

TRANSLITERATION OF CYRILIC ALPHABETS

by

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INTRODUCTION

Everyone who deals with information storage and information retrieval inevitably faces two problems: the language in which information is contained, and the alphabet, or any other system of writing by which this language is graphically represented. There is a great diversity of languages and quite a diversity of alphabets, so that one may recognize a language barrier to communication, and also an alphabet barrier or writing-system barrier.

In the different alphabets or writing-systems, books and periodicals are printed, manuscripts are written, literary, scientific, and informational material is produced. Most of it remains inaccessible, not only because of the language barrier, but also because of the alphabet barrier.

Materials in different alphabets, in various systems of writing, cannot be easily handled and checked, cannot easily be entered in bibliographies, catalogues, indexes, or other works of reference. Inter-alphabetic communication is ill provided for.

For general culture and progress it has always been important to share the achievements and civilization of other peoples and nations. Especially today, with the emerging of new nations, with the development of new languages from obscure, unfamiliar dialects, with the interweaving of economic and political, cultural and social, religious and philosophic interests, with the powerful pressure of mass media, the problem of international communication and understanding is more urgent than it ever was in the past.

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Many attempts have been made to create an international language, but all have failed. Maybe it will come sometime, this universal language, but until it comes, the minimum requirement should be found to lessen the barrier, and this minimum is the graphic access to other peoples' languages and writings.

There are about three thousand languages, employing quite a number of alphabets, or different writing systems. Thus far, no alphabet has ever been devised or generally accepted for international use. Each existing alphabet or system of writing is the product of slow evolution and constant development, each one reflects the needs of the language it serves.

In the western hemisphere it was the Roman alphabet which became the basis for many "national" Roman alphabets; in the Eastern and South Eastern Europe, as well as in many countries of Asia, it is the Cyrillic alphabet, originally derived from Greek, that furnished the foundations for "national" Cyrillic alphabets.

The inter-relation between these two alphabetic families, certainly has its history. It was, first of all, the Renaissance that laid down the first foundations for cultivation and appreciation of languages. In 1548 appeared the earliest book on comparative philology and phonetics written by a Swiss Orientalist Theodor Buchmann (Bibliander)¹.

1. Theodor Bibliander, De ratione linguarum et literarum commentarius, Zürich, Christoph Froschauer, 1548.

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It is probably the first book that deals in philological way with the comparison of several languages, Slavic included. At the end of the book, the author attached transcribed "Pater Noster" in: Aethiopian, Armenian, Arabic, Chaldaic, English, French, German, Greek, Hebrew, Icelandic, Illyric, Italian, Polish and Spanish. From him we also have tables of transliteration of Hebrew, Phoenician, and Greek into Latin. His discussion of Serbian is believed to be the first account ever given to a Cyrillic-written language.

In the 18th and especially in the 19th century the growing interest in linguistic studies brought significant contributions to the field. Several most important works were published, expanding and clarifying the problem of inter-alphabetic equations, i.e. the problem of transcription from one alphabet into another. Actually it was the Roman alphabet that served as a terminus ad quem, and not vice versa.

Of all such works the most complete and the most influential was that of Richard Lèpsius, a German philologist¹. It was he who set clearly the principles of transcription of foreign sounds (or scripts), emphasizing that the native conception of sounds and phonation should be brought in "transliteration". This idea initiated a trend that resulted in several important achievements.

1. Richard Lèpsius, Das allgemeine linguistische Alphabet; Grundsätze der Übertragung fremder Schriftsysteme und bisher noch ungeschriebener Sprachen in Europäische Buchstaben, Berlin, 1855.

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At the end of the 19th century an association was founded in France, namely the International Phonetic Association (1886), which developed a uniform phonetic alphabet applicable to all languages. Soon followed other similar alphabetic systems (Pitman, Comstock, Anthropos, Sprater, etc.) but they found no large scale application. All these systems were devised mainly for linguistic purposes, for rendering as truly as possible characteristics of one or another language. Being overloaded with diacritics (upon a Roman-alphabetic basis) and with symbols difficult to memorize, these systems were unusable for inter-alphabetic operations with bibliographic purposes in mind.

The situation engendered a new concept in the library world; application of the linguistic achievements for practical purposes, in connection with the cataloguing and bibliographic needs. This is noticeable in the provisions in cataloguing codes of the late 19th century with regard to the foreign scripts. As far as Cyrillic alphabets were concerned, they were rendered mainly according to the phonation of their constituents (letters). As the phonation (pronunciation) is not a stable factor, therefore the rendition of Cyrillic-written words varied greatly, depending from pronunciation as well as from the possibilities of one or another "national" Roman alphabet into which these words were transliterated or transcribed.

By the end of the 19th century a number of national systems for transcription or transliteration of Cyrillic was developed. The most important system that evolved during the 19th century was the system

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known as "International" and used widely in Slavic countries for linguistic, bibliographic, and also library purposes. The system was based on the Czech-style Roman. In application to the Cyrillic, it avoided letter combinations and the inter-alphabetic disparity (between the Roman and Cyrillic) solved with the help of diacritics.

This system was influential in many European countries on the provisions in cataloguing codes with respect to the Cyrillic alphabets.

In the Anglo-speaking world the systems of Cyrillic versus Roman equations were introduced in the second half of the 19th century, with the phonetic theories of that time being instrumental and playing an important role. This is the reason why the Anglo-American systems used today compromise the phonetic convenience with the modern form-economy, or letter-for-letter principle.

By the beginning of the 20th century, bibliographic, documentary, and library activity in general, had spilled over national boundaries. This activity represented a new involvement and interest in international literary productivity, in international communication. The "national" systems, good and workable within one nation, proved to be very unsatisfactory in international use.

After the first World War the bibliographic problem (in connection with transliteration) became so urgent that the Eleventh Session of the International Committee of Intellectual Cooperation devoted special attention to it. The Committee discussed the problem in 1929 and again in 1933. In the end it adopted a resolution to the effect

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that, for the sake of better understanding among nations, the Roman alphabet should be generally accepted as a basis for every nation's literary use.¹

At approximately the same time, in 1928, a special section of the FID was established, known as International Standards Association (ISA), the chief aim of which was to work out systems of standards in many fields of international communication and international relations. Recognizing the urgent need for alphabetic uniformity, the ISA in 1939 prepared the scheme of transliteration for Cyrillic alphabets for international use. Because of the outbreak of war, this project was not carried through.

This "Roman-alphabetic" trend did not remain without results. Some countries indeed switched to the Roman-based alphabets (e.g. Turkey, Indonesia, and Albania earlier, in 1908). A strong tendency toward the Romanization was in the Soviet Union in the 1920's and early 1930's. All the new alphabets, for about fifty various nationalities (mainly of Asiatic peoples), were oriented upon the Roman alphabet. This tendency lasted until 1937, when the alphabetic practice switched again toward the Cyrillic basis.

After the second World War another organization was founded to carry on the work of international standardization, namely, the International Standards Organization (ISO). This body accepted the recommendations of its predecessor (ISA), including those with regard to the

1. Institut International de Coopération Intellectuelle, L'Adoption universelle des caractères latins, Paris, Société des Nations, 1934.

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transliteration system of the Cyrillic alphabets.

Within a few years it produced the scheme for transliteration of Cyrillic, known as ISO/R9, as well as several other schemes. The system (ISO/R9) became international, and ISO itself became the central authority on transliteration problems, disregarding the fact that some of its schemes have not been accepted by all member nations.

The strong emphasis on transliteration (i.e. transcription "letter-by-letter"), the ISO made a clear distinction between these two ways of inter-alphabetic operations: transcription founded on phonetic factors, and transliteration founded on literal factors. The main reason for this was to eliminate the unstable phonetic factor as a basis for transliteration, and to adhere to one which is not subject to variants in pronunciation.

The ISO selected for its first scheme the Cyrillic alphabets. It means that the literary and scientific production in the Cyrillic alphabets has been highly evaluated.

CHAPTER I

TRANSLITERATION

1. ITS MEANING AND BASIC PRINCIPLES

The term transliteration has been known in English as well as in French lexicography since about the 1860's. Unabridged dictionaries, both English and French, published late in the nineteenth century include this word, but its meaning is not always clearly distinguished from that of transcription. The Century Dictionary, for instance, has under "transliteration" the following definition:

The rendering of a letter or letters of one alphabet by equivalents in another and that transliteration does not profess to give all the exact vocalic differences.

But it also has under "transliterator":

It seems to have been the object of the transliterator to represent, at least approximately, in Anglo-Saxon letters the current pronunciation of the Greek words¹.

The last interpretation of the term would not agree with the meaning that is attached to this term today. The definition itself could be interpreted variously, as meaning either a letter-for-letter operation or a phonetic operation. In the first case the meaning would be that which is attached to the term today, in the second case it would rather indicate an operation based on phonetic principles, ie. transcription.

1. The Century Dictionary and Cyclopedia, N.Y., The Century Co., 1900.

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Indeed, it was transcription that was used during the long centuries as a mean of inter-alphabetic operations, for bibliographic and non-bibliographic purposes. But, as transcription can satisfy many literary needs as well as many everyday necessities, it certainly cannot satisfy bibliographic or documentary needs. Being dependent upon an unstable factor (pronunciation) it cannot achieve the precision and exactness, the chief postulates of bibliographic notation. Therefore, it cannot be regarded as a safe guide for bibliographic purposes, and this exactness can better be achieved by another operation based on more stable foundation, i.e. transliteration.

Transliteration, as compared with transcription, has different reasons and different objectives. It does not attempt to write down foreign speech in our alphabet. The transliterator's purpose is to give an exact and accurate account, in letters of his own alphabet, of what has been written in a foreign alphabet, (in an alphabet of a different genealogical basis), in a foreign spelling, while disregarding any phonetic inadequacies that this operation may entail. Thus, transliteration does not take into account the orthoepic equation, but only the orthographic equation. And this is the main difference between these two operations.

The guiding principle of transliteration is to "write what you see, and not what you hear". To be sure, this is a principle that simply cannot be applied to all languages. It is valid only in connection with the languages which, in their graphic representation,

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have symbols for both consonants and vowels, as essential components of words. In the case of Hebrew, for instance, which was written without vowels, it would not be sensible to transliterate - thus producing Roman alphabetic text consisting of consonants, and therefore unpronounceable as far as the general reader is concerned. Nevertheless, the National Union Catalog under the Romanized Hebrew titles uses a "title transliterated" designation, although the titles are actually transcribed and not transliterated.

Transliteration thus conceived is very close to the practical transcription and many dictionaries when defining these two terms do not make any significant difference. The same type of definition is also reflected by the ALA Codes (both of 1941 and of 1949) which define transliteration as: "A representation of the characters of one alphabet by those of another"¹. The Anglo-American practice of transliterating is exactly the one indicated in this definition. There is no reference to the letter-for-letter, or one-letter-for-one-letter postulate demanded in recent years. The definition is carefully worded, and since it does not bind itself to the letter-for-letter principle (although this principle was in 1949 clearly stated), it admits digraphs or polygraphs (sh, zh, ch, shch) whenever the need for them arises. This procedure of admitting digraphs or polygraphs as equivalents for a single foreign letter is not in accord with the stricter recent definitions of transliteration.

1. A.L.A. Catalog Rules, Chicago, 1941, p. xxxi; also A.L.A. Cataloging Rules for Author and Title Entries, 2d ed., Chicago, 1949, p. 243.

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Not until after the war was the problem of the strict distinction between transliteration and practical transcription under discussion. Alois Sevcik is usually credited for being first to present clearly the distinction between transcription and transliteration in his paper presented to the Seventeenth International Conference on Documentation at Berne in 1947, and again in 1948 at the Hague conference of the Technical Committee 46 of the International Organization for Standardization (ISO TC/46)¹.

It does not mean that the difference between transliteration and transcription was not known before. However, it was not long ago that the consequences have been clearly realized. According to Ševčík's concept of transliteration "each letter should be accounted for by one sign and one only, with the minimum number of diacritical signs"². This was a new contribution to the definition of transliteration, and this view has been approved by ISO.

In 1955 ISO published its system for the transliteration of Cyrillic characters, and in the introductory note to this system the general principles of transliteration have been stated. The basic points of these "principles" are the following:

1. Transliteration is the operation by which the characters or signs of one alphabet are represented by those of another.

1. Francis L. Kent, "International Progress in Transliteration", in Unesco Bulletin for Libraries, vol. 10, May-June 1956, p. 132-137.

2. F. L. Kent, loc. cit., p. 133.

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2. It is a question of representing characters or signs, and not sounds; of how they are written and not how they are pronounced. This aspect is the main thing that distinguishes transcription from transliteration.
3. Transliteration is a bilateral operation, i.e. the operation of representing the characters or signs of any one alphabet by those of any other.
4. Each character or sign should always be transliterated in the same way (consistently) and, as a rule, a single character in one alphabet should always be replaced by a single character of the other alphabet.
5. Diacritics may be used, but as little as possible¹.

The principles of ISO are clear and actually do not need any explanation. One may observe only that the real sense of the modern definition of transliteration is identity, that is, the principle of one-to-one correspondence between two different scripts. These principles have been further developed and interpreted by such authorities as Francis Kent, R. Frontard, Jean Poulain, and others, but they do not bring in anything new as regards the meaning and concept of transliteration. Whatever definition or modern interpretation of this operation we take, one thing is certain: transliteration does not deal with sounds, it deals with the letters by which these sounds are represented. Here, however, one remark must be made. Transcription and transliteration both have a single common basis: namely, the word.

1. International Organization for Standardization, ISO Recommendation R9; International System for the Transliteration of Cyrillic Characters, 1st ed., Geneva, 1955.

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A word, when spoken or read, is represented by certain sounds; when written, it is represented by certain letters or symbols. Transcription has regard to pronunciation, transliteration to the graphic representation of pronunciation. Thus, transliteration is not the opposite of transcription, but a particular kind of transcription.

In theory it makes no difference what symbols or which symbols are used to write the word, but in practice it does. Certain sounds, by long tradition, are closely associated with certain symbols, and vice versa. Therefore, in choosing transliteration symbols one cannot proceed according to personal whim, without any regard for the long established national or local alphabetic traditions.

Shcherba, dealing with some theoretical problems of transliteration, says (and this is worth remembering) that "letters should not become hieroglyphics, and it is undesirable to assign to them functions conflicting with those which the letters in question have in international acceptance"¹ This condition of "international acceptance" could also be extended, at least to a certain degree, to "national acceptance". When a certain letter, for instance g, in a certain alphabet is associated with the sound it actually expresses, it cannot be assigned the function of expressing the sound h, or vice versa.

1. L. V. Shcherba, *Izbrannye raboty po iazykoznaniiu i fonetike*, Leningrad, Izd-vo Leningradskogo universiteta, 1958, vol. 1, p. 173.

Among statements (or principles) of ISO there is one which actually does not bear any reference to the nature and meaning of transliteration, but which is too important as to be omitted. It is the idea of "automatic" transliteration. The Introductory note says exactly:

Transliteration can, and should, be automatic, so that it can be done by anyone able to identify the language of the original; and it should be possible for anyone with an adequate knowledge of the language to re-establish the text in its original characters¹.

First of all, this statement has in it some degree of contradiction. If it is enough just to "identify" the language in order to be able to transliterate, one may wonder why in order to re-transliterate (the reverse operation) an "adequate knowledge" of that language is required. If the operation can be performed mechanically in one way, why the same cannot be done in another (reverse) way, using the same tables, and having just "identified" the language into which the re-transliteration should be done? In other words: if the mechanical transliteration is so easy and so safe in one way (Romanization), where does the difficulty originate that the reverse process cannot be done under the same conditions (identification of the language in question)? But this is not the focal point of interest. More important is the meaning and interpretation of the word "original". If by the term

1. International Organization for Standardization. ISO Recommendation R9, loc. c., p.4.

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"original" we understand the text we are transliterating from (i.e. disregarding the fact that the text might be translation from a primary source) then certainly an automatic operation of transliteration is feasible. But if this term "original" means a primary original source, then one is likely to encounter some difficulties. If a text is translated from a Roman-alphabetic language into a Cyrillic-alphabetic language, then the Cyrillic text would be an original as far as the transliterator is concerned. The retransliteration of this second-hand original would produce, in many cases, something that no one would recognize in terms of the real original text. For instance, the Czech writer Jiri Hanzelka's name if translated into Russian and retransliterated "automatically" will come out as "Irzhi Ganzelka". And this certainly is not in the interests of bibliographic exactness and precision. Neither will it be in accord with the chief idea of transliteration.

Otherwise the principles of ISO are theoretically acceptable. How far they may in practice be accepted is another question. Reformatskii, for instance, does not think that the "mechanical substitution" of letters of one (foreign) alphabet for those of another should be considered as an essential attribute of transliteration, nor that such a solution is ideal¹. The theory might be right, but when converted into practice it might turn out to be rather "unpractical".

1. A. A. Reformatskii, "Transliterated russkikh tekstov latinskimi bukvami", in Voprosy iazykoznaia, Moskva, Akademiia nauk SSSR, Institut iazykoznaia, 1960, vol. 5, p. 97.

The fact is that the principles underlying numerous transliteration systems ("national" systems) vary greatly. The main trouble is that these principles endeavor to satisfy both the requirements of bibliographic exactness and the phonetic requirements of a given language. These two purposes, however, cannot simultaneously be achieved at least not in all cases. They might be achieved to some degree in national bibliographies and for national needs. In international notation the phonetic aspects must yield to bibliographic precision.

2. BIBLIOGRAPHIC IMPORTANCE OF TRANSLITERATION

The flag-bearers of transliteration uniformity usually start their arguments with a "parade of names", to show how differently names may be spelled in different Roman-alphabetic languages. Sometimes the discordance is striking.

However, bibliographic interests are not limited to names only, personal or geographic, but include also titles, imprints, and foreign texts in general. The wrongly transliterated title presents the same search difficulties as the wrongly transliterated name. But names, from the bibliographic point of view, are of primary importance. The same discordance will occur everywhere, in transliterated titles, in imprints and in many other cases (e.g. quotations), but it is in names that the discordance is most impressive.

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One may find, for instance, the Arabic name Fakr al'Din (according to B.M.) occurring in the following forms:

Fachr ed-din, Fakhr ul-Din, Faccardin, Fekherdin,
Faccardine, Fekkerdin, Facardin, Fakhruddin, Fakroddin,
Fechrredin, Fakkardin, etc.

To be sure, the difficulty here is that this is an Arabic name, differently pronounced and differently written even by the Arabs themselves.

Slavic names are less complicated than Arabic, and in the Cyrillic alphabets they are written constantly in the same way. But what a difference there is in the Roman-alphabetic transliteration!

