope of the phrase "technical," and it is assumed that books in the social sciences were not included. He did add that the books included above are only such books as are ordinarily sold through bookstores. Children's picture-books and stencil-printed books are excluded, as are periodicals and their reprints, unless they appear as independent books. He states, on the other hand, that "annals" are included.

CONCLUSION

It is regretted that the inadequacy of the techniques of collecting data with respect to reports on both Denmark and Norway deprives the readers of *Science* of information about the vast and inspiring programs of research and publication which are developing in all the Scandinavian countries. There is in process in both social and physical sciences a new literature which should be of definite interest in America. For example, socialized medicine, on which we in the United States are continuing an important debate, has been a fait accompli in at least two of these countries for a number of years. The results, from the viewpoint of both doctors and patients, would undoubtedly be of great interest to all involved in the American debate.

In this survey of developments in 11 countries, it is significant that the words "research" and "education" appear so regularly. It is my opinion that, in this phase of the world revolution in the social as well as physical sciences, all publishers should utilize all possible agencies, including libraries and book distribution agencies, to accelerate to the best of their ability translations of the best of the important resulting literature. The maximum distribution of translations of important contributions in the sciences as an adjunct to the new programs in education should help to raise the standard of living throughout the world.