

HISTORICAL CHANGE OF THE MONGOLIAN LANGUAGE AND THE
RELATIONSHIP BETWEEN THE DIALECTS IN MONGOLIAN NO-GEOL-DAE (蒙語老乞大)

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1. Introduction

The three books, published in the late 18th century by Chuseon's 'Sayeokwon (사역원)' and renowned as *The Three Books for the Study of Mongolian "In Korea"*¹, became popular in the academic circle thanks to the Korean scholars who started studying them in mid-20th century. These three books transcribed the Mongolian colloquial language of that period in both classical Mongolian and hangul, and therefore, are significant documents of not only the Mongolian but also of Korean as well. In particular, the distinctive characteristics of Mongolian No-geol-dae (蒙語老乞大)² is that it's a text of real-life dialogues, and the colloquial pronunciations are often directly notated. Elements of the letters such as d (ㄷ) and t (ㅌ) as well as ö (ᠥ) and ü (ᠦ), which were notated by the same letter forms in the Mongolian scripture of that period, were distinguished by the Korean transcription. There are many interesting aspects of phonology that occur even when only comparing the Mongolian No-geol-dae's classical Mongolian spelling to its Hangul transcript. Professor Lee Ki Moon (1964), in his research of Mongolian No-geol-dae, raised many issues concerning comparisons with features of phonology in Beijing Geser. One of them is the question of which Mongolian dialect the Mongolian No-geol-dae (蒙語老乞大) is based on. He compared it to the vocabulary of various dialects of Mongolian language and concluded that there was Ordus dialect influence.

In this paper sought to find an answer to this question by comparing non-written Mongolian (words that directly indicate colloquial characteristics) and some grammatical forms recorded in Mongolian No-geol-dae to modern Mongolian dialects.

2. Research methods and literature review

In this paper, colloquial words and some grammatical forms were chosen from the source Mongolian No-geol-dae and were each compared to local dialect dictionaries and theoretical books. Firstly, the selected words were notated differently from the established classical Mongolian orthography of the period. Secondly, they differ from the modern Khalkha dialect word form. The selection was based on the evolution of historical development of Mongolian language phoneme which is the process that created the features of the many dialects of Mongolian from ancient

¹ Mongolian No-geol-dae (蒙語老乞大 1790), Mong-eo-ryu-hae (蒙語類解 1790), Cheop-hae-mong-eo (捷解蒙語 1790).

² Mongolian Lao Kida (1790). Source Materials for Korean Studies No. 3. Research Institute for Humanities Sogang University. Seoul. 1984.

Mongolian. In other words, the evolution of the historical development of Mongolian phonology influenced Mongolian word structures and created the numerous variations of dialects.

Kim Bang Han (1962, 1963, 1965, 1967) wrote about the characteristics of Mongolian in Mongolian No-geol-dae and Lee Ki Moon (1964) compared the characteristics of Mongolian in Mongolian No-geol-dae with using sources like Beijing Geser then provided many examples from Ordus dialect in further comparisons. Wayne Sclepp (1997) studied from the perspective of colloquial language and Lee Sung Gyu (1998, 2002) researched morphology in Mongolian No-geol-dae.

3. A sound adjustment of Classical Mongolian and hangul script in Mongolian No-geol-dae

The main influential historical change that impacted Mongolian language word structure and various dialect vocabularies is phonological sound change. Therefore, there's no choice but to define dialect word forms from the aspect of historical phonology. As we know, Mongolian No-geol-dae's original text was written in classical Mongolian and transcribed to the Korean alphabet, with the explanation for the meaning of each sentence attached (Photo 1).

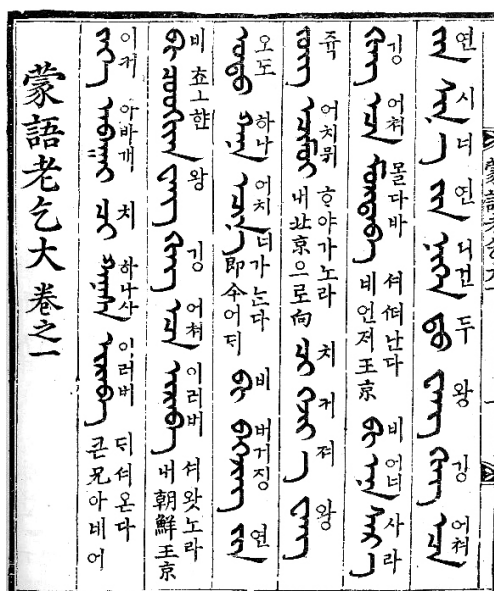


Photo 1. Mongolian No-geol-dae (first page)

0101a01	
C.M. 0101a02	yeke abayai či qanasa [=qamiy-a-ača] irebe.
Han. 0101a02	ika [=yeke] abayai či qanasa [=qamiy-a-ača] iraba.
C.M. 0101a03	bi čookiyan wang-ging-eče irebe.
Han. 0101a03	bi čooqyan [=čookiyan] wan-gin-ača iraba.
C.M. 0101a04	odo qana [=qamiy-a] ečin-e. bi begejing-yin (=ün)
Han. 0101a04	odo qana [=qamiy-a] ačina [=ečin-e]. bi bagajin-yan [=ün]
C.M. 0101a05	jüg ečimüi. či kejiy-e wang
Han. 0101a05	jüg ečimüi. či kača [=kejiy-e] wan
C.M. 0101a06	-ging-eče mordaba. bi ene sar-a
Han. 0101a06	-gin-ača mordaba. bi ana sara
C.M. 0101a07	-yin sin-e-yin nigen-dü wang-ging-eče
Han. 0101a07	-yan [=yin] sina-yan [=sin-e-yin] nigan-dü wan-gin-ača
C.M. 0101b01	mordaba. kedüyin ene sar-a
Han. 0101b01	mordaba. gadüin [=kedüyin] ana sara
C.M. 0101b02	-yin sin-e-yin nigen-dü wang-ging-eče
Han. 0101b02	-yan [=yin] sina-yan [=sin-e-yin] nigan-dü wan-gin-ača
C.M. 0101b03	mordaba geküle [=gekül-e] odo
Han. 0101b03	mordaba gaküla [=gekül-e] odo
C.M. 0101b04	qayas sar-a bolba yeügeji [=ya-yu-gejü] sayi ende
Han. 0101b04	qayas sara bolba. yaügaji [=ya-yu-gajü] sai [=sayi] anda
C.M. 0101b05	kürčü irebe. nige
Han. 0101b05	kürčü iraba. niga
C.M. 0101b06	nökür qočoraju [=qočorču] irekü-yin tula
Han. 0101b06	nökür qočoraju [=qočorču] irakü-yan [=irekü-yin] tula
C.M. 0101b07	jam-du alyur yabuju küliyejü iregsen-ü
Han. 0101b07	jam-du alyur yabuju külyaju [=küliyejü] iragsan-ü

