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Proposal to Encode the Tirhuta Script in ISO/IEC 10646

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1 Introduction

This is a proposal to encode the Tirhuta script in the Universal Character Set (UCS). The recommendations made here are based upon the following documents:

- L2/06-226 “Request to Allocate the Maithili Script in the Unicode Roadmap”
- N3765 L2/09-329 “Towards an Encoding for the Maithili Script in ISO/IEC 10646”

Tirhuta was called the ‘Maithili’ script in previous documents. A discussion of the names used for the script and the rationale for the change of name is offered in Section 3.1.

2 Background

Tirhuta is the traditional writing system for the Maithili language (ISO 639: mai), which is spoken in the state of Bihar in India and in the Narayani and Janakpur zones of Nepal by more than 35 million people. Maithili is a scheduled language of India and the second most spoken language in Nepal. Tirhuta is a Brahmi-based script derived from Gauḍī, or ‘Proto-Bengali’, which evolved from the Kuṭila branch of Brahmi by the 10th century CE. It is related to the Bengali, Newari, and Oriya scripts, which are also descended from Gauḍī, and became differentiated from them by the 14th century.[1] Tirhuta remained the primary writing system for Maithili until the 20th century, at which time it was replaced by Devanagari.

The Tirhuta script forms the basis of scholarly and religious scribal traditions associated with the Maithili and Sanskrit languages since the 14th century CE. The earliest records in Tirhuta are inscriptional records found on temples in Bihar and Nepal that are dated to the 13th century. The Maithil Brahmin and Kayasth communities have used the script for maintaining *pañjī* (genealogical records) from at least the 14th century to the present. Tirhuta continues to be used for writing manuscripts of religious and literary texts, as well as for personal correspondence. Printing in Tirhuta began in the 1920s with the production of metal fonts in Calcutta. Since the 1950s, various literary societies, such as the Maithili Akademi and Chetna Samiti, have been publishing literary, educational, and linguistic materials in Tirhuta (see figures 2 and 3). The script is also used for other purposes, such as in signage in Darbhanga and other districts of north Bihar and as an optional script for writing the civil services examination in Bihar.

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[1] Salomon 1998: 41.

In the past two decades, Maithili speakers have adapted Tirhuta for use with digital technologies. Beginning in the 1990s, users developed basic support for Tirhuta on computers by creating the first digitized fonts for the script. Today, several books and periodicals are produced in Tirhuta using desktop publishing software. These documents are available in printed and electronic formats. One such periodical is *Videha*, which is published bi-weekly in Tirhuta in Portable Document Format (PDF) (see Figure 11). However, there is an obstacle to complete support for Tirhuta in digital media: the absence of a character-encoding standard for the script. Maithili speakers have managed to overcome this barrier by developing Tirhuta fonts that are based upon legacy encodings or that are mapped to Unicode blocks such as Devanagari. But, these solutions do not allow for the representation of Tirhuta in plain text. The lack of a Unicode standard for Tirhuta impedes its use for basic activities, such as writing e-mails, creating websites, and publishing blogs; in digital typsetting; and in larger projects, such as establishing a Maithili Wikipedia.

The Government of India recognized Maithili as a scheduled language in 2004, a status that provides official support for the development of the language. The granting of scheduled status to Maithili has resulted in increased interest in Tirhuta and has revived its usage. In a presentation to the Unicode Technical Committee in 2005, Dr. Om Vikas of the Department of Information Technology, Government of India noted the historical importance of Tirhuta and expressed the Department's interest in including the script in the Unicode standard (see L2/05-063). More recently, an article in the *Times of India* (2010) featured the present author's efforts to develop a Unicode standard for Tirhuta. Such reports are evidence of the growing interest in and usage of the script. An encoding for Tirhuta in the UCS will permit its representation in plain text, will provide a standard for supporting and expanding current usage of the script, and will facilitate the development of new resources in the Maithili language.

3 Proposal Details

3.1 Script Name

The name of the script is 'Tirhuta'. It is also known as 'Mithilakshar' and 'Maithili'. The names 'Tirhuta' and 'Mithilakshar' are attested in historical sources, while 'Maithili' is a more modern designation. 'Tirhuta' is the traditional and most commonly used name for the script and is recognized as such by speakers of Maithili. It is derived from 'Tirhut' or 'Tirabhukti', which means the "land of river banks". The name Tirhut refers to the region of Bihar north of the Ganges river that is congruous with the Maithili-speaking area. Tirhuta is known in Bengal as *tiruṭe*, meaning the script "of the Tirhut region."[2] An older name for Tirhut is 'Mithila', which is the basis for the name 'Mithilakshar' (*mithilā* + *akṣara* 'letter') or the 'script of Mithila'. The name 'Maithili' appears in several modern sources and its usage is based upon the practice of linking writing systems to languages. However, as the Maithili language has historically been written in Tirhuta, Kaithi, Newari, and Devanagari, each of these might be considered 'Maithili' scripts. Of these names, 'Tirhuta' is uniquely associated with the proposed script and is recognized by Maithili speakers.

3.2 Character Repertoire

The 82 characters in this proposal comprise the core set of Tirhuta letters and signs. The script is currently allocated in the Supplementary Multilingual Plane at the range U+11480..U+114DF. The proposed code chart and names list is provided in Figure 1.

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[2] Chatterji 1926: 225.

3.3 Encoding Considerations

Although Tirhuta is an independent script, several of its characters bear resemblance to those of Bengali (see discussion in N3765 L2/09-329). These include the shapes of some consonants, vowels, and vowel signs (see tables 3–7 and Section 4.21). These similarities, however, are superficial. The actual differences are visible in the behaviors of characters in certain environments, such as consonant-vowel combinations and in consonant conjuncts, that are common in standard Tirhuta orthography. Despite the similarities between the two scripts, Tirhuta cannot be unified with Bengali. In fact, some orthographic features of Tirhuta prevent mutual intelligibility with Bengali. Proper representation of Tirhuta in plain-text requires the preservation of its distinct rendering behaviors. This can only be accomplished at the character level, through character content that is independent of font changes, alterations to text styles, or other formatting.

4 Writing System

4.1 Structure

The general structure (phonetic order, *mātrā* reordering, use of *virāma*, etc.) of Tirhuta is similar to that of other Indic scripts based upon the Brahmi model. The script is written from left-to-right.

4.2 Virāma

The Tirhuta ◌𑓂 VIRAMA is identical in function to the corresponding character in other Indic scripts.

4.3 Vowels

There are 14 vowel letters:

𑒁	A	𑒅	U	𑒉	VOCALIC L	𑒍	O
𑒂	AA	𑒆	UU	𑒊	VOCALIC LL	𑒎	AU
𑒃	I	𑒇	VOCALIC R	𑒋	E		
𑒄	II	𑒈	VOCALIC RR	𑒌	AI		

4.4 Vowel Signs

There are 15 combining vowel signs:

◌𑒰	SIGN AA	◌𑒴	SIGN UU	◌𑒸	SIGN VOCALIC LL	◌𑒼	SIGN O
◌𑒱	SIGN I	◌𑒵	SIGN VOCALIC R	◌𑒹	SIGN E	◌𑒽	SIGN O
◌𑒲	SIGN II	◌𑒶	SIGN VOCALIC RR	◌𑒺	SIGN SHORT E	◌𑒾	SIGN AU
◌𑒳	SIGN U	◌𑒷	SIGN VOCALIC L	◌𑒻	SIGN AI		

There are 3 two-part vowel signs: ◌𑒻 SIGN AI, ◌𑒼 SIGN O, ◌𑒾 SIGN AU. Note the method of writing ◌𑒻 SIGN AI: The first element is written before the consonant and the other attaches above the letter (compare Bengali ◌ৈ SIGN AI).

The signs ◌𑒺 SHORT E and ◌𑒽 SHORT O do not have independent forms because the sounds they represents do not occur word initially.

Certain vowel signs have special rendering behaviors when they occur in consonant-vowel combinations with certain consonants (see Section 4.7).

4.5 Representation of Vowel Letters and Signs

Some atomic vowel letters may be represented using a sequence of a base vowel letter and a vowel sign. Also, some atomic vowel signs may be represented using a sequence of two vowel signs. This practice is not recommended. The atomic character for the vowel letter and sign should always be used. The characters in question are specified below:

RECOMMENDED	NOT RECOMMENDED
𑒂 AA	𑒁 A + ◌𑒰 SIGN AA
𑒈 VOCALIC RR	𑒇 VOCALIC R + ◌𑒵 SIGN VOCALIC R
𑒉 VOCALIC L	𑒪 LA + ◌𑒵 SIGN VOCALIC R
𑒊 VOCALIC LL	𑒪 LA + ◌𑒶 SIGN VOCALIC RR
𑒌 AI	𑒋 E + ◌𑒺 SIGN SHORT E
𑒎 AU	𑒍 O + ◌𑒺 SIGN SHORT E
◌𑒻 SIGN AI	◌𑒹 SIGN E + ◌𑒺 SIGN SHORT E
◌𑒼 SIGN O	◌𑒹 SIGN E + ◌𑒰 SIGN AA
◌𑒽 SIGN SHORT O	◌𑒰 SIGN AA + ◌𑒺 SIGN SHORT E
◌𑒾 SIGN AU	◌𑒹 SIGN E + ◌𑒽 SIGN SHORT O

4.6 Consonants

There are 33 consonant letters:

𑒏	KA	𑒘	NYA	𑒡	DHA	𑒪	LA
𑒐	KHA	𑒙	TTA	𑒢	NA	𑒫	VA
𑒑	GA	𑒚	TTHA	𑒣	PA	𑒬	SHA
𑒒	GHA	𑒛	DDA	𑒤	PHA	𑒭	SSA
𑒓	NGA	𑒜	DDHA	𑒥	BA	𑒮	SA
𑒔	CA	𑒝	NNA	𑒦	BHA	𑒯	HA
𑒕	CHA	𑒞	TA	𑒧	MA		
𑒖	JA	𑒟	THA	𑒨	YA		
𑒗	JHA	𑒠	DA	𑒩	RA		

Each consonant letter bears an inherent vowel, represented by /a/. This inherent vowel is silenced using the ◌𑓂 VIRAMA. Certain consonants have special rendering behaviors when they occur in conjuncts (see Section 4.8) or in word-final position (see Section 4.9).

4.7 Consonant-Vowel Combinations

Combinations of consonants and vowels are written using combining vowel signs. Certain CV combinations have special rendering behaviors. These are described below:

- **Contextual form of VOWEL SIGN U** The vowel sign ◌𑒳 U has the contextual form ◌্ব, which is used with certain consonants and is written with these letters as a ligature.

	gu	*ju*	*ṇu*	*du*	*nu*	*pu*	*mu*	*lu*	*śu*	*su*
Tirhuta	𑒑𑒳	𑒖𑒳	𑒝𑒳	𑒠𑒳	𑒢𑒳	𑒣𑒳	𑒧𑒳	𑒪𑒳	𑒬𑒳	𑒮𑒳
Bengali	গু	জু	ণু	দু	নু	পু	মু	লু	শু	সু

  In Bengali, the element ◌্ব represents *ba-phala*, or the subjoined form of ব BA and is used in the creation of conjuncts. For example, স্ব represents Tirhuta *su*, but Bengali *sva*; in Tirhuta, *sva* is written as 𑒮𑓂𑒫.

- **Ligatures formed with VOWEL SIGN U** Combinations of certain consonants and the vowel sign ◌𑒳 U are written as special ligatures:

	ku	*tu*	*dhu*	*bhu*	*ẏu*	*yu*	*ru*	*ṣu*	*hu*
Tirhuta	𑒏𑒳	𑒞𑒳	𑒡𑒳	𑒦𑒳	𑒨𑓃𑒳	𑒨𑒳	𑒩𑒳	𑒭𑒳	𑒯𑒳
Bengali	কু	তু	ধু	ভু	য়ু	যু	রু	ষু	হু

- **Ligatures formed with VOWEL SIGN UU** Combinations of certain consonants and the vowel sign ◌𑒴 UU are written as special ligatures:

	kū	*dhū*	*rū*	*hū*
Tirhuta	𑒏𑒴	𑒡𑒴	𑒩𑒴	𑒯𑒴
Bengali	কূ	ধূ	রূ	হূ

- **Ligatures formed with VOWEL SIGN VOCALIC R** Combinations of certain consonants and the vowel sign ◌𑒵 VOCALIC R are written as special ligatures:

	kr̥	*tr̥*	*br̥*	*bhr̥*	*hr̥*
Tirhuta	𑒏𑒵	𑒞𑒵	𑒥𑒵	𑒦𑒵	𑒯𑒵
Bengali	কৃ	তৃ	বৃ	ভৃ	হৃ

4.8 Consonant Conjuncts

Consonant clusters are generally represented as complex ligatures (see Table 7). Certain consonants have other special rendering behaviors when they occur in clusters. These are described below:

1. **Letter TA** The representation of 𑒞 TA as C_1 is determined by C_2. If C_2 is 𑒞 TA, 𑒨 YA, 𑒩 RA, or 𑒫 VA, the conjunct is written as a ligature or with subjoined forms of C_2. With all other consonants, TA takes the two-part form 𑒞𑓂◌. For example, *tka* is written as 𑒞𑓂𑒏, eg. 𑒮𑒩𑒞𑓂𑒏𑒰𑒪 *saratkāla*. This behavior of TA resembles Bengali ৎ KHANDA TA, eg. সরৎকাল *saratkāla*. However, unlike KHANDA TA, it is

unnecessary to encode ◌𑓂 as an independent character because the context for its use are predictable. A variant form of ◌𑓂 attested in recent printed materials is 𑒞𑓂, eg. 𑒮𑒩𑒞𑓂𑒏𑒰𑒪 *saratkāla*.

2. **Letter NA** When 𑒢 NA is C_2 in conjuncts with certain consonants, it takes the subjoined form ◌𑓂𑒢. This form is used when the following consonants are C_1: KHA (𑒐𑓂𑒢 *khna*); PHA (𑒤𑓂𑒢 *phna*); SA (𑒮𑓂𑒢 *sna*).

3. **Letter BA** The letter 𑒥 BA has the following contextual forms when it appears in the following environments:

   (a) *Consonant-vowel combinations* The letter BA take the conjunct contextual form when it is written with ◌𑒵 SIGN VOCALIC R. This combination is written not as *𑒥𑒵, but as 𑒥𑒵.

   (b) *Conjunct onset* When BA is C_1 in certain clusters it takes the shape 𑒥𑓂, eg. 𑒥𑓂𑒠 *bda*.

   (c) *Conjunct final* When BA is C_2 it has the form ◌𑓂𑒥, eg. 𑒧𑓂𑒥 *mba*; compare 𑒧𑒳 *mu* and 𑒧𑓂𑒫 *mva*.

4. **Letter YA** When 𑒨 YA is C_2, its representation in a conjunct is dependent upon C_1:

   (a) *Atomic ligature* If C_1 is TA, it combines with YA to form a ligature: 𑒞𑓂𑒨 *tya* (Bengali ত্য).

   (b) *Post-base form* In conjuncts with other letters, YA takes the form ◌𑓂𑒨 and is written sequentially after C_1: 𑒞𑓂𑒨 *tya*. With some consonants, the post-base form joins with the base consonant to form a distinct ligature:

	dya	*nya*	*bhya*	*śya*	*sya*	*hya*
Tirhuta	𑒠𑓂𑒨	𑒢𑓂𑒨	𑒦𑓂𑒨	𑒬𑓂𑒨	𑒮𑓂𑒨	𑒯𑓂𑒨
Bengali	দ্য	ন্য	ভ্য	শ্য	স্য	হ্য

5. **Letter RA** The shape of RA as C_1 is dependent upon C_2:

   (a) *Repha* With the majority of consonants, RA as C_1 is written as ◌𑒩𑓂 *repha*, eg. 𑒩𑓂𑒣 *rpa*.

   (b) *Ligature* In some cases, RA forms a ligature with C_2. This is the common representation when GA is C_2: 𑒩𑓂𑒑 *rga* (Bengali র্গ).

6. **Letter LA** When LA is C_2, it takes the subjoined form ◌𑓂𑒪: 𑒏𑓂𑒪 *kla* (Bengali ক্ল), 𑒤𑓂𑒪 *phla* (Bengali ফ্ল), 𑒬𑓂𑒪 *śla* (Bengali শ্ল).

7. **Letter VA** When VA is C_2, it takes the subjoined form ◌𑓂𑒫, eg. 𑒮𑓂𑒫 *sva*.

4.9 Contextual Forms of Consonants

Certain consonants have special forms when they appear in word-final positions:

1. **Letter TA** The sequence <TA, VIRAMA> is written as 𑒞𑓂 (not 𑒞𑓂) at word-final position.
2. **Letter MA** the sequence <MA, VIRAMA> is written as 𑒧𑓂 (not 𑒧𑓂) at word-final position.

4.10 Nasalization

Nasalization is indicated by ◌𑒿 CANDRABINDU and ◌𑓀 ANUSVARA. These signs are written centered above the base. If written with an above-base sign or a letter with a graphical element that extends past the headstroke, they placed to the right of such these signs and elements.

4.11 Characters for Representing Sanskrit

The following characters are attested in Vedic and classical Sanskrit manuscripts written in Tirhuta:

1. ◌𑓁 VISARGA This sign represents an allophone of 𑒩 RA or 𑒮 SA at word-final position in Sanskrit orthography.
2. 𑓅 GVANG This sign represents nasalization. It belongs to the same class of characters as ᳩ U+1CE9 VEDIC SIGN ANUSVARA ANTARGOMUKHA, ᳪ U+1CEA VEDIC SIGN ANUSVARA BAHIRGOMUKHA, etc.
3. ᳲ *ardhavisarga* Represents /x/ *jihvāmūlīya* and /ɸ/ *upadhmānīya*. This character is not proposed for independent encoding and should be unified with ᳲ U+1CF2 VEDIC SIGN ARDHAVISARGA.

4.12 Nukta

The ◌𑓃 NUKTA is used for writing sounds that are not represented by a unique character, such as allophonic variants and sounds that occur in local dialects or in loanwords. The following combinations of consonant letter + NUKTA are attested in Tirhuta:

/ɽ/	𑒛𑓃	DDA + NUKTA
/ɽh/	𑒜𑓃	DDHA + NUKTA
/ɭ/	𑒪𑓃	LA + NUKTA
/j/	𑒨𑓃	YA + NUKTA

The NUKTA may be written with any vowel or consonant letter. If other combining marks, such as a vowel sign or ANUSVARA, also appear with the base character, then the NUKTA is written first, eg. 𑒪𑓃𑒰 <LLA, NUKTA, SIGN AA>.

The graphical structures of 𑒥 BA and 𑒫 VA possess a dot; however this dot is semantically not equivalent to NUKTA. These letters do not decompose to NUKTA and are treated as atomic characters.

4.13 Punctuation

Tirhuta uses । DANDA and ॥ DOUBLE DANDA. These should be unified with the Devanagari characters । U+0964 DEVANAGARI DANDA and ॥ U+0965 DEVANAGARI DOUBLE DANDA.

4.14 Abbreviation

The 𑓆 ABBREVIATION SIGN is used for marking abbreviations.

4.15 Digits

Tirhuta has a full set of decimal digits: 𑓐 ZERO, 𑓑 ONE, 𑓒 TWO, 𑓓 THREE, 𑓔 FOUR, 𑓕 FIVE, 𑓖 SIX, 𑓗 SEVEN, 𑓘 EIGHT, 𑓙 NINE.

4.16 Number Forms and Unit Marks

Number forms and unit marks are found in Tirhuta documents (see Figure 9). The most common characters are signs for writing fractions: eg. ꠱ U+A831 NORTH INDIC FRACTION ONE HALF, ꠲ U+A832 NORTH INDIC FRACTION THREE QUARTERS, etc.; and currency marks: eg. ꠸ U+A838 NORTH INDIC RUPEE MARK. These characters may be represented using those encoded in the 'Common Indic Number Forms' block (U+A830..U+A83F), which are described in N3367 L2/07-354. Also used are Bengali 'currency numerators', eg. ৴ U+09F4 BENGALI CURRENCY NUMERATOR ONE.

4.17 Special Signs

There are two script-specific special signs in Tirhuta:

1. 𑒀 **ANJI** This symbol is an important and uniquely Tirhuta character that is used in the invocations of letters, manuscripts, books, and charts of the script. The sign *āñjī* is said to represent the tusk of the deity Gaṇeśa, patron of learning.
2. 𑓇 **OM** This symbol is a unique character in Tirhuta. In Bengali, the sign is represented as ওঁ, which is a simple combination of O and CANDRABINDU.

4.17.1 Variant Characters

Tirhuta has variant forms for several letters, character elements, and conjuncts:

- The letter 𑒩 RA has two variant forms: (a) 𑒩 and (b) 𑒩. These variants produce consonant-vowel ligatures: (a) 𑒩𑒳 *ru* and 𑒩𑒴 *rū*; and (b) 𑒩𑒳 *ru* and 𑒩𑒴 *rū*.
- The character 𑒇 VOCALIC R has the variant form 𑒇
- The character 𑒈 VOCALIC RR has the variant form 𑒈,
- The conjunct-onset form of 𑒞 TA is represented as both 𑒞𑓂 and 𑒞𑓂.

All variant forms should be managed at the font level.

4.18 Collation

The basic collating order for Tirhuta is as follows:

𑒀 ANJI < 𑒁 A < 𑒂 AA < 𑒃 I < 𑒄 II < 𑒅 U < 𑒆 UU < 𑒇 VOCALIC R <
𑒈 VOCALIC RR < 𑒉 VOCALIC L < 𑒊 VOCALIC LL < 𑒋 E < 𑒌 AI < 𑒍 O < 𑒎 AU <
𑒏 KA < 𑒐 KHA < 𑒑 GA < 𑒒 GHA < 𑒓 NGA < 𑒔 CA < 𑒕 CHA < 𑒖 JA < 𑒗 JHA <
𑒘 NYA < 𑒙 TTA < 𑒚 TTHA < 𑒛 DDA < 𑒜 DDHA < 𑒝 NNA < 𑒞 TA < 𑒟 THA <
𑒠 DA < 𑒡 DHA < 𑒢 NA < 𑒣 PA < 𑒤 PHA < 𑒥 BA < 𑒦 BHA < 𑒧 MA < 𑒨 YA <
𑒩 RA < 𑒪 LA < 𑒫 VA < 𑒬 SHA < 𑒭 SSA < 𑒮 SA < 𑒯 HA < 𑒰 SIGN AA <

◌𑒱 SIGN I < ◌𑒲 SIGN II < ◌𑒳 SIGN U < ◌𑒴 SIGN UU < ◌𑒵 SIGN VOCALIC R <
◌𑒶 SIGN VOCALIC RR < ◌𑒷 SIGN VOCALIC L < ◌𑒸 SIGN VOCALIC LL < ◌𑒺 SIGN SHORT E <
◌𑒹 SIGN E < ◌𑒻 SIGN AI < ◌𑒽 SIGN SHORT O < ◌𑒼 SIGN O < ◌𑒾 SIGN AU <
◌𑒿 CANDRABINDU < ◌𑓀 ANUSVARA < ◌𑓁 VISARGA < ◌𑓂 VIRAMA

Combinations of consonant letter + NUKTA are sorted with the base letter.

The symbol 𑓅 GVANG has the same collation weight as ◌𑓀 ANUSVARA.

4.19 Linebreaking

Letters, vowel signs, and digits behave as in Bengali.

4.20 Character Properties

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11480;TIRHUTA ANJI;Lo;0;L;;;;;N;;;;;
11481;TIRHUTA LETTER A;Lo;0;L;;;;;N;;;;;
11482;TIRHUTA LETTER AA;Lo;0;L;;;;;N;;;;;
11483;TIRHUTA LETTER I;Lo;0;L;;;;;N;;;;;
11484;TIRHUTA LETTER II;Lo;0;L;;;;;N;;;;;
11485;TIRHUTA LETTER U;Lo;0;L;;;;;N;;;;;
11486;TIRHUTA LETTER UU;Lo;0;L;;;;;N;;;;;
11487;TIRHUTA LETTER VOCALIC R;Lo;0;L;;;;;N;;;;;
11488;TIRHUTA LETTER VOCALIC RR;Lo;0;L;;;;;N;;;;;
11489;TIRHUTA LETTER VOCALIC L;Lo;0;L;;;;;N;;;;;
1148A;TIRHUTA LETTER VOCALIC LL;Lo;0;L;;;;;N;;;;;
1148B;TIRHUTA LETTER E;Lo;0;L;;;;;N;;;;;
1148C;TIRHUTA LETTER AI;Lo;0;L;;;;;N;;;;;
1148D;TIRHUTA LETTER O;Lo;0;L;;;;;N;;;;;
1148E;TIRHUTA LETTER AU;Lo;0;L;;;;;N;;;;;
1148F;TIRHUTA LETTER KA;Lo;0;L;;;;;N;;;;;
11490;TIRHUTA LETTER KHA;Lo;0;L;;;;;N;;;;;
11491;TIRHUTA LETTER GA;Lo;0;L;;;;;N;;;;;
11492;TIRHUTA LETTER GHA;Lo;0;L;;;;;N;;;;;
11493;TIRHUTA LETTER NGA;Lo;0;L;;;;;N;;;;;
11494;TIRHUTA LETTER CA;Lo;0;L;;;;;N;;;;;
11495;TIRHUTA LETTER CHA;Lo;0;L;;;;;N;;;;;
11496;TIRHUTA LETTER JA;Lo;0;L;;;;;N;;;;;
11497;TIRHUTA LETTER JHA;Lo;0;L;;;;;N;;;;;
11498;TIRHUTA LETTER NYA;Lo;0;L;;;;;N;;;;;
11499;TIRHUTA LETTER TTA;Lo;0;L;;;;;N;;;;;
1149A;TIRHUTA LETTER TTHA;Lo;0;L;;;;;N;;;;;
1149B;TIRHUTA LETTER DDA;Lo;0;L;;;;;N;;;;;
1149C;TIRHUTA LETTER DDHA;Lo;0;L;;;;;N;;;;;
1149D;TIRHUTA LETTER NNA;Lo;0;L;;;;;N;;;;;
1149E;TIRHUTA LETTER TA;Lo;0;L;;;;;N;;;;;
1149F;TIRHUTA LETTER THA;Lo;0;L;;;;;N;;;;;
114A0;TIRHUTA LETTER DA;Lo;0;L;;;;;N;;;;;
114A1;TIRHUTA LETTER DHA;Lo;0;L;;;;;N;;;;;
114A2;TIRHUTA LETTER NA;Lo;0;L;;;;;N;;;;;
114A3;TIRHUTA LETTER PA;Lo;0;L;;;;;N;;;;;
114A4;TIRHUTA LETTER PHA;Lo;0;L;;;;;N;;;;;
114A5;TIRHUTA LETTER BA;Lo;0;L;;;;;N;;;;;
114A6;TIRHUTA LETTER BHA;Lo;0;L;;;;;N;;;;;
114A7;TIRHUTA LETTER MA;Lo;0;L;;;;;N;;;;;
114A8;TIRHUTA LETTER YA;Lo;0;L;;;;;N;;;;;
114A9;TIRHUTA LETTER RA;Lo;0;L;;;;;N;;;;;
```

```
114AA;TIRHUTA LETTER LA;Lo;0;L;;;;;N;;;;;
114AB;TIRHUTA LETTER VA;Lo;0;L;;;;;N;;;;;
114AC;TIRHUTA LETTER SHA;Lo;0;L;;;;;N;;;;;
114AD;TIRHUTA LETTER SSA;Lo;0;L;;;;;N;;;;;
114AE;TIRHUTA LETTER SA;Lo;0;L;;;;;N;;;;;
114AF;TIRHUTA LETTER HA;Lo;0;L;;;;;N;;;;;
114B0;TIRHUTA VOWEL SIGN AA;Mc;0;L;;;;;N;;;;;
114B1;TIRHUTA VOWEL SIGN I;Mc;0;L;;;;;N;;;;;
114B2;TIRHUTA VOWEL SIGN II;Mc;0;L;;;;;N;;;;;
114B3;TIRHUTA VOWEL SIGN U;Mn;0;NSM;;;;;N;;;;;
114B4;TIRHUTA VOWEL SIGN UU;Mn;0;NSM;;;;;N;;;;;
114B5;TIRHUTA VOWEL SIGN VOCALIC R;Mn;0;NSM;;;;;N;;;;;
114B6;TIRHUTA VOWEL SIGN VOCALIC RR;Mn;0;NSM;;;;;N;;;;;
114B7;TIRHUTA VOWEL SIGN VOCALIC L;Mn;0;NSM;;;;;N;;;;;
114B8;TIRHUTA VOWEL SIGN VOCALIC LL;Mn;0;NSM;;;;;N;;;;;
114B9;TIRHUTA VOWEL SIGN E;Mc;0;L;;;;;N;;;;;
114BA;TIRHUTA VOWEL SIGN SHORT E;Mn;0;NSM;;;;;N;;;;;
114BB;TIRHUTA VOWEL SIGN AI;Mc;0;L;114B9 114BA;;;;N;;;;;
114BC;TIRHUTA VOWEL SIGN O;Mc;0;L;114B9 114B0;;;;N;;;;;
114BD;TIRHUTA VOWEL SIGN SHORT O;Mc;0;L;;;;;N;;;;;
114BE;TIRHUTA VOWEL SIGN AU;Mc;0;L;114B9 114BD;;;;N;;;;;
114BF;TIRHUTA SIGN CANDRABINDU;Mn;0;NSM;;;;;N;;;;;
114C0;TIRHUTA SIGN ANUSVARA;Mn;0;NSM;;;;;N;;;;;
114C1;TIRHUTA SIGN VISARGA;Mc;0;L;;;;;N;;;;;
114C2;TIRHUTA SIGN VIRAMA;Mn;9;NSM;;;;;N;;;;;
114C3;TIRHUTA SIGN NUKTA;Mn;0;NSM;;;;;N;;;;;
114C4;TIRHUTA SIGN AVAGRAHA;Lo;0;L;;;;;N;;;;;
114C5;TIRHUTA GVANG;Mc;0;L;;;;;N;;;;;
114C6;TIRHUTA ABBREVIATION SIGN;Po;0;L;;;;;N;;;;;
114C7;TIRHUTA OM;Lo;0;L;;;;;N;;;;;
114D0;TIRHUTA DIGIT ZERO;Nd;0;L;;0;0;0;N;;;;;
114D1;TIRHUTA DIGIT ONE;Nd;0;L;;1;1;1;N;;;;;
114D2;TIRHUTA DIGIT TWO;Nd;0;L;;2;2;2;N;;;;;
114D3;TIRHUTA DIGIT THREE;Nd;0;L;;3;3;3;N;;;;;
114D4;TIRHUTA DIGIT FOUR;Nd;0;L;;4;4;4;N;;;;;
114D5;TIRHUTA DIGIT FIVE;Nd;0;L;;5;5;5;N;;;;;
114D6;TIRHUTA DIGIT SIX;Nd;0;L;;6;6;6;N;;;;;
114D7;TIRHUTA DIGIT SEVEN;Nd;0;L;;7;7;7;N;;;;;
114D8;TIRHUTA DIGIT EIGHT;Nd;0;L;;8;8;8;N;;;;;
114D9;TIRHUTA DIGIT NINE;Nd;0;L;;9;9;9;N;;;;;
```

4.21 ‘Confusable’ Characters

Several Tirhuta characters resemble those of Bengali. Some of these are ‘confusable’ homoglyphs:

- The glyph 𑒫 represents VA in Tirhuta, but র RA in Bengali.
- The glyph 𑒩 represents RA in Tirhuta, but ব BA in Bengali.
- The glyph 𑒪 represents LA in Tirhuta, but ণ NNA in Bengali.
- The glyph 𑒝 represents NNA in Tirhuta, but ল LA in Bengali.

Below is a list of Tirhuta characters that may be ‘confusable’ with those encoded in other blocks of the UCS:

```
1148B TIRHUTA LETTER E           ; 098F BENGALI LETTER E
1148C TIRHUTA LETTER AI          ; 0990 BENGALI LETTER AI
1148D TIRHUTA LETTER O           ; 0993 BENGALI LETTER O
1148E TIRHUTA LETTER AU          ; 0994 BENGALI LETTER AU
1148F TIRHUTA LETTER KA          ; 0995 BENGALI LETTER KA
11490 TIRHUTA LETTER KHA         ; 0996 BENGALI LETTER KHA
11491 TIRHUTA LETTER GA          ; 0997 BENGALI LETTER GA
```

```
11492 TIRHUTA LETTER GHA         ; 0998 BENGALI LETTER GHA
11494 TIRHUTA LETTER CA          ; 099A BENGALI LETTER CA
11496 TIRHUTA LETTER JA          ; 099C BENGALI LETTER JA
11498 TIRHUTA LETTER NYA         ; 099E BENGALI LETTER NYA
11499 TIRHUTA LETTER TTA         ; 099F BENGALI LETTER TTA
1149B TIRHUTA LETTER DDA         ; 09A1 BENGALI LETTER DDA
1149D TIRHUTA LETTER NNA         ; 09B2 BENGALI LETTER LA
1149E TIRHUTA LETTER TA          ; 09A4 BENGALI LETTER TA
1149F TIRHUTA LETTER THA         ; 09A5 BENGALI LETTER THA
114A0 TIRHUTA LETTER DA          ; 09A6 BENGALI LETTER DA
114A1 TIRHUTA LETTER DHA         ; 09A7 BENGALI LETTER DHA
114A2 TIRHUTA LETTER NA          ; 09A8 BENGALI LETTER NA
114A3 TIRHUTA LETTER PA          ; 09AA BENGALI LETTER PA
114A7 TIRHUTA LETTER MA          ; 09AE BENGALI LETTER MA
114A8 TIRHUTA LETTER YA          ; 09AF BENGALI LETTER YA
114A9 TIRHUTA LETTER RA          ; 09AC BENGALI LETTER BA
114AA TIRHUTA LETTER LA          ; 09A3 BENGALI LETTER NNA
114AB TIRHUTA LETTER VA          ; 09B0 BENGALI LETTER RA
114AD TIRHUTA LETTER SSA         ; 09B7 BENGALI LETTER SSA
114AE TIRHUTA LETTER SA          ; 09B8 BENGALI LETTER SA
114B0 TIRHUTA VOWEL SIGN AA      ; 09BE BENGALI VOWEL SIGN AA
114B1 TIRHUTA VOWEL SIGN I       ; 09BF BENGALI VOWEL SIGN I
114B9 TIRHUTA VOWEL SIGN E       ; 09C7 BENGALI VOWEL SIGN E
114BC TIRHUTA VOWEL SIGN O       ; 09CB BENGALI VOWEL SIGN O
114BD TIRHUTA VOWEL SIGN SHORT O ; 09D7 BENGALI VOWEL SIGN LENGTH MARK
114BE TIRHUTA VOWEL SIGN AU      ; 09CC BENGALI VOWEL SIGN AU
114BF TIRHUTA SIGN CANDRABINDU   ; 0981 BENGALI SIGN CANDRABINDU
114C1 TIRHUTA SIGN VISARGA       ; 0983 BENGALI SIGN VISARGA
114C2 TIRHUTA SIGN VIRAMA        ; 09CD BENGALI SIGN VIRAMA
114C3 TIRHUTA SIGN NUKTA         ; 09BC BENGALI SIGN NUKTA
114C4 TIRHUTA SIGN AVAGRAHA      ; 09BD BENGALI SIGN AVAGRAHA
114C5 TIRHUTA GVANG              ; 0057 LATIN CAPITAL LETTER W
114D0 TIRHUTA DIGIT ZERO         ; 09E6 BENGALI DIGIT ZERO
114D1 TIRHUTA DIGIT ONE          ; 09E7 BENGALI DIGIT ONE
114D2 TIRHUTA DIGIT TWO          ; 09E8 BENGALI DIGIT TWO
114D6 TIRHUTA DIGIT SIX          ; 09EC BENGALI DIGIT SIX
```

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	1148	1149	114A	114B	114C	114D
0	𑒀 11480	𑒐 11490	𑒠 114A0	◌𑒰 114B0	◌𑓀 114C0	𑓐 114D0
1	𑒁 11481	𑒑 11491	𑒡 114A1	◌𑒱 114B1	◌𑓁 114C1	𑓑 114D1
2	𑒂 11482	𑒒 11492	𑒢 114A2	◌𑒲 114B2	◌𑓂 114C2	𑓒 114D2
3	𑒃 11483	𑒓 11493	𑒣 114A3	◌𑒳 114B3	◌𑓃 114C3	𑓓 114D3
4	𑒄 11484	𑒔 11494	𑒤 114A4	◌𑒴 114B4	𑓄 114C4	𑓔 114D4
5	𑒅 11485	𑒕 11495	𑒥 114A5	◌𑒵 114B5	𑓅 114C5	𑓕 114D5
6	𑒆 11486	𑒖 11496	𑒦 114A6	◌𑒶 114B6	𑓆 114C6	𑓖 114D6
7	𑒇 11487	𑒗 11497	𑒧 114A7	◌𑒷 114B7	𑓇 114C7	𑓗 114D7
8	𑒈 11488	𑒘 11498	𑒨 114A8	◌𑒸 114B8		𑓘 114D8
9	𑒉 11489	𑒙 11499	𑒩 114A9	◌𑒹 114B9		𑓙 114D9
A	𑒊 1148A	𑒚 1149A	𑒪 114AA	◌𑒺 114BA		
B	𑒋 1148B	𑒛 1149B	𑒫 114AB	◌𑒻 114BB		
C	𑒌 1148C	𑒜 1149C	𑒬 114AC	◌𑒼 114BC		
D	𑒍 1148D	𑒝 1149D	𑒭 114AD	◌𑒽 114BD		
E	𑒎 1148E	𑒞 1149E	𑒮 114AE	◌𑒾 114BE		
F	𑒏 1148F	𑒟 1149F	𑒯 114AF	◌𑒿 114BF		

Table 1: Proposed code chart for Tirhuta.

The Tirhuta script is also known by the names 'Mithilakshar' and 'Maithili'.

Sign

11480	𑒀	TIRHUTA ANJI

Independent vowels

11481	𑒁	TIRHUTA LETTER A
11482	𑒂	TIRHUTA LETTER AA
11483	𑒃	TIRHUTA LETTER I
11484	𑒄	TIRHUTA LETTER II
11485	𑒅	TIRHUTA LETTER U
11486	𑒆	TIRHUTA LETTER UU
11487	𑒇	TIRHUTA LETTER VOCALIC R
11488	𑒈	TIRHUTA LETTER VOCALIC RR
11489	𑒉	TIRHUTA LETTER VOCALIC L
1148A	𑒊	TIRHUTA LETTER VOCALIC LL
1148B	𑒋	TIRHUTA LETTER E
1148C	𑒌	TIRHUTA LETTER AI
1148D	𑒍	TIRHUTA LETTER O
1148E	𑒎	TIRHUTA LETTER AU

Consonants

1148F	𑒏	TIRHUTA LETTER KA
11490	𑒐	TIRHUTA LETTER KHA
11491	𑒑	TIRHUTA LETTER GA
11492	𑒒	TIRHUTA LETTER GHA
11493	𑒓	TIRHUTA LETTER NGA
11494	𑒔	TIRHUTA LETTER CA
11495	𑒕	TIRHUTA LETTER CHA
11496	𑒖	TIRHUTA LETTER JA
11497	𑒗	TIRHUTA LETTER JHA
11498	𑒘	TIRHUTA LETTER NYA
11499	𑒙	TIRHUTA LETTER TTA
1149A	𑒚	TIRHUTA LETTER TTHA
1149B	𑒛	TIRHUTA LETTER DDA
1149C	𑒜	TIRHUTA LETTER DDHA
1149D	𑒝	TIRHUTA LETTER NNA
1149E	𑒞	TIRHUTA LETTER TA
1149F	𑒟	TIRHUTA LETTER THA
114A0	𑒠	TIRHUTA LETTER DA
114A1	𑒡	TIRHUTA LETTER DHA
114A2	𑒢	TIRHUTA LETTER NA
114A3	𑒣	TIRHUTA LETTER PA
114A4	𑒤	TIRHUTA LETTER PHA
114A5	𑒥	TIRHUTA LETTER BA
114A6	𑒦	TIRHUTA LETTER BHA
114A7	𑒧	TIRHUTA LETTER MA
114A8	𑒨	TIRHUTA LETTER YA
114A9	𑒩	TIRHUTA LETTER RA
114AA	𑒪	TIRHUTA LETTER LA
114AB	𑒫	TIRHUTA LETTER VA
114AC	𑒬	TIRHUTA LETTER SHA
114AD	𑒭	TIRHUTA LETTER SSA
114AE	𑒮	TIRHUTA LETTER SA
114AF	𑒯	TIRHUTA LETTER HA

Dependent vowel signs

114B0	◌𑒰	TIRHUTA VOWEL SIGN AA
114B1	◌𑒱	TIRHUTA VOWEL SIGN I
114B2	◌𑒲	TIRHUTA VOWEL SIGN II
114B3	◌𑒳	TIRHUTA VOWEL SIGN U
114B4	◌𑒴	TIRHUTA VOWEL SIGN UU
114B5	◌𑒵	TIRHUTA VOWEL SIGN VOCALIC R
114B6	◌𑒶	TIRHUTA VOWEL SIGN VOCALIC RR
114B7	◌𑒷	TIRHUTA VOWEL SIGN VOCALIC L
114B8	◌𑒸	TIRHUTA VOWEL SIGN VOCALIC LL
114B9	◌𑒹	TIRHUTA VOWEL SIGN E
114BA	◌𑒺	TIRHUTA VOWEL SIGN SHORT E
114BB	◌𑒻	TIRHUTA VOWEL SIGN AI
114BC	◌𑒼	TIRHUTA VOWEL SIGN O
114BD	◌𑒽	TIRHUTA VOWEL SIGN SHORT O
114BE	◌𑒾	TIRHUTA VOWEL SIGN AU

Various signs

114BF	◌𑒿	TIRHUTA SIGN CANDRABINDU
114C0	◌𑓀	TIRHUTA SIGN ANUSVARA
114C1	◌𑓁	TIRHUTA SIGN VISARGA
114C2	◌𑓂	TIRHUTA SIGN VIRAMA = halant
114C3	◌𑓃	TIRHUTA SIGN NUKTA
114C4	𑓄	TIRHUTA SIGN AVAGRAHA
114C5	𑓅	TIRHUTA GVANG = vedic anusvara
114C6	𑓆	TIRHUTA ABBREVIATION SIGN

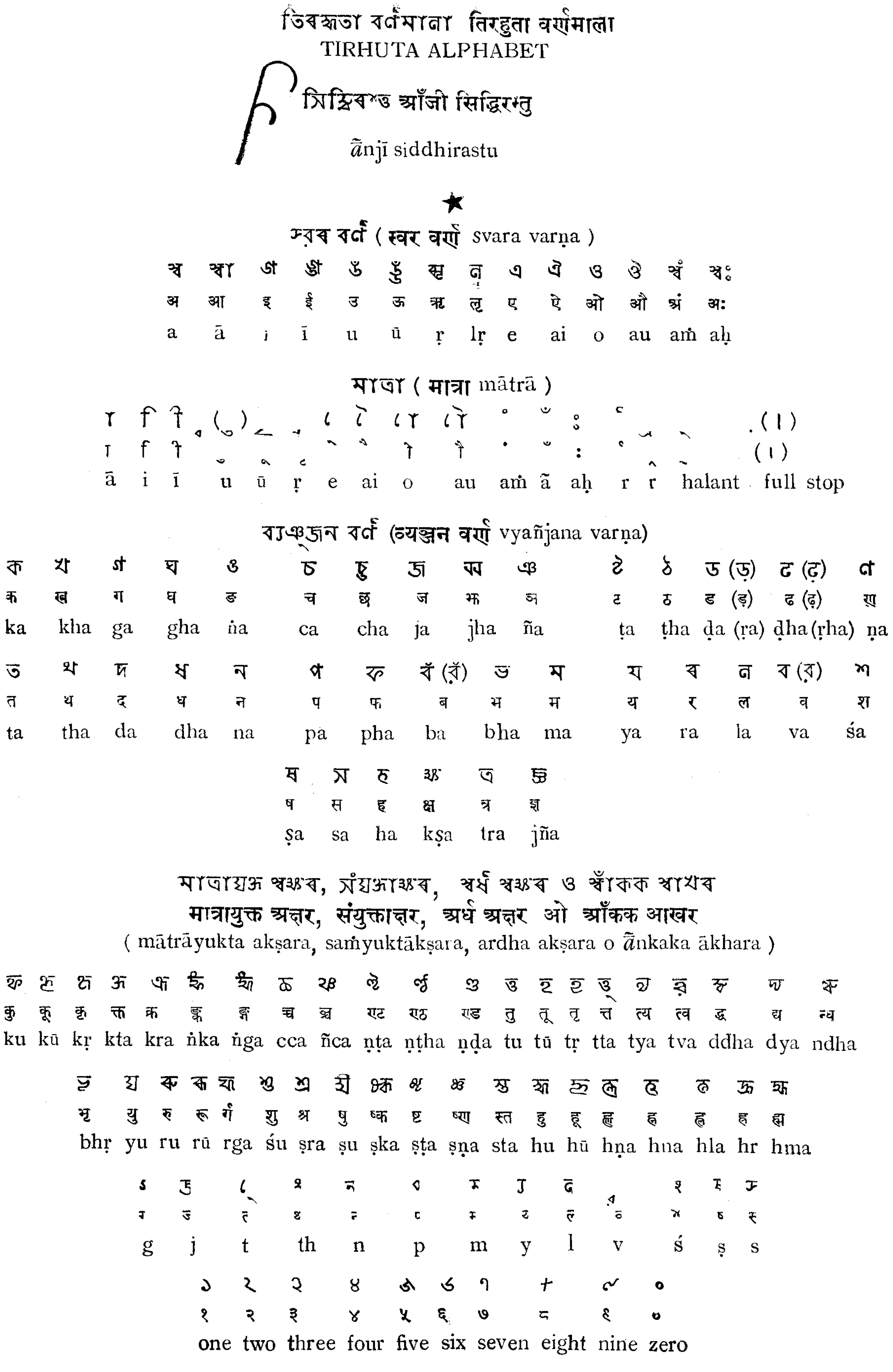
Sign

114C7	𑓇	TIRHUTA OM

Digits

114D0	𑓐	TIRHUTA DIGIT ZERO
114D1	𑓑	TIRHUTA DIGIT ONE
114D2	𑓒	TIRHUTA DIGIT TWO
114D3	𑓓	TIRHUTA DIGIT THREE
114D4	𑓔	TIRHUTA DIGIT FOUR
114D5	𑓕	TIRHUTA DIGIT FIVE
114D6	𑓖	TIRHUTA DIGIT SIX
114D7	𑓗	TIRHUTA DIGIT SEVEN
114D8	𑓘	TIRHUTA DIGIT EIGHT
114D9	𑓙	TIRHUTA DIGIT NINE

Table 2: Proposed names list for Tirhuta.



𑒞𑒱𑒩𑒯𑒳𑒞𑒰 𑒥𑒩𑓂𑒝𑒧𑒰𑒪𑒰 तिरहुता वर्णमाला
TIRHUTA ALPHABET

𑒮𑒱𑒠𑓂𑒡𑒱𑒩𑒮𑓂𑒞𑒳 आँजी सिद्धिरस्तु

ā̃njī siddhirastu

𑒮𑓂𑒫𑒩 𑒥𑒩𑓂𑒝 (स्वर वर्ण svara varṇa)

𑒁	𑒂	𑒃	𑒄	𑒅	𑒆	𑒇	𑒉	𑒋	𑒌	𑒍	𑒎	𑒁𑓀	𑒁𑓁
अ	आ	इ	ई	उ	ऊ	ऋ	ऌ	ए	ऐ	ओ	औ	अं	अः
a	ā	i	ī	u	ū	ṛ	lṛ	e	ai	o	au	aṁ	aḥ

𑒧𑒰𑒞𑓂𑒩𑒰 (मात्रा mātrā)

𑒰	𑒱	𑒲	𑒳	𑒴	𑒵	𑒹	𑒻	𑒼	𑒾	𑓀	𑒿	𑓁			𑓂	.(।)
ा	ि	ी	ु	ू	ृ	े	ै	ो	ौ	ं	ँ	ः				(।)
ā	i	ī	u	ū	ṛ	e	ai	o	au	aṁ	ã	aḥ	r	r	halant	full stop

𑒫𑓂𑒨𑒿𑒖𑒢 𑒥𑒩𑓂𑒝 (व्यञ्जन वर्ण vyañjana varṇa)

𑒏	𑒐	𑒑	𑒒	𑒓	𑒔	𑒕	𑒖	𑒗	𑒘	𑒙	𑒚	𑒛 (𑒛𑓃)	𑒜 (𑒜𑓃)	𑒝
क	ख	ग	घ	ङ	च	छ	ज	झ	ञ	ट	ठ	ड (ड़)	ढ (ढ़)	ण
ka	kha	ga	gha	ṅa	ca	cha	ja	jha	ña	ṭa	ṭha	ḍa (ṛa)	ḍha (ṛha)	ṇa

𑒞	𑒟	𑒠	𑒡	𑒢	𑒣	𑒤	𑒥 (𑒥𑓃)	𑒦	𑒧	𑒨	𑒩	𑒪	𑒫 (𑒫𑓃)	𑒬
त	थ	द	ध	न	प	फ	ब	भ	म	य	र	ल	व	श
ta	tha	da	dha	na	pa	pha	ba	bha	ma	ya	ra	la	va	śa

𑒭	𑒮	𑒯	𑒏𑓂𑒭	𑒞𑓂𑒩	𑒖𑓂𑒘
ष	स	ह	क्ष	त्र	ज्ञ
ṣa	sa	ha	kṣa	tra	jña

𑒧𑒰𑒞𑓂𑒩𑒰𑒨𑒳𑒏𑓂𑒞 𑒁𑒏𑓂𑒭𑒩, 𑒮𑓀𑒨𑒳𑒏𑓂𑒞𑒰𑒏𑓂𑒭𑒩, 𑒁𑒩𑓂𑒡 𑒁𑒏𑓂𑒭𑒩 𑒍 𑒂𑒿𑒏𑒏 𑒂𑒐𑒩
मात्रायुक्त अक्षर, संयुक्ताक्षर, अर्ध अक्षर ओ आँकक आखर
(mātrāyukta akṣara, saṁyuktākṣara, ardha akṣara o ā̃nkaka ākhara)

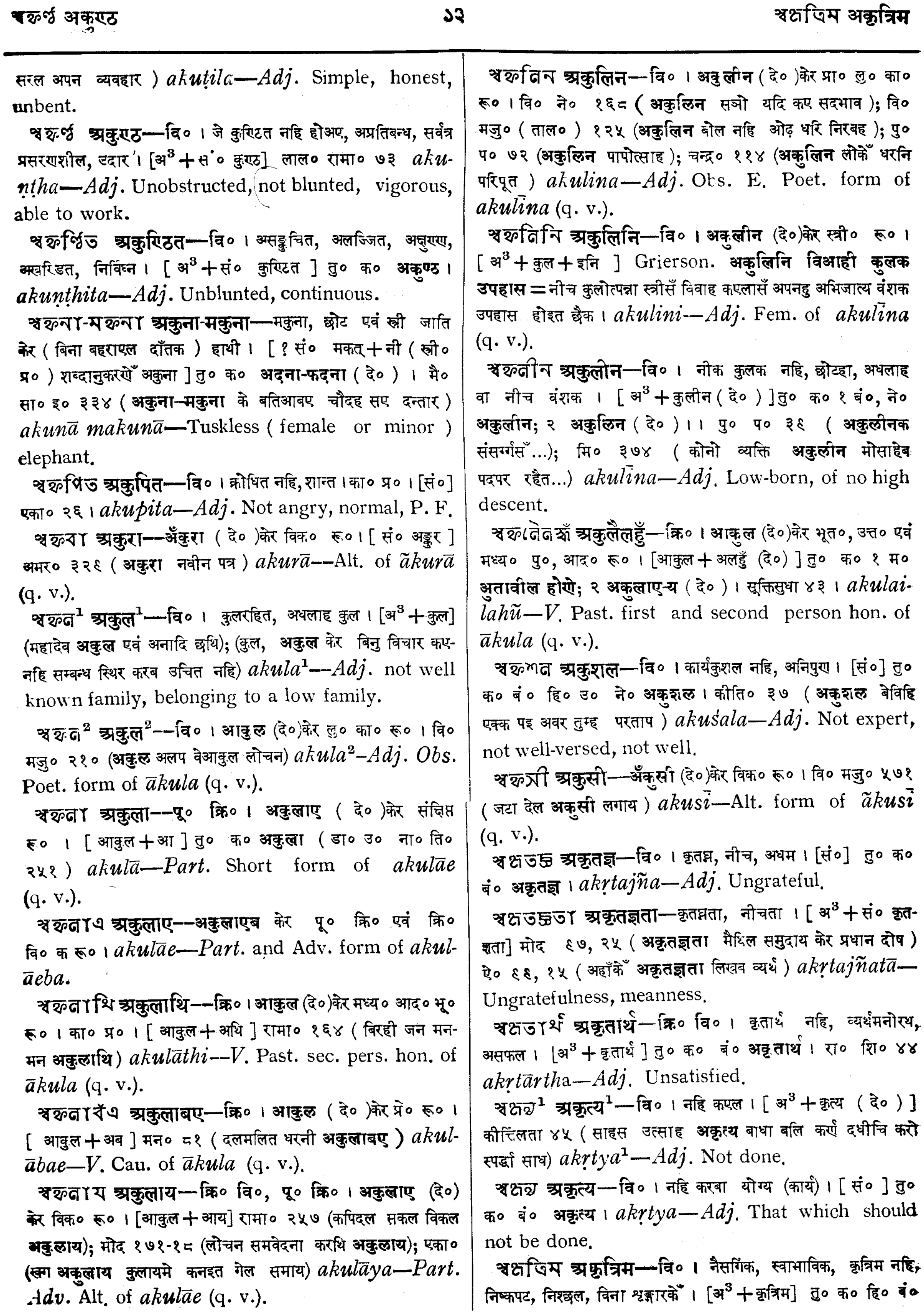
𑒏𑒳	𑒏𑒴	𑒏𑒵	𑒏𑓂𑒞	𑒏𑓂𑒩	𑒓𑓂𑒏	𑒓𑓂𑒑	𑒔𑓂𑒔	𑒘𑓂𑒔	𑒝𑓂𑒙	𑒝𑓂𑒚	𑒝𑓂𑒛	𑒞𑒳	𑒞𑒴	𑒞𑒵	𑒞𑓂𑒞	𑒞𑓂𑒨	𑒞𑓂𑒫	𑒠𑓂𑒡	𑒠𑓂𑒨	𑒢𑓂𑒡
कु	कू	कृ	क्त	क्र	ङ्क	ङ्ग	च्च	ञ्च	ण्ट	ण्ठ	ण्ड	तु	तू	तृ	त्त	त्य	त्व	द्ध	द्य	न्ध
ku	kū	kṛ	kta	kra	ṅka	ṅga	cca	ñca	ṇṭa	ṇṭha	ṇḍa	tu	tū	tṛ	tta	tya	tva	ddha	dya	ndha

𑒦𑒵	𑒨𑒳	𑒩𑒳	𑒩𑒴	𑒩𑓂𑒑	𑒬𑒳	𑒬𑓂𑒩	𑒭𑒳	𑒭𑓂𑒏	𑒭𑓂𑒙	𑒭𑓂𑒝	𑒮𑓂𑒞	𑒯𑒳	𑒯𑒴	𑒯𑓂𑒝	𑒯𑓂𑒢	𑒯𑓂𑒪	𑒯𑓂𑒩	𑒯𑓂𑒧
भृ	यु	रु	रू	र्ग	शु	श्र	षु	ष्क	ष्ट	ष्ण	स्त	हु	हू	ह्ण	ह्न	ह्ल	ह्र	ह्म
bhṛ	yu	ru	rū	rga	śu	ṣra	ṣu	ṣka	ṣṭa	ṣṇa	sta	hu	hū	hṇa	hna	hla	hr	hma

𑒑𑓂	𑒖𑓂	𑒞𑓂	𑒟𑓂	𑒢𑓂	𑒣𑓂	𑒧𑓂	𑒨𑓂	𑒪𑓂	𑒫𑓂	𑒬𑓂	𑒭𑓂	𑒮𑓂
ग्	ज्	त्	थ्	न्	प्	म्	य्	ल्	व्	श्	ष्	स्
g	j	t	th	n	p	m	y	l	v	ś	ṣ	s

𑓑	𑓒	𑓓	𑓔	𑓕	𑓖	𑓗	𑓘	𑓙	𑓐
१	२	३	४	५	६	७	८	९	०
one	two	three	four	five	six	seven	eight	nine	zero

Figure 1: A table of the Tirhuta script printed with metal type (from Mishra 1973: 41).



𑒁𑒏𑒳𑒝𑓂𑒚 अकुण्ठ 𑓑𑓓 **𑒁𑒏𑒵𑒞𑓂𑒩𑒱𑒧 अकृत्रिम**

सरल अपन व्यवहार) *akuṭila*—*Adj.* Simple, honest, unbent.

𑒁𑒏𑒳𑒝𑓂𑒚 अकुण्ठ—वि० । जे कुण्ठित नहि होअए, अप्रतिबन्ध, सर्वत्र प्रसरणशील, उदार । [अ^3+सं० कुण्ठ] लाल० रामा० ७३ *akuṇṭha*—*Adj.* Unobstructed, not blunted, vigorous, able to work.

𑒁𑒏𑒳𑒝𑓂𑒚𑒱𑒞 अकुण्ठित—वि० । असङ्कुचित, अलज्जित, अक्षुण्ण, अखण्डित, निर्विघ्न । [अ^3+सं० कुण्ठित] तु० क० अकुण्ठ । *akuṇṭhita*—*Adj.* Unblunted, continuous.

𑒁𑒏𑒳𑒢𑒰-𑒧𑒏𑒳𑒢𑒰 अकुना-मकुना—मकुना, छोट एवं स्त्री जाति केर (बिना बहराएल दाँतक) हाथी । [? सं० मकत्+नी (स्त्री० प्र०) शब्दानुकरणेँ अकुना] तु० क० अदना-फदना (दे०) । मै० सा० इ० ३३४ (अकुना-मकुना के बतिआबए चौदह सए दन्तार) *akunā makunā*—Tuskless (female or minor) elephant.

𑒁𑒏𑒳𑒣𑒱𑒞 अकुपित—वि० । क्रोधित नहि, शान्त । का० प्र० । [सं०] एका० २६ । *akupita*—*Adj.* Not angry, normal, P. F.

𑒁𑒏𑒳𑒩𑒰 अकुरा—अँकुरा (दे०)केर विक० रू० । [सं० अङ्कुर] अमर० ३२६ (अकुरा नवीन पत्र) *akurā*—Alt. of *ãkurā* (q. v.).

𑒁𑒏𑒳𑒪^1 अकुल^1—वि० । कुलरहित, अधलाह कुल । [अ^3+कुल] (महादेव अकुल एवं अनादि छथि); (कुल, अकुल केर बिनु विचार कएनहि सम्बन्ध स्थिर करब उचित नहि) *akula*^{1}—*Adj.* not well known family, belonging to a low family.

𑒁𑒏𑒳𑒪^2 अकुल^2—वि० । आकुल (दे०)केर लु० का० रू० । वि० मजु० २१० (अकुल अलप बेआकुल लोचन) *akula*^{2}-*Adj. Obs.* Poet. form of *ākula* (q. v.).

𑒁𑒏𑒳𑒪𑒰 अकुला—पू० क्रि० । अकुलाए (दे०)केर संक्षिप्त रू० । [आकुल+आ] तु० क० अकुला (डा० उ० ना० ति० २५१) *akulā*—*Part.* Short form of *akulāe* (q. v.).

𑒁𑒏𑒳𑒪𑒰𑒋 अकुलाए—अकुलाएब केर पू० क्रि० एवं क्रि० वि० क रू० । *akulāe*—*Part.* and Adv. form of *akulāeba.*

𑒁𑒏𑒳𑒪𑒰𑒟𑒱 अकुलाथि—क्रि० । आकुल (दे०)केर मध्य० आद० भू० रू० । का० प्र० । [आकुल+अथि] रामा० १६४ (बिरही जन मनमन अकुलाथि) *akulāthi*—*V.* Past. sec. pers. hon. of *ākula* (q. v.).

𑒁𑒏𑒳𑒪𑒰𑒥𑒋 अकुलाबए—क्रि० । आकुल (दे०)केर प्रे० रू० । [आकुल+अब] मन० ८१ (दलमलित धरनी अकुलाबए) *akulābae*—*V.* Cau. of *ākula* (q. v.).

𑒁𑒏𑒳𑒪𑒰𑒨 अकुलाय—क्रि० वि०, पू० क्रि० । अकुलाए (दे०) केर विक० रू० । [आकुल+आय] रामा० २५७ (कपिदल सकल विकल अकुलाय); मोद १७१-१८ (लोचन समवेदना करथि अकुलाय); एका० (खग अकुलाय कुलायमे कनइत गेल समाय) *akulāya*—*Part. Adv.* Alt. of *akulāe* (q. v.).

𑒁𑒏𑒳𑒪𑒱𑒢 अकुलिन—वि० । अकुलीन (दे०)केर प्रा० लु० का० रू० । वि० ने० १६८ (अकुलिन सञो यदि कए सदभाव); वि० मजु० (ताल०) १२५ (अकुलिन बोल नहि ओड़ धरि निरबह); पु० प० ७२ (अकुलिन पापोत्साह); चन्द्र० ११४ (अकुलिन लोकेँ धरनि परिपूत) *akulina*—*Adj.* Obs. E. Poet. form of *akulīna* (q. v.).

𑒁𑒏𑒳𑒪𑒱𑒢𑒱 अकुलिनि—वि० । अकुलीन (दे०)केर स्त्री० रू० । [अ^3+कुल+इनि] Grierson. अकुलिनि बिआही कुलक उपहास = नीच कुलोत्पन्ना स्त्रीसँ विवाह कएलासँ अपनहु अभिजात्य वंशक उपहास होइत छैक । *akulini*—*Adj.* Fem. of *akulīna* (q. v.).

𑒁𑒏𑒳𑒪𑒲𑒢 अकुलीन—वि० । नीक कुलक नहि, छोटहा, अधलाह वा नीच वंशक । [अ^3+कुलीन (दे०)] तु० क० १ बं०, ने० अकुलीन; २ अकुलिन (दे०) । । पु० प० ३६ (अकुलीनक संसर्गसँ...); मि० ३७४ (कोनो व्यक्ति अकुलीन मोसाहेब पदपर रहैत...) *akulīna*—*Adj.* Low-born, of no high descent.

𑒁𑒏𑒳𑒪𑒻𑒪𑒯𑒳𑒿 अकुलैलहुँ—क्रि० । आकुल (दे०)केर भूत०, उत्त० एवं मध्य० पु०, आद० रू० । [आकुल+अलहुँ (दे०)] तु० क० १ म० अुतावील होणे; २ अकुलाए-य (दे०) । सूक्तिसुधा ४३ । *akulailahũ*—*V.* Past. first and second person hon. of *ākula* (q. v.).

𑒁𑒏𑒳𑒬𑒪 अकुशल—वि० । कार्यकुशल नहि, अनिपुण । [सं०] तु० क० बं० हि० उ० ने० अकुशल । कीर्ति० ३७ (अकुशल बेविहि एक्क पइ अवर तुम्ह परताप) *akuśala*—*Adj.* Not expert, not well-versed, not well.

𑒁𑒏𑒳𑒮𑒲 अकुसी—अँकुसी (दे०)केर विक० रू० । वि० मजु० ५७१ (जटा देल अकुसी लगाय) *akusī*—Alt. form of *ãkusī* (q. v.).

𑒁𑒏𑒵𑒞𑒖𑓂𑒘 अकृतज्ञ—वि० । कृतघ्न, नीच, अधम । [सं०] तु० क० बं० अकृतज्ञ । *akṛtajña*—*Adj.* Ungrateful.

𑒁𑒏𑒵𑒞𑒖𑓂𑒘𑒞𑒰 अकृतज्ञता—कृतघ्नता, नीचता । [अ^3+सं० कृतज्ञता] मोद ६७, २५ (अकृतज्ञता मैथिल समुदाय केर प्रधान दोष) ऐ० ६६, १५ (अहाँकेँ अकृतज्ञता लिखब व्यर्थ) *akṛtajñatā*—Ungratefulness, meanness.

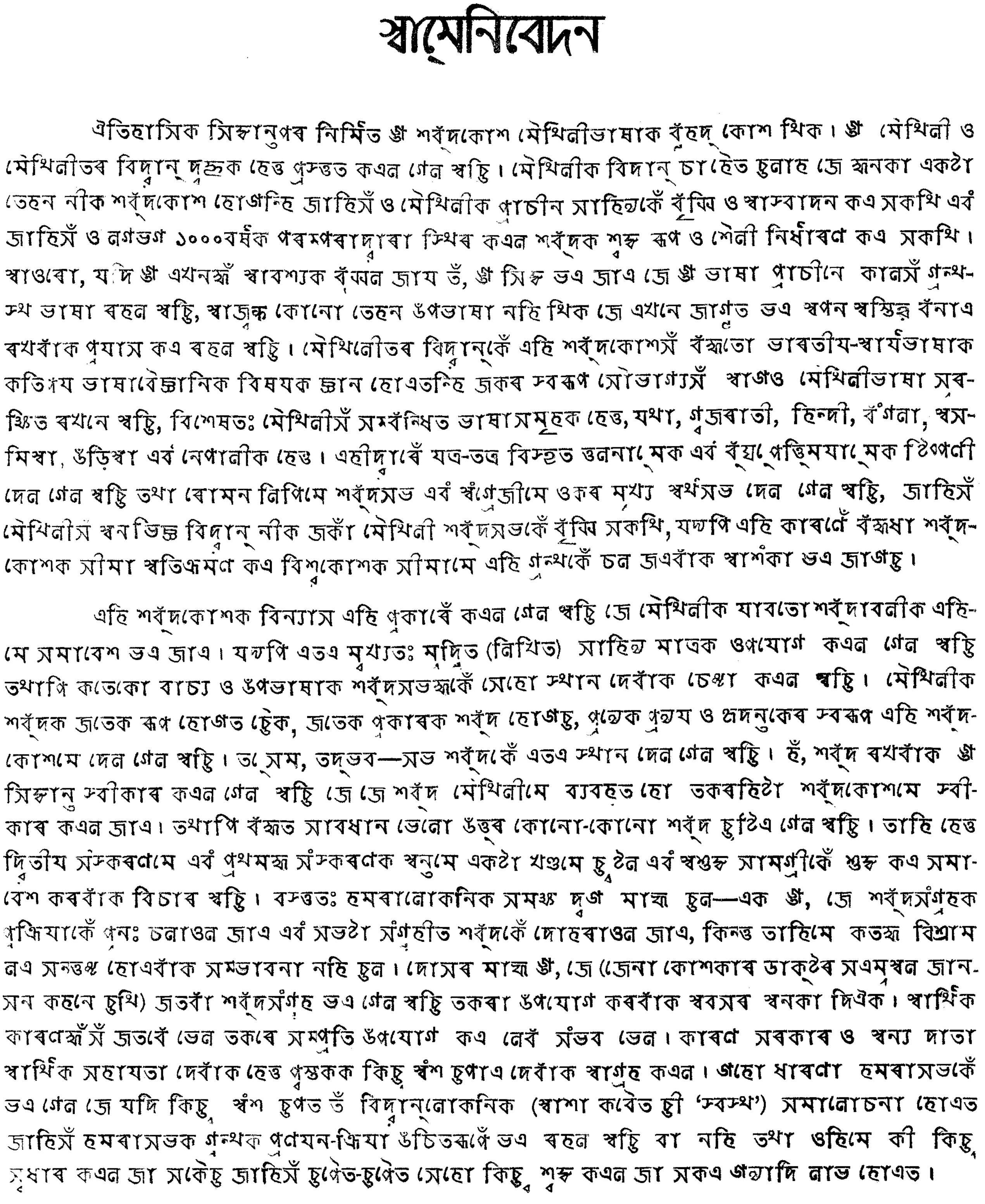
𑒁𑒏𑒵𑒞𑒰𑒩𑓂𑒟 अकृतार्थ—क्रि० वि० । कृतार्थ नहि, व्यर्थमनोरथ, असफल । [अ^3+कृतार्थ] तु० क० बं० अकृतार्थ । रा० शि० ४४ *akṛtārtha*—*Adj.* Unsatisfied.

𑒁𑒏𑒵𑒞𑓂𑒨^1 अकृत्य^1—वि० । नहि कएल । [अ^3+कृत्य (दे०)] कीर्त्तिलता ४५ (साहस उत्साह अकृत्य बाधा बलि कर्ण दधीचि करो स्पर्द्धा साथ) *akṛtya*^{1}—*Adj.* Not done.

𑒁𑒏𑒵𑒞𑓂𑒨 अकृत्य—वि० । नहि करबा योग्य (कार्य) । [सं०] तु० क० बं० अकृत्य । *akṛtya*—*Adj.* That which should not be done.

𑒁𑒏𑒵𑒞𑓂𑒩𑒱𑒧 अकृत्रिम—वि० । नैसर्गिक, स्वाभाविक, कृत्रिम नहि, निष्कपट, निश्छल, बिना शृङ्गारकेँ । [अ^3+कृत्रिम] तु० क० हि० बं०

Figure 2: An excerpt from the *Bṛhat Maithilī Śabdakośa*, a Maithili-English dictionary (from Mishra 1973: 13).

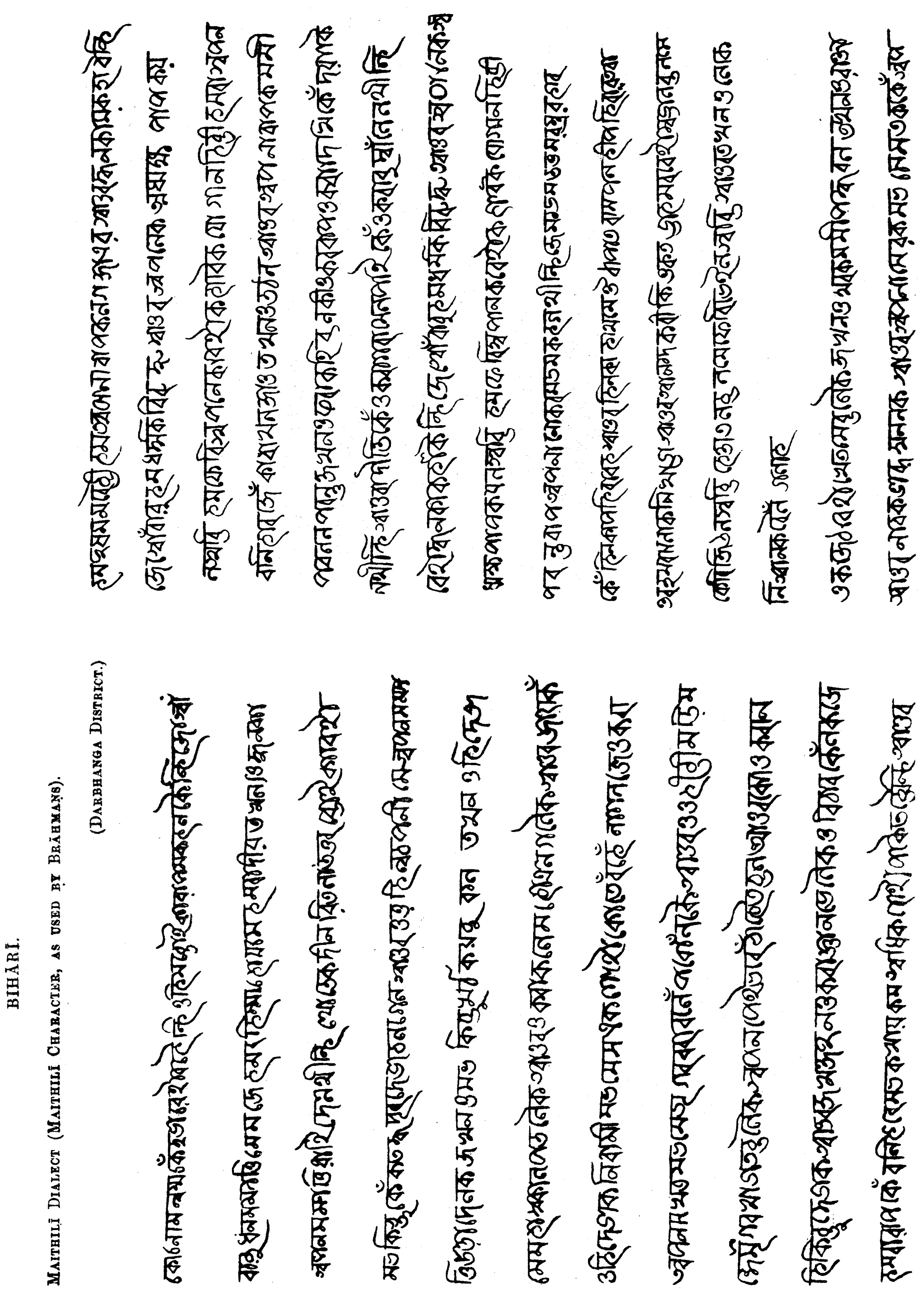


𑒂𑒞𑓂𑒧𑒢𑒱𑒫𑒹𑒠𑒢

𑒌𑒞𑒱𑒯𑒰𑒮𑒱𑒏 𑒮𑒱𑒠𑓂𑒡𑒰𑒢𑓂𑒞𑒣𑒩 𑒢𑒱𑒩𑓂𑒧𑒱𑒞 𑒄 𑒬𑒥𑓂𑒠𑒏𑒼𑒬 𑒧𑒻𑒟𑒱𑒪𑒲𑒦𑒰𑒭𑒰𑒏 𑒥𑒵𑒯𑒠𑓂 𑒏𑒼𑒬 𑒟𑒱𑒏। 𑒄 𑒧𑒻𑒟𑒱𑒪𑒲 𑒍 𑒧𑒻𑒟𑒱𑒪𑒲𑒞𑒩 𑒫𑒱𑒠𑓂𑒫𑒰𑒢𑓂 𑒠𑒳𑒯𑒳𑒏 𑒯𑒹𑒞𑒳 𑒣𑓂𑒩𑒮𑓂𑒞𑒳𑒞 𑒏𑒋𑒪 𑒑𑒹𑒪 𑒁𑒕𑒱। 𑒧𑒻𑒟𑒱𑒪𑒲𑒏 𑒫𑒱𑒠𑓂𑒫𑒰𑒢𑓂 𑒔𑒰𑒯𑒻𑒞 𑒕𑒪𑒰𑒯 𑒖𑒹 𑒯𑒳𑒢𑒏𑒰 𑒋𑒏𑒙𑒰 𑒞𑒹𑒯𑒢 𑒢𑒲𑒏 𑒬𑒥𑓂𑒠𑒏𑒼𑒬 𑒯𑒼𑒃𑒢𑓂𑒯𑒱 𑒖𑒰𑒯𑒱𑒮𑒿 𑒍 𑒧𑒻𑒟𑒱𑒪𑒲𑒏 𑒣𑓂𑒩𑒰𑒔𑒲𑒢 𑒮𑒰𑒯𑒱𑒞𑓂𑒨𑒏𑒹𑒿 𑒥𑒳𑒗𑒱 𑒍 𑒂𑒮𑓂𑒫𑒰𑒠𑒢 𑒏𑒋 𑒮𑒏𑒟𑒱 𑒋𑒫𑓀 𑒖𑒰𑒯𑒱𑒮𑒿 𑒍 𑒪𑒑𑒦𑒑 𑓑𑓐𑓐𑓐𑒫𑒩𑓂𑒭𑒏 𑒣𑒩𑒧𑓂𑒣𑒩𑒰𑒠𑓂𑒫𑒰𑒩𑒰 𑒮𑓂𑒟𑒱𑒩 𑒏𑒋𑒪 𑒬𑒥𑓂𑒠𑒏 𑒬𑒳𑒠𑓂𑒡 𑒩𑒴𑒣 𑒍 𑒬𑒻𑒪𑒲 𑒢𑒱𑒩𑓂𑒡𑒰𑒩𑒝 𑒏𑒋 𑒮𑒏𑒟𑒱। 𑒂𑒍𑒩𑒼, 𑒨𑒠𑒱 𑒄 𑒋𑒐𑒢𑒯𑒳𑒿 𑒂𑒫𑒬𑓂𑒨𑒏 𑒥𑒳𑒗𑒪 𑒖𑒰𑒨 𑒞𑒿, 𑒄 𑒮𑒱𑒠𑓂𑒡 𑒦𑒋 𑒖𑒰𑒋 𑒖𑒹 𑒄 𑒦𑒰𑒭𑒰 𑒣𑓂𑒩𑒰𑒔𑒲𑒢𑒹 𑒏𑒰𑒪𑒮𑒿 𑒑𑓂𑒩𑒢𑓂𑒟𑒮𑓂𑒟 𑒦𑒰𑒭𑒰 𑒩𑒯𑒪 𑒁𑒕𑒱, 𑒂𑒖𑒳𑒏 𑒏𑒼𑒢𑒼 𑒞𑒹𑒯𑒢 𑒅𑒣𑒦𑒰𑒭𑒰 𑒢𑒯𑒱 𑒟𑒱𑒏 𑒖𑒹 𑒋𑒐𑒢𑒹 𑒖𑒰𑒑𑒵𑒞 𑒦𑒋 𑒁𑒣𑒢 𑒁𑒮𑓂𑒞𑒱𑒞𑓂𑒫 𑒥𑒢𑒰𑒋 𑒩𑒐𑒥𑒰𑒏 𑒣𑓂𑒩𑒨𑒰𑒮 𑒏𑒋 𑒩𑒯𑒪 𑒁𑒕𑒱। 𑒧𑒻𑒟𑒱𑒪𑒲𑒞𑒩 𑒫𑒱𑒠𑓂𑒫𑒰𑒢𑓂𑒏𑒹𑒿 𑒋𑒯𑒱 𑒬𑒥𑓂𑒠𑒏𑒼𑒬𑒮𑒿 𑒥𑒯𑒳𑒞𑒼 𑒦𑒰𑒩𑒞𑒲𑒨-𑒂𑒩𑓂𑒨𑒦𑒰𑒭𑒰𑒏 𑒏𑒞𑒱𑒣𑒨 𑒦𑒰𑒭𑒰𑒫𑒻𑒖𑓂𑒘𑒰𑒢𑒱𑒏 𑒫𑒱𑒭𑒨𑒏 𑒖𑓂𑒘𑒰𑒢 𑒯𑒼𑒋𑒞𑒢𑓂𑒯𑒱 𑒖𑒏𑒩 𑒮𑓂𑒫𑒩𑒴𑒣 𑒮𑒾𑒦𑒰𑒑𑓂𑒨𑒮𑒿 𑒂𑒃𑒍 𑒧𑒻𑒟𑒱𑒪𑒲𑒦𑒰𑒭𑒰 𑒮𑒳𑒩𑒏𑓂𑒭𑒱𑒞 𑒩𑒐𑒢𑒹 𑒁𑒕𑒱, 𑒫𑒱𑒬𑒹𑒭𑒞𑓁 𑒧𑒻𑒟𑒱𑒪𑒲𑒮𑒿 𑒮𑒧𑓂𑒥𑒢𑓂𑒡𑒱𑒞 𑒦𑒰𑒭𑒰𑒮𑒧𑒴𑒯𑒏 𑒯𑒹𑒞𑒳, 𑒨𑒟𑒰, 𑒑𑒳𑒖𑒩𑒰𑒞𑒲, 𑒯𑒱𑒢𑓂𑒠𑒲, 𑒥𑒿𑒑𑒪𑒰, 𑒁𑒮𑒧𑒱𑒨𑒰, 𑒅𑒛𑓃𑒱𑒨𑒰 𑒋𑒫𑓀 𑒢𑒹𑒣𑒰𑒪𑒲𑒏 𑒯𑒹𑒞𑒳। 𑒋𑒯𑒲𑒠𑓂𑒫𑒰𑒩𑒹𑒿 𑒨𑒞𑓂𑒩-𑒞𑒞𑓂𑒩 𑒫𑒱𑒮𑓂𑒞𑒵𑒞 𑒞𑒳𑒪𑒢𑒰𑒞𑓂𑒧𑒏 𑒋𑒫𑓀 𑒫𑓂𑒨𑒳𑒞𑓂𑒣𑒞𑓂𑒞𑓂𑒨𑒰𑒞𑓂𑒧𑒏 𑒙𑒱𑒣𑓂𑒣𑒝𑒲 𑒠𑒹𑒪 𑒑𑒹𑒪 𑒁𑒕𑒱 𑒞𑒟𑒰 𑒩𑒼𑒧𑒢 𑒪𑒱𑒣𑒱𑒧𑒹 𑒬𑒥𑓂𑒠𑒮𑒦 𑒋𑒫𑓀 𑒁𑓀𑒑𑓂𑒩𑒹𑒖𑒲𑒧𑒹 𑒍𑒏𑒩 𑒧𑒳𑒐𑓂𑒨 𑒁𑒩𑓂𑒟𑒮𑒦 𑒠𑒹𑒪 𑒑𑒹𑒪 𑒁𑒕𑒱, 𑒖𑒰𑒯𑒱𑒮𑒿 𑒧𑒻𑒟𑒱𑒪𑒲𑒮𑒿 𑒁𑒢𑒦𑒱𑒖𑓂𑒘 𑒫𑒱𑒠𑓂𑒫𑒰𑒢𑓂 𑒢𑒲𑒏 𑒖𑒏𑒰𑒿 𑒧𑒻𑒟𑒱𑒪𑒲 𑒬𑒥𑓂𑒠𑒮𑒦𑒏𑒹𑒿 𑒥𑒳𑒗𑒱 𑒮𑒏𑒟𑒱, 𑒨𑒠𑓂𑒨𑒣𑒱 𑒋𑒯𑒱 𑒏𑒰𑒩𑒝𑒹𑒿 𑒥𑒯𑒳𑒡𑒰 𑒬𑒥𑓂𑒠𑒏𑒼𑒬𑒏 𑒮𑒲𑒧𑒰 𑒁𑒞𑒱𑒏𑓂𑒩𑒧𑒝 𑒏𑒋 𑒫𑒱𑒬𑓂𑒫𑒏𑒼𑒬𑒏 𑒮𑒲𑒧𑒰𑒧𑒹 𑒋𑒯𑒱 𑒑𑓂𑒩𑒢𑓂𑒟𑒏𑒹𑒿 𑒔𑒪 𑒖𑒋𑒥𑒰𑒏 𑒂𑒬𑓀𑒏𑒰 𑒦𑒋 𑒖𑒰𑒃𑒕।

𑒋𑒯𑒱 𑒬𑒥𑓂𑒠𑒏𑒼𑒬𑒏 𑒫𑒱𑒢𑓂𑒨𑒰𑒮 𑒋𑒯𑒱 𑒣𑓂𑒩𑒏𑒰𑒩𑒹𑒿 𑒏𑒋𑒪 𑒑𑒹𑒪 𑒁𑒕𑒱 𑒖𑒹 𑒧𑒻𑒟𑒱𑒪𑒲𑒏 𑒨𑒰𑒫𑒞𑒼 𑒬𑒥𑓂𑒠𑒰𑒫𑒪𑒲𑒏 𑒋𑒯𑒱𑒧𑒹 𑒮𑒧𑒰𑒫𑒹𑒬 𑒦𑒋 𑒖𑒰𑒋। 𑒨𑒠𑓂𑒨𑒣𑒱 𑒋𑒞𑒋 𑒧𑒳𑒐𑓂𑒨𑒞𑓁 𑒧𑒳𑒠𑓂𑒩𑒱𑒞 (𑒪𑒱𑒐𑒱𑒞) 𑒮𑒰𑒯𑒱𑒞𑓂𑒨 𑒧𑒰𑒞𑓂𑒩𑒏 𑒅𑒣𑒨𑒼𑒑 𑒏𑒋𑒪 𑒑𑒹𑒪 𑒁𑒕𑒱 𑒞𑒟𑒰𑒣𑒱 𑒏𑒞𑒹𑒏𑒼 𑒫𑒰𑒔𑓂𑒨 𑒍 𑒅𑒣𑒦𑒰𑒭𑒰𑒏 𑒬𑒥𑓂𑒠𑒮𑒦𑒯𑒳𑒏𑒹𑒿 𑒮𑒹𑒯𑒼 𑒮𑓂𑒟𑒰𑒢 𑒠𑒹𑒥𑒰𑒏 𑒔𑒹𑒭𑓂𑒙𑒰 𑒏𑒋𑒪 𑒁𑒕𑒱। 𑒧𑒻𑒟𑒱𑒪𑒲𑒏 𑒬𑒥𑓂𑒠𑒏 𑒖𑒞𑒹𑒏 𑒩𑒴𑒣 𑒯𑒼𑒃𑒞 𑒕𑒻𑒏, 𑒖𑒞𑒹𑒏 𑒣𑓂𑒩𑒏𑒰𑒩𑒏 𑒬𑒥𑓂𑒠 𑒯𑒼𑒃𑒕, 𑒣𑓂𑒩𑒞𑓂𑒨𑒹𑒏 𑒣𑓂𑒩𑒞𑓂𑒨𑒨 𑒍 𑒞𑒠𑒢𑒳𑒏𑒹𑒩 𑒮𑓂𑒫𑒩𑒴𑒣 𑒋𑒯𑒱 𑒬𑒥𑓂𑒠𑒏𑒼𑒬𑒧𑒹 𑒠𑒹𑒪 𑒑𑒹𑒪 𑒁𑒕𑒱। 𑒞𑒞𑓂𑒮𑒧, 𑒞𑒠𑓂𑒦𑒫—𑒮𑒦 𑒬𑒥𑓂𑒠𑒏𑒹𑒿 𑒋𑒞𑒋 𑒮𑓂𑒟𑒰𑒢 𑒠𑒹𑒪 𑒑𑒹𑒪 𑒁𑒕𑒱। 𑒯𑒿, 𑒬𑒥𑓂𑒠 𑒩𑒐𑒥𑒰𑒏 𑒄 𑒮𑒱𑒠𑓂𑒡𑒰𑒢𑓂𑒞 𑒮𑓂𑒫𑒲𑒏𑒰𑒩 𑒏𑒋𑒪 𑒑𑒹𑒪 𑒁𑒕𑒱 𑒖𑒹 𑒖𑒹 𑒬𑒥𑓂𑒠 𑒧𑒻𑒟𑒱𑒪𑒲𑒧𑒹 𑒫𑓂𑒨𑒫𑒯𑒵𑒞 𑒯𑒼 𑒞𑒏𑒩𑒯𑒱𑒙𑒰 𑒬𑒥𑓂𑒠𑒏𑒼𑒬𑒧𑒹 𑒮𑓂𑒫𑒲𑒏𑒰𑒩 𑒏𑒋𑒪 𑒖𑒰𑒋। 𑒞𑒟𑒰𑒣𑒱 𑒥𑒯𑒳𑒞 𑒮𑒰𑒫𑒡𑒰𑒢 𑒦𑒹𑒪𑒼 𑒅𑒞𑓂𑒞𑒩 𑒏𑒼𑒢𑒼-𑒏𑒼𑒢𑒼 𑒬𑒥𑓂𑒠 𑒕𑒳𑒙𑒱𑒋 𑒑𑒹𑒪 𑒁𑒕𑒱। 𑒞𑒰𑒯𑒱 𑒯𑒹𑒞𑒳 𑒠𑓂𑒫𑒱𑒞𑒲𑒨 𑒮𑓀𑒮𑓂𑒏𑒩𑒝𑒧𑒹 𑒋𑒫𑓀 𑒣𑓂𑒩𑒟𑒧𑒯𑒳 𑒮𑓀𑒮𑓂𑒏𑒩𑒝𑒏 𑒁𑒢𑒳𑒧𑒹 𑒋𑒏𑒙𑒰 𑒐𑒝𑓂𑒛𑒧𑒹 𑒕𑒳𑒙𑒪 𑒋𑒫𑓀 𑒁𑒬𑒳𑒠𑓂𑒡 𑒮𑒰𑒧𑒑𑓂𑒩𑒲𑒏𑒹𑒿 𑒬𑒳𑒠𑓂𑒡 𑒏𑒋 𑒮𑒧𑒰𑒫𑒹𑒬 𑒏𑒩𑒥𑒰𑒏 𑒫𑒱𑒔𑒰𑒩 𑒁𑒕𑒱। 𑒫𑒮𑓂𑒞𑒳𑒞𑓁 𑒯𑒧𑒩𑒰𑒪𑒼𑒏𑒢𑒱𑒏 𑒮𑒧𑒏𑓂𑒭 𑒠𑒳𑒃 𑒧𑒰𑒩𑓂𑒑 𑒕𑒪—𑒋𑒏 𑒄, 𑒖𑒹 𑒬𑒥𑓂𑒠𑒮𑓀𑒑𑓂𑒩𑒯𑒏 𑒣𑓂𑒩𑒏𑓂𑒩𑒱𑒨𑒰𑒏𑒹𑒿 𑒣𑒳𑒢𑓁 𑒔𑒪𑒰𑒍𑒪 𑒖𑒰𑒋 𑒋𑒫𑓀 𑒮𑒦𑒙𑒰 𑒮𑓀𑒑𑒵𑒯𑒲𑒞 𑒬𑒥𑓂𑒠𑒏𑒹𑒿 𑒠𑒼𑒯𑒩𑒰𑒍𑒪 𑒖𑒰𑒋, 𑒏𑒱𑒢𑓂𑒞𑒳 𑒞𑒰𑒯𑒱𑒧𑒹 𑒏𑒞𑒯𑒳 𑒫𑒱𑒬𑓂𑒩𑒰𑒧 𑒪𑒋 𑒮𑒢𑓂𑒞𑒳𑒭𑓂𑒙 𑒯𑒼𑒋𑒥𑒰𑒏 𑒮𑒧𑓂𑒦𑒰𑒫𑒢𑒰 𑒢𑒯𑒱 𑒕𑒪। 𑒠𑒼𑒮𑒩 𑒧𑒰𑒩𑓂𑒑 𑒄, 𑒖𑒹 (𑒖𑒹𑒢𑒰 𑒏𑒼𑒬𑒏𑒰𑒩 𑒛𑒰𑒏𑓂𑒙𑒩 𑒮𑒋𑒧𑒳𑒁𑒪 𑒖𑒰𑒢𑒮𑒢 𑒏𑒯𑒢𑒹 𑒕𑒟𑒱) 𑒖𑒞𑒥𑒰 𑒬𑒥𑓂𑒠𑒮𑓀𑒑𑓂𑒩𑒯 𑒦𑒋 𑒑𑒹𑒪 𑒁𑒕𑒱 𑒞𑒏𑒩𑒰 𑒅𑒣𑒨𑒼𑒑 𑒏𑒩𑒥𑒰𑒏 𑒁𑒫𑒮𑒩 𑒁𑒢𑒏𑒰 𑒠𑒱𑒌𑒏। 𑒂𑒩𑓂𑒟𑒱𑒏 𑒏𑒰𑒩𑒝𑒯𑒳𑒿𑒮𑒿 𑒖𑒞𑒥𑒹𑒿 𑒦𑒹𑒪 𑒞𑒏𑒩𑒹 𑒮𑒧𑓂𑒣𑓂𑒩𑒞𑒱 𑒅𑒣𑒨𑒼𑒑 𑒏𑒋 𑒪𑒹𑒥𑒿 𑒮𑓀𑒦𑒫 𑒦𑒹𑒪। 𑒏𑒰𑒩𑒝 𑒮𑒩𑒏𑒰𑒩 𑒍 𑒁𑒢𑓂𑒨 𑒠𑒰𑒞𑒰 𑒂𑒩𑓂𑒟𑒱𑒏 𑒮𑒯𑒰𑒨𑒞𑒰 𑒠𑒹𑒥𑒰𑒏 𑒯𑒹𑒞𑒳 𑒣𑒳𑒮𑓂𑒞𑒏𑒏 𑒏𑒱𑒕𑒳 𑒁𑓀𑒬 𑒕𑒣𑒰𑒋 𑒠𑒹𑒥𑒰𑒏 𑒂𑒑𑓂𑒩𑒯 𑒏𑒋𑒪। 𑒃𑒯𑒼 𑒡𑒰𑒩𑒝𑒰 𑒯𑒧𑒩𑒰𑒮𑒦𑒏𑒹𑒿 𑒦𑒋 𑒑𑒹𑒪 𑒖𑒹 𑒨𑒠𑒱 𑒏𑒱𑒕𑒳 𑒁𑓀𑒬 𑒕𑒣𑒞 𑒞𑒿 𑒫𑒱𑒠𑓂𑒫𑒰𑒢𑓂𑒪𑒼𑒏𑒢𑒱𑒏 (𑒂𑒬𑒰 𑒏𑒩𑒻𑒞 𑒕𑒲 '𑒮𑓂𑒫𑒮𑓂𑒟') 𑒮𑒧𑒰𑒪𑒼𑒔𑒢𑒰 𑒯𑒼𑒋𑒞 𑒖𑒰𑒯𑒱𑒮𑒿 𑒯𑒧𑒩𑒰𑒮𑒦𑒏 𑒑𑓂𑒩𑒢𑓂𑒟𑒏 𑒣𑓂𑒩𑒝𑒨𑒢-𑒏𑓂𑒩𑒱𑒨𑒰 𑒅𑒔𑒱𑒞𑒩𑒴𑒣𑒹𑒿 𑒦𑒋 𑒩𑒯𑒪 𑒁𑒕𑒱 𑒫𑒰 𑒢𑒯𑒱 𑒞𑒟𑒰 𑒍𑒯𑒱𑒧𑒹 𑒏𑒲 𑒏𑒱𑒕𑒳 𑒮𑒳𑒡𑒰𑒩 𑒏𑒋𑒪 𑒖𑒰 𑒮𑒏𑒻𑒕 𑒖𑒰𑒯𑒱𑒮𑒿 𑒕𑒣𑒻𑒞-𑒕𑒣𑒻𑒞 𑒮𑒹𑒯𑒼 𑒏𑒱𑒕𑒳 𑒬𑒳𑒠𑓂𑒡 𑒏𑒋𑒪 𑒖𑒰 𑒮𑒏𑒋 𑒃𑒞𑓂𑒨𑒰𑒠𑒱 𑒪𑒰𑒦 𑒯𑒼𑒋𑒞।

Figure 3: An excerpt from the preface to *Bṛhat Maithilī Śabdakośa* (from Mishra 1973: 25).



BIHĀRĪ.

MAITHILĪ DIALECT (MAITHILĪ CHARACTER, AS USED BY BRĀHMAṆS).

(DARBHANGA DISTRICT.)

Figure 4: Specimen of Tirhuta from the *Linguistic Survey of India* (from Grierson 1903: 56–58).

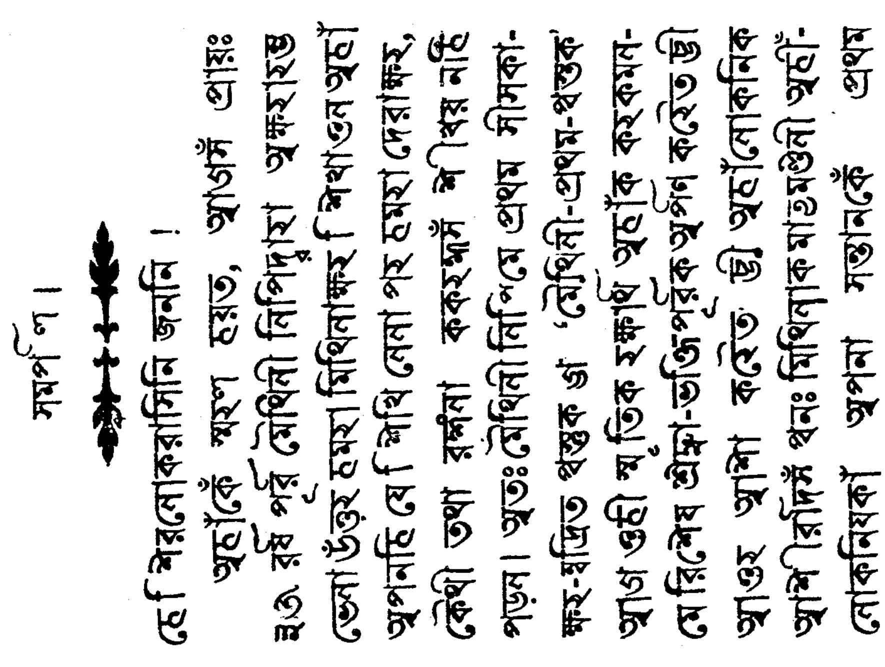


Figure 5: The preface from *Maithilī Prathama Pustaka*, printed in Tirhuta type (from Rāya 2003).

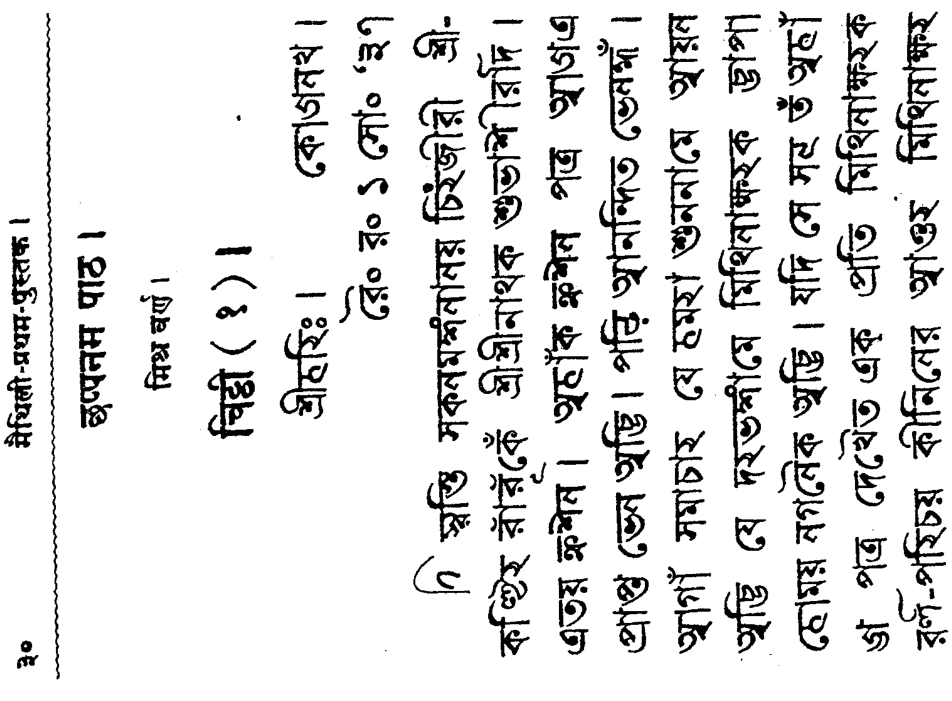


Figure 6: An excerpt from *Maithilī Prathama Pustaka* (from Rāya 2003: 30). The passage begins with the symbol *añjī*.

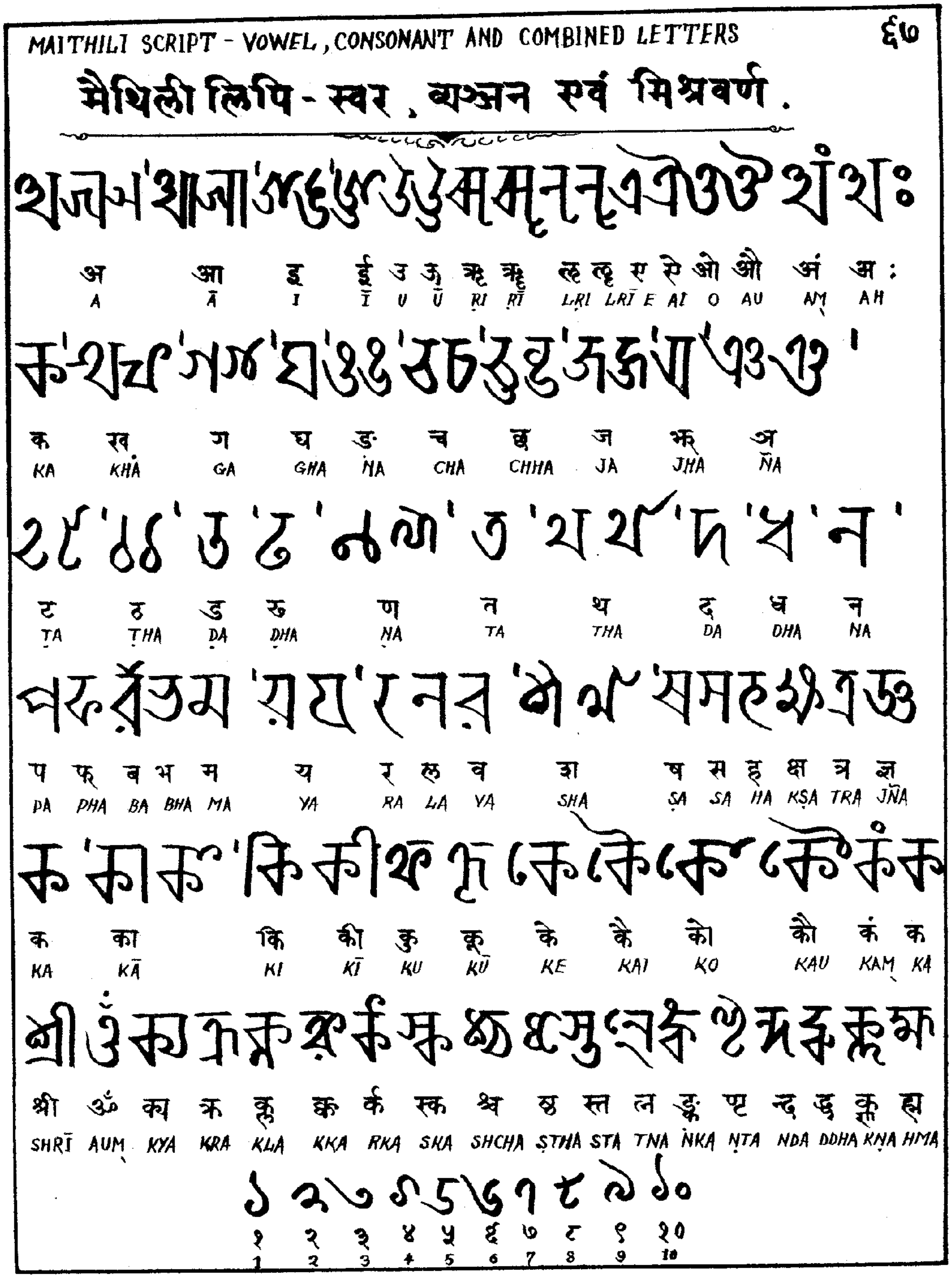

MAITHILI SCRIPT - VOWEL, CONSONANT AND COMBINED LETTERS
६७
मैथिली लिपि - स्वर, व्यञ्जन एवं मिश्रवर्ण.
अ आ इ ई उ ऊ ऋ ॠ ऌ ॡ ए ऐ ओ औ अं अः
A Ā I Ī U Ū ṚI ṚĪ LṚI LṚĪ E AI O AU AṀ AH
क ख ग घ ङ च छ ज झ ञ
KA KHA GA GHA ṄA CHA CHHA JA JHA ÑA
ट ठ ड ढ ण त थ द ध न
ṬA ṬHA ḌA ḌHA ṆA TA THA DA DHA NA
प फ ब भ म य र ल व श ष स ह क्ष त्र ज्ञ
PA PHA BA BHA MA YA RA LA VA SHA ṢA SA HA KṢA TRA JÑA
क का कि की कु कू के कै को कौ कं क
KA KĀ KI KĪ KU KŪ KE KAI KO KAU KAṀ KA
श्री ॐ क्य क्र क्ल क्क र्क स्क श्च ष्ठ स्त त्न ङ्क ण्ट न्द द्ध क्न ह्म
SHRĪ AUṀ KYA KRA KLA KKA RKA SKA SHCHA ṢṬHA STA TNA ṄKA ṆṬA NDA DDHA KṆA HMA
१ २ ३ ४ ५ ६ ७ ८ ९ १०
1 2 3 4 5 6 7 8 9 10

Figure 7: Chart of Tirhuta (from Śākyavaṃśa 1974: 67).

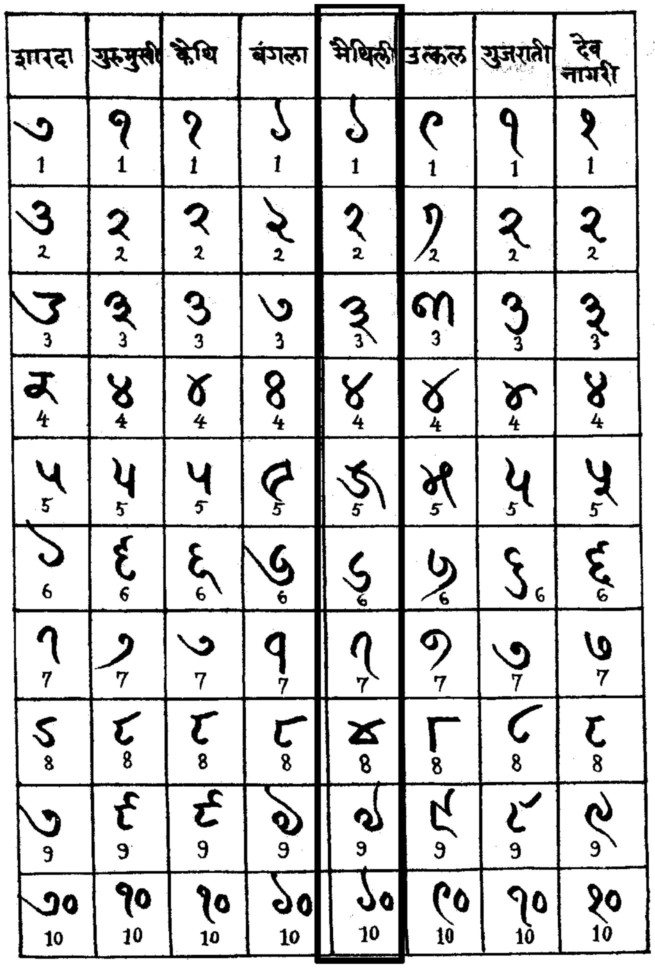

शारदा
गुरुमुखी
कैथि
बंगला
मैथिली
उत्कल
गुजराती
देव नागरी
1 1 1 1 1 1 1 1
2 2 2 2 2 2 2 2
3 3 3 3 3 3 3 3
4 4 4 4 4 4 4 4
5 5 5 5 5 5 5 5
6 6 6 6 6 6 6 6
7 7 7 7 7 7 7 7
8 8 8 8 8 8 8 8
9 9 9 9 9 9 9 9
10 10 10 10 10 10 10 10

Figure 8: Comparison of digits of Tirhuta and other scripts (from Śākyavaṃśa 1974: 76).

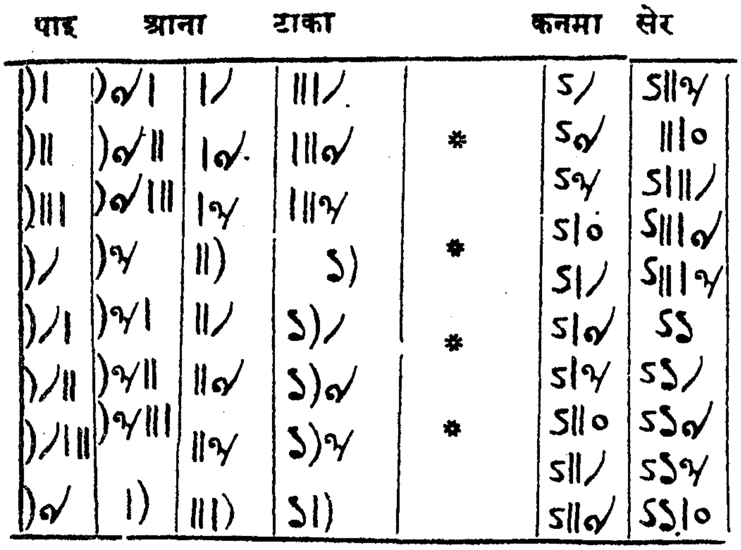
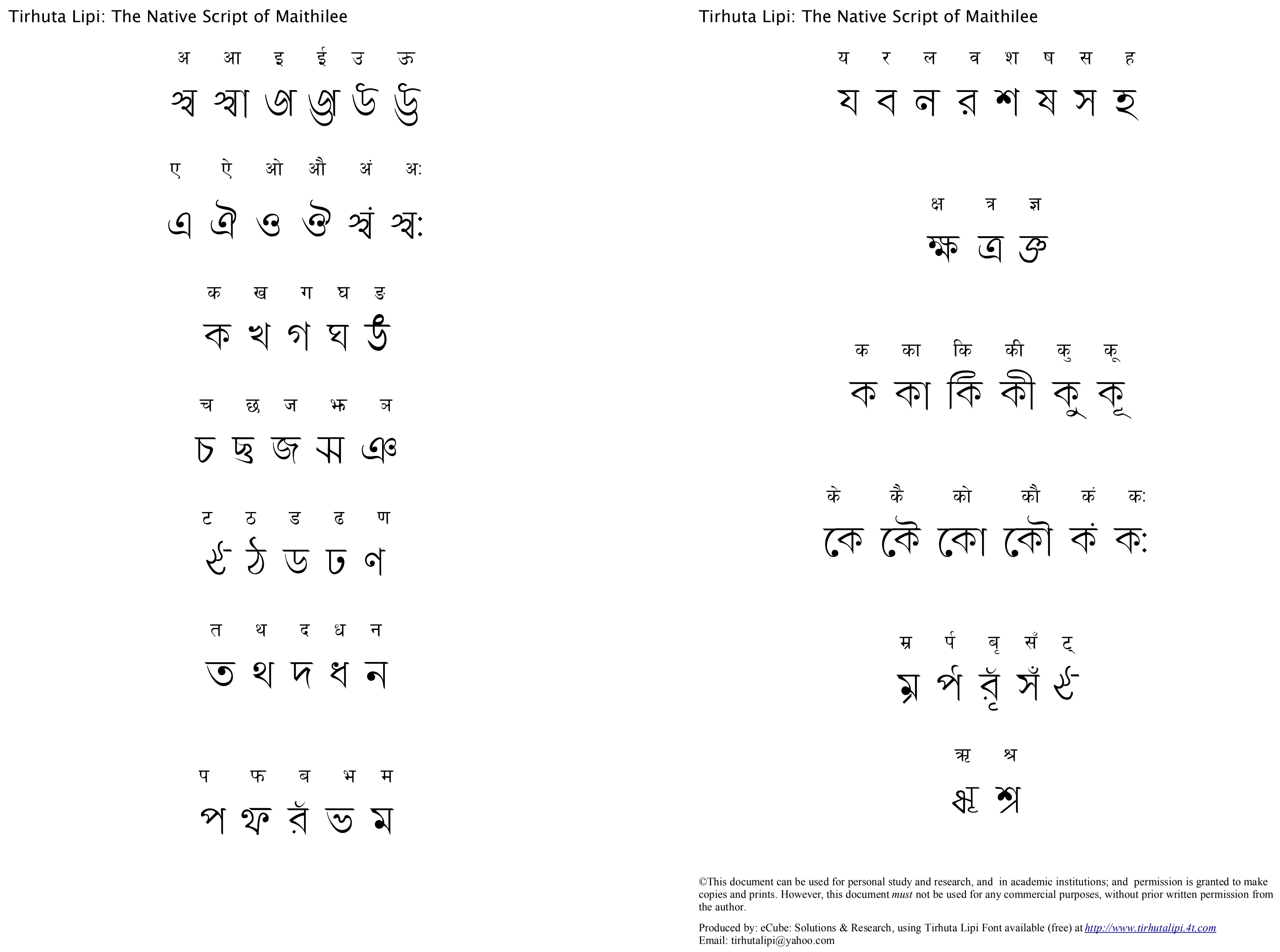

पाइ
आना
टाका
कनमा
सेर

Figure 9: Chart of number forms used in Tirhuta (from Rāya 2003: 39).



Tirhuta Lipi: The Native Script of Maithilee

अ आ इ ई उ ऊ

ए ऐ ओ औ अं अः

क ख ग घ ङ

च छ ज झ ञ

ट ठ ड ढ ण

त थ द ध न

प फ ब भ म

Tirhuta Lipi: The Native Script of Maithilee

य र ल व श ष स ह

क्ष त्र ज्ञ

क का कि की कु कू

के कै को कौ कं कः

म्र र्प बृ सँ ट्

ऋ श्र

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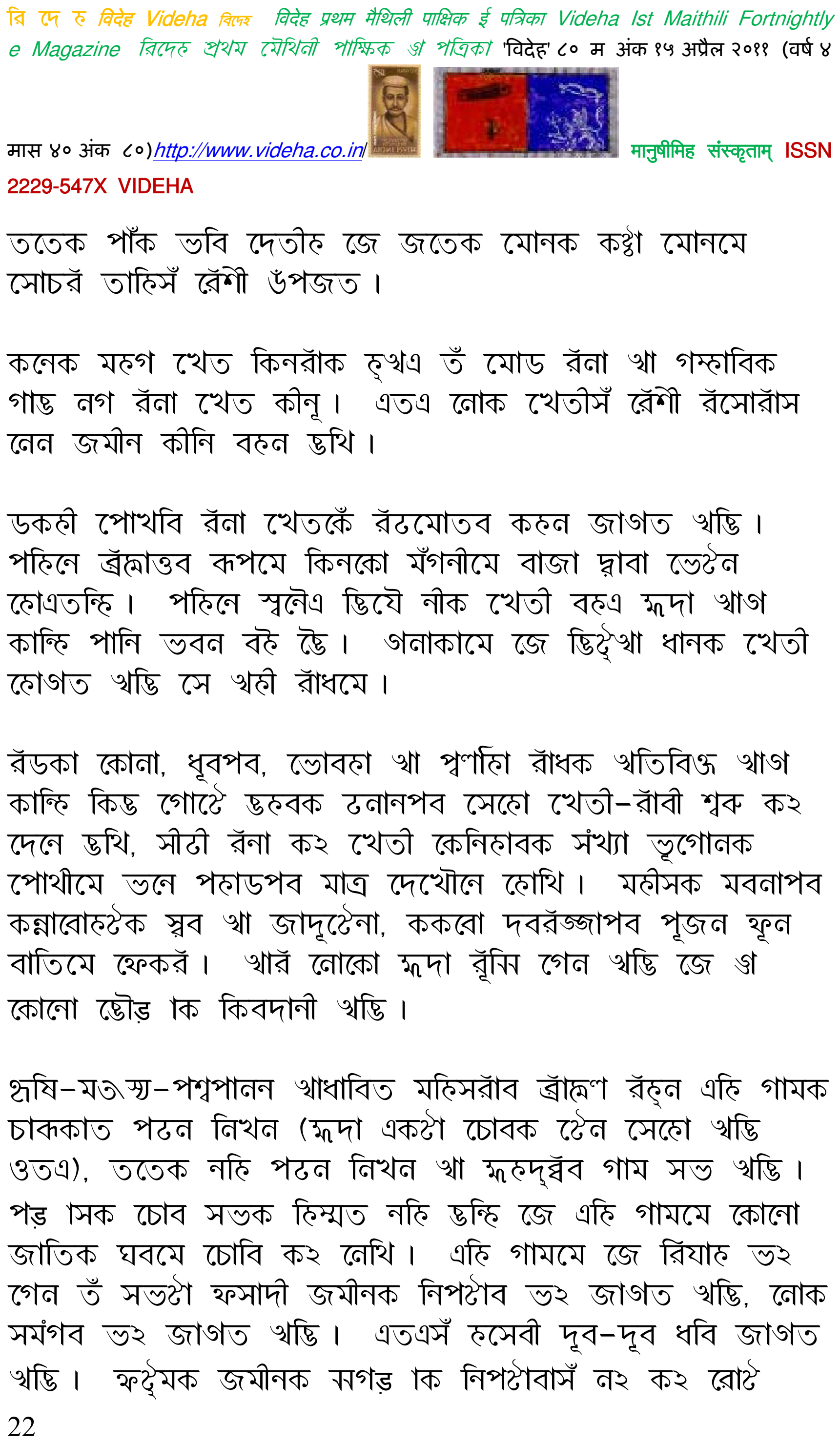
Produced by: eCube: Solutions & Research, using Tirhuta Lipi Font available (free) at *http://www.tirhutalipi.4t.com*
Email: tirhutalipi@yahoo.com

Figure 10: A chart of Tirhuta typeset with the digitized font, “Tirhuta,” developed by eCube: Solutions & Research (2003).



রি দে হ विदेह Videha বিদেহ विदेह प्रथम मैथिली पाक्षिक ई पत्रिका Videha Ist Maithili Fortnightly e Magazine বিদেহ প্রথম মৌথিনী পাক্ষিক ঔ পত্রিকা 'विदेह' ८० म अंक १५ अप्रैल २०११ (वर्ष ४ मास ४० अंक ८०)http://www.videha.co.in/ मानुषीमिह संस्कृताम् ISSN 2229-547X VIDEHA

ততেক পাঁক ভবি দেতীহ জে জতেক মোনক কণ্ঠা মোনমে সোচরঁ তাহিসঁ রেঁশী উঁপজত।

কনেক মহগ খেত কিনরাঁক হ্খএ তঁ মোড রঁনা খা গম্হাবিক গাছ নগ রঁনা খেত কীনৃ। এতএ নোক খেতীসঁ রেঁশী রঁসোরাঁস নেন জমীন কীনি বহন ছথি।

ডকহী পোখবি রঁনা খেতকেঁ রঁঠমোতব কহন জাগত খছি। পহিনে ব্রঁহ্মাত্তব রূপমে কিনকো মঁগনীমে বাজা দ্বাবা ভেঁটন হোএতন্হি। পহিনে স্বনৈএ ছিযৈ নীক খেতী বহএ হ্মদা খাগ কান্হি পানি ভবন বহি ছৈ। গনাকামে জে ছিট্ঁখা ধানক খেতী হোগত খছি সে খহী রাঁধমে।

রঁডকা কোনা, ধূবপব, ভোবহা খা প্বর্ণাহা রাঁধক খতিবিঞ্জ খাগ কান্হি কিছু গোটৈ ছহবক ঠনানপব সেহো খেতী–রাঁবী শ্বরু কঽ দেনে ছথি, সীঠী রঁনা কঽ খেতী কেনিহাবক সংখ্যা ভূগোনক পোথীমে ভনে পহাডপব মাত্র দেখৌনে হোথি। মহীসক মবনাপব কন্নাবোহটৈক স্ত্রব খা জাদূটৈনা, ককবো দবরঁজ্জাপব পূজন ফূন বাতিমে ফেকরঁ। খারঁ নোকো হ্মদা রূঁন্মি গেন খছি জে ঔ কোনো ছৌড় াক কিবদানী খছি।

হ্রষি–মত্স্য–পশ্বপানন খাধাবিত মহিসরাঁব ব্রাঁহ্মণ রঁহ্ন এহি গামক চাব্ধকাত পঠন নিখন (হ্মদা একটৌ চোবক টৈন সেহো খছি ওতএ), ততেক নহি পঠন নিখন খা হ্মহদ্বর্ঁব গাম সভ খছি। পড় াসক চোব সভক হিম্মত নহি ছন্হি জে এহি গামমে কোনো জাতিক ঘবমে চোবি কঽ নেথি। এহি গামমে জে রিঁযাহ ভঽ গেন তঁ সভটৌ ফসাদী জমীনক নিপটৌব ভঽ জাগত খছি, নোক সমংগব ভঽ জাগত খছি। এতএসঁ হসেবী দূব–দূব ধবি জাগত খছি। ফট্ঁমক জমীনক ঝগড় াক নিপটৌবাসঁ নঽ কঽ রোটৈ

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Figure 11: Excerpt from a Maithili e-journal in Tirhuta published as a PDF (from *Videha* no. 80: 22).

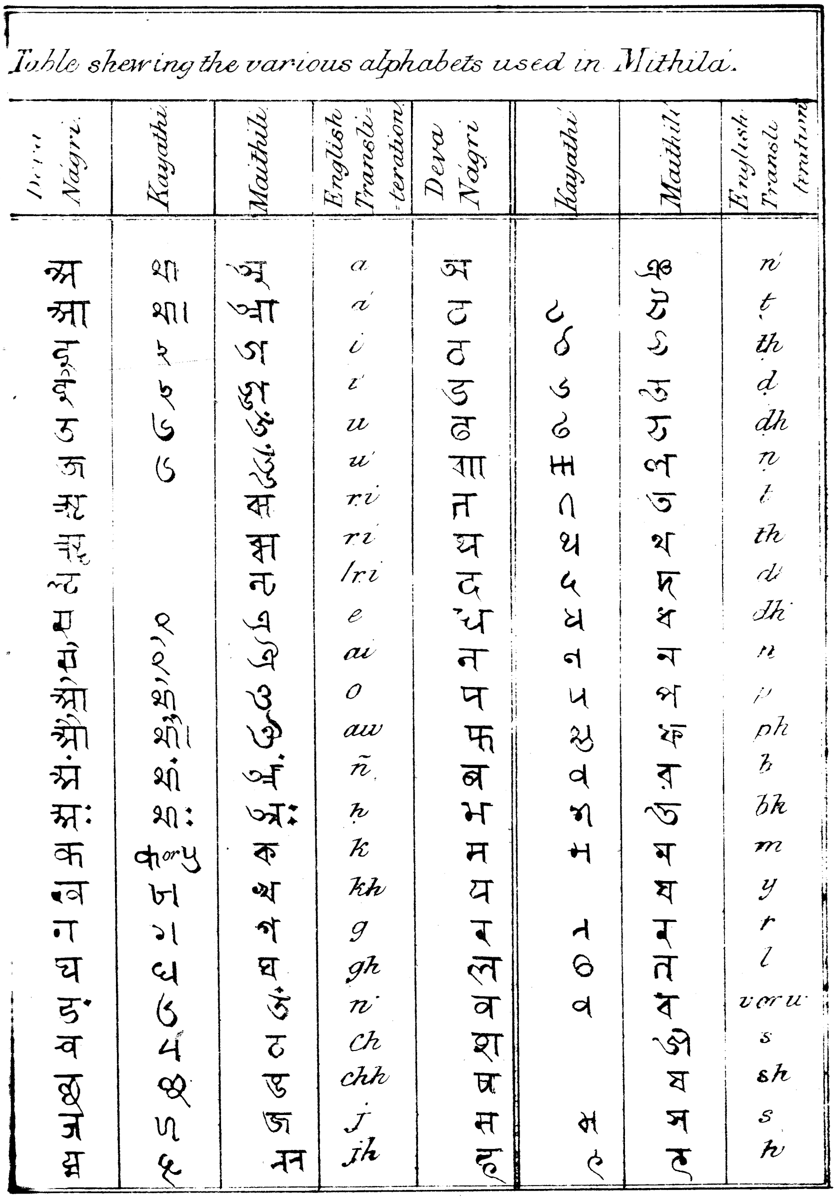
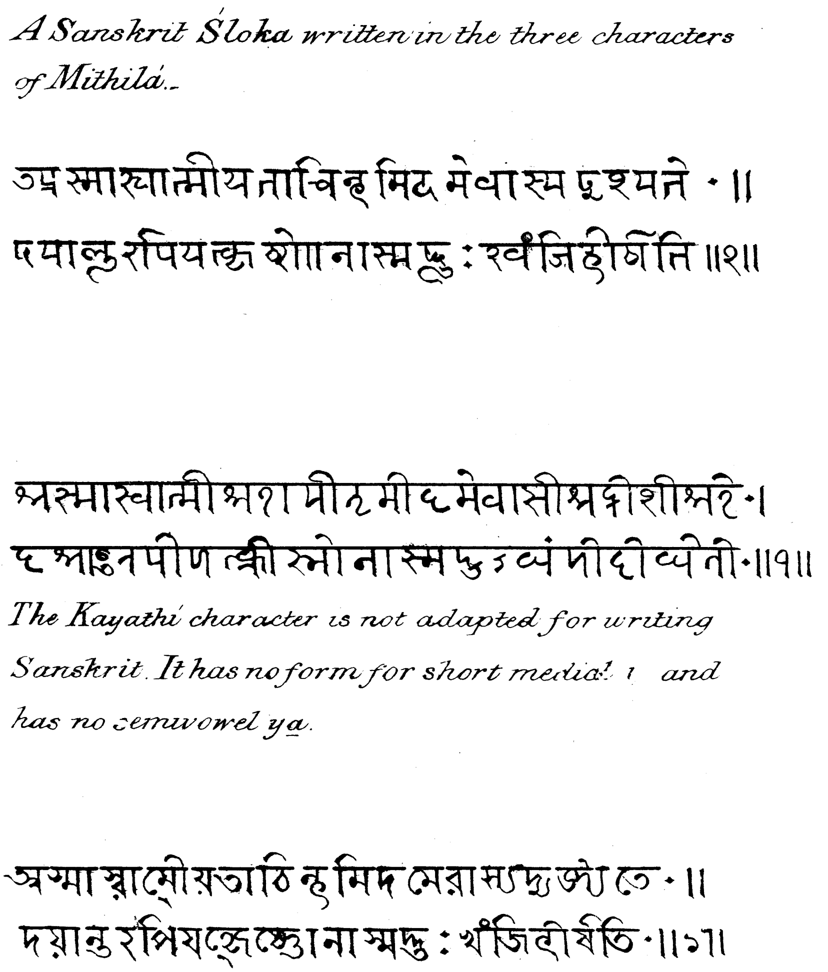


Table shewing the various alphabets used in Mithila.

Deva Nágri	Kayathi	Maithili	English Transliteration	Deva Nágri	Kayathi	Maithili	English Transliteration
अ	𑂃	𑒁	a	ञ		𑒘	ñ
आ	𑂄	𑒂	á	ट	𑂗	𑒙	t
इ	𑂅	𑒃	i	ठ	𑂘	𑒚	th
ई	𑂆	𑒄	í	ड	𑂙	𑒛	d
उ	𑂇	𑒅	u	ढ	𑂛	𑒜	dh
ऊ	𑂈	𑒆	ú	ण	𑂝	𑒝	n
ऋ		𑒇	ri	त	𑂞	𑒞	t
ॠ		𑒈	rí	थ	𑂟	𑒟	th
ऌ		𑒉	lri	द	𑂠	𑒠	d
ए	𑂉	𑒋	e	ध	𑂡	𑒡	dh
ऐ	𑂊	𑒌	ai	न	𑂢	𑒢	n
ओ	𑂋	𑒍	o	प	𑂣	𑒣	p
औ	𑂌	𑒎	aw	फ	𑂤	𑒤	ph
अं	𑂃𑂁	𑒁𑓀	ñ	ब	𑂥	𑒥	b
अः	𑂃𑂂	𑒁𑓁	h	भ	𑂦	𑒦	bh
क	𑂍 or 𑂍	𑒏	k	म	𑂧	𑒧	m
ख	𑂎	𑒐	kh	य		𑒨	y
ग	𑂏	𑒑	g	र	𑂩	𑒩	r
घ	𑂐	𑒒	gh	ल	𑂪	𑒪	l
ङ	𑂑	𑒓	n	व	𑂫	𑒫	v or w
च	𑂒	𑒔	ch	श		𑒬	s
छ	𑂓	𑒕	chh	ष		𑒭	sh
ज	𑂔	𑒖	j	स	𑂮	𑒮	s
झ	𑂕	𑒗	jh	ह	𑂯	𑒯	h

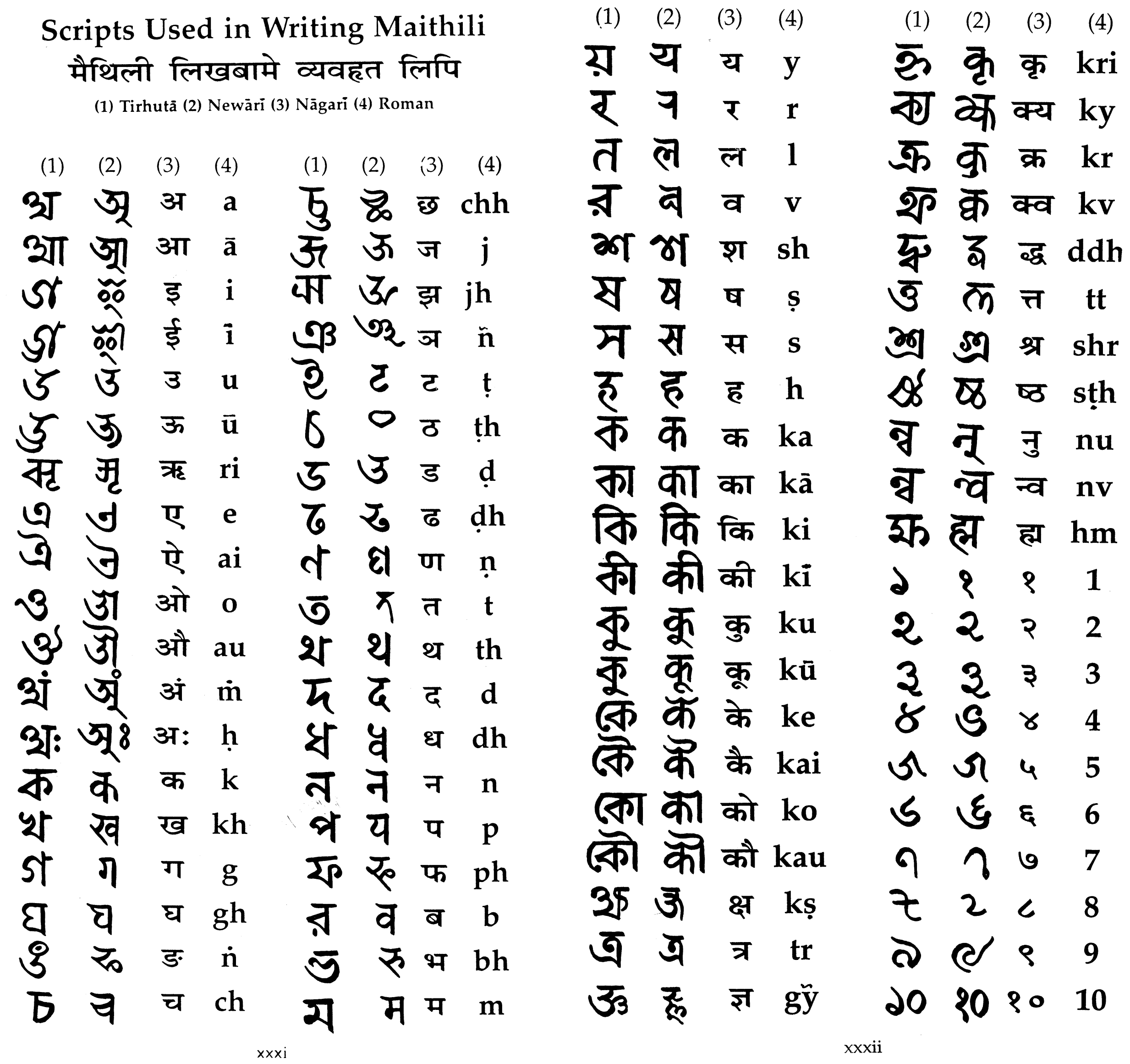
Figure 12: A chart of Devanagari, Kaithi, and Tirhuta (‘Maithili’) (from Grierson 1882: Appendix 1a).



A Sanskrit Śloka written in the three characters of Mithilá.–

The Kayathi character is not adapted for writing Sanskrit. It has no form for short medial i and has no semivowel ya.

Figure 13: Specimens of Devanagari, Kaithi, and Tirhuta (from Grierson 1882: Appendix 1b).



Scripts Used in Writing Maithili

मैथिली लिखबामे व्यवहृत लिपि

(1) Tirhutā (2) Newārī (3) Nāgarī (4) Roman

(3)	(4)
अ	a
आ	ā
इ	i
ई	ī
उ	u
ऊ	ū
ऋ	ri
ए	e
ऐ	ai
ओ	o
औ	au
अं	ṁ
अः	ḥ
क	k
ख	kh
ग	g
घ	gh
ङ	ṅ
च	ch

(3)	(4)
छ	chh
ज	j
झ	jh
ञ	ñ
ट	ṭ
ठ	ṭh
ड	ḍ
ढ	ḍh
ण	ṇ
त	t
थ	th
द	d
ध	dh
न	n
प	p
फ	ph
ब	b
भ	bh
म	m

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(3)	(4)
य	y
र	r
ल	l
व	v
श	sh
ष	ṣ
स	s
ह	h
क	ka
का	kā
कि	ki
की	kī
कु	ku
कू	kū
के	ke
कै	kai
को	ko
कौ	kau
क्ष	kṣ
त्र	tr
ज्ञ	gy̆

(3)	(4)
कृ	kri
क्य	ky
क्र	kr
क्व	kv
द्ध	ddh
त्त	tt
श्र	shr
ष्ठ	sṭh
नु	nu
न्व	nv
ह्म	hm
१	1
२	2
३	3
४	4
५	5
६	6
७	7
८	8
९	9
१०	10

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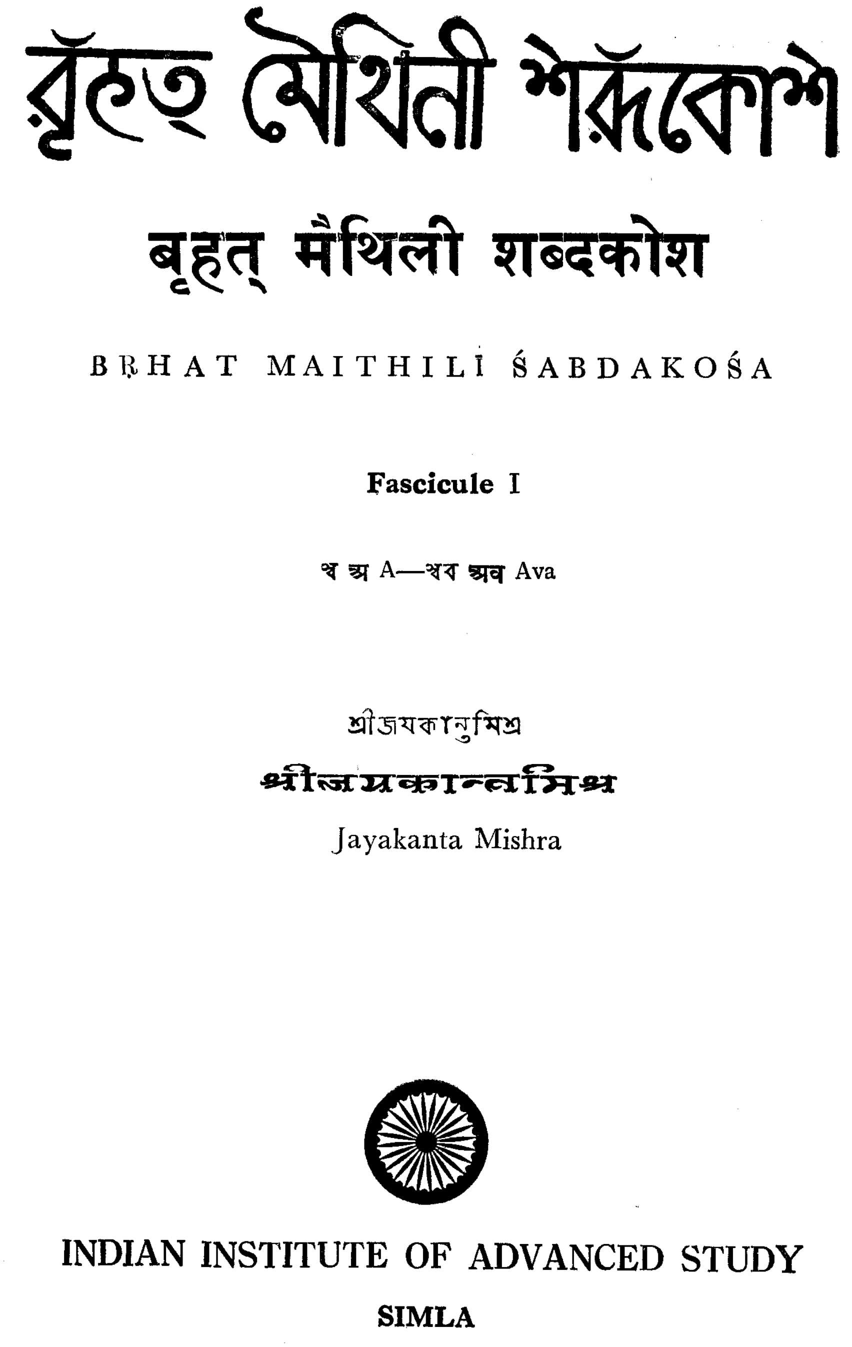
Figure 14: Comparison of Tirhuta, Newari, and Devanagari (from G. Jhā 1999: xxxi–xxxii).



𑒥𑒵𑒯𑒞𑓂 𑒧𑒻𑒟𑒱𑒪𑒲 𑒬𑒥𑓂𑒠𑒏𑒼𑒬

बृहत् मैथिली शब्दकोश

BṚHAT MAITHILĪ ŚABDAKOŚA

Fascicule I

𑒁 अ A—𑒁𑒫 अव Ava

𑒬𑓂𑒩𑒲𑒖𑒨𑒏𑒰𑒢𑓂𑒞𑒧𑒱𑒬𑓂𑒩

श्रीजयकान्तमिश्र

Jayakanta Mishra

INDIAN INSTITUTE OF ADVANCED STUDY

SIMLA

Figure 15: Title page of *Bṛhat Maithilī Śabdakośa* (from Mishra 1973).

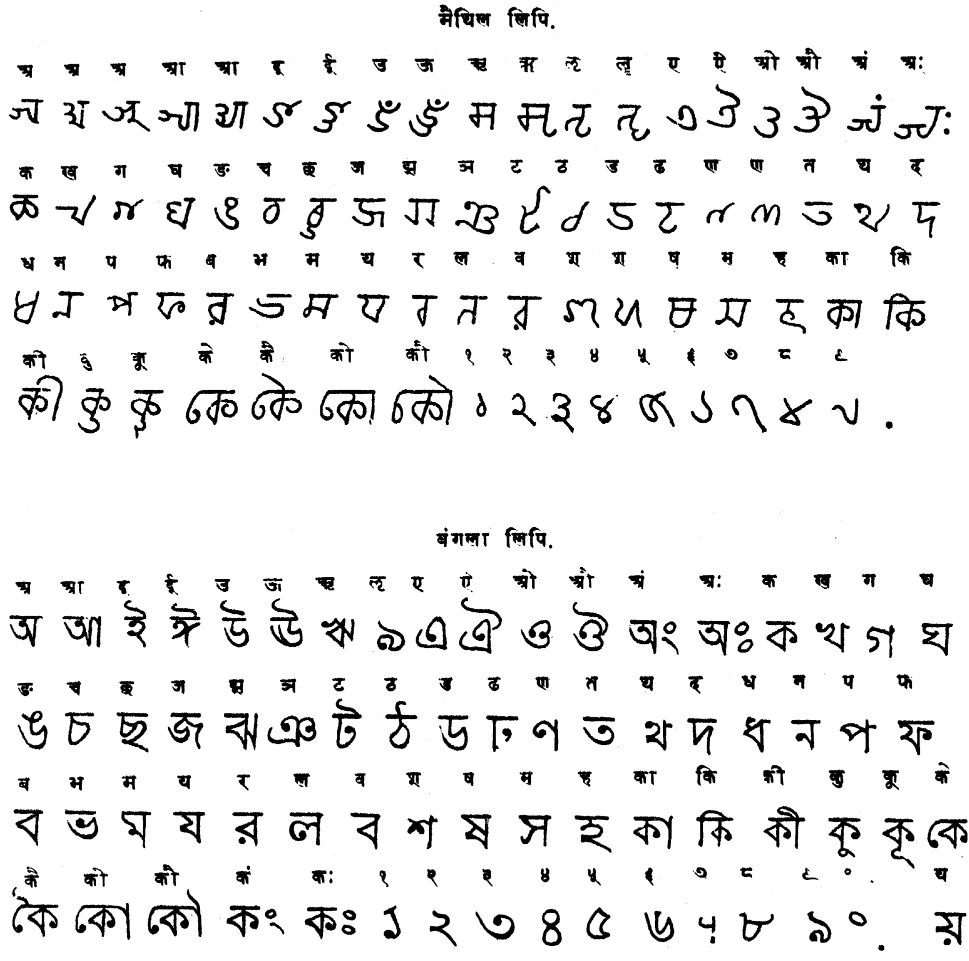
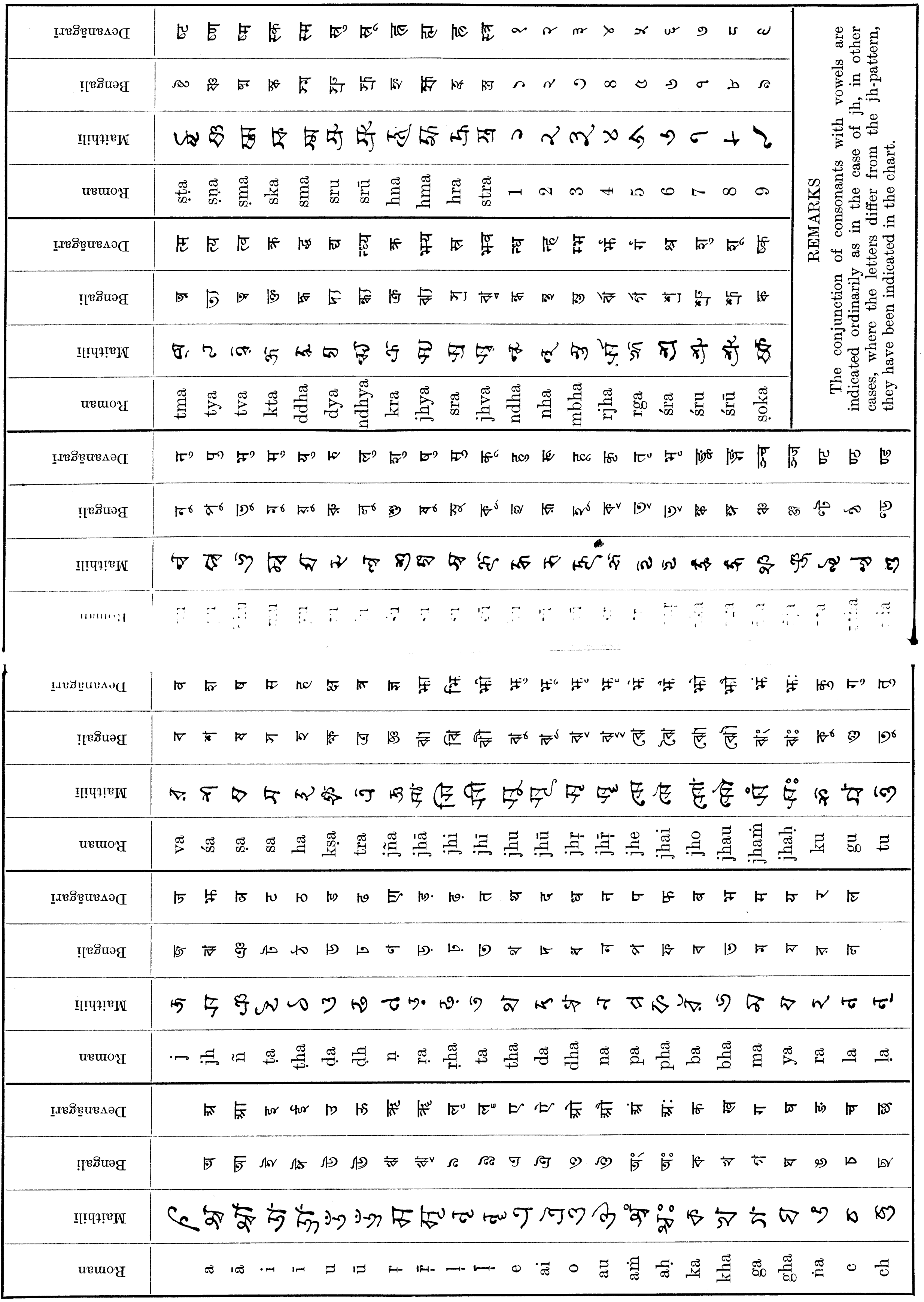

मैथिल लिपि.
अ अ अ आ आ इ ई उ ऊ ऋ ॠ ऌ ॡ ए ऐ ओ औ अं अः
क ख ग घ ङ च छ ज झ ञ ट ठ ड ढ ण ण त थ द
ध न प फ ब भ म य र ल व श श ष स ह का कि
की कु कू के कै को कौ १ २ ३ ४ ५ ६ ७ ८ ९
बंगला लिपि.
अ आ इ ई उ ऊ ऋ ऌ ए ऐ ओ औ अं अः क ख ग घ
ङ च छ ज झ ञ ट ठ ड ढ ण त थ द ध न प फ
ब भ म य र ल व श ष स ह का कि की कु कू के
कै को कौ कं कः १ २ ३ ४ ५ ६ ७ ८ ९ ० . य

Figure 16: Comparison of hand-written Tirhuta ('Maithili') and Bengali letters (from Ojhā 1971: Plate LXXVIII).


Roman
Maithili
Bengali
Devanāgarī
a ā i ī u ū ṛ ṝ ḷ ḹ e ai o au aṁ aḥ ka kha ga gha ṅa c ch
j jh ñ ṭa ṭha ḍa ḍh ṇ ṛa ṛha ta tha da dha na pa pha ba bha ma ya ra la ḷa
va śa ṣa sa ha kṣa tra jña jhā jhi jhī jhu jhū jhṛ jhṝ jhe jhai jho jhau jhaṁ jhaḥ ku gu tu
tma tya tva kta ddha dya ndhya kra jhya sra jhva ndha nha mbha rjha rga śra śru śrū ṣoka
ṣṭa ṣṇa ṣma ska sma sru srū hna hma hra stra 1 2 3 4 5 6 7 8 9

REMARKS

The conjunction of consonants with vowels are indicated ordinarily as in the case of jh, in other cases, where the letters differ from the jh-pattern, they have been indicated in the chart.

Figure 17: Chart showing comparison of Tirhuta ('Maithili') and Bengali (from S. Jha 1958: 54–55).

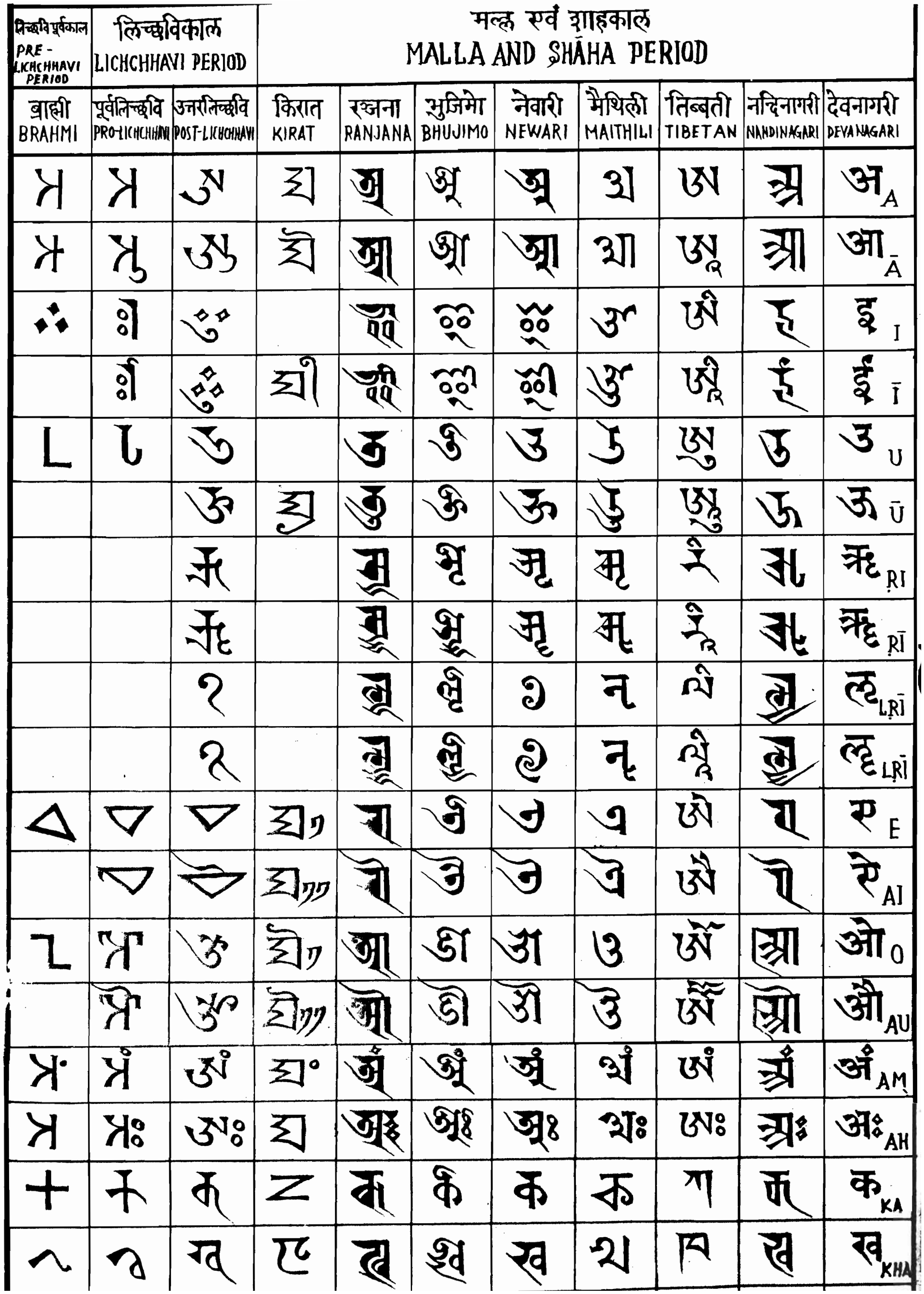

लिच्छवि पूर्वकाल
PRE-LICHCHHAVI PERIOD
लिच्छविकाल
LICHCHHAVI PERIOD
मल्ल एवं शाहकाल
MALLA AND ŞHĀHA PERIOD
ब्राह्मी BRAHMI
पूर्वलिच्छवि PRO-LICHCHHAVI
उत्तरलिच्छवि POST-LICHCHHAVI
किरात KIRAT
रञ्जना RANJANA
भुजिमो BHUJIMO
नेवारी NEWARI
मैथिली MAITHILI
तिब्बती TIBETAN
नन्दिनागरी NANDINAGARI
देवनागरी DEVANAGARI
अ A
आ Ā
इ I
ई Ī
उ U
ऊ Ū
ऋ ṚI
ॠ ṚĪ
ऌ LṚĪ
ॡ LṚĪ
ए E
ऐ AI
ओ O
औ AU
अं AM
अः AH
क KA
ख KHA

Figure 18: Excerpt from a chart of scripts used in Nepal (from Thāpā et al.).

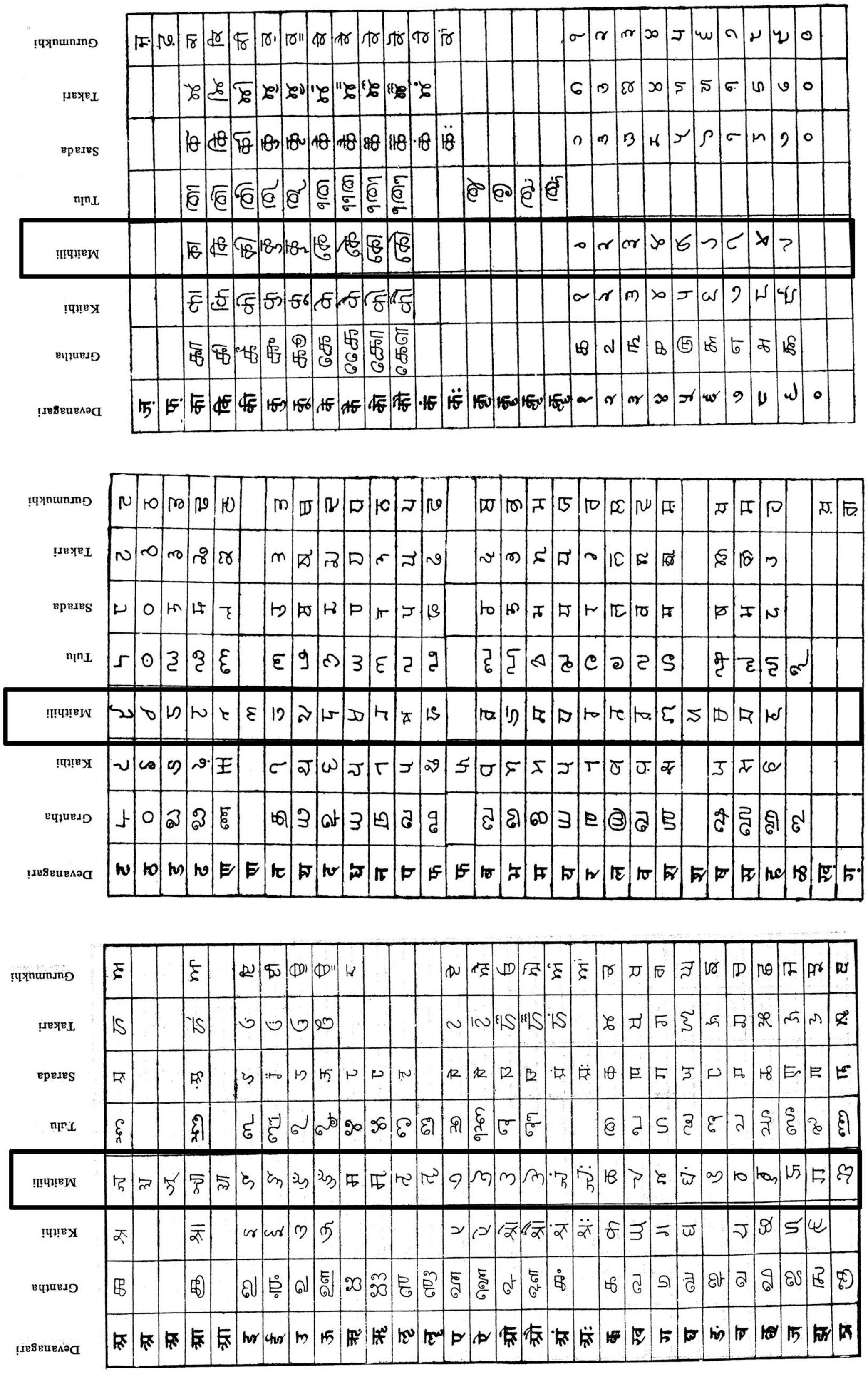

Devanagari
Grantha
Kaithi
Maithili
Tulu
Sarada
Takari
Gurumukhi

Figure 19: Comparison of Tirhuta ('Maithili') with other Brahmi-based scripts (from Naik 1971: Table 13).

	TIRUTA	BENGALI	TIRHUTA	BENGALI
A	𑒁	অ	*no dependent form*	
AA	𑒂	আ	◌𑒰	◌া
I	𑒃	ই	◌𑒱	◌ি
II	𑒄	ঈ	◌𑒲	◌ী
U	𑒅	উ	◌𑒳	◌ু
UU	𑒆	ঊ	◌𑒴	◌ূ
VOCALIC R	𑒇	ঋ	◌𑒵	◌ৃ
VOCALIC RR	𑒈	ৠ	◌𑒶	◌ৄ
VOCALIC L	𑒉	ঌ	◌𑒷	◌ৢ
VOCALIC LL	𑒊	ৡ	◌𑒸	◌ৣ
E	𑒋	এ	◌𑒹	◌ে
SHORT E	*no independent form*		◌𑒺	—
AI	𑒌	ঐ	◌𑒻	◌ৈ
O	𑒍	ও	◌𑒼	◌ো
SHORT O	*no independent form*		◌𑒽	◌ৗ
AU	𑒎	ঔ	◌𑒾	◌ৌ

