Proposal to Encode the Multani Script in ISO/IEC 10646

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1 Introduction

This is a proposal to encode the Multani script in the Universal Character Set (UCS). The script has been discussed previously in the following documents:

- N3766 L2/10-011 "A Roadmap for Scripts of the Landa Family"
- N3768 L2/10-013R "Preliminary Proposal to Encode the Landa Script in ISO/IEC 10646"
- N4027 L2/11-124 "Preliminary Proposal to Encode the Multani Script in ISO/IEC 10646"

In N3768, it was suggested that Multani be unified with Landa, which is not yet encoded. Additional research has indicated that Multani is sufficiently distinct from basic Landa and other related scripts and should be encoded independently in the UCS. Furthermore, Multani is one of four Landa scripts whose usage was extended beyond the mercantile domain and formalized for literary activity and printing; the others being Gurmukhi, Khojki, and Khudawadi. Although Multani is now obsolete, it is a historical script in which written and printed records exist.

2 Background

The Multani script was used for writing Seraiki (ISO 639-3: skr), an Indo-Aryan language of the Lahnda macrofamily that is spoken in the Multan region of Punjab and in northern Sindh. Seraiki is also known as Lahnda, Multani, Ochiki Punjabi, Southern Lahnda, and Wuch. The script is based upon the Landa model, but possesses additional letters for implosive consonants that are not used in the Landa scripts of Punjab, but which exist in those of Sindh, such as Khudawadi and Khojki (see comparison in tables 3 and 4). The Multani script is also referred to as Karikki and Sarai.

The script was used for routine writing and commercial activities. In the early 19th century it was adapted for literary usage when the Baptist Missionary Press produced metal fonts for the script in order to print Christian literature (see figures 4 and 6). The first book printed in the Multani script was the *New Testament* (1819). In the latter half of the 19th century, the British adminstration introduced the Arabic script as the standard for the languages of Sindh, which led to the demise of the Landa script of the region. The Multani script is no longer used and Seraiki is now written using an extension of the Arabic script.

Two different script styles of Multani are attested over the period 1819–1916. Table 1 shows four specimens of Multani, two of which are derived from printed works and the remaining are hand-written forms. It is evident that the printed works were produced using two different fonts, which are quite similar. The first font was produced by the Baptist Mission Press in Serampore, Bengal (column A in table 1). The second font appears in an English containing specimens of Christian texts printed in various languages and in Austrian books on typography. It appears to be based upon the Serampore font, although its provenance is unknown (likely developed in Europe). Specimens of the two hand-written forms were published in the *Journal of the Asiatic Society of Bengal* (*JASB*) and in the *Linguistic Survey of India* (*LSI*); the scribes are anonymous. The hand-written forms are quite different. The specimen from *JASB* aligns with the Serampore font in terms of character repertoire and glyph shapes. The *LSI* specimen is different from the other three. Information on the source of the specimen is unavailable.

3 Principles of the Encoding

There is no standard form of the Multani script. For this reason, the proposed character repertoire provides an idealized form of the script, which contains a superset of characters that are distinctly attested in different styles of the script. The proposed encoding for Multani is intended to serve as a unifying block for all styles varieties of the script. Variant forms are to be managed through fonts.

The script was affected by various orthographic changes by the first quarter of the 20th century. As is illustrated by a comparison of a specimen from 1837 (figure 2) and 1919 (figure 3), the greatest change was the modification of the character repertoire, such that a single letter was used for writing more than one sound. This practice is most apparent in the representation of aspirated forms of consonants using the letter for the unaspirated counterparts and the writing of implosive forms using letters for unaspirated stop consonants (see section 4.3.1). Space is reserved in the code chart for some nasal, aspirated, and implosive letters.

The proposed glyph shapes are based upon printed forms from the Christian *New Testament* published at Serampore in 1819, with additions from hand-written documents for characters unattested in print.

4 Script Details

4.1 Structure

Although Multani is based upon the Brahmi model, it is closer in structure to an abjad than an alphasyllabary. There is no VIRAMA. There are four independent vowel letters and no dependent vowel signs. Vowels are generally not written unless they occur in isolation, in word-initial position, or in the final position of monosyllabic words. Consonants theoretically possess the inherent vowel /a/, but as vowels are not explicitly marked, the actual syllabic value of a consonant in running text is ambiguous and must be inferred from context. Consonant clusters are written using independent letters; there are no conjuncts.

4.2 Vowels

There are 4 vowel letters:

𑊰 A   𑊱 I   𑊲 U   𑊳 E

4.2.1 Notes on Vowels

1. 𐑋 A   This letter is used for representing both /a/ and /a:/ and in some sources for /e/ and /æ/.

2. 𐑌 I   This letter is used for representing /i/ and /i:/. It is also commonly used for writing the semi-vowel /j/ in place of the consonant letter 𐑍 YA.

3. 𐑍 U   This letter is used for representing /u/ and /u:/, as well as /o/.

4. ⌒ E   This letter is used for representing /e/ and /æ/ in some sources, as well as /o/.

4.3 Consonants

There are 33 consonant letters:

𐑅	KA	ᒐ	TTA	ᒑ	DHA	𐑆	LA
𐑇	KHA	𐑈	TTHA	𐑉	NA	ᒒ	VA
𐑊	GA	ᒓ	DDA	𐑋	PA	𐑌	SA
𐑍	GHA	ᒔ	DDHA	𐑎	PHA	𐑏	HA
ᒕ	CA	𐑐	NNA	𐑑	BA	𐑒	RRA
𐑓	CHA	ᒖ	TA	𐑔	BHA	𐑕	RHA
𐑖	JA	𐑗	THA	𐑘	MA		
𐑙	JJA	ᒗ	DA	𐑚	YA		
𐑛	NYA	𐑜	DDDA	𐑝	RA		

4.3.1 Notes on Consonants

1. ᒕ CA   Shown in figure 3 as used for writing both /tʃ/ and /tʃʰ/, while in figure 7, the two are distinguished. The glyphic variant 𐑞 is attested.

