

Transliteration

≠ Transcription ≠

Translation

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Transliteration, transcription, and translation cause lots of work in libraries and information centers—in cataloging, abstracting, indexing, etc. If you're not exactly clear as to what each of the three is—where one leaves off and the other begins—you're not alone. Even experts frequently confuse them. They don't confuse the actual concepts or definitions. But they do confuse them—especially transliteration and transcription—in practice when they attempt to accomplish both at the same time.

Transliteration is the *spelling* of words from one language with characters from the alphabet of another. Ideally, it is a one-for-one character-by-character replacement. It should be a simple mechanical process. Too frequently it isn't—as we shall see.

Transcription is the representation of the *sound* of words in a language using any set of symbols you may care to invent or borrow for the purpose. For example, you can transcribe Russian words using the symbols of the international phonetic alphabet (IPA). You can also transcribe them using the letters of the roman alphabet. The results will differ. The IPA was invented for the purpose of transcribing various languages that do not use the roman alphabet or have no alphabets at all. If you do not know the IPA, you will find it used in most bilingual dictionaries to indicate the pronunciation of *English* words, but rarely those of other languages with more rational and phonetic spellings. See, for example, any of the excellent Cassell's series of dictionaries.

One can also transcribe *English* using the roman alphabet. Lots of spelling reformers wish we would. Instead we continue to spell English in a way that baffles all of us—native speakers and foreigners alike. English spelling is an historical monument, packed with ethnic, linguistic, martial, geopolitical, commercial, and even scientific memorabilia. As a monument it is absorbingly interesting, but like monuments in general, it is rather awkward for daily use.

Beyond transliteration and transcription is *translation*, the use of words in one language to express the meaning of words in another.

As I have said, there is frequent confusion of the three in practice. Transliterators, especially if they know the language they're transliterating, have an itch to turn what should be a straight one-for-one *transliteration* into as much of a *transcription* as possible. When they start scratching the itch, the results can be disastrous for bibliography. For example, *Khrushchev* is a transliteration of the Russian name *Хрущев*. I must add, hastily, that it is an *English-speaking* person's transliteration. But to English-speakers who know Russian, it doesn't transcribe the sound of the Russian name. To an English-speaker, a better *transcription* would be something like *Khrooshtchoff*.

Whenever that itch to transcribe intrudes upon what should be the absolute mechanicalness of transliteration, we have to worry about who has scratched the itch. Mr. Khrushchev may be *Khrooshtchoff* if the scratcher spoke En-

glish. But he, was probably *Chruschtchow* if he spoke German. (Note that a proper 'German' transliteration would be *Chrustershev*.) The transcription would be *Jruchev* in Spanish, *Chroesjtjov* in Dutch, and *Crustsciolf* in Italian. When transcriptions of this sort intrude upon transliteration, or when they are used as transliterations, they create havoc in international information systems.

The transcriptions I've given are not products of my imagination. They were and still are generally used in European newspapers. Recently I came across an amusing example of this transliteration/transcription confusion, in a single article. Throughout *Хрущев* is transliterated as *Kruščev*, a very nearly correct 'Slavic' transliteration. The author nevertheless always speaks of the *khrouchtchéviste* era, and Mr. Kosygin appears throughout wholly Gallicized as *Kossyguine*.¹

The accidental or intended confusion of transliteration and transcription may be understandable enough. But sometimes they are confused even with translation. This happens when words borrowed from one language by another are transliterated and/or transcribed back into the language from which they were borrowed.

Borrowings are sometimes called *loan-words*. I should point out, perhaps, that they are not the same as *cognate* words in different languages. Cognates have an ultimate common origin, and may or may not look alike. An example of borrowing is *intelligentsia*, a word we borrowed from the Russians, who had borrowed its base (*intelligent*) from French. Note that *intelligentsia* is the English spelling; *intelligentsia* is the correct transliteration of the Russian word.

There are many such borrowings in Russian. *Interes* is a transliteration of a word that Russian borrowed from French—it's not a translation. Likewise, *intsedent* is not a misspelled translation of the Russian word. It's a transliteration of a borrowed word.

Cognates are a completely different matter, and linguistically much more interesting. They may turn up looking exactly alike, or completely unrecognizable. In the latter case, recognition requires linguistic training, especially when the languages involved are so distantly related that they use different alphabets. Thus, the almost recognizable *baradar* and *doxtar* are transliterations of the cognate Persian words for *brother* and *daughter*.

