

Bibliographic Access to Multilingual Collections

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A PUBLIC LIBRARY THAT SERVES an ethnic minority by providing a collection of books and other materials in the minority's language (and often also in a script other than Roman) is faced with the dual problem of how to catalog these materials and how to assure adequate bibliographic access to the collections. The meaning of "adequate access" for members of an ethnic minority has been stated succinctly by Sanford Berman, the well-known fighter for sane and usable catalog entries:

Apart from bookmarks, displays, and shelving arrangements, ethnic materials should be fully identified and easily locatable through...subject headings; catalog users, including those whose primary language may not be English, should be able to understand readily the data in catalogs, should (ideally) be able to find desired subjects on the first try, and should not be prejudiced, confused, misled, or "turned off" by the terminology used to denote specific topics.¹

The catalog as a straightforward finding tool with a minimum of complexity, providing direct access to desired materials, has been an elusive desideratum for many decades. The advent of cooperative and centralized cataloging, with most catalog entries derived directly or indirectly from the MARC data base, has made the catalogs of most American public libraries a baffling conundrum even for native speakers of English. How much more are such catalogs a hindrance rather

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than a help for patrons who know little or perhaps nothing of that language!

It should be self-evident that "adequate access" to library materials for patrons of an ethnic minority means *access in their language*, and if that language is written in a non-Roman script, also *access in that script*. But this basic principle is by no means accepted by all librarians, much less translated into action, either in this country or abroad.

Clearly, all library materials should first be made accessible to the majority of a library's users. But the second and equally important rule should be that books in foreign languages be made accessible in the language (and if necessary, in the script) of the ethnic or lingual minority for which they are primarily intended. Unfortunately, this second rule is frequently followed only to the extent of placing foreign-language materials in separate sections or on special shelves without any other means of finding a book than simply browsing through the collection. This seems to be an easy solution to the problem, but it is actually counterproductive: the majority readers do not know what the library has in one or more foreign languages, while the minority so "served" is made to feel that books in their language are of no value or interest to other people. Clearly, this is not a good or even tolerable solution for any public library that takes its mission seriously. But the solution to the problem, admittedly a complex one, is by no means impossible.

Bibliographic Access to Foreign-Language Materials

Provision of bibliographic access to materials in foreign languages poses several problems which demand increasingly complex solutions if free and full access is to be achieved.

Author and Title Entries

For all languages written in the Roman script, the conventional author-title catalog normally provides adequate access. Minor difficulties may arise concerning the use of diacritical marks, which, contrary to a notion quite popular among English-speaking librarians, cannot safely be disregarded. In the past, this problem was easily solved. The cards distributed by the Library of Congress were (and still are) properly spelled. Most libraries producing their own cards used typewriters with special keyboards containing at least the most common diacritical marks. The situation has changed with the increasing use of computers for production of catalog entries in book catalogs or in various forms of

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COM (computer-output microform). Since computer printout or computer-controlled printing does not normally provide diacritical marks, these are now sometimes left out. There is, of course, no reason why computers cannot provide any desired diacritical marks, and some print at least the most common ones.

Non-Roman Scripts

Books and other materials written in a non-Roman script (e.g., Arabic, Chinese, Cyrillic) have always posed problems for Western libraries. The traditional method of romanization serves several purposes: it is, of course, indispensable in translations and for the cataloging of such works; it makes it easy to interfile entries in Roman and non-Roman scripts; and it is an aid for those users who cannot read a non-Roman script but wish to know, for example, whether the library has a book in Russian or Chinese. Native readers of a non-Roman script are, however, badly served by romanization because they will often be unable to recognize names of authors or titles. It is virtually impossible to recognize a romanized name or title in Chinese, Japanese or Korean, and the name cannot be reconstructed in its original form.

Subjects

Readers of foreign languages encounter difficulties much more severe than those relating to names and titles when seeking material on a particular subject, since subject catalogs of most libraries are available only in the dominant language. Moreover, a number of research projects during the past fifteen years have shown that even native speakers of English experience considerable difficulties with traditional subject headings. It is therefore naïve to expect foreigners or members of an ethnic minority to be able to understand and use such subject access systems with a fair chance of success.

These, then, are the problems. What solutions are being offered or have been tried by libraries that provide service to ethnic minorities? Answers to this question are difficult to find in the existing literature on library service to minorities,² and the few reports available on the cataloging of such material are largely out of date.³ In order to obtain pertinent and up-to-date information on methods currently used by public libraries to provide bibliographic access to their foreign-language collections, a questionnaire survey by mail was conducted.

The Survey

A short questionnaire, containing only four questions (with multiple-choice answers), was sent in August 1979 to 137 public libraries in large cities of countries known to have ethnic minorities (permanent residents or migrants). The Asian countries were chosen according to an earlier survey which had indicated those public libraries serving ethnic minorities. The breakdown by country and rates of response, as well as the percentage of public libraries actually serving ethnic minorities, are shown in table 1.