Photo 2. Comparative transcription (personal archive)

The following figure compares the transcription of Classical Mongolian and Hangul script at the Mongolian No-geol-dae (Photo 2).

The Korean transcription appears like it was transcribed by copying the classical Mongolian source text, but there are instances where it differs from the source and seems to have been transcribed from the colloquial pronunciation of the period. For example, in Mongolian No-geol-dae, 0102b: C.M. üge-y = han. ügə-gi (the word); C.M. örüsiyejü = han. örsyejü (forgive); C.M. tngri = han. tängəri (sky); C.M. kümün = han. kün (people) etc.

Sounds that were written with the same letter forms in classical Mongolian were transcribed with different letter forms in hangul. For example:

a. C.M.	오 (o)	b. C.M.	워 (ö)
	우 (u)		우 (ü)
c. C.M.	ㅌ (t)	d. C.M.	ㄱ (g)
	ㄷ (d)		ㅋ (k) etc.

Following table illustrates which classical Mongolian sound words were transcribed with which hangul letters.

№	SCRIPT						trans literation
	Word-initial		Medial		Final		
	C.M.	hangul	C.M.	hangul	C.M.	hangul	
1		아		ᠠ		ᠠ	a
2		어		ᠡ		ᠡ	e
3		이		ᠢ		ᠢ	i
4		오		ᠣ		ᠣ	o
5		위		ᠦ			ö
6		우		ᠤ		ᠤ	u
7		우		ᠦ		ᠦ	ü
8				ᠠ			è
9		—		ᠠ		ᠠ	ī
10		ᠨ		ᠨ		ᠨ	n
11		ᠯ		ᠯ		ᠯ	l
12		ᠮ		ᠮ		ᠮ	m
13		ᠰ		ᠰ		ᠰ	q
14		ᠬ		ᠬ			k
15		ᠶ		ᠶ		ᠶ	γ
16		ᠭ		ᠭ		ᠭ	g
17		ᠪ		ᠪ		ᠪ	b
18		ᠰ		ᠰ		ᠰ	s
19		ᠱ		ᠱ		ᠱ	š
20		ᠲ		ᠲ			t
21		ᠳ		ᠳ		ᠳ	d
22		ᠵ		ᠵ			j
23		ᠴ		ᠴ			č
24		야		ᠶ		ᠶ	ya
25				ᠨ		ᠨ	r
26				ᠨ		ᠨ	ng

Table 1. Comparative transcription Classical Mongolian and Hangul of MN.

3.1 Transcription of some allophone

Some controversial issues will be raised in this part.

3.1.1 Short vowels. As illustrated in the above table, from the corresponding seven vowels in Mongolian a, e, i, o, ö, u, ü to hangul transcription, u and ü were transcribed by the same letter. This is due to vowel harmony³ in Mongolian language. Masculine and feminine vowels are mutually exclusive thus u and ü can be distinguished easily therefore they seem to have been transcribed by the same letter.

Vowel /*ö*/

Regarding vowel /*ö*/, it's not found in the medial or final part of any word in Mongolian No-geol-dae. This is perhaps due to the characteristics of Mongolian language phoneme of the period. Professor Lee Ki Moon (이기문 1964:382-383) noted that the 'letter ö /*ᠥᠣ*/ occurs by itself or in syllables that start with č, ĵ, n and the letter ü /*ᠥᠦ*/ occurs in syllables starting with b, d, k, m, s, t and in non-initial syllables'.² However, there are instances of it occurring in words starting with b and not just č, ĵ, n.

If previously /*ö*/ used to occur after č, ĵ, n and b, currently why in central Mongolian dialect and most local dialects after č, ĵ, n and b; /*ü*/ is written instead of /*ö*/? This is an issue related to alternation of *ö* ~ *ü* vowels in most Mongolian dialects. For example, *jüb* ~ *jöb* (right); *čübürinə* ~ *čöbürin-e* (roll over); *jübləldüji* ~ *jöbləldüjü* (to consulting); *čülbəjü* ~ *čölbejü* (swallowing) etc.

Generally the transcribing in hangul of Mongolian No-geol-dae aimed to match each vowel to the appropriate phonemes precisely. In regards to u /*ᠥᠣ*/ and ü /*ᠥᠦ*/, the lack of distinctive letters is compensated by the fact that they're clearly distinguishable due to vowel harmony.

In Mongolian ryu-hae (蒙語類解) when transcribing classical Mongolian to hangul, /*ö*/ was also recorded after consonant m⁴. Then that means only examples of recording of /*ö*/ after consonants d, t, k, g are non-existent. This is due to /*ö*/ and /*ü*/, when following d, t, k, g consonants, are alternated in many local dialects. In other words, it's possible that 'The Three Books for the Study of Mongolian' was written in a dialect where *ü* commonly occurred after consonant d, t.

Instances of alternation between /*ö*/ and /*ü*/ occur frequently in modern Khalkha dialects *towĵin* ~ *tuwĵin*, *xowgu:n* ~ *xuwgu:n*, *xoĵog* ~ *xuĵug*, *tow* ~ *tuw*⁵. Generally, there were no /*o* ~ *ö*/ vowels after the second syllable in classical Mongolian language and there are even suggestions that /*ö*/ vowel didn't exist in ancient Mongolian language. Some modern dialects, for example Dagur dialect, do not have *o*, and in other dialects words with vowels *o* occur the fewest. There are many cases where vowels in Mongolian language were formed from the assimilation of ancient Mongolian *i* in initial syllable with the vowel *ü* in the following syllable or through regressive assimilation of *i* occurring after *ĵ*, *č*.

