Writing in the Altaic World Studia Orientalia 87, Helsinki 1999, pp. 17–27

A new approach to the Romanization of Written Mongol

Michael Balk & Juha Janhunen

This paper has grown from a joint project which the two authors initiated in late 1997 on the Romanization of the Mongol script. The authors first met earlier the same year at the Seventh International Congress of Mongolists in Ulan Bator, where they presented individual papers on related topics (Balk 1997, Janhunen 1997). Since it turned out that the two papers reflected an almost identical understanding of the fundamental issues of the problem, the authors decided to continue the work together in order to create a unified system of Romanization for Written Mongol with a potential for wider use in both scholarly and practical contexts. The final results of this work, as well as the detailed discussions which preceded them, will appear as separate publications, in which the history of the question will also be given due consideration. The purpose of the present paper is to give an introduction to the principal considerations and motivations underlying the new approach to the Romanization of Written Mongol. At the same time, the actual solutions proposed by the authors will also be illustrated.

Theoretical prolegomena

Although the Mongol script is essentially alphabetic, in that it has a set of distinct linear symbols or letters which are capable of expressing both the consonants and the vowels occurring in spoken samples of the Mongol language, it is in many ways different from most other alphabetic scripts. Some of the special features of the Mongol script, though well known to anybody working with the language, deserve to be recalled here:

(i) First, unlike, for instance, the Roman alphabet, the Mongol script, even in its printed form, binds the alphabetic segments into sequences or *graphic words* which influence the shapes of the individual letters. Most letters of the Mongol alphabet have therefore distinct variant forms for the initial, medial and final positions, as well as, occasionally, for the absolute unbound position. In some cases, the same graphic form appears as the initial or medial shape of one letter, and as the final shape of another letter. For instance, the form ᠪ, which in initial or medial

position stands for the weak labial stop *b* (our Romanization ᠪ **b**), expresses in final position the rounded back vowels *u o ü ö* (our Romanization ᠪ **u**). To account for such instances of dual function, we have to analyze the Mongol script in terms of two separate levels, which may be identified as *glyphic* and *alphabetic*. At the glyphic level, we can only interpret identical forms in terms of identical units (a single letter ᠪ **b**), while at the alphabetic level we may recognize the factor of positional variation and interpret a single graphic form in two different positions as two distinct units (ᠪ **b** vs. ᠪ **u**).

(ii) Also, when analyzed in terms of their linear graphic structure, certain letters, or certain positional variants of letters, actually turn out to be composed of sequences of two separate elements which can also occur as independent linear units of the Mongol script. For instance, the classical final forms of the letters expressing the consonants *b* resp. *g* (the latter in front-vocalic words) contain initial elements identical with the letters for *u* resp. *i* plus a final element identical with one of the graphic forms expressing the vowels *a e* (our Romanization ᠡ **e**). Here, the glyphic analysis yields a sequential interpretation (ᠣᠡ **ue** resp. ᠢᠡ **ie**), while at the alphabetic level we may interpret the sequences as the final variants of single consonant letters (ᠪ **b** resp. ᠭ **g**).

(iii) Further, the graphic resources of the Mongol script do not exactly correspond to the paradigmatic properties of Mongol phonology. On the one hand, there are instances of underdifferentiation, in which two or more phonemes are expressed by a single letter. This is the case, for instance, with the letters used for the dental stops *t d*. Although there are two different alphabetic symbols (our Romanization ᠲ **th** and ᠳ **d**) as well as one glyphic sequence (our Romanization ᠳᠤ **t**) indicating the two phonemes, the letters concerned are normally used in complementary distribution with each other (ᠲ **th** initially, ᠳ **d** medially, and ᠳᠤ **t** finally as well as medially before a consonant letter). At first glance, we could even view this complementarity as a case of the simple positional variation of a single letter, but the actual situation is that the three letters (ᠲ **th** ᠳ **d** ᠳᠤ **t**) can contrast under certain circumstances (as in the transcription of foreign words). The conventional approach to the Romanization of the letters for the dental stops restores the assumed (not always verified) phonemic values of the segments irrespective of how they are actually written in each case. Needless to say, this approach allows no distinction to be made between the graphic information contained in the written message and the corresponding phonemic sequences, which the writing only imperfectly reflects.