Table 3: Comparison of Tirhuta and Bengali vowel letters and signs (differences highlighted).

	TIRHUTA	BENGALI		TIRHUTA	BENGALI
KA	𑒏	ক	DA	𑒠	দ
KHA	𑒐	খ	DHA	𑒡	ধ
GA	𑒑	গ	NA	𑒢	ন
GHA	𑒒	ঘ	PA	𑒣	প
NGA	𑒓	ঙ	PHA	𑒤	ফ
CA	𑒔	চ	BA	𑒥	ব
CHA	𑒕	ছ	BHA	𑒦	ভ
JA	𑒖	জ	MA	𑒧	ম
JHA	𑒗	ঝ	YA	𑒨	য
NYA	𑒘	ঞ	RA	𑒩	র
TTA	𑒙	ট	LA	𑒪	ল
TTHA	𑒚	ঠ	VA	𑒫	—
DDA	𑒛	ড	SHA	𑒬	শ
DDHA	𑒜	ঢ	SSA	𑒭	ষ
NNA	𑒝	ণ	SA	𑒮	স
TA	𑒞	ত	HA	𑒯	হ
THA	𑒟	থ			

Table 4: Comparison of Tirhuta and Bengali consonant letters (differences highlighted).

	TIRHUTA	BENGALI
ZERO	𑓐	০
ONE	𑓑	১
TWO	𑓒	২
THREE	𑓓	৩
FOUR	𑓔	৪
FIVE	𑓕	৫
SIX	𑓖	৬
SEVEN	𑓗	৭
EIGHT	𑓘	৮
NINE	𑓙	৯

Table 5: Comparison of Tirhuta and Bengali digits (differences highlighted).

	TIRHUTA	BENGALI
CANDRABINDU	◌𑒿	◌ঁ
ANUSVARA	◌𑓀	◌ং
VISARGA	◌𑓁	◌ঃ
VIRAMA	◌𑓂	◌্
AVAGRAHA	𑓄	ঽ
ANJI	𑓆	—
OM	𑓇	—
GVANG	◌𑓅	—

Table 6: Comparison of Tirhuta and Bengali miscellaneous signs (differences highlighted).

	TIRHUTA	BENGALI		TIRHUTA	BENGALI
kta	𑒏𑓂𑒞	ক্ত	*tta*	𑒞𑓂𑒞	ত্ত
kra	𑒏𑓂𑒩	ক্র	*tya*	𑒞𑓂𑒨	ত্য
kṣa	𑒏𑓂𑒭	ক্ষ	*tva*	𑒞𑓂𑒫	ত্ব
gga	𑒑𑓂𑒑	গ্গ	*ddha*	𑒠𑓂𑒡	দ্ধ
gdha	𑒑𑓂𑒡	গ্ধ	*dya*	𑒠𑓂𑒨	দ্য
ṅka	𑒓𑓂𑒏	ঙ্ক	*ndha*	𑒢𑓂𑒡	ন্ধ
ṅkha	𑒓𑓂𑒐	ঙ্খ	*nha*	𑒢𑓂𑒯	ন্হ
ṅga	𑒓𑓂𑒑	ঙ্গ	*bda*	𑒥𑓂𑒠	ব্দ
ṅgha	𑒓𑓂𑒒	ঙ্ঘ	*bdha*	𑒥𑓂𑒡	ব্ধ
cca	𑒔𑓂𑒔	চ্চ	*ścha*	𑒬𑓂𑒕	শ্ছ
ccha	𑒔𑓂𑒕	চ্ছ	*ṣṭa*	𑒭𑓂𑒙	ষ্ট
jña	𑒖𑓂𑒘	জ্ঞ	*ṣṭha*	𑒭𑓂𑒚	ষ্ঠ
ñca	𑒘𑓂𑒔	ঞ্চ	*ṣṇa*	𑒭𑓂𑒝	ষ্ণ
ñcha	𑒘𑓂𑒕	ঞ্ছ	*rga*	𑒩𑓂𑒑	র্গ
ṭṭa	𑒙𑓂𑒙	ট্ট	*hṇa*	𑒯𑓂𑒝	হ্ণ
ṭṭha	𑒙𑓂𑒚	ট্ঠ	*hna*	𑒯𑓂𑒢	হ্ন
ṇṭa	𑒝𑓂𑒙	ণ্ট	*hma*	𑒯𑓂𑒧	হ্ম
ṇṭha	𑒝𑓂𑒚	ণ্ঠ	*hra*	𑒯𑓂𑒩	হ্র
ṇḍa	𑒝𑓂𑒛	ণ্ড	*hla*	𑒯𑓂𑒪	হ্ল
ṇḍha	𑒝𑓂𑒜	ণ্ঢ	*hva*	𑒯𑓂𑒫	হ্ব

Table 7: Comparison of conjunct forms used in Tirhuta and Bengali.

ISO/IEC JTC 1/SC 2/WG 2
PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS
FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646[1]
Please fill all the sections A, B and C below.
Please read Principles and Procedures Document (P & P) from http://www.dkuug.dk/JTC1/SC2/WG2/docs/principles.html for guidelines and details before filling this form.
Please ensure you are using the latest Form from http://www.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html.
See also http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html for latest *Roadmaps*.

A. Administrative

1. **Title:** ***Proposal to Encode the Tirhuta 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: *2011-05-05*
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: *Tirhuta*
   b. The proposal is for addition of character(s) to an existing block:
      Name of the existing block:
2. Number of characters in proposal: *82*
3. Proposed category (select one from below - see section 2.2 of P&P document):

A-Contemporary	*X*	B.1-Specialized (small collection)		B.2-Specialized (large collection)	
C-Major extinct		D-Attested extinct		E-Minor extinct	
F-Archaic Hieroglyphic or Ideographic				G-Obscure or questionable usage symbols	

4. Is a repertoire including character names provided? *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.):
      Anshuman 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.

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[1] Form number: N3902-F (Original 1994-10-14; Revised 1995-01, 1995-04, 1996-04, 1996-08, 1999-03, 2001-05, 2001-09, 2003-11, 2005-01, 2005-09, 2005-10, 2007-03, 2008-05, 2009-11, 2011-03)

C. Technical - Justification

1. Has this proposal for addition of character(s) been submitted before? *No*

If YES explain

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

If YES, with whom? *See text of proposal*

If YES, available relevant documents: *See text of proposal*

3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included? *Yes*

Reference: *Size of user community is unknown. Script is used for print and digital publications.*

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

Reference: *The Tirhuta script is used for writing Maithili. See text of proposal for details.*

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

If YES, where? Reference: *Bihar (India) and Nepal. See text of proposal for details.*

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 an existing character? *Yes*

If YES, is a rationale for its inclusion provided? *Yes*

If YES, reference: *See text of proposal for similarities between Tirhuta and Bengali.*

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? *Yes*

If YES, reference: *Combining vowel signs*

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? *Yes*

If YES, describe in detail (include attachment if necessary) *Virama*

See text of proposal

13. Does the proposal contain any Ideographic compatibility characters? *No*

If YES, are the equivalent corresponding unified ideographic characters identified?

If YES, reference: