SOME IMPRESSIONS ON SOVIET SCIENTIFIC INFORMATION SERVICES

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Describes the work of acquisition of publications in the Soviet Information Centres and Libraries in respect of centralised organisation, Statutory obligations and exchanges. Explains the various Abstracting and Indexing services. Gives an account of the Current Awareness Services. Mentions the present approach towards classification. Describes the translation services and traces the development of automation in Information services.

INTRODUCTION

Under the Indo-Soviet Cultural Exchange Programme, I was provided with an opportunity to visit the USSR during the months May - August 1964 to study the Soviet information and library practices. My programme of study was organised by the VINITI (= Vsesoyuznii Institut Nauchnoi Tekhnicheskoii Informatsii, All Union Institute for Scientific and Technical Information). While several valuable surveys have been made and have been published already, an attempt is made in this paper to record my own observations by way of addition to our existing knowledge on the Soviet Information practices. It is also hoped that the account given in this paper may be of some use to those engaged in similar work in our country.

ACQUISITION

Centralised organisation of acquisition work, extensive exchange relations and statutory obligations for several libraries to get Soviet publications are some of the salient features in the acquisition of materials by the Soviet libraries.

Centralised Acquisition

The Soviet Union follows a system of centralised acquisition for obtaining reading materials. This system is found helpful and has now reached a high degree of perfection yielding good results. All big libraries and the Central Information Services are in a position to get every Soviet publication and all worthwhile foreign publications. The scientists are thereby assured of access to world literature. Every possible effort is being made to obtain publications from almost all countries and published in several languages. Three organisations are presently engaged in the work of centralised acquisition. They are:

1. Vsesoyuznaya Knizhnaya Palata, Kremlevskaya Naberezhnaya 1/9, Moscow G-19 (All Union Book Chamber)

2. Tsentralnii Kollektor Nauchnikh Bibliotek, ul. Neglinnaya 9, Moscow (Central Collector for Scientific Libraries)

3. Mezdunarodnaya Kniga, Moscow G-200

The first two are concerned with the supply of Soviet publications while the Mezdunarodnaya Kniga, which is one of the Departments for Book Trade under the Ministry of Trade, deals with foreign publications. The Mezdunarodnaya Kniga also supplies Soviet publications to foreign buyers.

Soviet Publications

The publishing trade is expected to deposit by law free of cost fifteen copies of every publication with Vsesoyuznaya Knizhnaya Palata. In addition, 150 copies are supplied on payment to the Tsentralnii Kollektor Nauchnikh Bibliotek. These two organisations in turn distribute the copies to the interested libraries and institutions.
SOVIET INFORMATION SERVICES

As stated earlier, the Mezdunarodnaya Kniga is the sole organisation which undertakes supply of foreign books to Soviet libraries. However greater emphasis is placed on exchange for obtaining foreign publications. It is said that more than sixty percent of the requirements of foreign publications is met by exchange relations. Many big libraries like Gosudarstvennaya Biblioteka SSSR imeni V.I. Lenina (Lenin State Library of the USSR), Publichnoi Biblioteki imeni M.E. Saltykova-Shchedrina (Saltykova-Shchedrina State Public Library), Biblioteka Akademii Nauk SSSR (Library of the Academy of Sciences of the USSR), have departments exclusively for exchange work. They entertain exchange relations directly with foreign institutions. For this purpose the exchange departments stock Soviet publications. The following table shows the extent of exchange programmes of a few important Soviet libraries.