TABLE 1
LIBRARIES SERVING ETHNIC MINORITIES

Country	Questionnaires		Rate of Response (percentage)	Libraries Serving Minorities	
	Sent	Returned		N	Percentage of all Respondents
Australia	4	3	75	3	100
Canada	17	13	76	13	100
Denmark	4	2	50	2	100
Germany	24	14	58	10	71
India	4	2	50	1	50
Indonesia	1	1	100	1	100
Israel	4	3	75	3	100
Netherlands	3	1	33	1	100
Singapore	1	1	100	1	100
United Kingdom	24	11	46	9	82
United States	45	42	93	34	81
Total	137	93	68	87	94

Although a high percentage of the responding libraries indicated that they had collections serving ethnic minorities, many of them did not fit into the survey because the number of their foreign-language volumes was rather small. A few dozen books, mainly dictionaries, grammars, language courses, or Bibles, cannot be considered a collection for purposes of this study. Also, the vast collections of the New York Public Library have been excluded because such inclusion would make any comparisons misleading.

Table 2 shows the sizes and total number of major foreign-language collections, arranged by language. Table 3 shows the number of collections in various countries (based on the rather modest standard of a 500-volume minimum in any language), and their percentage of all

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reported collections. These figures seem to indicate that the problems of providing bibliographic access to books in foreign languages do not appear to overwhelm the affected libraries. There may, of course, be some sizable foreign-language collections in smaller public libraries not covered by the survey, or in some that did not return the questionnaire, but in view of the high rate of response it is doubtful whether the results would be different.

TABLE 2
FOREIGN-LANGUAGE COLLECTIONS, BY SIZE

<i>Language</i>	<i>Number of Volumes</i>						<i>Total</i>
	<i>Fewer than 100</i>	<i>100- 500</i>	<i>500- 1000</i>	<i>1000- 5000</i>	<i>5000- 10,000</i>	<i>More than 10,000</i>	
Arabic	27	8	2	3		2	42
Armenian	4	2	1				7
Bengali		3	4	2			9
Bulgarian	1	3		1			5
Chinese	29	9	2	3	1	2	46
Farsi	2	1					3
Greek	29	12	5	6	2		54
Gujarati		2	2	3		1	8
Hebrew	32	4		3			39
Hindi	1	3	3	4			11
Japanese	27	9		3		1	40
Korean	26	3	1	2			32
Punjabi	1	4	2	4		1	12
Russian	30	15	8	6	2	4	65
Serbian	6	5	1	3			15
Sinhala			1				1
Spanish	19	11	12	11	6	6	65
Telugu		2					2
Turkish		6	5	4		1	16
Ukrainian	5		1	2	2		10
Urdu	3	3	3	5		1	15
Vietnamese	26	1	1				28
Yiddish	26	2	2	4	1	2	37
Other	17	5	5	15	2	11	55

Even for Spanish and Russian, the two languages most frequently represented, the figures are relatively low. No more than nineteen of forty-two responding libraries in the United States (or 45 percent) have collections in Spanish with more than 500 volumes, and only nine of these are larger than 5000 volumes. Likewise, there are only five Russian

TABLE 3
FOREIGN-LANGUAGE COLLECTIONS LARGER THAN 500 VOLUMES, BY COUNTRY

<i>Language</i>	<i>Australia</i>	<i>Canada</i>	<i>Germany</i>	<i>India</i>	<i>Scandinavia</i>	<i>United Kingdom</i>	<i>United States</i>	<i>Other</i>	<i>Total</i>	<i>Percentage of all collections</i>
Arabic		1			1		2	4	8	19
Armenian		2					2		2	29
Bengali		3		1		4			7	78
Chinese	1						1	3	8	17
Greek	2		2		2	1	2		12	22
Gujarati		2				4			6	75
Hebrew							3		3	7
Hindi		3				4			7	53
Japanese		1						2	4	10
Korean		1			1		1		2	6
Punjabi		3				3			7	58
Russian		3	1	1		1	5	5	20	29
Serbian	1		1		4		1		4	27
Sinhala						1			1	100
Spanish	1	4	2		3	2	19	2	33	51
Turkish	1		5		5				11	69
Ukrainian		4					1		5	50
Urdu		3		1	1	4			9	60
Vietnamese	1								1	4
Yiddish							4	4	8	22

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collections of more than 500 volumes in U.S. public libraries. In the United Kingdom, collections in languages spoken by immigrants from the Indian subcontinent are most numerous: there are twenty collections with more than 500 books (four each in Bengali, Gujarati, Hindi, and Urdu; three in Punjabi; and one in Sinhala). In Germany and the Scandinavian countries, Turkish and Greek constitute the largest segments of foreign-language collections, obviously aimed at the "Gastarbeiter" population. Australia also has two large Greek collections, as well as the only Vietnamese collection of more than 500 books. (Although there are twenty-six collections of Vietnamese books in the United States, only one is larger than 100 volumes.)

The following summary and discussion of bibliographic access methods is therefore based mainly (though not exclusively) on the answers provided by those libraries which have at least a few hundred items in a particular language. These serve a user population that in most instances constitutes 5 percent or less of the total number of patrons. Only a few libraries cited a minority readership of 5-10 percent or higher.

Present Methods of Bibliographic Access to Foreign-Language Materials

Integrated Catalogs

This is the method used by all American libraries and by many libraries in other countries (82 percent of all libraries serving minorities). It is predicated on the idea of a monolithic catalog, either in one unbroken, alphabetical sequence (the dictionary catalog) or split into an author-title and a subject part. Authors' names and titles of works in Roman script are listed together with the romanized form of those originally written in non-Roman scripts. All books are indexed by subject headings in the dominant language of the country without regard to the language of the text. Filing of entries is reduced to a clerical routine, or can be performed by machines. The method also has the advantage of alerting patrons who can read foreign languages to books in those languages when they are looking for material on a particular subject. As pointed out earlier, however, subject headings in the dominant language mean little or nothing to people whose command of that language is only rudimentary. In summary, the integrated catalog is easiest to construct and to maintain for library management, but is cumbersome or even unusable for readers of books in a language or script other than the dominant one.

Cross-References in Foreign Languages

This method constitutes a slight improvement over the integrated catalog. Here the author catalog is managed in the same manner, and books in foreign languages are also indexed by subject headings in the dominant language, but throughout the subject catalog, "see" references from subject headings in one or more foreign languages to the established form are inserted. Details of this method (presently being planned by only a few libraries and not yet put to the test) will be considered below. The method has all the advantages of the integrated catalog as far as library management is concerned, with a slight additional (but once-only) burden of making the subject cross-references. Subject access for the foreign reader will thus be made somewhat easier, although it will still take a dedicated and somewhat sophisticated reader to find entries for the books desired.

The Alphabetical Author-Title and Classified Subject Catalog

This method, familiar to all library patrons in the United Kingdom and in many other countries but practically unknown in the United States, is based on an author-title catalog exactly like that found in the separately organized integrated catalog, except that the subject catalog is organized according to a classification system (in most instances, Dewey Decimal), and is supplemented by an alphabetical index to class marks. The interfiling of entries in different languages or scripts poses no problem, because the primary filing medium is the class mark. Here, too, non-Roman entries are traditionally romanized to allow for subarrangement of entries by name or title under the same class mark. An alphabetical index to a classified sequence is much more flexible than a subject heading system (especially if relationships between subjects are clearly indicated, as in PRECIS, the Preserved Context Index System). It is also easy to accommodate changing terminology and new words. Patrons speaking the dominant language will have few difficulties in gaining access to subjects, and the catalog will also reveal to them all books on a particular subject irrespective of language. Any problems regarding the subject indexing of foreign books for a classified catalog will not be substantially different from those posed by an alphabetical subject catalog. But the foreign reader will again be faced with the necessity of access through the medium of a language which he or she does not know sufficiently well or does not know at all, and this may be compounded by the need to learn a two-step method of access that demands a certain degree of sophistication.

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This method is used by twenty-seven libraries (31 percent of the sample). All U.K. libraries, most of those in the Scandinavian countries and in Asia, and some in Canada, Australia and Germany have classified subject catalogs.

Separate Catalogs by Language and Script

The author-title catalog is arranged as in the above method. Regarding the subject catalog, two variants were reported. One of these is a subject catalog divided according to language, but with subject headings in the dominant language; twelve libraries (14 percent) reported use of this method. The other variant is a classified subject catalog, arranged in separate sequences by script (e.g., Roman, Cyrillic and Hebrew, or Roman and Chinese). Subject indexes are apparently in the dominant language only (questionnaire answers did not make this point entirely clear). Two or possibly three libraries use this method.

From the point of view of management, such catalogs by language and/or script demand a considerable degree of sophistication for their construction and maintenance, and seem therefore less desirable. Readers of foreign languages are, however, quite well served by a classified catalog with multilingual indexes.

Separate Shelving by Language and/or Script

This method is used by 62 percent of the libraries, sometimes in conjunction with subject catalogs constructed by one of the other methods. Most often, however, there is no catalog at all for the separately shelved books, so the physical arrangement provides the sole means of access. This method makes it seemingly easy for readers of various ethnic minorities to find "their" books as far as language is concerned (especially if the library serves several quite different linguistic groups), but it provides no subject access. Separate shelving is mostly done by the author's name or by title, and indicated by a shelf mark to facilitate shelving for library personnel who do not know foreign languages, much less a non-Roman script.

Many libraries reported that only fiction and children's books are shelved separately by language, whereas nonfiction is shelved in one classified sequence along with the other books in the library. While this constitutes no particular problem for majority readers and may even be quite useful, it will prevent many minority readers from finding books on any subject in their own language or script, because access is provided only in the dominant language by one of the cataloging methods discussed above. Often minority readers are not even aware that books in

their language are to be found among the many books in the dominant language on the nonfiction shelves. The notion that members of an ethnic minority are interested only in fiction or children's books thus becomes a self-fulfilling prophecy.

But when, as is sometimes the case, all or most foreign books are shelved in a separate section of the library rather haphazardly and without any means of access other than browsing, both majority and minority readers are poorly served. The minorities are made to feel like second-class users not worthy of the services provided for the dominant majority of patrons. Yet the majority readers are likewise shortchanged: those who do know foreign languages are not made aware of the existence of these books. Thus, to acquire foreign literature but to leave it entirely uncataloged means a library pays only lip service to the idea of providing its foreign-language patrons with reading material.

Other Finding Aids

Seventeen libraries reported that they provided various means other than catalogs and/or separate shelving of guiding readers to foreign-language materials. Among these were lists of printouts of new accessions classified by language and sometimes arranged by broad categories such as fiction, children's literature, how-to-do-it books, travel, and the like; formal bibliographies, published from time to time, of foreign-language materials; newsletters in the language of a minority, containing announcements of new books; location signs throughout the library and on the shelves in the most prevalent foreign language(s); and color-coding of books in a separate stack section by language. Table 4 summarizes the methods of bibliographic access to foreign-language collections used by the responding libraries.

Promotional Literature

Several libraries provided samples of promotional literature for their foreign-language collections and services. Among the best are those published by the Multilingual Biblioservice of the National Library of Canada in over two dozen languages; each language has its own leaflet with English and French text added. In contrast, one of the worst examples is a colorful English-Spanish folder that contained numerous misprints and grammatical errors, and even failed to print the Spanish ñ or to accent letters. Such ill-prepared "publicity" is necessarily offensive to the intended readership.

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TABLE 4
METHODS OF BIBLIOGRAPHIC ACCESS TO FOREIGN-LANGUAGE
COLLECTIONS

<i>Method</i>	<i>Libraries Serving Minorities Number</i>	<i>Percentage* (N=87)</i>
Alphabetical author-title catalog and subject headings in the dominant language	63	72
Alphabetical author-title catalog and classified subject catalog with subject index in the dominant language	27	31
Alphabetical author-title catalog and separate subject catalogs by language or script	12	14
Other variants of author-title and subject catalogs	4	5
Separate shelving	54	62
Other finding aids	17	20

*Percentages total more than 100 because many libraries use several methods simultaneously.

What Can Be Done?

The current methods of cataloging foreign-language books and other materials are evidently not those that serve the needs of ethnic minorities very well. The means at the disposal of libraries are, however, severely limited, and most libraries will not be able to provide what seems to be "best," even presuming that anybody knows which of the possible solutions is the best under any given circumstances. Considering the limitations of personnel, money, time, and technical facilities under which public libraries everywhere must operate, what can reasonably be done to improve access to library materials for minority users, so as to approximate an optimal solution?

Many of the difficulties encountered in providing library services to minorities can be tackled effectively only by cooperative efforts and a centralized service. This pertains to bibliographic control perhaps more than to any other aspect of multilingual services. Mrs. M.F. Zielinska, Chief of the Canadian Multilingual Biblioservice, expressed this very aptly: "No individual library nor even a consortium of libraries can

satisfactorily cope with the existing needs because of difficulties inherent in the acquisition and cataloguing of foreign material, nor can it adjust to the fluctuations in the composition of ethnic communities within the regions being served."⁴ In the same article, she also discussed the advantages and disadvantages of centralized services; the reader is referred to her excellent analysis.

Whatever disadvantages there may be to centralized services, the advantages to be gained by centralized cataloging in many foreign languages and in a variety of scripts are so obvious that no library should try to "go it alone" if such services are available in any form. But centralized services provide only basic catalog entries, either as card sets, microfiches, or machine-readable input for computerized systems. They cannot build or maintain catalogs, nor can they solve the local problems of individual libraries, which must still decide on the type and form of catalogs they wish to provide so as to serve the needs of minorities. In the following discussion, several different catalog systems are considered and listed by increasing degree of complexity and sophistication.

The Conventional Author-Title-Subject Catalog, Augmented with Cross-References in Foreign Languages

Nothing in the present setup of the catalog need be changed for this method. The author-title catalog remains the same. Names and titles in non-Roman scripts are romanized and interfiled. The subject headings are in English. The only additions to be made to the catalog are subject cross-references in the respective language, which refer the user to the same subject heading in English, for the principal subjects represented by foreign-language books. For example, the following Spanish-to-English cross-references may be made: Jardinería, *véase* Gardening; Novelas en español, *véase* Spanish fiction.

This does not necessarily imply a wholesale translation of all English subject headings, because in many instances the collection of foreign-language books will not comprise works on all subjects covered in the dominant-language collection (and the converse may also happen, e.g., books in the Spanish collection may treat subjects not touched upon at all in English). It may be sufficient, at least for smaller or medium-sized foreign-language collections, to make such cross-references for the first 100 main classes of the Dewey Decimal Classification (DDC) system and for some of their most important subdivisions.

Preferably, the subject cross-references in one or more foreign languages should also be displayed in tabular form or in a separate card file kept with the general subject catalog. They should be clearly labeled,

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e.g., "Encabezamientos de materia en español" or "Vedettes matières en français." This method can probably be used even by quite small libraries since it demands few resources and is easy to produce, at least for the major languages for which good dictionaries and subject heading lists exist. It will be somewhat more difficult in the case of lesser-known languages, but it should not be impossible to enlist the aid and cooperation of competent people in the respective language communities to help with the translation and formulation of a relatively small number of simple subject headings.

Separate Subject Catalog in a Foreign Language

Where only a single ethnic minority is to be served (as is often the case for libraries serving Hispanics in American cities), a separate subject catalog with subject headings in the respective language may be set up. A project that will provide Spanish subject headings, based on several thousand titles held in some large California public libraries and known as the California Spanish Language Union Catalog, was started in 1977 and may become operative in 1980. If successful, other libraries serving Hispanic minorities may then be able to take advantage of this scheme, especially since the subject headings will be available in machine-readable form. Whether to assign English subject headings as well to the same books, and to integrate those entries in the general subject catalog is a matter of individual policy (and resources). In principle, it should be done.

Where more than one ethnic minority is to be served, it would probably be uneconomical to keep separate subject catalogs in several different languages. For such cases, another solution seems to be more practical and cost-effective.

Classified Subject Catalogs with Multilingual Indexes

This method is a logical extension of the classified version of separate catalogs by language and script. Subject entries are arranged in classified order, e.g., by DDC number. As pointed out before, the inter-filing of entries in different languages under one class mark poses no problem. Moreover, entries in different scripts can be interfiled, too, even if their headings (the secondary filing medium) have not been romanized. Such entries can be subarranged by date of publication. (Subarrangement of subject entries by date is often preferable to subarrangement by author or title, and many libraries prefer to file subject entries this way, independent of the kind of catalog they use.)

The greatest advantage of a classified subject catalog in a multilingual environment is that its arrangement is entirely independent of any natural language, because the indexes can be produced in as many languages as needed. The method of a classified subject catalog with bi- or multilingual indexes is especially well suited to the needs of patrons in bilingual countries such as Canada or South Africa. The entire subject collection of a library, irrespective of language or script, is thus displayed in a single classified (and largely hierarchical) sequence, while access to subjects is provided without bias or preference for any one language. Thus, index entries for "Gardening," "Jardinage" and "Jardinería" will all refer to 635 in DDC, as will the English and French synonym "Horticulture."

The relatively small size of such subject indexes makes it fairly easy to produce them in two or more languages. An additional feature in favor of a classified subject catalog is the fact that this type of catalog is often familiar to many groups of immigrants from Latin America and from Asian and African countries, where the classified catalog is much more widespread than it is on the North American continent.

A Combination Alphabetical and Classified Subject Catalog

It would be unrealistic to expect established public libraries with a dictionary catalog or an alphabetical subject catalog to switch to a classified subject catalog (although their shelflists already constitute, to a certain extent, such a catalog). However, in those cases in which foreign books are not cataloged at all, or are accessible to their readers only by means of subject headings in the dominant language, it may be possible to create a classified subject catalog for these books only, with subject indexes in the respective languages, and cross-references in the traditional subject catalog.

Such a combination would go a long way toward provision of subject access for minority readers. The assignment of class marks to foreign books should not be an insurmountable obstacle even for a small library. For the subject index, the DDC index can serve as a guide, either in English or in one of the many translations available.

Some librarians might be horrified by the thought of having a hybrid subject catalog, part alphabetical and part classified. However, they should consider that a foreign-language book collection which is not cataloged but only separately shelved results also in a hybrid: the shelving of books in two different and largely incompatible ways.

Cataloging of Materials in Non-Roman Scripts

It now remains to address the most vexing problem in cataloging foreign-language materials, namely, how to deal with non-Roman scripts. Table 5 shows that a considerable number of libraries have collections in the major non-Roman scripts. The traditional solution, romanization, is a largely misguided attempt to create an "integrated" catalog.⁵ The fact is that different scripts are by their very nature incompatible with each other. Romanization is also the method favored by library administrators concerned only with smooth functioning and minimal cost. The Library of Congress, which until recently romanized only headings, decided in 1979 to romanize in their entirety all entries for books originally written in a non-Roman script (except, for the time being, those in Arabic, Hebrew, Chinese, and Japanese). LC's justification was the purported technical difficulties in making non-Roman catalog entries amenable to computer manipulation, and thus to smooth integration into the MARC data base. Though this argument is demonstrably false (the New York Public Library has been producing entries in Cyrillic and Hebrew in its computer-generated catalog since 1977 and will soon add Arabic and perhaps other scripts⁶), it is widely believed to be true because of the authority of those putting it forward. As has been shown by several authors,⁷ romanized catalog entries, though necessary for translations (and certain other types of graphic communication, e.g., cartography), are a hindrance rather than a help for effective bibliographic control of works written in non-Roman scripts. But even those who would still argue that romanization is not only necessary but valuable will probably not deny that native readers of Russian, Arabic or Japanese neither need romanization nor are helped by having to decipher catalog entries for works in their own language and script in a transmogrified form.

Research and university libraries use romanization because they have been led to believe that this is what "scholars" want. But the aim of public libraries serving an ethnic minority must be to make books in non-Roman scripts accessible *in the original script*. This, admittedly, is often a formidable and complex task, but not an impossible one. Various solutions exist to achieve this aim, but they are basically different for alphabetical and logographic scripts. For this reason, these scripts will be discussed separately.

