

Source:	CheonHyeong SIM (沈天珩 / ᠰᡳᠮ ᠲᡳᠨᠬᡳᠢᠨᠠᠵᡳ) YEHEENARA Jiaxu (那佳旭) TUNGGIYA Uju (佟佳宗彌) Ziyu SU (苏子玉) WANG Shuo (王碩 / ᠠᠩᠰᡠᠬᡠ ᠰᡠᠬᡠ) Jalakū (札拉库) JANG Johūi (张卓晖)
Title:	Proposal to Encode One Manchu Letter
Date:	2023–12–29
Action:	To be considered by UTC and Script Ad Hoc

Proposed Character

One character is proposed for the historical orthography of the Manchu language.

Codepoint	Character Name	Representative Glyph
1879	MONGOLIAN LETTER MANCHU ALTERNATE UE	ᡤᡠ

Character Properties

General Category and Other Properties

1879;MONGOLIAN LETTER MANCHU ALTERNATE UE;Lo;0;L;;;;;N;;;;;

Line Break Properties

1879 ; AL # Lo MONGOLIAN LETTER MANCHU ALTERNATE UE

Shaping Behavior

	Default	FVS1	FVS2
Isolated Form	ᡤᡠ		
Initial Form	ᡤᡠᡵᡠ		
Medial Form	ᡤᡠᡵᡠ	ᡤᡠᡵᡠ	ᡤᡠᡵᡠ
Final Form	ᡤᡠᡵᡠ	ᡤᡠᡵᡠ	ᡤᡠᡵᡠ

When this letter comes after k(U+1874), g(U+1864), h(U+1865), t(U+1868) or d(U+1869), it will lose its dot in default, if the dot is needed, adding FVS2 can change it back; otherwise, the dot is retained, and adding FVS1 can make the dot disappear.

Shaping Process

<https://github.com/Kushim-Jiang/Mongolian/releases> gives out the shaping process of the Manchu writing system as a draft UTN document (see also L2/23–101), this subsection is to proof that the new character will not affect the original shaping process, and can adapt to this structure.

In simple terms, the characters before or after the new character (U+1879) behaves almost the same as before or after the fifth vowel (U+1860), except for the final consonant /k/ (U+1874) of a syllable should be the feminine form when comes after it.

Assuming this new letter is transcribed as *ü*. Generally, the sixth vowel is transcribed as *ū*, and the newly proposed seventh vowel could be transcribed as *ü* according to its homology with the Mongolian writing system; however, in the above–mentioned draft UTN document, *ü* is already used to transcribe the sixth vowel, so here *ü* is used instead.

- (1) In Table 20, “feminine vowel” should be changed from “e u” to “e u *ü*”;
- (2) In Table 21, “f” should be changed from “if precedes i/o/u/ü” to “if precedes i/o/u/*ü/ü*”;
- (3) In Table 21, “e u” should be changed to “e u *ü*”;
- (4) In Table 21, “k” should be changed from “else if follows e/ü” to “else if follows e/*ü/ü*”;
- (5) In Table 21, “t d” should be changed from “else if precedes e/u/ü” to “else if precedes e/u/*ü/ü*”.

Attestations and Descriptions

1. 《满文原档》 / *Original Manchu Archives*

Original Manchu Archives took form almost 400 years ago. In addition to important documents on the Manchus before becoming rulers, they also have unique features in terms of medium and paper used. In their early years, the Manchus did not have a written language. In relations with neighboring peoples, their documents were mostly written in either Mongolian or Chinese. Afterwards, following rapid economic and cultural developments, the Jurchen leader Nurgaci (努尔哈赤 / ᠨᡥᡦᡳᠴᡳ) ordered that Mongolian be used as the foundation for the creation of a Manchu language, now known as the so–called unpunctuated Old Manchu (无圈点满文 or 老满文 / ᠠᠮᠴᡳᠨ ᠤᠯᠤᠰ / ᠯᠠᠮᠠᠨ ᠤᠯᠤᠰ). However, since the borrowed Mongolian writing system could not fully accommodate the Manchu language, Hong Taiji (皇太极 / ᠬᡠᠩᡤᡠᡵᡳ) in 1632 ordered a revision of Old Manchu, in which punctuation accompanied characters and new forms were added, thereby improving Manchu and making it more complete. This is known as punctuated New Manchu (圈点满文 or 新满文 / ᠠᠮᠴᡳᠨ ᠤᠯᠤᠰ / ᠠᠮᠴᡳᠨ ᠤᠯᠤᠰ) improved by Dahai (达海 / ᠳᠠᠬᠠᠢ). ***Original Manchu Archives* was done mostly in the newly established unpunctuated Old Manchu along with punctuated New Manchu.** Interspersed in the archives is also writing in Mongolian and Chinese as well.

Thus, the medium of the archives is the most direct material for the study of the development of Manchu.

Actually, the dots and the circles added to the letters are not initial innovations of Dahai. In later years of the Old Manchu, people had already discovered the inconvenience, and used the dots and the circles in order to distinguish the different syllables, but the schemes were nonuniform from each other. Dahai only unified the rules. However, during the transition period from Old Manchu to New Manchu, or in other words, for feminine vowel /u/, during the transition period from ᡤ to ᡤᡠ, a transitional form ᡤᡠ appeared, which is unencoded at present.^[1]

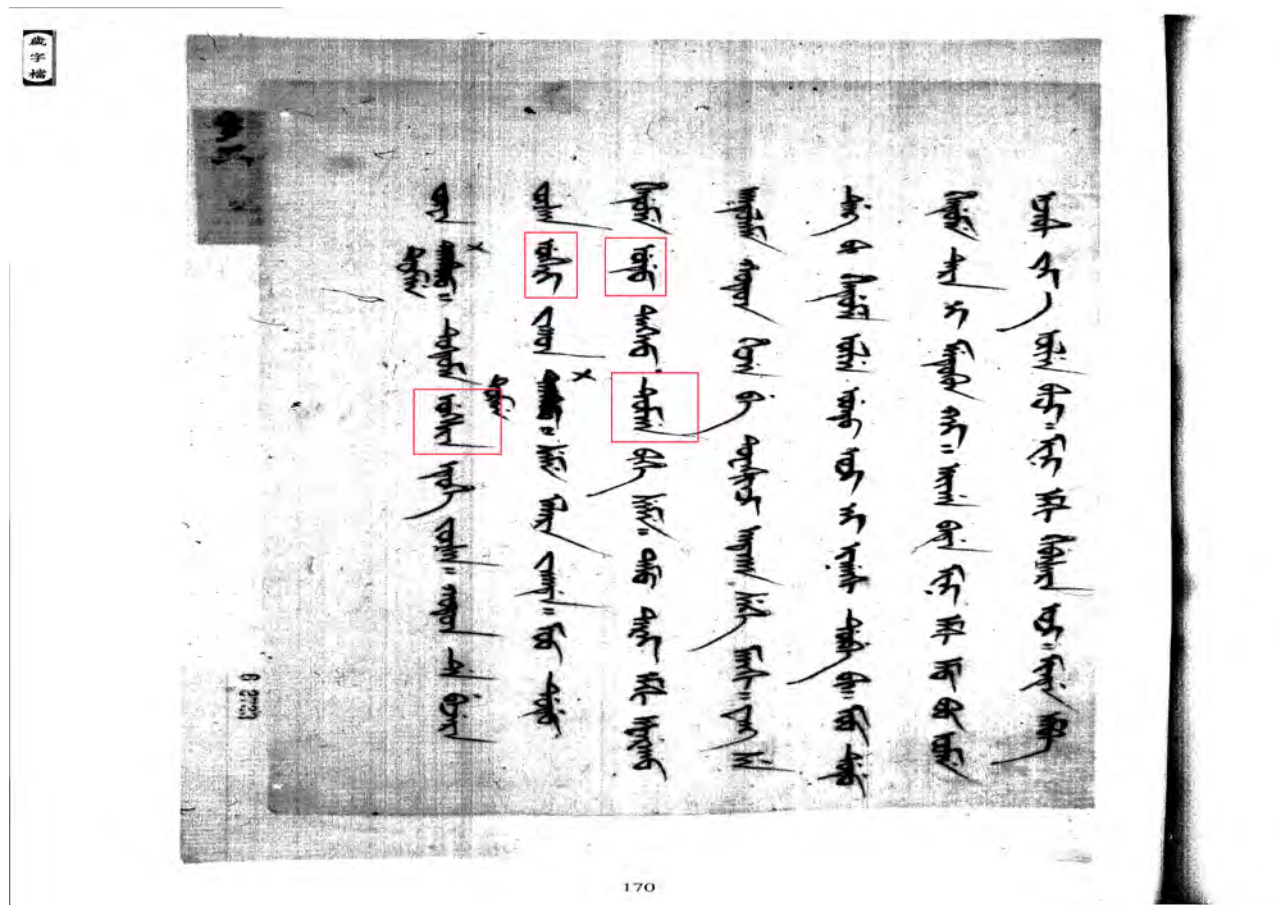
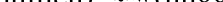
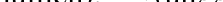


Fig.1 《满文原档》 Vol.6 P170

In Fig.1, there are four words using the new letter, respectively ᡤᡠᡤᡠᡤᡠᡤᡠ, ᡤᡠᡤᡠᡤᡠᡤᡠ, ᡤᡠᡤᡠᡤᡠᡤᡠ, ᡤᡠᡤᡠᡤᡠᡤᡠ. In modern orthography, they are written as ᡤᡠᡤᡠᡤᡠ(uksin), ᡤᡠᡤᡠ(uheri), ᡤᡠᡤᡠ(udu), ᡤᡠᡤᡠ(tumen), respectively. Note that, as mentioned above, the new letter loses its dot after t(U+1868).

In Fig.2, there are two words using the new letter, respectively , . In modern orthography, they are written as *muji len* (mujilen), *unggi* (unggi), respectively.

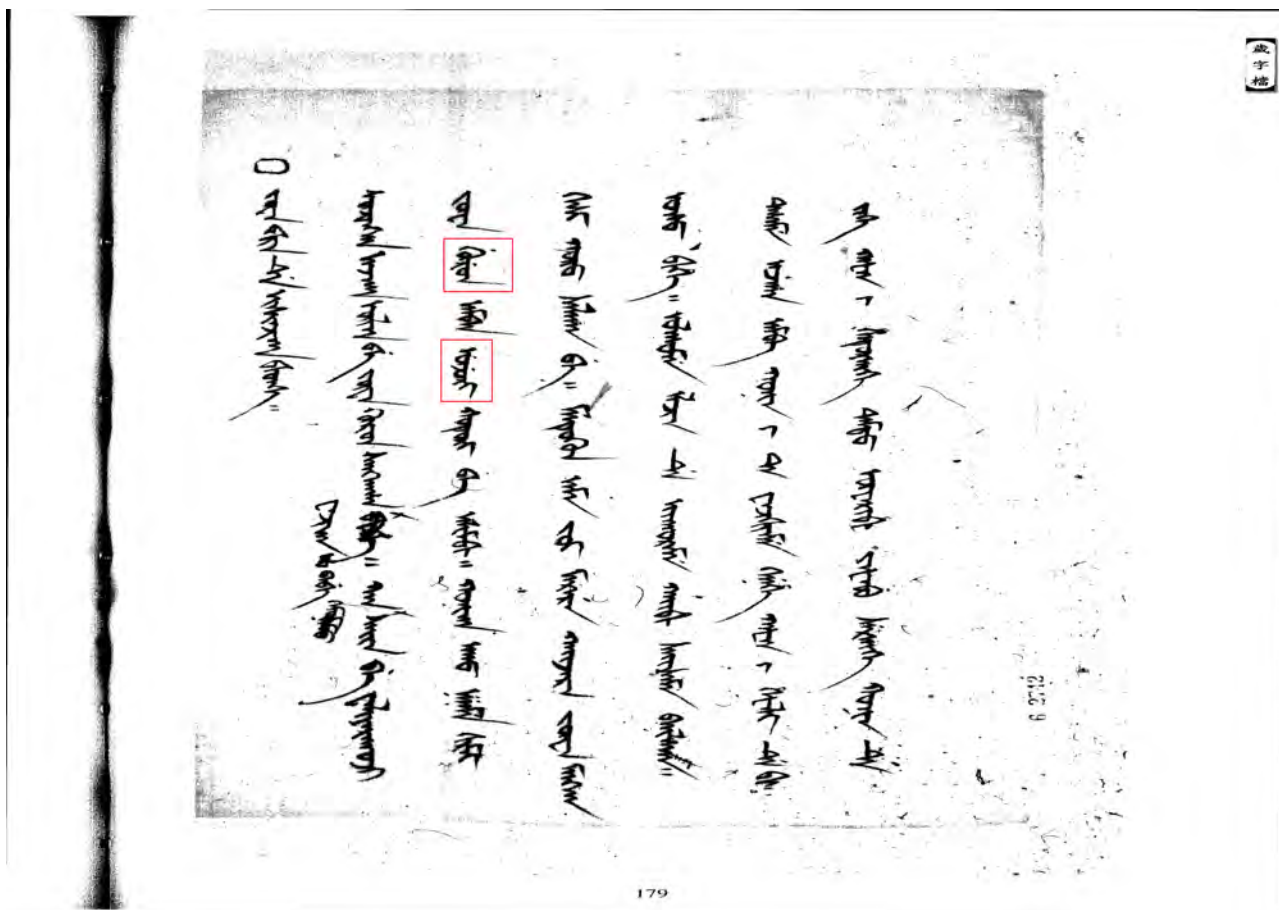


Fig.3 《满文原档》 Vol.6 P179

In Fig.3, there are two words using the new letter, respectively ᡤᡠᡵᡠᠨ, ᡤᡠᡵᡠᠨ. In modern orthography, they are written as ᡤᡠᡵᡠᠨ(gurun), ᡤᡠᡵᡠᠨ(ucuri), respectively. Note that, as mentioned above, the new letter loses its dot after g(U+1864).

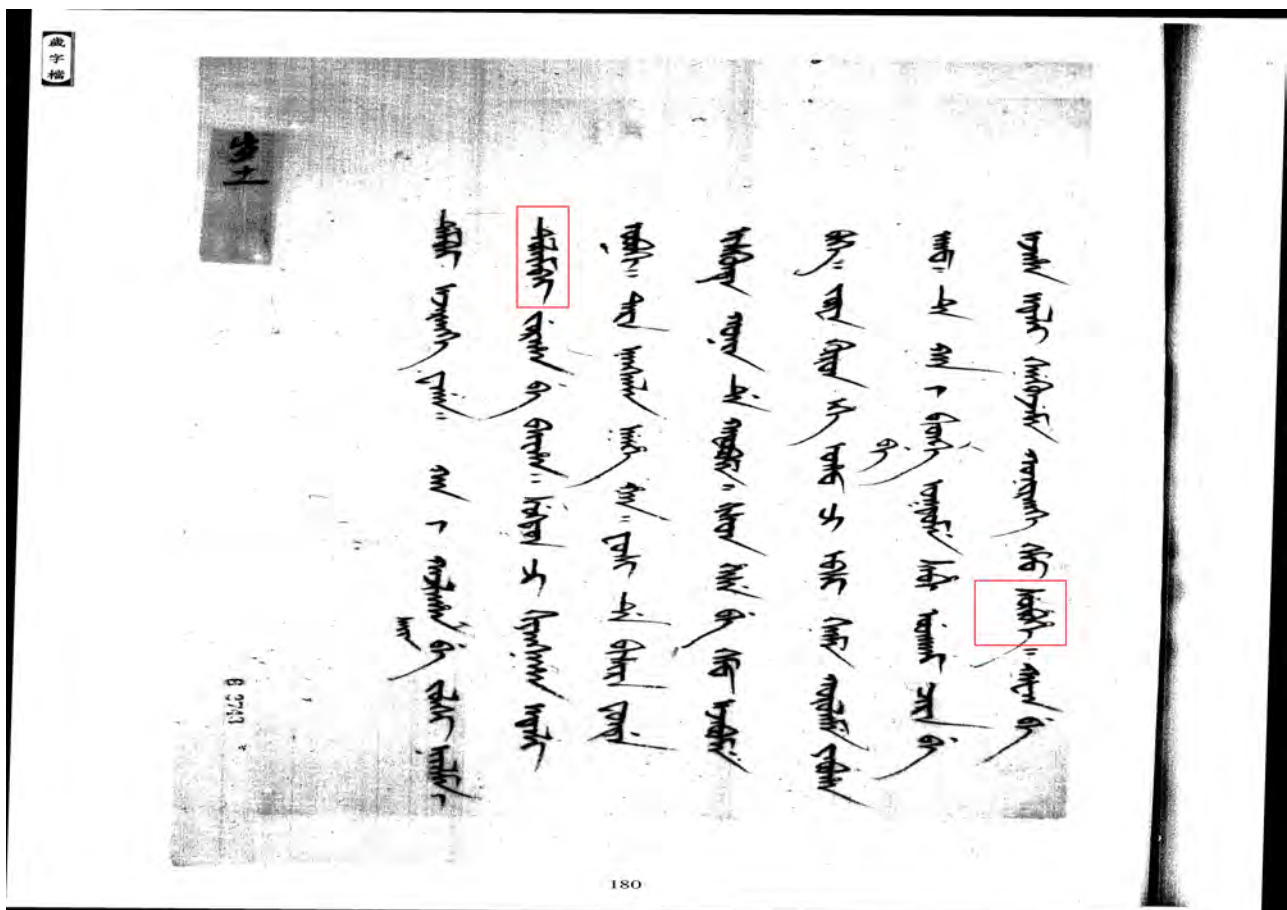






Fig.4 《满文原档》 Vol.6 P180

In Fig.4, there are two words using the new letter, respectively , . In modern orthography, they are written as (dulimbai), 

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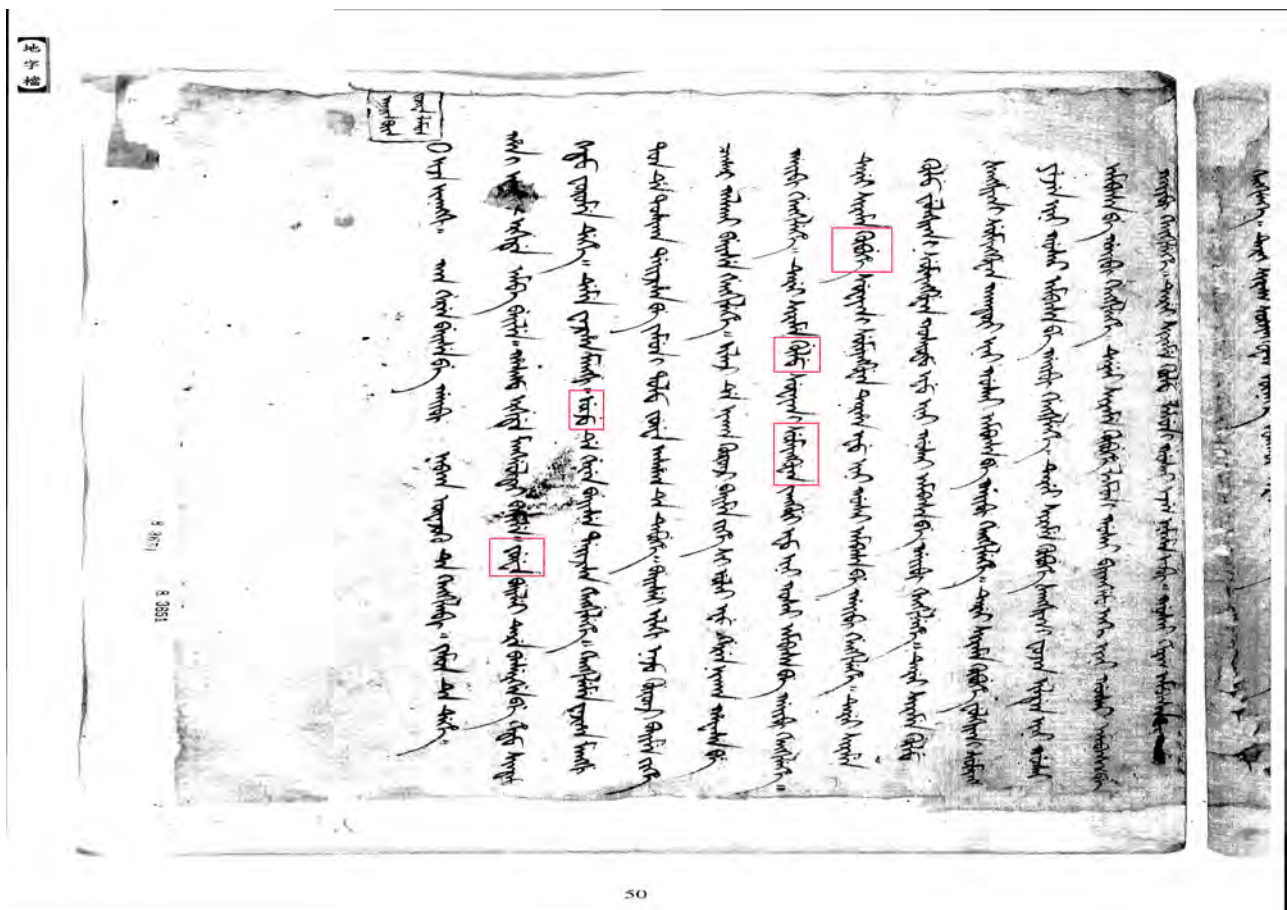


Fig.5 《满文原档》 Vol.8 P50

In Fig.5, there are five words using the new letter, respectively ᡵᡠᡵᡠ, ᡠᡵᡠ, ᡤᡠᡵᡠ, ᡳᡵᡠᡵᡠᡵᡠᡵᡠᡵᡠᡵᡠ, ᡠᡵᡠᡵᡠ. In modern orthography, they are written as ᡵᡠᡵᡠ(juwe), ᡠᡵᡠ(uju), ᡤᡠᡵᡠ(gulu), ᡳᡵᡠᡵᡠᡵᡠᡵᡠᡵᡠᡵᡠ(dzumingguwan), ᡠᡵᡠᡵᡠ(kubuhe), respectively. Note that, as mentioned above, the new letter loses its dot after k(U+1874) or g(U+1864).

More examples can be found in this book. Actually, after the standardization of New Manchu, the unencoded transitional form with its dot almost disappeared, however, that one without its dot still remained for a long period, mostly after k, g or h (e.g. lots of ᡵᡠᡵᡠ could be found in various imperial edicts in the early Qing Dynasty, see Fig.6).

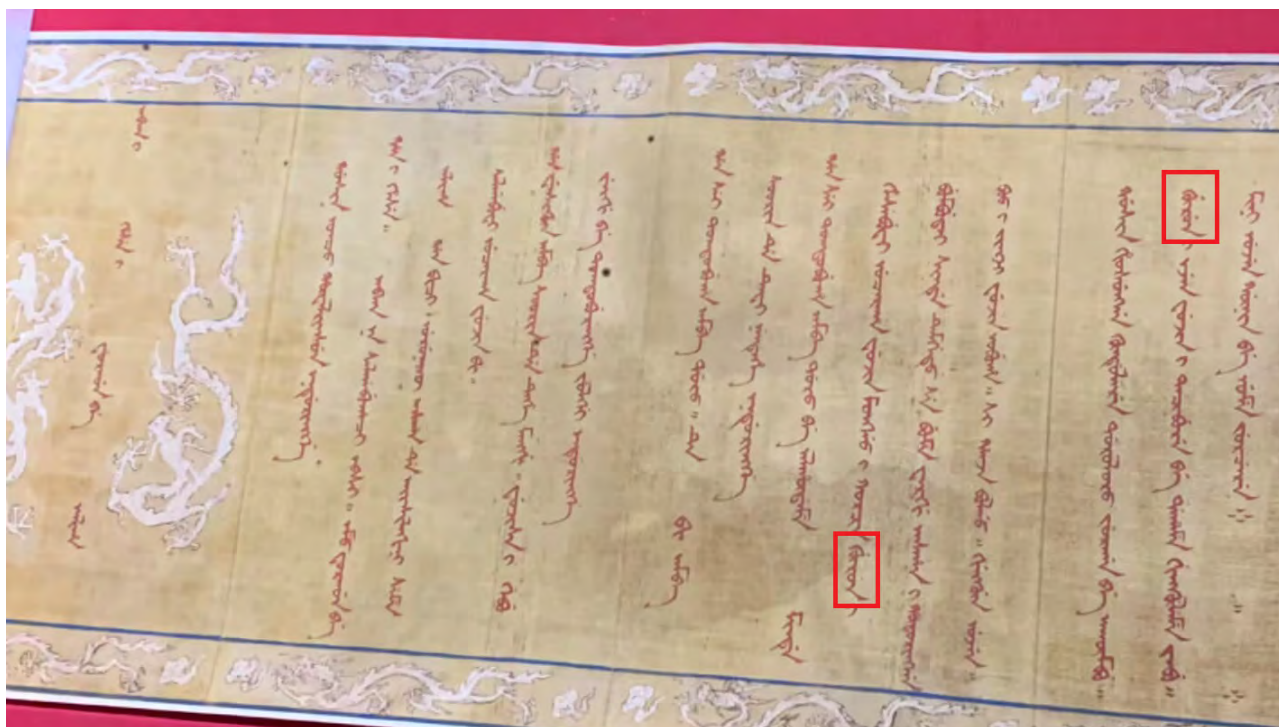


Fig.6 《庄妃册文》 in the 1st year of Chongde era (1636)

2. 《满洲实录》 / *Manchuria Authentic Records*

Manchuria Authentic Records was written during the Qianlong period of the Qing Dynasty. It describes the sacred land of the Jurchen people (the predecessor of the Manchu people), Changbai Mountain. Starting from the story of a fairy named Fekulen swallowing a piece of red fruit and getting pregnant, it takes the history of the Aisin Gioro (爱新觉罗 / ᡩᠠᡳᠨ ᡤᡳᠣᠷᠤ) family as the main thread to record the history of the Manchu people, and highlights the Divine Right of Kings in mythological form. In this book, some words retain the form of the Old Manchu, while some words and sentences retain obvious oral features, providing a basis for studying the language and writing system of Manchu.

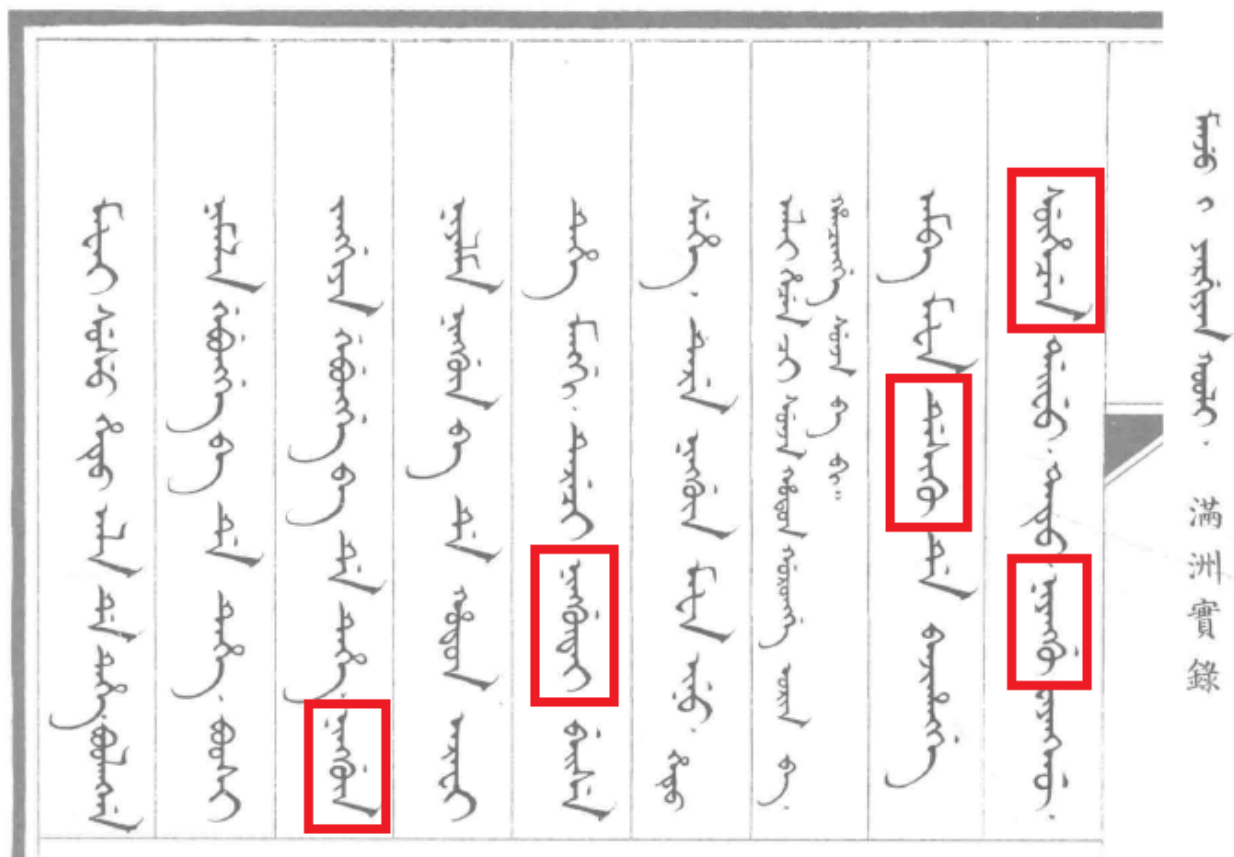


Fig.7 《满洲实录》 P25

In Fig.7, there are five words using the new letter, respectively ᠨᠢᠩᠭᠦᠨ , ᠨᠢᠩᠭᠦᠲᠠᠢ , ᠳᠡᠰᠢᠬᠤ , ᠰᠤᠬᠡᠴᠡᠩ , ᠨᠢᠶᠠᠩᠭᠤ . In modern orthography, they are written as ᠨᠢᠩᠭᠦᠨ (ninggun), ᠨᠢᠩᠭᠦᠲᠠᠢ (ninggutai), ᠳᠡᠰᠢᠬᠤ (desiku), ᠰᠤᠬᠡᠴᠡᠩ (suhecen), ᠨᠢᠶᠠᠩᠭᠤ (niyanggu), respectively. Note that, as mentioned above, the new letter loses its dot after k(U+1874) or g(U+1864).

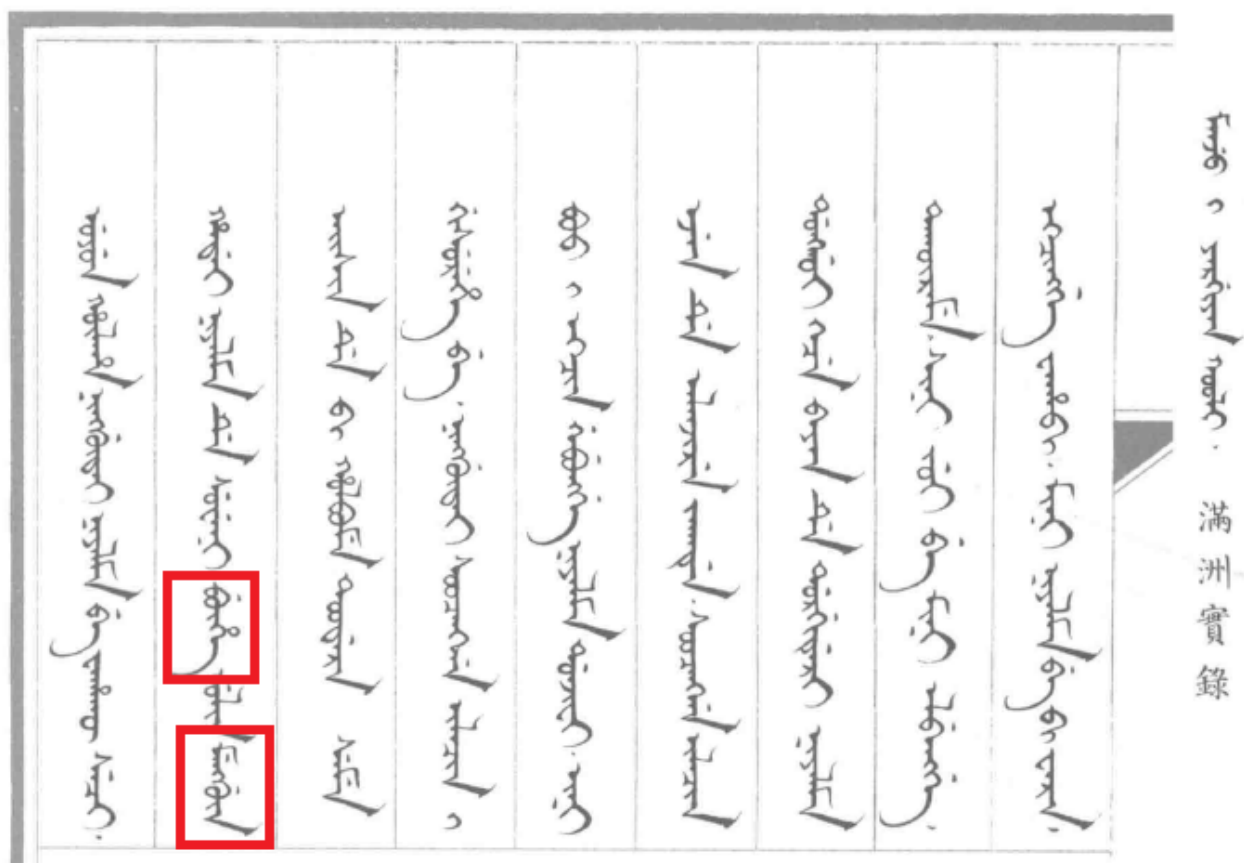


Fig.8 《满洲实录》 P33

In Fig.8, there are two words using the new letter, respectively ᡩᠠᡵᡠ, ᡤᡠᡵᡠᡳᡳᡳ. In modern orthography, they are written as ᡩᠠᡵᡠ(buhe), ᡤᡠᡵᡠᡳᡳᡳ(menggun), respectively. Note that, as mentioned above, the new letter loses its dot after g(U+1864).

More examples can be found in this book. As mentioned above, the examples are mainly after k, g or h – but still, examples after s and b do exist. What is more, even if most of them are gradually standardized, there are still several exceptions remaining in the modern orthography, which will be discussed in detail in the next section.

3. 《御制五体清文鉴》 / *Pentaglot Dictionary*

The *Pentaglot Dictionary*, also known as the *Manchu Polyglot Dictionary*, was a dictionary of major imperial languages compiled in the late Qianlong era of the Qing dynasty (also said to be compiled in 1794). The work contains Manchu lexemes and their translations into various administrative languages such as Tibetan, Mongolian, post-classical or vernacular Chagatai (Eastern Turki, now known as Modern Uyghur since 1921) and Chinese.

According to the description above, it is easy to see that this dictionary used New Manchu, in other words, the modern orthography standardized by Dahai. However, there are still several instances preserving the ancient spelling.^[2]

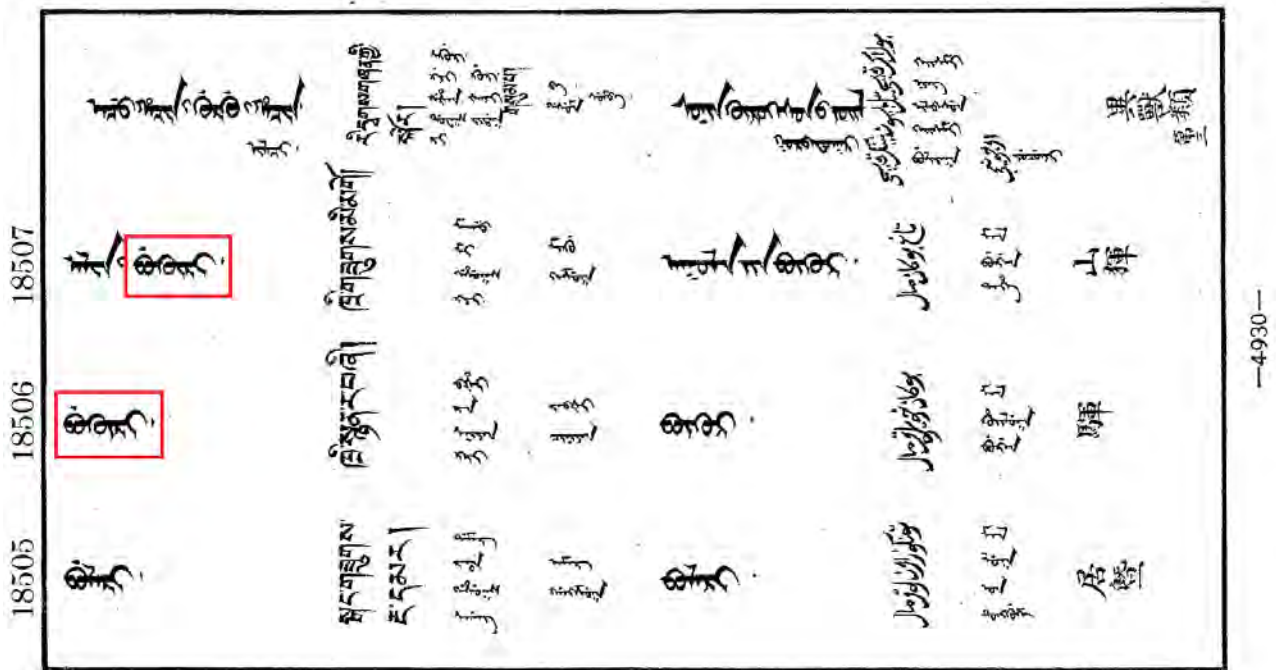





Fig.9 《御制五体清文鉴》 P4930, rotated for ease of typesetting

In Fig.9, there comes out a word written as . Normally, when the six vowels a(U+1820), e(U+185D), i(U+1873), o(U+1823), u(U+1860) and ū(U+1861) are combined with the consonant k(U+1874), they are respectively written as:

	ka	ke	ki	ko	ku	kū
Isolated						
Initial						
Medial						
Final						

— we cannot see anywhere. Actually, that can be considered as the “flickering 7th vowel” combined with the consonant k(U+1874) remaining from the old orthography Old Manchu. As mentioned above, the vowel loses its dot after k, which looks the same as (the medial form of U+1861), hence, the workaround today to input this word is to add a Free Variation Selector after k, in order to change with a masculine k to with a feminine k — according to the rules formulated by National Ethnic Affairs Commission, it should be FVS2(U+180C).^[3]

One issue here is that, is the name of Yongshun, the legendary founder of the Qing Dynasty (清始祖雍顺). You might say that is a special form in order to steer clear of

the venerable (aka the naming taboo), however, actually, they have very different sources.  is a native word in the Manchu language, originally the name of a mountain, while  is a derivative from , which is a loanword from Mongolian. The difference between the two words persists until now, and we can see the different entries in 《满汉大辞典》 — and since the contrast exists, which is not just an exception uncaptured by the orthography, encoding a 7th vowel instead of using the FVS seems to be necessary.

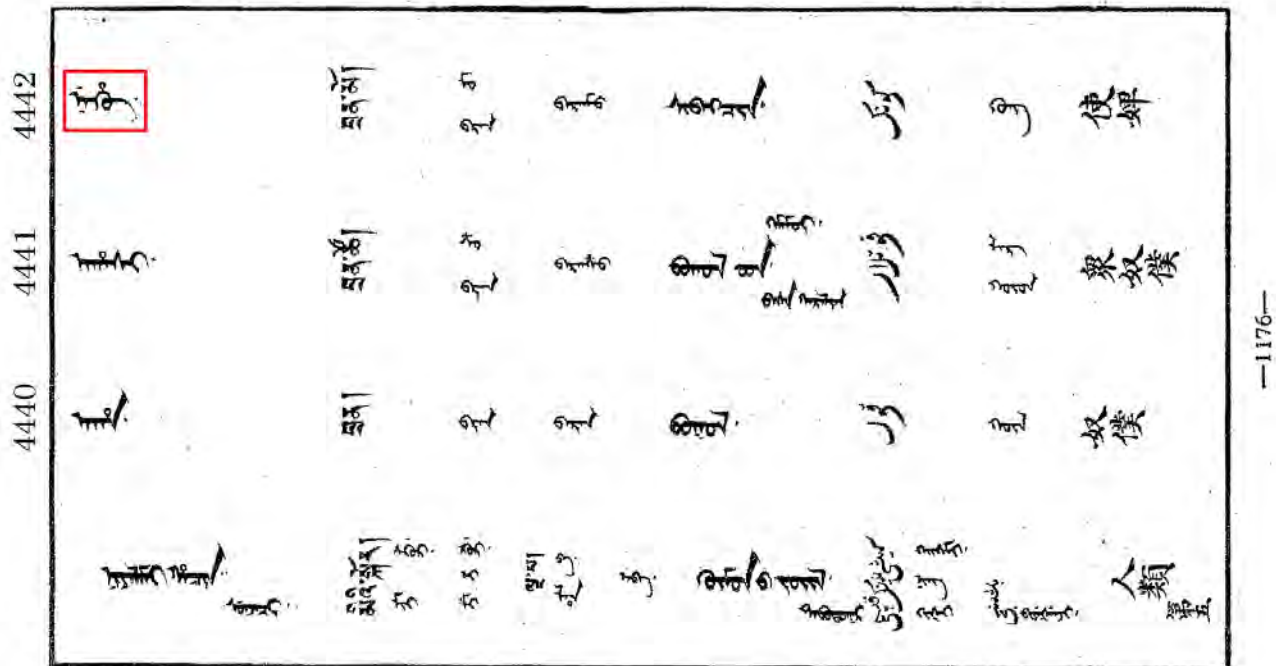





Fig.10 《御制五体清文鉴》 P1176, rotated for ease of typesetting

In Fig.10, there comes out another similar case which is written as . Even if  is a special form for the naming taboo, for , which means the maidservant, is there any necessity to have the naming taboo?

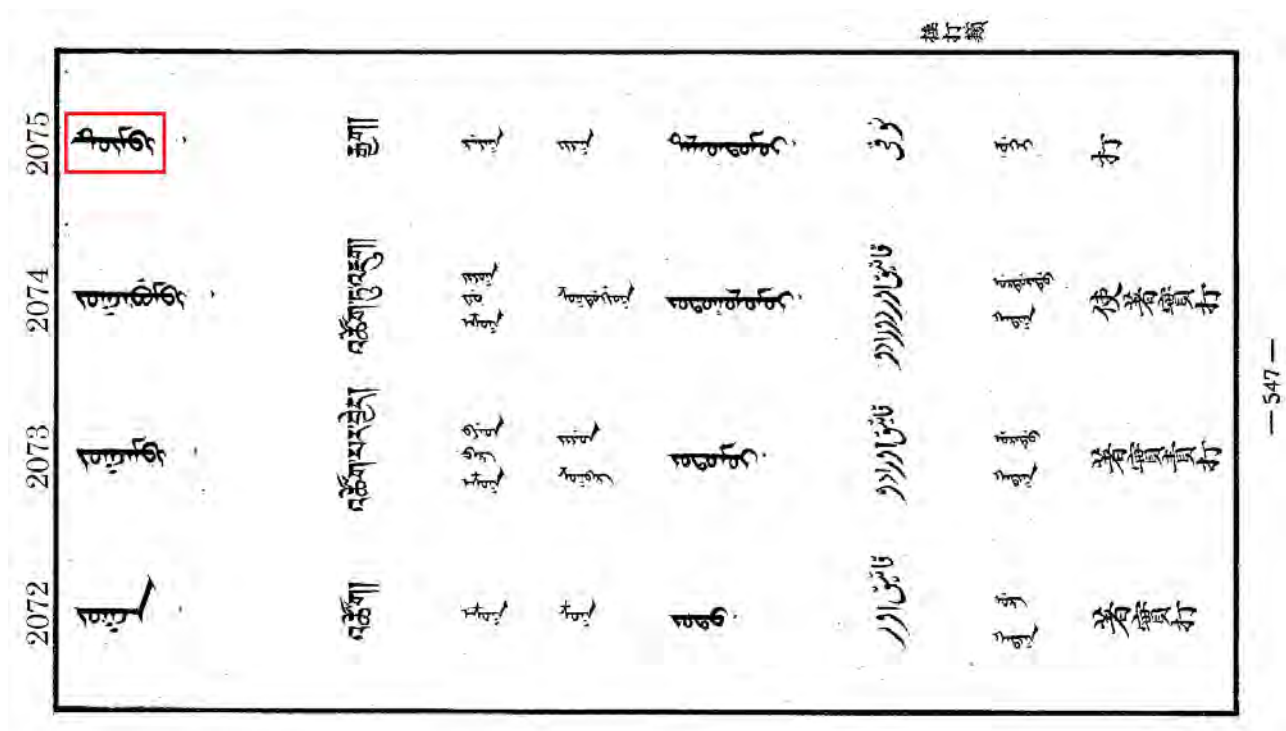


Fig.12 《御制五体清文鉴》 P547, rotated for ease of typesetting

By the way, still, there is another syllable with the historical form, accidentally being preserved in the modern orthography – that is 𐰆. In Fig.12, an example 𐰆𐰏𐰣 can be seen. Besides, the derivatives of this verb (e.g. 𐰆𐰏𐰣, 𐰆𐰏, etc.) and another noun 𐰆𐰏𐰣 also uses this syllable. Lots of people think that the vowel in this syllable is the 6th vowel, i.e. U+1861, but, really? According to 《增订清文鉴》, its pronunciation is “都烏”, completely the same as 𐰆 (/d/ + the 5th vowel /u/); According to «Грамматика Маньчжурского Языка» compiled by Иваномъ Захаровымъ, this syllable is transliterated as ду, which is also the same as 𐰆.^[4] What is more, from the conjugations of the verb 𐰆𐰏𐰣, we could know that the vowel in this syllable is a feminine vowel, not the regular 6th vowel in the modern orthography, which is a masculine vowel. The only explanation to why /du/ is written like this is that, it preserves the 7th vowel from Old Manchu, just like the examples in 《满文原档》 above. The reason why /d/ loses its dot is that, Old Manchu originally does not have the dot.

If the 7th vowel is encoded, then, when the seven vowels are combined with t or d, they would have to be respectively written as:

	a	e	i	o	u	ū	ü
t	𐰆	𐰆	𐰆	𐰆	𐰆	𐰆	𐰆
d	𐰆	𐰆	𐰆	𐰆	𐰆	𐰆	𐰆

– since the 7th vowel will lose its dot after t or d, it looks actually the same as U+1861, but the difference will be reflected from the form of the consonant, i.e. ᠲᠤ & ᠳᠤ. The attestations for ᠲ and ᠳ can be found in 《满文原档》 mentioned above (see an example for ᠲ in Fig.13 below), and also 《满蒙汉三体字书》, which will be discussed in detail in the next section, to show the existence of the contrast between ᠲᠤ/ᠳᠤ and ᠲᠤ/ᠳᠤ.

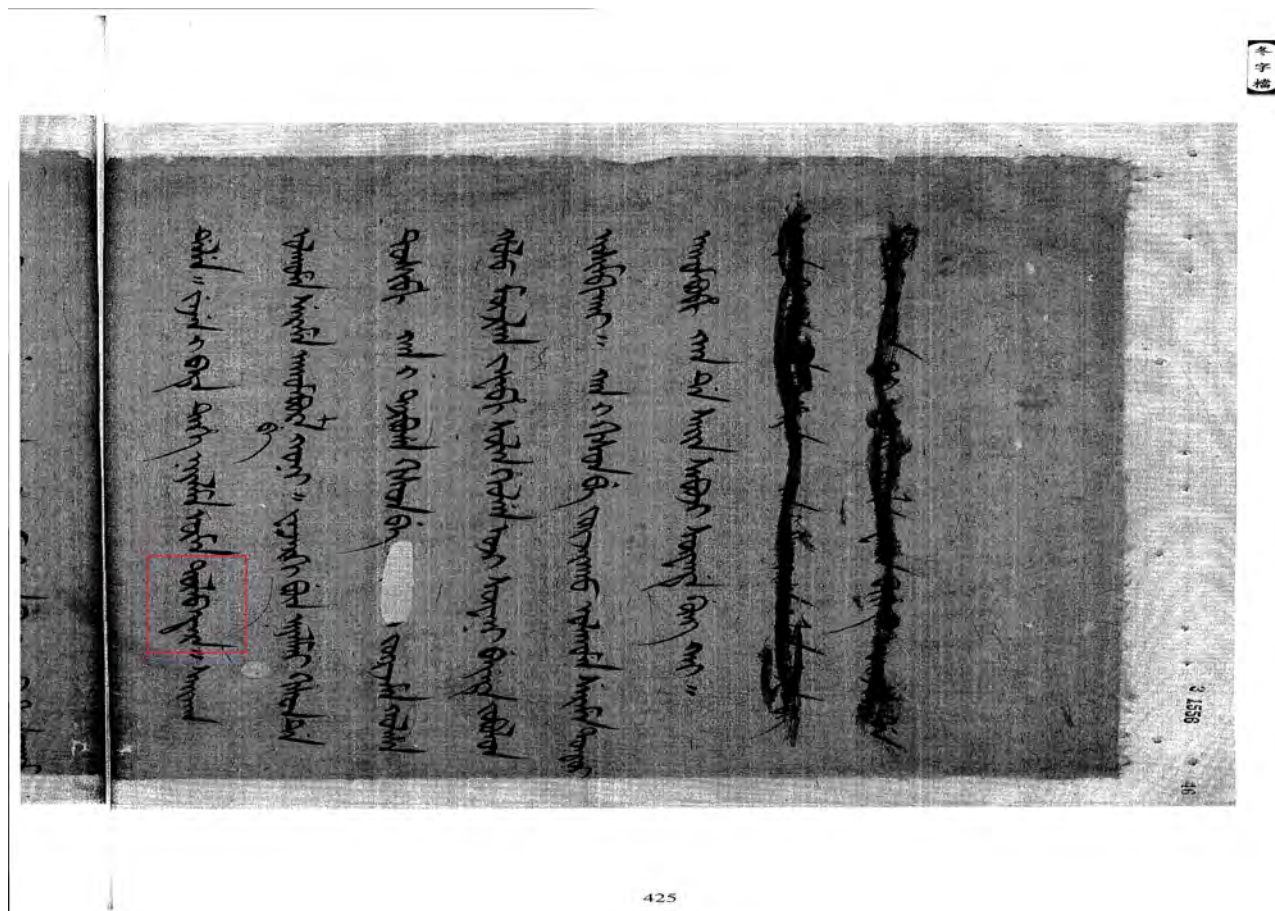


Fig.13 《满文原档》 Vol.3 P425

4. 《满蒙汉三体字书》 / *Manchu Mongolian Chinese Triglote Dictionary*

The *Manchu Mongolian Chinese Triglote Dictionary* was published in the 8th year of the Qianlong era (1743). At that time, the development of Mongolian was very chaotic, and Hongli was worried that future generations of Mongolians would no longer know the pronunciation of Mongolian (note that, Mongolian contains plenty of polyphonic syllables), so he used Manchu to transliterate Mongolian and made some dictionaries. Different from what many people imagine, many people assume that the inheritance of the Mongolian written language in the Qing Dynasty was also better than that of the Manchu language, given the current situation of “the Mongolian language surviving, the Manchu language in danger”. In fact, until the Qianlong era, the mastery level of the Manchu language in their respective knowledge groups was always higher than that of the Mongolian language. Another group that actually carried out the inheritance of the Mongolian language was the Lamas, but the Manchu people did not have it. As an important means of promotion, in

school, many Mongolians learned Manchu first just like the Chinese did. Their imperial examination, the Mongolian Translation Examination, was to translate the Confucian classics from Manchu into Mongolian, which was also the main way for the Manchu written language to influence Mongolian grammar. Even after the decline of the Manchu language in the central plains, and even in the decades after the Xinhai Revolution, due to some lag, the Mongolian region was still learning Manchu — when the contemporary the Mongolian language master Chinggeltei (清格尔泰 / ᠴᠢᠩᠭᠡᠯᠲᠡᠢ) attended a private school, he studied both Manchu and Mongolian. By the third generation, the Mongolian Eight Banners in the central plains could hardly speak Mongolian. During the Qianlong era, even Hongli had to come forward and help them learn their own mother tongue. Moreover, due to certain limitations, they were unable to learn Chinese. Many Mongolians in the Qing Dynasty were even more proficient in Manchu than the Manchus. In addition, the similarity between Manchu and Mongolian letters led to the emergence of the “punctuated Mongolian” (i.e. the Mongolian language written with the Manchu letters, with the dots and circles).

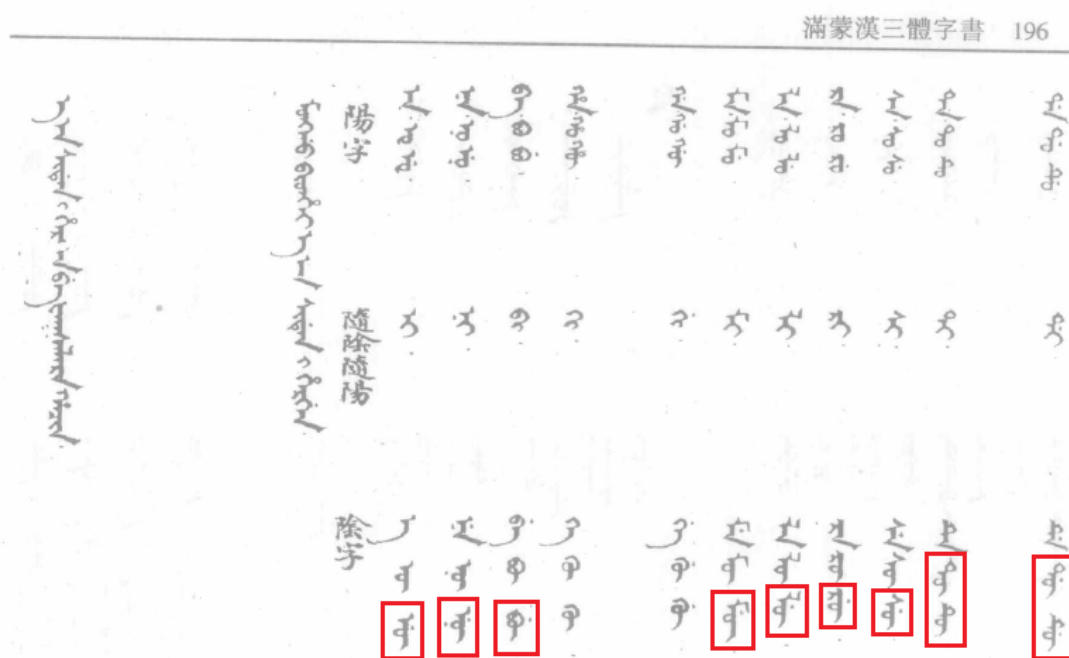


Fig.14 《滿蒙漢三體字書》 P196, the upper half

Fig.14 shows a list like an alphabet. Obviously, the 7th vowel ᠠ is undoubtedly an independent vowel, but not a variant of any other vowels — the Mongolian language has seven different vowels, when transliterating Mongolian with the Manchu writing system, a 7th vowel is urgently needed. Although the usage of the 7th vowel here is different from that one in 《滿文原檔》 or 《御制五體清文鑑》, by all odds they are the same letter since they have the same shape and the same context-related shaping rule. What is more,

Fig.11 shows a most direct evidence of the existence of the contrast between $\text{ᠰ}/\text{ᠱ}$ and $\text{ᠰ}/\text{ᠰ}$. All the seven vowels combined with t or d are given out, just like in the form above.

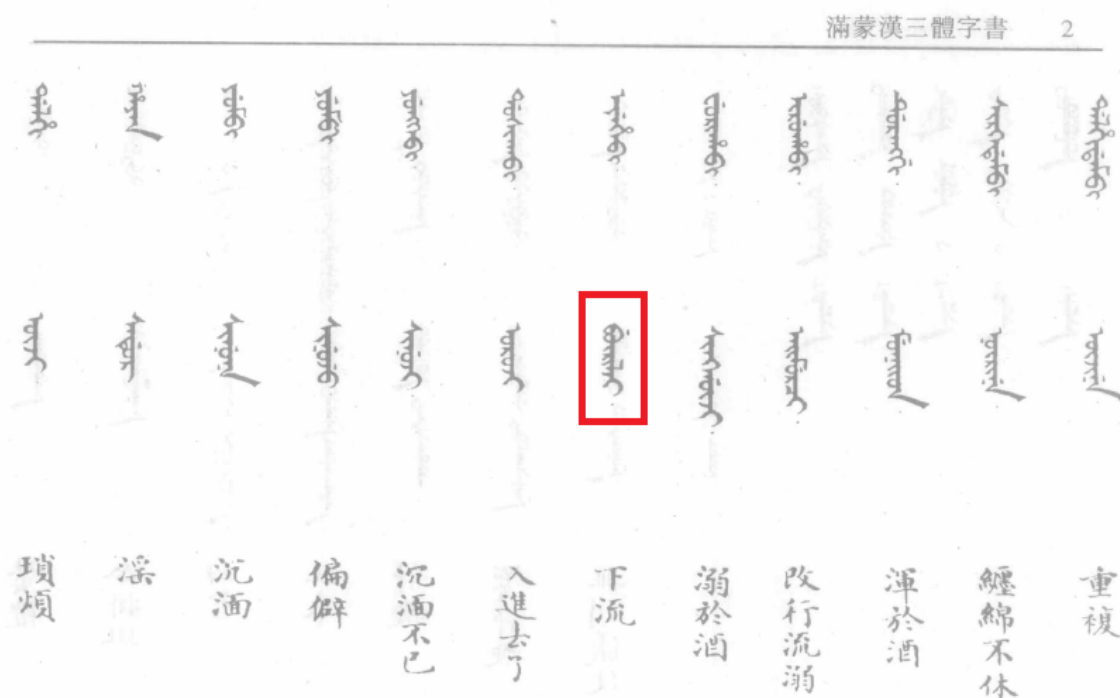


Fig.15 《满蒙汉三体字书》 P2, the upper half

In Fig.15, the 7th vowel appears in the word ᠪᠦᠷᠢᠯᠵᠦ . In modern Mongolian orthography, it is written as ᠪᠦᠷᠢᠯᠵᠦ (büriljü).

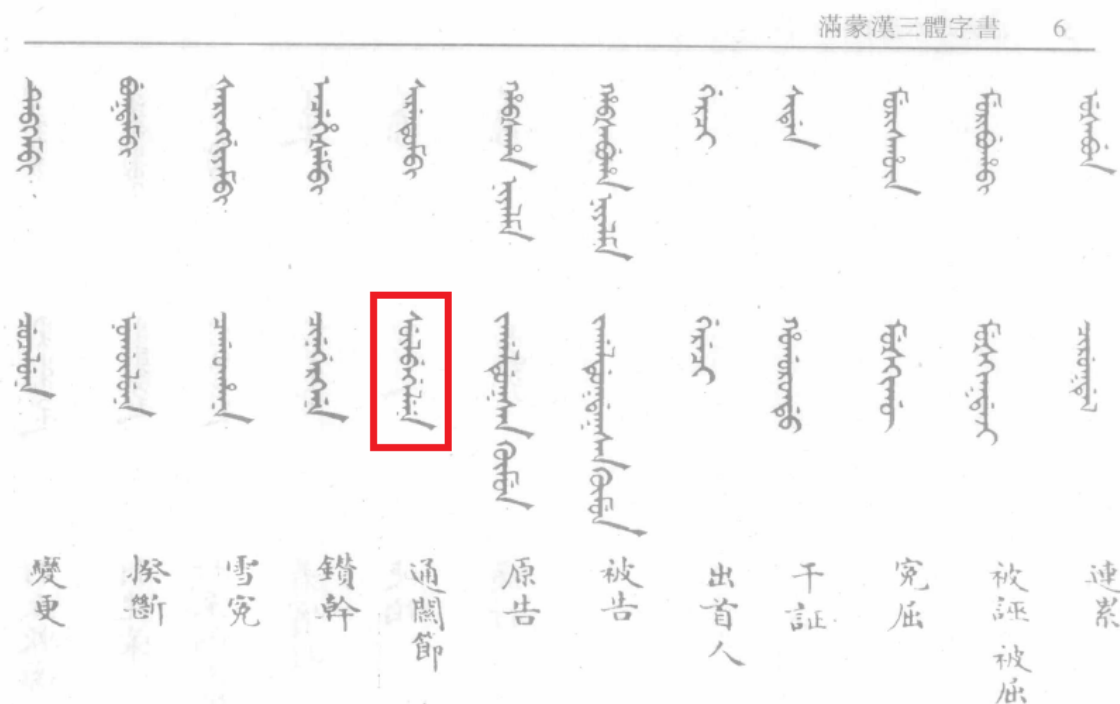




Fig.16 《满蒙汉三体字书》 P6, the upper half

In Fig.16, the 7th vowel appears in the word . In modern Mongolian orthography, it is written as  (sülbegelen_e).

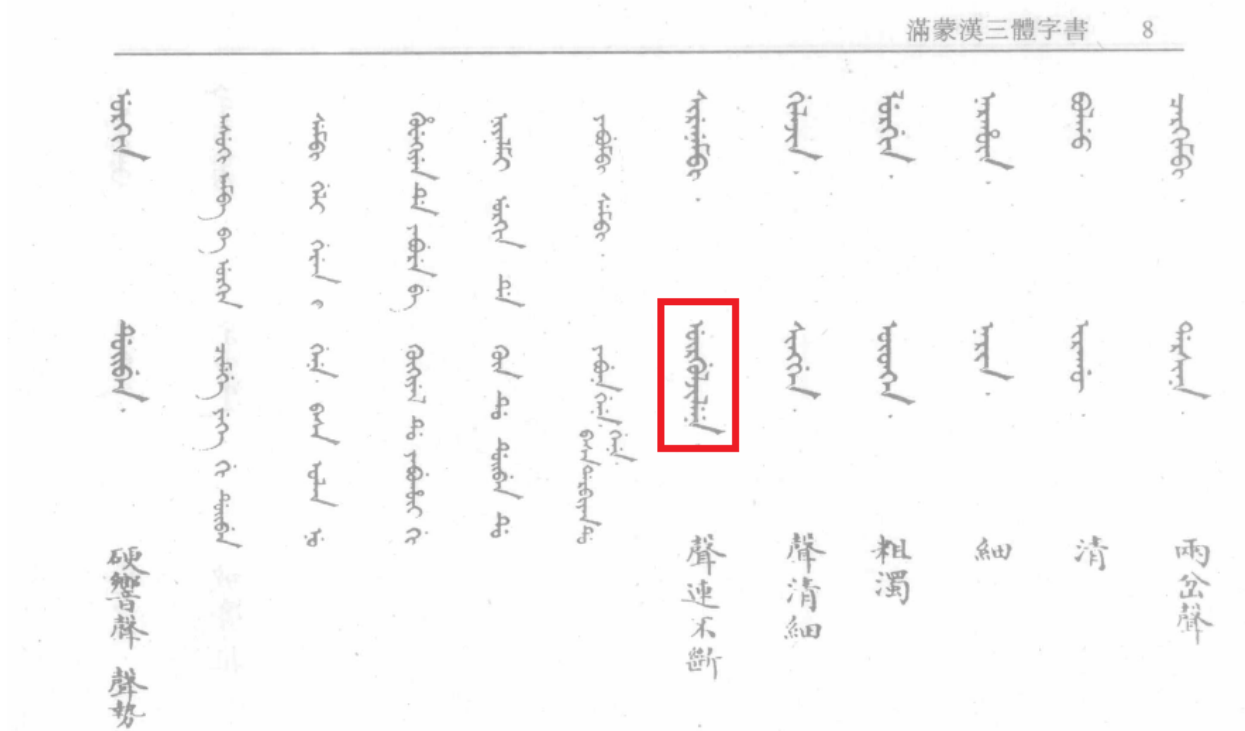


Fig.17 《满蒙汉三体字书》 P8, the upper half



In Fig.17, the 7th vowel appears in the word . In modern Mongolian orthography, it is written as  (ürgüljilen_e). Note that, in the Mongolian orthography, the long tooth (ᠶ) of the 6th and the 7th vowel only appears in the first syllable of a root morpheme (usually in the first syllable of a word), and the transliteration in this dictionary inherited such approach, hence the syllable corresponding to “gü” did not have a long tooth. Similarly hereinafter.



Fig.18 《满蒙汉三体字书》 P19, the lower half

In Fig.18, the 7th vowel appears in the words ᠪᠦᠷᠢᠳᠦᠨ and ᠪᠦᠷᠢᠳᠬᠡᠨ. In modern Mongolian orthography, they are written as ᠪᠦᠷᠢᠳᠦᠨ (büridün_e) and ᠪᠦᠷᠢᠳᠬᠡᠨ (büridhen_e).



Fig.19 《满蒙汉三体字书》 P22, the lower half

In Fig.19, the 7th vowel appears in the word ᠦᠷᠴᠢᠢᠵᠦ. In modern Mongolian orthography, it is written as ᠦᠷᠴᠢᠢᠵᠦ (ürciiᠵü).

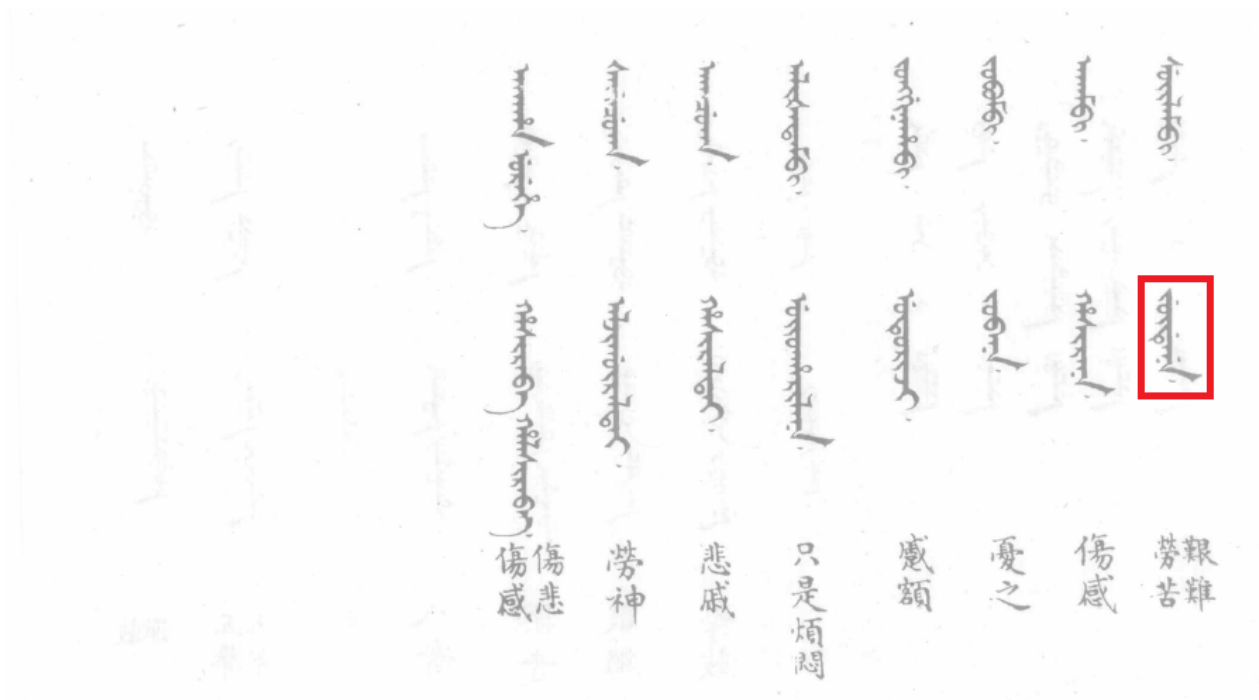


Fig.20 《满蒙汉三体字书》 P23, the lower half

In Fig.20, the 7th vowel appears in the word . In modern Mongolian orthography, it is written as (jüden_e).



Fig.21 《满蒙汉三体字书》 P56, the lower half

In Fig.21, the 7th vowel appears in the words , , and . In modern Mongolian orthography, they are written as , , and .

More examples can be found in this book.

Necessity of encoding separately

Just as the evidences show, the proposed letter is no doubt an independent new letter.

u plus i?

No. This letter is an independent letter, and due to the phonemic encoding model of the Mongolian block, we should never use u(U+1860) plus i(U+1873) instead. What is more, the default medial form for i after a vowel letter is not **one** long tooth but **two** long teeth, granted that you treat this one as u plus i, even an FVS is needed. That is extremely strange.

FVS for U+1861?

No. The contrast between this letter and U+1861 exists obviously, especially in Fig.14, which lists the possible syllables like an alphabet. As mentioned above, when comes after k, g, h, t or d, this letter will lose its dot, looks completely the same as U+1861 – however, the difference would be shown from the consonant. Before U+1861, k, g, h, t or d will be the masculine form, but before this letter, they will be the feminine form. In this case, it is impossible to add an FVS to the vowel, but only to the consonant. Sometimes the vowel, sometimes the consonant, the consistency completely extincts.

FVS for U+1860?

No. It seems to be the most reasonable one. By contrasting the historical forms and the modern forms, usually the difference is only the existence of the long tooth. Even the forms of the consonants before it are not affected. However, in New Manchu, the final consonant /k/ of a syllable is prescribed by Dahai to be a masculine form when following u(U+1860) – even if in a feminine word, which leads to the inconsistency, because when the final consonant /k/ of a syllable comes after the proposed letter, it should be a feminine form in default since the proposed letter is always a feminine vowel, see Fig.1 and Fig.21 for reference.

Another issue is that, according to the model of the National Ethnic Affairs Commission^[3], all the presentation forms should be able to be called out by FVSes in any contexts. U+1860 already has four final forms, while there are just right four FVSes encoded in the Mongolian block. If you treat the proposed letter as the variant of U+1860, then U+1860 will have six final forms, which is unacceptable.

In any case, it should be treated as an independent letter and should be encoded separately, possibly U+1879.

References

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- [3]梁金宝. 蒙古文名义字符到变形显现字符转换规则管理系统（满文）[DB/OL]. <http://rule.mongoltoli.cn/allchars-man.php>, 2020–05–01
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ISO/IEC JTC 1/SC 2/WG 2
PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS
FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646

Please fill all the sections A, B and C below.

Please read Principles and Procedures Document (P & P) from
<http://std.dkuug.dk/JTC1/SC2/WG2/docs/principles.html> for guidelines and details before filling this form.

Please ensure you are using the latest Form from

<http://std.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html>.

See also <http://std.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html> for latest *Roadmaps*.

Form number: N4502–F (Original 1994–10–14; Revised 1995–01, 1995–04, 1996–04, 1996–08, 1999–03, 2001–05, 2001–09, 2003–11, 2005–01, 2005–09, 2005–10, 2007–03, 2008–05, 2009–11, 2011–03, 2012–01)

A. Administrative

1. Title:	<i>Proposal to Encode One Manchu Letter</i>
2. Requester's name:	<i>CheonHyeong Sim, Yehenara Jiaxu, Tunggiya Uju, Ziyu Su, Wang Shuo, Jalakū, Jang Johūi</i>
3. Requester type (Member body/Liaison/Individual contribution):	<i>Individual contribution</i>
4. Submission date:	<i>2023–12–29</i>
5. Requester's reference (if applicable):	<i>N/A</i>
6. Choose one of the following:	
This is a complete proposal:	<i>YES</i>
(or) More information will be provided later:	

B. Technical – General

1. Choose one of the following:	
a. This proposal is for a new script (set of characters):	<i>NO</i>
Proposed name of script:	
b. The proposal is for addition of character(s) to an existing block:	<i>YES</i>
Name of the existing block:	<i>Mongolian</i>
2. Number of characters in proposal:	<i>1</i>
3. Proposed category (select one from below – see section 2.2 of P&P document):	
A–Contemporary	B.1–Specialized (small collection) <i>X</i>
	B.2–Specialized (large collection)
C–Major extinct	D–Attested extinct
	E–Minor extinct
F–Archaic Hieroglyphic or Ideographic	G–Obscure or questionable usage symbols
4. Is a repertoire including character names provided?	
	<i>YES</i>
a. If YES, are the names in accordance with the "character naming guidelines"	<i>YES</i>
b. Are the character shapes attached in a legible form suitable for review?	<i>YES</i>
5. Fonts related:	
a. Who will provide the appropriate computerized font to the Project Editor of 10646 for publishing the standard?	
	<i>CheonHyeong Sim</i>

b. Identify the party granting a license for use of the font by the editors (include address, e-mail, ftp-site, etc.):

CheonHyeong Sim

6. References:

a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided?

YES

b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached?

YES

7. Special encoding issue

Does the proposal address other aspects of character data processing (if applicable) such as input, presentation, sorting, searching, indexing, transliteration etc. (if yes please enclose information)?

YES

See the main body of the proposal

8. Submitters are invited to provide any additional information about Properties of the proposed Character(s) or Script that will assist in correct understanding of and correct linguistic processing of the proposed character(s) or script. Examples of such properties are: Casing information, Numeric information, Currency information, Display behaviour information such as line breaks, widths etc., Combining behaviour, Spacing behaviour, Directional behaviour, Default Collation behaviour, relevance in Mark Up contexts, Compatibility equivalence and other Unicode normalization related information. See the Unicode standard at <http://www.unicode.org> for such information on other scripts. Also see UAX#44: <http://www.unicode.org/reports/tr44/> and associated Unicode Technical Reports for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.

C. Technical – Justification

1. Has this proposal for addition of character(s) been submitted before?

NO

If YES explain

2. Has contact been made to members of the user community (for example: National Body, user groups of the script or characters, other experts, etc.)?

YES

If YES, available relevant documents:

3. Information on the user community for the proposed characters (for example:

size, demographics, information technology use, or publishing use) is included?

NO

Reference:

4. The context of use for the proposed characters type of use; common or rare)

Rare

Reference:

5. Are the proposed characters in current use by the user community?

NO

If YES, where? Reference:

6. After giving due considerations to the principles in the P&P document must the proposed characters be entirely in the BMP?

YES

If YES, is a rationale provided?

NO

If Yes,
reference:

7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?

YES

8. Can any of the proposed characters be considered a presentation form of an existing character or character sequence?

NO

If YES, is a rationale for its inclusion provided?

If Yes, reference:	
9. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters?	
	NO
If YES, is a rationale for its inclusion provided?	
If Yes, reference:	
10. Can any of the proposed character(s) be considered to be similar (in appearance or function) to, or could be confused with, an existing character?	
	NO
If YES, is a rationale for its inclusion provided?	
If Yes, reference:	
11. Does the proposal include use of combining characters and/or use of composite sequences?	
	YES
If YES, is a rationale for such use provided?	
If Yes, reference:	<i>FVS1 and FVS2 are used in order to switch the forms manually.</i>
Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?	
	YES
If Yes, reference:	<i>See the main body of the proposal</i>
12. Does the proposal contain characters with any special properties such as control function or similar semantics?	
	NO
If YES, describe in detail (include attachment if necessary)	
13. Does the proposal contain any Ideographic compatibility characters?	
	NO
If YES, are the equivalent corresponding unified ideographic characters identified?	
If Yes, reference:	

(End of document)