<table>
<thead>
<tr>
<th>Name of the Library</th>
<th>Exchanges with</th>
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<tr>
<td></td>
<td>No. of institutions</td>
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<tr>
<td>1. Vsesoyuznaya Patentno-tekhnicheskaya Biblioteka, Berezhkovskaya Naberezhnaya 24, Moscow (All Union Patent &amp; Technical Library)</td>
<td>36</td>
</tr>
<tr>
<td>2. Tsentrlnaya Nauchnaya Selskokhozyaistvennyaya Biblioteka, Orlikov per 1/11, Moscow K-12 (Central Scientific Agricultural Library)</td>
<td>650</td>
</tr>
<tr>
<td>4. Gosudarstvenii Universitet imeni M.V. Lomonosova, Lenin Hills, Moscow (Library of the Lomonosov State Univ)</td>
<td>800</td>
</tr>
<tr>
<td>5. Gosudarstvennaya Tsentrlnaya Nauchnaya Meditsinskaya Biblioteka, Sadovo-Kudrinskaya 1, Moscow (State Central Scientific Medical Library)</td>
<td>1074</td>
</tr>
<tr>
<td>6. Gosudarstvennaya Publichchnaya Nauchno-Tekhnicheskaya Biblioteka SSSR, Kuznetskii Most 12, Moscow-31 (State Public Scientific and Technical Library of the USSR)</td>
<td>1023</td>
</tr>
<tr>
<td>7. Biblioteka Akademii Nauk SSSR, Birgevanya Liniya 1, Leningrad V-164</td>
<td>2433</td>
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Exchange arrangements are mostly entered into on the basis of title to title while a few others take also into consideration cost of publications. However they are very liberal in dealing with Socialististic countries and the newly developing countries, and cost considerations do not always matter much in these cases. The criterion for exchange of patent specifications is on yearly fund basis.

BIBLIOGRAPHICAL SERVICES

Centralisation is the keynote in the organisational pattern of the Soviet information services. The bibliographical services may be broadly classed as abstracting services and indexing services. While the abstracting services are carried on by the Information Institutions, the indexing services are taken care of by the Libraries.
The services are undertaken for all levels of users, namely scientists, engineers, workers, students, and so on. The services are provided by a few Institutions and Libraries functioning at national level and having adequate resources. There is perfect coordination among them in undertaking the services. Duplication is avoided as far as possible. If at all there is any duplication like the one between the Patent Information Service and the Abstracting services of the VINITI, it is intentional. There are yet no abstracting services for agricultural subjects. However plans are underway by the Tsentralnaya Nauchnaya Selskokhozyaistvennaya Biblioteka (Central Scientific Agricultural Library) to start a service.

USSR Academy of Sciences

Akademii Nauk SSSR is the supreme body for sciences in the USSR. The USSR Academy of Sciences is a complexly-organised and widely-ramified institution directly subordinate to the USSR Council of Ministers and responsible for the conduct of basic and applied research in the major branches of knowledge. The academy is governed by a board (Presidium) and consists of seven major departments. Each department consists of specialised institutes, laboratories, museums, experimental stations, and the like. Directly under the Presidium are various concils and commissions with specific research, publishing, administrative functions and the principle libraries of the Academy.(1)

VINITI, the largest information centre in the Soviet Union functions under the control of the Presidium of the USSR Academy of Sciences. The centre started functioning in the year 1952 for providing centralised services to scientists and engineers. The Central Library of the USSR Academy of Sciences in Leningrad is one of the oldest (founded in 1714) and biggest (collection of 14 millions) libraries in the Soviet Union. The Library is connected to a chain of 180 libraries of the Academy situated in various parts of the country.

Abstracting Services

The abstracting services are organised at the National level only. The VINITI publishes the well known abstracting periodical, Referativui Zhurnal (RZ) which is now appearing in twenty five series on various branches of knowledge. It is considered to be a mighty attempt in the world today for a single agency to undertake such a comprehensive abstracting service covering all branches of science. The main series are broken down further into 127 sub-series. The number of series is being increased from time to time. It facilitates a subscriber to obtain either the combined volume of the main series or the sub-series in the narrower subjects according to his requirements. In addition to above, thirty two separate parts on subjects not covered by the main series are also published. The series excepting those mentioned below are published monthly.

1. Biologiya (Biology) 24 nos/year
2. Khimiya (Chemistry) -do-
3. Biologicheskaya khimiya -do- (Biological chemistry)
5. Obshchiye voprosy patologii -do- (General problems of pathology)
6. Pochvovedeniye -do- (Soil science)
7. Rastenievodstvo (Crop -do- husbandry)
9. Nauchnaya i tekhnicheskaya informatiya (scientific & technical information)

Out of the twenty five main series, as many as six series are devoted to Engineering subjects alone and they are published monthly. They are:

1. Avtomatika, telemekhanika i vychislitelnaya tekhnika (Automation, computation & telemechanics)
2. Radiotekhnika i elektrosvyaz (Radio engineering and electrical communication)
3. Teploenergetika (Thermal power engineering)
4. Tekhnologiya mashinostroeniya (Mechanical engineering)
5. Elektronika i yeyo primenenie (Electronics and its applications)
6. Elektrotekhnika i energetika (Electrical and power engineering)
The RZ attempts to cover fully the world scientific literature in as short time as possible. It takes approximately six months to one year to notify the literature in the RZ. About 18,000 periodical publications and other publications in 61 languages are obtained from 98 countries for inclusion in the RZ. Out of this about 3,000 publications alone are from the Soviet Union. In addition, patent specifications numbering about 220,000 are obtained every year through the Vsesoyuznaya Patentno tekhnicheskaya Biblioteka (All Union Patent and Technical Library). During the year 1962, RZ published 7,04,000 abstracts as compared to 1953, in which year the number of abstracts published was only 14,500 (2). The RZ covers all scientific and technical subjects excepting Agriculture, Building and Architecture and Medicine which are taken care of by the other Information Institutions specialising in these subjects.

Organisation of RZ

The VINITI has at present a staff of about 3500 persons. About 1500 persons are engaged in printing and publishing work. The others are distributed among the Preliminary Processing Departments, various Editorial and Abstracting Departments, Translation Department, Automation Department and Methodology Department. The work in the editorial departments is distributed according to language and subject specialities. The work in the acquisition department which is responsible for procuring the literature is distributed according to countries. On receipt, the documents are distributed according to language speciality to respective departments. Hence the work relates mainly to classification. The classification is very broad and does not therefore involve assignment of any class number. In the editorial department there are as many groups as the number of series brought out. Each editorial group is headed by a highly qualified scientist. He is assisted by subject specialists. It is in this department that the actual work of abstracting, distribution of the documents to the panel abstractors, etc. are carried out. There is a large number of subject specialists on the panel of abstractors for all the series taken together. About eighty to ninety percent of the documents are abstracted by the panel abstractors. Payment to the panel abstractors is stated to be decided on the basis of the quality of the abstracts. Documents are usually obtained in more than one copy. The additional copies are utilised for panel abstractors. If one copy only is received, photocopies are made and sent to the panel abstractors. Printed guides for abstracting work are also available for the benefit of fresh entrants to the panel. The editors are expected to ensure that the abstracts prepared by the panel abstractors conform to the standards prescribed. There is no fixed limit to the length of an abstract. It largely depends on the originality and value of the publication and the space available finally for printing. The editors however modify occasionally the length of the abstracts to suit space requirements. In case of documents in Japanese, Chinese, and Scandinavian languages, author abstracts are translated and are made use of. It may perhaps be due to some temporary deficiency in translation facilities in these languages. The work involved at the various stages in the production of the RZ is as follows:

Preliminary Processing

1. Acquisition of Soviet and Foreign publications
2. Classification: Classing and marking documents for various editorial departments
3. Bibliography: (i) standardising and typing of entries on cards (ii) checking the typed entries
4. Photocopying of the documents for sending to the panel abstractors.
5. Sorting: (i) Clipping the cards to the corresponding photocopies of the documents (ii) sorting the sets according to the editorial departments for which the documents are already marked by the classification group (iii) passing on the documents to the editorial departments

Editorial Departments
1. Technical group
   (i) receiving the processed documents
(ii) sending the documents to the panel abstractors
(iii) keeping record of flow of documents from this group to panel abstractors and back
(iv) preparing statements for payments to the panel abstractors
(v) laying out the abstracts along with the bibliographical details for printing
(vi) sending the laid out abstracts for printing
(vii) proof reading

2. Editors

(i) selecting the panel abstractor
(ii) editing the abstracts, sometimes do also the abstracting work
(iii) evaluating and deciding the remuneration to be paid to panel abstractors
(iv) general organisation of the editorial department

3. Printing and publishing department

4. Indexing department

The problem of dealing with overlapping areas is solved conveniently at the VINITI. At the classification stage, the subject fields of the document having a bearing on more than one subject are marked out according to the degree of relevance and usefulness. The document is first sent to that editorial department of the subject in which it has primary importance. The abstract prepared in the first editorial department is sent to the other editorial departments in the same order as marked out earlier and if it is desired to cover the document in their series also, suitable changes are made in the abstract to provide slant. The abstract is thus prepared only once by the panel abstractors and the same abstract is made use of by the different series. Apart from saving in the abstracting work, there is also economy in the work of acquisition, standardising the bibliographical entries, translation, etc.