Alphabetic Non-Roman Scripts

The principal alphabetic non-Roman scripts are Arabic, Cyrillic, Devanagari (and its derivatives), Greek, and Hebrew. Many of the

TABLE 5
FOREIGN-LANGUAGE COLLECTIONS BY SCRIPT

<i>Script</i>	<i>Total</i>	<i>Number More than 500 volumes</i>	<i>Percentage of total</i>
Arabic	60	17	28
Armenian	7	2	29
Chinese	118	15	13
Cyrillic	93	29	27
Devanagari (incl. derivative scripts)	43	28	65
Greek	54	12	20
Hebrew	79	12	15
Roman	164	78	48

responding libraries reported holdings in one or more of these scripts, though most were rather small. Most libraries either use completely romanized catalog entries, or they do not catalog such books at all, relegating them to a separate shelf section. Only a few libraries use romanized headings (names or titles) and provide also full bibliographic data in the original script (as did the Library of Congress before 1979). This method is, of course, preferable to wholly romanized entries, but still forces readers to look up a romanized name or title.

A much better solution, though more difficult to produce and to maintain, is an author catalog split into as many sequences as there are different scripts, complemented by a classified subject catalog with bilingual or multilingual indexes, as discussed above. Thus, there may be (in addition to the Roman script catalog) a Cyrillic catalog for names and titles in Russian, Ukrainian, White Russian, Bulgarian, Serbian, and Macedonian; an Arabic catalog for Arabic, Persian and Urdu; a Hebrew catalog for Hebrew and Yiddish; a catalog in Devanagari script (and its variants) for Hindi, Bengali, Gujarati, and other Indic languages; and a Greek catalog. When a library's holdings contain also translations of any of these books into one or more of the Western languages, the Roman script catalog contains cross-references to the author-title entry in the original script and vice versa. Such catalogs (though not always in the full form outlined here) are used by libraries in Israel, and also exist in the Soviet Union⁸ (but not in public libraries). The system obviates the need for any transcribed entries, except in those cases where a book originally written in a non-Roman script has been translated and the name of its author is given in romanized form. The

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native reader of a foreign language and script will be best served by such a catalog, as will the reader who has learned the language and script sufficiently well to be able to read its literature. The apparent disadvantage to readers of the dominant language, namely, that not all entries for an author's work are found in one place in the catalog, can be overcome by suitable cross-references in the form: Tolstoÿ, Lev Nikolaevich, *see also* Толстой, Лев Николаевич.

The library's management, however, will face difficulties with which it cannot cope using local resources alone. Cataloging in an original script requires experts in that language and script, special typewriters (or interchangeable type elements), and language experts also for the filing of entries, at least as long as these are in card form. Only centralized services can provide libraries with entries in non-Roman scripts at a reasonable cost, because the investment in necessary equipment and the high salaries of language experts must be spread over as large a number of customers as possible. Mere provision of catalog cards would still leave the problem of filing in individual libraries, and is therefore not a viable solution. Rather, separate catalogs for books in non-Roman scripts ought to be provided in the form of book catalogs, which can be produced either from camera-ready typescript or from computer-controlled phototypesetting (now available for almost all alphabetic non-Roman scripts). Another alternative is the use of computer-generated microfiches which would dovetail with the Roman-script microfiche catalogs increasingly used by public libraries. In either case, arrangement of entries in the proper alphabetical sequence would be done centrally at the point of production of these catalogs. Of course, a local public library would not possess all the books listed in a regional or statewide catalog of, say, books in Russian, but it would be a relatively small matter to indicate the books actually held in the local collection, while the larger catalog would enable readers to see what was available by interlibrary loan.

Logographic Scripts

The treatment of books written in languages that use logographic scripts, namely, Chinese, Japanese and Korean, poses even more difficulties, which may well be insurmountable for any but the largest public libraries, and no easy solution can be offered. The problems inherent in the transcription of logographic scripts from the point of view of bibliographic control have been discussed by several authors.⁹ The principal difficulty lies in the fact that no transcription system for Chinese characters will enable a reader to reconstruct those characters,

and without such an exact reproduction, no names and only very few titles can be recognized and understood. Though Western readers of Chinese, Japanese or Korean often say that they find transcribed catalog entries useful (because most of them know the script of these languages imperfectly, having mastered only a relatively small number of characters), it cannot be emphasized too strongly that a transcribed entry means, in most cases, absolutely nothing to the native reader of those languages. To make sense of a catalog entry, the reader must see it in the original script, either in addition to a transcribed filing medium or in a straightforward Chinese character catalog.

Regarding Chinese, the problem has recently been made even more complex by the official decision of the People's Republic of China to use only the Pinyin system of transcription (which has now also been adopted by Western news agencies, the press and several large libraries), while the Republic of China (Taiwan) continues to use the traditional Wade-Giles system of transcription. The Library of Congress also decided to continue the use of Wade-Giles.¹⁰ A reader of Chinese works will thus have to learn two transcription systems because it would be impossible to change the millions of entries for Chinese works already in the catalogs of Western libraries. No matter which system a library chooses, however, it will be of no use at all for native readers of Chinese.

A somewhat similar situation obtains regarding Japanese. Practically all Western libraries use the Hepburn system of transcription, but the Japanese government favors a partially different system, the official Kunrei transcription (in which, for example, the famous mountain Fujiyama is rendered as *Huziyama*).

Korean, when written in Chinese characters, encounters the same difficulties as Chinese when transcribed by means of the McCune-Reischauer system used by Western libraries, and even when it is written in the indigenous Han'gul alphabet (which is indeed a true alphabetical script), its transcription, by whatever system, is far from unambiguous.

Thus, the necessity to provide entries written in the original Chinese characters (and in the case of Japanese, also in *kana* signs) poses formidable technical problems for libraries. First, there is the problem of printing or writing. Although Chinese and Japanese typewriters exist, they are extremely cumbersome to use and also quite costly. Computer-typesetting of Chinese characters is now possible, but the necessary equipment is beyond the reach of a public library. Most libraries employ Chinese calligraphers to write master cards by hand, and these are duplicated by various methods. In most cases, small and medium-sized libraries cannot afford this method either. Another diffi-

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culty, perhaps even more formidable for a library than the one concerning the script itself, is the filing order of entries. Even if a central service provides Chinese or Japanese catalog cards, libraries without specially trained personnel cannot file them unless they use romanization, but the entries so filed will again be unintelligible to those for whom they are intended.

One of the four filing systems traditionally used for Chinese characters is arrangement by number of strokes. This system is used by the Toronto Public Library, which produces cards written entirely in Chinese characters, with a transcribed version of the author's name in the upper-left-hand corner, and an indication of the number of strokes used as a filing medium in the upper-right-hand corner (see figure 1). The cards can then be filed by people without any knowledge of Chinese (or by machines), by simply arranging them by the number combinations in ascending order. This system is, however, not unambiguous, since many characters have the same number of strokes. Another filing method that has been used successfully is arrangement of the characters by their number in the Chinese Standard Telegraph Code (which is nearly unambiguous), but the system is not widely known among Chinese readers.

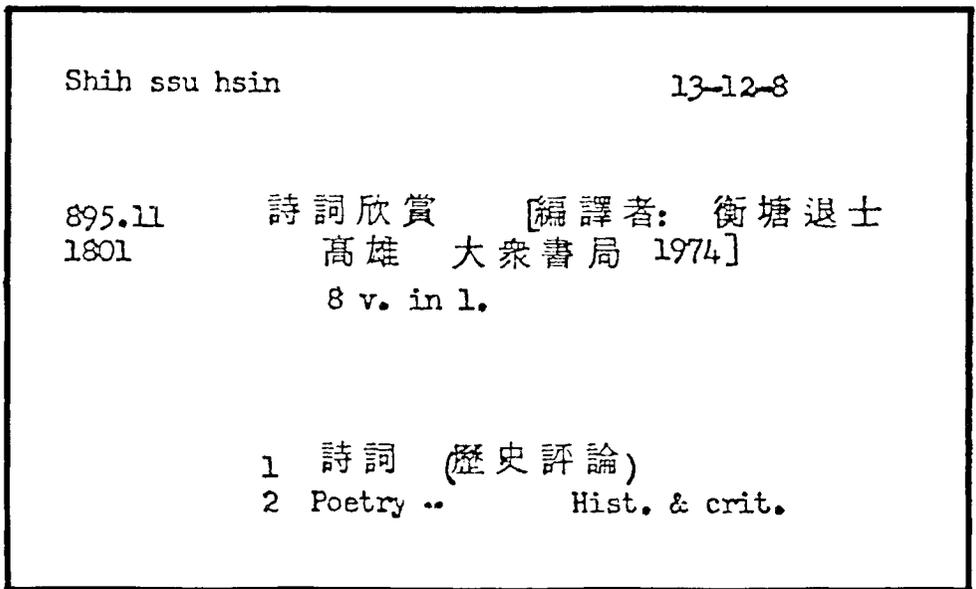


Figure 1. Catalog card for a Chinese book, produced by the Toronto Public Libraries

Despite these and other difficulties, it should not be entirely impossible to construct Chinese, Japanese and Korean catalogs in libraries which have substantial collections in these languages. Even more than in the case of other non-Roman scripts, centralized services must provide the necessary basic entries in whatever form (cards, book catalogs or microfiche). Local situations will have to depend on librarians with the necessary expertise or on the services of volunteers, retired persons or students in the respective language communities.

Conclusion

The provision of bibliographic access to foreign-language materials in public libraries is at the present time either nonexistent or greatly mismanaged. Only a few centralized library services provide members of ethnic minorities with books and other materials in a fashion comparable to that available to and expected by the majority of a library's patrons. The problem will not go away by being disregarded. Collections of books in foreign languages intended for native readers (as distinct from those provided for learners of those languages) will be with us for the foreseeable future, and there will be more demand for them.

Some of the solutions proposed here will perhaps appear to be "pie in the sky" to many librarians, not least because they would put additional burdens on a library's personnel and budget or necessitate a restructuring of the catalog. But they are actually quite realistic and are based on the practical experience of at least a few libraries and centralized services which have tried and used them successfully. The implications of acquisition of books in foreign languages for personnel and budget matters ought to be considered *before* making any decisions on collection building for minorities, or rather, they should be part and parcel of such a decision. A library that cannot afford to buy foreign books and does not have the necessary resources to deal with them appropriately, yet insists on acquiring a few books in "exotic" languages, shelving them away in a corner labeled "Books in Foreign Languages," ought not to be in that business at all, because it provides only a token service for its minority readers, who will make very slight use of it, if any.¹¹

As to the proposed methods of restructuring the catalog in order to assure effective bibliographic access to foreign books, this may indeed be a propitious time to initiate them. Many public libraries are now or will soon be in the process of closing all or part of their existing catalogs,

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perhaps changing their form from cards or books to COM. Thus, some major or minor restructuring of public library catalogs is now occurring anyway, and additional changes made for the sake of providing access to foreign-language books would often be only a minor part of such an operation.

Finally, it cannot be emphasized too strongly that such changes and accommodations ought to be made not just for the sake of the ethnic minorities in a community. Making books and other materials in foreign languages available and accessible to whoever might need them will ultimately result in the best service to the library's entire constituency.

References

1. Berman, Sanford. "Stop Playing Hide-and-Go-Seek with Ethnic Materials!" *Wilson Library Bulletin* 52:691, May 1978; reprinted, with minor revisions, *Hennepin County Minnesota Library Cataloging Bulletin*, no. 35, July/Aug. 1978, p. 1.

2. Several recent publications on library services to Spanish-speaking minorities fail to mention anything about cataloging. In Patricia B. Hanna's *People Make it Happen* (Metuchen, N.J., Scarecrow Press, 1978), library service to Puerto Ricans in the Hudson Valley is described in detail except for subject access; *Public Library Information and Referral Service*, edited by Clara S. Jones (New York, Gaylord, 1978) has an article on service to Hispanics in Detroit, the "Biblioteca de la gente" which is not used by the aged or those who do not know English because they "give up in despair" (p. 57)—perhaps because all Spanish material is accessible only through the medium of English? The report by James C. Johnstone, et al., *La Biblioteca Latino Americana: User Survey (San Jose Public Library)* (San Jose, Calif., Dept. of Librarianship, San Jose State University, 1977, ED 153 610) is based on a questionnaire on use or nonuse of the library by Chicanos, but no question about subject access was asked. The massive *A Public Library Service for Ethnic Minorities in Great Britain* by Eric A. Clough and Jacqueline Quarmby (London, Library Association, and Westport, Conn., Greenwood Press, 1978) has only a few passing remarks on cataloging, a topic not even included in the index to the book. McQuiston provides factual evidence for the difficulties encountered by Spanish-speaking students faced with English subject headings. See McQuiston, M.L. "The Problem of English Subject Headings in the Bi-lingual Library," *Texas Library Journal* 51:189-90, Winter 1975.

3. See, for example, Bulaong, Grace. *Living in a Romanized World: Cataloguing of Foreign Language Books in Metropolitan Toronto Library*. Toronto, Metropolitan Toronto Library, 1976. Though this report is now partially out of date, it is still one of the best expositions of the problem.

4. Zielinska, Marie F. "Multiculturalism and Library Services to Ethnic Communities," *Unesco Bulletin for Libraries* 32:18, Jan.-Feb. 1978.

5. Weinberg, Bella H. "Transliteration in Documentation," *Journal of Documentation* 30:18-31, March 1974.

6. Malinconico, S. Michael, et al. "Vernacular Scripts in the NYPL Automated Bibliographic Control System," *Journal of Library Automation* 10:205-25, Sept. 1977. See also "Continuing Reports on the 98th Annual Conference of the American Library Association: Association of College and Research Libraries; Asian and African Section," *Library of Congress Information Bulletin* 38:390, Sept. 14, 1979.

7. Weinberg, op. cit.; Spalding, C. Sumner. "Romanization Reexamined," *Library Resources & Technical Services* 21:3-12, Winter 1977; Wellisch, Hans H. "Script Conversion and Bibliographic Control of Documents in Dissimilar Scripts: Problems and Alternatives," *International Library Review* 10:3-22, Jan. 1978; ————. *The Conversion of Scripts: Its Nature, History, and Utilization*. New York, Wiley, 1978. See especially Chapter 6; and ————. "Multiscript and Multilingual Bibliographic Control: Alternatives to Romanization," *Library Resources & Technical Services* 22:179-90, Spring 1978.
8. Delougaz, Nathalie P., et al. "Libraries and Information Services in the U.S.S.R.," *Special Libraries* 68:252-65, July/Aug. 1977.
9. Kishibe, K. "Cataloguing Books in Chinese," *International Cataloguing* 3:4, Jan./March 1974; Rageau, Christiane. "Cataloguing Eastern Material in Western Libraries." In *Proceedings of the IFLA Worldwide Seminar, Seoul, 1976*. Seoul, Korean Library Association, 1977, p. 265-69; Tanabe, Hiroshi. "Bibliographic Control in Japan and the Cultural Sphere of Chinese Characters." In *Proceedings of the IFLA Worldwide Seminar*, op. cit., pp. 270-79; and Bulaong, op. cit., pp. 11-13.
10. "Library to Continue Wade-Giles Romanization," *Library of Congress Information Bulletin* 39:149, May 2, 1980.
11. According to Clough and Quarmby, "A broad heading such as 'foreign languages' is likely to help to ensure that the books are ignored." See Clough and Quarmby, op. cit., p. 312.