

UAI 34, 1964

✓ Mongolian Loan-Words in Middle Korean

By KI-MOON LEE (Seoul)

I

The contact that Koreans had with Mongolians during the Yüan Dynasty resulted in a considerable number of loan-words from the latter to the former. This fact is rather well-known among the scholars of both Mongolian and Korean studies through the work on the Mongolian words in Korye-sa by P. PELLIOI¹.

It seems unquestionable that many official titles and personal names found in the historical records of the Korye Dynasty are of Mongolian origin. To identify them, however, is not an easy task. Since only phonic shapes, i. e., titles and names transcribed with Chinese characters are available, one can have no guarantee that his etymological research is anything other than a mere guess-work². The above-mentioned article by PELLIOI hardly constitutes an exception to this statement, although it includes convincing etymologies. Discussions on proper names transcribed in Chinese characters will be excluded in this article³.

The contact between Koreans and Mongolians in Yüan period extends from the beginning of the 13th century to the middle of the 14th century. As the first major contact between the two peoples, it left substantial traces on the linguistic level⁴. This period coincides with both the Middle Mongolian and Middle Korean stages⁵. Thus the present article will concentrate on the Middle Mongolian loan-words in Middle Korean.

Linguistic borrowing reflects the cultural nature of the contact between the donor and donee. One can define this nature by confirming the semantic areas in which the loan-words cluster. In this respect, it is interesting to find that Middle Mongolian loans in Middle Korean can be grouped in clearly delimited semantic areas: they are exclusively concerned with horses, falcons and, in a

¹ P. PELLIOI, *Les mots mongols dans le 高麗史 Korye sä*, *Journal Asiatique*, 217, Octobre-décembre, 1930. This article is actually a revision of K. SHIRATORI's article in *Töyö gakuhö*, Vol. 18, No. 2, 1929.

² Cf. A. MEILLET, *La méthode comparative en linguistique historique*, Oslo 1925, pp. 41-42.

³ It goes without saying that even in the cases of exceptional success the transcriptions with Chinese characters do not yield, as those with Korean script do, exact phonic shapes of the words of Mongolian origin.

⁴ At the present stage of our knowledge, little evidence is found of linguistic borrowing between Mongolian and Korean in pre-Yüan period.

⁵ According to N. POPPE's periodization, the Middle Mongolian stage extends from the 13th century to the end of the 16th century. Cf. N. POPPE, *Introduction to Mongolian Comparative Studies*, Helsinki 1955, pp. 15-16. On the other hand, according to the periodization by the writer of the present article, Middle Korean extends from 10th-11th centuries to the end of the 16th century. Cf. KI-MOON LEE, *Introduction to the History of the Korean Language* (in Kor.), Seoul 1961, pp. 19-23.

few cases, arms, clothing, etc.¹ Without doubt, Koreans had been familiar with chivalry, falconry, etc. from ancient times; but Mongolians surpassed them by far in these fields. The mass of loan-words that will be discussed in the following shows that the donee received those particular elements in the material culture of the donor, who were essentially nomads.

In this article our attention is concentrated on the Mongolian loans of common nouns in Middle Korean, mostly attested in the materials written with the Korean script, an alphabetic writing system created in 1443. This script was well suited to the stock of phonemes and their arrangements in Middle Korean. By using these Middle Korean materials, which are abundant from the middle of the 15th century, we have an unparalleled privilege of detecting the exact phonic shapes of the words in question. Needless to say, to know the exact shapes of Middle Mongolian loan-words in Middle Korean is of immense value from a linguistic point of view. Firstly, these constitute a new source of information on Middle Mongolian. The examination of these loan-words can contribute a great deal to the study of Middle Mongolian phonology, though they are more or less adapted to the phonemic pattern of Middle Korean. Secondly, by examining the types of adaptation, we can comprehend more clearly the phonemic system of Middle Korean.

Before listing our loan-words, the writer feels it necessary to make some brief remarks on the Middle Korean materials and the transliteration used in this article.

Of the Middle Korean materials written in Korean script, those of the 15th century contain few Mongolian loan-words, since most of them are translations of Buddhist literature, Chinese poetry and so on. The two materials of paramount importance for our subject-matter were published in the beginning of the 16th century: the translation of Pak-thong-sa 朴通事, an old text of Chinese conversation for interpreters, and Hun-mong ča-hoi 訓蒙字會, a collection of Chinese characters with their semantic equivalents in Middle Korean. The latter was published in 1527 by Čoi Se-Žin, one of the greatest sinologues at that time, and the former was published some years before the latter (presumably in the 1510's) by the same author.

In this article, words written in Korean script are transliterated in the Roman alphabet. Our transliteration is mechanical and in most cases coincides with phonemic transcription. It would be disproportionate to the size of this article to explain this matter in detail. Some notes, however, seem to be indispensable.

No serious problems are found in consonants. Suffice it to say that in our system the symbol which represents the only liquid phoneme in Middle Korean is transliterated by *r*, though it had, to be sure, positional variants [r] and [l]. Likewise, unaspirated stop and affricate phonemes are transliterated by *p t c k*, though they had voiceless, voiced and unexploded variants in the initial, intervocalic and final positions respectively. Serious problems, however, are found in vowels. In the following list, we will adopt the system used by the late G. J. RAMSTEDT² simply for convenience of presentation. We will discuss later the inapplicability of this system to Middle Korean.

¹ The official titles and proper names of Mongolian origin are not considered in this statement.

² G. J. RAMSTEDT, *A Korean Grammar*, Helsinki 1939, p. 17.

Since Middle Korean was a tone language, the script was furnished with tone marks. It had two level tonemes, low and high, which were noted with zero and one dots respectively. And a juxtaposition of low and high tonemes (accordingly two morae) was noted by two dots. In our transliteration zero and one dots are replaced by zero and ' (Two dots are replaced by ' in our examples.)

II

As our loan-words are concerned with horses, falcons, etc., it is always difficult to find the equivalents in English or French and to give any satisfactory definitions. We present a bare list without discussion on each item. A fuller discussion of *Mo. turumtai*, for example, is found in a work by A. MOSTAERT¹. Such are obviously outside of the scope of the present article. The present article gives the Chinese equivalents to the Middle Korean forms cited. When no Chinese equivalents are given in Mongolian forms it is implied that the same Chinese equivalents as in Middle-Korean materials are found in well-known Mongolian-Chinese materials².

MK. *'acirkéi mgr* '兒馬' (Hun. I, 19 v) ← *Mo. ajiry-a* 'étalon, le mâle de plusieurs animaux,' SH. *ajirha* 'Hengst', HY. *ajirxa* 'étalon' (*eul ma*), Kh. *adzarga* 'Hengst', Urd. *adžarga* 'étalon, non châtré, mâle', *adžarga mori* 'étalon', Kalm. *adžrya* 'Hengst'. Cf. Žur. *'d-ti-rh mu-lin* 'Hengst', Ma. *ajirgan* 'männliches Pferd, Maultier oder Kamel'.

MK. *'aktái* 'castrated, gelded' (Hun. III, 7 v) ← *Mo. ayta* 'châtré, cheval hongre', SH. *akta* 'Wallach Pferd, Reitpferd', HY. *axta* 'cheval châtré' (*chan ma*), Urd. *aq't'a* 'cheval hongre, châtré', *aq't'a mori* 'cheval hongre', Kalm. *akt'* '(koll.) verschnittene Pferde, Reitpferde (als Herde)'. Cf. Žur. *'a-täh mu-lin* 'Wallach', Ma. *akta* 'kastriert, Kastrat', *akta morin* 'Wallach'.

MK. *cyertá mgr* '赤馬' (Pak. I, 42 v; 63 r) ← *Mo. jejerde morin* 'un cheval alezan', SH. *je'erde* 'rotes Pferd', Kh. *džérde* 'fuchsfarben, Fuchs (Pferd)', Urd. *džérde* 'robe de cheval: roux avec queue et crinière d'à peu près la même couleur', Kalm. *zérđ* 'rehfarbig, hellbraun, lichtbraun (mit rötlicher Nuance)'. Cf. Ma. *jerde* 'fuchsfarben', *jerde morin* 'Fuchs'.

MK. *kancyá mgr* '線臉馬' (Pak. I, 29 v) ← *Mo. galjan* 'étoile (sur le front d'un cheval)' Kh. *xaldžay* 'Blässe; eine Blässe habend', Urd. *χaldžan* 'qui a une grande tache blanche oblongue sur le chanfrein (cheval); qui a une grande tache blanche sur le front (chameau, boeuf, chèvre)'. Cf. Ma. *kalja* 'Streifen weißer Haare oder kahler Streifen am Tierkopf; Blesse des Pferdes von der Stirn bis zur Nase'.

¹ A. MOSTAERT, Sur quelques passages de l'histoire secrète des Mongols, Cambridge, Mass. 1953, pp. 27-29.

² The following abbreviations will be used in this article: MK. = Middle Korean. Pak. = Pak-thong-sa, Hun. = Hun-mong ča-hoi; Mo. = Written Mongolian (KOWALEWSKI or LESSING), SH. = Secret History of the Mongols (HAENISCH), HY. = Hua-yi Yi-yu (LEWICKI), Mu. = Muqaddimat al-adab (POPPE), Kh. = Khal-kha (POPPE), Urd. = Urdus (MOSTAERT), Kalm. = Kalmuck (RAMSTEDT); Žur. = Žurčen (GRUBE), Ma. = Manchu (HAUER).

MK. *kará* (*mgr*) 'black (horse)' (Pak. I, 27 v)¹ ← Mo. *gara* 'noir', SH. *hara* 'schwarz', HY. *zara* 'noir' (hei), Kh. *zara* 'schwarz', Urd. *zara* 'noir', Kalm. *zar^o* 'schwarz', *zar^o mör^o* 'Rappe (gewöhnl. nur *zar^o*)'. In Pak. we have actually *kará kancyé sčyóképčik' dis mgr* '五明馬', which corresponds exactly to Mo. *gara galjan bulay morin*. Here *kancyé* is a variant of *kancyá* that we have mentioned above.

MK. *korá mgr* '土黃馬' (Pak. I, 62 v) ← Mo. *gula* 'espèce de cheval sauvage couleur rouan avec la queue noire', SH. *hula* 'braunes Pferd', Kh. *xula* 'hellbraun, falb (von Pferden)', Urd. *xyła* 'robe de cheval: fauve, à queue et crinière noires avec bande noire sur l'échine', Kalm. *xył^u* '(Pferdefarbe) hellbraun mit schwarzer Mähne und schwarzem Schweif'. Cf. Ma. *kılan* 'Falber mit schwarzem Schweif und schwarzer Mähne', *kılan morin* 'isabellenfarbenes Pferd mit schwarzem Schweif und schwarzer Mähne'.

MK. *kołgrkái* 'crupper', 鞅 (Pak. I, 28 v) ← Mo. *qudurya* 'la croupière', SH. *hudurha* 'Schwanzriemen (am Sattel)', Kh. *xudraga* 'Schwanzriemen', Urd. *xydyrga* 'croupière'. Cf. Žur. *hüh-tih-läh* 'Schwanzriemen', Ma. *küdargan*, *küdarhan* 'Schwanzriemen des Sattels'.

MK. *kurčy* (*mgr*) 'dark brown, maroon (horse)' (Pak. I, 63 r) ← Mo. *küreng* 'dark brown, maroon (esp. of fur)', Urd. *k'ureg*, *k'uriŋ* 'sens général: brun, brun foncé; quand il s'agit de pelage: brun, brun foncé (chevaux), fond brunâtre ou jaunâtre avec raies noires (boeufs, chiens, chats)', Kalm. *kürŋ* 'dunkelbraun, dunkellila'. Cf. Ma. *kuren* 'dunkelbraun', *kuren morin* 'dunkelbraunes Pferd'. In Pak. we have actually *kurčy cyampür mgr* '栗色白臉馬'. The etymology of *campür* is unknown.

MK. 'oráŋ 'belly-band, girth, 肚帶 (Pak. I, 30 r) ← Mo. *olang* 'le sangle', SH. *olang* 'Bauchgurt des Pferdes, Satteltgurt', Mu. *olang*, Kh. *ology*, Urd. *ology* 'sangle, sous-ventrière', Kalm. *oly* 'vorderer Satteltgurt (unter die Brust gespannt)'. Cf. Ma. *olon* 'Bauchgurt des Pferdes'.

MK. 'iktéküi '兔鷓 (Hun. I, 15 v) ← Mo. *itelgü* 'nom d'un oiseau de proie qui prend les lièvres; gyrfalcon', HY. *itálogu* [itálgü] 'milan, vautour qui prennent les lièvres' (l'ou hou), Urd. *e't'elge* 'faucon', Kalm. *iłyvo*, *iłyvn* 'ein Raubvogel; Geierfalke?', (weiblicher) Würgefalke'. Cf. Ma. *itulhen* 'zur Hasenjagd benutzter Geierfalke'.

MK. *karcikéi* '黃鷹 (Hun. I, 15 v) ← Mo. *qarčayai* 'vautour (falco palumbarius)', SH. *harcihai* 'brauner Falke', HY. *qarčixai* 'faucon' (*houang ying*), Kalm. *qartsyā* (*qartsxā*) 'Habicht'.

MK. *kuekcün* '白角鷹 (Hun. I, 15 v) ← Mo. *kögsin* 'veillard, vieux', Kalm. *kökšy* 'alt, bejahrt', cf. Mo. *gegere-yin kögsin* 'espèce d'épervier qui habite les montagnes, faucon sauvage, gerfaut', Mo. *kögsilegül* 'nourir en cage les oiseaux de proie jusqu'à la saison de proie'. Cf. Ma. *hukšen* 'Falkenkappe; im Hause gehaltener Falke'.

MK. *nac'in* '鴉鷂 (Hun. I, 15 v) ← Mo. *nac'in* 'vautour qui prend les canards sauvages', HY. *lačün* 'faucon' (*ya hou*), Kh. *natšyŋ* 'falcon for hunting', Urd. *na'tš'in*, Kalm. *natšy* 'Falke'. Cf. Ma. *nacin* 'Wanderfalk, Falco peregrinator'.

¹ RAMSTEDT cites Kor. *kara* 'black' in his „Studies in Korean Etymology“, Helsinki 1949, p. 96, and points out that the Korean word is probably of Mongolian origin.

It is generally acknowledged that the Mongolian word *način* is in turn a loan-word from Turkic. Cf. Turkic *lačin* 'falcon'.

MK. *porá mät* '秋鷹' (MK. *mät* 'hawk, falcon') (Hun. I, 15 v) ← Mo. *boro* < **bora* id. According to "Han-i araha sunja hacin-i hergen kamoiha manju gisun-i buleku bithé", the Mongolian word which is equivalent to Chinese 秋黃 and Ma. *jařata* 'freiwillig aus dem Nest gekommener Falke, Sperber, usw.' is *boro*.

MK. *syonkór* '海青' (Hun. I, 15 v) ← Mo. *šingqor*, *šongqor* 'gerfaut (falco-gryfalcon)', SH. *šinghor* 'Edelfalke', HY. *šingxor* 'faucon' (*hai ts'ing*), Kh. *šonxor*, Urd. *šonxor* 'gerfaut', Kalm. *šonxor* 'eine Falkenart'. Cf. Ma. *šongkon* 'Seeadler'.

MK. *toronǰái* 'sparrow-hawk' (Kjím-gang-gyeng sam-ga-hä, 1482, IV, 34 v) '弄鬪兒' (Hun. I, 15 v) ← Mo. *turimtai*, *turumtai* 'tiercelot', SH. *turimtai* '龍多兒', HY. *turimtai* 'oiseau de proie, faucon' (*long to*), Kalm. *turmtē* 'irgendein kleiner Raubvogel: ein kleiner Falke, Neuntöter'. Cf. A. MOSTAERT'S work cited in note 1 on page 190.

MK. *t'uiikon* '白黃鷹' (Hun. I, 15 v) ← Mo. *tuiyun* 'white gerfalcon'.

MK. *kotori* '骸頭' (Hun. II, 29 r) ← Mo. *godoli* 'flèche avec un bouton en corne de boeuf et percé de deux ou trois trous', SH. *hodoli* '(Pfeil mit) knöchernem Ende (Kerbe?)', Urd. *godoli* 'flèche avec un bouton en corne et percé de trous', Kalm. *godol* (=*godl*) 'Klumpffeil, Pfeil mit hörnerner Spitze (die mit Löchern versehen ist und im Fluge zischt)'. In Hun. we find also 'úr *kotori* and *spyę kotori* (II, 29 r). Cf. MK. 'üz-resounding', MK. *spyę* 'bone'.

MK. 'onó 'notch (of an arrow)' (Njng-əm-gyeng en-hä, 1482, IX, 20 r), 'ongi id. (Hun. II, 28 v) ← Mo. *onu*, *oni* 'échancrure du bout du manche de la flèche', Urd. *oni* 'échancrure', Kalm. *on°* 'der Einschnitt am Pfeilende, der gegen die Bogensehne gelegt wird, Pfeilkerbe; (bisw.) Pfeil'.

MK. *pa'otár* 'camp, 營' (Hun. II, 8 r) ← Mo. *bayudal* 'camp, cantonnement, lieu où l'on s'arrête pendant le voyage dans les déserts, tente, auberge', cf. Mo. *bayu-* 'descendre de cheval, descendre à une auberge', SH. *ba'u-* 'lagern', Urd. *nj'dal* 'endroit où campent les caravanes en voyage; endroit où l'on s'arrête en voyage pour loger ou prendre le repas de midi', Kalm. *budl* 'das Absteigen, das Sichniederlassen, Absteigeplatz, (bisw.) Wirtshaus, Wohnort (der Nomadisierenden'.

MK. *sa'ori* 'stool' (Hun. II, 10 v) ← Mo. *sayuri*, *sayurin* 'place pour s'asseoir, siège', SH. *sa'uri* 'Sitz, Platz, Thron; Sitzplatz (nach) d. Range; Platz, Posten',

¹ Cf., for instance, N. POPPE, Introduction to Mongolian Comparative Studies, Helsinki 1955, p. 155. On this page he writes: "South Korean *la-tjen* > North Korean *nařen* 'Latin' and 'a special kind of hunting falcon' < *latin* 'Latin' (i. e. a Latin bird)." This is obviously based on false information.

² RAMSTEDT cites Kor. *soyk'or* in his "Kalmückisches Wörterbuch", p. 364, and Kor. *soykhol-mqi* in his "Studies in Korean Etymology", p. 242. It seems that he considers this Korean word as a cognate with Mo. *šongqor*.

³ RAMSTEDT wrote that Kor. *koduri* 'a blunt pointed object' is the borrowing of Mo. *goduli* 'a club-like arrow, an arrow with a thick end of wood'. Cf. his "Studies in Korean Etymology", p. 119.

cf. SH. *sa'u*- 'sitzen', HY. *sa'u*- 's'asseoir', Urd. *sŷri* 'siège, soubassement, domicile'¹.

MK. *tekiŕŕi* 'waistcoat for soldiers and subordinates' (Pak. I, 27 r) ← Mo. *degelei* 'jacket, camisole, short fur garment', SH. *de'el*, *degel* 'Kleid, Rock'².

MK. *t'yerrik* 'military officer's gown' (Pak. I, 27 r) ← Mo. *terlig*, *terelig* 'un cafetan ouate; cotton-padded gown', Kalm. *terliŕa* 'Weiberrock, Schlafrock'³. ✓

III

This list of Mongolian loan-words in Middle Korean reveals not a few extremely interesting facts.

To begin with, the loan-words show the characteristics of Middle Mongolian phonology in several respects.

First, our material reveals the tonemic pattern of Middle Mongolian. Our loan-words have high tone marks, without a single exception⁴, on their final syllables. This general trait of our loan-words is not due to the tonemic pattern of Middle Korean because Middle Korean, as a tone language⁵, had no restriction of high tonemes to any particular position, say, word-final syllable. As a matter of fact, Middle Korean was capable of keeping more or less faithfully the original tonemic structure of Middle Mongolian words, if any. Therefore, we can safely assume that the tonemic trait of our loan-words reflects that of Middle Mongolian.

In his recent work, Professor POPPE deals with stress accents and tones in Altaic languages. According to him, Mongolian languages have in general a high tone on the final syllable⁶. But no reference is made to the tonal characteristics of Middle Mongolian in his work, presumably due to the lack of evidence. Now the writer believes that we have the evidence: the Middle Mongolian loan-words found in Middle Korean materials. The fact that they have high tonemes on the final syllable markedly coincides with what we observe in Modern Mongolian languages. Here we can conclude that the high tone already had become fixed on the final syllable in Middle Mongolian.

Second, the forms *certá*, *pa'odár*, *sa'ori* show the stage in which the dropping of intervocalic *-ŷ/g-* in Mo. *jegerde*, *bayudal* and *sayuri* already occurred. But it is easily acknowledged that the contraction of the same vowels (*e-e*) in *jegerde*

¹ RAMSTEDT pointed out that Kor. *saori* (obsolete) 'a bench, a chair' is probably borrowed from Mongolian. Cf. *Studies in Korean Etymology*, p. 224.

² Cf. N. POPPE, Introduction to Mongolian Comparative Studies, p. 177.

³ Several Middle Korean words whose Mongolian origin is more or less doubtful are excluded from the foregoing list. One can double this list with the words of Mongolian origin found in Modern Korean materials or dialects. One should add, furthermore, the words of Mongolian origin found in the materials transcribed in Chinese characters to produce a complete list of Mongolian loan-words in Korean.

⁴ Only in *iktŕkŕi* we have a high tone mark in the second syllable as well as in the final syllable.

⁵ As for the basic characteristics of a tone language, cf. K. L. PIKE, *Tone Languages*, Ann Arbor 1948, pp. 3-17.

⁶ N. POPPE, *Vergleichende Grammatik der altaischen Sprachen*, Teil 1: *Vergleichende Lautlehre*, Wiesbaden 1960, p. 143.

after the dropping of *-g* already took place¹, while the different vowels (*a-u*) in *bayudal* and *sayuri* remain uncontracted. In Middle Korean forms *pa'odr* and *sa'ori*, the letter that we transliterate with ' indicates that the vowels belong to different syllables. In this our loan-words reaffirm the view which is generally accepted in Mongolian linguistics: "In Middle Mongolian **γ* and **g* gradually disappeared, whereby identical vowels preceding and following the consonant in question were contracted into a long vowel, e. g., **aya* > *a'a* or *ā*. When the vowels were different they remained uncontracted, e. g., **ayu* > *a'u*."²

Third, our loan-words reveal an interesting fact about the aspiration of voiceless stop and affricate phonemes in Middle Mongolian. Middle Korean had a system rich in stops and affricates; it had unaspirated *p t c k* and aspirated *p' t' c' k'*, not to speak of others. Such being the case, we find in our loan-words that Mongolian *b d ʒ g γ* were in all cases rendered as unaspirated *p t c k* in Korean, while Mongolian *t ʃ k q* were rendered in Korean as aspirated series in some cases, as un-aspirated series in other cases. In fact, we recognize that Mongolian *q* and *k*, on the one hand, were all rendered as unaspirated *k* in Korean, e. g., MK. *kancyd* ← Mo. *qaljan*, MK. *hard* ← Mo. *qara*, MK. *kord* ← Mo. *qula*, etc.; MK. *kuryŋ* ← Mo. *küreng*, MK. *kughōn* ← Mo. *kögein*. We recognize, on the other hand, that Mongolian *t* and *ʃ* were rendered as aspirated *t'* and *c'* in Korean, e. g., MK. *nač'in* ← Mo. *nač'in*, MK. *t'uihōn* ← Mo. *tuiyun*, MK. *'yerrik* ← Mo. *terlig*, MK. *toroŋ'di* ← Mo. *turimtai*³.

Furthermore, some examples seem to show that Middle Mongolian *t* and *ʃ* were unaspirated in some intervocalic consonant clusters, e. g., MK. *'aktidi* ← Mo. *aytai*, MK. *kurikŋi* ← Mo. *qartayai*.

It seems reasonable to assume that what we have confirmed in the preceding paragraphs can serve as reliable information on the actualization of stop and affricate phonemes in Middle Mongolian. If we are right, we may draw the conclusion that in Middle Mongolian the phoneme *t* and *ʃ* were strongly aspirated, while *q* and *k* were weakly aspirated in most of their actualizations.

It is well-known that the ancient voiceless : voiced opposition is represented by aspirated : unaspirated opposition in Present-day Mongolian. It has also been pointed out that Middle Mongolian and even Common Mongolian might have rather had an aspirated : unaspirated opposition⁴. Our material furnishes unusual support for this hypothesis, disclosing details about their actualizations.

The above list, on the other hand, has a deep implication on the phonology of Middle Korean, especially on its vowel system.

We notice that Mongolian vowels *o* and *u* are rendered as 'o' (in RAMSTEDT system) in Korean⁵, e. g., MK. *kord* ← Mo. *qula*, MK. *'ordŋ* ← Mo. *olang*, etc.;

¹ Unfortunately our material does not show the length of vowels.

² N. POPPE, Introduction to Mongolian Comparative Studies, p. 60.

³ It is interesting to observe that in this example the initial *t* was rendered as unaspirated in Middle Korean.

⁴ N. POPPE, Vergleichende Grammatik der altaischen Sprachen, Teil 1: Vergleichende Lautlehre, pp. 9-10; J. CH. STREET, The Language of the Secret History of the Mongols, American Oriental Society, New Haven 1957, p. 6.

⁵ The only one exception is MK. *t'uihōn* ← Mo. *tuiyun*. This is probably due to the influence of the following *i*.

Mongolian *ü* to 'u' in Korean, e. g., MK. *kurŭŭ* ← Mo. *küreng*; Mongolian *ö* to 'uŕ' in Korean, e. g., MK. *kuŕkŕŕŕn* ← Mo. *köysin*; Mongolian *e* to 'ŕ' in Korean, e. g., MK. *cyerŕŕ* ← Mo. *Jegerde*, MK. *kurŭŭ* ← Mo. *küreng*, etc.; Mongolian *a* to 'a' in Korean, e. g., MK. *harŕ* ← Mo. *qara*, MK. 'acirŕŕŕi ← Mo. *afiry-a*, etc.; Mongolian *i* to 'i' in Korean, e. g., MK. 'acirŕŕŕi ← Mo. *afiry-a*, MK. 'iktŕŕŕkui ← Mo. *itelgü*, etc.¹ Thus we get the following schema:

Middle Mongolian		Middle Korean
<i>a</i>	.....	'a'
<i>o</i>	.....	'o'
<i>u</i>	.....	'o'
<i>ü</i>	.....	'u'
<i>ö</i>	.....	'uŕ'
<i>e</i>	.....	'ŕ'
<i>i</i>	.....	'i'

Table 1

This schema is very important because it sheds light on the reconstruction of the Middle Korean vowel system. Let us begin with the rendering of Mongolian *o* and *u* as Middle Korean 'o'. It is quite reasonable to assume from this rendering that Middle Korean had only one rounded, high, back vowel which can be preferably represented by *u*. If there were both *o* and *u* in Middle Korean, such a rendering is unlikely to occur. Furthermore, the schema shows us that the vowel we have noted by 'u' was not really the back vowel *u*, though it is true in Present-day Korean. If the symbol 'u' represented a high, back vowel in Middle Korean, Mongolian *u* should have been rendered by it. It is probable that the symbol ('u') represented in fact a vowel like *ü* [u]. On the other hand, the rendering of Mongolian *e* as Middle Korean vowel symbolized by 'ŕ' shows that the symbol which now represents *ə* in Present-day Korean did not the same in Middle Korean; it must have been a vowel more like *ä*. The most interesting rendering is Mongolian *ö* to Middle Korean 'uŕ'. This shows that Middle Korean had no mid-high rounded vowel which corresponds to Mongolian *ö*; so Mongolian *ö* was rendered as rounded *ü* plus *ä*.

As a result we find that the RAMSTEDT system we have used in this article is unworkable in Middle Korean. Thus it seems unavoidable that we revise the above schema as follows. One may notice here that the vowel symbols 'o', 'u' and 'ŕ' are replaced by *u*, *ü* and *ä* in Middle Korean.

¹ Some items show us extremely interesting rendering of vowels in the second syllable. In MK. *kotŕŕkŕŕi* ← Mo. *qudurya* and MK. *tŕŕŕŕŕi* ← Mo. *degelei* we find *q* and *ŕ* which correspond respectively to Mongolian *u* and *e* in the second syllable. As a matter of fact, we have the Middle Korean vowels symbolized by *q* and *ŕ* only in these two particular positions.

Middle Mongolian		Middle Korean
<i>a</i>	.....	<i>a</i>
<i>o</i>	.....	<i>u</i>
<i>u</i>	.....	<i>u</i>
<i>ü</i>	.....	<i>ü</i>
<i>ö</i>	.....	<i>üä</i>
<i>e</i>	.....	<i>ä</i>
<i>i</i>	.....	<i>i</i>

Table 1'

Our conclusion actually means that there were the following vowel shifts from Middle to Modern Korean: $u > o$, $ü > u$, $ä > e$ ¹. In other words, the same symbols had different phonetic values in Middle Korean and Modern Korean. This fact becomes clear when we examine the system which we find in the Mongolian translation of Lao-ki-ta 蒙語老乞大 in the 18th century. Here we schematize the system of transcription in the initial syllable in Lao-ki-ta. (Korean vowel symbols are romanized again by the RAMSTEDT system.)

Mongolian		Korean
<i>a</i>	.....	<i>a</i>
<i>o</i>	.....	<i>o</i>
<i>u</i>	.....	<i>u</i>
<i>ü</i>	.....	<i>u</i>
<i>ö</i>	.....	<i>ue</i>
<i>e</i>	.....	<i>e</i>
<i>i</i>	.....	<i>i</i>

Table 2

We find a significant difference between this Table 2 and Table 1. We realize that the RAMSTEDT system is quite workable in this case.

Until now scholars have taken it for granted that every vowel symbol in Korean script had represented the same vowels in Middle Korean as in Present-day Korean, except the symbol 'g' which, to the best of our knowledge, represented an unrounded, mid-high, back vowel (Δ) in Middle Korean and was abolished later because of the convergence of that vowel into other vowels. Needless to say, their view has been dominated by the illusion of writing symbols. The writer believes that our conclusion in the above can contribute toward a clearer picture of the Middle Korean vowel system.

In addition, the foregoing list reveals an important fact of the Middle Korean consonant system. In Mo. *galjan* → MK. *kancyä* and Mo. *jegerde* → MK. *cyärtü* we notice that Mo. \int was rendered as *cy*, not *c*. This seems to imply that the Middle Korean affricate phoneme was not \int [tʃ] but *c* [ts]. Since the same symbol

¹ These shifts enable us to establish a chain of vowel shifts from Middle to Modern Korean, with the addition of e (' \int ' in RAMSTEDT system) $> i$, which is not covered here: $\ddot{a} \rightarrow e \rightarrow i/\ddot{u} \rightarrow u \rightarrow o$. On the theory of this type of shifts, cf. A. MARTINET, *Economie des changements phonétiques*, Berne 1955, pp. 48-62.

that we have transliterated by *c* represents *č* in Present-day Korean, scholars have generally postulated the same sound-symbol association for Middle Korean. Our material, however, does not corroborate this postulation. (As a matter of fact, we have deliberately transliterated by *c* in this article.)

IV

The writer of the present article believes that the Yong-bi-*č*-*č*en-ga 龍飛御天歌, one of the earliest materials published in Korean script, can make an extra contribution to our subject. This work contains many place and personal names transcribed in Korean script. Among these we find, interestingly enough, proper nouns of Mongolian origin as well as of Žurčen origin.¹

We find several personal names with Mo. *temür* 'iron', which is transcribed in this work as *tämür* (vowels in our new system) Cf. Vol. 7, f. 21 v, f. 22 r, f. 22 v, etc. And we find one personal name with *patür* which is, as the compiler correctly glossed, from Mo. *bayatur* 'hero'. Cf. Vol. 7, f. 10 r. In addition, we have a place name which is clearly attributed to Mongolian rule of that area, i. e., *hardn* in Vol. 4, f. 21 v. All these examples support our conclusions in the preceding section. It is noticeable, first of all, that they all have high tone marks on the final syllables. At the same time, in *patür* we notice the contraction of vowels preceding and following the consonant **γ*.

¹ Yong-bi-*č*-*č*en-ga is a precious material for the Žurčen language since it contains many personal and place names of Žurčen origin in northern Korea and Manchuria. The writer of this article hopes to devote an article to this subject in the near future; here he wants only to point out that all of the proper nouns of Žurčen origin also have high tone marks on the final syllables. E. g., *irán tāmán* ← Žur. *ī-lán* 'drei' *t'ū-man* 'Zehntausend'; *minjān* ← Žur. *mīng-kān* 'Tausend', etc.