

Universal Coded Character Set  
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## 0 Executive summary

This proposal is a revised version of:

- [L2/24-242](#), “Preliminary proposal to encode Wagindara letters for the Mongolian script”

and it incorporates comments and recommendations in:

- [L2/24-228](#) “Recommendations to UTC #181 November 2024 on Script Proposals”

to propose adding 39 Wagindara characters for the Wagindara script.

## 1 Introduction

The Wagindara script (also spelled [Vagindra](#) or Vaghintara, Buryat: вагиндрын үзэглэл / *vagindryn üzeglel*, Mongolian: ᠠᠭᠠᠩᠳᠣᠷᠵᠢᠶᠡᠭᠡᠯᠡᠯ / *wagindar-a üsüg*) is an alphabetic script developed for the Buryat Mongolian language (ISO 639-2: *bua*) by [Agwang Dorjiyee](#) (Mongolian: ᠠᠭᠠᠩᠳᠣᠷᠵᠢᠶᠡᠭᠡ / *agwang dorjiyëe*, 1853–1938) in the first decade of the 20<sup>th</sup> century. It was only used for a short time <sup>[1]</sup>.

Agwang Dorjiyee <sup>[2]</sup>, who was the religious leader of the Buryat Mongols, developed the Wagindara script based on the Buryat Mongolian dialect of the southern shore of Lake

[1] It should be noted that the Wagindara script is not one of the ancient Chinese scripts. Most Buryats lived on the southern shore of Lake Baikal and in the Selenge River basin and came under Russian control from the 17<sup>th</sup> century onward. A smaller number migrated into what is now Hulunbuir and were placed under Qing administration. The use of the script occurred in Russian-controlled regions.

[2] Some scholars hold that the term *Wagindara* might be the Sanskrit rendering of *Agwang*. Undeniably, *Agwang* is a prevalent personal name in Tibetan Buddhism, originating from Tibetan ངག་དབང་ / *ngag dbang*, which is a shortened form of ངག་གི་དབང་ཕྱུག་ / *ngag gi dbang phyug* < Sanskrit वागीश्वर / *vāgīśvara* ‘語自在’, or ངག་གི་དབང་པོ་ / *ngag gi dbang po* < Sanskrit वाक्यपति / *vākpati* ‘語之主’. However, Wagindara ought to be identified with the Sanskrit वागिन्द्र / *vāgindra* ‘語最勝’, where Sanskrit *vāc* matches the Tibetan *ngag*, and the standalone Tibetan *dbang po* can be rendered as *indra*. In conclusion, the authentic etymological implication of the name *Wagindara* still remains uncertain.

Baikal in 1905 to unify the Buryats culturally. He primarily based it on the Traditional Mongolian, Todo, and Manchu writing systems, expressing hope that it would help Buryats read materials written in ancient scripts.

By 1910, about ten books and pamphlets had been published in the Wagindara script, using a hybrid dialect based mostly on Strict Buryat. However, the script subsequently fell into disuse. In 1917, there was discussion of reviving it for use in native schools, but the Traditional Mongolian script was considered more effective in promoting Mongolian unity. In addition, the tsarist government viewed Mongolian unification — and thus the Wagindara script — as a political threat, leading to the exile of some of its proponents.

## **2 Script details**

### **2.1 Relationship with the Mongolian script**

Historically, apart from our own proposal, there has been no other proposal to encode Wagindara; the literature contains only a single mention of it (provided by the Mongolian Script Encoding Working Group from China, our translation; undated):

Historically, the Mongolian people also used a script known as Wagindara, which belonged to the Mongolian script. It was used in parts of Buryatia for less than 20 years and was a dialectal script that had virtually no influence on other regions. Therefore, after discussion, scholars concluded that the international standard for Mongolian script encoding need not include the Wagindara script.

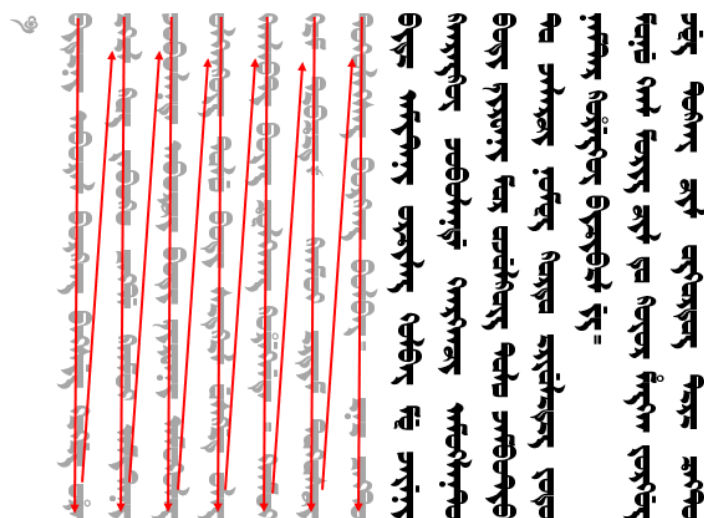
As can be seen, although previous scholars did not encode the Wagindara script into the Mongolian block, they still considered it to be part of the Mongolian script. For this reason, our earlier proposal classified it as part of Mongolian script. This is because, as we will see later, there are certain connections between Wagindara graphemes and Mongolian writing systems; the creator of the Wagindara script intentionally borrowed graphemes from various writing systems. Considering when the Wagindara script was created, the view expressed in the citation is correct in terms of its origins.

Although Wagindara and Mongolian are related, there are significant differences in the appearance of their characters, which leads us to regard the Wagindara script as a distinct script from the Mongolian script in terms of character behavior. The main issue here is that the Wagindara script cannot be supported by using Mongolian characters, as this would further increase the complexity of shaping for the Mongolian block. For example, the Wagindara script, in a sense, lacks ligatures; therefore, if Mongolian characters were to be used, all ligatures would have to be broken in the Wagindara locale, which is difficult to support. Therefore, only by assigning Wagindara characters a distinct set of characters from any Mongolian characters can they be clearly and simply handled and supported, which further leads to treating the two as different scripts.

### **2.2 Encoding model**

We use an encoding model that differs from the Mongolian one; specifically, we use the graphemic model. We presented two proposals in previous versions, and this proposal was selected at the SEW meeting.

First, as can be seen in the figure below, text written in the Wagindara script is cursive, and its writing direction is the same as that of the Mongolian script: letters are written from top to bottom, and lines run from left to right. Therefore, we should initially use the encoding model represented by Arabic script to process it.



Furthermore, we reject the phonemic model of the Mongolian script to avoid introducing the shaping rules dictated by orthography. This requires decomposing Wagindara text into written units and then merging them into graphemes based on their cursive nature.

As can be seen from the following sections, the joining variants of most letters are identical and indistinguishable. Therefore, since the font does not require any shaping steps related to cursive joining, some people consider it to be a non-cursive script. We believe that cursiveness should still be judged based on its visual appearance; in this sense, the Wagindara script is still cursive.

## 2.3 Literature

The 11 pieces of Wagindara literature we studied are taken from the following book:

Suyulma (苏优乐玛,  $\text{ᠰᠤᠢᠦᠯᠤᠮᠠ}$ ). *A study of Wagindara Script and Its Literature* (瓦津达拉文及其文献研究,  $\text{ᠠᠭᠢᠨᠳᠠᠷᠠ ᠠᠩᠭᠠᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ}$ ). Hohhot: Inner Mongolia Education Press, 2017.

The 11 pieces of literature are numbered as follows:

- [A] (written, 1905, pp. 2–10)  $\text{ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ}$
- [B] (printed, 1906, pp. 54–57)  $\text{ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ}$
- [C] (printed, 1906, pp. 64–70)  $\text{ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ}$
- [D] (written, 1907, pp. 140–156)  $\text{ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ}$
- [E] (written, 1908, pp. 238–252)  $\text{ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ}$
- [F] (printed, 1908, pp. 298–314)  $\text{ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ}$
- [G] (written, 1908, pp. 362–373)  $\text{ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ}$
- [H] (written, 1908, pp. 464–472)  $\text{ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ}$



Because of the vowel harmony, feminine and masculine vowels will not coexist in the same native word. The medial and final forms of the letter *e* 𐰢 are the letter *a* 𐰣 with a rightward dot, the basis of their glyphs being a short tooth (短牙 𐰢𐰣 / *ačuy*, Turkic Uighur: azıg, a Mongolian stroke name). When *e* 𐰢 is in a word, it will appear as a dotted form. But if some feminine vowels occur in the preceding syllable(s), the dot of *e* 𐰢 will be omitted, because the letter *a* 𐰣 will not appear in a feminine word. For examples:

𐰢𐰣𐰣𐰣 / *ceceg*, 𐰢𐰣𐰣𐰣 / *nigete*, 𐰢𐰣𐰣𐰣 / *šilbe*, 𐰢𐰣𐰣𐰣 / *erxügei*

**Vowel *ū*.** In literature F (Type One), 𐰢𐰣 appears in the word 𐰢𐰣𐰣𐰣 *dūdadag*, and 𐰢𐰣 appears in the word 𐰢𐰣𐰣𐰣𐰣 *dūdadagsan* in the same page. Therefore, the small curl on the second letter will sometimes be omitted.

**Vowel *e* in loanwords.** Literature B (Type Two) points out that when translating Russian loanwords, the contrast between the letters 𐰢 and 𐰣 can be used to distinguish between the Russian phonemes э /*ɛ*/ and ы /*ɨ*/ by adding a leftward dot to the letter *e*.

## 2.5 Consonants

As shown in literature B, there are 21 consonants for Buryat Mongolian.

| Buryat Consonant     | Glyph       | Note |
|----------------------|-------------|------|
| <i>g</i> /g/ ~ ɣ     | 𐰢 𐰢 𐰢 𐰢     |      |
| <i>x</i> /x/ ~ x     | 𐰢 𐰢 𐰢 𐰢     |      |
| <i>ḡ</i> /ŋ/ ~ ɢ     | 𐰢 𐰢 𐰢 𐰢 (𐰢) | [1]  |
| <i>ž</i> /d͡ʒ/ ~ ʒ   | 𐰢 𐰢 𐰢 𐰢     |      |
| <i>č</i> /t͡ʃ/ ~ ʧ   | 𐰢 𐰢 𐰢 𐰢     |      |
| <i>ṇ</i> /ɲ/ ~ ɳ     | 𐰢 𐰢 𐰢 𐰢     |      |
| <i>d</i> /d/ ~ ɖ     | 𐰢 𐰢 𐰢 𐰢     |      |
| <i>t</i> /tʰ/ ~ ʈ    | 𐰢 𐰢 𐰢 𐰢     |      |
| <i>n</i> /n/ ~ ɳ     | 𐰢 𐰢 𐰢 𐰢     |      |
| <i>b</i> /b/ ~ ɓ     | 𐰢 𐰢 𐰢 𐰢     |      |
| <i>p</i> /pʰ/ ~ ɸ    | 𐰢 𐰢 𐰢 𐰢     |      |
| <i>m</i> /m/ ~ ɱ     | 𐰢 𐰢 𐰢 𐰢     |      |
| <i>z</i> /dz/ ~ ʒ    | 𐰢 𐰢 𐰢 𐰢     |      |
| <i>c</i> /t͡sʰ/ ~ ʦ  | 𐰢 𐰢 𐰢 𐰢     |      |
| <i>w</i> /w/ ~ ʋ (w) | 𐰢 𐰢 𐰢 𐰢     |      |
| <i>š</i> /ʃ/ ~ ʂ     | 𐰢 𐰢 𐰢 𐰢     |      |
| <i>s</i> /s/ ~ ɕ     | 𐰢 𐰢 𐰢 𐰢     |      |
| <i>y</i> /j/ ~ ʝ (j) | 𐰢 𐰢 𐰢 𐰢     |      |
| <i>r</i> /r/ ~ ɽ     | 𐰢 𐰢 𐰢 𐰢     |      |
| <i>l</i> /l/ ~ ɭ     | 𐰢 𐰢 𐰢 𐰢     |      |
| <i>h</i> /h/ ~ ɦ     | 𐰢 𐰢 𐰢 𐰢     |      |

**Origin.** Wag.  < Hud. Ali Gali , Wag.  < Hud. Ali Gali , Wag.  < Tib. , Wag.  < Hud. Ali Gali , Wag.  < Hud. Ali Gali , Wag.  < Hud. Ali Gali , Wag.  < Hud. Ali Gali , Wag.  < Hud. Ali Gali , Wag.  < Hud. Ali Gali , Wag.  < Hud. Ali Gali , Wag.  < Man. Ali Gali , Wag.  < Hud. Ali Gali , Wag.  < Hud. Ali Gali , Wag.  < Hud. Ali Gali , Wag.  < Tib. .

**Letter *ṇ*.** Literature B and C show final  in texts, while in other handwritten texts, it is often written as a single, continuous stroke . This is a stylistic variation of this joining variant.

**Consonants in loan words.** Literature B also illustrates the notation used for Russian loan words, where a circle added to the right of a letter indicates the palatalization of that consonant; a dot or a small tail added to the left of a letter indicates that the sound value of that consonant has been altered to represent a loan phoneme. For examples:

 (*ḡ* /g<sup>j</sup>/ ~ гь),  (*ḡ* /x<sup>j</sup>/ ~ хь),  (*ḍ* /d<sup>j</sup>/ ~ дь),  (*ṭ* /t<sup>h</sup><sup>j</sup>/ ~ ть),  
 (*ṇ* /n<sup>j</sup>/ ~ нь),  (*ḅ* /b<sup>j</sup>/ ~ бь),  (*p̣* /p<sup>h</sup><sup>j</sup>/ ~ пь),  (*ṃ* /m<sup>j</sup>/ ~ мь),  
 (*ẓ* /ṭs<sup>j</sup>/ ~ зь),  (*ḡ* /ṭs<sup>h</sup><sup>j</sup>/ ~ ць),  (*ẉ* /w<sup>j</sup>/ ~ вь),  (*ṣ* /s<sup>j</sup>/ ~ шь),  
 (*ṛ* /r<sup>j</sup>/ ~ рь),  (*ḷ* /l<sup>j</sup>/ ~ ль),  (*ḥ* /h<sup>j</sup>/ ~ һь)  
 (*ḡ* /k/ ~ кг),  (*ḡ* /k<sup>h</sup>/ ~ к),  (*ẓ* /ṭj/ ~ чж),  (*ḍ* /t/ ~ тд),  
 (*ḅ* /p/ ~ пб),  (*ẓ* /ṭs/ ~ цз),  (*ṣ* /ṭj/ ~ ш),  
 (*ṿ* /v/ ~ в),  (*f̣* /f/ ~ ф).

## 2.6 Ligatures

It is well known that vowels in the Traditional Mongolian script and its derivatives will form ligatures with the preceding bowed consonants (such as *b* , *p* , *k* / *g* , etc.), for examples:

 (*ba*),  (*bababa*);  (*bo*),  (*bobobo*).

However, the situation does not happen in Wagindara, vowel letters after bowed consonants (like *b* , *p* , *g* , *x* , etc.) will not change, for examples:

 (*ba*),  (*bababa*);  (*bo*),  (*bobobo*).  
 (*rālabā*),  (*sēšitū*),  (*sōzōbō*),  (*ōyūxā*).

## 2.7 Punctuation and digits

There are 6 special punctuation marks are used in Wagindara running texts, as shown in literature B:

-  Birga
-  Comma
-  Full stop
-  Ellipsis
-  Question mark
-  Exclamation mark

The Mongolian punctuations and digits are also used in Wagindara running texts, they are:

u2010 Hyphen [F]  
u1802 Mongolian comma [F]  
u1803 Mongolian full stop [F]  
u1804 Mongolian colon [F]  
u1805 Mongolian four dots [K]  
u2013 En dash [F]  
u2014 Em dash [F]  
u1810..u1819 Mongolian digit zero .. Mongolian digit nine [D]  
uFF08..uFF09 Fullwidth left parenthesis .. Fullwidth right parenthesis [F]  
u3008..u3009 Left angle bracket .. Right angle bracket [F]  
u300A..u300B Left double angle bracket .. Right double angle bracket [J]

## 2.8 Collation

The collation of letters in Wagindara script is:

*a* < *e*<sub>1</sub> < *e*<sub>2</sub> < *i* < *o* < *u* < *ö* < *ü* < *ā*<sub>1</sub> < *ā*<sub>2</sub> <  
*ē*<sub>1</sub> < *ē*<sub>2</sub> < *ī*<sub>1</sub> < *ī*<sub>2</sub> < *ō*<sub>1</sub> < *ō*<sub>2</sub> < *ū*<sub>1</sub> < *ū*<sub>2</sub> < *ū*<sub>3</sub> <  
*ō*<sub>1</sub> < *ō*<sub>2</sub> < *ū*<sub>1</sub> < *ū*<sub>2</sub> <  
*g* < *x* < *ṅ* < *ṣ* < *č* < *ñ* < *d* < *t* < *n* < *b* < *p* <  
*m* < *z* < *c* < *w* < *š* < *s* < *y* < *r* < *l* < *h* <  
*ḡ* < ... < *ḥ* < *ḡ* < ... < \**h* < *v* < *f*

### 3 Proposal

| Codepoint | Character name                   | Joining | Glyph | Variants |
|-----------|----------------------------------|---------|-------|----------|
| XX00      | WAGINDARA LETTER A               | Dual    | ꦲ     | ꦲ ꦲ ꦲ ꦲ  |
| XX01      | WAGINDARA LETTER E               | Dual    | ꦺ     | ꦺ ꦺ ꦺ ꦺ  |
| XX02      | WAGINDARA LETTER I               | Dual    | ꦺ     | ꦺ ꦺ ꦺ ꦺ  |
| XX03      | WAGINDARA LETTER O               | Dual    | ꦺ     | ꦺ ꦺ ꦺ ꦺ  |
| XX04      | WAGINDARA LETTER U               | Dual    | ꦺ     | ꦺ ꦺ ꦺ ꦺ  |
| XX05      | WAGINDARA LETTER OE              | Dual    | ꦺ     | ꦺ ꦺ ꦺ ꦺ  |
| XX06      | WAGINDARA LETTER UE              | Dual    | ꦺ     | ꦺ ꦺ ꦺ ꦺ  |
| XX07      | WAGINDARA LETTER GA              | Dual    | ꦺ     | ꦺ ꦺ ꦺ ꦺ  |
| XX08      | WAGINDARA LETTER KA              | Dual    | ꦺ     | ꦺ ꦺ ꦺ ꦺ  |
| XX09      | WAGINDARA LETTER ANG             | Dual    | ꦺ     | ꦺ ꦺ ꦺ ꦺ  |
| XX0A      | WAGINDARA LETTER ZHA             | Dual    | ꦺ     | ꦺ ꦺ ꦺ ꦺ  |
| XX0B      | WAGINDARA LETTER CHA             | Dual    | ꦺ     | ꦺ ꦺ ꦺ ꦺ  |
| XX0C      | WAGINDARA LETTER NYA             | Dual    | ꦺ     | ꦺ ꦺ ꦺ ꦺ  |
| XX0D      | WAGINDARA LETTER DA              | Dual    | ꦺ     | ꦺ ꦺ ꦺ ꦺ  |
| XX0E      | WAGINDARA LETTER TA              | Dual    | ꦺ     | ꦺ ꦺ ꦺ ꦺ  |
| XX0F      | WAGINDARA LETTER BA              | Dual    | ꦺ     | ꦺ ꦺ ꦺ ꦺ  |
| XX10      | WAGINDARA LETTER PA              | Dual    | ꦺ     | ꦺ ꦺ ꦺ ꦺ  |
| XX11      | WAGINDARA LETTER MA              | Dual    | ꦺ     | ꦺ ꦺ ꦺ ꦺ  |
| XX12      | WAGINDARA LETTER ZA              | Dual    | ꦺ     | ꦺ ꦺ ꦺ ꦺ  |
| XX13      | WAGINDARA LETTER CA              | Dual    | ꦺ     | ꦺ ꦺ ꦺ ꦺ  |
| XX14      | WAGINDARA LETTER WA              | Dual    | ꦺ     | ꦺ ꦺ ꦺ ꦺ  |
| XX15      | WAGINDARA LETTER SHA             | Dual    | ꦺ     | ꦺ ꦺ ꦺ ꦺ  |
| XX16      | WAGINDARA LETTER SA              | Dual    | ꦺ     | ꦺ ꦺ ꦺ ꦺ  |
| XX17      | WAGINDARA LETTER YA              | Dual    | ꦺ     | ꦺ ꦺ ꦺ ꦺ  |
| XX18      | WAGINDARA LETTER RA              | Dual    | ꦺ     | ꦺ ꦺ ꦺ ꦺ  |
| XX19      | WAGINDARA LETTER LA              | Dual    | ꦺ     | ꦺ ꦺ ꦺ ꦺ  |
| XX1A      | WAGINDARA LETTER HA              | Dual    | ꦺ     | ꦺ ꦺ ꦺ ꦺ  |
| XX1B      | WAGINDARA LETTER VA              | Dual    | ꦺ     | ꦺ ꦺ ꦺ ꦺ  |
| XX1C      | WAGINDARA LETTER FA              | Dual    | ꦺ     | ꦺ ꦺ ꦺ ꦺ  |
| XX20      | WAGINDARA COMBINING BAR RIGHT    | Mark    | ꦺ     | —        |
| XX21      | WAGINDARA COMBINING DOT LEFT     | Mark    | ꦺ     | —        |
| XX22      | WAGINDARA COMBINING DOT RIGHT    | Mark    | ꦺ     | —        |
| XX23      | WAGINDARA COMBINING CIRCLE RIGHT | Mark    | ꦺ     | —        |
| XX2A      | WAGINDARA BIRGA                  | Non     | ꦺ     | —        |
| XX2B      | WAGINDARA COMMA                  | Non     | ꦺ     | —        |
| XX2C      | WAGINDARA FULL STOP              | Non     | ꦺ     | —        |
| XX2D      | WAGINDARA ELLIPSIS               | Non     | ꦺ     | —        |
| XX2E      | WAGINDARA QUESTION MARK          | Non     | ꦺ     | —        |
| XX2F      | WAGINDARA EXCLAMATION MARK       | Non     | ꦺ     | —        |

The proposed repertoire is shown as above. Variants without an attestation are highlighted in gray.

The information in NamesList.txt is as follows.

```

@@          XX00          Wagindara  XX2F
@           Letters
XX00        WAGINDARA LETTER A
XX01        WAGINDARA LETTER E
XX02        WAGINDARA LETTER I
XX03        WAGINDARA LETTER O
XX04        WAGINDARA LETTER U
XX05        WAGINDARA LETTER OE
XX06        WAGINDARA LETTER UE
XX07        WAGINDARA LETTER GA
XX08        WAGINDARA LETTER KA
XX09        WAGINDARA LETTER ANG
XX0A        WAGINDARA LETTER ZHA
XX0B        WAGINDARA LETTER CHA
XX0C        WAGINDARA LETTER NYA
XX0D        WAGINDARA LETTER DA
XX0E        WAGINDARA LETTER TA
XX0F        WAGINDARA LETTER BA
XX10        WAGINDARA LETTER PA
XX11        WAGINDARA LETTER MA
XX12        WAGINDARA LETTER ZA
XX13        WAGINDARA LETTER CA
XX14        WAGINDARA LETTER WA
XX15        WAGINDARA LETTER SHA
XX16        WAGINDARA LETTER SA
XX17        WAGINDARA LETTER YA
XX18        WAGINDARA LETTER RA
XX19        WAGINDARA LETTER LA
XX1A        WAGINDARA LETTER HA
XX1B        WAGINDARA LETTER VA
XX1C        WAGINDARA LETTER FA
@           Combining marks
XX20        WAGINDARA COMBINING BAR RIGHT
XX21        WAGINDARA COMBINING DOT LEFT
XX22        WAGINDARA COMBINING DOT RIGHT
XX23        WAGINDARA COMBINING CIRCLE RIGHT
@           Punctuation
XX2A        WAGINDARA BIRGA
XX2B        WAGINDARA COMMA
XX2C        WAGINDARA FULL STOP
XX2D        WAGINDARA ELLIPSIS
XX2E        WAGINDARA QUESTION MARK
XX2F        WAGINDARA EXCLAMATION MARK

```

The information in ArabicShaping.txt is as follows.

```

XX00; WAGINDARA LETTER A; D; No_Joining_Group
XX01; WAGINDARA LETTER E; D; No_Joining_Group
XX02; WAGINDARA LETTER I; D; No_Joining_Group
XX03; WAGINDARA LETTER O; D; No_Joining_Group
XX04; WAGINDARA LETTER U; D; No_Joining_Group
XX05; WAGINDARA LETTER OE; D; No_Joining_Group
XX06; WAGINDARA LETTER UE; D; No_Joining_Group
XX07; WAGINDARA LETTER GA; D; No_Joining_Group
XX08; WAGINDARA LETTER KA; D; No_Joining_Group
XX09; WAGINDARA LETTER ANG; D; No_Joining_Group
XX0A; WAGINDARA LETTER ZHA; D; No_Joining_Group
XX0B; WAGINDARA LETTER CHA; D; No_Joining_Group

```

```

XX0C; WAGINDARA LETTER NYA; D; No_Joining_Group
XX0D; WAGINDARA LETTER DA; D; No_Joining_Group
XX0E; WAGINDARA LETTER TA; D; No_Joining_Group
XX0F; WAGINDARA LETTER BA; D; No_Joining_Group
XX10; WAGINDARA LETTER PA; D; No_Joining_Group
XX11; WAGINDARA LETTER MA; D; No_Joining_Group
XX12; WAGINDARA LETTER ZA; D; No_Joining_Group
XX13; WAGINDARA LETTER CA; D; No_Joining_Group
XX14; WAGINDARA LETTER WA; D; No_Joining_Group
XX15; WAGINDARA LETTER SHA; D; No_Joining_Group
XX16; WAGINDARA LETTER SA; D; No_Joining_Group
XX17; WAGINDARA LETTER YA; D; No_Joining_Group
XX18; WAGINDARA LETTER RA; D; No_Joining_Group
XX19; WAGINDARA LETTER LA; D; No_Joining_Group
XX1A; WAGINDARA LETTER HA; D; No_Joining_Group
XX1B; WAGINDARA LETTER VA; D; No_Joining_Group
XX1C; WAGINDARA LETTER FA; D; No_Joining_Group
XX20; WAGINDARA COMBINING BAR RIGHT; T; No_Joining_Group
XX21; WAGINDARA COMBINING DOT LEFT; T; No_Joining_Group
XX22; WAGINDARA COMBINING DOT RIGHT; T; No_Joining_Group
XX23; WAGINDARA COMBINING CIRCLE RIGHT; T; No_Joining_Group
XX2A; WAGINDARA BIRGA; U; No_Joining_Group
XX2B; WAGINDARA COMMA; U; No_Joining_Group
XX2C; WAGINDARA FULL STOP; U; No_Joining_Group
XX2D; WAGINDARA ELLIPSIS; U; No_Joining_Group
XX2E; WAGINDARA QUESTION MARK; U; No_Joining_Group
XX2F; WAGINDARA EXCLAMATION MARK; U; No_Joining_Group

```

The information in UnicodeData.txt is as follows.

```

XX00;WAGINDARA LETTER A;Lo;0;L;;;;N;;;;;
XX01;WAGINDARA LETTER E;Lo;0;L;;;;N;;;;;
XX02;WAGINDARA LETTER I;Lo;0;L;;;;N;;;;;
XX03;WAGINDARA LETTER O;Lo;0;L;;;;N;;;;;
XX04;WAGINDARA LETTER U;Lo;0;L;;;;N;;;;;
XX05;WAGINDARA LETTER OE;Lo;0;L;;;;N;;;;;
XX06;WAGINDARA LETTER UE;Lo;0;L;;;;N;;;;;
XX07;WAGINDARA LETTER GA;Lo;0;L;;;;N;;;;;
XX08;WAGINDARA LETTER KA;Lo;0;L;;;;N;;;;;
XX09;WAGINDARA LETTER ANG;Lo;0;L;;;;N;;;;;
XX0A;WAGINDARA LETTER ZHA;Lo;0;L;;;;N;;;;;
XX0B;WAGINDARA LETTER CHA;Lo;0;L;;;;N;;;;;
XX0C;WAGINDARA LETTER NYA;Lo;0;L;;;;N;;;;;
XX0D;WAGINDARA LETTER DA;Lo;0;L;;;;N;;;;;
XX0E;WAGINDARA LETTER TA;Lo;0;L;;;;N;;;;;
XX0F;WAGINDARA LETTER BA;Lo;0;L;;;;N;;;;;
XX10;WAGINDARA LETTER PA;Lo;0;L;;;;N;;;;;
XX11;WAGINDARA LETTER MA;Lo;0;L;;;;N;;;;;
XX12;WAGINDARA LETTER ZA;Lo;0;L;;;;N;;;;;
XX13;WAGINDARA LETTER CA;Lo;0;L;;;;N;;;;;
XX14;WAGINDARA LETTER WA;Lo;0;L;;;;N;;;;;
XX15;WAGINDARA LETTER SHA;Lo;0;L;;;;N;;;;;
XX16;WAGINDARA LETTER SA;Lo;0;L;;;;N;;;;;
XX17;WAGINDARA LETTER YA;Lo;0;L;;;;N;;;;;
XX18;WAGINDARA LETTER RA;Lo;0;L;;;;N;;;;;
XX19;WAGINDARA LETTER LA;Lo;0;L;;;;N;;;;;
XX1A;WAGINDARA LETTER HA;Lo;0;L;;;;N;;;;;
XX1B;WAGINDARA LETTER VA;Lo;0;L;;;;N;;;;;
XX1C;WAGINDARA LETTER FA;Lo;0;L;;;;N;;;;;
XX20;WAGINDARA COMBINING BAR RIGHT;Mn;220;NSM;;;;N;;;;;
XX21;WAGINDARA COMBINING DOT LEFT;Mn;230;NSM;;;;N;;;;;
XX22;WAGINDARA COMBINING DOT RIGHT;Mn;220;NSM;;;;N;;;;;
XX23;WAGINDARA COMBINING CIRCLE RIGHT;Mn;220;NSM;;;;N;;;;;

```

```

XX2A;WAGINDARA BIRGA;Po;0;ON;;;;N;;;;
XX2B;WAGINDARA COMMA;Po;0;ON;;;;N;;;;
XX2C;WAGINDARA FULL STOP;Po;0;ON;;;;N;;;;
XX2D;WAGINDARA ELLIPSIS;Po;0;ON;;;;N;;;;
XX2E;WAGINDARA QUESTION MARK;Po;0;ON;;;;N;;;;
XX2F;WAGINDARA EXCLAMATION MARK;Po;0;ON;;;;N;;;;

```

The information in EastAsianWidth.txt is as follows.

```

XX00..XX1C ; N # Lo [29] WAGINDARA LETTER A..WAGINDARA LETTER FA
XX20..XX23 ; N # Mn [4] WAGINDARA COMBINING BAR RIGHT.. WAGINDARA
COMBINING CIRCLE RIGHT
XX2A..XX2F ; N # Po [6] WAGINDARA BIRGA.. WAGINDARA EXCLAMATION MARK

```

The information in LineBreak.txt is as follows.

```

XX00..XX1C ; AL # Lo [29] WAGINDARA LETTER A..WAGINDARA LETTER FA
XX20..XX23 ; CM # Mn [4] WAGINDARA COMBINING BAR RIGHT.. WAGINDARA
COMBINING CIRCLE RIGHT
XX2A..XX2F ; CL # Po [6] WAGINDARA BIRGA.. WAGINDARA EXCLAMATION MARK

```

The information in PropList.txt is as follows.

```

XX2A..XX2F ; Terminal_Punctuation # Po [6] WAGINDARA BIRGA.. WAGINDARA
EXCLAMATION MARK
XX2A..XX2F ; Sentence_Terminal # Po [6] WAGINDARA BIRGA.. WAGINDARA
EXCLAMATION MARK

```

The information in VerticalOrientation.txt is shown as below.

```

XX00..XX1C ; R # Lo [29] WAGINDARA LETTER A..WAGINDARA LETTER FA
XX20..XX23 ; R # Mn [4] WAGINDARA COMBINING BAR RIGHT.. WAGINDARA
COMBINING CIRCLE RIGHT
XX2A..XX2F ; R # Po [6] WAGINDARA BIRGA.. WAGINDARA EXCLAMATION MARK

```

The Wagindara script is a newly proposed script for ISO 15924. The suggested code is Wgdr.

Script=Wgdr

The information in ScriptExtensions.txt is shown as below.

```

3008 ; Bopo Hang Hani Hira Kana Mong Tibt Yiii Wgdr #Ps LEFT ANGLE BRACKET
3009 ; Bopo Hang Hani Hira Kana Mong Tibt Yiii Wgdr #Pe RIGHT ANGLE BRACKET
300A ; Bopo Hang Hani Hira Kana Lisu Mong Tibt Yiii Wgdr #Ps LEFT DOUBLE ANGLE BRACKET
300B ; Bopo Hang Hani Hira Kana Lisu Mong Tibt Yiii Wgdr #Pe RIGHT DOUBLE ANGLE BRACKET

```

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## Reference

- 苏优乐玛 / Suyulma ᠰᠤᠶᠤᠯᠠᠮᠠ. (2017). 瓦津达拉文及其文献研究 / *A study of Wagindara Script and Its Literature* ᠠᠭᠢᠨᠳᠠᠷᠠ ᠠᠩᠭᠡᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ. 呼和浩特 / Hohhot ᠨᠠᠭᠤᠨ: 内蒙古教育出版社 / Inner Mongolia Education Press ᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ ᠠᠨᠠᠭᠤᠨ.
- Nicholas POPPE. (1964). *Grammar of Written Mongolian*. Wiesbaden: Otto Harrassowitz.
- Juha JANHUNEN. (2003). *The Mongolic languages*. London: Routledge.
- Хөхийн БЯМБАЖАВ. (2019). *Тод Үсгийн Сурах Бичиг*. Улаанбаатар: Соёмбо Принтинг.
- ЦЭВЭЛИЙН ШАГДАРСҮРЭН. (2001). *Монголчуудын Үсэг Бичигийн Товчоон: Үсэг Зүйн Судлагаа*. Улаанбаатар: Урлах Эрдэм.
- 清格尔泰. (1991). 蒙古文语法 / *A Grammar of the Mongolian Language*. 呼和浩特 / Hohhot: 内蒙古人民出版社 / Inner Mongolia People's Publishing House.
- 额力很巴雅尔 / Erkenbayar. (2003). 蒙古文书法概论. 沈阳 / Shenyang: 辽宁民族出版社 / Liaoning Nationality Publishing House.
- Лариса Батоевна БАДМАЕВА (2005). *Язык Бурятских Летописей*. Улан-Удэ: Изд-во Бурятского Научного Центра СО РАН.

## Appendix 1 Code Charts

|   | xx0                                                                                         | xx1                                                                                         | xx2                                                                                         |
|---|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| 0 | <br>xx00   | <br>xx10   | <br>xx20   |
| 1 | <br>xx01   | <br>xx11   | <br>xx21   |
| 2 | <br>xx02   | <br>xx12   | <br>xx22   |
| 3 | <br>xx03   | <br>xx13   | <br>xx23   |
| 4 | <br>xx04   | <br>xx14   |                                                                                             |
| 5 | <br>xx05   | <br>xx15   |                                                                                             |
| 6 | <br>xx06  | <br>xx16  |                                                                                             |
| 7 | <br>xx07 | <br>xx17 |                                                                                             |
| 8 | <br>xx08 | <br>xx18 |                                                                                             |
| 9 | <br>xx09 | <br>xx19 |                                                                                             |
| A | <br>xx0A | <br>xx1A | <br>xx2A |
| B | <br>xx0B | <br>xx1B | <br>xx2B |
| C | <br>xx0C | <br>xx1C | <br>xx2C |
| D | <br>xx0D |                                                                                             | <br>xx2D |
| E | <br>xx0E |                                                                                             | <br>xx2E |
| F | <br>xx0F |                                                                                             | <br>xx2F |

## Letters

|      |                                                                                     |                      |
|------|-------------------------------------------------------------------------------------|----------------------|
| xx00 |    | WAGINDARA LETTER A   |
| xx01 |    | WAGINDARA LETTER E   |
| xx02 |    | WAGINDARA LETTER I   |
| xx03 |    | WAGINDARA LETTER O   |
| xx04 |    | WAGINDARA LETTER U   |
| xx05 |    | WAGINDARA LETTER OE  |
| xx06 |    | WAGINDARA LETTER UE  |
| xx07 |    | WAGINDARA LETTER GA  |
| xx08 |    | WAGINDARA LETTER KA  |
| xx09 |    | WAGINDARA LETTER ANG |
| xx0A |    | WAGINDARA LETTER ZHA |
| xx0B |    | WAGINDARA LETTER CHA |
| xx0C |    | WAGINDARA LETTER NYA |
| xx0D |    | WAGINDARA LETTER DA  |
| xx0E |    | WAGINDARA LETTER TA  |
| xx0F |    | WAGINDARA LETTER BA  |
| xx10 |    | WAGINDARA LETTER PA  |
| xx11 |    | WAGINDARA LETTER MA  |
| xx12 |    | WAGINDARA LETTER ZA  |
| xx13 |    | WAGINDARA LETTER CA  |
| xx14 |    | WAGINDARA LETTER WA  |
| xx15 |    | WAGINDARA LETTER SHA |
| xx16 |  | WAGINDARA LETTER SA  |
| xx17 |  | WAGINDARA LETTER YA  |
| xx18 |  | WAGINDARA LETTER RA  |
| xx19 |  | WAGINDARA LETTER LA  |
| xx1A |  | WAGINDARA LETTER HA  |
| xx1B |  | WAGINDARA LETTER VA  |
| xx1C |  | WAGINDARA LETTER FA  |

## Combining marks

|      |                                                                                     |                                  |
|------|-------------------------------------------------------------------------------------|----------------------------------|
| xx20 |  | WAGINDARA COMBINING BAR RIGHT    |
| xx21 |  | WAGINDARA COMBINING DOT LEFT     |
| xx22 |  | WAGINDARA COMBINING DOT RIGHT    |
| xx23 |  | WAGINDARA COMBINING CIRCLE RIGHT |

## Punctuation

|      |                                                                                     |                            |
|------|-------------------------------------------------------------------------------------|----------------------------|
| xx2A |  | WAGINDARA BIRGA            |
| xx2B |  | WAGINDARA COMMA            |
| xx2C |  | WAGINDARA FULL STOP        |
| xx2D |  | WAGINDARA ELLIPSIS         |
| xx2E |  | WAGINDARA QUESTION MARK    |
| xx2F |  | WAGINDARA EXCLAMATION MARK |

# Figures

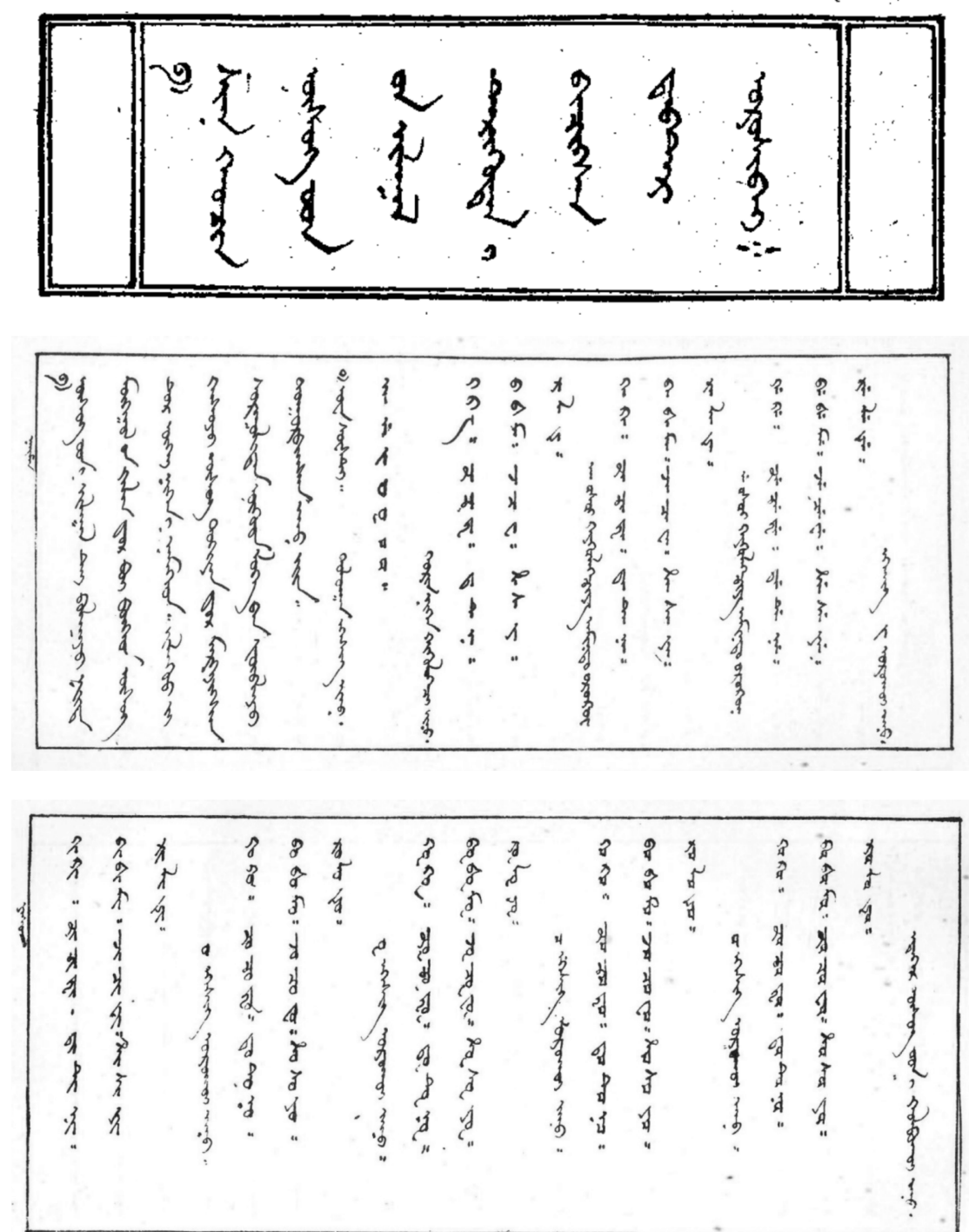


Fig. 1 Literature A  
 The Comparison of Old and New Mongolian Letters, 1905.

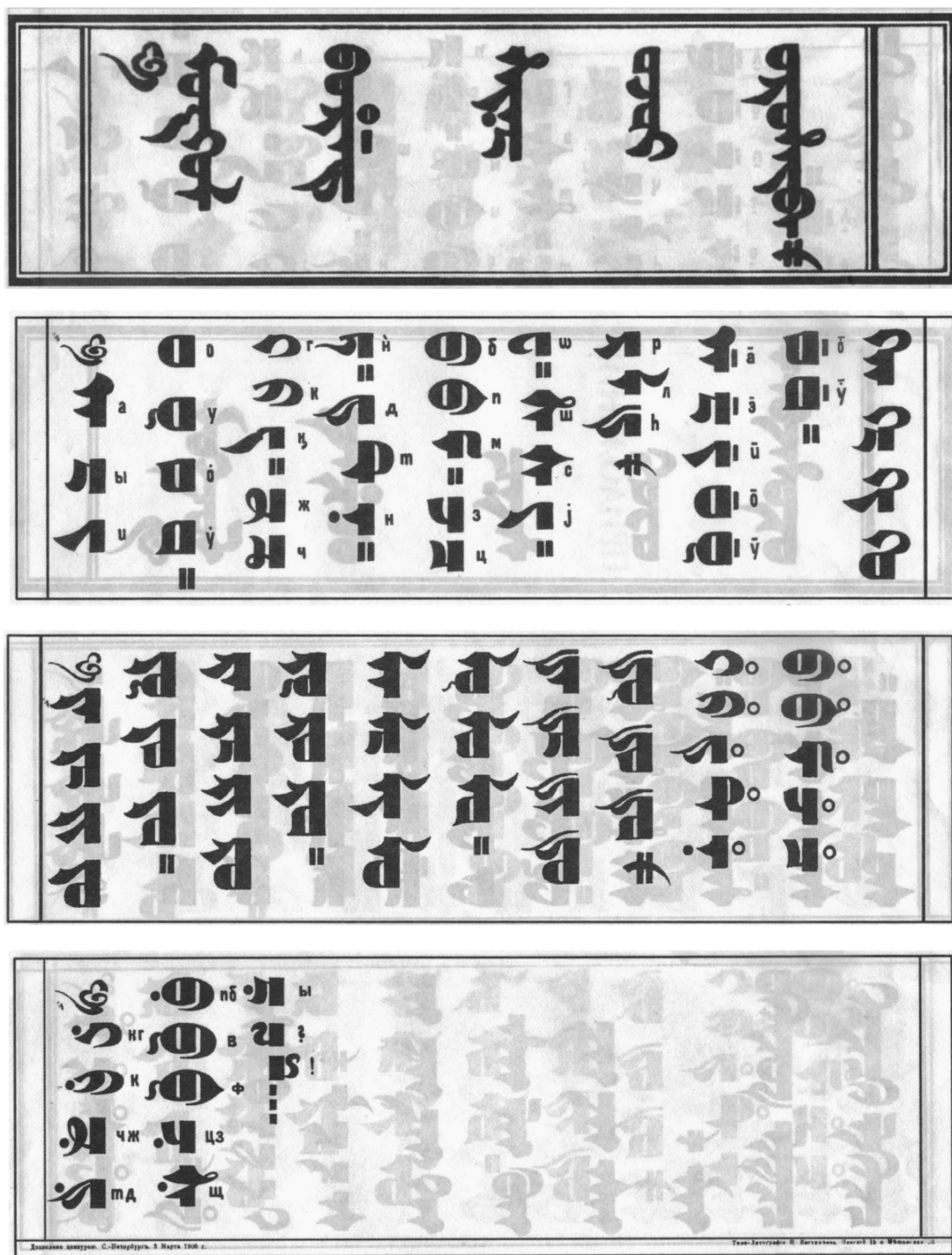


Fig. 2 Literature B  
 1906-й онд бичигдсэн бичиг баримт  
*New Letters of Buryat Mongolian, 1906.*

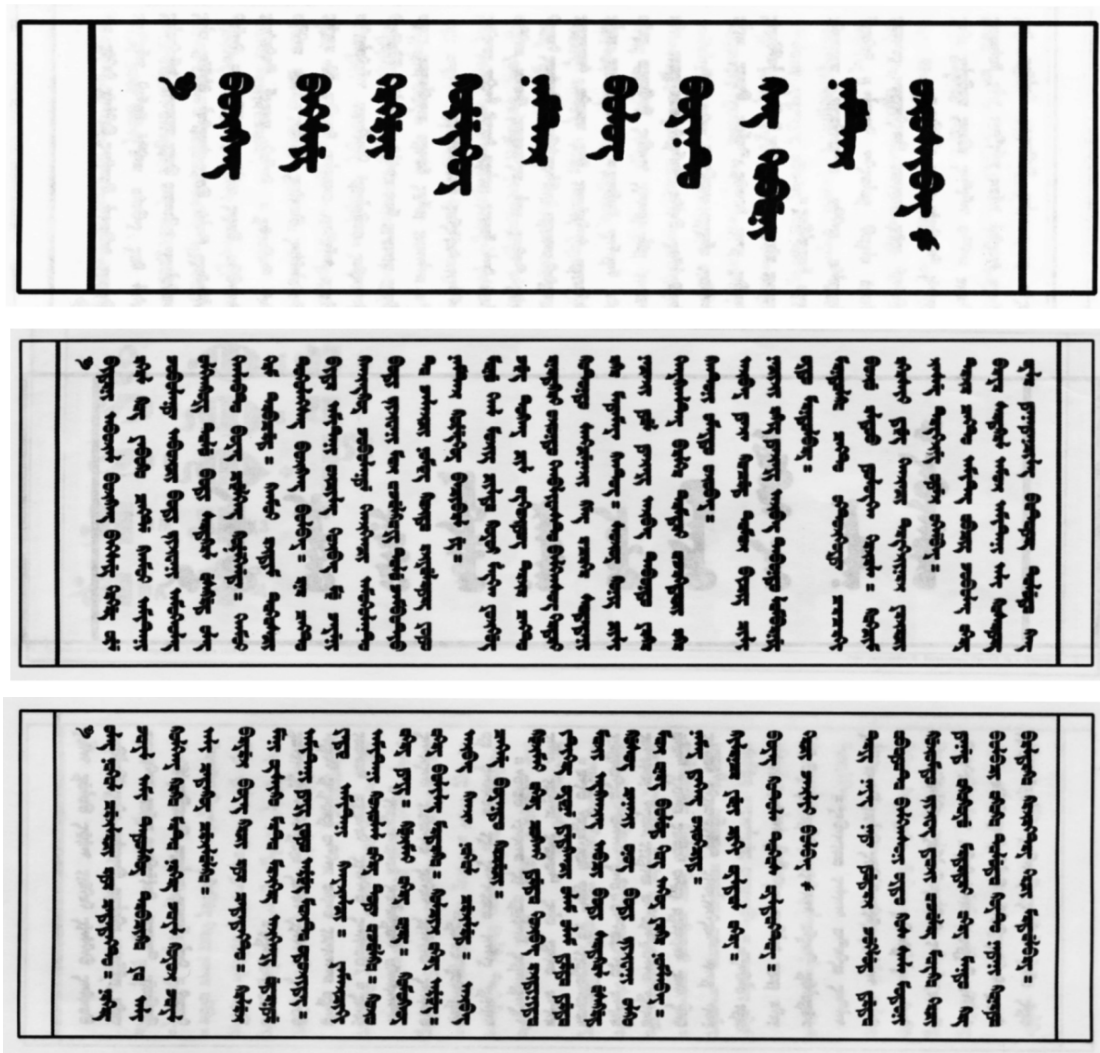
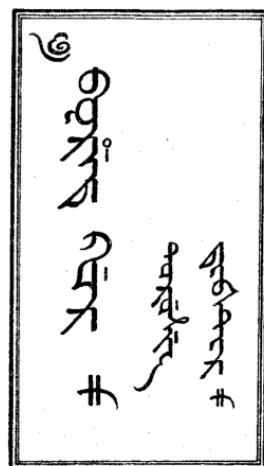
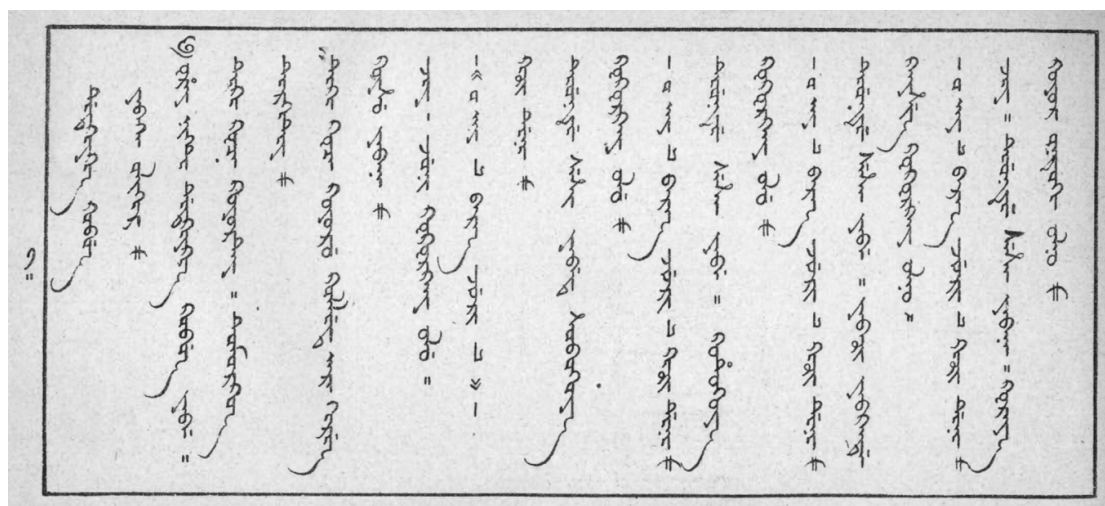


Fig. 3 Literature C

မာဂဟူရ မာဂဟူရ အာရုံရ မာဂဟူရ မာဂဟူရ မာဂဟူရ မာဂဟူရ  
*A Buddhist Scripture in Wagindara, 1906.*



« Хүндэр »  
 Өмнөд Бурят Улсын  
 Мэргэжлийн  
 Өмнөд Бурят Улсын

Fig. 4 Literature D  
 Бурят Улсын Мэргэжлийн  
 Бурят Pleasure, 1907.

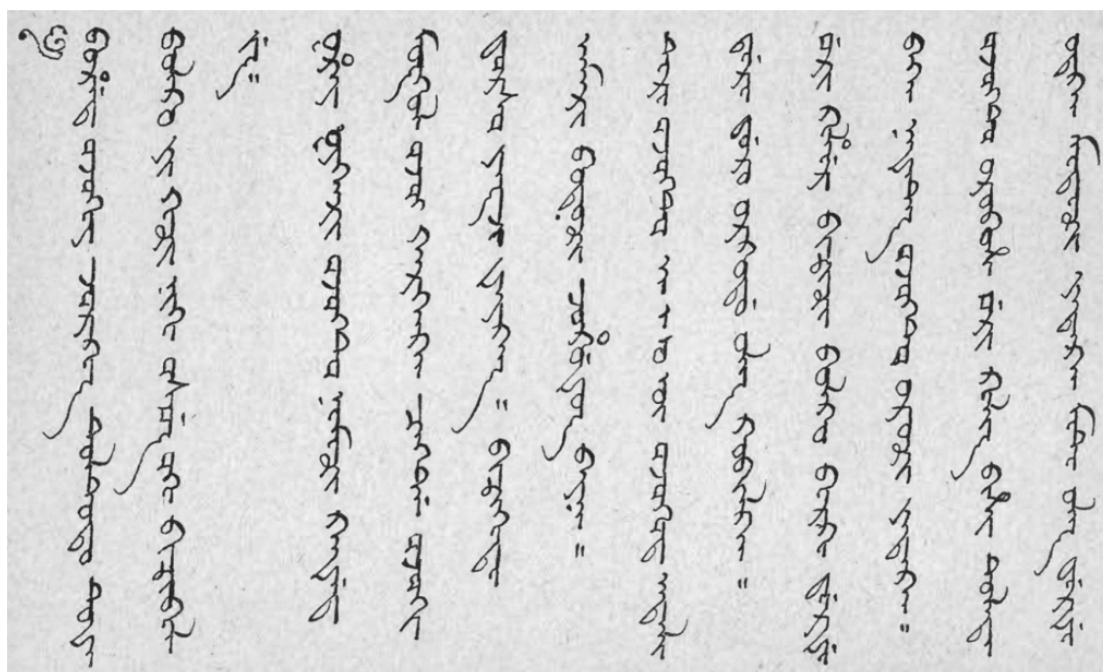
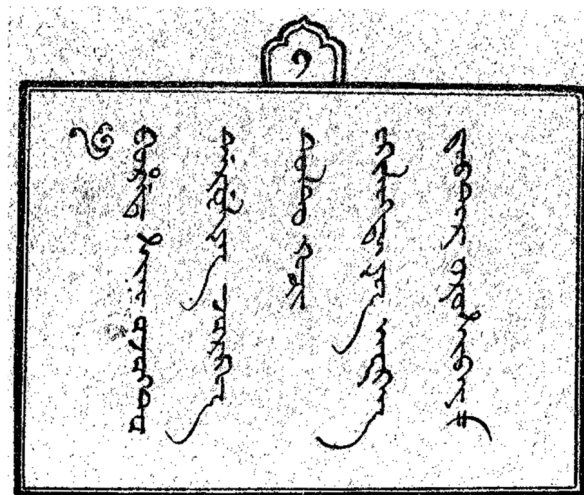


Fig. 5 Literature E

ᠨᠠᠭᠤᠯᠤᠰᠤ ᠠᠨᠠᠭᠤᠯᠤᠰᠤ ᠠᠨᠠᠭᠤᠯᠤᠰᠤ ᠠᠨᠠᠭᠤᠯᠤᠰᠤ ᠠᠨᠠᠭᠤᠯᠤᠰᠤ ᠠᠨᠠᠭᠤᠯᠤᠰᠤ ᠠᠨᠠᠭᠤᠯᠤᠰᠤ ᠠᠨᠠᠭᠤᠯᠤᠰᠤ  
*New Letters of Buryat, 1908.*



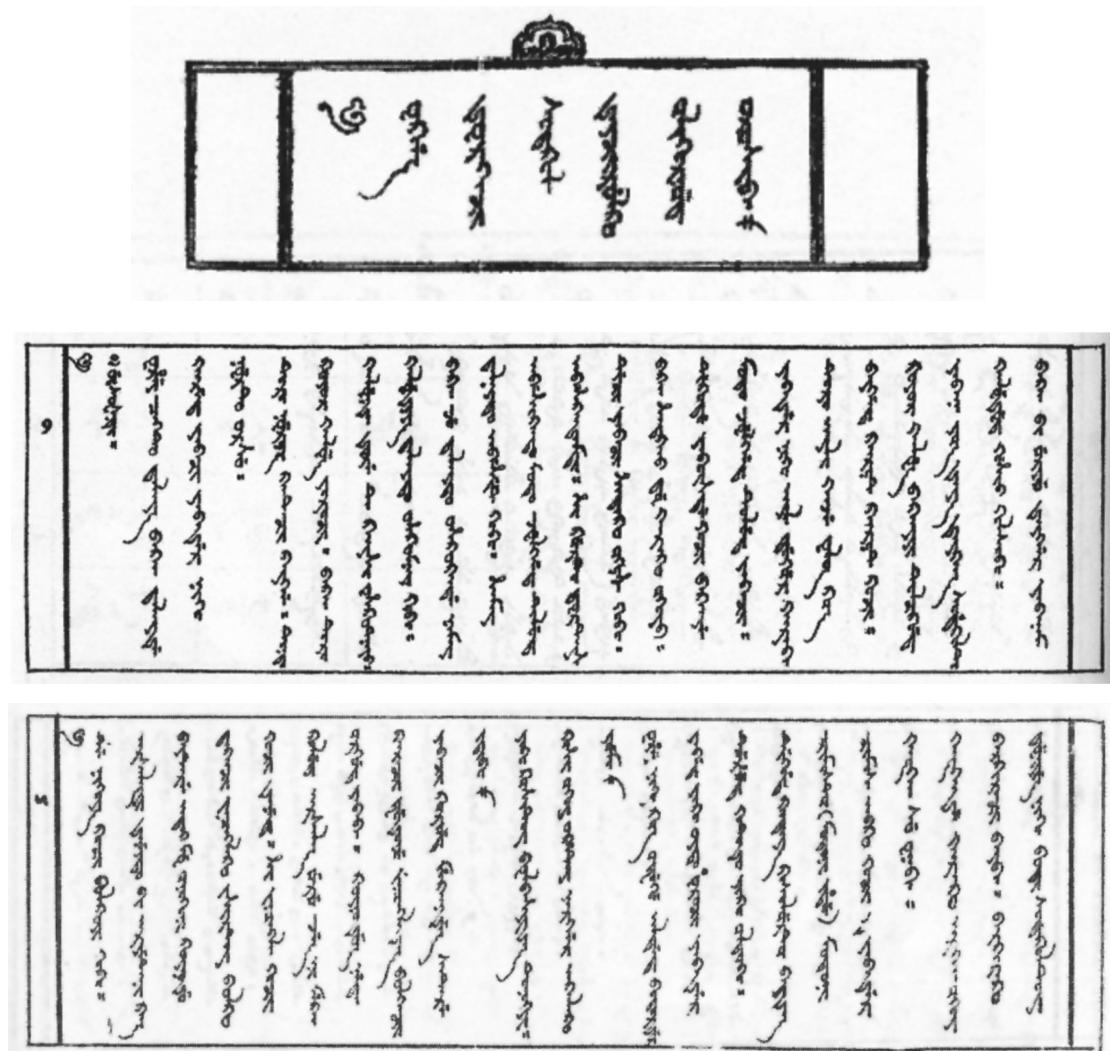


Fig. 7 Literature G  
 မြန်မာ့ နက္ခတ် အက္ခရာ နက္ခတ် အက္ခရာ  
 Puzzle Story Collection, 1908.

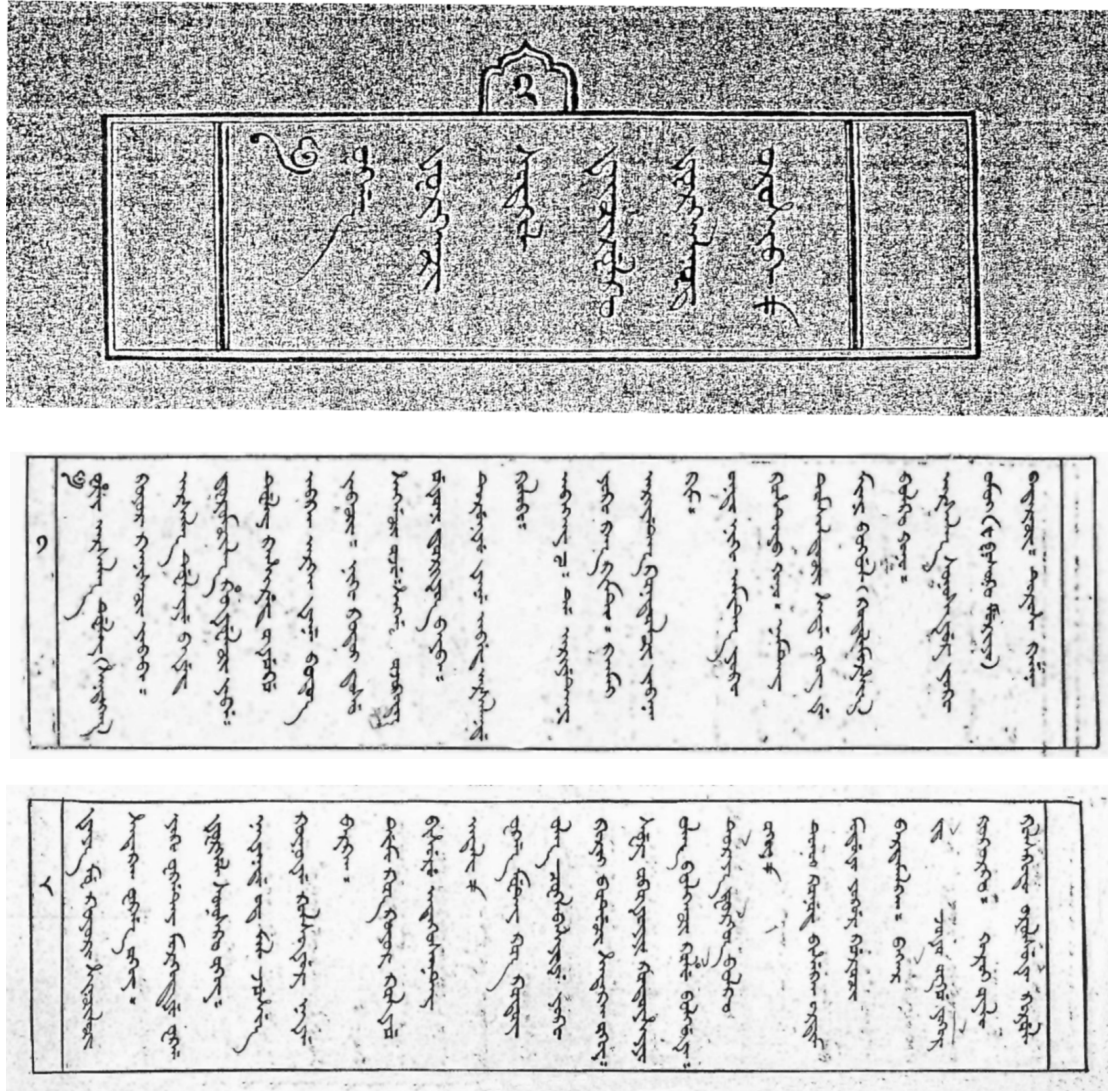


Fig. 8 Literature H  
 မိမိတို့ မိမိတို့ အသံအသံ မိမိတို့အသံ မိမိတို့အသံ  
 Words of Wisdom, 1908.

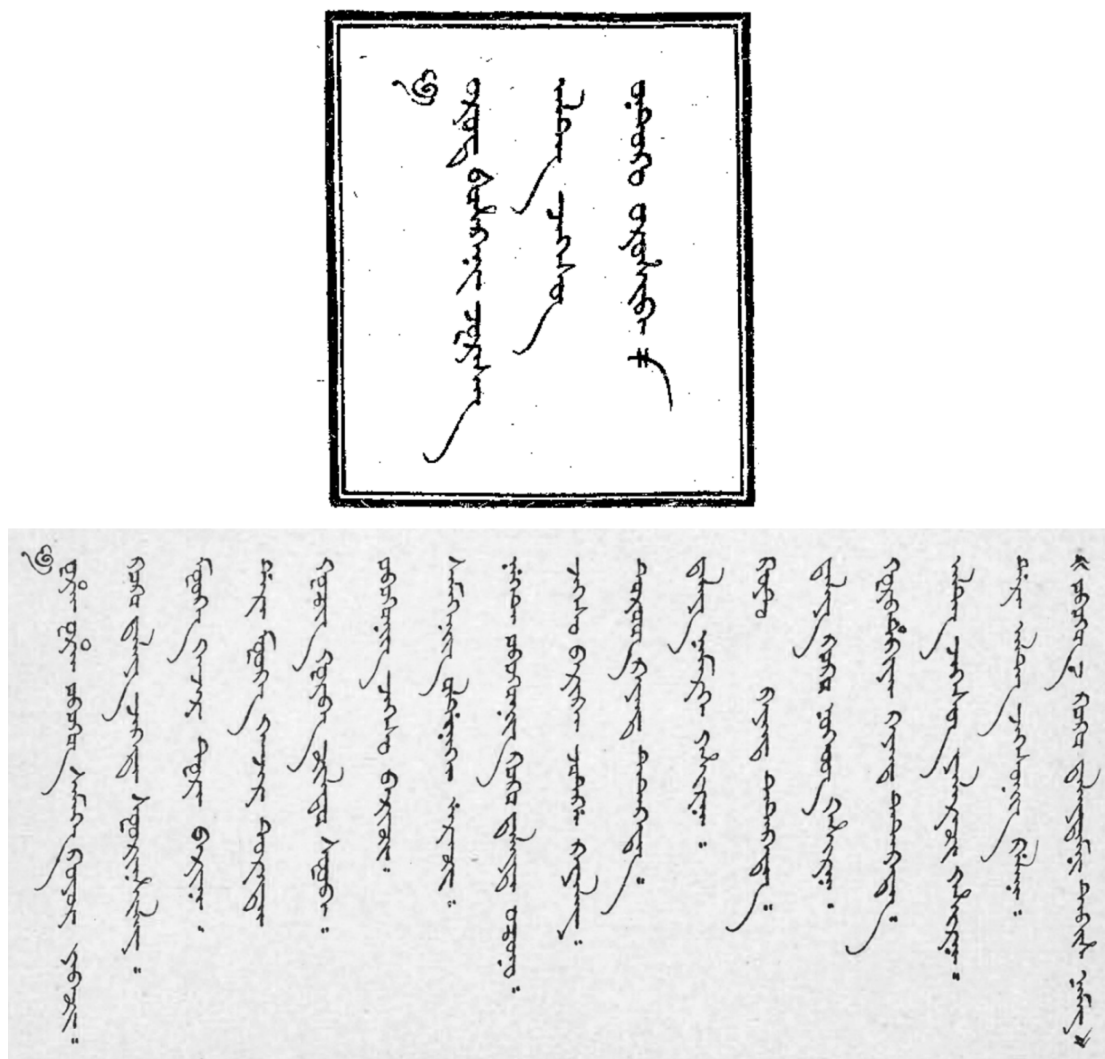


Fig. 9 Literature I  
 Ֆիշերման և Գոլդֆիշ ռուսական բանաստեղծի  
*Fisherman and Goldfish by Russian Poet Pushkin, 1910.*



Fig. 10 Literature J

ЧОНО БААТАР

Chono Baatar, 1910.





|    | କଳ୍ପ ଲେଖନ | ସମ୍ମିଶ୍ର ଲେଖନ |           |         | ଈକାନ୍ତ  | ଈକାନ୍ତ |
|----|-----------|---------------|-----------|---------|---------|--------|
|    |           | କଳ୍ପ          | ଋଷ୍ଟ୍ର    | ଲେଖନ    |         |        |
| 1  | ଈ         | ଈ             | ଈ         | ଈ.ଈ     | a       | a      |
| 2  | ଈ         | ଈ             | ଈ         | ଈ.ଈ     | e       | э      |
| 3  | ଈ         | ଈ             | ଈ.ଈ       | ଈ       | i       | и, й   |
| 4  | ଈ         | ଈ             | ଈ.ଈ       | ଈ.ଈ.ଈ   | o       | o      |
| 5  | ଈ         | ଈ             | ଈ.ଈ       | ଈ.ଈ.ଈ   | u       | y      |
| 6  | ଈ         | ଈ             | ଈ.ଈ.ଈ     | ଈ.ଈ.ଈ   | ö       | ө      |
| 7  | ଈ         | ଈ             | ଈ.ଈ.ଈ     | ଈ.ଈ.ଈ   | ü       | ү      |
| 8  | ଈ         | ଈ.ଈ           | ଈ.ଈ.ଈ.ଈ.ଈ | ଈ.ଈ     | g (γ,g) | г      |
| 9  | ଈ         | ଈ.ଈ           | ଈ.ଈ.ଈ     |         | k(q,k)  | х      |
| 10 | ଈ         |               | ଈ         | ଈ       | ñ(ng)   | н      |
| 11 | ଈ         | ଈ(+ଈ)         | ଈ(+ଈ)     |         | ǰ       | ж      |
| 12 | ଈ         | ଈ(+ଈ)         | ଈ(+ଈ)     |         | č       | ч      |
| 13 | ଈ         |               |           |         | ñ (ny)  |        |
| 14 | ଈ         | ଈ.ଈ           | ଈ.ଈ       | ଈ.ଈ     | d       | д      |
| 15 | ଈ         | ଈ.ଈ           | ଈ.ଈ       |         | t       | т      |
| 16 | ଈ         | ଈ.ଈ           | ଈ.ଈ.ଈ.ଈ   | ଈ.ଈ.ଈ.ଈ | n       | н      |
| 17 | ଈ         | ଈ             | ଈ         | ଈ       | b       | б      |
| 18 | ଈ         | ଈ             |           |         | p       | п      |
| 19 | ଈ         | ଈ             | ଈ.ଈ       | ଈ       | m       | м      |
| 20 | ଈ         | ଈ             | ଈ         |         | dz      | з      |
| 21 | ଈ         | ଈ             | ଈ         |         | ts      | ц      |
| 22 | ଈ         | ଈ             | ଈ         | ଈ       | w       | в      |
| 23 | ଈ         | ଈ             | ଈ         | ଈ       | š       | ш      |
| 24 | ଈ         | ଈ             | ଈ.ଈ       | ଈ.ଈ     | s       | с      |
| 25 | ଈ         | ଈ             | ଈ.ଈ       | ଈ.ଈ     | y       | я      |
| 26 | ଈ         |               | ଈ.ଈ       | ଈ       | r       | р      |
| 27 | ଈ         | ଈ             | ଈ.ଈ       | ଈ       | l       | л      |
| 28 | ଈ         |               | ଈ         |         | h       |        |

**Fig. 13** New and old letters of Mongolian script from Suyulma (2017)

[illegible]

**Fig. 14** Letters of Wagindara script, Traditional Mongolian script, Manchu script, and Todo Mongolian script from Suyulma (2017)

| 序号 | 瓦根达文 | 日阿文 | 现蒙古文 |
|----|------|-----|------|
| 1  | ᠊    | ᠊   | ᠊    |
| 2  | ᠋ᠠ   | ᠋ᠠ  | ᠋ᠠ   |
| 3  | ᠋ᠡ   | ᠋ᠡ  | ᠋ᠡ   |
| 4  | ᠋ᠢ   | ᠋ᠢ  | ᠋ᠢ   |
| 5  | ᠋ᠣ   | ᠋ᠣ  | ᠋ᠣ   |
| 6  | ᠋ᠤ   | ᠋ᠤ  | ᠋ᠤ   |
| 7  | ᠋ᠥ   | ᠋ᠥ  | ᠋ᠥ   |
| 8  | ᠋ᠦ   | ᠋ᠦ  | ᠋ᠦ   |
| 9  | ᠋ᠦ   | ᠋ᠦ  | ᠋ᠦ   |
| 10 | ᠋ᠦ   | ᠋ᠦ  | ᠋ᠦ   |
| 11 | ᠋ᠦ   | ᠋ᠦ  | ᠋ᠦ   |
| 12 | ᠋ᠦ   | ᠋ᠦ  | ᠋ᠦ   |
| 13 | ᠋ᠦ   | ᠋ᠦ  | ᠋ᠦ   |
| 14 | ᠋ᠦ   | ᠋ᠦ  | ᠋ᠦ   |
| 15 | ᠋ᠦ   | ᠋ᠦ  | ᠋ᠦ   |
| 16 | ᠋ᠦ   | ᠋ᠦ  | ᠋ᠦ   |
| 17 | ᠋ᠦ   | ᠋ᠦ  | ᠋ᠦ   |
| 18 | ᠋ᠦ   | ᠋ᠦ  | ᠋ᠦ   |
| 19 | ᠋ᠦ   | ᠋ᠦ  | ᠋ᠦ   |
| 20 | ᠋ᠦ   | ᠋ᠦ  | ᠋ᠦ   |
| 21 | ᠋ᠦ   | ᠋ᠦ  | ᠋ᠦ   |
| 22 | ᠋ᠦ   | ᠋ᠦ  | ᠋ᠦ   |
| 23 | ᠋ᠦ   | ᠋ᠦ  | ᠋ᠦ   |
| 24 | ᠋ᠦ   | ᠋ᠦ  | ᠋ᠦ   |
| 25 | ᠋ᠦ   | ᠋ᠦ  | ᠋ᠦ   |
| 26 | ᠋ᠦ   | ᠋ᠦ  | ᠋ᠦ   |
| 27 | ᠋ᠦ   | ᠋ᠦ  | ᠋ᠦ   |
| 28 | ᠋ᠦ   | ᠋ᠦ  | ᠋ᠦ   |
| 29 | ᠋ᠦ   | ᠋ᠦ  | ᠋ᠦ   |
| 30 | ᠋ᠦ   | ᠋ᠦ  | ᠋ᠦ   |
| 31 | ᠋ᠦ   | ᠋ᠦ  | ᠋ᠦ   |
| 32 | ᠋ᠦ   | ᠋ᠦ  | ᠋ᠦ   |
| 33 | ᠋ᠦ   | ᠋ᠦ  | ᠋ᠦ   |

Fig. 15 Letters of Wagindara script and Traditional Mongolian script from Erkenbayar (2003)

Вагиндрагийн бичигийн цагаан толгой

Эгшиг үсэг

- |              |              |
|--------------|--------------|
| 1.  a (a)    | 2.  o (o)    |
| 3.  u (y)    | 4.  i (и)    |
| 5.  e (э, е) | 6.  ё (ы, е) |
| 7.  ö (ө)    | 8.  ü (ү)    |

Гийгүүлэгч үсэг

- |                |               |
|----------------|---------------|
| 9.  b (б)      | 10.  p (п)    |
| 11.  γ (г)     | 12.  x (х)    |
| 13.  g (г)     | 14.  k (к, х) |
| 15.  t (т)     | 16.  d (д)    |
| 17.  z (э)     | 18.  ž (ж)    |
| 19.  s (с)     | 20.  š (ш)    |
| 21.  c (ц)     | 22.  č (ч)    |
| 23.  m (м)     | 24.  n (н)    |
| 25.  n (н)     | 26.  l (л)    |
| 27.  r (р)     | 28.  h (h)    |
| 29.  y (j)     | 30.  w (в)    |
| 31.  f (ф)     | 32.  v (y)    |
| 33.  j (ч, дж) | 34.  j (дэ)   |
| 35.  šč (щ)    | 36.  ñ (нь)   |

Үсэгийн нэмэлт тэмдэг

- |     |                                              |
|-----|----------------------------------------------|
| 37. | тагнайшсаны тэмдэг / бинт                    |
| 38. | эгшигийн уртын тэмдэг                        |
| 39. | цэг (6, 13, 14, 24, 33, 34, 35-р үсэгт орно) |
| 40. | дэгээ (3, 30, 31-р үсэгт орно)               |

Цэг тэмдэгийн зүйл

- |     |                                |
|-----|--------------------------------|
| 41. | хуудас эхлэсний тэмдэг / бярга |
| 42. | таслал                         |
| 43. | цэг                            |
| 44. | асуултын тэмдэг                |
| 45. | анхааруулгын тэмдэг            |
| 46. | зураас                         |
| 47. | цуваа цэг                      |

**Fig. 16** Letters, diacritics and punctuation of Wagindara script from Шагдарсүрэн (2001)

## Summary Form

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p align="center"><b>ISO/IEC JTC 1/SC 2/WG 2</b></p> <p align="center"><b>PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS</b></p> <p align="center"><b>FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646</b></p> <p>Please fill all the sections A, B and C below. Please read Principles and Procedures Document (P&amp;P) from <a href="http://unicode.org/wg2/principles.html">unicode.org/wg2/principles.html</a> for guidelines and details before filling this form.</p> <p>Please ensure you are using the latest Form from <a href="http://unicode.org/wg2/summaryform.html">unicode.org/wg2/summaryform.html</a>. See also <a href="http://unicode.org/roadmaps">unicode.org/roadmaps</a> for latest Roadmaps.</p> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### A. Administrative

|                                                                  |                                                             |
|------------------------------------------------------------------|-------------------------------------------------------------|
| 1. Title:                                                        | <i>Proposal to encode Wagindara in the UCS</i>              |
| 2. Requester's name:                                             | <i>YEHENARA Jiaxu, Kushim JIANG, TUNGGIYA Uju, LIU Tupu</i> |
| 3. Requester type (Member body/Liaison/Individual contribution): | <i>Individual contribution</i>                              |
| 4. Submission date:                                              | <i>May 18, 2026</i>                                         |
| 5. Requester's reference (if applicable):                        |                                                             |
| 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>yes</i>                                    |                                    |
| Proposed name of script:                                                                                                                                                                                  | <i>Wagindara</i>                              |                                    |
| b. The proposal is for addition of character(s) to an existing block:                                                                                                                                     | <i>no</i>                                     |                                    |
| Name of the existing block:                                                                                                                                                                               |                                               |                                    |
| 2. Number of characters in proposal:                                                                                                                                                                      | <i>39</i>                                     |                                    |
| 3. Proposed category (select one from below - see section 2.2 of P&P document):                                                                                                                           |                                               |                                    |
| A-Contemporary                                                                                                                                                                                            | B.1-Specialized (small collection)            | B.2-Specialized (large collection) |
| C-Major extinct                                                                                                                                                                                           | D-Attested extinct                            | <i>X</i> 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" in Annex L of P&P document?                                                                                                 | <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 font to the Project Editor of 10646 for publishing the standard?                                                                                                      | <i>Alari   YEHENARA Jiaxu</i>                 |                                    |
| b. Identify the party granting a license for use of the font by the editors (include address, e-mail, ftp-site, etc.):                                                                                    | <i>Alari   YEHENARA Jiaxu, ayasala@qq.com</i> |                                    |
| 6. References:                                                                                                                                                                                            |                                               |                                    |
| a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided?                                                                                                               | <i>yes</i>                                    |                                    |
| b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached?                                                                          | <i>yes</i>                                    |                                    |
| 7. Special encoding issues:                                                                                                                                                                               |                                               |                                    |
| 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)? | <i>no</i>                                     |                                    |

#### 8. Additional Information:

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 behavior information such as line breaks, widths etc., Combining behavior, Spacing behavior, Directional behavior, Default Collation behavior, relevance in Mark Up contexts, Compatibility equivalence and other Unicode normalization related information. See the Unicode standard at [www.unicode.org](http://www.unicode.org) for such information on other scripts. Also see Unicode Character Database ([www.unicode.org/reports/tr44](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.)?          | no   |
| If YES, with whom? _____                                                                                                                                       |      |
| 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? | yes  |
| Reference: <i>Suyulma (2017) and this document.</i>                                                                                                            |      |
| 4. The context of use for the proposed characters (type of use; common or rare)                                                                                | rare |
| Reference: <i>Suyulma (2017) and this document.</i>                                                                                                            |      |
| 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?                                  | no   |
| If YES, is a rationale provided? _____                                                                                                                         |      |
| 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? <i>yes</i>                                                                                                       |      |
| If YES, reference: <i>Combining characters are an inherent part of the writing system.</i>                                                                     |      |
| Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?                                                              | no   |
| If YES, reference: _____                                                                                                                                       |      |
| 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):<br>_____<br>_____                                                                                |      |
| 13. Does the proposal contain any Ideographic compatibility characters?                                                                                        | no   |
| If YES, are the equivalent corresponding unified ideographic characters identified? _____                                                                      |      |
| If YES, reference: _____                                                                                                                                       |      |

## UnicodeData.txt

```
1 XX00;WAGINDARA LETTER A;Lo;0;L;;;;;N;;;;;
2 XX01;WAGINDARA LETTER E;Lo;0;L;;;;;N;;;;;
3 XX02;WAGINDARA LETTER I;Lo;0;L;;;;;N;;;;;
4 XX03;WAGINDARA LETTER O;Lo;0;L;;;;;N;;;;;
5 XX04;WAGINDARA LETTER U;Lo;0;L;;;;;N;;;;;
6 XX05;WAGINDARA LETTER OE;Lo;0;L;;;;;N;;;;;
7 XX06;WAGINDARA LETTER UE;Lo;0;L;;;;;N;;;;;
8 XX07;WAGINDARA LETTER GA;Lo;0;L;;;;;N;;;;;
9 XX08;WAGINDARA LETTER KA;Lo;0;L;;;;;N;;;;;
10 XX09;WAGINDARA LETTER ANG;Lo;0;L;;;;;N;;;;;
11 XX0A;WAGINDARA LETTER ZHA;Lo;0;L;;;;;N;;;;;
12 XX0B;WAGINDARA LETTER CHA;Lo;0;L;;;;;N;;;;;
13 XX0C;WAGINDARA LETTER NYA;Lo;0;L;;;;;N;;;;;
14 XX0D;WAGINDARA LETTER DA;Lo;0;L;;;;;N;;;;;
15 XX0E;WAGINDARA LETTER TA;Lo;0;L;;;;;N;;;;;
16 XX0F;WAGINDARA LETTER BA;Lo;0;L;;;;;N;;;;;
17 XX10;WAGINDARA LETTER PA;Lo;0;L;;;;;N;;;;;
18 XX11;WAGINDARA LETTER MA;Lo;0;L;;;;;N;;;;;
19 XX12;WAGINDARA LETTER ZA;Lo;0;L;;;;;N;;;;;
20 XX13;WAGINDARA LETTER CA;Lo;0;L;;;;;N;;;;;
21 XX14;WAGINDARA LETTER WA;Lo;0;L;;;;;N;;;;;
22 XX15;WAGINDARA LETTER SHA;Lo;0;L;;;;;N;;;;;
23 XX16;WAGINDARA LETTER SA;Lo;0;L;;;;;N;;;;;
24 XX17;WAGINDARA LETTER YA;Lo;0;L;;;;;N;;;;;
25 XX18;WAGINDARA LETTER RA;Lo;0;L;;;;;N;;;;;
26 XX19;WAGINDARA LETTER LA;Lo;0;L;;;;;N;;;;;
27 XX1A;WAGINDARA LETTER HA;Lo;0;L;;;;;N;;;;;
28 XX1B;WAGINDARA LETTER VA;Lo;0;L;;;;;N;;;;;
29 XX1C;WAGINDARA LETTER FA;Lo;0;L;;;;;N;;;;;
30 XX20;WAGINDARA COMBINING BAR RIGHT;Mn;220;NSM;;;;;N;;;;;
31 XX21;WAGINDARA COMBINING DOT LEFT;Mn;230;NSM;;;;;N;;;;;
32 XX22;WAGINDARA COMBINING DOT RIGHT;Mn;220;NSM;;;;;N;;;;;
33 XX23;WAGINDARA COMBINING CIRCLE RIGHT;Mn;220;NSM;;;;;N;;;;;
34 XX2A;WAGINDARA BIRGA;Po;0;ON;;;;;N;;;;;
35 XX2B;WAGINDARA COMMA;Po;0;ON;;;;;N;;;;;
36 XX2C;WAGINDARA FULL STOP;Po;0;ON;;;;;N;;;;;
37 XX2D;WAGINDARA ELLIPSIS;Po;0;ON;;;;;N;;;;;
38 XX2E;WAGINDARA QUESTION MARK;Po;0;ON;;;;;N;;;;;
39 XX2F;WAGINDARA EXCLAMATION MARK;Po;0;ON;;;;;N;;;;;
```

+39

## ArabicShaping.txt

1042

1043 # EOF

```
1 XX00; WAGINDARA LETTER A; D; No_Joining_Group
2 XX01; WAGINDARA LETTER E; D; No_Joining_Group
3 XX02; WAGINDARA LETTER I; D; No_Joining_Group
4 XX03; WAGINDARA LETTER O; D; No_Joining_Group
5 XX04; WAGINDARA LETTER U; D; No_Joining_Group
6 XX05; WAGINDARA LETTER OE; D; No_Joining_Group
7 XX06; WAGINDARA LETTER UE; D; No_Joining_Group
8 XX07; WAGINDARA LETTER GA; D; No_Joining_Group
9 XX08; WAGINDARA LETTER KA; D; No_Joining_Group
10 XX09; WAGINDARA LETTER ANG; D; No_Joining_Group
```

```
11 XX0A; WAGINDARA LETTER ZHA; D; No_Joining_Group
12 XX0B; WAGINDARA LETTER CHA; D; No_Joining_Group
13 XX0C; WAGINDARA LETTER NYA; D; No_Joining_Group
14 XX0D; WAGINDARA LETTER DA; D; No_Joining_Group
15 XX0E; WAGINDARA LETTER TA; D; No_Joining_Group
16 XX0F; WAGINDARA LETTER BA; D; No_Joining_Group
17 XX10; WAGINDARA LETTER PA; D; No_Joining_Group
18 XX11; WAGINDARA LETTER MA; D; No_Joining_Group
19 XX12; WAGINDARA LETTER ZA; D; No_Joining_Group
20 XX13; WAGINDARA LETTER CA; D; No_Joining_Group
21 XX14; WAGINDARA LETTER WA; D; No_Joining_Group
22 XX15; WAGINDARA LETTER SHA; D; No_Joining_Group
23 XX16; WAGINDARA LETTER SA; D; No_Joining_Group
24 XX17; WAGINDARA LETTER YA; D; No_Joining_Group
25 XX18; WAGINDARA LETTER RA; D; No_Joining_Group
26 XX19; WAGINDARA LETTER LA; D; No_Joining_Group
27 XX1A; WAGINDARA LETTER HA; D; No_Joining_Group
28 XX1B; WAGINDARA LETTER VA; D; No_Joining_Group
29 XX1C; WAGINDARA LETTER FA; D; No_Joining_Group
30 XX20; WAGINDARA COMBINING BAR RIGHT; T; No_Joining_Group
31 XX21; WAGINDARA COMBINING DOT LEFT; T; No_Joining_Group
32 XX22; WAGINDARA COMBINING DOT RIGHT; T; No_Joining_Group
33 XX23; WAGINDARA COMBINING CIRCLE RIGHT; T; No_Joining_Group
34 XX2A; WAGINDARA BIRGA; U; No_Joining_Group
35 XX2B; WAGINDARA COMMA; U; No_Joining_Group
36 XX2C; WAGINDARA FULL STOP; U; No_Joining_Group
37 XX2D; WAGINDARA ELLIPSIS; U; No_Joining_Group
38 XX2E; WAGINDARA QUESTION MARK; U; No_Joining_Group
39 XX2F; WAGINDARA EXCLAMATION MARK; U; No_Joining_Group
```

+39 -2

## NamesList.txt

```
@@ XX00 Wagindara XX2F
@ Letters
XX00 WAGINDARA LETTER A
XX01 WAGINDARA LETTER E
XX02 WAGINDARA LETTER I
XX03 WAGINDARA LETTER O
XX04 WAGINDARA LETTER U
XX05 WAGINDARA LETTER OE
XX06 WAGINDARA LETTER UE
XX07 WAGINDARA LETTER GA
XX08 WAGINDARA LETTER KA
XX09 WAGINDARA LETTER ANG
XX0A WAGINDARA LETTER ZHA
XX0B WAGINDARA LETTER CHA
XX0C WAGINDARA LETTER NYA
XX0D WAGINDARA LETTER DA
XX0E WAGINDARA LETTER TA
XX0F WAGINDARA LETTER BA
XX10 WAGINDARA LETTER PA
XX11 WAGINDARA LETTER MA
XX12 WAGINDARA LETTER ZA
XX13 WAGINDARA LETTER CA
XX14 WAGINDARA LETTER WA
XX15 WAGINDARA LETTER SHA
```

XX16 WAGINDARA LETTER SA  
XX17 WAGINDARA LETTER YA  
XX18 WAGINDARA LETTER RA  
XX19 WAGINDARA LETTER LA  
XX1A WAGINDARA LETTER HA  
XX1B WAGINDARA LETTER VA  
XX1C WAGINDARA LETTER FA  
@ Combining marks  
XX20 WAGINDARA COMBINING BAR RIGHT  
XX21 WAGINDARA COMBINING DOT LEFT  
XX22 WAGINDARA COMBINING DOT RIGHT  
XX23 WAGINDARA COMBINING CIRCLE RIGHT  
@ Punctuation  
XX2A WAGINDARA BIRGA  
XX2B WAGINDARA COMMA  
XX2C WAGINDARA FULL STOP  
XX2D WAGINDARA ELLIPSIS  
XX2E WAGINDARA QUESTION MARK  
XX2F WAGINDARA EXCLAMATION MARK  
43 lines

### **ScriptExtensions.txt**

3008 ; Bopo Hang Hani Hira Kana Mong Tibt Yiii Wgdr #Ps LEFT ANGLE BRACKET  
3009 ; Bopo Hang Hani Hira Kana Mong Tibt Yiii Wgdr #Pe RIGHT ANGLE BRACKET  
300A ; Bopo Hang Hani Hira Kana Lisu Mong Tibt Yiii Wgdr #Ps LEFT DOUBLE ANGLE  
BRACKET  
300B ; Bopo Hang Hani Hira Kana Lisu Mong Tibt Yiii Wgdr #Pe RIGHT DOUBLE ANGLE  
BRACKET  
4 lines