Take for example the names of two Russian writers:

Pouchkine	(Fr.)	Chekhov	(Engl.)
Puschkin	(Germ.)	Čechov	(Czech.)
Puszkín	(Pol.)	Tschechoff, or	
Puskin	(Hung.)	Tchecchow	(Germ.)
Poesjkin	(Dutch)	Czechow	(Pol.)
Pushkin	(Engl.)	Tchekhov	(Fr.)
Pusjkin	(Swed.)	Cècof	(Ital.)
Pouskin	(Greek)	Chejov	(Span.)
Puschkine	(Ital.)		

In each case these names have been written according to a definite system of transliteration. It would not take much to find "Pushkin" in any foreign encyclopedia, biographic dictionary or bibliography, since the initial consonant remains unchanged. But "Chekhov" might be more difficult to locate in a Polish or Spanish or a German reference work, because of the variation of the initial.

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We should experience the same thing with a name like "Zoshchenko". The dental z-sound, and the following sibilants, are not sounds common to all Roman-alphabetic languages. Therefore, in transliteration they will be replaced by whatever letters or letter combinations are most closely associated with these sounds. Thus we should have the following forms:

Zoščenko (Czech), Soschtschenko (German), Zochtchenko (French), Zoszczenko (Polish), and so forth.

It is laid down that transliteration deals not with sounds but with letters. True; but the letters from which the process of transliteration starts are representative of sounds, and the choice of the substituent letters in the transliteration has to take this into account, in one measure or other.

Moreover, each national Roman alphabet offers its own particular choice of possible substituents. The following table shows how differently certain Cyrillic letters may be (and usually are) transliterated according to various national systems:

Ж	ž,	ž,	sh,	sch,	zh,	j
Х	h,	ch,	kh,	x		
Ц	c,	z,	ts,	cs		
Ч	č,	cz,	tsch	ch,	tch	
Ш	š,	sz,	sch,	sh,	ch	
Щ	šč,	szcz,	schtsch,	shch,	chtch	

It is evident that whenever a name is written in Cyrillic with one of these consonants as initial, it becomes most difficult to locate it in bibliographies or other reference works, in which different

(national) transliteration systems are used. Nobody can blame the systems themselves, since they have been designed for national and not for international use. For national use they may be well adapted and efficient. A Frenchman, for instance, may easily find (or may not) in the same alphabetic sequence the names of the Czech writer Svatopluk Čech (spelled in Larousse du XX^e siècle: Tchekkh), and the Russian Tcherbatchev, although the name "Shcherbachev" begins with quite a different initial than the name Čech.

Nevertheless, the disadvantages of a variety of national systems, from the bibliographic point of view, are indisputable. They might have been tolerated fifty years ago, when the international exchange of printed materials was insignificant. Today, when the circulation of books, periodicals, magazines, documents, educational and informational material has taken on such proportions, the problem of bibliographic access becomes very serious.

For the purpose of bibliography and documentation it is of minor importance how a word is pronounced, but it is important how it is written. How, for instance, would it be possible for a library to handle foreign books efficiently, to select and to acquire them, to file and interfile catalogue cards, if ten or more alphabets or transliteration systems have to be used? The same applies to the compiling of bibliographies, booksellers' catalogues, indexes, abstracts and reference tools in general. A transliteration system, to be effective and accurate, should follow as far as possible the original spelling and not conform to pronunciation. The ear is not a reliable, nor a precise,

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determinator of names.

The reproduction of foreign names presents essentially the same difficulties for the Cyrillic-alphabetic nations as for the Roman-alphabetic nations. When using Russian, Ukrainian, Bulgarian, Serbian or other Cyrillic-written sources, bibliographies, gazetteers, biographical dictionaries or other works of reference, one might find it difficult to locate such authors as Hugo, Musset, Buckle, or Galsworthy. These names would certainly be listed, but where? The following example¹ will show:

Hugo	Musset	Buckle	Galsworthy
(Russ.)	Мюссе	Бокл (Russ.)	Голсуорти
(Ukr.)	Мюссе	Бокль (Ukr.)	Гольсуерти
(Serb.)	Миссе	Бькл (Serb.)	Голзворди
(Bulg.)	Мюсе	Бекл (Bulg.)	Голсуѡрти

And here is one more example of the modern Greek handling of Roman-alphabetic names:

Bergk	"Mpergk"
Burke	"Mperk"
Bourget	"Mpoursè"
Draskovic	"Ntraskobits"
Duchesne	"Ntysen ² "

1. A. V. Superanskaia, "Slovari russkoi transkriptsii inoiaznykh sobstvennykh imen, in *Leksikograficheskii sbornik*, Moskva, Gos. izd-vo inostrannykh i natsional'nykh slovarei, 1960, p. 120

2. Examples taken from S. Juric, "Transkripcijske metode i bibliotekarstvo", in *Vestnik Bibliotekara Hrvatske*, vol. 1, p. 109-118, 1950.

Such a "transliteration" of foreign names might be satisfactory for those initiated into the mysteries of local or national pronunciation and graphic representation, but for international use, tools using a system of transliteration such as this, would be of little (if any) use.

Roman-alphabetic names transliterated into Cyrillic present greater difficulty than vice versa. Cyrillic writing, with few exceptions, is a phonetic writing. Each word is written as it is pronounced and the association of letters with sounds is stable. Transliterating the name "Shakespeare" into Ukrainian or Russian would produce something hardly recognizable. a form nowhere found in literary or documentary works. To understand such a transliteration at all, people would have to know how the word was spelled in English. But it would be too long and too hard, via foreign original spelling, to reconstruct the transliterated spelling in a domestic alphabet. This might be the reason that some Slavic linguists are not willing to interpret transliteration as a "mechanical" conversion of different alphabets¹.

Kent complains² that Russians dealing with foreign names do not transliterate them (as, for instance, in the "Referativnyi Zhurnal"), but transcribe them phonetically. Thus instead of Darmois they write "Darmua", for Guillaud they write "Gijo", and for Rousset - "Russe".

1. L. V. Shcherba, "Transkriptsia inostrannykh slov i sobstvennykh imen i familii", in Trudy Komissii po russkomu iazyku, Leningrad, Akademiia nauk SSSR, 1931, vol. 1, p. 191.

2. F. L. Kent, loc. cit., p. 133.

This looks strange to people accustomed to using the Roman alphabet, and from bibliographical point of view, certainly very inconvenient, but to readers of Cyrillic it does not. The latter are accustomed to associate spelling very closely with phonation. If it were demanded that they "overcome this strange habit", they would not find it as easy as it is for Englishmen, who are accustomed to a universally non-phonetic spelling - whose motto indeed seems to be "never ^{write} what you pronounce".

Nevertheless, if one wishes to consider the possibilities of bibliographic uniformity, then Kent's complaint has some justification. From the point of view of bibliographic precision and accuracy, a uniform, international system generally accepted could render a service that would make some phonetic sacrifices worthwhile.

Librarians have long ago recognized this, and in many countries they have striven to solve the problem according to their best understanding. Such uniformity is indeed important not only in the bibliographic field and for purely bibliographic (cataloguing, indexing, abstracting) purposes; it is just as important in other documentary fields, that is, for such non-bibliographic uses as in various sorts of registers, address books, catalogues and trade or industrial indexes. Also for official purposes (in passport offices, for instance) the uniform transliteration would be much better than a number of various national systems.

In the end, the international co-operation in the fields of education and science, as well as publication activity of international bodies, organizations, societies, agencies, etc., especially in preparing

bibliographic tools would probably be unattainable today. If one takes only the publications of UN and its Agencies, of Unesco, or of other cultural international organizations, he would realize that without one generally accepted system of transliteration for foreign scripts, no tools of universal character and general utility could be prepared.

3. ALA ATTEMPTS AT SYSTEMATIZATION

American librarians may rightly be given credit as real pioneers in the field of transliteration. Melvil Dewey, in discussion at the Lake George Conference (1885) said that he

... moved two years ago that this Committee be appointed, because I wished a set of rules for my own cataloguers, and was disheartened with the diversity of practice¹

This was probably the first time that the transliteration problem was discussed on an ALA forum. The conference, under the presidency of Cutter, discussed three schemes of transliteration: from the Semitic languages, from Sanskrit, and from Russian. But it is not the schemes as such that are important. If one takes, for instance, the scheme advanced for Russian and compares it with schemes in use today, there will be quite remarkable differences. What is important is the approach, and the understanding of the problem's urgency.

1. "Report of the A.L.A. Transliteration Committee, 1885", in Library Journal, vol. 10, p. 302-309, 1885.

Actually the ALA pioneers' views on transliteration were not very different from those that librarians hold today. Cutter, reporting on three schemes submitted by C. Toy, by Ch. R. Lanman of Harvard, and by L. Heilprin, added a few remarks of his own. He suggested that transliteration principles, as far as the library catalogue is concerned must be some kind of compromise between the

... claims of learning and logic on one hand,
and of ignorance, error, and custom on the
other¹.

He thought the catalogue must be set up and continued in such a way that it would serve not only for the present but also for the future. The future in question might however, not extend "beyond the next generation", because "the future is very uncertain".

The founders of the ALA system were very careful about assuming a permanence of contemporary trends in transliteration. They were not quite clear as to whether transliteration should be a "letter-for-letter" process, or whether it should involve a combination of phonetic and etymological principles. Foreign words, for instance, they preferred to see Romanized, and on International Latin rather than "English" phonetic principles (thus Butan, not Bootan or Boutan; Turgenef, not Toorgeneff or Tourgeneff, and so forth). In general, the ALA seems to have been strongly influenced by the practice of the Royal Geographic Society in Romanizing foreign names. For instance,

1. Ibid.

it was decided to adopt the continental values of vowels, instead of English values:

- u - as in rule
- a - as in father
- i - as in machine
- o - as in mote
- e - as in met or as in moiré

Most interesting are the remarks concerning diphthongs or more complicated sounds. Thus:

- ch - The consonantal sound of ch in cheap should never be expressed in transliteration by Polish cz, or by the German tsch. This is certainly a sound and just principle, but why eighty years later there are still combinations in use such as: Czech, czar, czaritsa, etc., is beyond one's comprehension.
- j - The consonantal sound of j as in judge should not be rendered by the English dg, nor French dj, nor German dsch, but by j alone.
- zh - The sound of French j should be rendered by zh.
- tz, ts - The diagraph tz is to be used for the ts-phoneme of Semitic and Slavic, and ts for the same purpose in Japanese and Chinese.

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- y - For the Semitic "yod" the symbol y should be used, and not the German j. An exception should be made when the yod follows a consonant in the same syllable; in Russian names ai, ei, oi, ui, are to be used instead of ay, oy, ey, uy (e.g. Aleksei, not Aleksey).
- w, v - W is to be used in Arabic names (e.g. Moawiyah), but not in Slavic names, where v is recommended (e.g. Paskevich).
- v, f - In Russian place-names ending in ov, ev, the v is retained, but in family names it is replaced by f or ff (thus -of, -off, -ef, -eff).
- kh - Kh should be used for the guttural affricate in Slavic and Oriental names; not the German ch nor the Spanish j.
- ei Other permitted combinations were:
- ai
- ei ei - for the sound of a as in fate
- ea ea - for the sound of ea as in great
- ai ai - for the sound ai as in trait

As a general rule it was suggested that consonants be used with the values they have in English, and vowels with the values as they have in Italian.

But the Conference did not reach unanimous agreement. All the speakers in the discussion favoured "letters rather than sounds as the better basis for the Committee to use in making its code of rules". However, when Melvil Dewey moved that practice should be "to transliterate letters" and not to transcribe sounds, he was forced to withdraw this motion because of the opposition of Poole. Poole thought that the problem was too important to permit voting "on a matter like that" without longer study and preparation¹. Thus, the problem of transliteration was not definitely settled for a long time. Subsequent ALA conferences again and again reverted to this matter. Of special interest would be the Chautauqua Conference held in August 1898. W. C. Lane of Harvard University spoke of the necessity of revising the system of transliteration for "Russian names". Lane complained on the practice in American libraries, because when transliterating, for instance, Serbian (Cyrillic alphabet) "libraries are etymological, but when they turn to Russian they attempt a hybrid mixture of the two methods", i.e. etymological and phonetic methods of transliteration².

1. Ibid., p. 309: This "Report of the A.L.A. Transliteration Committee" has also been reprinted in the "Catalog Rules, author and title entries" (Anglo-American), Chicago, ALA, 1908, p. 65-73 (in abbreviated form), as well as in Ch. A. Cutter, Rules for a Dictionary Catalog, Washington, GPO, 1904, p. 147-154.

2. Library Journal, vol. 23, p. 174.

The conference held in Montreal in 1900 accepted a general scheme for "Slavic transliteration", and approved the Leskien scheme for Old Bulgarian¹.

Transliteration has its place in early American codes. Dewey, in his "Condensed Rules for a Card Catalog" (1886), makes special provision for transliteration procedure². The later codes of 1908, 1941 and 1949, as also the "Additions and Changes" of 1949-58, likewise include rules and tables of transliteration³.

The Library of Congress Rules, except for the addition of some rules for points not covered by the ALA Code (e.g., for imprints), adopted the ALA transliteration rules and schemes.

1. Catalog Rules (Anglo-American), op. cit., p. 72.

2. Library Notes, vol. 1, p. 112-131, October 1886; p. 118: "transliterate by ALA rules, titles in foreign characters, except Greek".

3. Catalog Rules (Anglo-American) 1908, op. cit.: art. 42, 141, and the Appendix 2, with Tables for Semitic, Sanskrit, Slavic, Serbo-Croatian, Russian, Modern Greek, p. 65-73;

ALA Catalog Rules, 1941, op. cit.: art. 58b, 231; also Part IV. Transliteration with Tables for: Russian, Ukrainian, White Russian, Bulgarian, Serbian, Modern Greek, Semitic (Arabic and Hebrew), Syriac and Ethiopic; The ALA Catalog Rules, 1949, has the following on transliteration: art. 45B, 70B, and Part IV. Transliteration, with the Tables for the same languages as in 1941 Code, except Syriac and Ethiopic, but Yiddish added. - "Additions and Changes, 1949-1958", Appendix IV. (Transliteration) provides Tables for Arabic and Armenian; for Romanization of Chinese and Japanese; references for Korean and Thai, (p. 38-57);

Ch. A. Cutter, Rules for a Dictionary Catalog, op. cit.: art. 35, 36, 37, 38, 39, 248; also p. 147-154.

Library of Congress, Rules for Descriptive Cataloging. Washington, The Library of Congress, 1949, 2:14, 3:41, 3:139, 3:140, 8:6.

During the early period of transliteration systematization, the greatest attention was devoted to the transliteration of Cyrillic alphabets, especially the Russian. The above-mentioned Chautauqua Conference of 1898 is probably one of the important events in this regard. Lane, criticising "a mingling of etymological and phonetic spelling", suggested at this time the use, for cataloguing purposes, of the system adopted by Jagic in his "Archiv für slavische Philologie", with some slight modifications¹. But it was about ten years before a definite decision was taken at the Montreal Conference.

Although not all large libraries on this continent have adopted the ALA scheme of transliteration, this in no way diminishes its (ALA) merits in the field of uniformity of transliteration.

4. PROVISIONS FOR TRANSLITERATION IN EUROPEAN CODES

Perhaps the most important of European codes, from the point of view of its impact on other continental codes, was that known as the "Prussian Instructions" (1899)².

1. Instruktionen für die alphabetischen Kataloge der preussischen Bibliotheken. Vom 10 Mai 1899; This code, originally compiled by K. Dziatko for Breslau University Library and based on the earlier Munich Code (1850) was regarded as "epoch-making". - In this work use has been made of:

Andrew D. Osborn, The Prussian Instructions, Ann Arbor, The University of Michigan Press, 1938.

2. The following Codes were in use in larger German libraries: Munich (ca 1850), Breslau (1886), Cologne (1886), Halle (1888), Berlin (1890, 1892, 1899, 1908), Karlsruhe (1893), Kassel (1893), Wolfenbittel (1893), Freiburg (1900), Stuttgart (1902-11), Munich (1905, 1911, 1922), Strassburg (1911), Frankfurt (1913). - Cit. after A.D. Osborn, op cit, p. xiv.

It was not the earliest German code, because there were about a dozen of them associated with the larger libraries in Germany, some dating from as early as 1850.

But the Prussian Instructions were the best of them all, and after simplification in 1908 they exercised a great influence on the codification of cataloguing rules in other European countries. Thus, the codes of Hungary, Sweden, Switzerland, Austria, as well as those of Denmark, Holland and Norway, were all more or less influenced by the Prussian Instructions. The Prussian code was extended in 1935 to the whole of Germany and Austria. It has the following provisions with regard to foreign names or scripts:

- art. 4:1 - The title is entered in Roman characters, even if it is printed in German characters. Greek script is transcribed from the copy.
- 4:2 - Every other kind of writing is transliterated according to the appended scheme (Appendix II), and the designation of the kind of writing precedes the transliteration.
- 22:2 - This article rules on the variations in the "national" Roman alphabets, especially as regards umlauts (German and Swedish), on other variant practice in Dutch, Old Norse, Old and Middle English, and on Greek characters. Greek diphthongs should be rendered by the corresponding diphthongs in Latin (au, eu, but u); initial r or rr should be rendered by rh or rrh respectively. The guttural g (gamma) preceding other gutturals should be transliterated by n; the spiritus asper by h, iota subscript and iota adscript should be omitted entirely.
- 130 - If a name appears transformed according to the laws of a foreign language, the original form of the name becomes the entry word; reference is made from the altered form if necessary.

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These rules, especially art. 130, seem to be clearer and more definite than the corresponding rules in the ALA Code of 1949 (e.g. art. 36 "general rule" with its possible exceptions as in art. 40, 44, 45). It also is more sensible with regard to "transformed names" than the "automatic" provision of ISO.

The transliterated forms of names are also dealt with in articles 163 and 164. Article 163 rules that whenever

... the given transliteration of a name does not agree with the rules drawn up in Appendix II, then the form of the name established according to these rules becomes the entry word ...
(e.g. not Ouvaroff, but Uvarov)

And article 164 states:

If the name of an author appears carried over into a language whose alphabet has to be transliterated, the original name becomes the entry word; as a rule a reference is made from the form of the name to be established according to the rules for transliteration only when the author himself has written in that language.

This last is an interesting rule (and a sound one) which, if applied, would eliminate a lot of confusion in entering foreign names, and every "automatist" should take note of it.

The Code provides Tables for transliteration of the following languages or scripts: Russian, Ukrainian, Old Bulgarian, Modern Bulgarian, Serbian, Wallachian, Sanskrit, Arabic, Persian, Turkish, Hindustani, Malay, Hebrew, Syriac, Ethiopic, Coptic, Armenian, Georgian. In transliterating Cyrillic, the scheme admits a few diacritics and digraphs (ch, sc, ju, ja, etc.)

The French code, which reflects the practice of the "Catalogue Général", also has special provisions for foreign names and scripts (noms anciens, latinisés, modernes), embodied in Article 167-169, and in a special chapter (11) on "Ouvrages imprimés en caractères particuliers". The said chapter deals with European, Asiatic, and other non-Roman characters (articles 222-244)¹. It does not include tables of transliteration, but refers the reader to the practice of the "Ecole des Langues Orientales" or to other sources in each particular language.

The second French code, prepared by the Association des Bibliothécaires Français, rules that all foreign scripts except the Greek should be rendered "en écriture latine" (art. 10). Although it has some rules on the differences exhibited by the "national" Roman alphabets (e.g. articles 52 and 107) and on entries for foreign authors (Arabic, Persian, Turkish, Indic, Hebrew, and so forth) it fails to provide transliteration tables².

In the British Museum Rules it is worthwhile to mention article 9, concerning foreign names and umlauts (foreign names are also dealt with in other special articles: 6, 7, 10, 40, etc.). Article 41

1. Usages suivis dans la rédaction du Catalogue Général des Livres Imprimés, par E. G. Ledos, nouv. ed. par Armand Rastoul, Paris, Bibliothèque Nationale, 1940.

2. Règles et Usages observés dans les principales bibliothèques de Paris pour la rédaction et le classement des Catalogues d'auteurs et d'anonymes, Paris, 1912. (Extrait de la "Revue des Bibliothèques", no 4-6, avril-juin, 1913).

contains schemes for transliteration of the following alphabets: Cyrillic (Bulgarian, Russian, Ukrainian, Serbo-Croatian) and Modern Greek. It is interesting that the schemes for Ukrainian and Russian do not use diacritics, but admit digraphs and polygraphs (zh, kh, ts, ch, sh, shch, etc.)¹.

The last example is the Vatican code. This is indeed an important piece of work. According to statements of American librarians it is "perhaps the best of modern cataloguing codes, and one which goes far to reconcile European and American practice"². A comprehensive work (490 articles in 39 chapters), it has the following articles on transliteration:

- 46 - Foreign names should be latinized (transliterated) according to the rules for transliteration (Appendix IV). If any other form of name is found, the form that should be accepted, as entry word, is that resulting from the rules for transliteration.
- 46:d - Transliterated names in foreign languages are in all cases restored to the original forms.
This ruling (like the pertinent rule in the Prussian Instructions) is the only just and logical decision as regards dealing with foreign names.
- 298 - This article deals with the "transliteration" of Roman numerals, and of other older symbols, into Arabic numerals.

1. Rules for compiling the catalogues of printed books, maps and music in the British Museum, rev. ed., London, 1936.

2. W. W. Bishop. "J. C. M. Hanson and International Cataloging" in Library Quarterly, vol. 4, p. 165-168, April 1934.

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- 475 - Titles in non-Roman alphabets are filed as though they were transliterated into Roman characters (e.g. Greek: Katalogos).

Appendix IV contains Tables for the following languages: Arabic, Persian, Turkish, Armenian, Coptic, Ethiopic, Gaelic, Greek, Hebrew, Slavic languages (one Table with "Special characters" found in Church Slavic, Bulgarian, Serbian, Ukrainian, Croatian), Syriac. For Cyrillic ("Slavic" languages) it uses a few digraphs, diacritics, and ties. With few exceptions it follows the Croatian style of transliterating Cyrillics¹.

5. INTERNATIONAL CO-OPERATION

As the first attempt at international standardization one might take the Anglo-American Code of 1908, which provided rules of transliteration for the English-speaking world. At this time a cooperative effort was not too difficult, since only transliteration into the English was envisaged.

But even in the English-speaking world the provisions of the Code did not find unanimous approval and acceptance. Many great libraries in both countries continued to follow the old, earlier established systems (as they still do today). Cooperation on a larger scale began late in the 1920's, initiated by the "Institut International de Coopération Intellectuelle".

1. The Vatican Library, Rules for the Catalog of Printed Books; translated from the Second Italian Edition by Thomas J. Shanahan (and others), edited by Wyllis E. Wright, Chicago, ALA, 1948.

This Institute was established by the League of Nations in 1925 (succeeding the previous Committee on Intellectual Cooperation, 1921), with the aim of promoting education and mutual understanding.

In 1929, at its Eleventh Session, the Institute discussed extensively the possibility of the Roman alphabet's being accepted by all nations of the world, and published in this connection a very valuable book¹.

Similar movements in the 1920's could be observed in other countries also, namely in the USSR, in China, and in Turkey. At its Fifteenth Session, in July 1933, the IICI Conference passed a new resolution on "l'adoption universelle des caractères latins"². The time, however, was probably not yet ripe for the universal acceptance of Latin characters, and the "Roman-alphabetic" enthusiasm of the 1920's slowly cooled.

It was another international organization, the "International Federation of National Standardizing Associations" (known as ISA and organized in 1928) that took charge of the problem. The Technical Committee of the ISA prepared in 1939 a project for international transliteration, but this project, because of the outbreak of war, was not

1. Institut International de Coopération Intellectuelle, l'Adoption universelle des caractères latins, Paris, 1934.

2. Ibid., p. 193.

carried out¹. The agenda of ISA were taken over by a new international organization founded after the war (1946), the "International Organization for Standardization" (ISO).

As an international union of national standards associations with a membership of twenty-five participating countries, the organization was created to promote "mutual cooperation in the sphere of intellectual, scientific, technological, and economic activity". The Technical Committee of ISO (ISO/TC 46) at its first meeting, held in The Hague on June 17-19, 1948, discussed a number of questions regarding standardization and raised the question of transliteration. It was agreed unanimously to recommend, with some slight modifications, the adoption of ISA project No. 7 for transliteration of the Cyrillic alphabets - prepared, as mentioned above, by the ISA with the help and cooperation of the Italian slavist Damiani².

1. Fédération Internationale de Documentation (F.I.D.), Communications, vol. 6, p. 9, 111, 113, 1936; and vol. 7, p. 62, 1940.

A. Sevcik, La Translittération, in Revue de la Documentation, vol. 14, p. 21-22, 1940.

2. E. Damiani was very prolific in the field of transliteration, and his works, especially on the transliteration of Cyrillics, are of primary importance. His most important works in this regard are:

--- "Sulla questione della trascrizione dei caratteri cirillici in caratteri latini e vice versa" in Rivista italo-bulgara di letteratura, storia, arte; vol. 6, 1936.

--- "Sur l'état actuel des systèmes de transcription des noms slaves cyrilliques dans la documentation bibliographique" in F. I. D., Transactions, vol. 14, p. 245-248, 1938.

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This time the preparation of the modified project was entrusted to A. Sevcik, a Czech documentalist. At the same session the sub-committee passed the following resolution:

The sub-committee recommends that, if so desired, each national standards association supplements the international system with a phonetic system appropriate to its own language, and that one suitable system would be that now widely used in the United States of America, which agrees closely with the system of the Russian standard OST/VKS 8483¹.

Interesting in this resolution is that the position taken by the members of the sub-committee with regard to a uniform standard of transliteration was rather liberal. It admits, besides the international transliteration system, as a supplementary aid, national phonetic systems, the basis of which is actually transcription.

The ISO Technical Committee 46 and its Working Committee No. 2 (Transliteration of Cyrillic characters) dealt again with the problem at the Ascona Conference, April 28-30, 1950, and in Rome, September 1951.

At the Ascona meeting a paper submitted by the British Standard Institution (BSI) was accepted, which after certain modifications constituted the draft to be approved by ISO. This draft was finally accepted by ISO Technical Committee at the Brussels Conference, and

1. Ir. M. Verhoef, "International Standardization and Documentation", in Revue de la Documentation, vol. 16, p. 51-53, 1949.

approved by the ISO Council in Geneva in September 1954 as ISO/R9 "International System for the Transliteration of Cyrillic Characters"¹.

It is also worth mentioning that the problem of transliteration was discussed with great interest by the F.I.D. Conférence Internationale de Documentation in Berne, August 1947. It was here, at this Conference that the Czech representative Ševčík spoke of the urgent need for one generally accepted system of transliterating Cyrillic alphabets, which, he thought, should be the one prepared in 1939 by ISA².

This was certainly encouragement for ISO to go ahead with its proposals. By the end of 1963, the ISO Technical Committee had prepared or published a few more schemes of transliteration. They are:

- R 233 - International System for transliteration of Arabic characters, 1961.
- R 259 - Transliteration of Hebrew, 1962.
- DR 315 - (2d draft) Transliteration of Greek into Latin characters, 1963³.

The ISO/R9 scheme did not achieve the universal acceptance that had been expected. Even some members of ISO are reluctant to accept it. This probably was the reason that Technical Committee 46 decided, at the

1. ISO, ISO Recommendation R9, op. cit., p. 3.

2. A. Ševčík, loc. cit., p. 21.

3. F.I.D., News Bulletin, vol. 13, p. 48, December 15, 1963;

M. Rodinson, "Les Principes de la translittération de l'Arabe et la nouvelle norme de l'ISO, in Bulletin des Bibliothèques de France, vol. 9, p. 1-23, janvier 1964.

session in Brussels, October 1963, to review and eventually to revise the scheme¹.

At the present time, ISO is considering Romanization systems for Chinese and Japanese. This is one of the more difficult problems. For the rendering of monosyllabic Chinese the system in use (the modified Wade-Giles) is far from perfect. For Japanese, the Hepburn system has been widely used, in which the consonants are rendered as in English and the vowels as in Italian. But the difficulty is that the Japanese, in the last thirty years, have switched to another system of their own, which they consider a better one - an opinion that the rest of the world is far from sharing. If ISO succeeds in satisfying both sides, it will be a great achievement².

Not quite an achievement of international cooperation, but an achievement whereby the international community can profit, is the publication of two Library of Congress schemes.

The first of these, for the transliteration of Persian, was issued in 1963, and approved by L.C. and ALA³. The second scheme provides Tables for the following Indic or neighbouring languages: Assamese, Bengali, Gujarati, Hindi, Kannada, Malayan, Marathi, Oriya, Panjabi in Gurmukhi script, Sanskrit and Prakrit in the Devanagari script,

1. F.I.D., News Bulletin, loc. cit., p. 48.

2. H. E. Palmer, The Principles of Romanization with special reference to the Romanization of Japanese, Tokyo, 1930.

A. Richter, Z-39 today - its work and its subcommittees, in Special Libraries, vol. 54, p. 107-109, February 1963.

3. Library of Congress, Processing Department, Bulletin, vol. 59, July 1963.

Tamil, Telugu, Urdu in Arabic script, as well as rules of application and rules for the transliteration of some additional symbols¹.

In the last fifteen years, generally speaking, great progress has been made toward the standardizing of transliteration systems. Although the complaints of Jespersen about "la grande diversité des alphabets en usage" have not lost their relevance, there is nevertheless, today, much easier and better access to information than at his time or even a decade ago². This could not have been achieved without a joining of forces and a sincere cooperation.

1. Ibid., February 1964.

2. G. A. Lloyd, A Decade of Standardizing in Documentation, in Journal of Documentation, vol. 15, p. 208-225, December 1959.

3. J. Meyriat, La Normalisation internationale des codes de translittération, in Courrier de la normalisation, no. 155, p. 538-596, September-October 1960.

IFLA, International Conference on Cataloguing Principles, Paris, 9-18 October 1961, Report. London, 1963, p. 109-112.

CHAPTER II

CYRILLIC ALPHABETS

1. A FEW NOTES ON CYRILLIC WRITING

The system of writing used today in countries of Eastern and South Eastern Europe, as well as by many peoples in Asia and Caucasus, originated more than a thousand years ago. Its origin and authorship are not quite clear and are still a controversial matter. Some authors think it was St. Cyril, the apostle to the Slavs, who invented or adapted it to the Old Church Slavonic. Others maintain that Cyrillic writing already existed when he and his brother, St. Methodius, started missionary work among the Slavs¹.

Istrin, in his recently published book², believes that there are good reasons to accept the year 863 as an origin date for this system of writing. According to his findings the Old Cyrillic alphabet, i.e. its oldest version, had thirty-eight letters. During the next century five more letters were added, thus making an alphabet of forty-three symbols.

More than half of this alphabet (twenty-four letters) was taken over from the Greek, while the other letters, nineteen in number, were created independently of the Greek alphabet. By this addition of nineteen letters the Old Cyrillic alphabet became more independent of its

1. I. Ohienko, Povstannia azbuk i literaturnoi movy v slovian, Zhovkva, Vyd. OO. Vasylian, 1938.

2. V. A. Istrin, Tysiacha sto let slavianskoi azbuki, Moskva, Akademiia nauk SSSR, 1963, p. 50.

Greek basis than the western alphabets were of the Roman. It was also better equipped than the Roman alphabet to meet the phonetic needs of the language it served.

Today the Cyrillic alphabet is known and used in two scripts or two type-faces: the Old or Ecclesiastical Cyrillic, and the new or civil Cyrillic. Other terms used in connection with and applied to the Cyrillic writing are: Old Bulgarian (Cutter), Old Bulgarian (Church Slavic), Old Church Slavonic, Old Church Slavonic Cyrillic (Matthews), Classical Cyrillic (Rudnyts'kyi), Old Cyrillic, Church Slavic, Church Slavonic Cyrillic, or simply Cyrillic. Matthews also calls the Old Cyrillic "Paleocyrillic", and the modern form "Neocyrillic"¹. In the present work the Old Cyrillic or Classical Cyrillic is used for the old type of Cyrillic writing, and the term Cyrillic for the type of writing used today.

Over the centuries, this script underwent several changes. When it was originally introduced, its letter forms were based on the Greek uncials, and this type-face, with only partial remodeling, was used until about the fourteenth century. After that, the uncial writing was replaced by the 'lower-case' letters, i.e. by the less monumental form. Some letters fell out of use, as being no longer needed for the rendition of oral speech.

In the eighteenth century the alphabet again underwent a thorough revision (1710, 1735, 1758), many letters being omitted and the

1. W. K. Matthews, The Latinization of Cyrillic Characters, in The Slavonic and East European Review, vol. 30, p. 531-548, 1951-1952.

graphic form simplified. In the end, after the last alphabetic "purge" in 1917, twelve of the original forty-three had been omitted and some new ones added. It must be noted that all these revisions did not result in any essential change of the Cyrillic alphabet. The modern Cyrillic, as used in national alphabets, is only a stylistic variant of the Old Cyrillic, developed and perfected mainly during the last two centuries. With a few exceptions, the graphemes of the modern Cyrillic writing remained almost the same as in Old Cyrillic.

There are about eighteen letters in modern Cyrillic alphabets that either did not occur or had a different meaning in the Old Cyrillic. There are six new letters (or remodelings) in Serbian, five in Russian; the rest are in other Cyrillic alphabets.

In view of these changes, the Old Cyrillic alphabet is today used mainly for the printing of the liturgical books of some Orthodox Churches including the Ukrainian Catholic, and for the reprinting of literary monumenta. The modern or reformed Cyrillic, with slight differences in each "national" alphabet, is used today by the following languages: Bulgarian, Macedonian^d, Moldavian, Russian, Serbian, Ukrainian, White Russian, plus a number of Asiatic and Caucasian languages. Taken all together, about sixty different languages today employ Cyrillic alphabets¹.

In all these sixty Cyrillic alphabets the main stock of graphic

1. R. S. Giliarevskii, *Opredelitel' iazykov mira po pis'mennosti*, 2-e izd., Moskva, Izd-vo Vostochnoi literatury, 1961.

signs is the same, but there are many additions, especially in alphabets for the Asiatic and Caucasian languages, the "Cyrillization" of which started late in the 1930's and has continued after the war. These additions are either remodeled or inverted Cyrillic letters, letter-compounds, and new creations, plus letters with diacritics ... diacritics are heavily used in the alphabets for Asiatic languages.

Of the non-Slavic peoples in Europe, only the Rumanians have used the Cyrillic alphabet. Rumanian Cyrillic lasted until about the middle of the nineteenth century (1860), when it was replaced by a Roman-based alphabet. The alphabetic modifications in Rumanian Cyrillic (alfabetul cirilic) were not the same as in other languages which employed the Cyrillic system of writing. Of the original forty-three letters, only twenty-eight remained by the middle of the nineteenth century when the reform came. Some letters of the Old Cyrillic were discarded as no longer needed for speech purposes, and some were replaced by new ones, characteristic for Rumanian Cyrillic only.

The first attempts to adapt the Old Cyrillic alphabet to the needs of emerging vernacular languages were made in the twelfth century. From that time there has existed a variant of Cyrillic known as "bosan-cica" or "bosanska cirilica", an alphabet used for ecclesiastic purposes in Bosnia and Dalmacia.

Changes on a larger scale in the Old Cyrillic alphabet were initiated in Russia in 1708. Regarded as outdated, this alphabet was replaced by the "grazhdanka", a Cyrillic alphabet more suitable for a living language. The subsequent amendments have adapted it very well

to cover the approximately thirty-nine phonemes of Russian, or the more or less similar number of Ukrainian and White Russian phonemes.

Of all the modern Cyrillic alphabets, it was the Serbian alphabet in which the most far-reaching changes were made. Vuk Karadzic created the new Serbian alphabet in 1818. He omitted twelve letters of the remodeled Old Cyrillic and added six new, specifically Serbian letters or letter combinations. This Serbian alphabet (cirilica) is exactly paralleled in the Croatian Roman-based alphabet (latinica). Therefore the transliteration of Serbian-Cyrillic into Croatian-Roman presents no difficulties.

The Macedonians also accepted the reformed Serbian alphabet and introduced only a few insignificant changes - two letters with diacritics and one new letter. The Bulgarians, after the last reform in 1945, retained in their alphabet thirty letters, and the Moldavians too have the same number.

Today, when the term "Cyrillic alphabet" is encountered (in the sense of the modern Cyrillic writing), it should be understood in a general sense. There is no longer any single Cyrillic alphabet, but a number of separate national alphabets having the same Cyrillic basis. Neither is there a single Slavic or Slavonic alphabet. Unusual and improper is also the term "Serbo-Croatian" (Cyrillic) used by the B.M. Rules in reference to Serbian. There is no such alphabet, since the Croats use Roman letters, in an alphabet of their own, and this indeed is what the table shows. Still less reason is there to categorize all the alphabets which have a common Cyrillic basis as "Russian".

With regard to the term "Slavic alphabet" (Cutter), it may be observed that there are Slavic nations which do not use any "Slavic (Cyrillic) alphabet"; for instance, the Poles, Czechs and Croatians. As to the term "Russian", it is obvious that not all peoples that use the same or a similar alphabet belong to the same nation, and such a "simplification" of the alphabetic terminology is decidedly undesirable. A mistake of this sort may appear to be insignificant, but in fact it creates a confusion, and in the end one does not know what is Cyrillic, what is Slavic or Slavonic, and what is (or is not) Russian. And besides this, if one is to preach terminological precision and reliability of information, then first of all he himself has to be precise.

