A Study of the Chinese Characters Used for a Sino-Mongol Glossary Known as the *Bei-lu Yi-yu* 北虜譯語

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Abstract

This is a study of a version of the Sino-Mongol glossary known as the *Bei-lu Yi-yu* 北虜譯語(also known as *Yi-yu* 譯語), which is contained in the *Deng-tan Bi-jiu* 登壇必究. The purpose of this paper is to explain the dialect sound system, and the spelling rules of the Chinese Characters denoting Mongolian sounds in the Bei-lu Yi-yu.

1. Introduction of the Transcription of Chinese Characters and the Bei-lu Yi-yu

The Middle Mongol language is known from written documents that were recorded in many different scripts, including Uighur-Mongol script, phags-pa script, Chinese script, and Arabic script. Among these sources written in Chinese script are by far the most important for the phonological reconstruction of the Middle Mongol language. During the Yuan 元 and Ming 明 dynasty (1271-1645), many different Sino-Mongolian glossaries and works of writing were compiled and published. The *Secret History of the Mongols* 元朝秘史 is the best known work among the above mentioned works. These transcriptions are comprised of the Chinese terms and their corresponding Mongolian terms, which is uses the phonetic value of the Chinese characters to denote Mongolian pronunciation. The Mongolian words denoted by the Chinese script represent the sounds of the Mongolian counterparts at the time of compilation. That is why the phonological reconstruction and understanding of the dialect phonetic features of the Chinese characters is crucial for building the foundation for researching Middle Mongolian phonology.

To better analyze and interpret the Chinese transcriptions of the Mongolian text, I divided these transcriptions into two different categories, Elaborated Transcription and Rough Transcription. The significant difference between the two groups is the accuracy of the transcriptions of the Mongolian sounds. The elaborate transcriptions use a complex spelling system to denote Mongolian pronunciation, and the rough transcriptions use a simple spelling system to denote Mongolian pronunciation. For example, the Mongolian consonants *q* and *r* do not exist in the Chinese language. In the elaborated transcription system, the translators use a small character 中 or 舌 next to the upper left corner of the primary character that is being modified to indicate the manner of articulation, or the position of articulation of the consonant. In the rough transcription system there are no small characters or markers to indicate Mongolian sounds, which do not exist in the Chinese language. The elaborated transcription group includes the *Secret History of the Mongols* (hereafter SH) and *Hua-yi Yi-yu* 華夷譯語 (version A , hereafter HYa). The rough transcription consists of *Zhi-yuan Yi-yu* 至元譯語, other versions of *Hua-yi Yi-yu* 華夷譯語, *Bei-lu Yi-yu* 北虜譯語, and *Yi-bu* 譯部 etc.

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Bei-lu Yi-yu 北虜譯語 (hereafter BY) is contained in the *Deng-tan Bi-jiu* 登壇必究(hereafter DB), which is a Chinese military handbook compiled by Wang Ming he 王鳴鶴 and dated 1599. BY is the 22nd juan 卷 (scroll) of total number of 40 juans. The BY is a list of words, as well as a Sino-Mongol glossary, which is consists of 639 vocabulary words divided into 17 men 門 (subject, categories) sections. The order of each entry is Chinese words are followed by their Mongolian translations also written in Chinese script. The 17 men are indicated below:

1. 天文門   tian wen men   Astronomy (42 entries)
2. 地理門   di li men   Geography (70 entries)
3. 時令門   shi ling men   Time and Seasons (40 entries)
4. 人物門   ren wu men   Human Affairs (82 entries)
5. 珍寶門   zhen bao men   Precious Things(25 entries)
6. 走獸門   zou shou men   Quadrupeds(58 entries)
7. 聲色門   sheng se men   Sounds and Colors(28 entries)
8. 花木門   hua mu men   Flowers and plants(29 entries)
9. 菓木菜門 guo mu cai men   Fruits, trees and vegetables(31 entries)
10. 飲食門   yin shi men   Food and beverage (47 entries)
11. 衣服門   yi fu men   Clothes (53 entries)
12. 飛禽門   fei qin men   Birds (26 entries)
13. 身體門   shen ti men   Parts of the body (38 entries)
14. 馬鞍革伏器械門   ma an fu qi xie men
                Harness, machinery, vessels and implements (36 entries)
15. 房舍車輛門 fang she che liang men   Habitations and coaches (7 entries)
16. 鐵器門   tie qi men   Metal tools (11 entries)
17. 軍器什物門 jun qi shi wu men Weaponry and other goods (16 entries)

2.   The Correspondence between the Chinese Characters of the BY and *Zhong-yuan Yin-yun* 中原音韻

Middle Mongol is the technical term for the Mongolic language recorded in documents during the thirteenth through the fifteenth century. Middle Mongol is an actual historical language. The existing documents regarding this language should be reviewed as an attempt to reflect upon the language through writing[2]. The reconstruction of the phonetic value of the Chinese Characters used to transcribe Mongolian sounds is an important foundation for researching Middle Mongolian phonology. The most essential step is to clarify which dialect of Chinese characters based on. During the Yuan and Ming dynasty, many rhyme books were compiled and recording different dialects of Chinese language. To reconstruct the sound of the Chinese characters, used in the BY, we have to decide which rhyme books are can be an accurate references for them. In this present study, we use two rhyme books: *Zhong-yuan Yin-yun* 中原音韻 and *Xi-ru Er-mu Zi* 西儒耳目資. The *Zhong-yuan Yin-yun* 中原音韻 (hereafter ZY) is a rhyme dictionary compiled by Zhou deqing 周德清 dated 1324[3]. Many scholars believe that it records the standard speech of the Northern Chinese dialect 北方官话, which including Peking dialect 北京音.

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[2] Edited by Juha Janhunen, *the Mongolic Languages* p,57. Volker Rybatzki: *Middle Mongol*.
[3] Zhong-yuan Yin-yun testifies many phonological changes from Middle Chinese to Modern Chinese, such as the reduction and disappearance of final stop consonants 入声 and the reorganization of the tones.