2. 𐑓 CHA   This letter has the glyphic variant 𐑝.

3. 𐑖 JA   This letter generally represents /dʒ/, but some sources show it for also writing /dʒʰ/.

4. 𐑛 NYA   This letter appears in written sources (figures 2 and 3), but is unattested in print. It has the variant shape 𐑟.

5. ᒐ TTA   This letter represents /ʈ/, but in some cases it is also used for writing /ʈʰ/.

6. 𐑜 DDDA   This letter is historically used for writing the alveolar implosive /ɗ/, but it is also shown in some sources as being used for representing the cluster /tra/. It has the glyphic variant 𐑠.

7. 𐑡 DDHA This letter historically represents /ɗʱ/. However, the glyphic variant ϐ is shown in figures 7 and 8 as being used for writing /dʱ/, which has the distinct letter ᒑ. The glyph 𐑡 is normative for DDHA as it corresponds to characters in related scripts, eg. 𑋋 U+112CB KHUDAWADI LETTER DDHA, 𑈗 U+11217 KHOJKI LETTER DDHA, ਢ U+0A22 GURMUKHI LETTER DDHA, etc.

8. ꢌ THA   This letter has two distinct glyphic representations: ꢌ and ꢍ. The former is found in written (figure 2) and printed sources (figure 4). The shape ꢍ occurs in a chart from the *Linguistic Survey of India* (figure 3) and corresponds to ਥ U+0A25 ɢᴜʀᴍᴜᴋʜɪ ʟᴇᴛᴛᴇʀ ᴛʜᴀ. The form ꢌ is taken as the representation form because it is the most commonly occuring form of the letter. It is evident that the metal type for ᴛʜᴀ is based upon this form.

9. ꢖ DHA   This letter is shown in figure 3 as representing /d/ and /dʱ/. However, other sources show ꢣ ᴅᴀ as being used for /dʱ/ and /d/. As shown in the glyph comparison in table 1, it is clear that the most commonly used letter for /d/ is ꢣ, as is proposed here. Although the distinction between /d/ and /dʱ/ may not be retained in writing in some sources, it is evident that the letter ꢖ is historically assigned to /dʱ/, which corresponds to characters in related scripts, eg. ਧ U+0A27 ɢᴜʀᴍᴜᴋʜɪ ʟᴇᴛᴛᴇʀ ᴅʜᴀ and 𑆣 U+111A3 ꜱʜᴀʀᴀᴅᴀ ʟᴇᴛᴛᴇʀ ᴅʜᴀ.

10. ꢫ YA   This letter is unattested in written sources, but it is found in printed sources. Generally, the vowel letter ꢓ ɪ is used in place of ʏᴀ.

11. ꢭ LA   This letter has the variant glyph ✕, which is a simplification of the more 'ornate' ꢭ.

12. ꢲ RHA   This letter represents /ɽʱ/. In figure 3, the sound is written as ꢰꢬ. This is not an atomic letter, but a sequence of ꢦ ʜᴀ and ꢬ ʀᴀ that represents the metathesis of /ɽʱ/ as /hr/.

13. ꢱ SA   This letter is used for writing both /s/ and /ʃ/. Presumably, it would also be used for representing the retroflex /ʂ/.

4.3.2 Characters Not Proposed

1. *ɢɢᴀ, *ʙʙᴀ   The velar implosive /ɠ/ and the bilabial implosive /ɓ/ are phonemic in Seraiki, however the available sources in the Multani script indicate that these sound are represented using the letters for the unaspirated stops of the same class, ie. ꢗ ɢᴀ and ꢤ, respective. This may be the result of simplification of the character repertoire. However, distinct letters for the palatal implosive /ʄ/ and alveolar implosive /ɗ/ do exist: ꢙ ᴊᴊᴀ and ꢟ ᴅᴅᴅᴀ, respectively. Although letters for implosive consonants are not found in Punjabi Landa scripts besides Multani, they are found in those of Sindh. Given the attestation of two implosive letters, it is possible that historical records may show a complete set of the letters. For this reason, space is reserved for the potential inclusion of *ɢɢᴀ and *ʙʙᴀ.

2. *ɴɢᴀ   Although distinct letters exist for the class nasals ɴʏᴀ (/ɲ/), ɴɴᴀ (/ɳ/), ɴᴀ (/n/), and ᴍᴀ (/m/), there is no attested letter for /ŋ/. Space has been reserved for *ɴɢᴀ in case the letter is attested.

3. *ᴊʜᴀ   Figure 11 shows the letter ꢙ used for writing *ja* and *jha*. This form of ᴊᴀ differs slightly from those attested in other sources, eg. ꢙ, ꢙ, ꢙ (see table 1. However, the same figure shows the use of a single letter for writing pairs of aspirated and unaspirated sounds, eg. ꢗ for both *ca* and *cha*. The use of ꢙ ᴊᴀ for writing both *ja* and *jha* arises from this practice. Nevertheless, it is possible that a distinct letter for *jha* exists in a style of Multani. For this reason, space has been reserved for *ᴊʜᴀ in the block.