The literary and scientific production of the nations using the Cyrillic type of writing has aroused increasing interest within the Roman-alphabetic world, especially after the last war. In older transliteration schemes there usually were only two or three Cyrillic alphabets included. After the last war, when scientific and technological publications increased in volume and quality, the interest became still greater, so that more and more Cyrillic alphabets were being transliterated. Aside from the Roman-based alphabets, it is the Cyrillic system of writing that today exhibits the greatest vitality. Over sixty languages, representing about 10% of the world's population, today use a Cyrillic-based alphabet¹.

1. V. A. Istrin, Razvitie pis'ma. Moskva, Izd-vo Akademii nauk SSSR, 1961, p. 367-369.

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2. CYRILLIC AND ROMAN

To render all vowel phonemes the Roman alphabet offers no more than six letters, a number far below the need. To solve the problem of vowel coverage the western alphabets resorted to various diacritics to modify the phonemic significance of particular letters. By the incorporation of diacritical marks into their alphabets, they succeeded, at least partially, in covering the vowel sounds. It is more difficult, though, to meet the consonantal needs, especially in the group of sibilants and affricates. Here particularly it is not easy to harmonize the Cyrillic and Roman alphabets. Sibilants and affricates exist in both Slavic and western languages, but are handled very differently. The Cyrillic alphabet, as compared with its Greek prototype, has significantly extended its stock of letters to provide for these needs, whereas the western alphabets have not extended their stock of letters and have therefore had to resort to rather artificial means. The resulting situation may be illustrated as follows:

Cyrillic	English	French	German	Polish
х	kh	kh	ch	ch
ч	ch	tch	tsch	cz
ш	sh	ch	sch	sz
щ	shch	stch	schtsch	szcz

The Cyrillic alphabet, it is seen, provides a very good coverage for this class of consonants. The western languages, on the other hand, have had to resort to clumsy and inconvenient letter combinations.

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This is the fundamental difference between the Cyrillic and the various national Roman alphabets. These Roman-based alphabets do not have phonetically equivalent letters to be substituted for those of the Cyrillic alphabets, and here lies the chief difficulty of transliterating Cyrillic into Roman.

The same Cyrillic letter Ш is represented in English by the digraph sh, in French by ch, in German by sch, and in Polish by sz. Here we see that the diphthong ch has different phonetic values in French and in English, and is used for different purposes in transliterating. In German the digraph ch has still another value, a value which in English is generally rendered by kh (e.g. in the L.C. transliteration).

The Cyrillic letter x has in French a double equivalent. At times it appears in the guise of the digraph ch (Chmilowsky, Cheops), wherever these words or names are originally so written in Roman characters or so transliterated from other than Cyrillic scripts. In other cases the Cyrillic x will be transliterated by kh (Kharbin, Khar-kov, Kherson).

Similar difficulties occur in many other cases. Using two or more Roman letters for one Cyrillic is not quite in accordance with the "one-letter-for-one-letter" principle, but there is no single system of transliteration which in this regard would be impeccable.

However, it is not digraphs that cause the trouble; it is with polygraphs that one encounters a more complicated situation. The Cyrillic letter Ш will be transliterated in some German systems by a

seven-letter combination (schtsch); in French by five letters (chtch, as in Chtcherbatchev); in English by four letters (shch). Thus it happens that in French encyclopedias names which in the original (Cyrillic) begin with different initials are classed together:

Х,	Херасков	- Cheraskov
Ш,	Шевченко	- Chevtchenko
Щ,	Щедрин	- Chtchedrine

3. INTERALPHABETIC EQUATIONS

With regard to the Old Cyrillic alphabet there are only nineteen letters which are transliterated in the same way in all systems.

They are:

а, б, в, г, д, е, з, и, к, л, м,
н, о, п, р, с, т, у, ф.

All other letters are transliterated variously. Both diacritical marks and letter combinations may be used wherever the Roman alphabet fails to cover the more extensive Cyrillic alphabet. It is worthwhile to note that some systems fail to transliterate certain letters (e.g. the letters jer, and jer'), when it happens that these letters express no particular sound. This certainly is contrary to the basic rule of transliteration (letter-for-letter) since in such case a restitutio ad integrum (re-transliteration) would be impossible.

The most controversial elements in transliteration schemes are probably the equations for the nasals ("jusy"), both major and minor, and for certain original Greek letters. In particular the

letter θ (theta), which in the Russian pronunciation becomes equal to f, is rendered by the Roman digraph th representing the original Greek letter, or by f, or by f with a diacritical sign, or by ph.

Cataloguing codes and their tables do not devote much attention to Old Cyrillic, for it seldom happens that one has much to do with this type of writing in library practice.

The situation is different with regard to the modern Cyrillic alphabets. With these alphabets every librarian is more or less conversant. In them there are even fewer letters, in fact only sixteen, which in all schemes have the same Romanized equivalents, while about half of each alphabet is dealt with variously in different systems. The following letters of the modern Cyrillic alphabets are transliterated identically in every system:

а, б, в, г, з, к, л, м,
н, о, п, р, с, т, у, ф.

All other letters found in particular Cyrillic alphabets (there is a total of over thirty such letters) are transliterated variously. This distinction in transliteration practice derives mainly from phonetic considerations. Before transliteration had been recognized as a distinct procedure, and a precise definition adopted, it was transcription (practical transcription) that was used for all inter-alphabetic operations. Hence the differences in schemes --- differences that are the outcome of the phonetic approach to transliteration. Thus the German ch was (and still is) used for the Cyrillic X, since in German this diphthong (ch) does render the phonetic value of the Cyrillic X.

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In English the procedure is to use the digraph kh.

In most cases little difficulty is created by the different national uses of diacritical marks or letter combinations to represent the approximate original phonation. But there are a few letters which present major difficulties and which should be discussed separately. These are above all Г, М, and Х, - Г, Г. This is probably the most confusing and controversial letter as far as transliteration of Ukrainian and White Russian is concerned. The letter Г has, in all Cyrillic alphabets except Ukrainian and White Russian, the phonetic value of the Croatian g. In Ukrainian, however, and in White Russian, differing from all other Cyrillic alphabets, it does not have the phonetic value of g, but of h. Therefore the Ukrainian and White Russian alphabets have a separate letter Г' to represent the Croatian g-sound. But many transliteration schemes disregard this fact and render the Ukrainian or White Russian Г by the Roman letter g. If a transliteration scheme fails to make this distinction and renders this letter always by g, it commits a major error, because it substitutes for the Ukrainian and White Russian Г a quite different phoneme, a phoneme which in these two alphabets is associated with a different graphic sign. It is true that this could be understood as a routine operation or "automatic" transliteration, but when the true g-letter (Г') of these two languages is encountered, there will be no way of rendering it properly, since the letter g has already been pre-empted to render the h-sound.

A system disregarding this distinction creates uncertainties and ambiguities; many words or names, instead of sounding Ukrainian or White Russian, will sound as though they were Russian, thus misleading, and often resulting in their retransliteration as Russian words or names. The most confusing situations could occur in the transliteration of personal and geographical names. Thus the Ukrainian name Hrushevs'kyi will become Grushevs'kyi - another Ukrainian name of the same sound and spelling (when Romanized); Grushets'kyi could be either Hrushets'kyi or Grushets'kyi, Halych might be Galych, and so forth. Unfortunately there are several systems which do not make this distinction between the White Russian and Ukrainian usage and that of the other Cyrillic alphabets.

И, и - This symbol exists in all Cyrillic alphabets except White Russian, and has the value of the Roman i. Not so in Ukrainian. In Ukrainian it has a value very close to the German ü. However, only a few codes take note of this fact; usually this symbol is lumped together with the letter i of Ukrainian, and transliterated by the Roman letter i (for instance, in B.M., Cutter, Prussian Instructions, Swedish, Damiani, Slovenian). This practice also contravenes a principle of exact transliteration, since it is impossible to retransliterate correctly; the letter i of the transliteration represents two original letters, namely И and и. This, certainly, would be of paramount importance as regards to the proper spelling of personal or geographical names.

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X, x - The Roman-based alphabets do not have any special letter to represent this sound, which is found in every Cyrillic alphabet: namely, the sound of the Scottish ch (in the word loch). For transliterating this letter we find three different expedients employed, namely h, ch, kh, and sometimes even x (e.g. Xomiakov). As the Cyrillic x has no equivalent letter in any of the national Roman alphabets, a tempting, but cheap, solution of the problem was to use h for the purpose; that is, to equate Cyrillic x and Roman h. Yet transliteration of Cyrillic x by h will utterly confuse Ukrainian words and their meanings, since in Ukrainian it is the letter Г which phonetically corresponds to the Roman h. If the Roman h is substituted for Cyrillic x, it will produce in Ukrainian the following confusions of words:

ХОЛОД	= cold weather, transcribed holod, which is actually the sound of ГОЛОД = hunger
ХОЛОДНИЙ	= cold, transcribed holodnyi, which is actually the sound of ГОЛОДНИЙ = hungry
хата	= house, transcribed hata, which is actually the sound of гата = dam
хай	= let, transcribed hai, which is actually the sound of гай = grove
хори	= choirs, transcribed hory, which is actually the sound of гори = mountains

The name of the painter Kholodnyi (= Cool) will confuse with Holodnyi (= Famished)!

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One further note must be made here. The Cyrillic x (the English kh-sound) is indeed represented in Roman-alphabetic Croatian by h. Therefore all codes, with one exception (the Swedish code), have h for Serbian, but kh or ch for the other Slavic alphabets, with the h left free. Ch is used in the Prussian Instructions and in the Austrian, Swedish, Hungarian, Czech and Polish codes. Kh is used in the ALA, B.M., Vatican and French rules or codes. All the codes which transliterate by ch or kh (except the Swedish) include also the h-alternative for Serbian. ISO/R9 transliterates the Cyrillic x by the letter h, but has here a "principle with exception". In addition to the h it admits, for "countries with a firmly established tradition of ch or kh", the alternative use of these digraphs. If one needs an example of non-uniform procedure, then surely this kh-ch-h phoneme provides it.

The above case seems to be one of the major stumbling-blocks in the problem of interalphabetic equation and international standardization of transliteration. Other differences between transliteration schemes (especially with respect to affricates and sibilants, as previously illustrated) have been much better resolved in the international transliteration schemes, in spite of their being conditioned and influenced by the phonetic tradition of the respective "national" alphabetic systems.

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4. THE AMERICAN SYSTEMS

The oldest of the American systems of transliterating Cyrillic will be that introduced by the American Library Association in 1885. Its original proponent and probably its author was L. Heilprin of the Transliteration Committee of the ALA. It is interesting that in defining the principles of transliteration accepted at this time, Cutter, speaking for the Conference, put forth the idea of a "compromise" between scholarliness and convenience, an idea which still prevails in many systems of transliteration. This attitude is certainly reflected in the scheme itself. At first glance it is seen that many diacritical marks are employed, especially underlinings, which also served as "ties". The letter *y* was used to represent iotization.

The first ALA system underwent a certain evolution, and having included into its scheme a few more Cyrillic alphabets, it is known today as the ALA-L.C. system. It is reproduced, in its definitive form, in the ALA Rules (1949).

Originating from the same source, or influenced thereby, we have the New York Public Library system (NYPL) and the U.S. Board of Geographic Names system (BGN). All these four older systems are very similar in their manner of deciding controversial points, and strongly rely on the traditional representation of certain Cyrillic letters, or better said, on the traditional representation of Russian letters, since the ALA scheme (1885) was actually devised for Russian only. The table will show their similarities and dissimilarities.

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TABLE

Russian	ALA 1885	ALA (1949)-L.C.	NYPL	BGN
г	g (h, v)	g	g (v)	g
е	e (ye)	e	e (ye, io)	e (ye)
ё	-	e	io (e)	e (ye)
ж	<u>zh</u>	zh	zh	zh
й	i	i	i	y
х	<u>kh</u>	kh	kh	kh
ц	<u>tz</u>	ts	tz	ts
ч	<u>tch</u>	ch	ch	ch
ш	<u>sh</u>	sh	sh	sh
щ	<u>shtch</u>	shch	shch	shch
ю	<u>yu</u>	iu	yu	yu
я	<u>ya</u>	ia	ya	ya

As the table indicates, there are some differences between the systems, but basically they represent one trend, the principle of which is not to disregard entirely the phonetic element in transliteration. The ALA (1885) scheme goes so far as to prescribe the use of f instead of v in the terminations of family names, for in the actual pronunciation it is an f-sound and not a y that is heard (thus Gorchakof, not Gorchakov).

All other Cyrillic letters (not reproduced above) are identically transliterated or exhibit only insignificant differences¹.

1. Library Journal, vol. 10, p. 302-309, September-October 1885.

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Of the newer American systems, the following four should be mentioned, as they are employed by important reference tools: by the Slavic Review (1945), the Mathematical Reviews (1940), Chemical Abstracts (1937), and the American Standards Association, Sectional Committee Z 39 (ASA/SC 39). Of these four, there are two that follow the old tradition, while the other two display more contemporary trends. The following table is a representative comparison.

TABLE

Russian	Chem. Abs.	ASA/SC-Z39	Math. Rev.	Slav. Rev.
Ж	zh	zh	z	z
Х	kh	kh	h	kh
Ц	ts	ts	c	c
Ш	sh	sh	s	s
Щ	shch	shch	sc	sc

The last two systems (Mathematical Reviews and Slavic Review) reflect the influence of the ISA project, dating from 1939 and continued by ISO.

In 1962 a new system of transliteration of Russian was announced by the National Science Foundation, and recommended by the American Association for the Advancement of Science. It is known as the "AAA Transliteration System" and endeavours to combine features of various systems now in use¹.

1. Jerrold Orne, Transliteration of modern Russian, in Library Resources and Technical Services, vol. 8, p. 51-53, Winter 1964.

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5. CANADIAN PRACTICE

Are there any specifically Canadian transliteration systems?

It is worthwhile, in this connection, to review Canadian practice in the transliteration of Cyrillics, and it must be said at the beginning that there are no special systems (to this writer's knowledge) of Canadian origin. It is understandable why. Canadian libraries and bibliographic or documentary institutions depend very much on American or English reference tools, which use "English-style" transliteration of Cyrillics. Canada, being also an English speaking country, at least in its major part, does not have any logical need for a special system. Therefore Canadian bibliographic or reference works have always been orientated upon one or another English-style system used in the USA or Great Britain. Meanwhile French works published in Canada have recourse to systems used in France.

The leading bibliographic source, the publication Canadiana, should be a very authoritative example as regards to systems used for transliterating Cyrillic. It is nowhere said that the LC-ALA system of transliteration has been adopted for this bibliography, but it is evident from the very beginning that Canadianadoes adhere to it. Such entries as:

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Tsentrāl'nyi Komitet, agitatsiia, Borshchak,
 Kommunisticheskaia partiia, Shevelov, Ukrain's'ka
 Akademiia nauk, Khrushchev, Panchuk, etc.

indicate that the basic system employed here is that^{used} by L.C. and ALA. But this is not the only transliteration used in Canadiana. Just what the criteria are for using one or the other transliteration, is difficult to determine, at least from examination of the entries themselves.

From the name "Rudnyts'kyi", for instance, there is a "see reference" to Rudnyc'kyj (1950-1951, p. 111, index), and under this name the entries are handled consistently. Here we have a transliteration that is definitely not ALA-LC. The use of c and j is reminiscent of the International system. Rudnyc'kyj is not the only name transliterated in this way: we find, for instance, Barvins'kyj, Zilyns'kyj, Luckyj, Bilec'kyj, Sheptyckyj, Borovs'kyj, Kupranec, Daciuk, Hancov, and others.

Thus, it would seem that besides the ALA-LC system Canadiana also uses the International. But this is only partly the case. The names cited above, with two exceptions (Sheptyckyj, Daciuk), are indeed transliterated according to the said system. However, there are many names which are transliterated according to neither the International nor the ALA scheme. There occur forms that might be referred to the British system (Yuzyk, Pereyaslav) or to the old ALA of 1885 (Pidhainy). There are forms that are transliterated according to a combination of schemes; for instance, the names Kopacz, Klymasz, Shewchuk, Woycenko, Luciiv, Hawrysyshyn, Lypoweckyj, Zyla, Kluchko, etc., each have one or

more discrepancies in their forms. The letter w, which occurs in many of them, is not used for its Cyrillic equivalent in any of the transliteration systems. All systems use in this case the Roman letter v.

One entry, "Wasył' Simovych" (1953, p. 167) has for the same Cyrillic letter Б the transliteration w in the first name, but v in the second name. By what rule or which system this is done, one cannot determine. Another interesting name is "Shevelov, George Yury". Shevelov is the surname and is transliterated correctly in accordance with L.C.; George is an English name, in fact the English form of the name Yury; this name Yury is transliterated not according to L.C. but in an "English" manner. Thus disregarding any nonsense about "confirmation" of the English transliteration by the "original" name, we here find two different systems of transliteration, used in one and the same author's name. The retransliteration of this name to its correct original form would not be possible.

Of course, many mistakes could possibly be ascribed to a wrong identification of the language in question (the original language in which these names occur). Such names as Smal-Stocki, Katerina Antonovich, Kurilo, Stechishin, Pidhainy, etc., are either wrongly transliterated or erroneously taken as non-Ukrainian names; analysis is here impossible.

To sum up the transliteration practice of the editors of Canadiana, it could be said that:

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a) Basically Canadiana uses the ALA and LC system for transliteration of Cyrillic.

b) Canadiana's practice has from the start been, and still is, influenced by the practice of authors who favour the International system. Thus Canadiana in many cases follows the International transliteration procedure.

c) There is a lack of consistency in the application of this International system.

d) The title-page form (one has the impression) is in many cases the deciding factor, though this, from the viewpoint of bibliographic uniformity, is undesirable.

e) A common difficulty is that authors themselves spell and transliterate their names in various ways. The editor, it seems, does not see any other possibility than to accept the name as it appears, even in mutilated form.

Nevertheless, many unnecessary mistakes could be eliminated by limiting the systems admitted (to ALA and International), and by the use of "see references" for names variously or mistakenly transliterated by the authors.

The following cases that have been observed will illustrate the transliteration practice of this important Canadian bibliographic tool.

- Ї - is transliterated: i, j, - y (Ukrains'kyi, Kysilewskyj, Pidhaini, Woycenko)
- В - is transliterated: v, w Kovaliv, Woroby
- Х - is transliterated: zh, Z (Zyla, without the diacr. mark)

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- X - is transliterated: kh, ch (Khrushchev, Ochrym, Prychodko)
- Ц - is transliterated: ts, c (Tsentral'nyi, Luckyj)
- Ш - is transliterated: sh, sz (Shewchuk, Klymasz)
- Ю - is transliterated: iu, ju, Yu (Daciuk, Julian, Yury)
- Я - is transliterated: ia, J, ya (Ul'ianov, Jaroslav, Pereyaslav)
- Ч - is transliterated: ch, cz (Chaplenko, Kopacz)

The second authority interested and engaged in transliteration practice are Canadian slavists. Their practice is represented and reflected by the "Canadian Slavonic Papers"¹, an irregular publication since the 1956. On the verso of the title page of each volume a note on transliteration reads:

Two systems of transliteration of Slavic languages are used in this publication. One, closely resembling the system of the Library of Congress, is used in literary and historical articles, the other in contributions on philology.

This "other" system is namely the International, Czech-based system, as many names transliterated according to it would demonstrate. The first system, the one "closely resembling the system of the Library of Congress", is not as much "closely" resembling if one compares, for instance, such transliterations as: Lyubcheko, Revutsky, Strakhovsky, Malakhiy, Araktcheyev, Chaadaev, Alexander, etc. On the same page one may find tch and ch for the same Cyrillic letter.

1. Canadian Slavonic Papers, published for the Canadian Association of Slavists by the University of Toronto Press in co-operation with the University of British Columbia, 1956-

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Summarizing these few remarks on Canadian practice, it could be accepted that there are two basic trends in Canadian transliteration practice (of Cyrillics): the older and stronger one, based on the long established tradition and adapted to the phonetic peculiarities of the English language, i.e. the system widely used in USA, and the second trend promoted and advocated by linguists and philologists, the practice of the International (Czech-based) system or very closely reminding this system.

6. THE ENGLISH SYSTEMS

English systems of Cyrillic transliteration show less variation than the American. In particular they are more careful in distinguishing (whenever the necessity arises) between the value of a letter in Russian and in Ukrainian. Otherwise, there is in the English systems the same tendency as in American, namely, to confound the principle of transliteration with the "principle" of convenience for the English reader. Thus digraphs resembling the phonetic value of the original (Cyrillic) letter are often in use (e.g. zh, kh, sh, shch, etc.). A few letters taken from the Russian alphabet will illustrate the relationships of these systems:

TABLE

Russian	B.M.	Bodleian	PCGN	BSI	Science Abs.
Г	g	g	g (h)	g	g
Ж	zh	zh	j	zh	zh

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Russian	B.M.	Bodleian	PCGN	BSI	Science Abs.
X	kh	kh	kh (h)	kh	kh
Ц	ts	ts	ts	ts	ts
Ч	ch	ch	ch	ch	ch
Ш	sh	sh	sh	sh	sh
Щ	shch	shch	shch	shch	shch

From this comparison is evident that only the Permanent Committee on Geographical Names system (PCGN) has alternative transcriptions for any Russian letter. Thus h is provided to replace kh as an equivalent for the Cyrillic letter X, when this X actually represents an h in a foreign word borrowed into a Slavic language; h is also allowed to replace g in similar cases, that is when Cyrillic Г actually represents an h-sound or a borrowed h. Further to the above list there are also some variations in representing the Russian letters e, i, and "yat'", or in applying diacritical marks; but these variations, although undesirable from the point of view of transliteration principles, could be tolerated as far as they affect bibliography in the English-speaking world.

The oldest English systems are the Bodleian and the B.M., the newest is the BSI (British Standards Institution) known as BSI: 2979:1958. It was introduced in 1958, just three years after ISO/R9 was accepted and recommended for international use. In the introductory notes to BSI:2979 the authors indicate why this system has been introduced. The new ISO/R9, they explain, is an "amplification of the Serbo-Croat latinica", and therefore "it can hardly be expected that it will

be used for all purposes in countries with alphabetic traditions and literary heritage as strong as those of English ...". One cannot say that the argument of BSI authors has a weak foundation.

After the publication of this system (BSI:2979), a fiery discussion broke out with many known and highly competent specialists participating (Palmer, Poulain, Lloyd, Hope and others)¹.

Although both sides are right, one of them certainly is "righter". Nobody can deny that Poulain is right when he advocates international uniformity of transliteration and the urgent need for this. But one cannot deny that arguments offered by Lloyd and Hope are of a serious nature, and they cannot be dismissed. Theoretically it is not difficult to construct a scheme that would satisfy in detail the stated principles, but it is much more difficult to persuade the nations to use it. National traditions and habits are not easy to overcome and in cases like this they certainly should be taken into consideration. There is no doubt that a single universal system would be best, but as practical life demonstrates, it is no easy matter to construct or establish such a system, to the satisfaction of all concerned.

1. This exchange of opinion took place in the New Scientist, in the following order: Palmer, April 26, 1962; Lloyd, May 31, 1962; Palmer, June 28, 1962; Hope, August 2, 1962; Poulain, August 30, 1962.

Of particular interest is the system known as PCGN¹, it is, the system developed by the Permanent Committee on Geographical Names. This Committee was formed in 1919 with the purpose of dealing with the correct spelling of foreign geographical names for British official use. Before the PCGN was formed, the Royal Geographical Society had previously employed, for many years, a system (usually called R.G.S.) for the phonetic representation of foreign names. The PCGN revised this system and produced a new one, known as R.G.S. II. The system provides transliteration tables for many languages or language groups, Slavic included. For the Slavic languages which use Cyrillic alphabets the system provides tables of transliteration only for Russian, Ukrainian, and Serbian. (Bulgarian is discussed, but no special tables of transliteration are provided). The tables are basically the same as for Russian, with a few exceptions indicated. Besides the tables of transliteration the system has also "Rules for Spelling of Geographical Names" and a "Table for Spelling and Pronunciation" according to R.G.S.II.

An interesting fact is that the system does not favour diacritical marks. There is not a single diacritical mark in the tables for Russian or Ukrainian. Diacritical marks are used only when they exist in the original spelling (e.g. in Czech, Polish, German, etc.), but not in all cases even here.

1. Lord Edward Gleiche, and John H. Reynolds, Alphabets of Foreign Languages, 2d ed., London, The Royal Geographical Society, 1933.

The system admits digraphs and polygraphs and provides alternatives (e.g., g and h, kh and h - for Russian), but it commits one basic error: it has one symbol (i) for four different Cyrillic letters. As far as transliteration in its proper sense is concerned, this is inadmissible, since the reverse process (retransliteration) would be impossible.

There are also other systems, derived from the R.G.S. system for dealing with geographical names, but less known than the R.G.S. II¹.

1. Rules for the Transliteration of Place-names Occuring on Foreign Maps, compiled in the Topographical Section, General Staff, by Alexander Knox, (London) 1906, (known as the War Office System).

Instructions for the Spelling of Place-names in Foreign Countries, Naval Staff Intelligence Division, 1917.

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7. OTHER EUROPEAN SYSTEMS

Under the ambitious heading only a few European systems will be mentioned. It is clear that every European country and every larger library will have some established way of Romanizing or transliterating Cyrillics. But a survey in this regard has never been made, and there is no way of knowing which systems or how many systems are used in dealing with Cyrillic alphabets.

Most European cataloguing codes provide rules and tables for either all or at least a few Cyrillic alphabets. Some codes, however, do not include either rules or tables of transliteration (e.g. the Italian code), and in their practical work rely on rules laid down by some external authority. The majority of European systems in use have been fundamentally influenced by the Croatian orthography, as the best counterpart of the Serbian "cirilica".

The Croatian orthographic system, known as "Hrvatska latinica", evolved after the reform of the Serbian alphabet by Vuk Karadzic. It is a popular system used by many learned institutions, philological societies and their publications, as well as by many libraries. Its popularity increased especially after Damiani undertook to demonstrate its philological perfection and its simplicity. The origin of the system is traceable to the early 19th century, when Karadzic was preparing his "Lexicon Serbico-Germanico-Latinum" (1st ed. 1818)¹.

1. Vuk S. Karadzic, Lexicon Serbico-germanico-latinum, 4th ed., Belgradi, 1935.

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In this dictionary he included a comparative table of Serbian letters and their equivalents in Croatian, Czech, Polish, Hungarian, German, Italian, French and English. Thus Karadzic produced the oldest poly-alphabetic, scholarly and well founded system of transliterating Serbian into various national alphabets. A few selected examples will show his approach:

TABLE

Serbian	Croat.	Czech	Pol.	Hungar.	German	Ital.	Fr.	Engl.
В	в	w	w	v	w	v	v	v
Ж	ž	ž	ż	zs	-	-	j	s
Х	h	ch	ch	h	ch	-	-	-
Ц	c	c	c	cz	z	z	-	-
Ч	č	č	cz	cs	tsch	c	-	ch
Ш	š	š	sz	s	sch	sc	ch	ch

If one compares the Croatian "latinica" of today with the Serbian equivalents (i.e. Serbian transliterated into Roman) introduced by Karadzic one hundred and fifty years ago, only one change will be seen: today the symbol ђ is used instead of Karadzic's dj (for which in any case he gave ѣ as substitute).

Of course, Karadzic's table dealt only with the Serbian alphabet, whereas the "latinica" is extended (by adding diacritics) to correspond fully with all Cyrillic alphabets, and the correspondence is very satisfactory. Damiani and many other supporters of this Croatian system think that it is very well elaborated and suitable to serve as an international

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system for the transliteration of Cyrillic¹. It conforms to all the modern transliteration principles:

1. The principle of one-letter-for-one-letter is rather well maintained;
2. Different letters are never transcribed by the same letter;
3. The principle of "nothing added and nothing omitted in transliteration" is respected.

Thus theoretically the Croatian system, except for the single defect that the Ukrainian and White Russian letter X is transliterated by the Roman letter h, should be quite serviceable. But the theory takes no adequate note of practical considerations in the national Roman alphabets, each with its own tradition, nor of the procedures of individual national libraries.

The Croatian system, or better said, the system of Romanization introduced by Karadzic, strongly influenced transliterating practices, especially in the field of cataloguing and bibliography, in other European countries. When the German code (the Prussian Instructions) was published, with its transliteration tables, it too served as a guide for other codes in the field of transliteration. The Prussian Instructions most obviously influenced the following codes: the Austrian, the French,

1. E. Damiani, Sur l'état actuel des systèmes de transcription des noms slaves cyrilliques dans la documentation bibliographique, in F.I.D., Communications, vol. 5, p. 107-109, 1938.

--- Norme adottate e da adottare per l'unificazione bibliografica dei nomi d'autori variamente trascritti da lingue a caratteri diversi dall'alfabeto latino, con particolare riguardo all'alfabeto cirillico. Relazione al VI. Convegno nazionale dell'Associazione Italiana per le Biblioteche, Napoli, 15-18 maggio, Roma, 1940.

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the Hungarian, and even the Vatican..

Thus the second generation of Cyrillic transliterating systems is the group influenced by the Prussian Instructions. There is very little difference between the transliteration systems in these particular European codes. The following table of selected letters will exhibit their affinity:

Cyrillic	Pruss. Instr.	Austr.	Belg.	French	Swed.	Hung.	Vatican
Ж	ž	ž	ž	ž	ž	ž	ž
Й	j	j	j	j	j	j	i
Х	ch	ch	h	kh	ch	ch	kh
Ц	c	c	c	c	ts	c	ts
Ч	č	č	č	č	tj	č	č
Ш	š	š	š	š	sj	š	š
Щ	šč	šč	šč	šč	stj	šč	šč

Variations, as the table shows, are not very significant; except in the Swedish scheme the letter-equations are mostly the same and are oriented upon the Prussian Instructions, which in turn were influenced (as far as transliteration is concerned) by the Serbo-Croatian equations.

The new German system developed recently by Steinitz¹, and known as the Steinitz-Duden system of transliteration, is actually not

L. W. Steinitz, "Wie sollen wir russische Namen schreiben?" in Die neue Gesellschaft, Berlin, Verlag Kultur und Vorschritt, No. 4, p. 66-71, 1948.

--- "Abschliessend zur Schreibung russischer Namen", in Die neue Gesellschaft, No. 3, p. 233, 1950.

a transliteration in the proper sense, since it pays too much attention to phonetic factors. Besides, it was not intended for documentary or bibliographic use. The other German system known as "Bibliothekarisch", and used mainly in libraries, is the same as that in the Prussian Instructions, with only two additions: "ë" is used for the io- sound, while the "hard" sign (jer), previously disregarded at the end of a word and represented by a hyphen in the middle of words, is in the "Bibliothekarisch" system represented by " (quotation mark) in the middle of a word, and omitted at the end of a word.

In connection with this group of transliteration systems we should mention the system developed and used (since 1921) by the Institut d'Etudes Slaves¹. It follows very closely the Croatian practice. The Cyrillic X, however, is rendered, as in the Prussian Instructions, by ch.

As what might be considered a separate group of systems for transliterating Cyrillic alphabets, we note the procedures employed by the Roman-alphabetic Slavic peoples. The Slavic nations have the same difficulties in representing particular Cyrillic letters in terms of Roman letters as are observed in the English and French transliterations of Cyrillic. But in particular cases the Roman-alphabetic Slavs proceed differently from the Roman-alphabetic non-Slavs. Thus the Czech, Polish and Croatian systems, instead of using polygraphs, generally employ diacritics, thus achieving a considerable abbreviation of the

1. Institut d'Etudes Slaves, Revue des Etudes Slaves, t. 1, p. 310-312, 1921.

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written forms. As regards to the transliteration of vowels there are only insignificant differences between the procedures of the Roman-alphabetic Slavs and of other nations, though the divergencies become much greater elsewhere. They transliterate in the following ways:

Cyrillic	Czech	Polish	Slovenian	Croatian
Ѣ	ě	ź	ž	ž
Ц	c	c	c	c
Ч	č	ć	č	č
Ш	š	ś	š	š
Щ	št	št	št	št
	šč	śc	šč	šč

Only in one case, namely in Bulgarian, is there a double notation for one and the same Cyrillic letter, to allow for a special Bulgarian phonation of this letter.

The Polish spellings are individual and characteristic; this language already had distinct letter combinations precisely and fully representing certain Cyrillic letters (sz, cz, szcz, ź)¹. In general the European systems resemble very much the Croatian orthography, differing from it only in a few cases (the transliteration of the Ukrainian letters h, i, y, and of a few Serbian letters). Characteristic of these systems is the avoidance of polygraphs.

Comparing now the American transliteration of Cyrillic with the European (continental) systems, it would be very difficult to make a definite statement as to which is better. If we proceed by a strict

1. Przepisy katalogowania w bibliotekach polskich, Warszawa, 1934.

J. Grycz, Skrocone przepisy katalogowania alfabetycznego, Warszawa, 1946

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interpretation of the principles of transliteration, then the European systems would come out on top. They follow more precisely the one-letter-for-one-letter rule than the American systems. The main differences are found in the following Cyrillic letters:

Cyrillic	American				European			
	ALA-LC	Ang-Am.	Cutter	NYPL	Pruss.	Czech	Pol.	Croat.
Ж	zh	zh	zh	zh	ž	ž	ž	ž
Х	kh	kh	kh	kh	ch	ch	ch	ch
Ц	ts	ts	ts	tz	c	c	c	c
Ш	sh	sh	sh	sh	š	š	š	š
Щ	shch	shch	shch	shch	šč	šč	šč	šč
Ю	iu	iu	iu	yu	ju	ju	ju	ju
Я	ia	ia	ia	ya	ja	ja	ja	ja

Finally, one must add that these systems are created not for their own sake, but for service. The Anglo-American tradition in transliterating Cyrillic is long and well established; the systems serve their purposes very well, so that if they sin against "purity in principle", this is in practice a negligible defect.

8. RUSSIAN AND UKRAINIAN SYSTEMS

Until the end of the 19th century there is not much that can be said about the standard forms or systems of transliterating Cyrillic into Roman, or Roman into Russian or Ukrainian. As regards to personal and geographical names, practice varies. In the earlier centuries, the 16th and 17th, the only way of rendering foreign names into Ukrainian or Russian (and vice versa) was transcription, i.e., their rendition according to phonetic principles.

In the 18th century we observe the contrasting practice of transliteration. Here, of course, the word transliteration should not be understood precisely in the modern sense, but in any case the trend was to follow the letter rather than the sound¹.

In the 19th century there was again strong emphasis on pronunciation as the basis for the rendering of foreign names, and this tendency, as far as personal and geographical names are concerned, is still dominant².

As in Western Europe, the way for scholarly systems of transliteration was prepared by eminent linguists and philologists of the middle and late 19th century - Lomonosov, Vostokov, Vasil'ev, Radlov, Zaleman, Baudouin de Courtenay, Zhytets'kyi, Potebnia and others. It was they who laid a strong foundation for comparative linguistic studies and thus made it possible to construct transliteration systems based on reasonably scientific principles

The oldest system of Romanization used in Russian was probably that developed by the Department of Posts and Telegraphs, influenced by and oriented on the French language and French systems.

1. L. Iivainen, "The Rendering of English Proper Names in Russian," in the Slavonic and East European Review, vol. 39, p. 137-147, December, 1960.

2. Akademiia nauk SSSR, Institut russkogo iazyka, Toponemastika i Transkriptsiia, Moskva, Izd-vo Nauka, 1964. (A number of articles dealing with the practical transcription of personal and geographical names of foreign origin into Russian).

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Since 1906 there have followed a number of different systems developed either by scientific institutions or by individuals. Thus the Academy of Sciences in 1906 introduced its first scheme of transliteration, which has been several times modified (1925, 1937, 1951, 1957). The Russian Geographical Society produced its own system in 1911. Another system widely used is that designated as OST-VKS, and known since 1935 as OST 8483¹.

Systems developed by individual philologists are those of Teplov, Iakovlev and Larin, but they did not find application on any large scale; they remained rather scholarly projects than systems in use.

The Russian systems in general are influenced either by French or by English-language considerations, and by the transliteration procedures in countries of French or English speech. Differences of treatment affect about half the alphabet. The following letters are treated everywhere the same:

а, б, в, г, д, з, к, л,
м, н, о, п, р, с, т, ф

for which the Roman equivalents are:

a, b, v, g, d, z, k, l, m, n, o, p, r, s, t, f.

The other half of the alphabet reflects either English or French, and sometimes even German influence. These influences are most visible in

1. A. A. Reformatskii, Transliteratsiia russkikh tekstov latinskimi bukvami, in Voprosy iazykoznanii, Akademiia nauk SSSR, Institut iazykoznanii, vol. 5, p. 96-103, Moskva, 1960.

OST-VKS = Obshchesoiuznyi Standart - Vsesoiuznyi Komitet po Standartyzatsii.

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the case of the fricatives and sibilants, as shown in the table¹:

Cyrillic	OST VKS, 1935	NK vn. torg	Geog. Soc.	NK sviazi
Ж	zh	zh	j	j
Х	kh	kh	ch	kh
Ц	c(ts)	z	tz	tz (ts)
Ч	ch	ch	tsh	tsh
Ш	sh	sh	sh	ch
Щ	sch	sch	stsh	stch

The English-style transliteration is best visible in OST-VKS (1935) system. The Narkomat "sviazi" system was oriented on French, and transliterates the respective letters in the same way as the French systems do (thus j, tch, ch, stch, ou, etc.). The German influence is visible in the Geographical Society's treatment of the Cyrillic X, which is rendered by the digraph ch (as in the Prussian Instructions).

A different approach is visible in the system devised by N. F. Iakovlev (1920's). He avoids digraphs or polygraphs and applies diacritics to both vowels and consonants. This system was developed for use by those peoples of the Soviet Union whose languages were to be Romanized (a trend in the years 1923-1937).

The B. A. Larin system, also developed in the 1920's and resembling the one mentioned above (no digraphs, no polygraphs), is interesting on certain counts; first of all, for the transliteration

1. *ibid*, p. 102-103.

of Cyrillic X by the Roman letter x. The introduction of the German letter ß to represent the Cyrillic ш (shch) is, of course, a nonsensical procedure. The soft vowels are transliterated either by giving them a circumflex accent or by the addition of j (thus â or ja, ô or jo).

Another recently developed system is that of Teplov (1951)¹, which is actually a revision of the OST-VKS No. 8483 system of 1935. From the viewpoint of strict transliteration principles this system is unacceptable, if only for the reason that no distinction is made as regards to the use of the apostrophe for the softening of consonants in their different positions in the word; that is to say, no distinction between consonants followed by the "soft sign" or followed by soft vowels. Such a treatment of softening creates difficulties in re-transliteration. Unacceptable also is the treatment of the letter X, which transliterates by the Roman letter x (as in Iakovlev's system).

The Academy of Sciences system² (i.e. its various versions) is oriented mainly on the Croatian latinica. The differences between its successive versions affect only a few letters: x, dotted é, and the palatalized vowels. The letter x is usually transliterated by ch. Only the version of 1939, elaborated by Shcherba has for Cyrillic X the Roman h. Shcherba thought that the digraph ch, or the kh used

1. A. A. Reformatskii, op. cit., p. 100.

2. L. V. Shcherba, "Transliteratsiia latinskimi bukvami russkikh familii i geograficheskikh nazvanii," in Izvestiia Akademii nauk, Otdel, literatury i iazyka, No. 3, Moskva, 1940.

in the Anglo-American systems, "contradicts the basic principles of transliteration"¹. Yet he himself does use such "contradictory" digraphs in other cases, e.g.: je, jo, ji, šč, ju, ja. Cyrillic X represented by Roman h is the worst feature of Shcherba's system. When this procedure is applied to the Ukrainian and White Russian alphabets, the Roman h will not be available to represent the letter ґ

That is to say, if one transliterates Russian, Bulgarian and Serbian x by kh, the h is left free so far as these three alphabets are concerned. This free h is needed to represent Ukrainian and White Russian ґ. In Shcherba's system (1939) the letter h is used for the Cyrillic X, thus blocking its use to represent the sound of Ukrainian and White Russian ґ. The same mistake was committed in ISO/R9 also.

Between the Ukrainian and White Russian on one hand, and the Russian alphabet on the other, about 25 letters will be transliterated in the same way. Seven or eight letters will be differently transliterated. As in the Russian practice, the rendition of foreign names into Ukrainian (as well as into White Russian) was and still is done by transcription, that is, phonetically². In dictionaries of foreign languages where the pronunciation is given, the simplified International Phonetic Alphabet is used, and the transcription of foreign names is regulated by rules issued by the Ukrainian Academy of Sciences³.

1. L. V. Shcherba, Izbrannye raboty po iazykoznaviiu i fonetike, Leningrad, Izd-vo Leningradskogo universiteta, 1958, vol. 1, p. 177.

2. I. Ohienko, Ridne pysannia, Druk. OO Vasyliian, Zhovkva, 1933. p. 96-110.

3. Akademiia nauk URSR, Ukrains'kyi pravopys, Kyiv, 1960, p. 114-137.

As regards to systems for transliterating (in the proper sense) Ukrainian into Roman letters, there have been several attempts to deal with the problem. The most used is probably the "International" system for Cyrillic, which provides satisfactory equivalents for the uniquely Ukrainian letters, i.e., for *Є* and *ї*, and for the characters *е* and *ѣ* which have values different from those in Russian. The semivowel *й* in isolation (*ѣ*) is rendered by *j*, which letter is also used for softening purposes. The "controversial" Ukrainian *Х* is rendered by German-style *ch*; *Г* by *h*, and *Г* by *g*. The only questionable procedure is the rendition of *Х* by *ch*; otherwise the system is irreproachable¹.

This system is followed by J. Rudnyts'kyi², who has also elaborated his own schemes of "practical transliteration" (i.e. transcription) of Ukrainian into English, French, German, Spanish, and Portuguese.

Schemes such as that proposed by A. Zaharychuk³ are not reasonable enough to be considered seriously.

1. W. K. Matthews, op. cit., p. 541.

2. J. Rudnyts'kyi, Chuzhomovni transliteratsii ukrains'kykh nazv, Augsburg, 1948.

--- Anhiis'ka peredacha ukrains'koi abetky, Augsburg, 1946.

3. A. Zaharychuk, The Ukrainian Alphabet, Winnipeg, 1961, p. 28.

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The system used by the publishers of the Ukrainian Encyclopedia¹ is the most recent one. Basically it resembles the NYPL system, with slight modifications in a few cases and diacritics omitted. Differences as compared with the NYPL and L.C. systems occur in the following letters:

Ukrainian	Ukrainian Enc.	NYPL	L.C.
є	ye (ie) ²	ye	ie
ж	zh	zh	zh
й	y (i)	i	i
ю	yu (iu)	yu	iu
я	ya (ia)	ya	ia
ц	ts	tz	ts

One has to admit that the use of, for instance, the L.C. system would be preferable and much safer, as far as exactness of transliteration and retransliteration is concerned. The omission of "ties" used by L.C. may create, at least in one case, a difficulty of retransliteration.

In transliterating words like:

згага, згар, згаданий, згоден, згінка

if zh is written without a "tie", would confuse with

жага, жар, жаданий, жоден, жінка,

which are words of quite different meaning. There are indeed two different names in Ukrainian that could not be distinguished at all, namely Згарський and Жарський.

1. Ukraine; a concise encyclopedia. Prepared by the Shevchenko Scientific Society, Toronto, Toronto University Press, 1964, cf. p. xxxii-xxxiii.

2. Initially or otherwise.

True, the words affected are not many, but nevertheless they exist. The omission of the "tie" over the zh might be tolerated in some reference works such as encyclopedias, but it is unacceptable for strict bibliographic purposes.

The second mistake of the UE system is in connection with the letter y, which is to be used "initially or otherwise". This letter y is used in the system for two different purposes, namely, to represent the letter *ѣ* and for the softening of semi-vowels. Thus re-transliteration from the Encyclopedia system is not "automatically" simple. Modern systems of transliteration tend to be as simple and clear as possible, therefore this complication and confusion, no matter what the arguments for it, is regrettable. According to all principles of transliteration, one and the same letter ought not to be used for two different purposes.

The second system used in the said Encyclopedia is described as "the system of international transliteration commonly used in Slavic linguistics". This "international" system is used in the articles on language and in some maps. Why two different systems should be used in one work is not explained. Nor is it quite clear just what this "international system" is. W. K. Matthews recognizes only one International system, namely, the "Czech-style" Latin transliteration of Cyrillic.

But the system employed in the Encyclopedia (in linguistic articles and in maps) is not the same as this International system recognized by Matthews.

9. INTERNATIONAL SYSTEMS

How many "international" systems there are for the transliteration of Cyrillic alphabets is an open question. An "international" system would be one that is internationally used. Yet L.C., for instance, which is actually used internationally, is not termed "international". The same could be said with regard to the system used by the Revue des Etudes Slaves, or the System used by the Slavonic and East European Review, or the system developed by O. Hujer¹, and perhaps others.

Nevertheless there are at least two systems that could be regarded as international in a proper sense. The first is that evolved in the 19th century and known as the "Czech-style" or International system; the second one, that which was introduced by ISO in 1955.

The International, or Czech-style, system originated in Bohemia thanks to the comparative study of Slavonic languages that began there early in the 19th century. It is generally used for Indo-European and Slavonic linguistics in Central as well as in Western Europe. Its basis is the Czech alphabet, which has a long tradition of development and a dominant position among the other Roman-alphabetic Slavic languages.

1. W. K. Matthews, op. cit., p. 535.

Slavonic Review, vol. 1, no. 1, p. vi-vii, 1922.

Transliteration of Russian, in Slavonic and East European Review, vol. 8, no. 22, p. vii-viii, 1922.

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The International system is the best one for transliterating Old Cyrillic, as it combines brevity of form and clarity of representation.

For the modern Cyrillic (national) alphabets it provides a good coverage, resorting for this purpose to both diacritics and digraphs. The main difference between the International and other systems is that it uses more diacritics and less letter combinations. Comparison with, for instance, the British system (BSI) will show this very well in the following cases:

British:	zh,	kh,	ch,	sh,	shch
Intern.:	ž,	ch,	č,	š,	šč

Here the International uses only one digraph (ch). In other cases it resorts to diacritics, in places where the British system uses digraphs with h.

The only digraphs the International system uses are dz, ch, dž (Macedonian), ch, št (Bulgarian), ch (White Russian), ch, šč (Ukrainian), ch, šč (Russian) and the j-combinations used to represent the soft vowels. As compared with other systems this is not excessive. All other alphabetic problems are solved with the help of diacritical marks. The International system is certainly one of the best ever devised. Its features are clarity and simplicity. It is based on a strong foundation (the Czech alphabet) and as such is more easily acceptable to users of national Cyrillic alphabets.

The second system in question is the ISO/R9¹. This system was

1. International Organization for Standardization (ISO), ISO Recommendation R9, International System for the Transliteration of Cyrillic Characters, 1st ed., (Geneva), 1955.

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initiated by the International Standards Associations (ISA), the predecessor of International Standards Organization (ISO). The draft of the scheme was ready in 1939, but because of the outbreak of war it failed to secure international acceptance. When the ISO was established after the war, its Technical Committee 46 (Documentation) took over the work on a uniform system of transliterating Cyrillic alphabets. Study of the scheme began in 1947 and ended in 1954, when it was accepted at the ISO plenary meeting in Brussels, June 1954. It was published in October 1955.

The system includes tables for the transliteration of Bulgarian, Russian, Ukrainian, White Russian, and Serbian. The Macedonian alphabet is not included, but a note is added to the effect that this language may be transliterated in the same way as Serbian.

The principles of transliteration as set forth by ISO are worth our attention, since they represent the fundamentals not only for Cyrillic alphabets, but for transliteration in general. Briefly they are as follows:

1. Transliteration is the representation of signs or characters of one alphabet by those of another. Its purpose is to make texts written in non-Latin characters recordable in Roman characters, mainly for bibliographic and library purposes.
2. Transliteration represents characters, not sounds. It is the equation of characters as they are written, and not according to how they are pronounced, or what etymological value they have.
3. Transliteration should be automatic; that is it should be performable by anyone able to identify the language, or rather the characters to be transliterated.

4. A character or sign of an alphabet should always be transliterated in the same way, and always by the same equivalent. Wherever possible the "one-letter-for-one-letter" principle should be maintained. But in certain cases combinations of letters may be used, that is, where the Roman alphabet offers no "other reasonable possibility".
5. Diacritical marks may be used, but only such as may be¹ easily typed on a Roman-alphabetic typewriter¹.

These principles are no new creation. They reflect and recapitulate the practice already established by systems previously developed. ISO's merit is that it has definitely and clearly set forth these principles as a guide for the future.

In deciding on this system of transliteration, the ISO probably anticipated that some countries would hesitate to accept it, and added an "escape clause". It is laid down that

... the standard international system for the transliteration of Cyrillic characters may be supplemented by a recognized national system of transliteration, based on the characteristics of the non-Slav language concerned.

This exception practically excludes the possibility of a uniform system for international use, since many countries which have long-established systems would prefer (for practical reasons) to take advantage of this "escape clause". It appears, however, that the "escape" facility is intended only for "non-Slav" languages; thus Czechs, Poles, and Croatsians, who are Roman-alphabetic Slavs, are not to make use of it no matter what they would like to do.

1. Ibid., p. 4.

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The ISO system includes 44 Cyrillic letters found in various alphabets, and it is based on the Hrvatska latinica. There are indeed only very slight differences between the Croatian system (with which one may include the International system) and the ISO/R9. They are mainly in the employment of diacritics.

The ISO system is constructed according to stated principles. It is easy to use, its diacritics are available on typewriters, and it permits retransliteration. For the sensitive distinction in Ukrainian and White Russian (the letter Г) it provides the Roman equivalent ġ. But one does not know why this equivalent is provided at all, since the note attached to the said letter says that "No. 5 is no longer utilized in Ukrainian or in White Russian". If this letter is no longer in use, then the equivalent is not needed. But indeed it is not so simple. The letter in question is still used in a great many Ukrainian and White Russian publications, and it was used for a long time before it was abolished (by Soviet fiat). Therefore the note should at least have briefly explained this fact.

The second remark that could be made is on the treatment of the Cyrillic x. This too has been taken over from the Croatian system. The Serbs are accustomed to this transliteration, since it is used in the Croatian latinica. Nevertheless, where other Cyrillic alphabets are concerned it would be more practical to continue with the kh digraph, as used in Anglo-American and French systems. Then the free h could be used for the Ukrainian and White Russian letter now transliterated by g. It is to be noted that in all Russian systems except Shcherba's (1939)

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the Russians have transliterated this letter properly - more aptly than ISO.

As is known, two major countries, the United States and Great Britain, did not accept the ISO/R9 system. Whatever their reasons, the fact is that ISO/R9 has to this extent failed of acceptance, and this certainly affects its international standing. Perhaps it was this that moved ISO/TC 46 to take another look at the system. Perhaps it will eventually be brought into an acceptable shape¹.

The characteristic of the system is avoidance of letter-combinations (digraphs, or polygraphs). Like the International system the ISO system endeavours to solve inter-alphabetic equations by using diacritical marks. Its difference from the Croatian system or from the International is minimal. As regards to transliterating Ukrainian there are only three letters which are not identically transliterated in all three systems. They are:

Ukrainian	ISO/R9	Croatian	International
Г	g	g	h
г	g̃	g̃	g
х	h	h	ch

Elsewhere there are no differences. The ISO system, as said, follows the Croatian style of Cyrillic transliteration. The basis is sound, and if ISO is finally able to effect a few corrections and to persuade the greatest producers of bibliographic tools (the U.S.A. and Great Britain) to accept it, the system will be a great success.

1. F.I.D. News Bulletin, vol. 13, p. 48, 1963.

CHAPTER III

TABLES

How many systems of transliteration of Cyrillic exist in current practice is not known. But there are about a dozen schemes that are widely known and used by major libraries or bibliographic centres.

The tables here reproduced represent a kind of a cross-section of transliteration schemes for both Classical or Old Church Cyrillic and the modern national Cyrillic alphabets (Bulgarian, Macedonian, Moldavian, Russian, Serbian, Ukrainian and White Russian).

For some of these alphabets, especially the Russian, there exist more than two dozen different schemes of transliteration; other alphabets, such as the Moldavian, have nowhere been transliterated.

In general, these tables reflect two basic practices: the Anglo-American and the European. Each one derives from a particular attitude and point of view on transliteration as an inter-alphabetic operation.

In many cases the systems differ insignificantly, mostly as regards to the diacritical marks, but in other cases there are quite remarkable distinctions. These are easier realized and understood when put in parallel with the other systems.

Some schemes fail to transliterate particular letters (e.g. Prussian Instructions omits the Old Cyrillic letter S; Vatican omits the letter Ѣ).

Some schemes transliterate more than they should (e.g. B.M. includes in Serbian the letter Ш = shch, which this alphabet actually

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does not possess). Elsewhere it sometimes happens that a certain letter is accidentally omitted (e.g. B.M. omits in Serbian the letter B= v).

The sources from which these tables have been taken are listed at the end of the chapter, except the sources for Classical Cyrillic, which follow immediately after the tables of transliteration for that alphabet.

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CLASSICAL CYRILLIC ALPHABET

	Cyrillic	ALA-LA 1908 Cutter	B.M.	Pruss. Instr.	Austr. Code	Czech Code	Vatican Code	Slovenian Code
1.	А а	a	a	a	a	a	a	a
2.	Б б	b	b	b	b	b	b	b
3.	В в	v	v	v	v	v	v	v
4.	Г г	g	g	g	g	g	g	g
5.	Д д	d	d	d	d	d	d	d
6.	Е е	e	e	e	e	e	e	e
7.	Ж ж	z	zh	ž	ž	ž	ž	ž
8.	З з	z(dz)	s		dz	dz	dz	dz
9.	И и	i	i	i	i	i	i	i
10.	Й й	i	i	i	i	i	i	ĩ
11.	К к	k	k	k	k	k	k	k
12.	Л л	l	l	l	l	l	l	l
13.	М м	m	m	m	m	m	m	m
14.	Н н	n	n	n	n	n	n	n
15.	О о	o	o	o	o	o	o	o
16.	П п	p	p	p	p	p	p	p
17.	Р р	r	r	r	r	r	r	r
18.	С с	s	s	s	s	s	s	s
19.	Т т	t	t	t	t	t	t	t
20.	У у ¹	u	u	u	u	u	u	u
21.	Ф ф	f	f	f	f	f	f	f
22.	Х х	h(ch)	kh	ch	ch	ch	kh	h
23.	Ц ц	o	o	o	o	o	o	o
24.	Ч ч	št	shch	št	št	št	št	št
25.	Ш ш	c	ts	c	c	c	ts	c
26.	Щ щ	č	ch	č	č	č	č	č
27.	Ъ ъ	š	sh	š	š	š	š	š
28.	Ы ы							

1. No. 21 - Occurs also as oy, and Ѹ

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	Cyrillic	ALA-LA 1908 Cutter	B.M.	Pruss. Instr.	Austr. Code	Czech Code	Vatican Code	Slovenian Code
29.	Ѣ ѣ	Ѣ		ǔ(med.)	ǔ	ǔ		ǔ
30.	Ѣ ѣ	y	ui	y	y	y	y	y
31.	Ѣ ѣ	Ѣ	,	ǐ	ǐ	ǐ	,	ǐ
32.	Ѣ ѣ	Ѣ	ye	ě	ě	ě	ě	ě
33.	Ю ю	ju	yu	ju	ju	ju	iũ	ju
34.	Ѣ ѣ	ja	ya	ja	ja	ja	iã	ja
35.	Ѣ ѣ	je	ye	je	je	je	e	je
36.	Ѣ ѣ	jē	ē	ē	ē	ē	ē	ē
37.	Ѣ ѣ	a	a	ǣ	ǣ	ǣ	ǣ	ǣ
38.	Ѣ ѣ	jē	yē	jē	jē	jē	iē	jē
39.	Ѣ ѣ	jǣ	yǣ	jǣ	jǣ	jǣ	iǣ	jǣ
40.	Ѣ ѣ	ks	x	x	x	x		x
41.	Ѣ ѣ	ps	ps	ps	ps	ps		ps
42.	Ѣ ѣ	th	th	f	th	th	f	th
43.	Ѣ ѣ	v	i	ǝ	ǝ	y	ǝ	ǝ

ALA-LA (1908), Cutter - transliterate according to A. Leskien, Handbuch der altbulgarischen (altkirchenslawischen) Sprache, 2. Aufl., Weimar, 1886; Letters 8 and 23 are also transliterated by Leskien as dz and ch.

B.M.: - British Museum, Rules for Compiling the Catalogues of Printed Books, Maps, and Music in the British Museum, London, 1936.

Pruss. Instr.: - The Prussian Instructions. Rules for the Alphabetical Catalogs of the Prussian Libraries. Tr. by Andrew D. Osborn, Ann Arbor, University of Michigan Press, 1938.

Austr. Code: - Vorschrift für die Verfassung des alphabetischen Nominal-Zettelkatalogs der Druckwerke der k.k. Hofbibliothek, Wien, 1901.

Czech Code: - J. Borecky, Pravidla katalogu základního, V Praze, 1925.

Vatican Code: - Vatican Library, Rules for the Catalog of Printed Books, tr. by Thomas J. Shanahan (and others), Chicago, ALA, 1948.

Slovenian Code: - Pravila za katalogizacijo v znanstvenih knjižnicah: Abecedni imenski katalog, Ljubljana, 1947.

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CLASSICAL CYRILLIC ALPHABET

Cyrillic	Croatian	Rumanian	Hungarian	Polish	Lehr-	Internation-
			(Kniezsa) A	B	Splawinski	al
1. А а	a	a	a	a	a	a
2. Б б	b	b	b	b	b	b
3. В в	v	v	v	v	v	v
4. Г г	g	g	g	g	g	g
5. Д д	d	d	d	d	d	d
6. Е е	e	e	e	e	e	e
7. Ж ж	ž	j	ž	ž	ž	ž
8. С с	š	dz	dz	dz	z	dz
9. З з	z	z	z	z	z	z
10. И и	i	i	i	i	i	i
11. Ї ї	ī	ī	i	i	i	i
12. К к	k	k	k	k	k	k
13. Л л	l	l	l	l	l	l
14. М м	m	m	m	m	m	m
15. Н н	n	n	n	n	n	n
16. О о	o	o	o	o	o	o
17. П п	p	p	p	p	p	p
18. Р р	r	r	r	r	r	r
19. С с	s	s	s	s	s	s
20. Т т	t	t	t	t	t	t
21. У у	u	u	u	u	u	u
22. Ф ф	f	f	f	f	f	f
23. Х х	h	h	ch	ch	x	ch
24. Ѡ ѡ	ō	ō	o	o	o	o
25. Ѣ ѣ	št	st	št	št	šč	št
26. Ъ ѣ	c	t	c	c	c	c
27. Ч ч	č	c	č	č	č	č
28. Ш ш	š	s	š	š	š	š

1. Polish B, transliterates oy as ou, and ѣ as ou.

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Cyrillic	Croatian	Rumanian	Hungarian (Kniezsa)	Polish A	Polish B	Lehr- Splawinski	Inter- national
29. Ъ ѡ	'	ă/ũ	Ѣ	'	'	Ѣ	ũ
30. Ы ы	y	âĩ	y	y	y	y	y
31. І і	'	ĩ/ũ	Ю	'	'	Ю	ĩ
32. Ъ ѡ	ě	ea	ě	ě	ě	ě	ě
33. Ю ю	ju	ĩu	ju	ju	ju	ju	ju
34. Я я	ja	ia	ja	ja	ja	ja	ja
35. ІЕ іе	je		je	je	je	je	je
36. Ѧ ѧ	ę	ea	ę	ę	ia	ę	ę
37. Ѧ ѧ	q	â	q	q	u	q	q
38. Ѧ ѧ	ję			ję		ję	ję
39. Ѧ ѧ	jq			jq	iu	jq	jq
40. Ѧ ѧ	ks	x		ks	ks	Ѧ	ks
41. Ѧ ѧ	ps	ps		ps	ps	Ѧ	ps
42. Ѧ ѧ	f	th	f	th	ph	Ѧ	t/f
43. Ѧ ѧ	ý	y	y	ý	ý	Ѧ	i
* Ѧ ѧ		î					
Ѧ ѧ		g					

* In Rumanian only; there are also the following variants of Alfabetul cirilic in latinized Rumanian: No. 6 - ie (after vowels), No. 8- z, No. 23- ch, No. 24- o, No. 29- â, u, No. 30- î, â, No. 32- e, No. 36- ê, ia, e, No. 37- î, u, No. 40- t, No. 41- i; cit. after the British Standards Institution, Transliteration of Cyrillic and Greek Characters, London, 1958, p. 15.

Croatian: - S. Jurić, "Transliteracija cirilickich azbuka," in Vestnik Bibliotekara Hrvatske, vol. 1, p. 225-244, 1950.

Rumanian: - W. K. Matthews, "The Latinisation of Cyrillic Characters," in The Slavonic and East European Review, vol. 30, p. 531-548, 1952.

Hungarian: - I. Kniezsa, Cirillbetűs szláv szövegek nemzetközi tudományos átírása, Budapest, 1939.

Polish A: - Przepisy katalogowania w bibliotekach polskich. I. Alfabetyczny katalog druków, Warszawa, 1934.

Polish B: - B. Horodyski, "O transliteracji druków cyrylickich," in Przegląd Biblioteczny, vol. 16, p. 171-179, 1948.

Lehr-Splawinski: - T. Lehr-Splawinski, Zarys gramatyki języka staro-cerkiewno-słowiańskiego, Poznań, 1923.

International: - W. K. Matthews, op. cit. supra.

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BULGARIAN ALPHABET

Bulgarian	ALA-LC B.M. 1949	Science BSI Abs.	Pruss. Instr.	Vati- can	Inter- national	ISO
1. А, а	a	a	a	a	a	a
2. Б, б	b	b	b	b	b	b
3. В, в	v	v	v	v	v	v
4. Г, г	g	g	g	g	g	g
5. Д, д	d	d	d	d	d	d
6. Е, е	e	e	e	e	e	e
7. Ж, ж	zh	zh	zh	ž	ž	ž
8. З, з	z	z	z	z	z	z
9. И, и	i	i	i	i	i	i
10. Й, й	ĩ	i	ĩ	j	j	j
11. К, к	k	k	k	k	k	k
12. Л, л	l	l	l	l	l	l
13. М, м	m	m	m	m	m	m
14. Н, н	n	n	n	n	n	n
15. О, о	o	o	o	o	o	o
16. П, п	p	p	p	p	p	p
17. Р, р	r	r	r	r	r	r
18. С, с	s	s	s	s	s	s
19. Т, т	t	t	t	t	t	t
20. У, у	u	u	u	u	u	u
21. Ф, ф	f	f	f	f	f	f
22. Х, х	kh	kh	kh	ch	kh	h
23. Ц, ц	ts	ts	ts	c	ts	c
24. Ч, ч	ch	ch	ch	č	č	č
25. Ш, ш	sh	sh	sh	š	š	š
26. Щ, щ	sht	shch	sht	št	št	št
27. Ъ, ъ	ũ/"	u/ā	ũ	ũ	"	ā
28. Ь, ь	'	,	,	/'	'	/'
29. Ю, ю	iũ	yu	yu	ju	iũ	ju
30. Я, я	iā	ya	ya	ja	iā	ja
	ũ	ā	ū	ā	ū	ā



No. 19, the letter t, - in BSI only, - when followed by s, is divided by a hyphen (t-s).

No. 27, the letter б, is transliterated by ũ in the middle of a word (ALA); by u or ā when it represents a vowel-sound, and disregarded otherwise (B.M.); disregarded when final (BSI); ā - when medial, disregarded when final (ISO).

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MACEDONIAN ALPHABET

Macedonian	BSI	Internat.	ISO
I. A, a	a	a	a
2. Б, б	b	b	b
3. В, в	v	v	v
4. Г, г	g	g	g
5. Д, д	d	d	d
6. Ѓ, ѓ	đ	ǵ	ǵ'/g'
7. Е, е	e	e	e
8. Ж, ж	ž	ž	ž
9. З, з	z	z	z
10. С, с	dz	dz	dz
11. И, и	i	i	i
12. Ј, ј	j	j	j
13. К, к	k	k	k
14. Л, л	l	l	l
15. Љ, љ	lj	l'	lj
16. М, м	m	m	m
17. Н, н	n	n	n
18. Њ, њ	nj	n'	nj
19. О, о	o	o	o
20. П, п	p	p	p
21. Р, р	r	r	r
22. С, с	s	s	s
23. Т, т	t	t	t
24. Ќ, ќ	č	č	k'/k'
25. У, у	u	u	u
26. Ф, ф	f	f	f
27. Х, х	h	ch	h
28. Ц, ц	c	c	c
29. Ч, ч	č	č	č
30. Џ, џ	dž	dž	dž
31. Ш, ш	š	š	š
32. ,	,	,	,

The letters *ǵ*, *č* and *š* are the only characters by which Macedonian differs from the Serbian alphabet.

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MOLDAVIAN ALPHABET

Moldavian	BSI
1. А, а	a
2. Б, б	b
3. В, в	v
4. Г, г	g (gh before e and i)
5. Д, д	d
6. Е, е	e
7. Ж, ж	j
8. З, з	z
9. И, и	i
10. Й, й	i
11. К, к	c (ch before e and i)
12. Л, л	l
13. М, м	m
14. Н, н	n
15. О, о	o
16. П, п	p
17. Р, р	r
18. С, с	s
19. Т, т	t
20. У, у	u
21. Ф, ф	f
22. Х, х	h
23. Ц, ц	ṭ
24. Ч, ч	c
25. Ш, ш	ʃ
26. ЪІ, ъі	ʃ ↑
27. Ь, ь	y
28. Э, э	ä
29. Ю, ю	iu
30. Я, я	ia

ISO/R9 does not mention this alphabet. This transliteration is shown under the heading "Modern Cyrillic Transliteration (ISO/R9)" in BSI's Transliteration of Cyrillic and Greek Characters, London, 1958. It is based on modern Rumanian orthography.

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RUSSIAN ALPHABET

Russian	ALA 1885	Cutter	ALA-LC 1949	NYPL	Chemical Abs.	Sl.R.	BGN
1. А, а	a	a	a	a	a	a	a
2. Б, б	b	b	b	b	b	b	b
3. В, в	v/f	v	v	v	v	v	v
4. Г, г	g/h	g/h	g	g/v	g	g	g
5. Д, д	d	d	d	d	d	d	d
6. Е, е	e/ye	e	e	e/ye/io	e	e	e/ye
7. Ё, ё			e	io/e		e	e/ye
8. Ж, ж	zh	zh	zh	zh	zh	ž	zh
9. З, з	z	z	z	z	z	z	z
10. И, и	i	i	i	i	i	i	i
11. Й, й	<u>i</u>	ĩ	ĩ	ĩ	ĩ	j	y
12. К, к	k	k	k	k	k	k	k
13. Л, л	l	l	l	l	l	l	l
14. М, м	m	m	m	m	m	m	m
15. Н, н	n	n	n	n	n	n	n
16. О, о	o	o	o	o	o	o	o
17. П, п	p	p	p	p	p	p	p
18. Р, р	r	r	r	r	r	r	r
19. С, с	s	s	s	s	s	s	s
20. Т, т	t	t	t	t	t	t	t
21. У, у	u	u	u	u	u	u	u
22. Ф, ф	f	f	f	f	f	f	f
23. Х, х	kh	kh	kh	kh	kh	kh	kh
24. Ц, ц	tz	ts	t̄s	tz	ts	c	ts
25. Ч, ч	tch	tch	ch	ch	ch	č	ch
26. Ш, ш	sh	sh	sh	sh	sh	š	sh
27. Щ, щ	shtch	shtch	shch	shch	shch	šč	shch
28. Ъ, ъ			»	»	«	,	»
29. Ы, ы	y	y	y	y	y	y	y
30. Ь, ь	,	' or,	,	,	«	,	,
31. Э, э		e	e	è	e	è	e
32. Ю, ю	yu	iu/u	iũ	yu	yu	ju	yu
33. Я, я	ya	ia	iã	ya	ya	ja	ya

No. 4, the letter *г*, is transliterated by ALA 1885 and Cutter as *h*, when it represents the original foreign *h*.

NYPL transliterates the letter *г* by the letter *v* when in genitive form.

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RUSSIAN ALPHABET

Russian	B.M.	PCGN	BSI	Science Abs.	Etudes Slaves	Pruss. Instr.	Vatican
1. А, а	a	a	a	a	a	a	a
2. Б, б	b	b	b	b	b	b	b
3. В, в	v	v	v	v	v	v	v
4. Г, г	g	g/v	g	g	g	g	g
5. Д, д	d	d	d	d	d	d	d
6. Е, е	e	e	e	e	e	e	e
7. Ё, ё		e	ë	ë			
8. Ж, ж	zh	j	zh	zh	ž	ž	ž
9. З, з	z	z	z	z	z	z	z
10. И, и	i	i	i	i	i	i	i
11. Й, й	i	i	ĩ	ĩ	j	j	ĩ
12. К, к	k	k	k	k	k	k	k
13. Л, л	l	l	l	l	l	l	l
14. М, м	m	m	m	m	m	m	m
15. Н, н	n	n	n	n	n	n	n
16. О, о	o	o	o	o	o	o	o
17. П, п	p	p	p	p	p	p	p
18. Р, р	r	r	r	r	r	r	r
19. С, с	s	s	s	s	s	s	s
20. Т, т	t	t	t	t	t	t	t
21. У, у	u	u	u	u	u	u	u
22. Ф, ф	f	f	f	f	f	f	f
23. Х, х	kh	kh/h	kh	kh	ch	ch	kh
24. Ц, ц	ts	ts	ts	ts	c	c	ts
25. Ч, ч	ch	ch	ch	ch	č	č	č
26. Ш, ш	sh	sh	sh	sh	š	š	š
27. Щ, щ	shch	shch	shch	shch	šč	šč	šč
28. Ъ, ъ			"	˘	,		
29. Ы, ы	ui	i	ȳ	ȳ	y	y	u
30. Ь, ь	,	,	,	,	,	,	,
31. Э, э	e	e	e'	é		è	è
32. Ю, ю	yu	yu	yu	yu	ju	ju	iu
33. Я, я	ya	ya	ya	ya	ja	ja	ia

No. 4. PCGN transliterates the letter *ѣ* by *v* when in genitive form.

No. 23. PCGN transliterates the letter *х* by *h* when it represents the original foreign *h*.

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RUSSIAN ALPHABET

Russian	Acad. of Sciences	Geog. OST-VKS	IAkov-	Larin	Croat.	In-	ISO
1906	1939	1957	Soc. No.8483	lev		ter-	nat.
1.А, а	a	a	a	a	a	a	a
2.Б, б	b	b	b	b	b	b	b
3.В, в	v	v	v	v	v	v	v
4.Г, г	g	g	g	g	g	g	g
5.Д, д	d	d	d	d	d	d	d
6.Е, е	e/je	e/je	e/je	e/je	e	e	je/e
7.Ё, ё	'o/o/jo	e/je	'o/o/jo	e/je	e/je	ô/jo	o/jo
8.Ж, ж	ž	ž	ž	j	zh	ž	ž
9.З, з	z	z	z	z	z	z	z
10.И, и	i/ji	i/ji	i/ji	i	i	i	i
11.Й, й	j	j	j	j	j	j	j
12.К, к	k	k	k	k	k	k	k
13.Л, л	l	l	l	l	l	l	l
14.М, м	m	m	m	m	m	m	m
15.Н, н	n	n	n	n	n	n	n
16.О, о	o	o	o	o	o	o	o
17.П, п	p	p	p	p	p	p	p
18.Р, р	r	r	r	r	r	r	r
19.С, с	s	s	s	s	s	s	s
20.Т, т	t	t	t	t	t	t	t
21.У, у	u	u	u	u	u	u	u
22.Ф, ф	f	f	f	f	f	f	f
23.Х, х	h	ch	ch	kh	x	x	h
24.Ц, ц	c	c	tz	c/ts	ç	c	c
25.Ч, ч	č	č	tsh	ch	č	č	č
26.Ш, ш	š	š	sh	sh	š	š	š
27.Щ, щ	šč	šč	stsh	sch	šč	ß	šč
28.Ъ, ъ	-	-	,	j'	-	-	-
29.Ы, ы	y	y	y	y	y	y	y
30.Ь, ь	'	l	,/j	j	i/j	'/j	','
31.Э, э	e	e	e	e	-	ae	è
32.Ю, ю	'u/ju	'i/ju	ju	ju	û/ju	û/ju	ju
33.Я, я	'a/ja	'ia/ja	ja	ja	á/ja	â/ja	ja

No. 7 - 'io ('o ,e) after consonants except Ч, Ш, Ж, Щ
 = jo (1906), je (1939) - otherwise
 = o (1957) after Ч, Ш, Ж, Щ
 = jo - initially, after vowels and Ъ, Ь

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SERBIAN ALPHABET

Serbian	ALA-LC 1949	B.M.	BSI	Science Abs.	PCGN	Vati- can	Prüss. Instr.	Croat.	ISO
1. A, a	a	a	a	a	a	a	a	a	a
2. Б, б	b	b	b	b	b	b	b	b	b
3. В, в	v	v	v	v	v	v	v	v	v
4. Г, г	g	g	g	g	g	g	g	g	g
5. Д, д	d	d	d	d	d	d	d	d	d
6. Ђ, ђ	đ	g'	đ	j'	dy/d'/j	đ	d'	đ	đ
7. Е, е	e	e	e	e	e	e	e	e	e
8. Ж, ж	ž	ž	ž	zh	zh	ž	ž	ž	ž
9. З, з	z	z	z	z	z	z	z	z	z
10. И, и	i	i	i	i	i	i	i	i	i
11. Ј, ј	j	j	j	y	y	j	j	j	j
12. К, к	k	k	k	k	k	k	k	k	k
13. Л, л	l	l	l	l	l	l	l	l	l
14. Љ, љ	lj	lj	lj	l'	ly/l'	lj	l'	lj	lj
15. М, м	m	m	m	m	m	m	m	m	m
16. Н, н	n	n	n	n	n	n	n	n	n
17. Њ, њ	nj	nj	nj	n'	ny/n'	nj	ń	nj	nj
18. О, о	o	o	o	o	o	o	o	o	o
19. П, п	p	p	p	p	p	p	p	p	p
20. Р, р	r	r	r	r	r	r	r	r	r
21. С, с	s	s	s	s	s	s	s	s	s
22. Т, т	t	t	t	t	t	t	t	t	t
23. Ћ, ћ	ć	ć	ć	t'	ty/t'/ch	ć	ć'	ć'	ć'
24. У, у	u	u	u	u	u	u	u	u	u
25. Ф, ф	f	f	f	f	f	f	f	f	f
26. Х, х	h	h	h	kh	kh/h	h	h	h	h
27. Ц, ц	c	c	c	ts	ts	c	c	c	c
28. Ч, ч	č	č	č	ch	ch	č	č	č	č
29. Џ, џ	dž	dž	dž	j	j	dž	g'	dž	dž
30. Ш, ш	š	š	š	sh	sh	š	š	š	š

ALA-LC corresponds exactly to the Croatian transliteration of Serbian. No.³³PCGN transliterates by ch at the end of a word, otherwise by ty or t'.

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UKRAINIAN ALPHABET

Ukrainian	ALA-LC 1949	B.M.	PCGM (RGS.II)	BSI	Pruss. Instr.	Vatican	Ecole nat. des langues orient. vivan- tes
1. А, а	a	a	a	a	a	a	a
2. Б, б	b	b	b	b	b	b	b
3. В, в	v	v	v	v	v	v	v
4. Г, г	h	h	h	h	g	h	h
5. Ґ, ґ	g	g	g	g	ǵ	g	g
6. Д, д	d	d	d	d	d	d	d
7. Е, е	e	e	e	e	e	e	e
8. Є, є	ie	e	ye	ye	je		je
9. Ж, ж	zh	zh	j	zh	ž	ž	ž
10. З, з	z	z	z	z	z	z	z
11. И, и	y	i	i	y	i	i	y
12. І, і	i	i	i	i	i	i	i
13. Ї, ї	ī	i	yi	yi			ī
14. Й, й	ī	i	ī	ī	j	i	j
15. К, к	k	k	k	k	k	k	k
16. Л, л	l	l	l	l	l	l	l
17. М, м	m	m	m	m	m	m	m
18. Н, н	n	n	n	n	n	n	n
19. О, о	o	o	o	o	o	o	o
20. П, п	p	p	p	p	p	p	p
21. Р, р	r	r	r	r	r	r	r
22. С, с	s	s	s	s	s	s	s
23. Т, т	t	t	t	t	t	t	t
24. У, у	u	u	u	u	u	u	u
25. Ф, ф	f	f	f	f	f	f	f
26. Х, х	kh	kh	kh	kh	ch	kh	kh
27. Ц, ц	ts	ts	ts	ts	c	ts	c
28. Ч, ч	ch	ch	ch	ch	č	č	č
29. Ш, ш	sh	sh	sh	sh	š	š	š
30. Щ, щ	shch	shch	shch	shch	šč	šč	šč
31. Ю, ю	iū	yu	yu	yu	ju	iū	ju
32. Я, я	iā	ya	ya	ya	ja	iā	ja
33. Ь	'	,	,	/	'	'	'

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UKRAINIAN ALPHABET

Ukrainian	Etudes Slaves	Hungar. Knięzsa	Croatian	Rudnyc ¹ - kyj	AUA-UE	Inter- national	ISO
1. А, а	a	a	a	a	a	a	a
2. Б, б	b	b	b	b	b	b	b
3. В, в	v	v	v	v	v	v	v
4. Г, г	h	h	g	h	h	h	g
5. Ґ, ґ	g	g	g	g	g	g	g
6. Д, д	d	d	d	d	d	d	d
7. Е, е	e	e	e	e	e	e	e
8. Є, є		je	ě	ye	ye/ie	ye	je
9. Ж, ж	ž	ž	ž	zh	zh	ž	ž
10. З, з	z	z	z	z	z	z	z
11. И, и	y	y	y	y	y	y	y
12. І, і	i	i	i	i	i	i	i
13. Ї, ї		ji	ĩ	yi	yi/ĩ	yi	ji
14. Й, й	j	j	j	y/y'	y	j	j
15. К, к	k	k	k	k	k	k	k
16. Л, л	l	l	l	l	l	l	l
17. М, м	m	m	m	m	m	m	m
18. Н, н	n	n	n	n	n	n	n
19. О, о	o	o	o	o	o	o	o
20. П, п	p	p	p	p	p	p	p
21. Р, р	r	r	r	r	r	r	r
22. С, с	s	s	s	s	s	s	s
23. Т, т	t	t	t	t	t	t	t
24. У, у	u	u	u	u	u	u	u
25. Ф, ф	f	f	f	f	f	f	f
26. Х, х	ch	ch	h	kh	kh	ch	h
27. Ц, ц	c	c	c	c	^{ts} , c	c	c
28. Ч, ч	č	č	č	ch	ch	č	č
29. Ш, ш	š	š	š	sh	sh	š	š
30. Щ, щ	šč	šč	šč	shch	shch	šč	šč
31. Ю, ю	ju	ju	ju	yu	yu/iu	ju	ju
32. Я, я	ja	ja	ja	ya	ya/ia	ja	ja
33. Ь	'	,	,	,	,	'	'

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WHITE RUSSIAN ALPHABET

White Russian	ALA-LC 1949	BSI	Polish	Croat.	Intern.	ISO
1. А, а	a	a	a	a	a	a
2. Б, б	b	b	b	b	b	b
3. В, в	v	v	v	v	v	v
4. Г, г	h	h	h	g	h	h
5. І, і	g	g	g	g	g	g
6. Д, д	d	d	d	d	d	d
7. Е, е	e	e	e	e	e	e
8. Ё, ё	io	ě	ě	ě	jo	ě
9. Ж, ж	zh	zh	ž	ž	ž	ž
10. З, з	z	z	z	z	z	z
11. І, і	i	i	i	i	i	i
12. Й, й	ŷ	ŷ	j	j	j	j
13. К, к	k	k	k	k	k	k
14. Л, л	l	l	l	l	l	l
15. М, м	m	m	m	m	m	m
16. Н, н	n	n	n	n	n	n
17. О, о	o	o	o	o	o	o
18. П, п	p	p	p	p	p	p
19. Р, р	r	r	r	r	r	r
20. С, с	s	s	s	s	s	s
21. Т, т	t	t	t	t	t	t
22. У, у	u	u	u	u	u	u
23. Ў, ў	ũ	w	ũ	ũ	ũ	ũ
24. Ф, ф	f	f	f	f	f	f
25. Х, х	kh	kh	ch	h	ch	h
26. Ц, ц	ts	ts	c	c	c	c
27. Ч, ч	ch	ch	č	č	č	č
28. Ш, ш	sh	sh	š	š	š	š
29. ЪІ, ъі	y	ȳ	y	y	y	y
30. Ь, ь	'	'or'	'	'	'	'or'
31. Э, э	ē	é	ě	è	e	ě
32. Ю, ю	iu	yu	ju	ju	ju	ju
33. Я, я	ia	ya	ja	ja	ja	ja

TABLES

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KARADZIC'S TABLE

Karadzic's transliteration of Serbian into Croatian, Czech,
Polish, Hungarian, German, Italian, French and English.

Alphabeti serbici
cum viciniorum popularium et alijs cultioris
Europae alphabetis parallelismus¹.

Serbian	Croat.	Bohem.	Polon.	Hungar.	German	Ital.	Gall.	Angl.
1. A, a	a	a	a	a'	a	a	a	
2. Б, б	b	b	b	b	b	b	b	b
3. В, в	v	w	w	v	w	v	v	v
4. Г, г	g	g	g	g	g	g	g	g
5. Д, д	d	d	d	d	d	d	d	d
6. Ђ, ђ	dj	d'		gy				
7. Е, е	e	e	e	e	e	e	e	e
8. Ж, ж	ž	ž	z	zs			j	s
9. З, з	z	z	z	z	s	s	z	z
10. И, и	i	i	i	i	i	i	i	ee/y
11. Ј, ј	j	j	j	j	j	j	i	y
12. К, к	k	k	k	k	k	c	c	k
13. Л, л	l	l		l	l	l	l	l
14. Љ, љ	lj		l	ly		gl	il	
15. М, м	m	m	m	m	m	m	m	m
16. Н, н	n	n	n	n	n	n	n	n
17. Њ, њ	nj	ñ	ñ	ny		gn	gn	
18. О, о	o	o	o	o	o	o	o	o
19. П, п	p	p	p	p	p	p	p	p
20. Р, р	r	r	r	r	r	r	r	r
21. С, с	s	s	s	sz	ss	s	s	s
22. Т, т	t	t	t	t	t	t	t	t
23. Ћ, ћ	ć	t'		ty				
24. У, у	u	u	u	u	u	u	ou	oo
25. Ф, ф	f	f	f	f	f	f	f	f
26. Х, х	h	ch	ch	h	ch			
27. Ц, ц	c	c	c	cz	z	z		
28. Ч, ч	č	č	cz	cs	tsch	c		ch
29. Џ, џ	dz/g'					ge		j
30. Ш, ш	š	š	sz	s	sch	sc	ch	sh
б, в								

1. Vuk S. Karadzic, Lexicon serbico-germanico-latinum, (4th ed.), Belgradi, Tipographia Regni Jugoslaviae, 1935; the 1st ed. of this Lexicon appeared in 1818.

The transliteration tables of the modern Cyrillic alphabets, (besidesthose already mentioned under the "Classical Cyrillic") have been taken from the following sources:

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BSI - British Standards Institution, Transliteration of Cyrillic and Greek Characters, London, 1958.

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NYPL - Rosemary Neiswender, Russian Transliteration, Sound and Sense, in Special Libraries, V. 53, p. 37-41, January 1962.

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Sc. Abst. - Science Abstracts, Electrical Engineering Abstracts (Section B of Science Abstracts), V. 56, p. x-xl, 1953.

Slavic Review - W. K. Matthews, op. cit.

CONCLUSIONS

The relationship between the Cyrillic and Roman-style alphabets has a long history. This inter-alphabetic relationship is also one of the serious problems of today, as far as bibliographies, catalogues and other reference tools are concerned.

For long centuries, transcription was used by the Roman-alphabetic nations for the rendering of Cyrillic-alphabetic words and names, not only for linguistic, educational or other similar purposes, but for purely bibliographical purposes as well.

Transcription is what is still employed today by the Cyrillic-alphabetic nations when dealing with the Roman alphabet, particularly in the case of names. This manner of reproducing foreign names by Cyrillic characters will probably continue for a long time to come, since in the Cyrillic-writing world one is accustomed to read what is written ... what one actually sees. This is not at all the case in the Roman-alphabetic world, where one writes, for instance, Worcester or Proulx, and then reads about half of what is written.

The Roman-alphabetic world, in view of the discrepancy between speech and its graphic representation, has opted for another method of rendering foreign (including Cyrillic) words or names ... the method of transliteration.

The difference between transcription and transliteration was long ago realized, but a clear distinction of one from the other was first made by the Copenhagen Conference in 1925¹.

1. Otto Jespersen, Phonetic transcription and transliteration; proposals of the Copenhagen Conference, April 1925, Oxford, 1926.

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The object of this clarification was to define the purposes of each of these two operations, as founded on different principles and having two different aims. Such clarification is, however, of more practical use for the Roman-style alphabets than the Cyrillic. It was set forth by the Conference and accepted as a guiding principle that transcription, or "transcription phonétique", as it was called, must render the spoken language and sounds. Its chief aim is to show proper pronunciation. The letters of one alphabet here become guides to the pronunciation of a foreign language written in another foreign alphabet. This has always been the accepted principle in Cyrillic alphabetic usage, but not (or at least not always) in the usage of the Roman-based alphabets.

Transcription still remains an important inter-alphabetic operation. Transcription is used in dictionaries (to indicate pronunciation), in primers and readers, and in other language aids. It is used for the rendering of foreign names in the daily press, in magazines, in handbooks, in histories and in bibliographies ... material with which every librarian has to do.

Every "national" alphabet, Roman or Cyrillic, will have some system of transcribing foreign words and sounds. For national purposes it may well be a satisfactory system, provided that it is uniform and observed by all concerned. For many practical uses transcription cannot be replaced by transliteration, which is of nonservice as regards to the pronunciation (of foreign names and so forth).

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On the other hand, for librarians, documentalists and bibliographers it is of minor importance how a word is read or pronounced. What is important is how it is written, and how to reproduce unambiguously each written symbol (for instance, each Cyrillic letter). The basis of procedure here lies in the written form, that is to say, in the letters by which words or names are represented. This second approach to foreign scripts is transliteration, a process which, we repeat, is based not on the sound (pronunciation) but on the symbols by which the sound is represented. Yet relying on the letter does not mean that transliteration can entirely ignore the relation between the letter and the sound in the original language, nor that it can play ducks and drakes with graphemes that in the different languages have strong associations of meaning or function. This is of paramount importance, for graphs, in every alphabetic system, are closely associated with certain sounds, and assigning to them a different function than that which they already have acquired is evidently an illogical procedure. This is the case, for instance, when a Roman *h* is used to represent Cyrillic *х*, and a Roman *g* to represent Ukrainian and White Russian *Г*, thus intermixing two different phonemes.

The theory and practice of transliterating Cyrillic have established certain principles, which when respected should lead to simple and workable systems. When compared with some older systems, which are often a mixture of the phonetic and literal approaches, the newer practice of letter-for-letter operation is certainly a step in advance.

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Basically, all systems of transliterating Cyrillic may be divided into two groups: English-style, and Croatian-style. Beside these two groups we have a number of "national" systems or practices, each adapting the transliteration scheme to its own needs.

In view of the modern (letter-for-letter) trend, the difficulty that arises is how to effect a reconciliation with old-established "national" schemes or practices, which in certain cases depart far from what transliteration principle would demand. This is practically the only difficulty in the way of agreement. What is mainly concerned is the practice of using combinations of two or more characters to represent a single letter of another alphabet. Thus, for instance, the Cyrillic Ш is transliterated by sch, sh, or s.

This happens not only with the Cyrillic scripts, but with others as well. The Greek letter ϱ is transliterated in the ALA system as rh, and in the B.M. system as a simple r. The Hebrew letter "shin" in the ALA is sh; in the Vatican system it is s. The letter "tsadi" is represented by both ts and s.

The Cyrillic alphabets have several letters that are difficult to transliterate into Roman. They are: ж, х, ц, ч, ш, щ (letters which, except for the last, are common to all Cyrillic alphabets) plus the "palatalizing" vowels (which are common to some of these alphabets). In transliterating Cyrillic, especially as regards to the letters mentioned above, there is no system that keeps strictly to the principle of "one-letter-for-one-letter" operation. This departure from principle is unavoidable if one does not want to create additional symbols in the

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Roman alphabet and considers diacritics as undesirable. But even in systems observing the "one-letter-for-one-letter" principle there is no entire consistency. In case of the letter Ѣ , for instance, a diacritic might, as elsewhere, be employed (at least in Croatian-style transliteration). But no system ventures to do so. Here the departure from the principle is made because national practices are too strong, and unnecessary conflict therewith is undesirable.

The above-mentioned consonants are transliterated in English-style schemes by as many as two to four equivalents (zh, kh, ts, ch, sh, shch). The equivalents in question are easily acceptable to the English reader, because they are, or could be, associated with the same (ch) or similar (ts) sounds in the English language. Additional difficulty arises in connection with the transliteration of the Cyrillic x. The two major systems, the ISO/R9 and the Croatian, transliterate this x by h, an unsatisfactory solution, for there are two Cyrillic alphabets which could make good use of h in another connection.

The letter h is needed to represent its counterpart in the Ukrainian and White Russian alphabets. In the Ukrainian and White Russian alphabets the letter ґ represents a phoneme distinct from the one represented by the same graph in other Cyrillic alphabets ... a phonetic distinction that must be respected. This letter ґ should not be transliterated as in the case of other Cyrillic alphabets, by the Roman g. Indeed, the Roman g is needed in these two alphabets for the letter ґ , which does not occur in other Cyrillic alphabets, and has the phonetic value g.

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These systems and variants of systems used in the English-speaking world could easily be brought into harmony. Distinctions among them are insignificant, mainly in the employment of diacritics.

The second major system of transliteration of Cyrillic is that based on Czech or Croatian tradition. It has been accepted by ISO (with very insignificant changes), thus becoming an international system.

Yet some nations, members of ISO, are hesitant about accepting it, and persist in using their own "national" systems. Particularly opposed to it is the English-speaking world. The reason is not difficult to understand. Some of these English "national" schemes have long been in use; hundreds of volumes of bibliographic or other reference tools have been published according to their principles, and millions of readers are accustomed to them. The switch to another system, which might be found unsatisfactory ten or twenty years from now, creates a problem not easy to solve.

Another problem arising in the ISO/R9 system is how its principles are to be interpreted, how strict should they be, what exceptions should they allow, and why? And ultimately, which "national" Roman alphabet should become the bibliographic Roman, the sole basis of transliteration?

The last question is probably the most difficult to answer. What would be convenient as a Roman alphabet for the French would not be convenient for the English, Germans or Croatians.

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There is also a practical question to be answered: would an international system for transliteration of Cyrillic (such as ISO/R9), if accepted for domestic use, assist the average reader (not merely the learned scientist) in his quest for information and in his use of bibliographic tools, or would it confuse him even more than he is confused today?

Further, should the enforcement of theoretical principles ignore all the fairly well established national practices, or might not some compromise be found, reconciling national systems, practices or points of view with the "internationality" of the proposed system?

As is well known, the international ISO system for Cyrillic has not been accepted by the USA and Great Britain, the two greatest producers of bibliographic and reference materials. This situation also of necessity influences the Canadian standpoint. Canada, being heavily dependent on reference works (bibliographies, indexes, encyclopedias) produced in the USA and in Great Britain. has had good and just reasons to adopt the system which prevails in the English-speaking world, the one accepted by ALA and used by a great many American libraries.

This English-style transliteration also solves more effectively the controversial problems in connection with the transliteration of the letters Γ , Γ and x in the Ukrainian and White Russian alphabets¹.

It cannot be denied that uniformity of transliteration would greatly facilitate bibliographic operations and render bibliographic

1. E. R. Hope, "Transliterating Russian," in New Scientist, no. 298, August 2, 1962.

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tools much easier to use. But it also seems certain that the above-mentioned questions must be taken into account, if the proposed system for international use is not to remain just a particularism of one or another international body.

What adjustments the ISO authorities may introduce into the system, in order to make it satisfactory to all, remain to be seen. Yet one cannot deny that the work accomplished so far by this Organization in furthering a common cause deserves the full acknowledgment and support of all those who understand the importance of bibliographic uniformity and systematization of information retrieval.

The interest of the Western world in the Cyrillic-alphabetic output has increased enormously in recent years. It may be assumed that this interest will continue, and that a great deal of information will be drawn from material originally published in Cyrillic. This is an additional supporting argument for uniformity of approach to the Cyrillic scripts, or for some other practical solution of the problem.

One does not need to exaggerate. The existence of a transliteration system will not absolutely determine the accessibility of Cyrillic material, but it will certainly determine how easily and effectively the bibliographic and other reference material may be used.

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