The indexes are compiled by conventional methods. Very recently the VINITI has started preparing the author index by machine. The subject index for one of the series of the RZ namely Avtomatika i Radiotelekonika is now prepared by machine. Possibility of preparing the subject index by machine for other series of the RZ is also being considered.

Other Abstracting Services

There are two other abstracting services in addition to RZ. They are Meditsinskii Referatvivni zhurnal (Medical abstracting journal) and the abstracting journal for Building and Architecture.

Meditsinskii Referatvivni zhurnal is published by the Vsesoyuznii Nauchno-Issledovatselskii Institut Meditsinskoi i Mediko-Tekhnicheskoi Informatsii (All Union Institute for Medical and Medico-Technical Information), Moscow. It is published in thirteen series covering about thirty five areas in medicine. Every month about 4,000 to 5,000 entries either with abstracts or with annotations or with bare bibliographical details are given. The organisation of work in this case differs from that of the RZ in two respects. While the VINITI itself acquires the literature, the Medical Institute depends on the Gosudarstvennaya Tsentrальная Meditsinskaya Biblioteka (State Central Scientific Medical Library), Moscow. The bibliographical details for most of the publications are copied on cards from the collection of the Medical Library. In cases where the documents are not procurable by them from the Medical Library, the cards containing the bibliographical data are sent to the panel abstractors, who themselves arrange to obtain the originals from the Medical Library for abstracting purposes. Unlike the VINITI where photocopies of documents are supplied to the abstractors, the procedure followed by the Medical Institute in expecting the abstractors to arrange themselves the originals in most cases brings about economy in respect of staff and material. The publication of the abstracts is also stated to be expedited. The difference in practice in these two organisations is probably for the reason that the VINITI abstractors are scattered far and wide extending even beyond Moscow, whereas the abstractors for the Medical Institute are mainly concentrated in and around Moscow.

The practice followed in abstracting service for Building and Architecture differs also from the earlier two services.
As is the case with the Medical Institute, the Tsentralnii Institut Nauchnoi Informatsii po Stroitelsvyi Arkhitekturii Gostroii SSSR (Central Institute for Scientific Information in Building and Architecture), Moscow does not also acquire the publications itself. The publications are borrowed from the State Committee for Building, Department for Foreign Relations. Here the articles are first translated fully by the staff translators before preparing the abstracts. Eighty percent of the abstracts are made by the staff abstractors themselves which is just the reverse in the case of RZ. As the number of documents to be covered is very much less in this service, they are in a position to effect these changes in the routine from that of the VINITI and the Medical Institute with economy and efficiency.

Indexing Services

The indexing services are provided by the libraries only at the local levels. Indexing service is most popular of all the services provided by the libraries and it therefore receives greater attention.

Individual libraries compile occasionally as well as regularly bibliographies on special subjects and lists of recommended reading materials. The work of compiling special bibliographies is coordinated, for example, Gosudarstvennaya Biblioteka SSSR imeni V. I. Lenina (Lenin State Library) takes care of Humanities; Tsentralnaya Nauchnaya Selskokhozyaistvennaya Biblioteka (Central Scientific Agricultural Library) - Agriculture; Gosudarstvennaya Tsentralnaya Nauchnaya Meditsinskaya Biblioteka - Medicine; Biblioteka Akademii Nauk SSSR - Natural sciences; and so on. The Gosudarstvennaya Publichchnaya Nauchno-Tekhnicheskaya Biblioteka SSSR (State Public Scientific and Technical Library of the USSR) brings out regularly current lists of books, periodicals, articles, industrial catalogues, etc. For example, Novye knigi po tekhnike dlya rabochikh is published fortnightly and lists recommended books of interest to the workers. Each issue covers 10-15 current books and the list is published in six series covering different industries. These lists are found to be of great value to engineers and workers in their daily work.

National Bibliography

National bibliographies are compiled by the Vsesoyuznaya Knizhnaya Palata (All Union Book Chamber), Moscow, which is the depository by law for all Soviet publications. The main characteristic of the set up of National Bibliography is that it is organised for complete bibliographical control of every kind of macro as well as micro documents such as books, periodicals, etc. The National Bibliography is therefore a diversified one according to kinds of documents. The entries in the bibliographies are given in classified sequence. Indexes are also provided. The periodicity of the bibliographies is also conveniently determined according to the kinds of documents, covered by them. Few important series in the National Bibliography are given here by way of illustration.