4.4 Digits

There is a full set of decimal digits: ꣐, ꣑, ꣒, ꣓, ꣔, ꣕, ꣖, ꣗, ꣘, ꣙ (see figure 4). These are nearly identical to Gurmukhi digits (੦, ੧, ੨, ੩, ੪, ੫, ੬, ੭, ੮, ੯). The primary difference between the two sets is that the Multani digits 6 and 7 more closely resemble Devanagari ६ ꜱɪx and ७ ꜱᴇᴠᴇɴ than the corresponding

Gurmukhi digits. Therefore, instead of encoding Multani digits separately it is appropriate to unify them with those of Gurmukhi (see Section 5.4).

4.5   Punctuation

The ꞏ SECTION MARK is used for indicating the end of a sentence. It occurs in figure 3 as the form °, which is a glyphic variant.

4.6   Collation

The collating order for Multani is as follows:

A < I < U < E < SA < HA < KA < KHA < GA <

GHA < CA < CHA < JA < JJA < NYA < TTA < TTHA <

DDA < DDHA < NNA < TA < THA < DA < DDDA < DHA <

NA < PA < PHA < BA < BHA < MA < YA < RA < LA <

VA < RRA < RHA

5   Character Data

5.1   Character Properties

```
11280;MULTANI LETTER A;Lo;0;L;;;;;N;;;;;
11281;MULTANI LETTER I;Lo;0;L;;;;;N;;;;;
11282;MULTANI LETTER U;Lo;0;L;;;;;N;;;;;
11283;MULTANI LETTER E;Lo;0;L;;;;;N;;;;;
11284;MULTANI LETTER KA;Lo;0;L;;;;;N;;;;;
11285;MULTANI LETTER KHA;Lo;0;L;;;;;N;;;;;
11286;MULTANI LETTER GA;Lo;0;L;;;;;N;;;;;
11287;<reserved>
11288;MULTANI LETTER GHA;Lo;0;L;;;;;N;;;;;
11289;<reserved>
1128A;MULTANI LETTER CA;Lo;0;L;;;;;N;;;;;
1128B;MULTANI LETTER CHA;Lo;0;L;;;;;N;;;;;
1128C;MULTANI LETTER JA;Lo;0;L;;;;;N;;;;;
1128D;MULTANI LETTER JJA;Lo;0;L;;;;;N;;;;;
1128E;<reserved>
1128F;MULTANI LETTER NYA;Lo;0;L;;;;;N;;;;;
11290;MULTANI LETTER TTA;Lo;0;L;;;;;N;;;;;
11291;MULTANI LETTER TTHA;Lo;0;L;;;;;N;;;;;
11292;MULTANI LETTER DDA;Lo;0;L;;;;;N;;;;;
11293;MULTANI LETTER DDDA;Lo;0;L;;;;;N;;;;;
11294;MULTANI LETTER DDHA;Lo;0;L;;;;;N;;;;;
11295;MULTANI LETTER NNA;Lo;0;L;;;;;N;;;;;
11296;MULTANI LETTER TA;Lo;0;L;;;;;N;;;;;
11297;MULTANI LETTER THA;Lo;0;L;;;;;N;;;;;
11298;MULTANI LETTER DA;Lo;0;L;;;;;N;;;;;
11299;MULTANI LETTER DHA;Lo;0;L;;;;;N;;;;;
1129A;MULTANI LETTER NA;Lo;0;L;;;;;N;;;;;
1129B;MULTANI LETTER PA;Lo;0;L;;;;;N;;;;;
1129C;MULTANI LETTER PHA;Lo;0;L;;;;;N;;;;;
1129D;MULTANI LETTER BA;Lo;0;L;;;;;N;;;;;
```

```
1129E;<reserved>
1129F;MULTANI LETTER BHA;Lo;0;L;;;;;N;;;;;
112A0;MULTANI LETTER MA;Lo;0;L;;;;;N;;;;;
112A1;MULTANI LETTER YA;Lo;0;L;;;;;N;;;;;
112A2;MULTANI LETTER RA;Lo;0;L;;;;;N;;;;;
112A3;MULTANI LETTER LA;Lo;0;L;;;;;N;;;;;
112A4;MULTANI LETTER VA;Lo;0;L;;;;;N;;;;;
112A5;MULTANI LETTER SA;Lo;0;L;;;;;N;;;;;
112A6;MULTANI LETTER HA;Lo;0;L;;;;;N;;;;;
112A7;MULTANI LETTER RRA;Lo;0;L;;;;;N;;;;;
112A8;MULTANI LETTER RHA;Lo;0;L;;;;;N;;;;;
112A9;MULTANI SECTION MARK;Po;0;L;;;;;N;;;;;
```

5.2 Linebreaking

Linebreaking properties given in the data format of `LineBreak.txt`:

```
11280..112A8; AL    # LETTER A .. LETTER RHA
112A9; BA           # SECTION MARK
```

5.3 Syllabic Categories

Syllabic categories given in the data format of `IndicSyllabicCategory.txt`:

```
# Indic_Syllabic_Category=Vowel_Independent
11280..11283  ; Vowel_Independent   # Lo   [4] LETTER A .. LETTER E

# Indic_Syllabic_Category=Consonant
11284..112A8  ; Consonant           # Lo  [32] LETTER KA .. LETTER RHA
```

5.4 Script Extensions

Multani digits are nearly the same as Gurmukhi digits and should be unified with them. This information is to be added to `ScriptExtensions.txt`. The data below uses 'Mult' as the code for Multani.

```
# Script_Extensions=Guru Mult

0A66..0A6F    ; Guru Mult # Nd  [10] GURMUKHI DIGIT ZERO..GURMUKHI DIGIT NINE

# Total code points: 10
```

5.5 'Confusable' Characters

```
11293 MULTANI LETTER DDDA    ;   11216 KHUDAWADI LETTER DDA
112A9 MULTANI SECTION MARK   ;   002C COMMA
```