(iv) On the other hand, there are instances of overdifferentiation, in which two or more graphemes stand for a single phoneme. An example is

offered by the strong velar stop *k*, which is expressed by two different letters depending on the vocalism of the word (our Romanization ᠺ **q** for the letter used in a back-vocalic vs. ᠭ **g** for the letter used in a front-vocalic context). What makes the situation even more complicated is that the impacts of underdifferentiation and overdifferentiation can accumulate. This is exactly the case with the letters for *k*, which, with certain positional limitations, can also express the corresponding weak velar stop *g*, as well as the original velar spirant *x* (later hiatus and modern zero). In this case, most conventional systems of Romanization incorporate information on both the graphic and the phonemic levels. Thus, the two stop phonemes *k g* are commonly expressed by four different symbols of Romanization. Curiously, however, the spirant phoneme *x* is not distinguished from the corresponding weak stop *g*.

(v) Finally, we have to remember the general conservativeness of the Written Mongol orthography. There is no doubt that Written Mongol originally arose as the written form of an actual spoken language (close to Proto-Mongolic), but the Mongolic idioms whose speakers today use the Written Mongol orthography represent a much later evolutionary stage. This is, in itself, no exceptional situation among the written languages of the world, for we know of several other languages (including English) which follow conservative, archaic, or even obsolete orthographical norms. Like many of these other languages, Written Mongol exhibits not only a series of systematic conservative conventions, but also a large number of idiosyncratic exceptions, in which sounds and letters are simply in no regular correspondence with each other. All of this makes it necessary to formulate the goals of Romanization with regard to the dichotomy between *transcription* vs. *transliteration*. In spite of the occasional mistakes in the underlying phonemic analysis, most of the extant systems of Romanization of Written Mongol are basically systems of transcription. Additionally, they commonly include selected transliterational information, taken from the graphic substance without, however, being consistent in this respect.

Practical considerations

One might think that it is superfluous to alter the practice already established in Mongolic studies. Most specialists in the field certainly view the task of Romanization as an issue of minor relevance, and many might even regard a new system of Romanization merely as a periphrase of the extant systems. Moreover, since anyone working with the Mongol script is likely to know the underlying language as well, the mixed use of graphemic and phonemic information at the level of Romanization is not

regarded as a problem. Ultimately, everybody is supposed to rely on the available standard handbooks, which give the normative Romanization of every single word and grammatical element. A closer look at the issue will, however, reveal that even the specialist, not to speak of the layman, will greatly benefit of a more systematic approach to the analysis of the Mongol script. There are several reasons why this approach can only be based on the principle of transliteration, rather than transcription:

(vi) For the specialist, it is good to realize that the Mongol script is actively used by a population of at least three million native speakers in China. In the traditional Chinese classification of ethnic groups, the Mongols used to be counted as one of the five literate peoples of Greater China, while the Mongol script (together with Chinese, Manchu, Tibetan, and Arabic) was one of the five scripts accepted for official use during imperial times. Even today, Written Mongol has the status of an official literary language in Inner Mongolia, one of the five autonomous regions of China, as well as in a number of lower-level administrative units elsewhere in the country. Written Mongol is currently being introduced as a second (at a later phase, possibly, the first) literary language also for the Mongols of Outer Mongolia. Already now, most of the two million inhabitants of the Republic of Mongolia have at least an elementary familiarity with the Mongol script and the Written Mongol language. This means that Written Mongol is no longer a matter for the specialist alone. There are more and more laymen, both Mongols and non-Mongols, facing the task of handling the units of the Mongol script in terms of other writing systems, notably the Roman alphabet. Not everybody can be assumed to have the specialist competence required for using the extant systems of Romanization and the scholarly handbooks explaining their principles and adaptations. The process of Romanization should become more practical and straightforward.

(vii) One field in which the use of Written Mongol as a living literary language is experienced as a particularly acute challenge is library work. Many libraries all over the world have extensive and continuously growing collections of old and new Mongol books, which have to be catalogued as well as, possibly, indexed. At least part of this work, at the more practical end of the process, has to be handled by persons not necessarily fluent in the Mongol language. Since the process of cataloguing large numbers of books has to be rapid and effective, it would also be unthinkable to require the librarians to refer to handbooks and other technical guides except in very specific cases. Obviously, a serviceable system of Romanization for Written Mongol has to be simple enough to be handled in a more or less automatic way. Most importantly, any information feeded into the library files has to be fully reconvertible

into the original script. This is not the case with the conventional systems of Romanization, which actually ignore many graphemic distinctions at the same time as they include an unsystematic selection of graphically irrelevant phonemic information.

(viii) Library work is also an example of the rapidly increasing computerization of all information. Although many types of modern software can already handle material written in very complicated systems of writing (including both Chinese characters and the letters of the Mongol script), a fact is that the most commonly used general programs of data processing and electronic communication can only operate with the symbols available on the standard Roman keyboard. For most programs, even the simple diacritic symbols of several major European orthographies (including French, Spanish, and German) are an insurmountable technical problem. It remains to be seen whether the world is indefinitely ready to accept the dominance of a single (English) keyboard standard, but for the time being, at least, it is wise *not* to use any non-standard letters or diacritics when Romanizing the Mongol script. Again, this makes it necessary to deviate from the extant tradition, which includes several special symbols (*gamma*, *u o* Umlaut, capped *c j s*, and others) in the set of Roman letters used for Written Mongol. It happens that these symbols become superfluous when we recognize that our basic goal is transliteration, not transcription. The Mongol alphabet comprises just about as many basic letters as the standard Roman keyboard (26), plus a few diacritically modified symbols. Moreover, there is always the alternative to use digraphs for specific purposes whenever necessary.

(ix) From the structural point of view, the choice of transliteration over transcription is necessitated by the extraordinary abundance of homographs in the Written Mongol orthography. Most of these homographs are due to the factor of systematic underdifferentiation in the Mongol script. The conventional systems of Romanization require that the person handling the data is able to choose the correct alternative. It is commonly assumed that this is a simple procedure for a person knowing the language, and this is, in fact, the way how the Mongols themselves transfer the written message to phonemic sequences. There are, however, contexts in which neither the specialist nor the native speaker is able to distinguish between homographs. It can be questioned why, for instance, a librarian Romanizing a book title should at all take a stand to the homographs occurring in the data. One of the most obvious rules of Romanization is that the Romanized sequence of letters should contain no more and no less information than the original text. There is no need to attempt a phonemic interpretation of the data when we are only supposed to deal with the written message.

(x) The above discussion has also an important linguistic aspect, in that even when we are not dealing with homographs it is not at all so easy to assign correct phonemic values to the letters of the Mongol alphabet. There are many types of phonemic sequences in Mongol which can only be distinguished on rather shaky grounds, if at all. For instance, the vowel combinations *o–o* vs. *o–u* are conventionally distinguished from each other when Romanizing Mongol, though they are written identically in the Mongol script (our Romanization **u–u**). Since the distinction has been lost in most modern forms of Mongolic, the conventional Romanization is based on complicated diachronic and dialectological considerations. From the point of view of the script itself, these considerations are totally irrelevant, and in many cases they are even likely to contain linguistic errors. There is no reason to incorporate these errors, ambiguities and unclarities into the system of Romanization.

Actual solutions

Starting from the premises summarized above, it is still possible to arrive at many different solutions concerning the representation of the Mongol script in terms of the basic Roman letters. Of course, it is reasonable to keep any Romanization as close to the conventional solutions as possible. On the other hand, clarity and economy should go before conventions, when necessary. There is, for instance, no need to make a Romanized sequence easily pronounceable letter by letter, for the relationship between writing and pronunciation is determined by the original script alone. Nevertheless, the presence of at least some inherent mnemotechnic potential will greatly increase the value of a Romanization system. In view of all these considerations the present authors have arrived at the following actual solutions, now proposed for wider use:

(xi) Most of the units of the Mongol alphabet can be rendered with a single Roman letter at both the glyphic and the alphabetic level of transliteration. This is the case, in particular, with the consonant letters **c d f h k l m p q r s y z**. Most of these letters can occur initially, medially, and finally, but there are some limitations. For various reasons, the letter **q** occurs only initially, the letters **d f h k p y** only initially or medially, the letters **c** and **h** only medially, and the letter **z** (as an alternative to **s**) only finally.

(xii) We also use the single Roman letter **e** to denote ᠯ, a vowel letter which only occurs in final or absolute position. Since this letter is most often used to denote the final vowel (*a e*) of morphologically indivisible word stems, we prefer to omit in the final Romanization the space that actually precedes it in the Mongol script.

(xiii) There are four other Mongol letters whose glyphic identities may be rendered by the simple Roman symbols **b g u i**. As already noted above, due to a systematic correlation between the glyphic and alphabetic levels, the final occurrences of alphabetic **u** and **i** are actually expressed by graphic forms identical with the glyphs ᠪ **b** resp. ᠭ **g**, while the final occurrences of alphabetic **b** and **g** are expressed by the glyphic sequences ᠠᠪ **ue** resp. ᠠᠭ **ie**. It is true, in Modern Written Mongol, the sequence **ue** is normally replaced by ᠸᠪ **be**.

(xiv) The Roman letter **v** is used to express the glyphic identity of the «tooth» ᠨ (with positionally conditioned graphic variants), which in the Mongol script has multiple functions. As a single segment, **v** stands initially for a vocalic Anlaut (*aliph*), while medially and finally it expresses either a vowel (*a e*) or a nasal consonant (*n*). In the position preceding a vowel, the latter is written by the dotted «tooth» ᠩ, in which case we identify it glyphically as **n**. Most of the Romanization systems used for Written Mongol do not distinguish between the dotted and the non-dotted «tooth», as used for a nasal consonant, but we feel that this distinction is essential. Incidentally, there are occasional examples of the dot in positions which normally would be written by the non-dotted variety.

(xv) In addition to the final glyphic sequences ᠠᠪ **ue** and ᠠᠭ **ie**, as used to express alphabetic **b** resp. **g**, there are several other alphabetic units which are written in terms of two consecutive glyphs. The Mongol letter which we denote by **t**, for instance, has no glyphic form of its own, but is rendered as the glyphic sequence ᠳᠤ **uv** (with positional variants). This means that the sequence **uv** has actually two alphabetic interpretations, the one being **t** (used for the phoneme *d*) and the other being **uv** (used for the phonemic sequences *un on ün ön*). The two interpretations do not overlap distributionally, for they are confined to different environments, the former being only possible in a postvocalic and the latter in a postconsonantal position. In a similar way, we may interpret the medial glyphic sequence ᠤᠤ **vv** and the final sequence ᠤᠰ **vz** as representatives of the alphabetic unit **q**, which in initial position is expressed by a letter of its own. In view of the positional limitations regulating the occurrence of the alphabetic units, there are very few cases of true ambiguity. In such cases, of course, we can only leave sequences like **uv** and **vv** (as well as **vvv**) without a specified alphabetic interpretation.

(xvi) Due to the lack of a direct correlation between the Mongol and Roman alphabets, there are some Mongol letters which inevitably have to be expressed by digraphs in the Romanization. We use this solution to distinguish ᠲ **th** (for *t d* in initial and *t* in medial position) from ᠳ **t** (for *d* in medial or final position), and ᠴ **ch** (for the strong palatal

affricate *c* in initial or medial position) from ᠴ **c** (for the weak palatal affricate *j* in medial position). In these cases the Roman letter **h** has no segmental counterpart in the Mongol script. There is, however, again no possibility of confusion, since the Mongol alphabetic units ᠲ **t** and ᠴ **c** would never be combined with a following ᠨ **h**. By contrast, there is an actual sequence ᠳᠬ **dh** in the Mongol script (occuring in Sanskrit loanwords), and here the two Roman letters correspond to separate segments in the Mongol script.

(xvii) There are three other basic letters of the Mongol alphabet, which have to be to expressed in terms of Roman digraphs. These are ᠵ **dz** and ᠼ **tz**, standing for dental affricates (though in most dialects phonemically indistinguishable from the palatal affricates), and ᠵᠣ **zh**, standing for a weak or voiced palatal or retroflex sibilant (in most dialects indistinguishable from the weak palatal affricate). All of these letters are only used in the transcription of foreign words, and since none of them can occur in final position there is no possibility of confusion with regard to the independently occurring final letter **z**.

(xviii) We also use digraphs to express the diacritically modified Mongol letters ᠶ **qh** (the double-dotted **q**) and ᠱ **sh** (the double-dotted **s**). In the former case, the same Romanization is applied irrespective of whether the underlying basic letter is written as ᠺ **q** (initially), ᠰ **vv** (medially), or ᠷ **vz** (finally). In practice, the final occurrences of ᠬᠶ **qh** are confined to cases preceding ᠡ **e**. As a non-standard letter, ᠭᠣ **gh** (a double-dotted **g**) also occurs in some Mongol texts.

(xix) In difference from all the letters discussed so far, there are three units of the Mongol alphabet that systematically occur in two functions, which may be identified as vocalic vs. consonantal, or syllabic vs. asyllabic. Although the Mongol script in these cases makes no distinction between the two functions at either the glyphic or the alphabetic level, we propose to make a distinction in the final Romanization in order to show the actual syllabification of the phonemic sequences to which the Mongol script corresponds. One of the three letters concerned is ᠤ **v**, as already discussed above. We take the Roman letter **v** to stand for the consonantal value of the alphabetic unit, while we write the corresponding vocalic value by the letter **a**. Phonemically, the vocalic value **a** can represent two different vowels (*a e*), while the consonantal value **v** can stand both for an initial zero (*aliph*) and for a medial or final nasal (*n*). The choice between the two letters of Romanization is in most cases automatically determined by the syntagmatic properties of the sequence of Mongol letters. There are, however, a few true homographs, the best known of which involves the glyphic sequence ᠰᠳᠷ **vvdv**. Since in this case it is impossible to tell from the graphic substance alone whether we are

dealing with **vada** (for *ada* 'demon') or with **avda** (for *ende* 'here'), we only have the choice to leave the syllabic interpretation unspecified in the Romanization. It has to be noted, however, that many forms of Modern Written Mongol (both printed and handwritten) do distinguish the initial vocalic **a** from the consonantal **v** by extending the line connecting the glyph to the following segment, yielding  **avda**. In such forms of writing the distinction between the initial sequences  **va** vs. **av** is reflected by an actual glyphic contrast.

(xx) A close parallel to the behaviour of **v** is formed by the two functions of **w**, a graphic element occurring only in the transcription of foreign words. Again, we may take the Roman letter **w** to stand for the consonantal value of the Mongol alphabetic unit (phonemically *w* or *b*), while the corresponding vocalic value may be written as **e** (phonemically *e*). Although the rules of syllabification are rather complicated (and will not be elaborated here), they allow even a sequence like **wwv** to be unambiguously and correctly Romanized as **wev** (the Mongol transcription for the Chinese syllable *wen*). It must be noted that the choice of **e** as the vocalic value of **w** does not affect the simultaneous use of **e** as the Romanized counterpart of the Mongol glyph , since the two glyphs are in a systematic distributional contrast.

(xxi) The third Mongol letter with two functions is **i**. In this case, we take the Roman letter **i** to express the vocalic value (phonemically *i*), while we write the corresponding consonantal value as **j** (standing initially for the weak palatal affricate *j* and initially or medially for the palatal glide *y*). Again, we can use a set of syllabification rules to transform glyphic sequences like **iil** and **iiv** into the correct Romanizations **jil** (for *jil* 'year') resp. **jiv** (for *-yin* genitive suffix after a stem-final vowel). With the graphic means thus created we can also distinguish between Romanized sequences like **sajiv** (the normal printed orthographical shape) vs. **saviv** (a common handwritten orthographical shape, both standing for *sain* 'good').

(xxii) Finally, we employ the Roman letter **x** to denote the final glyph which is used in Modern Written Mongol after **u** (for phonemic *üü*) in cases like **sux** 'milk' (phonemically *süü*), also written as **su**. Most of the actual examples are Chinese loanwords (containing the Chinese Pinyin vowel *u*). The same graphic element also occurs after **w**, when used in its vocalic value **e** (mainly rendering Chinese *e*), as in **lex** (the Mongol transcription for the Chinese syllable *le*). A further context for **x** in both native and foreign words involves the final sequences **bix** and **gix**. While the latter are the regular printed shapes, the handwritten (and typewritten) shapes are often rendered as **bi** resp. **gi**. The sequences **bix** and **gix** may be compared with **bae** and **gae**

(for phonemic *ba be* resp. *ge*), which also exhibit a special convention of the Mongol orthography.

Although it still remains to be seen what the reception of the proposed new system of Romanization for Written Mongol will be in specialist circles, the authors have confidently started using it for a variety of purposes. For one thing, the Mongol book resources at the East Asian Section of Berlin State Library (Staatsbibliothek zu Berlin, Ostasien-abteilung) are already being catalogued using this very system of Romanization (Michael Balk). Also, a grammatical description of Written Mongol is being prepared in terms of the new system for a collective volume on the Mongolic languages (Juha Janhunen). Too often in the past, Written Mongol has been described as if it were a spoken language, while in actual fact it has probably always been primarily an abstract means of written communication. During centuries of use by speakers of a variety of Mongol dialects and even separate Mongolic languages, its written identity has only grown stronger, and it is high time to start understanding its orthographical norms and grammatical peculiarities from this point of view.

Sample Romanization

The following is the Romanization of an extract from the **vUiligar uv Thalai**, as printed in Schmidt (1831.131). A conventional transcription of the same text can be found in Grønbech & Krueger (1955.48). The Romanization incorporates capitalizations not present in the Mongol text.

Arda thuqe thumsi vuigai nuigchigsav galab uv vurida vanu, ana Dzambudwib thur Jagae Thargae naradu qaqhav builugae. Thara qaqhav dur qariie thu mivgqhav thuqhadav vuichugugav qat buju. Qhurbav guibaguv buju. Jagae guibaguv vanu Mahee Nada naradu buju. Thumdadu guibaguv vanu Mahee Diue nara thu buju. vUtqan guibaguv vanu Mahee Saduwa naradu bulai. Thara vutqav guibaguv vanu vuichugav acha vasaraqui nigulasgui satgildu buluqhat, qamuq buiguda ji qhaqcha guibaguv dur vadali satgimui.

References

Balk Michael 1997. Transliteration and Romanization of the Mongol script. Paper presented at the Seventh International Conference of Mongolists. Forthcoming. Ulan Bator: International Association for Mongol Studies.

Grønbech Kaare & John R. Krueger 1955. *An introduction to Classical (Literary) Mongolian.* Wiesbaden: Otto Harrassowitz.

Janhunen Juha 1997. Romanization problems of Written Mongol. Paper presented at the Seventh International Conference of Mongolists. Forthcoming. Ulan Bator: International Association for Mongol Studies.

Schmidt I. J. 1831. *Grammatik der mongolischen Sprache.* St.-Petersburg: Kaiserliche Akademie der Wissenschaften.