The ZY selected 5,866 characters divided into 19 rhyme groups:*Dong-zhong* 東鍾；*Jiang-Yang* 江陽；*Zhi-Si* 支思；*Qi-Wei* 齊微；*Yu-Mo* 魚模；*Jie-Lai* 皆來；*Zhen-Wen* 真文；*Han-Shan* 寒山；*Huan-Huan* 桓歡；*Xian-Tian* 先天；*Xiao-Hao* 蕭豪；*Ge-Ge* 歌戈；*Jia-Ma* 家麻；*Che-Zhe* 車遮；*Geng-Qing* 庚青；*You-Hou* 尤侯；*Qin-Xun* 侵寻；*Jian-Xian* 監咸；*Lian-Xian* 廉纖. The ZY shows the typical Mandarin four-tone system: Feminine level tone 平声陰; Masculine level tone 平声陽; Rising tone 上声; Departing tone 去声. This system is a result of the split of the level tone into Feminine level tone 平声陰 and Masculine level tone 平声陽, and the loss of the entering tone 入声. The entering tone was distributed across the other tone groups as Entering tone as level tone 入声作平声，Entering tone as rising tone 入声作上声，and Entering tone as departing tone 入声作去声 in the ZY[4]. The *Xi-ru Er-mu Zi* 西儒耳目資 (EMZ) was compiled by Nicolas Trigault 金尼閣(1577-1628), in 1626. 西儒耳目資 means *an aid to the eyes and ears of Western Literati*. It is an important source for the system of Romanization in late Ming *guan-hua* 官話, and it denotes Nanking dialect 南京音. Due to the difference in the time of compilation of the ZY and BY, it is necessary to refer to the other Chinese rhyme dictionaries of the late Ming dynasty. In this present study of the BY, I intend to use the ZY and EMZ to inspect the Chinese characters, which are used to denote the Mongolian sounds. To carry out the investigation, I divided the 265 Chinese characters used in the BY into the following five groups according to the Mongolian phonological structure: C (consonant) +V (Vowel), C+V+V, C+V+n, C+V+m and C+V+ng.

2.1 C+V Groups

Depending on the type of vowel, we can divide the C+V group sounds into five following groups: C+a, C+e, C+i, C+o/ö, C+u/ü groups.

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[4] Also, voiced plosives and affricates have become voiceless aspirates in the level tone and voiceless non-aspirates in other tones.

Table 1: C+a Group

Chinese Characters	Phonetic value in BY	Phonetic value in ZY	Final of ZY	Tone of ZY	Romanization of EMZ
阿	a	o	Ge-Ge 歌戈	feminine level	o
納	na	na	Jia-Ma 家麻	entering as departing*	na
那	na	nuo	Ge-Ge 歌戈	masculine level; rising；departing	no
		na	Jia-Ma 家麻	departing	na
八	ba	pa	Jia-Ma 家麻	entering as rising	pa
把	ba	pa	Jia-Ma 家麻	rising	pa
扒	ba				pa
哈	qa/ha/γa				
噶	γa				ko
馬	ma	ma	Jia-Ma 家麻	rising	ma
麻	ma	ma	Jia-Ma 家麻	masculine level	ma
剌	la/ra				la
撒	sa	sa	Jia-Ma 家麻	entering as rising	sa
殺	sa	ʃa	Jia-Ma 家麻	entering as rising	xa
廈	ša	ʃa	Jia-Ma 家麻	departing	
		xia	Jia-Ma 家麻	departing	hia
塔	ta	tʻa	Jia-Ma 家麻	entering as rising	tʻa
他	ta	tʻuo	Ge-Ge 歌戈	feminine level	tʻa
打	da	ta	Jia-Ma 家麻	rising	ta
苔	da				ta
達	da	ta	Jia-Ma 家麻	entering as masculine level	ta
叉	ča	tʃˁa	Jia-Ma 家麻	feminine level	cʻha
札	ǰa				cha
牙	ya	ia	Jia-Ma 家麻	masculine level	ia
丫	ra	ia	Jia-Ma 家麻	feminine level	ia
法	va	fa	Jia-Ma 家麻	entering as rising	fa

* entering as departing：入声作去声；entering as rising：入声作上声；entering as masculine level：入声作平声陽；entering as feminine level：入声作平声陰

Table2: C+e Group

Chinese Characters	Phonetic value in BY	Phonetic value in ZY	Final of ZY	Tone of ZY	Romanization of EMZ
額	e	iɛ	Che-Zhe 車遮	entering as departing	ge
		iai	Jie-Lai 皆來	entering as departing	
捏	ne	niɛ	Che-Zhe 車遮	entering as departing	nie
伯	be	pai	Jie-Lai 皆來	entering as departing	pe
黑	he	xei	Qi-Wei 齊微	entering as departing	he
革	ge	kiai	Jie-Lai 皆來	entering as departing	ke
箇	ge	ko	Ge-Ge 歌戈	departing tone	ko
克	ke				k'e
墨	me	muei	Qi-Wei 齊微	entering as departing	me
列	le	liɛ	Che-Zhe 車遮	entering as departing	lie
勒	le/re	lei	Qi-Wei 齊微	entering as departing	le
塞	se	sï	Zhi-Si 支思	entering as rising	se
		sai	Jie-Lai 皆來	departing tone	sai
色	se	sai	Jie-Lai 皆來	entering as rising	se
忒	te				t'e
得	de	tei	Qi-Wei 齊微	entering as rising	te
扯	če				c'he
者	ǰe	tʃiɛ	Che-Zhe 車遮	rising tone	che
折	ǰe	ʃiɛ	Che-Zhe 車遮	entering as masculine level tone	
		tʃiɛ	Che-Zhe 車遮	entering as rising	xe*
野	ye	iɛ	Che-Zhe 車遮	rising tone	ie
葉	ye	iɛ	Che-Zhe 車遮	entering as departing	ie

*According to Lu Zhi-wei 陸志韋1971，consonant *x* can reconstruct as [ʃ].

Table 3: C+i Group

Chinese Characters	Phonetic value in BY	Phonetic value in ZY	Final of ZY	Tone of ZY	Romanization of EMZ
亦	i				ie
一	i/yi	i	Qi-Wei 齊微	entering as rising	ie
你	ni	ni	Qi-Wei 齊微	rising	ni
泥	ni/mi	ni	Qi-Wei 齊微	masculine level; departing	ni
必	bi	pi	Qi-Wei 齊微	entering as rising	pie
乞	ki	kʻi	Qi-Wei 齊微	entering as rising	kʻi
希	hi	xi	Qi-Wei 齊微	feminine level	hi
吉	gi	ki	Qi-Wei 齊微	entering as rising	kie
米	mi/ni	mi	Qi-Wei 齊微	entering as rising	mi
里	li/ri	li	Qi-Wei 齊微	rising	li
失	ši	ʃi	Qi-Wei 齊微	entering as rising	xi
使	ši	ʃi	Zhi-Si 支思	rising	xi
習	ši	si	Qi-Wei 齊微	entering as masculine level	sie
替	ti	tʻi	Qi-Wei 齊微	departing	tʻi
迪	di				tie
赤	či	tʃʻi	Qi-Wei 齊微	entering as rising	cʻhe
乞	či	kʻi	Qi-Wei 齊微	entering as rising	kʻi
尺	či	tʃʻi	Qi-Wei 齊微	entering as rising	cʻhe
直	či/ǰi	tʃi	Qi-Wei 齊微	entering as masculine level	chi/che
只	ǰi	tʃi	Qi-Wei 齊微	entering as rising	chi
以	yi	i	Qi-Wei 齊微	rising	i
力	ri	li	Qi-Wei 齊微	entering as departing	lie
利	ri	li	Qi-Wei 齊微	departing	li

Table 4: C+o/ö Group

Chinese Characters	Phonetic value in BY	Phonetic value in ZY	Final of ZY	Tone of ZY	Romanization of EMZ
我	o/γo	ŋo	Ge-Ge 歌戈	rising	go
藕	o	əu	You-Hou 尤侯	rising	geu
奴	no	nu	Yü-Mo 魚模	masculine level	nu
孛	bo				poei
火	qo/ho	xuo	Ge-Ge 歌戈	rising	ho
科	qo	k'uo	Ge-Ge 歌戈	masculine level	k'o
扣	kö	k'əu	You-Hou 尤侯	departing	k'eu
活	qo	xuo	Ge-Ge 歌戈	entering as masculine level	huo
惡	γo	o	Ge-Ge 歌戈	entering as departing	o
革	go	kiai	Jie-Lai 皆來	entering as rising	ke
果	go	kuo	Ge-Ge 歌戈	rising	ko
可	kö	k'o	Ge-Ge 歌戈	rising	k'o
吼	hö				
墨	mö	muei	Qi-Wei 齊微	entering as departing	me
莫	mo	muo	Ge-Ge 歌戈	entering as departing	mo
		mau	Xiao-Hao 蕭豪	entering as departing	mu
羅	lo/ro	luo	Ge-Ge 歌戈	masculine level	lo
鎖	so	suo	Ge-Ge 歌戈	rising	so
瑣	so	suo	Ge-Ge 歌戈	rising	so
勺	šo/čo				xo
脱	to	t'uo	Ge-Ge 歌戈	entering as rising	t'o
朵	do	tuo	Ge-Ge 歌戈	rising	to
着	ǰo	tʃiɛu	Xiao-Hao 蕭豪	entering as masculine level	
岳	yo	io	Ge-Ge 歌戈	entering as departing	io
		iau	Xiao-Hao 蕭豪	entering as departing	
姚	yo	iɛu	Xiao-Hao 蕭豪	masculine level	iao
鑼	ro	luo	Ge-Ge 歌戈	masculine level	lo

Table 5: C+u/ü Group

Chinese Characters	Phonetic value in BY	Phonetic value in ZY	Final of ZY	Tone of ZY	Romanization of EMZ
五	u	u	Yü-Mo 魚模	rising	u
無	u	vu	Yü-Mo 魚模	masculine level	vu
兀	u	u	Yü-Mo 魚模	entering as rising	guo
藕	u	əu	You-Hou 尤侯	rising	geu
奴	nu	nu	Yü-Mo 魚模	masculine level	nu
努	nu	nu	Yü-Mo 魚模	rising	nu
艹	bu				poei
補	bu	pu	Yü-Mo 魚模	rising	pu
薄	bu	po	Ge-Ge 歌戈	entering as masculine level	po
伯	bu	pai	Jie-Lai 皆來	entering as rising	pe
補	bü	pu	Yü-Mo 魚模	rising	pu
忽	qu	xu	Yü-Mo 魚模	entering as rising	ho
虎	qu	xu	Yü-Mo 魚模	rising	hu
苦	qu	k'u	Yü-Mo 魚模	rising	k'u
果	qu	kuo	Ge-Ge 歌戈	rising	ko
取	qu	ts'iu	Yü-Mo 魚模	rising	c'iu
戸	qu	xu	Yü-Mo 魚模	departing	hu
虎	γu	xu	Yü-Mo 魚模	rising	hu
火	hü	xuo	Ge-Ge 歌戈	rising	ho
故	gü	ku	Yü-Mo 魚模	departing	ku
谷	gü	ku	Yü-Mo 魚模	entering as rising	ko
古	gü	ku	Yü-Mo 魚模	rising	ku
過	gu	kuo	Ge-Ge 歌戈	feminine level	kuo
木	mu	mu	Yü-Mo 魚模	entering as departing	mo
墨	mu	muei	Qi-Wei 齊微	entering as departing	me
目	mu	mu	Yü-Mo 魚模	entering as departing	mo
母	mu	mu	Yü-Mo 魚模	rising	mu
魯	lu	lu	Yü-Mo 魚模	rising	lu
六	lu	liəu	You-Hou 尤侯	entering as departing	lo
速	su	su	Yü-Mo 魚模	entering as rising	so
土	tu	t'u	Yü-Mo 魚模	rising	t'u

禿	tu	t'u	Yü-Mo 魚模	entering as rising	t'o
兔	tü	t'u	Yü-Mo 魚模	departing	t'u
堵	du	tu	Yü-Mo 魚模	rising	tu
度	du	tu	Yü-Mo 魚模	departing	tu
督	du	tu	Yü-Mo 魚模	entering as rising	to
多	du	tuo	Ge-Ge 歌戈	feminine level	to
都	dü	tu	Yü-Mo 魚模	feminine level	tu
出	ču	tʃʻiu	Yü-Mo 魚模	entering as rising	c'hu
主	ču	tʃiu	Yü-Mo 魚模	rising	chu
勺	ču				xo
處	čü	tʃʻiu	Yü-Mo 魚模	departing	c'hu
竹	ǰu	tʃiu	Yü-Mo 魚模	entering as rising	cho
		tʃiəu	You-Hou 尤侯	entering as rising	
魯	ru	lu	Yü-Mo 魚模	rising	lu
羅	ru	luo	Ge-Ge 歌戈	masculine level	lo
伏	fu	fu	Yü-Mo 魚模	entering as masculine level	fo

2.2 C+V+V Groups

Depending on the type of vowel, the C+V +V groups can divided into C+V+i and C+V+u/ü groups.

Table 6: C+V+i Group

Chinese Characters	Phonetic value in BY	Phonetic value in ZY	Final of ZY	Tone of ZY	Romanization of EMZ
愛	ai	ai	Jie-Lai 皆來	departing	gai
矮	ai	iai	Jie-Lai 皆來	rising	iai
委	ui	uei	Qi-Wei 齊微	rising	uei
乃	nai	nai	Jie-Lai 皆來	rising	nai
					gai
奈	nai	nai	Jie-Lai 皆來	departing	nai
伯	bai	pai	Jie-Lai 皆來	entering as rising	pe
敗	bai	pai	Jie-Lai 皆來	departing	pai
亥	qai				hai
害	qai	xai	Jie-Lai 皆來	departing	hai
海	qai	xai	Jie-Lai 皆來	rising	hai
克	key				k'e
虧	küi	k'uei	Qi-Wei 齊微	feminine level	k'uei
懷	hoi	xuai	Jie-Lai 皆來	masculine level	hoai
貴	ɣui	uei	Qi-Wei 齊微	departing	kuei
鬼	güi	kuei	Qi-Wei 齊微	rising	kuei
妹	mei	muei	Qi-Wei 齊微	departing	mui
來	lai	lai	Jie-Lai 皆來	masculine level	lai
賽	sai	sai	Jie-Lai 皆來	departing	sai
水	süi	ʃuei	Qi-Wei 齊微	rising	xui
太	tai	t'ai	Jie-Lai 皆來	departing	t'ai
大	dai	tai	Jie-Lai 皆來	departing	tai

Table 7: C+V+u/ü Group

Chinese Characters	Phonetic value in BY	Phonetic value in ZY	Final of ZY	Tone of ZY	Romanization of EMZ
襖	au	au	Xiao-Hao 蕭豪	rising	gao
藕	eü	əu	You-Hou 尤侯	rising	geu
惱	nau	nau	Xiao-Hao 蕭豪	rising	nao
鈕	niu	niəu	You-Hou 尤侯	rising	
保	bau	pau	Xiao-Hao 蕭豪	rising	pao
寶	bau	pau	Xiao-Hao 蕭豪	rising	pao
扣	köw	k'əu	You-Hou 尤侯	departing	k'eu
好	hau	xau	Xiao-Hao 蕭豪	rising	hao
告	gau	kau	Xiao-Hao 蕭豪	departing	kao
狗	gew	kəu	You-Hou 尤侯	rising	keu
毛	mau	mau	Xiao-Hao 蕭豪	masculine level	mao
老	lau	lau	Xiao-Hao 蕭豪	rising	lao
牢	law	lau	Xiao-Hao 蕭豪	masculine level	lao
流	liu	liəu	You-Hou 尤侯	masculine level	lieu
留	liü	liəu	You-Hou 尤侯	masculine level	lieu
掃	sau	sau	Xiao-Hao 蕭豪	rising	sao
搜	seü	ʃəu	You-Hou 尤侯	feminine level	seu
討	tau	t'au	Xiao-Hao 蕭豪	rising	t'ao
木匋	tau	t'au	Xiao-Hao 蕭豪	rising	
倒	dau	tau	Xiao-Hao 蕭豪	rising	tao
		tau	Xiao-Hao 蕭豪	departing	tao
斗	dew	təu	You-Hou 尤侯	rising	teu
招	ǰau	tʃiɛu	Xiao-Hao 蕭豪	feminine level	chao
咒	ǰiw	tʃiəu	You-Hou 尤侯	departing	cheu
周	ǰiw	tʃiəu	You-Hou 尤侯	feminine level	cheu

2.3 C+V+n Group

The C+V+n group can divide into five following groups: C+a+n, C+e+n, C+i+n, C+o/ö+n, C+u/ü+n groups.

Table 8: C+V+n Group

Chinese Characters	Phonetic value in BY	Phonetic value in ZY	Final of ZY	Tone of ZY	Romanization of EMZ
安	an	an	Han-Shan 寒山	feminine level	gan
俺	an	iam	Jian-Xia 監咸	rising	ien
難	nan/nem	nan	Han-Shan 寒山	masculine level	nan
半	ban				puon
班	ban/ben	pan	Han-Shan 寒山	feminine level	pan
汗	qan/ɣan/gen	xan	Han-Shan 寒山	masculine level; departing	han
罕	qan	xan	Han-Shan 寒山	rising	han
敢	ɣan	kam	Jian-Xia 監咸	rising	kan
完	ɣan	on	Huan-Huan 桓歡	masculine level	huon
漢	ɣan	xan	Han-Shan 寒山	departing tone	han
蠻,蛮	man	man	Han-Shan 寒山	masculine level	man
欒	lan	lon	Huan-Huan 桓歡	masculine level	luon
朗	lan	laŋ	Jiang-Yang 江陽	masculine level	lam
散	san	san	Han-Shan 寒山	rising	san
賞	šan	ʃaŋ	Jiang-Yang 江陽	rising	xam
炭	tan	tʻan	Han-Shan 寒山	departing	tʻan
原	yan/yon	iuɛn	Xian-Tian 先天	masculine level	iuen
印	en/yin	iən	Zhen-Wen 真文	departing	in
揩	ken				
根	gen	kən	Zhen-Wen 真文	feminine level	ken
鎮	ǰen	tʃiən	Zhen-Wen 真文	departing	chin
言	yen	iɛn	Xian-Tian 先天	masculine level	ien
寧	nin	niəŋ	Geng-Qing 庚青	masculine level	nim
賓	bin	piən	Zhen-Wen 真文	feminine level	pin
琴	kin	kʻiəm	Qin-Xun 侵寻	masculine level	kʻin
民	min	miən	Zhen-Wen 真文	masculine level	min
令	lin	liəŋ	Geng-Qing 庚青	masculine level; departing	lim
臣	cin	tʃʻiən	Zhen-Wen 真文	masculine level	cʻhin
林	rin/lin	liəm	Qin-Xun 侵寻	masculine level	lin
端	don	ton	Huan-Huan 桓歡	feminine level	tuon
聰	con	tsʻuŋ	Dong-Zhong 東鍾	feminine level	çum

軟	yon	ʒiuɛn	Xian-Tian 先天	rising	juen
穩	u/ün	uən	Zhen-Wen 真文	rising	uen
文	u/ün	vuən	Zhen-Wen 真文	masculine level	ven
溫	u/ün	uən	Zhen-Wen 真文	feminine level	uen
紅	qun	xuŋ	Dong-Zhong 東鍾	feminine level	hum
困	kun	kʻuən	Zhen-Wen 真文	departing	kʻuen
昆	kun	kuən	Zhen-Wen 真文	feminine level	kuen
棍	gun				kuen
們	mün				
孫	sun	suən	Zhen-Wen 真文	feminine level	sun
屯	tün	tʻuən	Zhen-Wen 真文	masculine level	tʻun
墩	dun	tuən	Zhen-Wen 真文	feminine level	tun
倫	run/rün	luən	Zhen-Wen 真文	masculine level	lun

2.4 C+V+m Group

Depending on the type of vowel, we can divide the C+V+m groups into three following groups: C+a+m, C+i+m, C+u/ü+m groups.

Table 9: C+V+m Group

Chinese Characters	Phonetic value in BY	Phonetic value in ZY	Final of ZY	Tone of ZY	Romanization of EMZ
俺	am	iam	Jian-Xian 監咸	rising	ien
難	nam	nan	Han-Shan 寒山	masculine level	nan
汗	qam	xan	Han-Shan 寒山	masculine level; departing	han
藍	lam	lam	Jian-Xian 監咸	masculine level	lan
寧	nim	niəŋ	Geng-Qing 庚青	masculine level	nim*
林	lim/rim	liəm	Qin-Xun 侵寻	masculine level	lin
穩	um	uən	Zhen-Wen 真文	rising	uen
屯	dum	tʻuən	Zhen-Wen 真文	masculine level	tʻun
准	ǰum	tʃuən	Zhen-Wen 真文	rising	chun

*In the EMZ, ending -*m* denotes -*ng* sound.

2.5 C+V+ng Group

The C+V+ng groups can divide into five following groups: C+a+ng, C+e+ng, C+i+ng, C+o/ö+ng, C+u/ü+ng groups.

Table 10: C+V+ng Group

Chinese Characters	Phonetic value in BY	Phonetic value in ZY	Final of ZY	Tone of ZY	Romanization of EMZ
莽	mang/mong	maŋ	Jiang-Yang 江陽	rising tone	mam
藍	lang	lam	Jian-Xian 監咸	masculine level	lan
郎	lang	laŋ	Jiang-Yang 江陽	masculine level	lam
桑	sang	saŋ	Jiang-Yang 江陽	feminine level	sam
湯	tang	t'aŋ	Jiang-Yang 江陽	feminine level	t'am
黨	dang	taŋ	Jiang-Yang 江陽	rising	tam
長	ǰang	t'aŋ	Jiang-Yang 江陽	masculine level	cʰam
兩	riang	liaŋ	Jiang-Yang 江陽	rising	leam
能	neng	nəŋ	Geng-Qing 庚青	masculine level	nem
坑	keng	k'əŋ	Geng-Qing 庚青	feminine level	k'em
猛	meng	muŋ	Dong-Zhong 東鍾	rising	mem
生	seng	ʃəŋ	Geng-Qing 庚青	feminine level	sem
騰	teng	t'əŋ	Geng-Qing 庚青	masculine level	t'em
兵	bing	biəŋ	Geng-Qing 庚青	feminine level	pim
令	ling	liəŋ	Geng-Qing 庚青	departing	lim
黃	qong	xuaŋ	Jiang-Yang 江陽	masculine level	hoam
隴	long	liuŋ	Dong-Zhong 東鍾	rising	lum
瓏	long	luŋ	Dong-Zhong 東鍾	masculine level	lum
松	song	siuŋ	Dong-Zhong 東鍾	feminine level	sum
猛	müng	muŋ	Dong-Zhong 東鍾	rising	mem
通	tüng	t'uŋ	Dong-Zhong 東鍾	feminine level	t'um

2.6 The Correspondence of the BY and **ZY**

The above analysis (Tables 1-10) shows that the correspondence between the Chinese characters of the BY and the final groups of the ZY. The table below is a summary of the Correspondence of the BY and ZY.

Table 11: Correspondence of the BY and ZY

Mongolian sounds	Final group of ZY	Phonetic value of vowel in ZY
C+A group	Jia-Ma 家麻	a
	Ge-Ge 歌戈	o
C+E group	Che-Zhe 車遮韵	iɛ
	Jie-Lai 皆來	iai
	Qi-Wei 齊微	ei
	Ge-Ge 歌戈	o
C+I group	Qi-Wei 齊微	i
	Zhi-Si 支思	ì
C+O/Ö group	Ge-Ge 歌戈	o/ou
	Xiao-Hao 蕭豪	iɛu
	You-Hou 尤侯	iuɛ
	Yu-Mo 魚模	u
	Qi-Wei 齊微	uei
	Jie-Lai 皆來	iai
C+U/Ü group	Yu-Mo 魚模	iu
	You-Hou 尤侯	əu
	Ge-Ge 歌戈	ou
C+V+I group	Jie-Lai 皆來	uai
	Qi-Wei 齊微	uei
C+V+U group	You-Hou 尤侯	əu
	Xiao-Hao 蕭豪	au
C+V+N group	Han-Shan 寒山	an
	Zhen-Wen 真文	iən
	Huan-Huan 桓欢	on
	Xian-Tian 先天	iuɛn
	Jian-Xian 監咸	am
	Qin-Xun 侵寻	əm
	Dong-Zhong 東鍾	ung
	Jiang-Yang 江陽	ang

	Geng-Qing 庚青	eng
C+V+M group	Jian-Xian 監咸	am
	Qin-Xun 侵寻	iəm
	Zhen-Wen 真文	uən
	Han-Shan 寒山	an
C+V+NG group	Jiang-Yang 江陽	iaŋ
	Geng-Qing 庚青	iəŋ
	Dong-Zhong 東鍾	uŋ
	Jian-Xian 監咸	iuŋ

Above analysis shows that the Chinese characters in the BY, unlike the SH and HYa, some of the characters' sounds do not correspond with the ZY's dialect system. Particularly, many dissimilar characters from the different final group of the ZY denoted the Mongolian C+e group and C+o/ö groups' sounds. Most of these characters are belong to the entering tones of the *Geng* 梗 and *Zeng* 曾 *She* 攝 groups[5] in the *Guang-yun* 廣韻[6]. Consequently, the entering tone's *Geng-she* and *Zeng-she* group characters are the key to clarify the dialect of the Chinese characters of the BY.

3. The Dialect of the Chinese Characters in the BY

In my previous study of *The Secret History of the Mongol* and the *Hua-yi Yi-yu* (Version A,) I used the ZY rhyme book to determine the phonetic value of the Chinese characters. Then I arrived at the conclusion that the Chinese characters, used to transcribe Mongolian sounds corresponded with the speech system of the ZY, which is based on the Northern Chinese colloquial dialect 北方白話音. However, the above analysis of the Chinese characters in the BY proved that they do not match the ZY's dialect. This means that the Chinese characters in the BY and the SH were based on different Chinese dialect sound system. The C+e group in BY, particularly, is more complicated than the SH and HYa. The discrepancy primarily lies in the entering tones of the *Geng* and *Zeng She* group characters. In the history of the development of Modern Chinese phonology, the most important development was the disappearance of the entering tone[7]. Todo Akiyasu 藤堂明保(1952:111) argues that in Modern Chinese, the entering tone of Middle Chinese developed into two distinct Types. Type1 is the entering tone's stop consonants /p/,/t/,/k/ became the *-i/-u* coda 韵尾. Type2 is the entering tone's stop consonants /p/,/t/,/k/ became a glottal stops [ʔ][8]. He also points out in Type 1, the characters of *Geng-She*, group's final stop consonant changes to *-i*; the characters of *Dang* 宕-*She* group's final stop consonant become *-u*. Middle Chinese entering tone's stop consonants /p/,/t/,/k/ change to an –i/-u coda reflects the colloquial speech sound system, and it is similar to the Peking 北京 dialect, while the change to a glottal stop reflects the classical reading sound system, like the Nanking 南京 dialect.

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[5] In Middle Chinese phonology, finals were classified into 16 rhyme classes, named 攝 *she*. Within each rhyme class, syllables were classified as either "open" (開 *kai*) or "closed" (合 *he*), as belonging to one of the four tones.

[6] The *Guangyun* 廣韻 is a Chinese ryhme dictionary that was compiled from 1007 to 1008 under the auspices of Emperor Zhenzong of Song. Chen Pengnian 陳彭年(961–1017) and Qiu Yong 邱雍 were the chief editors. It is a revision and expansion of the influential *Qieyun* 切韻 ryhme dictionary of 601. The *Guangyun* was the most accurate available account of the *Qieyun* phonology, and was heavily used in early work on the reconstruction of Middle Chinese.

[7] Chen Chong-yu 陈重瑜:1992.

[8] Dodo 藤堂 in used〔•〕to denote the glottal stop sound in his paper. In this paper, we use[ʔ] to indicate the glottal stop.

Thus, if a *Geng-she* group character was used to transliterate Mongolian diphthongs of the   C+V+i group, it must reflect a type1 dialect system. If, however, a *Geng-she* group character was used to transliterate a Mongolian C+V group sound, it must reflect a type2 dialect system. Therefore this is a reliable criterion for determining the dialect sound system of the Chinese characters used to transcribe Mongolian pronunciations. In the SH and HYa, the entering tone's *Geng-she* group characters are almost always used to transliterate the Mongolian C+V+i group diphthongs. For example, 克 denotes the *kei* sound; 伯 denotes the *bai* sound; 德 denotes the *dei* sound; 索 denotes

the *sai* sound; 澤 denotes the *jai* sound; 国 denotes the *goi* sound in the SH and HYa. Thus the Chinese characters of the SH and HYa, used to transliterate the Mongolian pronunciations must have been based on the Northern Colloquial speech system, which is very close to the sound system of the ZY. The BY does not use the same transliteration method as the SH and HYa, but we can use the same criterion used above to determine what dialect sound system it was based on.

3.1   The Entering tone's Characters in the BY

There are ten characters of the entering tone of the *Geng-she* and *Zeng-she* in the BY. Below are the details of the sound feature and usage in the BY.

(1) 革

In the *Guang-yun* 廣韻 , 革 belongs to the final group 麥[9], and is pronounced with an entering tone. The *fan-qie* 反切 for 革 in the *Guan-yun* is given as "古核切" , allowing us to reconstruct the sound as [kæk]. In the EMZ, 革 is romanized as *ke*. In the ZY, 革 belongs to the *Jie-lai* 皆來 group and sound can be reconstructed as *k'iai*. 革 appears 31 times in the BY to denote the Mongolian sound *ge*, as well as occasionally for the sound *gha* and *gho*. For example, in Entry №358, 革失文 *geši'ün* (枝 *zhi*, meaning 'branch'), 革 denotes the Mongolian sound *ge*.   There are no entries in which 革 denote the diphthong.

(2)墨

In the *Guang-yun*, 墨 belongs to final group 德, and pronounced with an entering tone. The *fan-qie* for 墨 in the *Guang-yun* is given as "莫北切" , we can reconstruct as [mək]. In the EMZ, its romanization is *me*. In the ZY, 墨 belongs to the *Qi-wei* 齊微 final group, and the reconstruction of the phonetic value is *muei*. 墨 appears 9 times in the BY, and it was used to transliterate the Mongolian sounds *me*/*mö*/*mü*. In Entry №205 額墨 *eme* (老婆 *lao-po*, 'wife'), and Entry №5 墨乞 *möči* (辰 *chen*, 'period of time'), 墨 used to transcribe the Mongolian sounds *me* and *mö*. There are no entries in which 墨 denotes the diphthong.

(3)勒

勒 belongs to 德 finals group in the *Guang-yun,* and is pronounced with an entering tone. The *fan-qie* for 勒 given as "盧則切", allowing us to reconstruct as [lək]. In the EMZ, 勒 is romanized as *le*. In the ZY, 勒 belongs to the *Qi-wei* final group, and sound can be reconstructed as *lei*. 勒 is used to transliterate the Mongolian sounds /le/,/re/,/l/,/r/ in the BY. There are no entries in which 勒 to denote the diphthong.

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[9] The traditional analysis of the Chinese syllable, derived from the *fan-qie* method, it is contained the 反切上字 an initial consonant, or "initial", (*sheng-mu* 聲母) and 反切下字 a final group (*yun-mu* 韻母).

For example, in Entry №9 藕勒 *eüle*(雲 *yun*, 'cloud'), 勒 denotes the Mongolian sound *le*.

(4)塞

塞 is the same as 勒 , and it belongs to the final group 德 in the *Guang-yun*, and is pronounced with an entering tone. The *fan-qie* for 塞 is given as "蘇則切," sound can be reconstruct as [sək]. In the EMZ, 塞 is romanized as *se*. In the ZY, 塞 belongs to *Jie-lai* 皆来 final group , and its phonetic value is *sei/sï* .塞 is used to transcribe the Mongolian sound *se* in the BY. In Entry №142 塞里文 *seri'ün* (凉 *liang*, 'cool'), 塞 denotes the Mongolian sound *se*, and there are no entries in which 塞 denotes the diphthong.

(5)色

In the *Guang-yun*, 色 belongs to the final group 職, and is pronounced with an entering tone. The *fan-qie* for 色 given as "所力切," and the phonetic value of its reconstruction is [ʃĭək]. In the EMZ, 色 is romanized as *se*. In the ZY, 色 belongs to the *Jie-lai* final group , and can be reconstructed as *sai* .色 is used to denote the Mongolian sound *se* in the BY. For example, in Entry №568 色力伯 *seribe* (醒了 , *xing-le*, 'awoke'), 色 used to transcribe Mongolian sound *se*. There are no entries in which 色 denotes the diphthong in the BY.

 (6)忒

In the *Guang-yun*, 忒 belongs to the final group 德, and is pronounced with an entering tone. The *fan-qie* for 忒 is given as "他德切, and its phonetic value is [t'ək]. In the EMZ, 忒 is romanized as *t'e*. However the 忒 does not appeared in the ZY. 忒 is used to denote the Mongolian sound *te* in the BY. For example, in Entry № 246 忒木兒 *temür* (鐵 *tie*, 'iron'), 忒 denotes Mongolian sound *te*. There are no entries to denote the diphthong.

 (7)得

得 belongs to the final group 德 in the *Guang-Yun*, and is pronounced with an entering tone. The *fan-qie* for 得 given as "多則切," allowing us to reconstruct the sound as [tək]. In the EMZ, 得 is romanized as *te*. In the ZY, 得 belongs to *Qi-Wei* final group, and its phonetic value is *tei* .得 is used to transcribe the Mongolian sounds *de/dö* in the BY. For example, in Entry № 135 五得失 *üdeši* (晚 *wan*, 'late'), 得 denotes the Mongolian sound *de*. There are no entries in which 得 denotes the diphthong.

(8)黑

黑 belongs to the final group 德 in the *Guang-yun*, and is pronounced with an entering tone. The *fan-qie* for 黑 is given as "呼北切," its phonetic value is [xək]. In the EMZ, 黑 is romanized as *he*. In the ZY, 黑 belongs to the *Qi-Wei* final group and its phonetic value is *xei* .黑 is used to denote the Mongolian sound *he/ho*. For example, in Entry №533 黑乞 *heki* (頭 *tou*, 'head'), 黑 denotes the sound *he*, and there are no entries to denote the Mongolian diphthong.

(9) 伯

伯 belongs to the final group 陌 in the *Guang-yun*, and is pronounced with an entering tone. The *fan-qie* for 伯 is given as "博陌切," allowing us to reconstruct the sound as [pɐk]. In the EMZ, 伯 is romanized as *pe*. In the ZY, 伯 belongs to the *Jie-Lai* final group, and its phonetic value is *pai*. Basically, 伯 is used to denote the Mongolian sounds *be/bö/bü*. 伯 denotes the Mongolian diphthong sound only in one word in the BY. For example, in Entry №199 伯 里根 *berigen* (嫂子 *sao-zi*, 'sister in law'), 伯 denotes the Mongolian sound *be* , but in Entry №67 伯桑 *baisang* (園子 *yuan-zi*, 'garden'), 伯 denotes the *bai* diphthong sound.

(10) 克

In the *Guang-yun* , 克 belongs to the final group德, and is pronounced with an entering tone. The *fan-qie* for 克 is given as "苦德切" , we can reconstruct the sound as [k'ək]. In the EMZ, 克 is romanized as *k'e*. However the 克 does not appeared in the ZY. 克 is almost always used to transcribe the Mongolian sounds *ke/kö*. 克 denotes Mongolian *kei* diphthong sound only in one word in the BY. For example, in Entry №92 克勒目 *kerem* (墙*qiang*, 'wall'), 克 denotes the sound *ke*. In Entry №463捏克得兒*nekei de'el* (毛皮襖*mao-pi-ao*, 'fur coat'), 克 denotes the diphthong *kei* in the BY. In the above analysis of the entering tone characters of the *Geng* and *Zeng-she* groups, it is clear that these ten characters are used to transcribe Mongolian C+V group sounds. Basically, the entering tone's characters of the *Geng* and *Zeng-she* groups were not used to transcribe Mongolian diphthongs. This means that the BY is based on a dialect sound system which is different from those of the SH and HYa. Many of the dialect features are similar to those in the EMZ sound system, which recorded the Nanking dialect of the late Ming dynasty. However, we cannot say that the Chinese characters of the BY are simply based on the Nanking dialect, because there are two exceptions: the characters伯 and 克. In entry №67 伯桑 *baisang* (園子meaning building or court), and in entry №463 捏克得兒*nekei de'el* (毛皮襖meaning fur coat), the characters 伯and克 are used to transcribe the Mongolian diphthongs *bai* and *kei*.

This is a feature of the Northern colloquial dialect, and it does not exist in the Nanking dialect sound system. Although, the sound structure of Chinese characters in the BY is similar to that of the Nanking dialect, it seems as though the dialect used by the translator of the BY also includes some Northern features. In his discussion of the Peking colloquial pronunciation and traditional reading pronunciation, Sato Akira (1979) states that there are very clear correspondences between the entering tone's characters of the *Geng* and *Zeng-she* groups and the colloquial sounds of Peking. In the colloquial Peking dialect, the entering tone in *Geng she*'s final group became *-ei*, and in *Zeng she* they became *-ai*. The 伯 is a character of the *Geng she* group, with an entering tone, and used to transliterate the Mongolian *bai* sound, while 克 is a character of the *Zeng she* group, with an entering tone, used to transliterated the Mongolian sound *kei* in the BY. The sounds of these two characters are the same as Peking's colloquial sounds. This means that the dialect of the Chinese characters used in the BY have two forms: classical reading pronunciation and Northern colloquial pronunciation. During the Ming dynasty, the capital city was moved from Peking to Nanking, and then, 35 years later, back to Peking, bringing a new infusion of southern influence into the Peking dialect. Thus, it's a reasonable hypothesis that the literary layers of Pekingese, with its traditional reading pronunciations that differ from spoken forms, particularly in old entering tone words, stem from this southern influence during the Ming period. The contexts using for literary versus colloquial pronunciation are not always clearly defined.

Some very common words lack an expected literary reading, and many pronunciations have been borrowed from the literary layers to be used in everyday speech, either supplanting the inherited colloquial form or existing alongside it, sometimes with a special meaning[10]. Fortunately, there are some sources dating from this period. One of them is the *Deng-yun Tu-jing* 等韵图经, a rhyme book compiled by *Xu-Xiao* 徐孝 in late Ming[11]. *Deng-yun Tu-jing* represents the Peking dialect of late Ming and contains two different dialect layers: traditional reading pronunciations and colloquial pronunciation. These situations indicate that the late Ming Peking dialect was heavily influenced by the Nanjing dialect as it became closer to Modern Peking dialect. As mentioned above, the entering tone's characters of *Geng* and *Zeng-she* groups were used to transcribe the Mongolian C+V sounds and C+V+i/u diphthongs in the BY. This shows that the Chinese Characters of the BY contain two different pronunciation layers, which are the classical literary and colloquial layers. It is same as the Peking dialect sound system of the late Ming dynasty. This suggests that already in the late Ming dynasty, the Peking dialect sound system possessed two dialect layers.

3.2 Some Nasal-Ending Consonants

In the ZY, there are characters ending in nasal sounds, which I refer to as nasal-ending groups. These groups include the *-ng* ending: *Dong-Zhong* 東鍾 , *Jiang-Yang* 江陽, the *-n* ending: *Han-Shan* 寒山 , *Zhen-Wen* 真文 , *Huan-Huan* 桓歡 , *Xian-Tian* 先天 and the *-m* ending : *Qin-Xun* 侵寻, *Jian-Xian* 監咸, *Lian-Xian* 廉纖. In the Yuan and early Ming dynasty, there was still retained a final *–m ending* which has since merged with the *–n* ending in modern Chinese dialects. This process of sound combination occurred during the Ming dynasty. In the SH and HYa, the nasal-ending *-m* groups consisted of characters that were used to transcribe the Mongolian C+V+m group sounds, and the nasal-ending *-n* group characters were used to transcribe the Mongolian C+V+n sounds. However, in the BY, the Mongolian C+V+m sounds were denoted by the *Han-Shan* 寒山 , *Zhen-Wen* 真文 , *Huan-Huan* 桓歡 , *Xian-Tian* 先天,*Qin-Xun* 侵寻 , *Jian-Xian* 監咸 , and *Lian-Xian* 廉纖 final groups. There is no distinction between the C+V+n and C+V+m group's characters. This means that the *n* ending *Han-Shan* 寒山 , *Zhen-Wen* 真文 , *Huan-Huan* 桓歡 , *Xian-Tian* 先天 and the *m* ending *Qin-Xun* 侵寻、*Jian-Xian* 監咸、*Lian-Xian* 廉纖 were combined into the same final group in the late Ming dynasty.

4. Conclusion

The BY is an important primary source of the Middle Mongol language. The information provided in this paper is critical and conducive to building the foundation for researching Middle Mongolian phonology. This study was based on the comparative research of several editions of the BY and provides accurate information taken from the Harvard-Yenching Edition. This paper investigates the categories of transcription illustrated in the BY. Through my exploration of the Correspondence systems of the BY and ZY, I have arrived at the conclusion that the Chinese characters used to transcribe the Mongolian sounds in the BY were based on the Peking dialect of the late Ming Dynasty, which was heavily influenced by the Nanking dialect, unlike the SH and HYa. In the late Ming dynasty, the Peking dialect was heavily influenced by the Nanking dialect. Thus, the dialect has two different layers: *literary* and *colloquial*. Comparative study of rhyming dictionaries allows us to verify the presence of two layers in the Peking dialect. The BY was compiled during the late Ming period, and the Chinese characters within the BY reflect the pronunciation of the late Ming Chinese. My analysis of the existing glossary of the BY confirms that the Chinese Characters of the BY reflect the existence of these two layers in the late Ming Peking dialect. The investigations and explorations around the subject of the Chinese Characters used to denote Mongolian sounds presented in this paper is crucial not only to the study of Mongolian, but also to our understanding of Chinese historical phonology. The research on this subject matter has facilitated the process of learning the way the Chinese characters function, as well as has created a landscape of the Chinese language.

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[10] E.G.Pulleyblank 1984:p.4

[11] Deng-yun Tu-jing 等韵图经 preserved at the Harvard –Yenching Library.

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