The Letopis knizhnaya lists Soviet books. It is published weekly with quarterly author and subject indexes. It has annual cumulations also. The bibliography gives about 1,000 entries every week and the entries are classified according to the UDC.

The Letopis periodicheskikh izdaniy is an annual National Bibliography listing Soviet newspapers and periodicals. It is published in two parts, the first part being devoted to the Soviet newspapers and periodicals, which are new, renamed or ceased publication, while the second part lists various serials on collections of scientific works, scientific notes, etc. The annual bibliography is cumulated every five years. A cumulated volume for 1917-1949 for the Soviet periodicals (excepting the newspapers) has been published. The work of preparing a separate edition for the newspapers covering the years 1917-1960 is in progress and it is expected to be completed in the year 1967.

The Letopis zhurnalnikh statei lists articles from Soviet periodicals and is published weekly with author index for every issue and geographical index in every quarter.

The Letopis gazetnikh statei is published monthly which covers articles from the central newspapers, the newspapers from Moscow, Leningrad and Republi...
the Soviet Union. Every issue contains author and geographical index.

There are a few more bibliographies compiled at the National level, such as Kartograficheskaya letopis (annual) for maps, Letopis muzikalnoi literaturi (quarterly) for music, Letopis retsenzii (quarterly) covers reviews on Soviet books appeared in different sources, and so on.

The All Union Book Chamber also publishes annually Bibliografiya Sovetskoi bibliografii which is the list of Soviet bibliographies.

PATENTS INFORMATION

Dissemination of patents information is the main activity of the Tsentralnii Nauchno Issledovatelskii Institut Patentnoi Informatskii i Tekhniko-ekonomicheskikh Issledovanii (Central Scientific Research Institute for Patent Information and Techno-economic Research), Moscow. The Institute gets cooperation from the Vsesoyuznaya Patentno-tekhnicheskaya Biblioteka (All Union Patent and Technical Library), Moscow which has the world collection of patents. About 250,000 foreign patents from about thirty six countries are received annually by this Library. A fortnightly bulletin, Bulletin isobretenii i towarnikh znano (Bulletin for patents and trade marks) covers Soviet patents and trade marks. About ten thousand patents are listed in the bulletin in a year. The Institute provides also card service for patents information.

Patent reviews on specific subjects are also prepared by the Institute. About 100 reviews are published every year. The reviews usually contain some of the major aspects of investigations with illustrations. About 30-40 patents are referred by way of examples and at the end list of patents consulted is given. In addition, statistical figures by year, country, etc. on the patents referred are given. The reviews are prepared by subject specialists on the staff of the Institute.

CURRENT AWARENESS

Considerable importance is given to keep the scientists, the engineers and the workers informed in the quickest possible time of the current literature being published on their subjects. This is achieved by the Express Information Service (EI) in the first instance. There are also other services providing liaison between research and industries.

Express Information

The several information institutions in the Soviet Union in addition to other services provided by them bring out express information services. The express information services are not identical at all these institutions and there are variations.

The VINITI's EI was started in 1955 when sixteen series were published. The number of series increased in 1963 to sixty one and in the year 1964 it was published in sixty seven series. The number of entries in 1955 was about 4,000 and in 1962 the number of entries was about 20,000. (2). Each series of the EI is published forty eight times in a year. The time lag in reporting in the EI is about two months only whereas in the RZ it is between six months to one year. The selection of documents for inclusion in this service is done by specialists in narrow disciplines and it is on the basis of immediate requirements of the research work in progress in the country. The EI covers only foreign documents. Detailed abstracts and sometimes almost complete articles are incorporated into this service. The abstracting work is done by outside specialists in the stipulated time of seven to ten days.

The Information Institute of Medicine issues the EI in the form of cards giving only bare bibliographical details of the documents. On the other hand the EI for Building and Architecture is published in two parts - the first part devoted to the account of local experts on their experience at home and abroad and the second part devoted to selected foreign literature. The Central Scientific Agricultural Library publishes a fortnightly EI in two parts, namely Soviet agriculture and Foreign agriculture.

Liaison Between Research and Industry

The Soviet Union is divided into twenty industrial regions. Each region has a Council of National Economy (Sovnarkhoz) which acts as the coordinating body for looking after industrial progress of the
SOVIET INFORMATION SERVICES

The responsibility for the dissemination of scientific information is shared jointly by the Regional Councils, Dom Nauchno-tekhnicheskoi Propagandii (Centres for Scientific and Technical Dissemination), the State Technical and Scientific Library of the USSR, and various documentation departments and libraries attached to industries. There are about 100 Centres for Scientific and Technical Dissemination in the 20 industrial regions, the oldest being located at Leningrad. The State Technical and Scientific Library takes into consideration the overall national interest in all its bibliographical activities. This Library is connected to a chain of smaller libraries operating at various levels and thereby ensures flow of information to all medium and small industries which do not have information departments of their own. However the Documentation Departments and Libraries attached to big industries could themselves serve their clientele by issuing out bibliographies on subjects of immediate concern to their own work. These big industries share among themselves without reservation the information collected by them.

The Centres for Scientific and Technical Dissemination organise their information services as below:

(i) Seminars through which workers share their experience. The subjects for the discussion are chosen in consultation with the specialists.

(ii) Exhibitions for education and introduction for new products (or new inventions) etc.

(iii) Publicity on new products through placards, leaflets, etc. The inventors are requested to write short account with illustrations on their achievements and it is given wide publicity to other industries of the similar nature.

(iv) Very important details, designs and drawings, concerning a new invention are reproduced and circulated to similar enterprises.

CLASSIFICATION

The Soviet libraries were following till recently the so-called Soviet Dewey classification scheme which is now being abandoned. A new Soviet classification scheme which is on the lines of the Universal Decimal Classification (UDC) is under introduction. In this scheme knowledge is divided according to Marxist-Leninist principles. In the libraries documents are not arranged on the shelves following this scheme and the classified approach is provided only through the catalogue.

For the information services the UDC is being followed. It is said that there are even statutory obligations to follow this scheme. The UDC has been translated into the Russian language. However the information services just give the UDC numbers against each entry without following the sequence.

TRANSLATION SERVICES

The Soviet scientists have also to overcome the language barrier as major part of the scientific literature is being in languages unfamiliar to them. They, however, are very much interested to be kept well informed of the scientific progress being made elsewhere. To a large extent the RZ is expected to meet this need. The translation work in RZ is carried on efficiently by employing scientists cum language specialists for abstracting work. As far as possible detailed abstracts with all important data are given so as to minimise the need for going through the originals. If translations of full articles are needed for detailed study, facilities are available at almost all the Information Institutions.

Translation service is not completely centralised. There is however coordination in translation services among all the Information Institutes for avoiding duplication. Translation services are offered by Information Institutes on the subjects of their speciality only. For example, the Information Institute for Building and Architecture translates cover to cover documents on the subjects of their interest and publishes abstracts. The translations are preserved for future use. Similarly the Medical Institute and the State Central Agricultural Library take up translations in their respective subjects. Only VINITI’s translation bureau undertakes translation work on any subject. The bureau consists of 42 staff editors knowing English, French, German, Eastern languages, etc. and over 3000 out-
side translators and editors. Depending upon the length of the document, the translation, including editing and typing work, takes from 10 days to 3 months. The charges for a translation are calculated on the basis of a unit, called 'Printed page', each of which consists of 40,000 printed marks. The rates of the charges are as stated below:

Translation into
- Russian: 60 Rub/printed page
- Foreign language: 80 Rub/printed page
Copy of the translation (both into
- Russian and
- Foreign languages): 7 Rub/printed page

Outside translators are paid at the rate of 60 Rub/printed page depending on the quality of the work. The bureau issues a monthly catalogue of translations done by them. The catalogue lists about 800 translations every month.

It is stipulated by law that copies of all the translations done anywhere in the Soviet Union should be deposited centrally at the State Public Scientific and Technical Library. Thus all the translations done in the USSR are collected together and this helps to eliminate duplication in translation effort. It also facilitates in providing quickly copies of translations already done. The Library brings out a fortnightly list, namely Список переведов which notifies translations deposited during that period.

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REFERENCE