6 References

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7   Acknowledgments

	1128	1129	112A
0	ᴡ 11280	ᴄ 11290	ᴍ 112A0
1	ɢ 11281	ɢ 11291	ᴍ 112A1
2	ɢ 11282	ᴄ 11292	ᴋ 112A2
3	ᴄ 11283	ᴍ 11293	ᴋ 112A3
4	ᴋ 11284	ᴍ 11294	ᴄ 112A4
5	ᴋ 11285	ᴍ 11295	ᴋ 112A5
6	ᴍ 11286	ᴍ 11296	ᴄ 112A6
7		ᴛ 11297	ᴍ 112A7
8	ᴍ 11288	ᴋ 11298	ᴍ 112A8
9		ᴜ 11299	ᴄ 112A9
A	ᴄ 1128A	ᴍ 1129A	
B	ᴋ 1128B	ᴍ 1129B	
C	ᴍ 1128C	ᴍ 1129C	
D	ᴍ 1128D	ᴍ 1129D	
E			
F	ᴍ 1128F	ᴍ 1129F	

Vowels

11280	ᴡ	MULTANI LETTER A
11281	ɢ	MULTANI LETTER I
11282	ɢ	MULTANI LETTER U
11283	ᴄ	MULTANI LETTER E

Consonants

11284	ᴋ	MULTANI LETTER KA
11285	ᴋ	MULTANI LETTER KHA
11286	ᴍ	MULTANI LETTER GA
11287	▨	<reserved>
11288	ᴍ	MULTANI LETTER GHA
11289	▨	<reserved>
1128A	ᴄ	MULTANI LETTER CA
1128B	ᴋ	MULTANI LETTER CHA
1128C	ᴍ	MULTANI LETTER JA
1128D	ᴍ	MULTANI LETTER JJA
1128E	▨	<reserved>
1128F	ᴍ	MULTANI LETTER NYA
11290	ᴄ	MULTANI LETTER TTA
11291	ɢ	MULTANI LETTER TTHA
11292	ᴄ	MULTANI LETTER DDA
11293	ᴍ	MULTANI LETTER DDDA
		= tra
11294	ᴍ	MULTANI LETTER DDHA
11295	ᴍ	MULTANI LETTER NNA
11296	ᴍ	MULTANI LETTER TA
11297	ᴛ	MULTANI LETTER THA
11298	ᴋ	MULTANI LETTER DA
11299	ᴜ	MULTANI LETTER DHA
1129A	ᴍ	MULTANI LETTER NA
1129B	ᴍ	MULTANI LETTER PA
1129C	ᴍ	MULTANI LETTER PHA
1129D	ᴍ	MULTANI LETTER BA
1129E	▨	<reserved>
1129F	ᴍ	MULTANI LETTER BHA
112A0	ᴍ	MULTANI LETTER MA
112A1	ᴍ	MULTANI LETTER YA
112A2	ᴋ	MULTANI LETTER RA
112A3	ᴋ	MULTANI LETTER LA
112A4	ᴄ	MULTANI LETTER VA
112A5	ᴋ	MULTANI LETTER SA
112A6	ᴄ	MULTANI LETTER HA
112A7	ᴍ	MULTANI LETTER RRA
112A8	ᴍ	MULTANI LETTER RHA

Punctuation

112A9	ᴄ	MULTANI SECTION MARK

Figure 1: Proposed code chart and names list for Multani.

	A	B	C	D		A	B	C	D
A	𐑭	𐑭	𐑭	𐑮	TA	𐑝	𐑝	𐑝	𐑝
I	𐑟	𐑟	𐑟	𐑠	THA	𐑡	𐑢	𐑣	𐑤
U	𐑥	𐑥	𐑥	𐑦	DA	𐑧	𐑨	𐑩	𐑪
E	𐑫	—	𐑫	—	DHA	—	—	𐑬	—
KA	𐑭	𐑭	𐑭	𐑭	NA	𐑮	𐑯	𐑰	𐑱
KHA	𐑲	𐑳	𐑴	𐑵	PA	𐑶	𐑷	𐑸	𐑶
GA	𐑹	𐑺	𐑻	𐑼	PHA	𐑽	𐑾	𐑿	𐒀
GHA	𐒁	𐒂	—	𐒃	BA	𐒄	𐒅	𐒆	𐒇
CA	𐒈	𐒉	𐒊	8	BHA	𐑝	𐑝	—	𐒋
CHA	𐒌	𐒍	𐒎	𐒏	MA	𐒐	𐒑	𐒒	𐒓
JA	𐒔	𐒕	𐒖	𐒗	YA	𐒘	—	𐒙	—
JJA	𐒚	𐒛	—	—	RA	𐒜	𐒝	𐒞	𐒟
NYA	—	𐒠	—	𐒡	LA	𐒢	𐒣	𐒤	𐒥
TTA	𐒦	𐒧	—	𐒨	VA	𐒩	𐒪	𐒫	𐒬
TTHA	𐒭	—	—	—	SA	𐒮	𐒯	𐒰	𐒱
DDA	𐒲	𐒳	𐒴	𐒵	HA	𐒶	𐒷	𐒸	𐒶
DDDA	𐒹	𐒺	𐒻	—	RRA	𐒼	𐒽	𐒾	—
DDHA	𐒿	𐓀	—	𐓁	RHA	𐓂	—	—	𐓃
NNA	𐓄	𐓅	𐓆	𐓇					

Table 1: Comparison of Multani letterforms from (A) Baptist Mission Press 1819: printed; (B) Prinsep 1837: hand-written; (C) Bagster 1848 and Faulmann 1880a: printed; (D) Grierson 1919: hand-written.