Brat is the Russian cognate of Persian *baradar* and English *brother*. On the other hand, the Russian word *slavo* is a cognate of the name *Cleon*. That sort of specialized knowledge isn't going to help you in dealing with problems of transliteration and translation. Nor are cognates as straightforwardly or as reliably helpful in translating languages that are much more closely related than English and Persian or English and Russian. It would probably be impossible to count the number of times the French word *dosage* (titration, determination, quantitative analysis) has been mistranslated as *dosage* in English biochemical research documents. The same applies to the frequent mistranslation of German *Herzfehler* (cardiac defect) as *heart failure* in medical research documents.

I've gone into all of this because transliteration of Russian (that is transliteration of the Cyrillic into the roman alphabet) is a major problem, no matter how simple it ought to be.

Recently I used the *Author Index and Address Directory of Current Contents*[®] (*CC*[®]) to locate an address. I came across two slightly different Russian names. The 'two' authors had the identical address. Furthermore, the two articles reported research in the same field. The 'two' authors' names proved to be different transliterations of the same name.

How did this 'mistake' in *CC* occur? At ISI[®] we have used the same system of transliterating Russian for many years, a system that agrees in essentials with that used by the Russians. Naturally we stress

the importance of consistency. It isn't sufficient to be 'almost correct' about authors' names.²

As it turns out, the mistake was not originally made by ISI. We merely perpetuated it by accepting a transliteration provided by a Soviet journal.

If one compares the Russian contents page in question with the English version prepared in Moscow, one could not possibly conclude that any *one* system of transliteration had been used. This was surprising, since we assumed that various Soviet dicta on this and other standard procedures would be followed. The Soviet Union does have a standard system for English-language transliteration of Russian, but its application depends upon human frailty.³

The error has been corrected now that we are aware how inconsistent the Russians can be in dealing with their system of transliteration. In some instances, this means we must generate in toto another English contents page. In this process, the contents page will also become more legible, since the Russian publishing houses win few prizes for typographic style. This practice will prevent a Russian name like *Braunshtein* from being re-Germanized to *Braunstein*. There's always the odd problem, however. If on occasion a Westerner by the name of Hilbert should publish or be cited in Soviet journal, he'll turn up in the Cyrillic alphabet as *Gilbert*. A consistent transliterating system will fail us in a case like this. It's unlikely that we'd know

in every case whether the man is really Gilbert or might be Hilbert.

Transliteration from one alphabet to another must be a simple, algorithmic or mechanical process. I demonstrated this about fifteen years ago at a meeting of the American Chemical Society in Atlantic City. At that time, ISI (then known as Eugene Garfield Associates, Information Engineers) demonstrated truly mechanical transliteration of Russian. Without knowledge of the Russian language a typist familiar only with the Cyrillic alphabet copied a Cyrillic text. The typewriter keyboard contained Cyrillic characters. However, the typewriter (it was a Flexowriter) produced a perforated paper tape. Then, the tape was fed into the tape-reading unit of the typewriter, which printed out the transliterated text in roman characters. All of this can easily be combined into a single typing operation. But the operator has to get used to a new typing rhythm. Several Cyrillic characters require more striking than keying strokes. For example, four characters must strike when keying the Cyrillic character *ш*, which we transliterate with *-shch*.

Obviously the problem of transliteration will vanish if the typist is going to translate the document. It would also vanish if the Russians published and cited in English, or if they used the roman alphabet themselves. That suggestion, along with some others regarding Russian and the scientific literature, I'll discuss in a follow-up a few weeks from now.

1. Fejto J. Chine/U.R.S.S.; de l'alliance au conflit [China/USSR; from alliance to conflict]. *Revue de l'Est* 4(4):207-27, 1973.

2. Neiswender R. Russian transliteration—sound and sense. *Special Libraries* 53:37-41, 1962. — This excellent article reviews the various systems of transliterating Russian used by speakers of English, and others. As its title implies, it discusses also the transcription vs. transliteration controversy.

3. Reformatskii A A. Transliteratsiia russkikh tekstov latinskimi bykvami [Transliteration of Russian texts with Latin letters]. *Voprosy Iazykhoznanii* (5):96-103, 1960. — I am indebted for this reference, and for the various examples of continental transliterations of *Khrushchev* to Mr. H. Kraus of the Slavic Division of the Library of Congress. The article gives many systems of transliteration, including one that the author finds suitable for 'universal' use in transliterating Russian with roman characters.