In Buriat dialect, *ö* in the initial syllable is pronounced as *ü*. Moreover, in khorchin dialect (a, ə, i, ɔ, u, ɛ, œ) there is no *ö* (in Khalkha *o*), and there are many instances where *ü* occurs in the location of ancient Mongolian *ü*, and vowel *ü* occurs in the location of *ö* which was formed by the reciprocal assimilation of *e* and *ü*. For example, *kh. ubəl* ~ *kh. owöĵ* > C.M. *ebül*, *kh. umən* ~ *kh. omnö* > C.M. *emün-e* etc .

³ Mongolian language obeys vowel harmony: words have either masculine vowels a, o, u or feminine vowels e, ö, ü. Classical Mongolian follows this vowel harmony completely. Initial vowels all have different letter forms. Whereas non-initial vowels a and e have the same letter form, as well as /*o*/ and /*ö*/, /*u*/ and /*ü*/ and they are distinguished from each other in words through vowel harmony and the initial vowel. This rule was also reflected in the hangul transcription. There were instances where words have both masculine and feminine vowels, which is recordings of dialect features with palatalized vowels due to evolution.

⁴ 정제문. 1992. 蒙語類解의 몽골어에 대한 연구. 弘文閣.

⁵ In modern Mongolian, used for International Phonetic Alphabet (IPA).

Allophone /ə/

This allophone is unrounded, close-mid, palatalized short vowel phoneme *e*. In Korean transcribed Mongolian No-geol-dae, classical Mongolian *e* (ᠡᠭᠡᠷᠡ / *a*) is written as *ə* (ᠡ). *ə* in Chakhar, Sonit, Khorchin, Kharachin, Tumet dialects accords with *e* in modern Khalkha dialect. Other inner Mongolian *ə* sounds closer to *ö* rather than *e* of Khalkha dialect. For example in Mongolian No-geol-dae, *öbərə* < C.M. *öger-e* (0104b07), *nigə* < C.M. *nige* (0104b07), *baysi-yən* < C.M. *-yin*, *nərə* < C.M. *ner-e* (0105a01). Same examples in Khorchin. *chor. ə:ri:n* < C.M. *öber-ün*, *chor. uḡə:* < C.M. *üniy-e*, *chor. əḡfḡḡ* < C.M. *egesig* etc.

Allophone /i̯, i/

Classical Mongolian (ᠢ), hangul (ᠣᠤ). Final, palatalized, masculine and unrounded vowel. Two allophones: long and short. Generally, not written and occurs in spoken medium. One of eight ancient Mongolian vowels. Preserved in Altaic languages such as ancient Turkic and some Mongolic languages. Written as *ī* (in Cyrillic *ы*) in masculine words in modern Khalkha dialect. Sometimes it occurs adjacent palatalized consonants in masculine words. Tsakhar (*a, ə, ɪ, i, ɔ, ʊ, o, u*), Ordus (*a, e, ɪ, i, ɔ, ʊ, ʊ, ʊ*) and Kharachin (*a, ə, ɪ, i, ɔ, ʊ, o, u, ɛ, œ, ʏ, y*) dialects have this sound. These cases were recorded in Mongolian No-geol-dae's Mongolian language.

a. Recorded at location of /a/ classical Mongolian and many modern Mongolian dialects

MN. biqan (0304a07) < C.M. baqan (a lot) > kh. pa:xān

MN. čajilad (0316a07) < C.M. čayaǰalayad (were executed) > kh. tsa:dzḡa:d

b. Occurs in location of palatalized consonants in masculine words

MN. ačar-a (0545a06) < C.M. abčira (bring it) > kh. awfḡr

MN. ibčoo (0607b07) < C.M. ibčayu (narrow) > kh. yawfḡ: etc.

An example like the one above is from the following local dialects: *ch. ɯalt* (victory), *ḡnar* (quality), *ord. ɯra* (scab), *khar. tum. muḡ* (a thousand); *xumd* (cheap); *dḡɯd* (spear weapon).

Allophone /ö ~ ǣ/

These cases were recorded in Mongolian No-geol-dae's Classical Mongolian (ᠢ), hangul (ᠣᠣ). Masculine *ī* of ancient Mongolian is speculated to have lost its role at the beginning of middle Mongolian and was recorded as *i* 'shilbe' (classical Mongolian element) in written language. The many examples of */i/* that should be written after *k, g* in feminine words which instead were written after masculine *q, γ* in literary sources reveal the traces of ancient Mongolian back */ɪ/* in middle Mongolian. But then it's peculiar that this sound was recorded in 17th century Mongolian sources. However it was written in place of not *i* but rounded vowels. If it was only written in classical Mongolian, it could be interpreted as traditional written language, but in the hangul transcription it was written in place of rounded vowels⁶ and *a, e*. For example in Mongolian No-geol-dae,

M.N. qiyala (0417b02) < C.M. qoyayula

M.N. diḡyadu-yən (0821b01) < C.M. dotuḡadu-yin

M.N. čajilsin (0104a07) < C.M. čegeḡilegsen

M.N. ḡbasin (0307b07) < C.M. ḡbayḡsan

M.N. təḡtasan (0521a04) < C.M. toḡtaysan

M.N. usin (0707a01) < C.M. uuḡuḡsan

M.N. usən (0705b06) < C.M. uuḡuḡsan

M.N. urduḡa (0709b05) < C.M. urdadu etc.

⁶ In Korean language, the tradition of examples of writing vowel (ᠢ) alternated with *eu, eo* have occurred since ancient times. Lee Seong gyu (И Сөнгүй 2008-59), in description of 'geom' syllable in 'Wang-geom', wrote the word *geom* meaning military general has another allophone *geum* and is also related to *geom* meaning bear ... 'vowels *eo, eu, o* are closely located in the vocal organ therefore each could be written with three variants (*geom, geum, gom*)'.