	Multani	Arabic		Multani	Arabic
A	ﭞ	اَ, آ, ے	TA	ﭾ	ت
I	ﭺ	اِ, ای, ی	THA	ﭼ	تھ
U	ﭺ	اُ, او, و	DA	ﭺ	د, دھ
E	ﭺ	اے, اَے, او	DHA	ﭼ	دھ
KA	ﭺ	ک	NA	ﭺ	ن
KHA	ﭺ	خ, کھ	PA	ﭺ	پ
GA	ﭼ	گ, گِ, گ	PHA	ﭺ	پھ
GHA	ﭼ	گھ	BA	ﭺ	ب, بِ
CA	ﭺ	چ, چھ	BHA	ﭼ	بھ
CHA	ﭺ	چھ	MA	ﭺ	م
JA	ﭺ	ج, ج, جھ, ز	YA	ﭺ	ی
JJA	ﭺ	ج	RA	ﭺ	ر, ڑ
NYA	ﭺ	نج	LA	ﭺ	ل
TTA	ﭺ	ٹ, ٹھ	VA	ﭺ	و
TTHA	ﭺ	ٹھ	SA	ﭺ	س, ش
DDA	ﭺ	ڈ, ڈِ	HA	ﭺ	ہ
DDDA	ﭺ	ڈ, تّر, دّر	RRA	ﭺ	ڑ
DDHA	ﭺ	ڈھ, دھ	RHA	ﭺ	ڑھ
NNA	ﭺ	ٹ			

Table 2: Correspondences between the Arabic script used at present for writing Seraiki and letters of the Multani script (based upon Shackle 1983: 56, 59).

Figure 2: Comparison of the Multani, Khudawadi, and Marwari scripts (from Prinsep 1837: 352).

Figure 3: Hand-written form of Multani script (from Grierson 1919: 315–316).

[Multani script text in figure]

Figure 4: Excerpt from the Multani *New Testament* print with metal fonts (from Serampore Missionaries 1819: 1).

2. Multan.

Nachdem wir in der Leptša-Schrift einen echt indischen Charakter kennen gelernt haben, nehmen wir eine andere Spur auf und begeben uns an den äusse.-sten Westen Indiens, wo der Charakter der vokallosen Schrift sich noch bis auf den heutigen Tag als eine Brücke erhalten hat welche die

indischen Schriftensysteme mit den semitischen verbindet. Wir lassen zunächst eine Probe des Vaterunsers aus einer im Jahre 1819 in Serampore erschienenen Bibel folgen:

Transscription und Übersetzung:

Ai saragwitš rahanwala asda pita teḍa naw pawitra tha teḍa radž

O Himmel in weilender unser Vater euer Name heilig sei euer Reich

awa   teḍa dilmaṭha saragwitš džaha taha dunyawitš kara wanyna. aska-

zukomme euer Wille Himmel in wie   so Erde auf gethan gehe, unser

džiwan layak   khawun adž asko dawa bhya asḍa   ḍewin asko tšuda džaha

Leben nöthige Nahrung heute uns gieb, und unsere Schuld uns vergieb, wie

asi apna ḍewanwaleki   tšhuḍehun   bhya adžmatwitš aska matan ṭhana

wir selbst Schuldnern vergebend sind, und Versuchung uns nicht führe, son-

para watšhtriakani tšhuḍwa tšhadž radž bhya parākaram bhya mahatam sada

dern Übel von   erlöse denn Reich und Herrlichkeit und   Macht stets

tusḍo hin. Amen.

euch sind. Amen.

     Aus dieser Schriftprobe geht hervor, dass die Vokale ⵁ *a 6 i ☉ u* in dieser Schrift dieselbe Rolle spielen wie א *a ' y ו w* in der hebräischen oder die Vokalzeichen in der Pehlevi-Schrift, die richtige Aussprache bleibt der mündlichen Überlieferung überlassen. Dennoch steht die Multan-Schrift mit der Devanagari in innigster Verbindung, letztere hat mehrere Zeichen derselben entnommen, wie

Multan									
Devanagari	क	ग	च	ण	ड	न	प	म	य	ह
	ka	*ga*	*tša*	*ṇa*	*ḍa*	*na*	*pa*	*ma*	*ya*	*ha*

Figure 5: Excerpt of printed Multani with German translation (from Faulmann 1880b: 454, 455).

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LADAKHI　　　　　　　　　504

Tibetan characters

[Tibetan script text]

Mk. 3:35; 1919

Spoken in eastern Kashmir, near the borders of Tibet, northern India. First publication, St. Mark's Gospel in 1905 at Leh, Ladakh; tr. by Rev. A. H. Francke of the Moravian Mission; lithographed by the BFBS, Calcutta, 1908.

LAEWOMBA　　　　　　　505

(No specimen available.)

Spoken on the Markham River, New Guinea.　First publication, a reader containing Scripture stories in 1917 at Logaweng; tr. by K. Pazzer.

LAHNDA: Hindko　　　　　506

Persian characters

[Persian/Arabic script text]

Spoken by about 800,000 people in Peshawar and Hazara, North West Frontier Province, India.　First publication, St. John's Gospel in 1930 at Lahore by the BFBS; tr. by Miss C. L. Robertson of the Women's Industrial Mission and two native pastors.

LAHULI: Bunan dialect　　　　509

Tibetan characters

[Tibetan script text]

Mk. 3:35; 1911

Spoken by about 2,900 people on the borders of Kashmir and Western Tibet.　First publication, Selections in 1905 by the BFBS; tr. by Rev. A. W. Heyde. St. Mark's Gospel, 1911, at Herrnhut by the BFBS, tr. by Rev. A. F. Francke, of the Moravian Mission.

LAHNDA: Multani　　　　　507

Landa characters

[Landa/Multani script text]

1819

Persian characters

[Persian/Arabic script text]

1898

Spoken in the western Panjab, India.　First publication, the New Testament in Landa characters in 1819 at Serampore by the Mission Press; tr. by the Serampore missionaries (See No. 87).　Persian characters: St. Mark's Gospel, BFBS, Lahore, 1888; tr. by A. Jukes of the CMS; St. Matthew's, St. Luke's and St. John's Gospels, 1898.　　CP: BFBS.

LAHU　　　　　　　　　508

Awlawn ko^ leh: hka: yon ve: chaw: hka: pg'e, chaw: ya^v o^v ve: awhkaw: lo: co: ti, ha: ti, g'a: tu, ve: awlawn yo:.　G'ui, sha: Ya" hpu: hta^ yon ve: chaw: hui: hka: pg'e, lu, kui, she^ kui, lo: ma^v g'a: ga,, co: ti, ha: ti, hta^ g'a: tu,, G'ui, sha: leh:, yaw^v lo: te^v g'a^v ti^v Ya^v hpu: hta^ pi^v kai: hta^v hka: ga,, myigui, ya^v hta^ yaw^v ha" ve: yo.. Myi gui, ya^v hta^ ciyan tu,, G'ui, sha: leh: yaw^v Ya" hpu: hta^ myi gui, hko^ peu: la^v ve: ma^v he^.　Myi-gui, ya^v te^v hpa yaw^v hta^ pa: taw: myi co yu kui lo: g'a: ga, tu, yaw^v peu: la^v ve: yo:.　Yaw^v hta^ yon ve: chaw: hui:, vin^vba^v ciyan ve: hta^ ma^v g'a: hkan.　Ma^vyon ve: chaw: hui:, G'ui, sha: lo: Ya" hpu: te^v g'a: ti^v awmeh: hta^ ma^v yon ve: pa: taw:, chi^v beu^ vin^vba^v ciyan ve: hta^ g'a hkan ve: yo:. Vin^vba^v ciyan ve: hta^ g'a: hkan ve: aw lawn leh: awg'eu^v ba: leh: chi: myigui, hko^ lo^ c: la ve:, myi gui, ya^v leh: awg'eu^ ba: ve: hta, akeh^v leu leh: na^ ho^ ve: hta^ yaw^v hui: ni: ma: hkaw: caw^v ve: yo:.　Awlawn ko^leh: yaw^vhui: hka: te: ve: kan

Jn. 3.15–19

Spoken by about 60,000 people in the southern Shan States near Ken-tung, Burma, and in Yunnan, China.　Reduced to written form by Dr. H. H. Tilbe, American Baptist Foreign Mission Society.　First publication, St. Mark's Gospel in 1924 at Rangoon, by the American Baptist Mission Press; tr. by J. H. Telford of the ABFMS, with native assistants.　New Testament, 1932.

Figure 6: A few lines from the *New Testament* printed in Multani (from The American Bible Society 1938: 202.) A specimen of the text is given here in Figure 4.

CLASS III.]	ALPHABETS.	[INDO-EUROPEAN.

SINDHEE.	MOULTAN OR WUCH.		CASHMERIAN.	
barkm a		barkm a	barkm a	barkm jha
barkm i			barkm a	barkm na
barkm u		barkm dha	barkm i	barkm ta
barkm ka	barkm i		barkm i	barkm tha
barkm kha		barkm na	barkm u	barkm da
barkm ga	barkm n		barkm u	barkm dha
barkm gha		barkm pa	barkm r	barkm na
barkm ca	barkm ka		barkm r	barkm ta
barkm cha		barkm pha	barkm i	barkm tha
barkm ja	barkm kha		barkm i	barkm da
barkm jha		barkm ba	barkm e	barkm dha
barkm na			barkm ai	barkm na
barkm ta		barkm ma	barkm o	barkm pa
barkm tha	barkm ga		barkm au	barkm pha
barkm da		barkm ya	barkm m	barkm ba
barkm na	barkm ca		barkm h	barkm bha
barkm ta		barkm ra	barkm ka	barkm ma
barkm tha	barkm cha		barkm kha	barkm ya
barkm da		barkm la	barkm ga	barkm ra
barkm dha	barkm ja		barkm gha	barkm la
barkm na		barkm va	barkm na	barkm va
barkm pa	barkm da		barkm ca	barkm ca
barkm pha		barkm sa	barkm cha	barkm sha
barkm ba	barkm na		barkm ja	barkm sa
barkm bha		barkm ha		barkm ha
barkm ma	barkm ta			
barkm ya				
barkm ra	barkm da			
barkm la	barkm tha	barkm tra		
barkm va				
barkm sa	barkm da	barkm pause		
barkm ha				
barkm tra				

Multan khya bracket: barkm } kha

Ligatures.

barkm	kya	barkm	pra
barkm	cu	barkm	mpa
barkm	jya	barkm	rja
barkm	tma	barkm	cu
barkm	tu	barkm	sma
barkm	ncu	barkm	sva
barkm	nu	barkm	hya
barkm	nya	barkm	{ vowel omitted

xliv

Figure 7: Table showing the Khudawadi ('Sindhee'), Multani ('Moultan'), and Sharada ('Cashmerian') scripts (from Bagster 1848: xliv).

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SINDH- UND MULTANSCHRIFT.

Sindh		Multan		Sindh		Multan		Sindh		Multan	
Zeichen	Wert	Zeichen	Wert	Zeichen	Wert	Zeichen	Wert	Zeichen	Wert	Zeichen	Wert
⟨ ⟩	a	⟨ ⟩	a	⟨ ⟩	ña, ña			⟨ ⟩	pha	⟨ ⟩	pha
⟨ ⟩	i	⟨ ⟩	i	⟨ ⟩	ṭa			⟨ ⟩	ba	⟨ ⟩	ba
⟨ ⟩	u	⟨ ⟩	u	⟨ ⟩	ṭha			⟨ ⟩	bha		
⟨ ⟩	ka	⟨ ⟩	ka	⟨ ⟩	ḍa	⟨ ⟩	ḍa	⟨ ⟩	ma	⟨ ⟩	ma
⟨ ⟩	kha	⟨ ⟩	kha	⟨ ⟩	ṇa	⟨ ⟩	ṇa	⟨ ⟩	ya	⟨ ⟩	ya
⟨ ⟩	ga	⟨ ⟩	ga	⟨ ⟩	ta	⟨ ⟩	ta	⟨ ⟩	ra	⟨ ⟩	ra
⟨ ⟩	gha			⟨ ⟩	tha	⟨ ⟩	tha	⟨ ⟩	la	⟨ ⟩	la
⟨ ⟩	tša	⟨ ⟩	tša	⟨ ⟩	da	⟨ ⟩	da	⟨ ⟩	va	⟨ ⟩	va
⟨ ⟩	tšha	⟨ ⟩	tšha	⟨ ⟩	dha	⟨ ⟩	dha	⟨ ⟩	sa	⟨ ⟩	sa
⟨ ⟩	dža	⟨ ⟩	dža	⟨ ⟩	na	⟨ ⟩	na	⟨ ⟩	ha	⟨ ⟩	ha
⟨ ⟩	džha			⟨ ⟩	pa	⟨ ⟩	pa	⟨ ⟩	tra	⟨ ⟩	tra

Die vorstehenden Schriften sind in doppelter Art beachtenswert, erstens weil sie in gleicher Weise wie die semitischen Schriften die Vokale in der Mitte der Wörter nicht schreiben, z. B. Sindhisch ⟨ ⟩ *tuhidžo*, zweitens weil ihre Zeichen sich an die semitischen Schriften anlehnen, anderseits sich in der Devanagarischrift vorfinden, wenn diese von der Paliform abweicht; so hat ⟨ ⟩ dieselbe Bedeutung auf Pehlewi-Münzen, ⟨ ⟩ entspricht dem ⟨ ⟩ im Aramäischen, ⟨ ⟩ erinnert an die phönikische Form ⟨ ⟩ χ, ⟨ ⟩ an das phönikische ⟨ ⟩ *š*. Den von den Inschriftformen abweichenden Devanagarizeichen ⟨ ⟩ *ka* entspricht Multan ⟨ ⟩, dem ⟨ ⟩ *kha* (Inschrift ⟨ ⟩) entspricht Sindh ⟨ ⟩ *gha*, ⟨ ⟩ kann ebensowohl von der Inschrift ⟨ ⟩, wie von Sindh ⟨ ⟩ *ga* abstammen, dem ⟨ ⟩ *tšha* entspricht Sindh ⟨ ⟩ *tšha*, dagegen Inschrift ⟨ ⟩ *tšha* dem Devanagari ⟨ ⟩ *la*, Devanagari ⟨ ⟩ hat seine Analogie nur in Sindh ⟨ ⟩ (dagegen Inschrift ⟨ ⟩ *ṇa*), ebenso ⟨ ⟩ Sindh ⟨ ⟩ (Inschrift ⟨ ⟩), ⟨ ⟩ *p*, Sindh ⟨ ⟩ (Inschrift ⟨ ⟩).

Die auffallenden Abweichungen der beiden Schriften von Sindh und Multan beweisen, dass von einer einfachen Entlehnung keine Rede sein kann, denn wir finden Sindh ⟨ ⟩ *tša* als Multan ⟨ ⟩ *ra*, Sindh ⟨ ⟩ *tha* als Multan ⟨ ⟩ *pha*, dagegen befindet sich Multan ⟨ ⟩ *tšha* in Übereinstimmung mit Sindh ⟨ ⟩ *tša*.

Mit Rücksicht auf die Einwanderung der arischen Stämme von Norden liegt die Vermuthung nahe, dass die vorstehenden Schriften des nördlichen Indiens den Grundstock der vedischen Schrift abgaben. Durch die Herrschaft der magadhischen Schrift während der Zeit, wo in ganz Vorderindien der Buddhismus herrschte, wurde die heimische Schrift in den Schatten gestellt. Man zog die fremde Schrift wegen ihres Reichthums an Zeichen und wegen ihrer festen Schreibregeln vor. So kam es, dass die heimische Schrift, welche sich trotzdem im Volke erhielt, zu den gelehrten Werken nicht verwendet und diesfalls die Devanagarischrift vorgezogen wurde.

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Figure 8: Description of Multani and 'Sindhi', showing metal fonts (from Faulmann 1880a: 121). These types are identical to those shown in Figure 7.

Figure 9: Arabic correspondences for the printed form of Multani used in the Serampore *New Testament* (see figure 4 from 1819 (from Shackle 1983: 59).

Figure 10: Arabic correspondences for the written form of Multani that appears in a specimen in the *Linguistic Survey of India* (see figure 3) from 1919 (from Shackle 1983: 56).

MŪLTĀNĪ OF MULTAN.   311

	Laṇḍā.	Laṇḍā of Multan.		Laṇḍā.	Laṇḍā of Multan.
a ('ăiṛā')			ḍa		
i ('iṛi')			ḍha		
u ('ūṛā')			ṇa		
ē			ta		
ō			tha		
sa			da		
ha			dha		
ka			na		
kha			pa		
ga			pha		
gha			ba		
ṅa		...	bha		
cha			ma		
chha			ya		...
ja			ra		
jha			la		
ña			va		
ṭa			ṛa		
ṭha			ṛha	...	