In Setsengua's research of Qarilčayan-u bičig, 'Modern Mongolian Khorchin local dialect unstressed syllable vowels written after consonants such as *ᠳᠵ*, *ᠰ*, *ᠵ* become vowel *i* and consonant *s* become *ᠰ* and also *ə* vowel. *ᠳᠵarləᠭ* instead of *ᠵarlᠢᠭ*, *adəs* instead of *adis* are examples of non-initial syllable reduced vowel *ə* being written as *e*' (2007:65).

Inner Mongolian central dialect Tsahar has eight short vowels and eight long vowels which are parallel to the short ones. Those are short vowels: *a* (æ), *ə*, *i*, *ɔ* (œ), *u*, *o*, *u*, long vowels: *aa*, *əə*, *ii*, *ɔɔ*, *uu*, *oo*, *uu* (Sečenbayatur 2005:204-205). From it, there are vowel variants that occur less than, occurring at the beginning of the vowel in close sounds. For example, *ɔlbog*, *xənäg* (Bayančoytu, 2002:10) etc. Accords with classical Mongolian *o*. Similar phoneme allophone exist in Zavhan's Sartuul local dialect. S.Moomoo et al wrote about this, 'The manner of articulating vowel phoneme is generally more closed in Sartuul dialect than in central Khalkha dialect. For this reason, sometimes even *a* at the start of words get closed and get pronounced as *o* like a sound. For example, *yawsan*, *yawa:gui*, *ᠳamaig*, *dža:lxān* are pronounced as *chomæg*, *yowsān*, *yowāgūi*. In some words a phoneme gets even more closed and is switched with front, closed *i*. For example, *argal* is pronounced as *argil*' (Mөөмөө 1982: 118).

Allophone /ë/

Classical Mongolian (ᠭ), hangul (ᠭᠣᠯ). The instances where ancient Mongolian *e* is written as *i* are due to Mongolian palatalized *ë*.

M.N. inə (0802b03) < *C.M. ene* > *kh. eně ~ khor. ini*

M.N. diü-yən (0205a06, 0321a06) < *C.M. degüü* etc.

Pronounced as palatalized phoneme in Khorchin dialect. For example, *ixdu:d* < *C.M. ökid* (girls), *ᠰᠢᠵᠢᠭ* < *C.M. čečeg* (flowers), *ix* < *C.M. eki* (first), *id* < *C.M. ed* (merchandise).

3.1.2 Is it a diphthong or palatalization?

Classical Mongolian words with the same root were transcribed in two different variations in hangul. Classical Mongolian *iya*, *ayi*, *iye*, *eyi*, *oyi*, *uyi*, *üyi* syllables could have been transcribed to hangul but weren't, that's another proof of colloquial pronunciation of that period. For example, *C.M. tariyalang* (farming), *CM. tariyan*, *han. tariyalan* (0717a05), *han. taryan* (0322a07, 0722b06). See 'i breaking' (4.1.3) and consonant dropping (4.2.2), Word forms created by palatalization (4.2.4) for more specific description.

Adhering to the sound match of the above example, let's examine the features of local dialects from the aspect of phonology and vocabulary form.

4. Phonological evolution that illustrates local dialect

This source presents many facts of Mongolian historical linguistic. From here, very specific examples of local dialects features created from the systematic evolution throughout history are illustrated below.

4.1 The form of the word formed by the evolution of vowel sounds

4.1.1 Assimilation

There are many instances of progressive or regressive assimilation by influence of stress vowels when a suffix was attached to the root or the root structure. In some special cases, a when regressive assimilation occurs in Khalkha dialect, there is progressive assimilation in hangul transcription of Mongolian No-geol-dae and vice versa.

M.N. tāmār (0701b03) < *C.M. temür* > *kh. tomör*;

M.N. dərbən (0821b01) < *C.M. dörben* > *kh. dorwön*;

M.N. čidər čidərlə (0311a05) < C.M. čidür čidürle > kh. ʃɒdör ʃɒdörlə

M.N. əbədçi (0706b05) < C.M. ebedčü > kh. owdödž etc.

These examples become labialized in Khalkha, Ordus and Tsahar dialects. On the other hand there are examples of unrounded vowel influenced assimilation in Oirat, Khorchin and such dialects. For instance, C.M. ebür > kh. owör ~ zax. ever, C.M. erüke > xal. erk, C.M. bögem > kh. bo:m ~ khor. bə:m, C.M. kögesü > kh. xo:s ~ khor. xə:s, C.M. öber-ün > kh. o:ri:n ~ khor. ə:ri:n etc. In Barga and Kharachin dialects sound inversion occurred: bar. tumər, har. tumer etc.

On the other, another specific labialization was noted in the Mongolian No-geol-dae.

M.N. müngü (0116a01) < C.M. mönggü

M.N. kübägün (0109b05) < C.M. köbegün

M.N. kügsin (0511a02) < C.M. kögsin

M.N. kəküküd (0506a04) < C.M. keüked etc.

Oirat dialect e, ö, ü are articulated front and closed than those of Khalkha dialect. Labial harmony isn't as developed as the Khalkha dialect. Therefore, many modern Khalkha words with assimilated ö and ü or articulated with assimilated e are written with their classical Mongolian spelling. In Buriat dialect ö, ü are not differentiated and often articulated as ü. For instance, üdür, übül, ündür. In Mongolian No-geol-dae, the initial ö of a word was written as ü. Inner Mongolian dialects Khorchin and Kharachin don't have the vowel ö.

Features of phonetic adaptation of rounded vowels and unrounded vowels in one sentence were also recorded.

M.N. čökən (0811a01) < C.M. čögeken

M.N. kükəbtür (0606a07) < C.M. kökebtür

M.N. kükəgčün (0819b02) < C.M. kökegčün etc.

In Khorchin dialects this adaptation occurred: bulə:n > C.M. büliyen; xudə: < C.M. ködege; dʒurə: < C.M. jöriy-e etc.

Mongolian local dialects alternate u and o.

M.N. ulasu(0720b06) ~ kh. olosu

M.N. uisu (0612b06) ~ kh. dag. ois

M.N. čoqomqan (0815a03) ~ kh. čuqamqan etc.

In Khorchin dialects this alternation occurred: bogën > C.M. boyuni, xəməx < C.M. qumiqu etc.

4.1.2 Assimilation of VCV⁷

Suprasegmental phoneme u in syllable ayū progressive assimilated due to stress from a. Progressive assimilation in Khalkha dialect usually occurs in the direction of suprasegmental phonemes .

M.N. aalju (0211b01) < C.M. ayulju

M.N. qoyala (0402b02) < C.M. qoyayula etc.

These are examples of assimilation due to stress from initial and second syllable opened 'a's in many local dialects such as Oirat and Khorchin. For example, oir. doka: < C.M. dokiya, oir. ty:kæ: < C.M. tögükei, khor. tsowa: < C.M. čubuy-a, khor. bəlsn bada < C.M. boluysan buday-a etc.

In many Mongolian No-geol-dae examples of labial harmony influenced assimilation, vowels 'o' were written in the location of 'u'. For example,

⁷ P.M. *VCVsuprasegmental phoneme > A.M. VCVlengthening > M.M. V`consonant droppingV > Mo.M. Vlong vowel
After the consonant dropping of VCV structure, if the vowels on both sides were the same, they become a long vowel, and otherwise, become a diphthong. In khalkha a complete assimilation.

M.N. ibčoo (0607b07) < C.M. ibčayu
M.N. qalon (0511b03) < C.M. qalayun
M.N. jaora (0410a05) < C.M. jāyur-a
M.N. qaoli (0522a04) < C.M. qauli
M.N. taolai (0704b05) < C.M. taulai⁸ etc.

Similar examples can be found in Darhad and Khorchin dialect. For example, dar. xo:li < CM. qauli, dar. o:olo < CM. ayula, dar. to:xa < CM. tauqai, khor. xæ:l < CM. qauli, khor. sæ:r < CM. sayuri. In Kharachin local dialect, classical Mongolian initial syllable ayu assimilated to o:. For example, ōl < CM. ayula, tōlä < CM. taulai etc. Examples that follow the same rule can also be found in the sources of Khevtse Dorvoljin script. In Dagur dialect, it assimilated to aula, naur, seül. Where as in dialects such as Oold, Oirat and Tsahar, it became long vowels. Namely, modern Khalkha dialect words with diphthong -oi is pronounced with long vowel o: in Khotgoid and Oirat dialects and long vowel a: in Oold dialect. For example, kh. mǝgoi ~ oir. mǝgo:, kh. tǝxoi ~ oir. tǝxɔ:, kh. tu:lǝi ~ oold. tula:, kh. ɔrɔi ~ oold. ora: etc.

Examples of vowels that evolved differently from Khalkha dialect are also in this source. The vowel lengthening process of Mongolian dialect is as follows:

$$\begin{array}{ccc} & V_1 V_2 & V_2 \\ \text{PM. *VCV:} > \text{AM. VCV:} > \text{MM.} & > \text{Mo.M.} & vV_2 \sim 1 \\ & V_2 V_1 & V_1 \end{array}$$

4.1. 3 i breaking

The principle of i vowel breaking is generally similar to aforementioned vowel assimilation(4.1.1) but it depends on the features of vowel i. When vowel i comes after a consonant, it palatalized this consonant and when occurring in the same word with another vowel, it assimilates towards that vowel. In Mongolian No-geol-dae, i vowel breaking doesn't occur but transcribed at the beginning of words. For example,

MN. ibčoo (0607b07) < C.M. ibčayu > kh. yawtsɔ:,
MN. jisyalaju (0218a04) < C.M. jisiyalaju > kh. džasa:ldž etc.

The previous examples are articulated in the general style of palatalized é of eastern Khalkha dialect (Möömөө 1982: 84). Among modern dialects, Dagur, Urainkhai and Oold dialect have unassimilated initial syllable i. In Khalkha dialect it assimilated to y + (a, e, o, ö, o, u, i). There are also instances of unrounded vowels and rounded vowels assimilating into ou rounded diphthong vowels in local dialects. tod. ijour < C.M. ijayur. In many Mongolian dialects ayu, au assimilated into long vowel u:, whereas it assimilated into ɔ: in Darhad, Bayd, Oirat, Kharachin and Tumed local dialects. For example, dar. o:lo < C.M. ayula; bayd. doon < C.M. dayun etc.

4.1.4 Reduced vowels

Let's examine how Mongolian No-geol-dae interpreted the questions of when vowel reduction started in Mongolian language and how local dialects evolved. Short vowels in second syllable and after become reduced vowels in modern Khalkha dialect. But, it is written as vowel + consonant + vowel syllable, vowel is inserted in morphology relations of classical Mongolian. In Mongolian language of Mongolian No-geol-dae, vowel reduction is notated as follows;

⁸ Classical Mongolian words with distinctive spelling such as ᠲᠠᠭᠤᠯᠠᠢ *taulai*, ᠲᠡᠭᠦᠬᠡ *teüke* directly reflects dropping of consonant that's in the middle of two distinct vowels. This is an established form of classical Mongolian orthography.

M.N. ar (0413a06) < C.M. aru > kh. ar
M.N. salju (0404b01) < C.M. salaḡu > kh. saldž
M.N. olsan (0322b01) < C.M. oluḡsan > kh. ᠣᠯᠰᠠᠨ etc.

In order to illustrate consonant palatalization, vowels were highlighted in some examples.

M.N. tabu (0516b04) < C.M. tabun > kh. taw,
M.N. tabi (0805b02) < C.M. tabin > kh. taw' etc.

One evolution was noted in this regard. A second syllable short vowel *i* palatalized the preceding consonant and -y- consonant was not dropped and changed to half vowel feature. In Khalkha dialect, consonants usually got dropped and the word form of long vowels following a palatalized consonant was created. For example,

M.N. jokyal (0710a02) < C.M. jokiyal > kh. dzox'o:l,
M.N. tobkya (0211a07) < C.M. tobkiy-a > kh. towx'a:,
M.N. jakya (0505a02) < C.M. jakiy-a > kh. dzax'a: ~ bur. zakya,
M.N. qya (0405b05) < C.M. kiy-a > kh. x'a: etc.

Evolution like the one in Mongolian No-geol-dae remains in modern Buriat, Oirad and Alshaa dialects.

4.2 Word forms formed via consonant change

4.2.1 Consonant dropping (Vowel + g + vowel > vowel + vowel)

In Mongolian No-geol-dae, there are many systematic occurrences of dropping of intervocalic consonant and non complete assimilation of the two vowels. This reveals the distinct features of Mongolian local dialects.

M.N. amaraolju (0410a03) < C.M. amaraḡulju > kh. amro:ᠭdž
M.N. asauju (0518a06) < C.M. asaḡuḡju > kh. aso:dž
M.N. əünəčə (0311a05) < C.M. egün-eče > kh. u:ne:s
M.N. kəčəü (0222a01) < C.M. kəčəḡü > kh. xetsu:
M.N. əimü (0402a04) < C.M. eyimü > kh. i:m
M.N. əin-kü (0107b05) < C.M. eyinkü > kh. i:nxu: etc.

There was even a speculation (Санжеев 1953: 78) that words that were formed by two different syllables, for example *o + a*, *a + u*, *e + ü* diphthong vowels, had occurred in Mogol and Dagur dialects for a long time without changing to long vowel form.

4.2.2 Consonant dropping (A.M. Vowel + y + vowel < M.M. vowel + vowel)

An interesting fact in Mongolian No-geol-dae is that modern Mongolian diphthong is transcribed as *ᠢ* (ya) in hangul. It's *V + y + V* in classical Mongolian form. In other words, instead of a long vowel or a diphthong getting formed due to *y* consonant getting dropped, the vowel preceding consonant *y* palatalized the adjacent consonant.

M.N. ḡisyalaju (0218a04) < C.M. ḡisiyalaju
M.N. qubyaḡi (0518b05) < C.M. qubiyaju
M.N. quryaju (0117b04) < C.M. quriyaju etc.

Semi-vowel, semi-consonant⁹ -ya of modern Khalkha dialect was created.

⁹ In modern Mongolian language it's called auxiliary vowels or я- type letters, but it's in fact a compound letter of 'y (cons.)' + vowel. In modern Mongolian this compound letter is written by a single letter according to cyrillic orthography and for some beginner learners of the language it's hard to learn it without text. For example, *эрийн хэрэг* (*yuriin xereg*), *эрийн тоо* (*yuriin too*).

4.2.3 Consonant alternation

Numerous instances of alveolar stops d/t, palatal affricates j/č, stop b, velar stop g/γ~ q/k consonant alternation occur in Mongolian local dialects. Classical Mongolian script was designed by taking this into consideration and these pairs are written by the same letter form¹⁰. Mongolian No-geol-dae has the distinct feature of differentiating these letter forms and this feature also facilitates in determining the source dialect the book was based on. The largest difference from modern Khalkha dialect feature is the consonant alternation of d and t.

M.N. naitasan (0505b07) < C.M. nayidaγsan
M.N. šabtala (0704b01) < C.M. šabdala
M.N. urdutā (0709b05) < C.M. urdadu
M.N. qodoγotu (0704a06) < C.M. qodoγodu
M.N. quntaya (0508b04) < C.M. qunday-a
M.N. maryata (0114a03) < C.M. maryadar
M.N. əbtəragšan (0209b04) < C.M. ebderegsen etc.
That words are written with t in Jalaid and Durvud sub dialects of Khorchin.
Conversely, Khalkha dialect t was written as d.
M.N. irdinčü (0107a02) < C.M. yirtünčü
M.N. ači-du (0149b04, 0150b05) < C.M. ačitu
M.N. medü (0415a15) < C.M. metü etc.

For example of Modern Mongolian dialects: baa. dəs > C.M. tosu <kh. tos; ch. datax > C.M. tatax < kh. tatāx; khor. dolda:n < C.M. tula-dayan; khor. dut < C.M. töde etc.

Consonant alternation of j accords with a foreign word example and some palatalized d~j alternation occurs in Khalkha Buriat and Khorchin dialects.

M.N. qandyu (0714a02) < C.M. qanju > kh. handz.

It occurs in ancient Mongolian and Altaic languages frequently. Among modern dialects, in Khotgoid, Oirat and Khorchin local dialects consonant d changed to dz through dissimilation. For example, oir. gada: ~ gadz a: , khor. fidem < C.M. sijim.

g/γ ~ q/k are also alternated frequently, this was recorded in hangul.
M.N. čikirsü (0208b06) > C.M. čigirsü
M.N. sikira (0704a05) > C.M. sigir-e
M.N. tügəi (0316a07) > C.M. tükei etc.

Alternation between stops k and g occurs frequently in Mongolian No-geol-dae and in modern local dialects h and g are alternated, such as nomxon ~ nomgon, xaranxui ~ xarangui in Oold dialect.

M.N. sətərgəi (0511b07) ~ kh. setərxi:
M.N. dələgəi (0107a01) ~ kh. delxi:
M.N. gədüin (0101b01) ~ kh. xedi:n
M.N. gər-bər (0207a05) ~ kh. xervēr
M.N. börgü (0720a04) ~ kh. burx
M.N. tügəi (0316a07) ~ kh. tu:xi: etc.

Comparable examples with Mongolian No-geol-dae also occur in Ordus and Baarin dialects. ord. gato > C.M. qatayu; ord. gofu: < C.M. qosiyu; ord. gəxə < C.M. köke; ord. guŋu < C.M. kücü. baa. gato: < C.M. qatayu; baa. gaxax < C.M. qaqaqu, khor. gaŋgən < C.M. γaγčaqan; khor. ɛ:tga:x < C.M. idqaqu. khor. naɣf < C.M. naγaču etc.

¹⁰ Sh.Luvsanvandan (2002 :108) suggested, 'In the first dialect that adopted classical Mongolian script, perhaps, d ~ t; ö ~ ü; o ~ u sounds were considered two allophones of the same phoneme, therefore there was no need to create letters for all of them.'

I will explain a particular word that has the same changed form with the above examples: M.N. sirgəg (0608a04) > kh. shirxeg. The feature that of two successive consonants in a word, the first a voiceless consonant and the second a strong consonant, resulting in the first consonant's dissimilation occurs in all of Khalkha dialects. But this feature was not found in Mongolian No-geol-dae's Mongolian language.

4.2.4 Word forms created by palatalization

In Mongolian language, all consonants in front-vocalic words are palatalized. If neutral i is in back-vocalic word, then palatalization will occur. One of the differences between classical Mongolian and Mongolian No-geol-dae is palatalized stop consonant of Oirat dialect.

M.N. jakya (0505a02) < C.M. jakiy-a > kh. dzaxja:

M.N. jokyal (0710a02) < C.M. jokiyal > kh. dzəxjə:l

M.N. tobkya (0211a07) < C.M. tobkiy-a > kh. təwxjə : etc.

Scholars, who studied the graphemics of Mongolian clear script, stated that palatal stop consonant k reflected only Oirat dialect features. However, classical Mongolian stop consonant k is also pronounced that way in Dagur, Mogol, Oirat and Ordos dialects. In other words, stop consonant k was not just a feature of Oirat dialect, but it was also a feature of many other dialects. khor. xaja:d < C.M. qaniyadu, khor. xəɛ:t < C.M. qariyatu; khor. xəru: < C.M. qariyu; khor. abja:s < C.M. abiyas etc.

There's another difference of transcription between classical Mongolian and Mongolian No-geol-dae. In these examples classical written Mongolian palatalized bs preceding iya are notated.

M.N. biqan (0304a07) < C.M. baqan > kh. ba:xān

M.N. bolbi (0312b05) < C.M. bolba > kh. bolōw

Same examples: khor. ɛ:tga:x < C.M. idqaqu; khor. dʒirəg < C.M. jerge; khor. ajig < C.M. ayay-a etc .

Due to the effect of palatalization, vowels following consonants changed various ways. Words with i preserved by inner Mongolian local dialect, assimilated by a half vowel to ya, yu, yo in Khalkha and Buriat dialects and became ä in Ordus dialect. ya, yu in нюдэ < C.M. nidü > kh. nüd, bur. мяха < C.M. miq-a > kh. max in Buriad dialect developed into ü, a in Khalkha dialect.

4.2.5 Unstable -n of word final¹¹

Almost every noun in ancient Mongolian ended with a front, nasal n and in modern Khalkha dialect when affixes are attached to nouns, consonant -n appears in most words. This is called unstable -n in Mongolian language grammar. Unstable -n examples started appearing in the 14th century Mongolian vocabulary source Mongolian Hua Yi-yu. It was recorded in two different variations in Mongolian No-geol-dae's Mongolian language. First variation is -n, For example,

M.N. dərbən (0821b01) < C.M. dörben

M.N. alban-yər (0313b03) < C.M. alban-iyar

M.N. tabun (0108b05) < C.M. tabun etc.

The sources written in classical Mongolian from the same period as Mongolian No-geol-dae systematically recorded -n. For instance, in sources like 'Altan товч', naran, morin etc were written without dropping the word final unstable n. (Орловская 1984: 149)

¹¹ Мөөмөө С. 1984. Монгол хэлний үгийн эцсийн 'н' -тэй үгийн тухай асуудалд. МУИС-ийн эрдэм шинжилгээний бичиг. 3 (87). 9-14. Улаанбаатар. Заяабаатар Д. 1999. Тогтворгүй 'н' -ний учрыг 'Монголын нууц товчоон' -оос эрэх нь. МУИС-ийн эрдэм шинжилгээний бичиг. XV (153). 87-93. Улаанбаатар.

Secondly, -n was dropped from words of numbers which required word final -n.

M.N. tabu (0516b04) < C.M. tabun > kh. taw

M.N. tabi (0805b02) < C.M. tabin > kh. taw' etc .

Compared to the many examples of non-dropped -n consonants in modern Oirat and Buriat dialects, many words have dropped -n Mongolian No-geol-dae's Mongolian. -n was dropped examples with dialect: khor. taβ < C.M. tabun, khor. arëβ < C.M. arba, khor. ar < C.M. aru etc.

5. Suffix in local dialects

This part will examine a few examples that demonstrate distinct features of local dialects.

5.1 Noun suffix

Genitive case -yen: Classical written language -yin, the modern Khalkha dialect suffix -ийн/-ын, in Mongolian No-geol-dae is written as -yen with vowel e in words with both back and front vowels. For example,

M.N. budaya-yən (0122a06) < C.M. buday-a-yin

M.N. ail-yən-ki (0315a07) < C.M. ayil-un-ki

In Todu script Geser, this suffix was lengthened as -yēn. There are similar forms in the following dialects. oir. ʊ:l æ:n < C.M. ayula-yin, khor. ʊla:nən < C.M. ulayan-u etc.

Genitive case -nai2/-ai2: Colloquial form of classical written mongolian -u, modern Khalkha dialect -ийн/-ын. In Mongolian No-geol-dae, vowel harmony was not followed in some words.

M.N. ɛrtənəi (0311a06) < C.M. erten-ü > kh. ertni:

M.N. yäünai (0308b02) < C.M. yayun-u > kh. yuni:

In a Khevtse Durvuljin language source rounded -no was recorded. There are similar forms in the following dialects. oir. nominæ: > C.M. nom-un, oir. mörnæ: > C.M. morin-u, oir. ty:næ: < C.M. tegun-u . ch. daxwarnæ > C.M. dabqur-un, khor. ɛrbæ:ne < C.M. arbai etc.

Instrumental case -yər: This instrumental case passed through these stages of change: -γār/-gēr > -bar/-ber > -iyar/-iyer > -ār/-ēr. The colloquial form -γār/-gēr / -ār/-ēr was recorded in Mongolian No-geol-dae.

M.N. udqur-ər (0217a03) < C.M. udqur-iyar

M.N. ulam-yər (0722b04) < C.M. ulam-iyar

There are similar forms in the following dialects. oir. mør-æ:r > C.M. morin-iyar.

Recursion case -γān/-gēn: Recursion case classical mongolian form -ban-ben; the weakening form of -iyan/-iyen. Recorded as -yən; -an/-ən in Mongolian No-geol-dae.

M.N. dotoran (0718a03) < C.M. dotor-a-ban

M.N. əji-yən (0615b02) < C.M. eji-ben

M.N. nöküřən (0523a04) < C.M. nöküř-iyen etc.

There are similar forms in the following dialects. oir. khor. usə:rə:n < C.M. üsü-ber-iyen, khor. ʊla:nən < C.M. ulayan-iyen . khor. gɣtə:gan < C.M. ger-tei-ben etc.

5.2 Verb suffix

Past tense -ba/-be: Classical written Mongolian form is -ba and the Khalkha dialect form is -v. In Mongolian No-geol-dae disobeyed vowel harmony by recording local dialect forms or by attaching a back vowel suffix to a front vowel word.

M.N. bičiba (0521b05) ~ C.M. bičibe

There are similar forms in the following dialects. tor. irwæ: > C.M. irebe, khor. ʊɛɭʃigbə: < C.M. okilačiqaba, khor. oʃbi < C.M. očiba, khor. giwæ: < C.M. gebe etc.

Present tense -müi: Classical Mongolian form is back vocalic word + mui, front vocalic word + -müi.

Following colloquial forms were recorded in Mongolian No-geol-dae.

M.N. külyamui < C.M. küliyemüi (0411b03)

This disobeyed vowel harmony by attaching a back vowel suffix to a front vowel word. This occurs in the Khorchin.

6. Conclusion

Generally, 17-18th century Mongolian central dialect differs greatly from modern Mongolian central dialect. Therefore, modern Mongolian central dialect Khalkha cannot be directly compared with features of Mongolian of that period. There were relatively small differences among Khalkha, Oirad, and inner Mongolian dialects, and also had much common characteristics with the dialects of Buriyad, Dagur, etc. of that period. That is, there were not many differences but relatively common characteristics rather than differences among the central dialects of Mongolia such as Khalkh, Tsahar, and Ordos, as well as among the eastern dialects such as Kharachin and Khorchin, and the western and northern dialects such as Oirad and Buriad. These dialects also all had the same written language. From the 17-18th century onward, however, they started evolving separately due to local influences. For example, from two versions of one word evolved due to vowel assimilation, one can be used actively in one dialect and the other can become outdated word in another dialect. The Khalkha dialect has a number of branches and local dialects and upon adopting Cyrillic alphabet, additional real features of phonology were formed to an extent. For the most part, it's from other modern dialects. Approximately until the late 19th century Khalkh dialect had similar phonetic characteristics with the Tsahar, Ordos dialects, etc.

Mongolian No-geol-dae, considering the publisher's location, the epilogue, and the like, is clearly based on the dialects of Beijing Mongolians. In addition, from the linguistic characteristics of the source, it can be seen that to some extent that it was based on dialects of Beijing Mongolians, also known as turned into a half Manchu Mongols. Beijing Mongols of the period are divided into two subgroups. Both subgroups were heirs of Mongolian nobles in the Manchu imperial court and had assimilated and spoke Manchu-influenced Mongolian and were part of the Eight Banners. Manchurian Eight Banners were divided into Manchus and Mongols. The Mongol Banners are removed and forgotten from Mongolian. But they are recorded in Manchu source *Magad huuli* 'Veritable Records of the Qing Dynasty', 'Daičin ulus-un tulyar töriig togtooson bodlogiin bičig' (Military annals of the foundation of the Qing Dynasty). Among them were even Khalkha Mongols, for instance in 1605, Khalkha Baygud tribe chief Engered surrendered to Manchuria and was incorporated into Eight Banners. Manchuria's influence was great during this period, and with Mongolian chiefs such as the above had joined Manchuria with their tribes, it's understandable that Mongolists from other countries had more contact with Manchu-influenced Mongols. There are many occurrences of Oirad, Ordos, Khorchin, Kharachin, Dagur dialects in Mongolian No-geol-dae. There are instances of Kharachin and Khorchin dialect words formed via progressive assimilation, Kharachin vowel alternation via long vowel labial harmony in Mongolian No-geol-dae. Furthermore, the fact that *ö* from the modern Mongolian dialect was recorded the least amount of times is consistent with its absence in the Khorchin and Kharachin dialects. The phoneme allophone of Classical Mongolian *a* and palatalized vowel occurring in rounded vowel location also fits the characteristics of Korchin, Kharachin and

Tsahar dialects. Therefore, I concluded that Mongolian No-geol-dae was based on pronunciation of Kharachin and Khorchin dialects. As mentioned above, it needs to be ascertained with historical sources.

In Mongolian No-geol-dae, although many occurrences of Ordus and Oirat dialects features exist, examples such as noun word final -n, which have been preserved unaltered in Oirat dialect until now, being dropped also occur. Hence, Oirat can be excluded from the dialects which Mongolian No-geol-dae was based on. Oirats had historical importance. Therefore it's understandable that the characteristics of their dialect are accord with characteristics of many other dialects.

Kharachin and Khorchin dialect features have the most significant occurrences than any other dialects. Speakers of Kharachin and Khorchin dialects currently live in Jirim League, Kholon buir, Khar murun, Girin of Inner Mongolia. Kharachin and Khorchin dialect speakers or east Mongols are the second largest subgroup after the central dialect speakers (Moomoo 1982: 65).

Abbreviations

AM = Ancient Mongolian

baa = baarin

bar = barga

bur = buriad

ch = chakhar

C.M = Classical Mongolian

dar = darkhat

han = Hangul

IPA = International Phonetic Alphabet

kh = khalkha

khar = kharachin

khor = khorchin

MM = Middle Mongolian

MN = Mongolian No-geol-dae

MoM = Modern Mongolian

oir = oirat

ord = ordus

PM = Proto Mongolian

tum = tumet

xal = kalmuck

zax = zaxchin

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