Figure 11: Comparison of basic Landa with Multani (from Grierson 1919: 311)

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Lautwert	Śāradā 804	Kasch-mīrī	Ṭākrī		Laṇḍā		Multanī	Gur-mukhī
			Jaun-sarī	Cha-meālī	Khu-dāwādī	Sindhī-Schrift		
a								
i								
u								
e								
o								
ā								
ka								
kha								
ga								
gha								
ṅa								
ča								
čha								
ǧa								
ǧha								
ña								
ṭa								
ṭha								
ḍa								
ḍha								
ṇa								
ta								
tha								
dä								
dha								
na								
pa								
pha								
ba								
bha								
ma								
ya								
ra								
la								
va								
śa								
ṣa								
sa								
ha								

Figure 12: Scripts of the Sharada family (from Jensen 1969: 366). Multani is classified separately from other 'Landa' scripts, ie. Khudawadi and 'Sindhi-Schrift'.

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	Multani	Khudawadi	Khojki	Gurmukhi	Devanagari
KA	2	ᴎ	ᴣ	क	क
KHA	ⳇ	ϩ	ⲩ	ਖ	ख
GA	ⳡ	⌀	⌀	ग	ग
GGA	—	ⅾ	⅔	—	ग़
GHA	ⳋ	⊘	⊌	ਘ	घ
CA	ⳝ	⅄	ⅉ	ਚ	च
CHA	ⳃ	⅗	⅔	ਛ	छ
JA	ⳤ	⌀	⅌	ਜ	ज
JJA	⳥	⅊	⅌	—	ज़
JHA	—	ⅎ	—	ਝ	झ
NYA	⳧	⌀·	ⴰ꞉	ਞ	ञ
TTA	ⳓ	⊂	⊇	ਟ	ट
TTHA	Ⳕ	ⅇ	ⴈ	ਠ	ठ
DDA	ⳕ	⌀	ⅽ	ਡ	ड
DDDA	Ⳗ	⅀	⅗	—	ड़
DDHA	ⳗ	⌀	⅌	ਢ	ढ
NNA	ⳡ	ⅲ	ⴲ	ਣ	ण
TA	Ⳙ	⌀	ⵀ	ਤ	त
THA	ⳙ	ⅿ	ⴴ	ਥ	थ

Table 3: Comparision of Multani, Khudawadi, Khojki, Gurmukhi, and Devanagari letters.

	Multani	Khudawadi	Khojki	Gurmukhi	Devanagari
DA	૨	૨	૨	ਦ	द
DHA	ધ	૨	૨	ਧ	ध
NA	૨	✓	૭	ਨ	न
PA	੫	੮	੫	ਪ	प
PHA	ੲ	੭	ੴ	ਫ	फ
BA	੪	ੲ	ੲ	ਬ	ब
BBA	—	੭	ੲ	—	ब़
BHA	੩	ੲੲ	੭	ਭ	भ
MA	੩	ੲ	ੲੴ	ਮ	म
YA	੩	੩੨	੭੭੭	ਜ	य
RA	੪	੨	੨	ਰ	र
LA	੪	੨	੩	ਲ	ल
VA	੬	੦	੧	ਵ	व
SHA	—	ੲੲ	—	ਸ਼	श
SSA	—	—	—	—	ष
SA	੪	ੲੲ	੪੦	ਸ	स
HA	੪	੭	੩	ਹ	ह
LLA	—	—	ੴ	ਲ਼	ळ
RRA	੨	੪	—	ੜ	(ड़)
RHA	੩	—	—	—	(ढ़)

Table 4: Comparision of Multani, Khudawadi, Khojki, Gurmukhi, and Devanagari letters.

A. Administrative

1. **Title:** *Proposal to Encode the Multani Script in ISO/IEC 10646*
2. Requester's name: *Script Encoding Initiative (SEI) / Anshuman Pandey (pandey@umich.edu)*
3. Requester type (Member body/Liaison/Individual contribution): *Liaison contribution*
4. Submission date: *2012-09-25*
5. Requester's reference (if applicable):
6. Choose one of the following:
     This is a complete proposal: *Yes*
     (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): *Yes*
          Proposed name of script: *Multani*
     b. The proposal is for addition of character(s) to an existing block:
          Name of the existing block:
2. Number of characters in proposal: *38*
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		E-Minor extinct	X
F-Archaic Hieroglyphic or Ideographic				G-Obscure or questionable usage symbols	

4. Is a repertoire including character names provided? *Yes*
     a. If YES, are the names in accordance with the "character naming guidelines"
          in Annex L of P&P document? *Yes*
     b. Are the character shapes attached in a legible form suitable for review? *Yes*
5. Fonts related:
     a. Who will provide the appropriate computerized font to the Project Editor of 10646 for publishing the standard?
          Anshuman Pandey
     b. Identify the party granting a license for use of the font by the editors (include address, e-mail, ftp-site, etc.):
          Anshman Pandey (pandey@umich.edu)
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 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)? *Yes*

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 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 Unicode Character Database (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?   *No*
   Reference: *Information on current user community is unknown; the script is extinct*

4. The context of use for the proposed characters (type of use; common or rare)   *Common*
   Reference: *Used for writing Seraiki (Multani) until the early 20th century*

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?   *N/A*
   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?   *No*
    If YES, is a rationale for such use provided?
    If YES, reference:
    Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?
    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)

13. Does the proposal contain any Ideographic compatibility characters?   *No*
    If YES, are the equivalent corresponding unified ideographic characters identified?
    If YES, reference: