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## Proposals from the Script Encoding Initiative

### Title

Proposal to Encode the Takri Script in ISO/IEC 10646

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# Proposal to Encode the Takri Script in ISO/IEC 10646

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## 1 Purpose

This is a proposal (N3758 L2/09-424) to encode the Takri script in the Universal Character Set (ISO/IEC 10646). It document replaces the following documents:

- L2/09-111 “Proposal to Encode the Takri Script in ISO/IEC 10646” (April 2009)
- L2/07-419 “Proposal to Encode the Takri Script in ISO/IEC 10646” (December 2007)

## 2 Introduction

Takri is the name given to the popular script used in the region of South Asia that comprises present-day Jammu and Kashmir, Himachal Pradesh, Panjab, and Uttarakhand (see Figure 1). It is the traditional writing system for Chambeali, Dogri, and several ‘Pahari’ languages, such as Jaunsari, Kulvi, and Mandeali. The name Takri appears in English sources as ‘Takari’, ‘Takkari’, and ‘Tankri’, with other variations. This multiplicity of names arises from uncertain etymologies for ‘Takri’. One source holds that Takri is derived from ‘*ṭaṅkā*’ ‘coin’, which suggests that the script originated as a commercial script.<sup>1</sup> Another source connects the name Takri to ‘*ṭakka*’, a name referring to the old landed class of Punjab, or Takri being “the alphabet of the Ṭakkas”,<sup>2</sup> Despite the uncertain etymology, the script is commonly known as ‘Ṭākārī’, and the normalized spelling of ‘Takri’ is suggested as its name in the Universal Character Set (UCS).

Takri belongs to the Sharada family of Brahmi scripts and is related to Gurmukhi and Landa. A comparison of Takri, Gurmukhi, Sharada, and Devanagari is given in tables 2, 3, and 4. Takri is descended from Sharada through an intermediate form known as Devāśeṣa, which emerged in the 14th century.<sup>3</sup> Devāśeṣa was a script used for religious and official purposes, while its popular form, known as Takri, was used for commercial and informal purposes. Takri became differentiated from Devāśeṣa in the 16th century.<sup>4</sup>

In its various regional manifestations Takri served as the official script of several princely states of northern and north-western India from the 17th century until the middle of the 20th century. A reformed version of the Takri used for writing Chambeali was established as the official script of the former Chamba State, now in Himachal Pradesh, India, and metal types for Chambeali Takri were developed. The Dogri form of Takri was adopted as the official script of Jammu and Kashmir and a standardized form of the script, known as

<sup>1</sup> Vogel 1911: 47. <sup>2</sup> Grierson 1911: 802–803. <sup>3</sup> Kaul Deambi 2008: 70. <sup>4</sup> Kaul Deambi 2008: 70.

Dogra Akkhar, was propagated by official decree by Maharaja Ranbir Singh of Jammu in the 1860s. Ranbir Singh also established the Vidya Vilas Press in Jammu in order to print official publications and scholarly books in the new Dogri script. Until the late 19th century, Takri was used concurrently with Devanagari,<sup>5</sup> but it was gradually replaced by the latter, or in the case of Dogri Takri, on a decision in 1944 by the Dogri Sansthan to use Devanagari as the official script for the Dogri language.

Owing to its use as both an official and popular script, Takri appears in numerous records, from manuscripts to inscriptions. Takri was used for writing administrative documents, such as letters, land grants, and official decrees. It appears on postage stamps and postmarks from Jammu and Kashmir from the 19th century (see Figure 24 and Figure 25). Translations of Sanskrit texts into the Dogri language printed in Dogri Takri were commissioned by Maharaja Ranbir Singh. The most well-known of these is the mathematical treatise *Līlavatī* by Bhāskarācārya (see Figure 26). The British and Foreign Bible Society printed translations of Christian religious texts into the Chambeali language in Takri (see Figure 17). The most well-known of Takri records are inscriptions on Pahari paintings, which belong to the ‘Pahari’ style of miniature painting that was developed in former princely states such as Basohli, Chamba, Kangra, and Guler. Pahari miniatures often contain captions indicated the subject of a portrait or a description of a scene written in the local language using Takri, or excerpts from a literary text whose scene is the subject of depiction. Specimens of Pahari paintings with Takri inscriptions are given in Figure 8 and Figure 10.

There are reports of efforts to revive the use of Takri for languages such as Dogri, Kishtwari, and Kulvi. In February 2006, a workshop was held in Kullu, Himachal Pradesh to provide training in the Takri script that was used for writing Kulvi.<sup>6</sup> In January 2009, the government of Himachal Pradesh established a program in association with Indira Gandhi National Open University (IGNOU) for the purpose of training specialists in Takri under the guidance of the National Manuscripts Mission.<sup>7</sup> Revival efforts for Takri are inspired by the quickening extinction of the script. While materials written in these languages in Takri exist, there is no literacy in the script, and therefore no access to this literature. As a result, languages such as Gaddi are further endangered by loss of literacy in Takri.<sup>8</sup>

An encoding for Takri in the UCS will provide linguistic communities in South Asia with the ability to communicate in their native script and to preserve their cultural heritage. Such an encoding will also provide a means for specialists to conduct further research on the language, art, and history of sub-Himalayan South Asia.

## 2.1 Varieties of the Script

There are several regional varieties of Takri, “with each Hill State or tract having its own style.”<sup>9</sup> Some of these regional forms are itemized below. There is considerable variation in the spellings of the names of the regional forms and the languages they represent. The names of languages have also changed, so that the names used in Grierson and other sources differ from current practices. In order to assist in the identification of languages and the forms of Takri associated with them, the language names below are denoted using ISO 639-3 codes. Specimens of Takri representative of the regional form is also indicated.

- Bhattiyali [bht]: Bhateali, Bhatiali (specimen in Figure 41)
- Chambeali [cdh]: Chambiali, Chameali, Chamiali (specimen in Figure 12, etc.)
- Dogri [dgo], [doi]: Dogari (specimen in Figure 18, etc.)
- Gaddi [gbk]: Bharmauri, Gadi (no specimens)
- Gahri [bfu]: Bunan (no specimens)
- Jaunsari [jns]: (specimen in Figure 27)

<sup>5</sup> Kaul Deambi 2008: 71. <sup>6</sup> *The Hindustan Times* 2006. <sup>7</sup> *The Tribute* 2009. <sup>8</sup> National Public Radio 2006. <sup>9</sup> Vogel 1911.

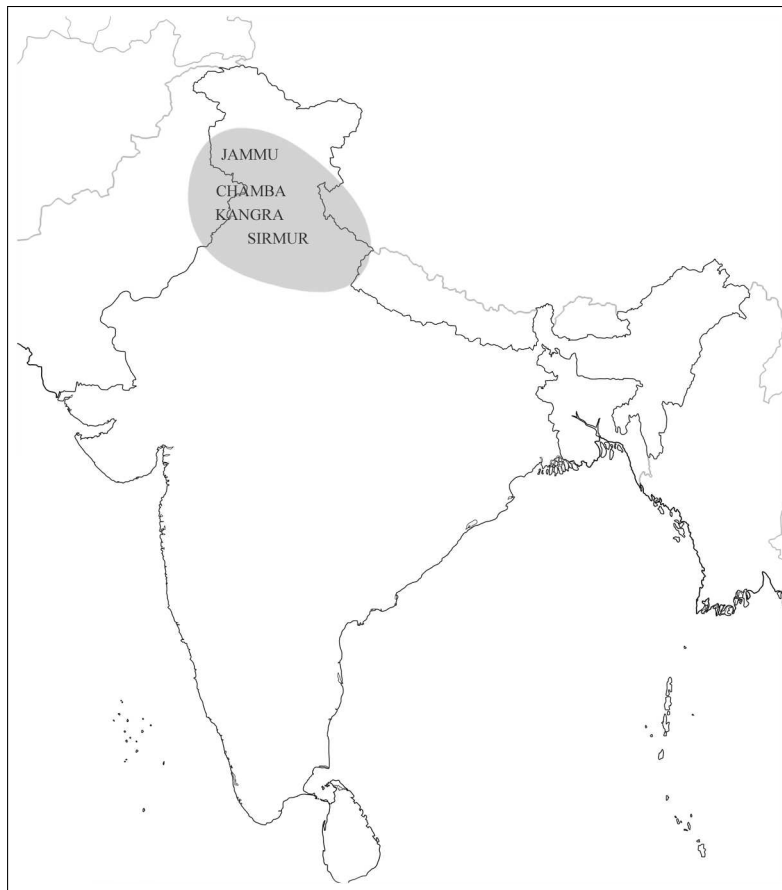


Figure 1: Historical geographic distribution of Takri

- Kangri [xnr]: Kangra, Kangra-Dogri (specimen in Figure 19)
- Kinnauri [kjo]: Kanauri (specimen in Figure 35)
- Kishtwari [kas]: Kashtwari, recorded as dialect of Kashmiri (Figure 38)
- Kulvi [kfx]:<sup>10</sup> Kullu, Kului, Kullvi (Figure 33)
- Mahasu [bfz]: Kochi, Kiunthali (Figure 31)
- Mandeali [mjl]: Himachali, Mandi (specimen in Figure 36)
- Sirmauri [srx]: (specimen in Figure 29)

There is no universal, standard form of Takri. Rather, in cases where Takri was standardized, the reformed script was limited to a particular polity, such as a kingdom or a princely state. When Grierson published a table comparing Takri with other north-western Indic scripts, he wrote that he chose what were representative forms of the Takri characters.<sup>11</sup> Grierson's approach illustrates that despite variations in glyph shapes and orthographic style, the regional varieties of Takri adhere to a common underlying structure. To be sure, a comparison of the letterforms of Takri varieties shows strong typological affiliation across regional forms. However, some varieties have glyph shapes for characters that differ entirely from those proposed here. For example, the Jaunsari and Sirmauri forms of  $\kappa\alpha$  are unique; however the majority of characters correspond to the Chambeali form. Given the variation in the appearance of Takri across different localities, Takri may be considered as more a 'class' of scripts than as the name of a specific script.

Moreover, although regional forms of Takri may differ the shapes of glyphs for certain characters, the scripts are perceived by their users to be 'Takri'. As Bushan Kumar Kaul Deambi wrote with regard to the distinction

<sup>10</sup> The name 'Kulvi' is used by the Government of India (2001). <sup>11</sup> Grierson 1904: 69.

between Takri and its ancestor Devāśeṣa, “the nomenclature Devāśeṣa once popular with the local paṇḍits is no longer used now and the people today are familiar with only one appellation[:] Tākārī.”<sup>12</sup> Given this, all regional forms of Takri may be unified with the Takri proposed here.

The reformed Dogri script may be an exception to a unified encoding for Takri. In the 1860s, Maharaja Ranbir Singh of Jammu ordered that the form of Takri used for writing the Dogri language be reformed. The new script was called ‘Dogra Akkhar’ or ‘Name Dogra Akkhar’ (‘New Dogra Script’) and it was established as the official script of Jammu. The characters of Dogra Akkhar differ from the original Dogri script and also from other standard forms of Takri, such that it may be considered a distinct script (see Table 5 and Table 6). The Dogri script is often shown separately in comparative script charts. Given this, this reformed Dogri form of Takri may be a candidate for disunification from Takri. But, Grierson writes that Dogri is “allied” to Takri,<sup>13</sup> which means that the variety is typologically related to Takri and is genetically a Takri script.

For present purposes Takri may serve as a unifying block and regional forms may be accurately considered as glyphic variants and controlled at the font level. If user requirements or further research determines a necessity for disunifying a particular regional form of Takri, then the matter may be discussed at that time.

### 3 Characters Proposed

The 66 characters in this proposal comprise the core set of Takri letters and signs to be encoded in the Supplemental Multilingual Plane (SMP) at the range U+11680..116CF. The convention used for naming Takri characters in the UCS follows that used for Devanagari. The proposed characters are shown in the code chart in Figure 2.

The Takri script proposed here is based on the Chambeali form of Takri used in the former State of Chamba, which is now part of the state of Himachal Pradesh, India. The Chambeali form served as the basis for a Takri metal font. This font was used by George Grierson to print specimens of the Chambeali, Dogri, and Kangri languages in the *Linguistic Survey of India*, and by the British and Foreign Bible Society (Ludhiana, Punjab) to print Christian literature, an excerpt of which is shown in Figure 17. The Dogri form of Takri was also standardized and metal fonts were developed for it, but the reformed Dogri script is associated specifically with the Dogri language, while the Chambeali form was used more broadly to write other languages, such as Kangri. Therefore, the Chambeali form is chosen to represent a unified Takri encoding. A comparison of the Chambeali glyphs used by Grierson with the digitized forms drawn by Anshuman Pandey is given in Table 1.

#### 3.1 Characters Not Proposed

The following characters are attested in printed and written Takri materials, but they are not proposed for encoding at present:

1. **LETTER SSA** Several charts show the form  $\text{𑆑}$  for SSA. This glyph is simply that of KHA, as the retroflex sibilant is often pronounced as an aspirated velar plosive in the Chambeali, Dogri, and ‘Pahari’ languages. The chart in Figure 6 shows the glyph  $\text{𑆑}$  for SSA. This character resembles the sequence SA + VIRAMA + HA, in which a half-form of SA is joined to a modified form of HA, which corresponds to the irregular form \*रह in Devanagari. This is most likely an attempt at supplying a character inherently lacking in Takri.

<sup>12</sup> Kaul Deambi 2008: 70. <sup>13</sup> Grierson 1916a: 638.

2. **DANDA and DOUBLE DANDA** Takri forms of DANDA and DOUBLE DANDA may be unified with those of Devanagari.
3. **Precomposed Characters with NUKTA** Although there may be historical reasons to encoding NUKTA characters independently, they may be represented using the base character + NUKTA. Such characters are \*३ DDDHA (DDA + NUKTA), \*३ RHA (DDHA + NUKTA), \*ॢ LLA (LA + NUKTA), and \*ॣ SHA (SA + NUKTA).
4. **Number Forms** Fraction signs and currency marks are found in Takri documents. They are identical to the characters in the Common Indic Number Forms block (U+A830..U+A83F). See Pandey (2007) for more information on these characters.

### 3.2 Notes on Characters

The glyphs for the proposed Takri characters are based upon those in the Chambeali metal font; however, the Chambeali form does not contain some characters found in other forms of Takri. In order to accommodate all forms of Takri, the proposed script includes the following characters:

1. **LETTER NYA** The character ॣ NYA is based upon the Dogri form, as shown in Figure 18.
2. **LETTER SHA** The character ॣ SHA is based upon the form shown in Figure 6, which is most likely derived from the form shown in Figure 44. Chambeali Takri uses ॣ to represent SHA.
3. **LETTER RRA** This letter represents the unaspirated retroflex flap consonant. In several north Indic scripts this sound is represented by writing a NUKTA beneath DDA, and in some scripts it is encoded as the atomic character DDDHA. The Chambeali form of Takri represents this sound using ३ (DDA + NUKTA); however, the Dogri form uses the character ३, which is semantically identical to U+05AC GURMUKHI LETTER RRA. The Takri RRA is, therefore, proposed for encoding as an atomic character. It is based upon the form shown in Figure 6.
4. **SIGN VIRAMA** The character ॣ VIRAMA is based upon the form depicted in Figure 6.
5. **SIGN NUKTA** The character ॣ NUKTA is proposed in order to accommodate characters such as ॣ \*GHHA, etc. that are represented arbitrarily in Takri documents.

## 4 Implementation

### 4.1 Encoding Model

Takri should be implemented according to the *virāma* model.

### 4.2 Consonant Conjuncts

Consonant conjuncts are infrequently written in Takri. Consonant clusters are broken through epenthesis of the inherent vowel. When conjuncts are written, they consist of two consonants, of which the second element is ॣ YA, ॣ RA, or ॣ HA. Takri YA is represented in conjuncts as ॣ, eg. ॣ *chya*. The letter RA is represented as ॣ, which is written as a ligature, eg. ॣ *tra*, or as a subjoining form, eg. ॣ *pra*. Letter HA is written as a half-form, eg. ॣ *mha*.

Clusters consisting of geminated consonants are written using a single consonant letter. This practice is common to that of Gurmukhi, in which geminated consonants are written using a single letter. But, unlike Gurmukhi in which such cases are marked using ॱ GURMUKHI ADDAK, doubled consonants are not expressed orthographically in Takri.

### 4.3 Vowel Equivalencies

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

| RECOMMENDED       | NOT RECOMMENDED                    |
|-------------------|------------------------------------|
| 𑖞 VOWEL LETTER AA | 𑖞 VOWEL LETTER A + 𑖞 VOWEL SIGN AA |
| 𑖞 VOWEL LETTER AI | 𑖞 VOWEL LETTER E + 𑖞 VOWEL SIGN E  |
| 𑖞 VOWEL LETTER O  | 𑖞 VOWEL LETTER A + 𑖞 VOWEL SIGN O  |
| 𑖞 VOWEL LETTER AU | 𑖞 VOWEL LETTER A + 𑖞 VOWEL SIGN AU |

### 4.4 Appearance

Headlines are generally not used in Takri as is the practice for writing Devanagari. But, headlines do appear in the glyph shapes of certain Takri letters, compare Chambeali 𑖞 MA and 𑖞 SA. The headline is an intrinsic feature of glyph shapes in such varieties as Dogri Akkhar, which is inspired by the design of Devanagari characters. There is no rule regarding the joining of headlines. The headlines of two sequential characters possessing headlines are left unjoined in Chambeali. In printed Dogra Akkhar, the headlines of a letter and a vowel sign are joined.

### 4.5 Collation

The collating order for Takri is as follows:

A AA I II U UU E AI O AU SA SHA HA KA KHA GA GHA NGA CA CHA JA JHA NYA TTA TTHA DDA  
DDHA NNA TA THA DA DHA NA PA PHA BA BHA MA YA RA LA VA RRA SIGN AA SIGN I SIGN II SIGN  
U SIGN UU SIGN E SIGN AI SIGN O SIGN AU ANUSVARA VISARGA VIRAMA

The writing of SA, SHA, and HA at the top of the consonant order after the vowels is similar to the ordering of these consonant letters in Gurmukhi.

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

### 4.6 Linebreaking

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

## 4.7 Character Properties

The properties for Takri characters in the Unicode Character Database format are:

```

11680;TAKRI LETTER A;Lo;0;L;;;;N;;;;;
11681;TAKRI LETTER AA;Lo;0;L;;;;N;;;;;
11682;TAKRI LETTER I;Lo;0;L;;;;N;;;;;
11683;TAKRI LETTER II;Lo;0;L;;;;N;;;;;
11684;TAKRI LETTER U;Lo;0;L;;;;N;;;;;
11685;TAKRI LETTER UU;Lo;0;L;;;;N;;;;;
11686;TAKRI LETTER E;Lo;0;L;;;;N;;;;;
11687;TAKRI LETTER AI;Lo;0;L;;;;N;;;;;
11688;TAKRI LETTER O;Lo;0;L;;;;N;;;;;
11689;TAKRI LETTER AU;Lo;0;L;;;;N;;;;;
1168A;TAKRI LETTER KA;Lo;0;L;;;;N;;;;;
1168B;TAKRI LETTER KHA;Lo;0;L;;;;N;;;;;
1168C;TAKRI LETTER GA;Lo;0;L;;;;N;;;;;
1168D;TAKRI LETTER GHA;Lo;0;L;;;;N;;;;;
1168E;TAKRI LETTER NGA;Lo;0;L;;;;N;;;;;
1168F;TAKRI LETTER CA;Lo;0;L;;;;N;;;;;
11690;TAKRI LETTER CHA;Lo;0;L;;;;N;;;;;
11691;TAKRI LETTER JA;Lo;0;L;;;;N;;;;;
11692;TAKRI LETTER JHA;Lo;0;L;;;;N;;;;;
11693;TAKRI LETTER NYA;Lo;0;L;;;;N;;;;;
11694;TAKRI LETTER TTA;Lo;0;L;;;;N;;;;;
11695;TAKRI LETTER TTHA;Lo;0;L;;;;N;;;;;
11696;TAKRI LETTER DDA;Lo;0;L;;;;N;;;;;
11697;TAKRI LETTER DDHA;Lo;0;L;;;;N;;;;;
11698;TAKRI LETTER NNA;Lo;0;L;;;;N;;;;;
11699;TAKRI LETTER TA;Lo;0;L;;;;N;;;;;
1169A;TAKRI LETTER THA;Lo;0;L;;;;N;;;;;
1169B;TAKRI LETTER DA;Lo;0;L;;;;N;;;;;
1169C;TAKRI LETTER DHA;Lo;0;L;;;;N;;;;;
1169D;TAKRI LETTER NA;Lo;0;L;;;;N;;;;;
1169E;TAKRI LETTER PA;Lo;0;L;;;;N;;;;;
1169F;TAKRI LETTER PHA;Lo;0;L;;;;N;;;;;
116A0;TAKRI LETTER BA;Lo;0;L;;;;N;;;;;
116A1;TAKRI LETTER BHA;Lo;0;L;;;;N;;;;;
116A2;TAKRI LETTER MA;Lo;0;L;;;;N;;;;;
116A3;TAKRI LETTER YA;Lo;0;L;;;;N;;;;;
116A4;TAKRI LETTER RA;Lo;0;L;;;;N;;;;;
116A5;TAKRI LETTER LA;Lo;0;L;;;;N;;;;;
116A6;TAKRI LETTER VA;Lo;0;L;;;;N;;;;;
116A7;TAKRI LETTER SHA;Lo;0;L;;;;N;;;;;
116A8;TAKRI LETTER SA;Lo;0;L;;;;N;;;;;
116A9;TAKRI LETTER HA;Lo;0;L;;;;N;;;;;
116AA;TAKRI LETTER RRA;Lo;0;L;;;;N;;;;;
116AB;TAKRI SIGN ANUSVARA;Mn;0;NSM;;;;N;;;;;
116AC;TAKRI SIGN VISARGA;Mc;0;L;;;;N;;;;;
116AD;TAKRI VOWEL SIGN AA;Mn;0;NSM;;;;N;;;;;
116AE;TAKRI VOWEL SIGN I;Mc;0;L;;;;N;;;;;
116AF;TAKRI VOWEL SIGN II;Mc;0;L;;;;N;;;;;
116B0;TAKRI VOWEL SIGN U;Mn;0;NSM;;;;N;;;;;
116B1;TAKRI VOWEL SIGN UU;Mn;0;NSM;;;;N;;;;;
116B2;TAKRI VOWEL SIGN E;Mn;0;NSM;;;;N;;;;;
116B3;TAKRI VOWEL SIGN AI;Mn;0;NSM;;;;N;;;;;
116B4;TAKRI VOWEL SIGN O;Mn;0;NSM;;;;N;;;;;
116B5;TAKRI VOWEL SIGN AU;Mn;0;NSM;;;;N;;;;;
116B6;TAKRI SIGN VIRAMA;Mn;9;NSM;;;;N;;;;;
116B7;TAKRI SIGN NUKTA;Mn;7;NSM;;;;N;;;;;
116C0;TAKRI DIGIT ZERO;Nd;0;L;0;0;0;N;;;;;

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116C1;TAKRI DIGIT ONE;Nd;0;L;;1;1;1;N;;;;;  
 116C2;TAKRI DIGIT TWO;Nd;0;L;;2;2;2;N;;;;;  
 116C3;TAKRI DIGIT THREE;Nd;0;L;;3;3;3;N;;;;;  
 116C4;TAKRI DIGIT FOUR;Nd;0;L;;4;4;4;N;;;;;  
 116C5;TAKRI DIGIT FIVE;Nd;0;L;;5;5;5;N;;;;;  
 116C6;TAKRI DIGIT SIX;Nd;0;L;;6;6;6;N;;;;;  
 116C7;TAKRI DIGIT SEVEN;Nd;0;L;;7;7;7;N;;;;;  
 116C8;TAKRI DIGIT EIGHT;Nd;0;L;;8;8;8;N;;;;;  
 116C9;TAKRI DIGIT NINE;Nd;0;L;;9;9;9;N;;;;;

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|   | 1168       | 1169       | 116A       | 116B       | 116C       |
|---|------------|------------|------------|------------|------------|
| 0 | 𑌨<br>11680 | 𑌩<br>11690 | 𑌪<br>116A0 | 𑌫<br>116B0 | 𑌬<br>116C0 |
| 1 | 𑌭<br>11681 | 𑌮<br>11691 | 𑌯<br>116A1 | 𑌰<br>116B1 | 𑌱<br>116C1 |
| 2 | 𑌳<br>11682 | 𑌴<br>11692 | 𑌵<br>116A2 | 𑌶<br>116B2 | 𑌷<br>116C2 |
| 3 | 𑌹<br>11683 | 𑌺<br>11693 | 𑌻<br>116A3 | 𑌼<br>116B3 | 𑌽<br>116C3 |
| 4 | 𑌽<br>11684 | 𑌾<br>11694 | 𑌿<br>116A4 | 𑍀<br>116B4 | 𑍁<br>116C4 |
| 5 | 𑍃<br>11685 | 𑍄<br>11695 | 𑍅<br>116A5 | 𑍆<br>116B5 | 𑍇<br>116C5 |
| 6 | 𑍉<br>11686 | 𑍊<br>11696 | 𑍋<br>116A6 | 𑍌<br>116B6 | 𑍍<br>116C6 |
| 7 | 𑍑<br>11687 | 𑍒<br>11697 | 𑍓<br>116A7 | 𑍔<br>116B7 | 𑍕<br>116C7 |
| 8 | 𑍗<br>11688 | 𑍘<br>11698 | 𑍙<br>116A8 |            | 𑍚<br>116C8 |
| 9 | 𑍛<br>11689 | 𑍜<br>11699 | 𑍝<br>116A9 |            | 𑍞<br>116C9 |
| A | 𑍟<br>1168A | 𑍠<br>1169A | 𑍡<br>116AA |            |            |
| B | 𑍤<br>1168B | 𑍥<br>1169B | 𑍦<br>116AB |            |            |
| C | 𑍩<br>1168C | 𑍪<br>1169C | 𑍫<br>116AC |            |            |
| D | 𑍯<br>1168D | 𑍰<br>1169D | 𑍱<br>116AD |            |            |
| E | 𑍷<br>1168E | 𑍸<br>1169E | 𑍹<br>116AE |            |            |
| F | 𑍽<br>1168F | 𑍾<br>1169F | 𑍿<br>116AF |            |            |

Figure 2: Proposed code chart for Takri

**Independent vowels**

|       |   |                 |
|-------|---|-----------------|
| 11680 | 𑆑 | TAKRI LETTER A  |
| 11681 | 𑆒 | TAKRI LETTER AA |
| 11682 | 𑆓 | TAKRI LETTER I  |
| 11683 | 𑆔 | TAKRI LETTER II |
| 11684 | 𑆕 | TAKRI LETTER U  |
| 11685 | 𑆖 | TAKRI LETTER UU |
| 11686 | 𑆗 | TAKRI LETTER E  |
| 11687 | 𑆘 | TAKRI LETTER AI |
| 11688 | 𑆙 | TAKRI LETTER O  |
| 11689 | 𑆚 | TAKRI LETTER AU |

|       |   |                   |
|-------|---|-------------------|
| 116C1 | 𑆛 | TAKRI DIGIT ONE   |
| 116C2 | 𑆜 | TAKRI DIGIT TWO   |
| 116C3 | 𑆝 | TAKRI DIGIT THREE |
| 116C4 | 𑆞 | TAKRI DIGIT FOUR  |
| 116C5 | 𑆟 | TAKRI DIGIT FIVE  |
| 116C6 | 𑆠 | TAKRI DIGIT SIX   |
| 116C7 | 𑆡 | TAKRI DIGIT SEVEN |
| 116C8 | 𑆢 | TAKRI DIGIT EIGHT |
| 116C9 | 𑆣 | TAKRI DIGIT NINE  |

**Consonants**

|       |   |                   |
|-------|---|-------------------|
| 1168A | 𑆑 | TAKRI LETTER KA   |
| 1168B | 𑆒 | TAKRI LETTER KHA  |
| 1168C | 𑆓 | TAKRI LETTER GA   |
| 1168D | 𑆔 | TAKRI LETTER GHA  |
| 1168E | 𑆕 | TAKRI LETTER NGA  |
| 1168F | 𑆖 | TAKRI LETTER CA   |
| 11690 | 𑆗 | TAKRI LETTER CHA  |
| 11691 | 𑆘 | TAKRI LETTER JA   |
| 11692 | 𑆙 | TAKRI LETTER JHA  |
| 11693 | 𑆚 | TAKRI LETTER NYA  |
| 11694 | 𑆛 | TAKRI LETTER TTA  |
| 11695 | 𑆜 | TAKRI LETTER TTHA |
| 11696 | 𑆝 | TAKRI LETTER DDA  |
| 11697 | 𑆞 | TAKRI LETTER DDHA |
| 11698 | 𑆟 | TAKRI LETTER NNA  |
| 11699 | 𑆠 | TAKRI LETTER TA   |
| 1169A | 𑆡 | TAKRI LETTER THA  |
| 1169B | 𑆢 | TAKRI LETTER DA   |
| 1169C | 𑆣 | TAKRI LETTER DHA  |
| 1169D | 𑆤 | TAKRI LETTER NA   |
| 1169E | 𑆥 | TAKRI LETTER PA   |
| 1169F | 𑆦 | TAKRI LETTER PHA  |
| 116A0 | 𑆧 | TAKRI LETTER BA   |
| 116A1 | 𑆨 | TAKRI LETTER BHA  |
| 116A2 | 𑆩 | TAKRI LETTER MA   |
| 116A3 | 𑆪 | TAKRI LETTER YA   |
| 116A4 | 𑆫 | TAKRI LETTER RA   |
| 116A5 | 𑆬 | TAKRI LETTER LA   |
| 116A6 | 𑆭 | TAKRI LETTER VA   |
| 116A7 | 𑆮 | TAKRI LETTER SHA  |
| 116A8 | 𑆯 | TAKRI LETTER SA   |
| 116A9 | 𑆰 | TAKRI LETTER HA   |
| 116AA | 𑆱 | TAKRI LETTER RRA  |

**Various signs**

|       |     |                     |
|-------|-----|---------------------|
| 116AB | ◌◌  | TAKRI SIGN ANUSVARA |
| 116AC | ◌◌: | TAKRI SIGN VISARGA  |

**Dependent vowel signs**

|       |     |                     |
|-------|-----|---------------------|
| 116AD | ◌◌  | TAKRI VOWEL SIGN AA |
| 116AE | ◌◌  | TAKRI VOWEL SIGN I  |
| 116AF | ◌◌  | TAKRI VOWEL SIGN II |
| 116B0 | ◌◌  | TAKRI VOWEL SIGN U  |
| 116B1 | ◌◌◌ | TAKRI VOWEL SIGN UU |
| 116B2 | ◌◌◌ | TAKRI VOWEL SIGN E  |
| 116B3 | ◌◌◌ | TAKRI VOWEL SIGN AI |
| 116B4 | ◌◌◌ | TAKRI VOWEL SIGN O  |
| 116B5 | ◌◌◌ | TAKRI VOWEL SIGN AU |

**Various signs**

|       |    |                   |
|-------|----|-------------------|
| 116B6 | ◌◌ | TAKRI SIGN VIRAMA |
| 116B7 | ◌◌ | TAKRI SIGN NUKTA  |

**Digits**

|       |   |                  |
|-------|---|------------------|
| 116C0 | ◌ | TAKRI DIGIT ZERO |
|-------|---|------------------|

Figure 3: Proposd names list for Takri

## CONSONANTS

|      | A | B |         | A   | B   |       | A   | B   |
|------|---|---|---------|-----|-----|-------|-----|-----|
| KA   | क | क | DDA     | क   | क   | BA    | ब   | ब   |
| KHA  | ख | ख | (DDDHA) | (क) | (क) | BHA   | ड   | ड   |
| GA   | ग | ग | DDHA    | घ   | घ   | MA    | म   | म   |
| GHA  | ग | ग | (RHA)   | (घ) | (घ) | YA    | य   | य   |
| NGA  | ङ | ङ | NNA     | ञ   | ञ   | RA    | र   | र   |
| CA   | च | च | TA      | ट   | ट   | LA    | ल   | ल   |
| CHA  | छ | छ | THA     | थ   | थ   | (LLA) | (ल) | (ल) |
| JA   | ज | ज | DA      | ड   | ड   | VA    | व   | व   |
| JHA  | झ | झ | DHA     | ढ   | ढ   | SHA   | (श) | (श) |
| NYA  | — | न | NA      | न   | न   | SA    | स   | स   |
| TTA  | ट | ट | PA      | प   | प   | HA    | ह   | ह   |
| TTHA | ठ | ठ | PHA     | फ   | फ   | RRA   | —   | र   |

## VOWELS

|    | A | B |    | A | B |    | A  | B  |
|----|---|---|----|---|---|----|----|----|
| A  | अ | अ | U  | उ | उ | O  | ऑ  | ऑ  |
| AA | आ | आ | UU | ऊ | ऊ | AU | औ  | औ  |
| I  | इ | इ | E  | ऎ | ऎ | AM | अं | अं |
| II | ई | ई | AI | ऌ | ऌ |    |    |    |

Table 1: Comparison of the Chambeali Takri font used by Grierson in the *Linguistic Survey of India* (column ‘A’) with a digitized font developed by Anshuman Pandey (column ‘B’). Note: AM represents LETTER A + SIGN ANUSVARA. Characters shown in parentheses are part of the Chambeali script, but are not proposed for encoding as atomic characters as they can be produced using NUKTA.

|       | TAKRI | GURMUKHI | SHARADA | DEVANAGARI |     | TAKRI | GURMUKHI | SHARADA | DEVANAGARI |
|-------|-------|----------|---------|------------|-----|-------|----------|---------|------------|
| KA    | क     | ਕ        | क       | क          | THA | थ     | ਥ        | थ       | थ          |
| KHA   | ख     | ਖ        | ख       | ख          | DA  | द     | ਦ        | द       | द          |
| GA    | ग     | ਗ        | ग       | ग          | DHA | ध     | ਧ        | ध       | ध          |
| GHA   | घ     | ਘ        | घ       | घ          | NA  | न     | ਨ        | न       | न          |
| NGA   | ङ     | ਙ        | ङ       | ङ          | PA  | प     | ਪ        | प       | प          |
| CA    | च     | ਚ        | च       | च          | PHA | फ     | ਫ        | फ       | फ          |
| CHA   | छ     | ਛ        | छ       | छ          | BA  | ब     | ਬ        | ब       | ब          |
| JA    | ज     | ਜ        | ज       | ज          | BHA | भ     | ਭ        | भ       | भ          |
| JHA   | झ     | ਝ        | झ       | झ          | MA  | म     | ਮ        | म       | म          |
| NYA   | य     | ਯ        | य       | य          | YA  | य     | ਯ        | य       | य          |
| TTA   | ट     | ਟ        | ट       | ट          | RA  | र     | ਰ        | र       | र          |
| TTHA  | ठ     | ਠ        | ठ       | ठ          | LA  | ल     | ਲ        | ल       | ल          |
| DDA   | ड     | ਡ        | ड       | ड          | LLA | ळ     | ਲ਼       | ळ       | ळ          |
| DDDHA | ड़    | —        | —       | ड़         | VA  | व     | ਵ        | व       | व          |
| RRA   | र्र   | ੜ        | —       | —          | SHA | श     | ਸ਼       | श       | श          |
| DDHA  | ढ     | ਢ        | ढ       | ढ          | SSA | —     | —        | ष       | ष          |
| RHA   | ऱ     | —        | —       | ऱ          | SA  | स     | ਸ        | स       | स          |
| NNA   | ण     | ਨ਼       | ॠ       | ण          | HA  | ह     | ਹ        | ह       | ह          |
| TA    | उ     | ਤ        | उ       | त          |     |       |          |         |            |

Table 2: A comparison of consonant letters of Takri, Gurmukhi, Sharada, and Devanagari.

| INDEPENDENT VOWELS |       |          |         | DEPENDENT VOWEL SIGNS |     |       |          |         |            |
|--------------------|-------|----------|---------|-----------------------|-----|-------|----------|---------|------------|
|                    | TAKRI | GURMUKHI | SHARADA | DEVANAGARI            |     | TAKRI | GURMUKHI | SHARADA | DEVANAGARI |
| A                  | ਯ     | ਅ        | ਸ       | अ                     | -A  | —     | —        | —       | —          |
| AA                 | ਯਾ    | ਆ        | ਸੁ      | आ                     | -AA | ँ     | ਠਾ       | ा       | ा          |
| I                  | ਏ     | ਇ        | ਓ       | इ                     | -I  | ि     | ਿ        | ि       | ि          |
| II                 | ਏ     | ਈ        | ੌ       | ई                     | -II | ी     | ੀ        | ी       | ी          |
| U                  | ਊ     | ਉ        | उ       | उ                     | -U  | ु     | ੁ        | ु       | ु          |
| UU                 | ਊ     | ਉ        | उ       | उ                     | -UU | ू     | ੂ        | ू       | ू          |
| E                  | ਏ     | ਏ        | ए       | ए                     | -E  | े     | ੇ        | े       | े          |
| AI                 | ਏ     | ਐ        | ऐ       | ऐ                     | -AI | ै     | ੈ        | ै       | ै          |
| O                  | ਓ     | ਓ        | ओ       | ओ                     | -O  | ो     | ो        | ो       | ो          |
| AU                 | ਓ     | ਔ        | औ       | औ                     | -AU | ौ     | ੌ        | ौ       | ौ          |

Table 3: A comparison of vowel letters and signs of Takri, Gurmukhi, Sharada, and Devanagari.

|       | TAKRI | GURMUKHI | SHARADA | DEVANAGARI |       | TAKRI | GURMUKHI | SHARADA | DEVANAGARI |
|-------|-------|----------|---------|------------|-------|-------|----------|---------|------------|
| ZERO  | •     | ੦        | •       | ०          | FIVE  | ੫     | ੫        | ੫       | ५          |
| ONE   | ੧     | ੧        | ੦       | १          | SIX   | ੬     | ੬        | ੬       | ६          |
| TWO   | ੩     | ੨        | ੧       | २          | SEVEN | ੭     | ੭        | ੭       | ७          |
| THREE | ੩     | ੩        | ੩       | ३          | EIGHT | ੮     | ੮        | ੮       | ८          |
| FOUR  | ੪     | ੪        | ੪       | ४          | NINE  | ੯     | ੯        | ੯       | ९          |

Table 4: A comparison of digits of Takri, Gurmukhi, Sharada, and Devanagari.

TABLE 8 (a)  
DEVĀŚEṢA - TĀKARĪ ALPHABET  
(17<sup>th</sup> - 18<sup>th</sup> Centuries)

|                     | I                                    | II                                   | III                                    | IV                                    | V                                       | VI  | VII                                     | VIII                      | IX                                       | X             |
|---------------------|--------------------------------------|--------------------------------------|--|---------------------------------------|---|---|---|---------------------------|--|---------------|
| Characters in Roman | Chamba Plate of Balabhadrā V.S. 1667 | Chamba Plate of Balabhadrā V.S. 1692 | Mindhal Plate of Prthvisiṅha V.S. 1698 | Chamba Plate of Prthvisiṅha V.S. 1702 | Divkhari Plate of Prthvisiṅha V.S. 1718 | Lakṣmīnārāyaṇa Temple Plate of Śatrusiṅha | Lakṣmīnārāyaṇa Temple Niche Inscription | Cabūtra Stone Inscription | Treaty Between Rajasiṅha and Samsaracand | Modern Tākari |
| a                   | अ ष                                  | अ                                    | अ                                      | अ                                     | अ                                       | अ   |   | अ                         | अ  | अ             |
| ā                   |                                      |                                      |  | अ                                     |   |   |   |                           |  | अ             |
| i                   | इ                                    | इ                                    | इ                                      | इ                                     | इ                                       | इ   | इ                                       |                           | इ  | इ             |
| ī                   |                                      |                                      |  |                                       |   |   |   |                           |  | इ             |
| u                   | उ                                    | उ                                    | उ                                      | उ                                     | उ                                       |   |   | उ                         | उ  | उ             |
| ū                   |                                      |                                      |  |                                       |   |   |   |                           |  | उ             |
| e                   | ए                                    | ए                                    | ए                                      | ए                                     | ए                                       | ए   | ए                                       | ए                         | ए  | ए             |
| ai                  |                                      | ऐ                                    |  |                                       | ऐ                                       |   |   |                           |  | ऐ             |
| o                   | ओ                                    | ओ                                    | ओ                                      | ओ                                     |   | ओ   |   |                           |  | ओ             |
| anu-nāsika          | ँ                                    | ँ                                    | ँ                                      | ँ                                     | ँ                                       | ँ   |   |                           |  |               |
| k                   | क                                    | क                                    | क                                      | क                                     | क                                       | क   | क                                       | क                         | क  | क             |
| kh                  | ख                                    |                                      | ख                                      | ख                                     |   | ख   |   |                           | ख  | ख             |
| g                   | ग                                    | ग                                    | ग                                      | ग                                     | ग                                       | ग   | ग                                       | ग                         | ग  | ग             |
| gh                  | घ                                    | घ                                    | घ                                      |                                       | घ                                       |   |   |                           | घ  | घ             |
| ṅ                   |                                      | ङ                                    |  | ङ                                     |   |   |   |                           |  | ङ             |
| c                   | च                                    | च                                    | च                                      | च                                     | च                                       | च   |   | च                         | च  | च             |
| ch                  | छ                                    |                                      | छ                                      |                                       |   | छ   |   |                           | छ  | छ             |

Figure 4: Comparison of historical and modern forms of Takri (from Kaul Deambi 2008: Table 8a).



TABLE 8 (b)  
DEVĀŚEṢĀ - TĀKARĪ ALPHABET  
(17<sup>th</sup> - 18<sup>th</sup> Centuries)

|                     | I                                    | II                                   | III                                    | IV                                    | V                                       | VI  | VII                                     | VIII                     | IX                                       | X             |
|---------------------|--------------------------------------|--------------------------------------|--|---------------------------------------|---|---|---|--------------------------|--|---------------|
| Characters in Roman | Chamba Plate of Balabhadra V.S. 1667 | Chamba Plate of Balabhadra V.S. 1692 | Mindhaj Plate of Prthvisinḥa V.S. 1698 | Chamba Plate of Prthvisinḥa V.S. 1702 | Divkhari Plate of Prthvisinḥa V.S. 1718 | Lakṣmīnārāyaṇa Temple Plate of Satrusinḥa | Lakṣmīnārāyaṇa Temple Niche Inscription | Cabḥrā Stone Inscription | Treaty Between Rājāsīnḥa and Samsaracand | Modern Tākari |
| j                   | 𑂔                                    | 𑂔𑂔                                   | 𑂔                                      | 𑂔                                     | 𑂔                                       | 𑂔𑂔  |   | 𑂔                        | 𑂔  | 𑂔             |
| jh                  | 𑂔𑂔                                   | 𑂔                                    | 𑂔                                      |                                       | 𑂔                                       | 𑂔   |   |                          | 𑂔  | 𑂔             |
| ñ                   |                                      |                                      |  |                                       |   |   |   |                          |  | 𑂔             |
| t                   | 𑂔𑂔                                   | 𑂔                                    | 𑂔                                      | 𑂔                                     | 𑂔                                       | 𑂔   |   |                          | 𑂔  | 𑂔             |
| th                  | 𑂔                                    | 𑂔                                    | 𑂔                                      |                                       | 𑂔                                       | 𑂔   |   |                          | 𑂔  | 𑂔             |
| d                   | 𑂔                                    | 𑂔                                    | 𑂔                                      | 𑂔                                     | 𑂔                                       | 𑂔   | 𑂔                                       |                          | 𑂔  | 𑂔             |
| dh                  | 𑂔                                    | 𑂔                                    | 𑂔                                      | 𑂔                                     |   |   |   |                          |  | 𑂔             |
| n                   | 𑂔                                    | 𑂔                                    | 𑂔                                      | 𑂔                                     | 𑂔                                       | 𑂔   |   | 𑂔                        | 𑂔  | 𑂔             |
| t                   | 𑂔                                    | 𑂔                                    | 𑂔                                      | 𑂔                                     | 𑂔                                       | 𑂔   | 𑂔                                       | 𑂔                        | 𑂔  | 𑂔             |
| th                  | 𑂔                                    | 𑂔                                    | 𑂔                                      | 𑂔                                     | 𑂔                                       | 𑂔   |   | 𑂔                        | 𑂔  | 𑂔             |
| d                   | 𑂔                                    | 𑂔                                    | 𑂔                                      | 𑂔                                     | 𑂔                                       | 𑂔   | 𑂔                                       | 𑂔                        | 𑂔  | 𑂔             |
| dh                  | 𑂔                                    | 𑂔                                    | 𑂔                                      | 𑂔                                     | 𑂔                                       | 𑂔   |   | 𑂔                        | 𑂔  | 𑂔             |
| n                   | 𑂔                                    | 𑂔                                    | 𑂔                                      | 𑂔                                     | 𑂔                                       | 𑂔𑂔  | 𑂔                                       | 𑂔                        | 𑂔  | 𑂔             |
| p                   | 𑂔                                    | 𑂔                                    | 𑂔                                      | 𑂔                                     | 𑂔                                       | 𑂔   | 𑂔                                       | 𑂔                        | 𑂔  | 𑂔             |
| ph                  | 𑂔𑂔                                   | 𑂔                                    | 𑂔                                      |                                       |   |   |   |                          | 𑂔  | 𑂔             |
| bh                  | 𑂔                                    | 𑂔                                    | 𑂔                                      | 𑂔                                     | 𑂔                                       | 𑂔   |   | 𑂔                        | 𑂔  | 𑂔             |
| m                   | 𑂔                                    | 𑂔                                    | 𑂔                                      | 𑂔                                     | 𑂔                                       | 𑂔   | 𑂔                                       | 𑂔                        | 𑂔  | 𑂔             |

Figure 5: Comparison of historical and modern forms of Takri (from Kaul Deambi 2008: Table 8b).

TABLE 8 (c)  
DEVĀŚEṢĀ - ṬĀKARĪ ALPHABET  
(17<sup>th</sup> - 18<sup>th</sup> Centuries)

|                     | I                                    | II                                   | III                                    | IV                                    | V                                       | VI  | VII                                     | VIII                      | IX                                       | X             |
|---------------------|--------------------------------------|--------------------------------------|--|---------------------------------------|---|---|---|---------------------------|--|---------------|
| Characters in Roman | Chamba Plate of Balabhadra V.S. 1667 | Chamba Plate of Balabhadra V.S. 1692 | Mindhal Plate of Pṛthvisiṅha V.S. 1698 | Chamba Plate of Pṛthvisiṅha V.S. 1702 | Divkhari Plate of Pṛthvisiṅha V.S. 1718 | Lakṣminārāyaṇa Temple Plate of Śatrusiṅha | Lakṣminārāyaṇa Temple Niche Inscription | Cabōtrā Stone Inscription | Treaty Between Rajasiṅha and Samsaracand | Modern Ṭākari |
| y                   | य                                    | य                                    | य                                      | य                                     | य                                       | य   |   | य                         |  | य             |
| r                   | र                                    | र                                    | र                                      | र                                     | र                                       | र   | र                                       | र                         | र  | र             |
| l                   | ल                                    | लल                                   | ल                                      | ल                                     | ल                                       | ल   |   | ल                         | ल  | ल             |
| v                   | व                                    | व                                    | व                                      | व                                     | व                                       | व   |   | व                         | व  | व             |
| ś                   | स                                    | स                                    | स                                      | स                                     | स                                       | स   |   | स                         | स  | स             |
| ṣ                   | ष                                    | ष                                    | ष                                      | ष                                     | ष                                       | ष   |   | ष                         | ष  | ष             |
| s                   | स                                    | स                                    | स                                      | स                                     | स                                       | स   | स                                       | स                         | स  | स             |
| h                   | ह                                    | ह                                    | ह                                      | ह                                     | ह                                       | ह   | ह                                       | ह                         | ह  | ह             |
| halanta             | ॐ                                    | ॐ                                    | ॐ                                      | ॐ                                     | ॐ                                       | ॐ   |   | ॐ                         |  |               |
| MEDIAL VOWELS       |                                      |                                      |  |                                       |   |   |   |                           |  |               |
| ā with k            | क क                                  | क                                    | क                                      | क                                     | क                                       | क   |   | क                         | क  | क             |
| ā                   | जा रा ना                             | जा ना                                | जा ना                                  | जा ना                                 | जा ना                                   | जा ना                                     |   |                           |  |               |
| i with k            | कि                                   | कि                                   | कि                                     | कि                                    | कि                                      | कि  | कि                                      | कि                        | कि                                       | कि            |
| ī with k            | की                                   | की                                   | की                                     | की                                    | की                                      | की  |   | की                        | की                                       | की            |
| u with k            | हु कु                                | कु                                   | भु कु                                  | भु कु                                 | कु                                      | कु  | कु                                      | कु                        | कु                                       | कु            |
| u with k            | क                                    | क                                    | क                                      | क                                     | क                                       | क   |   | क                         | क  |               |
| ru                  | रु                                   |                                      |  |                                       | रु                                      |   | रु                                      |                           |  |               |

Figure 6: Comparison of historical and modern forms of Takri (from Kaul Deambi 2008: Table 8c).

TABLE 9  
NUMERALS OF THE ṬĀKARĪ ALPHABET

|               | I                           | II                           | III                           | IV                         | V   | VI                                   | VII                       | VIII                                      |
|---------------|-----------------------------|------------------------------|-------------------------------|----------------------------|---|--------------------------------------|---------------------------|---|
|               | Guroli Plate of Vairsvarman | Chamba Plate of Ānandavarman | Chamba Plate of Pratāpasinhha | Chamba Plate of Balabhadra | Lakṣminārāyaṇa Temple Plate of Balabhadra | Camba and Mamdu Grants of Balabhadra | Cabūtrā Stone Inscription | Treaty between Rājasiṅgha and Samsaracand |
| 1             | ᳚                           | ᳚᳚                           | ᳚                             | ᳚                          | ᳚   | ᳚                                    | ᳚                         | ᳚   |
| 2             |                             | ᳚                            |                               | ᳚                          |   | ᳚                                    | ᳚                         | ᳚   |
| 3             | ᳚                           | ᳚                            | ᳚                             |                            | ᳚   |                                      | ᳚                         |   |
| 4             |                             | ᳚                            |                               | ᳚                          | ᳚   |                                      |                           | ᳚   |
| 5             |                             | ᳚                            | ᳚                             | ᳚                          |   |                                      | ᳚                         | ᳚   |
| 6             |                             | ᳚᳚                           | ᳚                             | ᳚                          | ᳚   | ᳚                                    | ᳚                         |   |
| 7             | ᳚                           | ᳚                            |                               |                            | ᳚   | ᳚                                    | ᳚                         |   |
| 8             | ᳚                           |                              |                               |                            |   | ᳚                                    | ᳚                         | ᳚   |
| 9             |                             | ᳚                            |                               | ᳚                          |   | ᳚                                    |                           |   |
| MODERN ṬĀKARĪ |                             |                              |                               |                            |   |                                      |                           |   |
| 1 to zero     | ᳚<br>᳚                      | ᳚<br>᳚                       | ᳚<br>᳚                        | ᳚<br>᳚                     | ᳚<br>᳚                                    | ᳚<br>᳚                               | ᳚<br>᳚                    |   |
| ᳚             | ᳚                           | ᳚                            | ᳚                             | ᳚                          | ᳚   | ᳚                                    | ᳚                         | ᳚   |

Figure 7: Comparison of historical and modern forms of Takri digits (from Kaul Deambi 2008: Table 9).



Figure 8: A painting (c. 1758) by Nainsukh of Balwant Singh, prince of Jasrota, showing the prince writing a letter to Amrit Pal, the ruler of Basohli. (from Goswami 1997: 190–191).

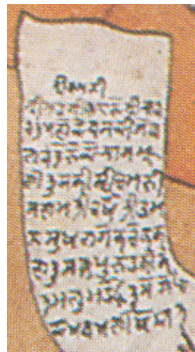


Figure 9: Enlargement of Takri letter shown in Figure 8

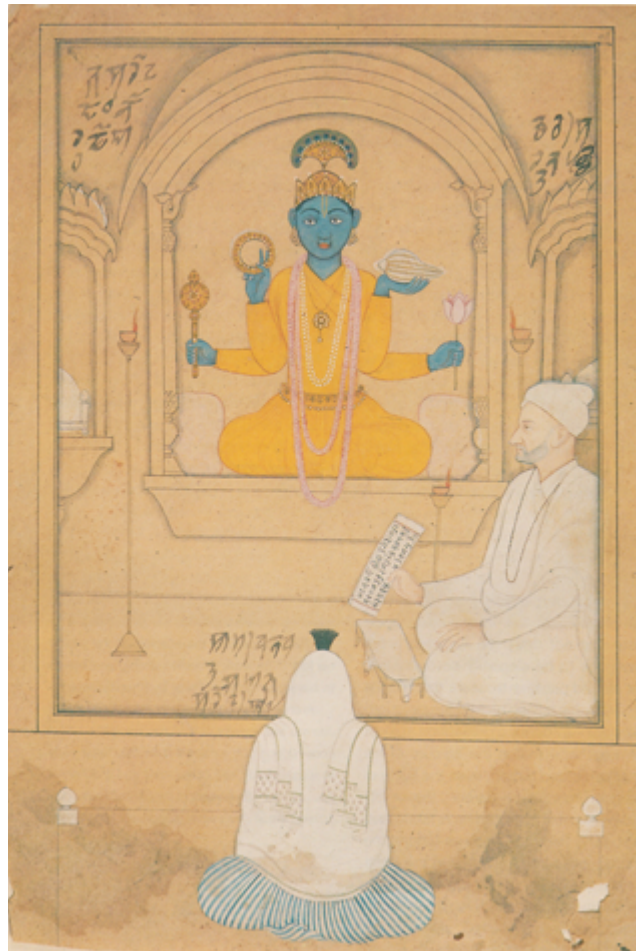


Figure 10: A painting (c. 1760) by Nainsukh of Balwant Singh, prince of Jasrota, in the *thākurdvāra* (from Goswami 1997: 200–201).

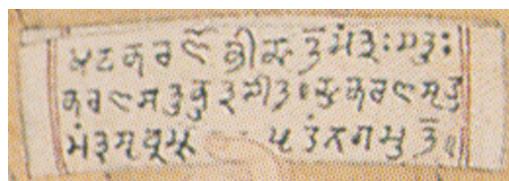


Figure 11: Enlargement of Sanskrit text in Takri shown in Figure 10

The printed Chamba Tākri alphabet is as follows:—

### Vowels.

ढ a      ढ̄ ā      ङ i      ङ̄ ī      ङ u      ङ̄ ū  
 २ ē      २̄ ai      ढ̄ ō      ढ̄̄ au      ढ̄̄̄ m.

### Consonants.

|       |        |       |        |       |
|-------|--------|-------|--------|-------|
| ढ ka  | ख kha  | ग ga  | ग़ gha | ङ na  |
| च cha | छ chha | ज ja  | झ jha  |       |
| ट ta  | ठ tha  | ड da  | ड़ dha | ण na  |
| त ta  | थ tha  | ड da  | ड़ dha | ण na  |
| प pa  | फ pha  | ब ba  | भ bha  | म ma  |
| य ya  | र ra   | ल la  | व va   |       |
| न sa  | ह ha   | र̄ ra | ल̄ la  | श sha |

### Conjuncts.

य̄ yā    थि thi    ही hi    सु su    पु पु pu    उ or    हु hi  
 ३ tē    ३̄ hai    य̄ yō    य̄̄ yau    र̄̄̄ ram or rā    छ̄ chhya  
 ५ pra    ३ tra    म̄ mha.

### Numerals.

१ 1,      ३ 2,      २ 3,      ४ 4,      ५ 5,      ७ 6,  
 १ 7,      ५ 8,      ६ 9,      • 0.

Double letters are never written. They are left to be inferred by the reader. Thus, *dittā*, given, is written ढ̄̄̄ *dittā*, but must be read *dittā*.

Figure 12: Chart of the Standard Chambeali form of Takri in print (from Grierson 1916a: 640).

**STANDARD DIALECT.**

**Alphabet**—Chamšāli is written in a form of the Tākri alphabet. In the State of Chamba this character has been advanced to the dignity of the printing press, and type in an improved Tākri has been cast. The alphabet is as follows:—

𑒧 a    𑒧 ka    𑒧 ā    𑒧 kā    𑒧 i    𑒧 ki  
 𑒧 i    𑒧 ki    𑒧 u    𑒧 ku    𑒧 ū    𑒧 kū  
 𑒧 ē, ē    𑒧 kē, kē    𑒧 ai    𑒧 kai    𑒧 ō    𑒧 kō  
 𑒧 au    𑒧 kau    𑒧 kam.

𑒧 ka    𑒧 kha    𑒧 ga    𑒧 gha  
 𑒧 cha    𑒧 chha    𑒧 ja    𑒧 jha  
 𑒧 ta    𑒧 tha    𑒧 da    𑒧 dha    𑒧 na  
           𑒧 ra    𑒧 rha  
 𑒧 ta    𑒧 tha    𑒧 da    𑒧 dha    𑒧 na  
 𑒧 pa    𑒧 pha    𑒧 ba    𑒧 bha    𑒧 ma  
 𑒧 ya    𑒧 ra    𑒧 la    𑒧 va  
 𑒧 śa    𑒧 sha    𑒧 sa    𑒧 ha    𑒧 ḷa

**SPECIMENS OF COMPOUND CONSONANTS.**

𑒧 kya    𑒧 khya    𑒧 kra    𑒧 tra    𑒧 dra    𑒧 lha

**NUMERALS.**

𑒧 1, 𑒧 2, 𑒧 3, 𑒧 4, 𑒧 5, 𑒧 6, 𑒧 7, 𑒧 8, 𑒧 9, 0

Figure 13: Chart of the Chambeali form of Takri (from Grierson 1916b: 772).

PAÑJĀBĪ.

DOGRĀ DIALECT.

(STATE JAMMU.)

SPEOIMEN II.

CHAMBA TĀKRI CHARAOTER.

।१। ऊँ कीर्त अक्षरं। म्भ नो गमीदरि मंउम। ङिउ  
दिउ गिलिउ गमीदरि अंउउ॥

।३। ऊँ यंउ उग मीं गमीदम। षु उी लुट लैम। उं  
गिंमिउं उँउ दिउँ॥

।२। उँ उगुउ उरिष लंउीदरि गमीदम उँउँ। ङिउ दिउ  
गिलिउ गमीदरि अंउउ॥

।४। उँ उउउउ गउउउ मंउम षु दिम उंम। उँ गिंमि  
उं उँउ दिउँ॥

Figure 14: The Dogri language printed in Chambeali Takri (from Grierson 1916a: 770).



WESTERN PAHĀRĪ (CHAMĒĀLĪ).

STANDARD DIALECT.

ॐ ढी ढमणी ॐ म पु३ षि० । ॐ३० नं३ षि०  
 पु३ ६६ म३ गल० ६६ ॐ म३ ६६ ॐ ॐ  
 नं३ ॐ नं३ षि० म३ । ३ ॐ३ ढप० लटीपटी  
 ॐ३० ॐ ६३ षि० । ढ३ म३ षि० षि०  
 ल३० पु३ ग३ षि० ६६ली ६६ली म३ म३  
 म३ नं३ मली ग३ ढ३ ॐ३ ढप० लटीपटी  
 पु३ म३ षि० ग३ । नं३ ग३ ग३ षि०  
 ग३ ६६ ३ ॐ३ म३ नं३ ६६ ढप० प३  
 ढ३ ॐ३ नं३ षि० । ३ नं३ ६६ म३ ॐ३  
 म३ ॐ ॐ३ ढमणी ॐ ल३ ल३ ढ३ ॐ३ ॐ३  
 ढप० म३ नं३ ग३ म३ ॐ३ ॐ३ ढ३ ॐ३ म३  
 नं३ षि० ग३ ग३ ६६ षि० ॐ३ म३ ढप०

Figure 15: Hand-written specimen of the Chambeali form of Takri (from Grierson 1916b: 785).

## PAÑJĀBĪ.

KĀNGRĀ DIALECT.

(DISTRICT, KANGRA.)

## SPEOIMEN II

ੋਯ ਸੀ ਯਯੀਟੰ ਪੰਕਤ ਰੁਪਯੋ ੋਯ ਸੀ  
 ਯਯਤੋ ਧਲ ਬੈਯੀ ਰਥੋ ਬੋ । ਯਯੋ ਤਿਸਤੋ ਯਯੀ ਯਯੀ  
 ਯੁਯੀ ਬੋਤੋ ਬੋਤੋ ਸੈਯ ਲੰਯੀ ਬੀ । ਕੰ ੋਯ ਸਿਯ  
 ਯੁਯੀਟੰ ਯਯਤੋ ਤ ਯਯਯੀ ਬੈਯੀ ਗੰਗੀ ਤੰ ਯਯਤੋ  
 ਲੋਥ ਯਯੀ ਪੰਯ ਰੁਪਯੋ ਧਯੀ ਯੋਯ ਯਯੋ ।  
 ਠਿਯੀ ਠੀ ਯੁਯੀ ਤਿਸ ਤ ਪਯੋ ਪਯੋ ਸੈਯ  
 ਯਯੀ ਯਯੀ ਲੰਯੀ ਰਠੀ । ਕੰ ਠਿਯੀ ਲੋਥ  
 ਤੋਯੋ ਤੰ ਪੰਯ ਰੁਪਯੋ ਧਯੀ ਠੀ  
 ਯੁਯੀਯੋ ਸੁਯੀ ਸਟ । ੋਯ ਸਲਯ ਸਲਯ  
 ਲੋਯੋ ਤਤ ਯਯੀਤੋ ਕੋ  
 ਪੰਯ ਪੰਯਤੋ ਲੋ ਸਟ ਪੰਯ ਯੀ ਲੋ ਪਯੋ ।  
 ਯਯ ਯਯਤੋ ਪਯੋ ਪੋ ਤੰ ਯੁਯੀ ਯਯੋ ਕਯੋ॥

Figure 16: Hand-written specimen of the Kangri language in Chambeali Takri (from Grierson 1916a: 788).

CHAGA: Machame dialect 137

Iruva ekundy e ulana katana alekeya mwana wakwe wa ngitañ, na wo nndu akusiry e nawe nalakooye ireka, naambo nakooye iwarya muu wa luñanu.

Spoken on the slopes of Mt. Kilimanjaro, Tanganyika, East Africa. First publication, the Gospels in 1932 by the BFBS; tr. by the Rev. J. Raum, of the Leipzig Lutheran Mission, with the assistance of Salomo Nkya.

CHAKMA 138

Kia Ishyor ei jogodore en kuas pelo je, nijor eguagori Puare dan gori dilo, jen je kio tare bichas gore, te binash no oy, mattor Omor Jibon pay.

Spoken in the Chittagong Hills, Bengal, India. First publication, Selections in 1915 at Calcutta by the Baptist Mission Press; tr. by W. J. L. Wenger. New Testament, at London, by the Bible Translation and Literature Auxiliary, 1924-26; tr. by the Rev. George Hughes, a Baptist Missionary.

CHALDEE

Hebrew characters

139

מֵאֲרָעָא לְמַצְלִים לְבֵית עֲבֻדָּתָא: וְחַי אֱלֹהֵי יִשְׂרָאֵל
תְּדַחַל וְקַדְמוֹהֵי תְּכַלְתּוּ וְכַשְׂמִיָּה תְּכַוִּימוּ לְאִתְּהֻבּוֹן בְּתַר מְעוֹת עֲמִיָּא לְמַפְעוֹת עֲמִיָּא
דִּי בְּסַחְרֵי נְכוֹן: אֵרִי אֱלֹהָא בְּנָא יְיָ אֱלֹהֵהּ שְׂכַנְתִּיהָ שְׂרָיָא בִּינְהָ דִּילְמָא יִתְקַף רוּגְזָא
דִּי יְיָ אֱלֹהֵהּ בְּרָ וְיִשְׁאַיְנָה מַעַל אֶפְרִי אֲרַעָא: לֹא תִנְסוֹן יְתִי יְיָ אֱלֹהֵינוּ כְּמָא דְנִסִּיתוֹן
בְּנִסְתָּא: מְיֻטָר תִּיטְרוֹן יְתִי בִּיבְרֻדְיָא דִּי יְיָ אֱלֹהֵינוּ וְסַדְדוֹתֵיהּ וְקַדְמוֹהֵי דִּבְרַקְדָּר:

The Aramaic vernacular which superseded Hebrew among the Jewish population of Palestine and Babylon. First publication, the Targum of Onkelos on the Pentateuch in 1482 at Bologna, with the Hebrew text. The Targums for all the Old Testament, except Daniel, Ezra and Nehemiah, were published in the first Rabbinic Bible, Venice, printed

Deut. 6.13-17; Complutensian Polyglot, 1517 by Daniel Bomberg, 1517. The Targums are translations or paraphrases of the Hebrew text intended to be read in the synagogue, made as Hebrew came to be less well understood than the vernacular. The dates of their composition and their authorship are uncertain.

CHAMBIALI 140

Chamba character (Tankri)

मै- ॐ नमो भगवते वासुदेवाय
ॐ नमो भगवते वासुदेवाय
ॐ नमो भगवते वासुदेवाय
ॐ नमो भगवते वासुदेवाय

Spoken in Chamba State, India. First publication, St. Matthew's Gospel, chapters 5-7, in 1882 at Ludhiana by the BFBS; tr. by Sohan Lal, a native pastor, under the supervision of J. Hutchinson, of the Church of Scotland Mission. St. Matthew's Gospel, 1883; St. John's Gospel, 1884; St. Mark's Gospel, 1891; St. Luke's Gospel, 1910.

CHAMORRO 141

15 Para todo ayo y jumonggue güe, ti siña malingo, ya guaja linálaña na taejinecog.
16 ¶ Sa taegtüenao na jaguaeya si Yuus y tano, janae ni linilisja Lajña y para todo ayo y jumonggue güe, ti siña malingo, ya guaja linálaña na taejinecog.
17 Sa ti jatago si Yuus y Lajña guato gui tano, para usapit y tano, lao para y tano unalibre pot güiya.
18 Y jumonggue güe, ti umasapit; ayo y ti jumonggue güe ayo umasapit, sa ti manjonggue ni naan unoja na Lajin Yuus.
19 Ya este na sinapit, na y inina malag y tano, ya y taotao sija gaonñija y jemjom qui y inina, sa y fuatinasñija
31 ¶ Y g taquilo qui tanoja güe an; ya y iyajululo.
32 Tanaja jungog, monioña.
33 Ya y sumeyo ne
34 Sa y jasangan, ni y Espir
35 Sa y güinaja ja
36 Y jun jinecog na

Spoken on the Island of Guam, Ladrone Islands. First publication, the Gospels, the Acts, and Psalms in 1908 by the ABS; tr. by the Rev. Francis M. Price of the ABCFM. CP: ABS.

Figure 17: Entry for the Chambeali ('Chambiali') language in The Book of a Thousand Tongues showing a specimen of a bible in printed Takri of the Standard Chambiali type (from American Bible Society 1938: 80). The font used is identical to that used by Grierson in printing specimens in the Linguistic Survey of India.

The following are the Dōgrā characters as used in the specimens :—

**Vowels.**

**INITIAL FORMS.**

a, ā, i or ī, u or ū, e, ē or ai, o or au, or ~

**NON-INITIAL FORMS.**

ka, kā, ki or kī, ku, kū, ke or kē, kai, kō, kau, kam or kām.

**NOTE.**—Great carelessness is allowed in writing the vowels and the nasal sign. They are often omitted altogether. Long and short vowels are frequently interchanged. Initial vowels are often written in the place of non-initial long ones. Thus—

da; tā. The letter e or ē is frequently written for i, and o for u.

**Consonants.**

ka, kha, ga, gha, na;
   
 cha, chha, ja, jha, ñ;
   
 ta, tha, ða, ðha, or ña;
   
 ta, tha, da, dha, na;
   
 pa, pha, ba, bha, ma;
   
 ya, ra, la, va, wa;
   
 sha, sa, ha, ra.

**NOTE.**—That the same sign is employed for ja and ya, and for ba and va (or wa), respectively. There is really only one sibilant,—the letter sa. When it is necessary to represent the sound of the Persian *sh*, the character for *chha* is employed.

Figure 18: Chart of the Dogri style of Takri (from Grierson 1916a: 641).

In order to facilitate comparison, I next give the current written forms of the letters of the Gurmukhi, Kangrā, and Dogrā alphabets.

| Gurmukhi. | Kāgrā. | Dōgrā. |        | Gurmukhi. | Kāgrā. | Dōgrā. |     |
|-----------|--------|--------|--------|-----------|--------|--------|-----|
| ੳ         | ਯ      | ਯ      | 'āirā' | ੳ         | ੳ      | ਊੳ     | da  |
| ਏ         | ਏ      | ਏ      | 'īrī'  | ਏ         | ਏ      | ਏ      | dha |
| ਓ         | ਓ      | ਓ      | 'ūrā'  | ਓ         | =      | ਏ      | na  |
| ਊ         | ਊ      | ਊ      | ō      | ਤ         | ਤ      | ਤ      | ta  |
| ਸ         | ਸ      | ਸ      | sa     | ਬ         | ਬ      | ਬਯ     | tha |
| ਹ         | ਹ      | ਹ      | ha     | ਦ         | ਦ      | ਦ      | da  |
| ਕ         | ਕ      | ਕ      | ka     | ਪ         | ਪ      | ਪਯ     | dha |
| ਖ         | ਖ      | ਖ      | kha    | ਨ         | ਨ      | ਨ      | na  |
| ਗ         | ਗ      | ਗ      | ga     | ਪ         | ਪ      | ਪ      | pa  |
| ਘ         | ਘ      | ਘ      | gha    | ਫ         | ਫ      | ਫ      | pha |
| ਬ         | ਬ      | ਬ      | ba     | ਬ         | ਬ      | ਬ      | ba  |
| ਚ         | ਚ      | ਚ      | cha    | ਭ         | ਭ      | ਭ      | bha |
| ਛ         | ਛ      | ਛ      | chha   | ਮ         | ਮ      | ਮ      | ma  |
| ਜ         | ਜ      | ਜ      | ja     | ਯ         | ...    | ਯ      | ya  |
| ਝ         | ਝ      | ਝ      | jha    | ਰ         | ੳ      | ੳ      | ra  |
| ਠ         | ...    | ਠ      | ṅa     | ਲ         | ੳ      | ਲ      | la  |
| ਟ         | ੳ      | ੳ      | ṭa     | ਵ         | ੳ      | ੳ      | va  |
| ਠ         | ੳ      | ੳ      | ṭha    | ੳ         | ੳ      | ੳ      | re  |

Figure 19: Comparison of Kangri and Dogri styles of Takri with Gurmukhi (from Grierson 1916a: 642).

PAÑJĀBĪ.

ḌŌGRĀ DIALECT.

(JAMMU STATE.)

SPECIMEN I.

ḌŌGRĀ CHARACTER.

ਪੰਚ ਨਾਮਾ ਸੋ ਸੋ ਜੁੱਤੋ ਆਪ ਸਿ ਪਾਸ  
 ਨਾਰ ਫੈਰਪ ਪੰਧਵਾ ਸਯੋਲ ਕਰ ਤਪ ਧੰ  
 ਕੁੰਪਸੁਤਾ ਸਯ ਕੁਪ ਤੋਸੇ ਸੋਕਾ ਜੋਕੁੰ-  
 ਤੇਪ ਸਤ ਸੋਕਾ ਸਭ-ਸਭ ਤੁਲ ਸਿੱਕੇ ਸੱਲ  
 ਠਿਕੇਕਾ ਪਾਸ-ਸਭ ਸੁੱਕੇ ਆਸਿ ਸੇਦ ਜੋਰੇ  
 ਨੇਕੇਫੈ ਜੁਤਰ = ਕਰ ਸਧ-ਕੇਕੇ ਕੰਠ - ਕਰ  
 ਸਭੇ ਸੋਸਪ ਸਯਾ ਜੋਸਲ ਕਾਰ ਸੁੱਕੇ ਠਿਕੇ  
 ਸਾਯਕਲ ਸੱਲ ਲੁਸ ਗਏ ਕੁਪ ਗੋਲਾ - ਸੁੱਕੇ  
 ਸੁੱਕੇ ਕੁਸ ਸਧ ਆਸ ਕਰ ਸਭਿ ਸਿ  
 ਸਭਿਕਾ ਪਾਸ ਪਾਠ ਕੱਲ ਗਾਗਲ ਸੁੱਕੇ  
 ਤੇਤੋ ਕੰਗਲ ਤੋਨੇ ਨਾਗ ਸੁੱਕੇ ਸਿ ਸੋਲਯੰਧ  
 ਠਿਕੇ ਪਾਠ ਕੁੰਪਸੁਤਾ ਧੰਲ ਸਭ ਕੁੰਠੇ ਨਾਗ

Figure 20: Specimen of the Dogri language written in Dogri Takri (from Grierson 1916a: 760).

| ३४१      | शुदरुण | ३४१      | शुदरुण |
|----------|--------|----------|--------|
| णवदणव३४  | )।     | ३णव३     | ≡)     |
| णवधवणव३४ | )॥     | शदव३णव३  | ≡)।    |
| णवधवणव३४ | )॥॥    | शवक३णव३  | ≡)॥    |
| णव३४     | - )    | णवधवणव३४ | ≡)॥॥   |
| शदवणव३४  | - )।   | धवणव३    | )।     |
| क३णव३४   | - )॥   | शदवधवणव३ | )।     |

Figure 21: The forms of fractions in Takri and the number forms used to represent them (from Staal 1984: 75).

|                            | Nagari | Dogri |     | Nagari | Dogri |     | Nagari | Dogri |
|----------------------------|--------|-------|-----|--------|-------|-----|--------|-------|
| a                          | अ      | ਲ     | ka  | क      | ਕ     | ta  | त      | ਤ     |
| ā                          | आ      | ਲਾ    | kha | ख      | ਖ     | tha | थ      | ਥ     |
| i                          | इ      | ੳ     | ga  | ग      | ਗ     | da  | द      | ਦ     |
| ī                          | ई      | ੳੳ    | gha | घ      | ਘ     | dha | ध      | ਧ     |
| u                          | उ      | ੳ     | nga | ङ      | ਙ     | na  | न      | ਨ     |
| ū                          | ऊ      | ੳੳ    |     |        |       |     |        |       |
| e                          | ए      | ੲ     | ca  | च      | ਚ     | pa  | प      | ਪ     |
| ai                         | ऐ      | ੲੲ    | cha | छ      | ਚ     | pha | फ      | ਫ     |
| o                          | ओ      | ੳੳੳ   | ja  | ज      | ਜ     | ba  | ब      | ਬ     |
| au                         | औ      | ੳੳੳੳ  | jha | झ      | ਝ     | bha | भ      | ਭ     |
| am<br>(nasalized<br>vowel) | अं     | ੳਂ    | ña  | ञ      | ਞ     | ma  | म      | ਮ     |
| śa                         | श      | ਸ਼    | ta  | ट      | ਟ     | ya  | य      | ਯ     |
| ṣa                         | ष      | ਸ਼    | tha | ठ      | ਠ     | ra  | र      | ਰ     |
| sa                         | स      | ਸ     | ḍa  | ड      | ਡ     | la  | ल      | ਲ     |
| ha                         | ह      | ਹ     | dha | ढ      | ਢ     | va  | व      | ਵ     |
|                            |        |       | na  | ण      | ਣ     |     |        |       |

Figure 22: Comparison of Dogri and Devanagari vowel and consonant letters (from Staal 1984: 33).

|     | Nagari |    | Dogri |    |     | Nagari |    | Dogri |    |
|-----|--------|----|-------|----|-----|--------|----|-------|----|
| kā  | क      | ख  | ਕ     | ਖ  | gā  | ग      | ग  | ਗ     | ਗ  |
| ki  | कि     | खि | ਕਿ    | ਖਿ | gī  | गि     | गि | ਗਿ    | ਗਿ |
| kī  | की     | खी | ਕੀ    | ਖੀ | gi  | गी     | गी | ਗੀ    | ਗੀ |
| ku  | कु     | खु | ਕੁ    | ਖੁ | gu  | गु     | गु | ਗੁ    | ਗੁ |
| kū  | कू     | खू | ਕੂ    | ਖੂ | gū  | गू     | गू | ਗੂ    | ਗੂ |
| ke  | के     | खे | ਕੇ    | ਖੇ | ge  | गे     | गे | ਗੇ    | ਗੇ |
| kai | के     | खे | ਕੇ    | ਖੇ | gai | गै     | गै | ਗੈ    | ਗੈ |
| ko  | को     | खो | ਕੋ    | ਖੋ | go  | गो     | गो | ਗੋ    | ਗੋ |
| kau | कौ     | खौ | ਕੌ    | ਖੌ | gau | गौ     | गौ | ਗੌ    | ਗੌ |
| kaṃ | कं     | खं | ਕਂ    | ਖਂ | gaṃ | गं     | गं | ਗਂ    | ਗਂ |
| k   | क      | ख  | ਕ     | ਖ  | g   | ग      | ग  | ਗ     | ਗ  |

Figure 23: Comparison of Dogri and Devanagari vowel signs (from Staal 1984: 34).



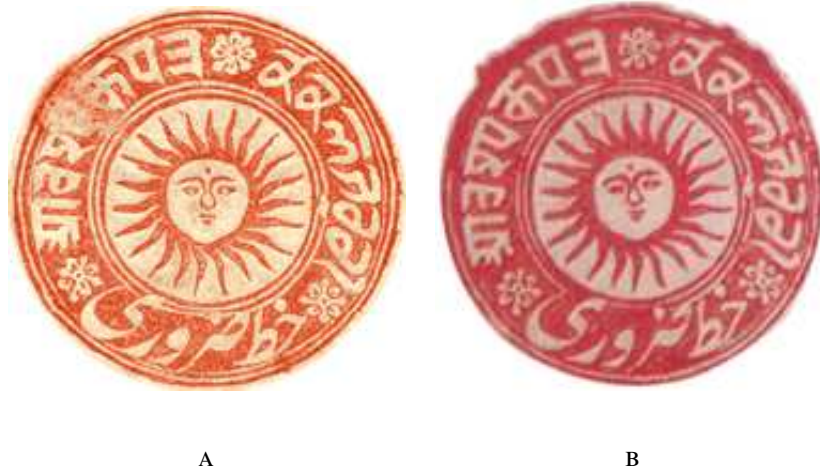


Figure 24: Two specimens of a trilingual stamp for expedited mail from Jammu State in Dogri Takri, Persian, and Devanagari scripts. The Takri reads **ਕਕਲ ਜਰੂਰੀ** *kakal jarurī* (note the use of Dogri forms for KA, JA, RA, and VOWEL SIGN II). The Persian reads **خط ضروری** *khaṭ zarūrī*; the Devanagari reads *āvaśyaka patra* आवश्यक पत्र.



Figure 25: Four bilingual regular postage stamps from Jammu State in Dogri Takri and Persian. Stamps A, B, and D are half ‘anna’ stamps and C is a one ‘anna’ stamp. In all stamps, the Takri text at the top reads **ਜਨਮ** ‘Jammu’ *jamau* and **ਕਸ਼ਮੀਰ** ‘Kashmir’ *kaśmīr* (note the use of Dogri **ਕ** CHA for writing SHA). In A, B, and D, the first line of the center is Persian **نیم آناه ۱۹۲۳ ۱۹۲۳** *[samvat] nim ānah* ‘half ānnā’; the second line of the center is Takri **ਅਦਾ ਅਨਾ** *ada ana* ‘half ānnā’. In C, the first line of the center is Persian **یک آناه** *yak ānah* ‘one ānnā’; the second line of the center is Takri **ਓਦਾ ਅਨਾ**. In all stamps, the third line of the center is the date 1923 *[samvat]* in Takri **੧੯੨੩**. The Persian at the bottom reads **قلمرو و سرکار جموں و کشمیر** *qalamra o sarkār jammūn o kaśmīr* ‘dominions of the ruler of Jammu and Kashmir.’

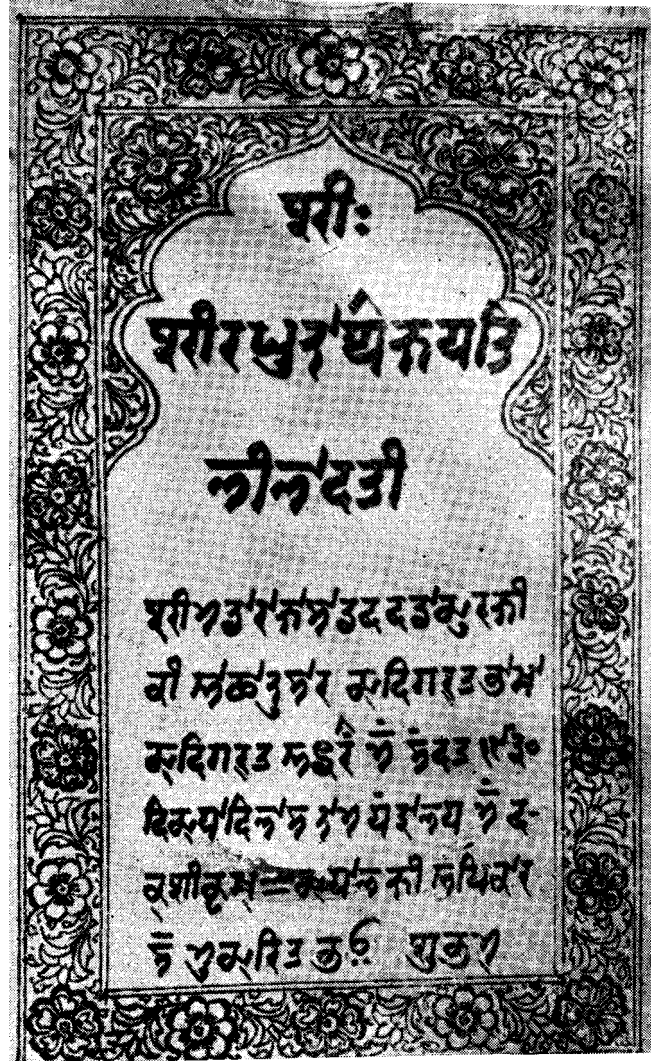


Figure 26: A folio of the *Lilavati*, a treatise on mathematics, printed in the standardized Dogri Takri script known as ‘Dogra Akkhar’ (from Pathik 1980: Plate 3). The translation of the *Lilavati* of Bhāskarācārya from Sanskrit into Dogri was commissioned by Maharaja Ranbir Singh and printed in the reformed Dogri script in 1872 at Vidya Vilas Press, the first printing press in Jammu.

|    | CHAMBEALI | DOGRI |     | CHAMBEALI                | DOGRI |
|----|-----------|-------|-----|--------------------------|-------|
| A  | 𑂔         | 𑂕     | -A  | <i>no dependent form</i> |       |
| AA | 𑂔         | 𑂕     | -AA | 𑂔̣                       | 𑂕̣    |
| I  | 𑂖         | 𑂗     | -I  | 𑂖̣                       | —     |
| II | 𑂖         | —     | -II | 𑂖̣                       | 𑂗̣    |
| U  | 𑂘         | 𑂙     | -U  | 𑂘̣                       | 𑂘̣    |
| UU | 𑂘         | —     | -UU | 𑂘̣                       | 𑂘̣    |
| E  | 𑂚         | 𑂛     | -E  | 𑂚̣                       | 𑂚̣    |
| AI | 𑂚̄        | 𑂛̄    | -AI | 𑂚̣                       | 𑂚̣    |
| O  | 𑂜         | 𑂝     | -O  | 𑂜̣                       | 𑂜̣    |
| AU | 𑂜         | 𑂝     | -AU | 𑂜̣                       | 𑂜̣    |

Table 5: Comparison of Chambeali and Dogri vowel letters and signs (differences highlighted). Characters shown in parentheses are part of the proposed Takri script, but are not proposed for encoding as atomic characters as they can be produced using NUKTA.

|         | CHAMBEALI | DOGRI |       | CHAMBEALI | DOGRI |
|---------|-----------|-------|-------|-----------|-------|
| KA      | क         | क     | THA   | थ         | थ     |
| KHA     | ख         | ख     | DA    | ड         | ड     |
| GA      | ग         | ग     | DHA   | घ         | घ     |
| GHA     | घ         | घ     | NA    | न         | न     |
| NGA     | ङ         | ङ     | PA    | प         | प     |
| CA      | च         | च     | PHA   | फ         | फ     |
| CHA     | छ         | च     | BA    | ब         | ब     |
| JA      | ज         | ज     | BHA   | भ         | भ     |
| JHA     | झ         | ज     | MA    | म         | म     |
| NYA     | —         | न     | YA    | य         | य     |
| TTA     | ट         | ट     | RA    | र         | र     |
| TTHA    | ठ         | ठ     | LA    | ल         | ल     |
| DDA     | ड         | ड     | (LLA) | (ल)       | —     |
| (DDDHA) | (ढ़)      | —     | VA    | व         | व     |
| DDHA    | ढ         | ढ     | SHA   | (श)       | श     |
| (RHA)   | (र)       | (र)   | SA    | स         | स     |
| NNA     | न्        | न्    | HA    | ह         | ह     |
| TA      | त         | त     | RRA   | —         | र     |

Table 6: Comparison of Chambeali and Dogri consonant letters (differences highlighted). Characters shown in parentheses are part of the proposed Takri script, but are not proposed for encoding as atomic characters as they can be produced using NUKTA.

**JAUNSĀRĪ (SIRMAURĪ) ALPHABET.**

|         |        |         |      |   |     |
|---------|--------|---------|------|---|-----|
| ३       | a      | ⤴<br>X) | kau  | ३ | tha |
| ३), ३)) | ā      | ⤴<br>X) | kā   | ३ | da  |
| ३       | i      | ३       | ka   | ३ | dha |
| ३       | ī      | ३       | kha  | ३ | na  |
| ३       | u      | ३)      | ga   | ३ | pa  |
| ३       | ū      | ३)      | gha  | ३ | pha |
| ३, ३    | ě, ē   | —       | na   | ३ | ba  |
| ३)      | ai     | ३       | cha  | ३ | bha |
| ३)      | ō, ō   | ३       | chha | ३ | ma  |
| ३)      | au     | ३)      | ja   | ३ | ya  |
| .       | ~      | ३       | jha  | ३ | ra  |
| ३       | ka     | —       | ña   | ३ | la  |
| ३)      | kū     | ✓       | tā   | ३ | wa  |
| ३)      | ki     | ✓ ३     | thā  | ३ | śa  |
| ३)      | kī     | ३ ३     | ḍa   | ३ | śha |
| ३)      | ku     | ३       | ra   | ३ | sa  |
| ३)      | kū     | ३       | ḍhā  | ३ | hā  |
| ३)      | kě, kē | ३       | rha  |   |     |
| ३)      | kai    | ३)      | ṛa   |   |     |
| ३)      | kō, kō | ३)      | ta   |   |     |

When used before consonants of their own class, nasals are, as usual, represented by Anusvāra (◌̣). As ṛi and ṛī occur only in this position, they have no special character

Figure 27: Chart of the Jaunsari form of Takri (from Grierson 1916b: 384).



The Sirmauri Alphabet.

|          |        |        |   |
|----------|--------|--------|---|
| a        | 3      | da     | ε |
| ā        | 3)     | dha    | ε |
| i, ī & ē | 6 or 5 | na     | ∩ |
| u & ū    | ⊙      | pa     | 5 |
| ē        | 3 or 5 | pha    | 5 |
| ai       | ⊙      | ba     | 9 |
| ō & ȳ    | ⊙      | bha    | 9 |
| au       | ⊙      | ma     | ∩ |
| ka       | x      | ya     | x |
| kha      | 5      | ra     | ∩ |
| ga       | ∩      | la     | ε |
| gha      | 5      | wa     | 9 |
| cha      | ∩      | śa     | 9 |
| chha     | ∩      | sha    | 5 |
| ja       | ∩      | sa     | 9 |
| jha      | ∩      | ha     | ε |
| ṭa       | ∩      | kā     | x |
| ṭha      | 6      | ki, kī | x |
| ḍa       | 5      | ku, kū | x |
| ḍha      | 5      | ke, kē | x |
| ṇa       | ∩      | kai    | x |
| ta       | ∩      | ko, kō | x |
| tha      | 5      | kau    | x |

Figure 29: Chart of the Sirmauri form of Takri (from Grierson 1916b: 459).





**Kochi Alphabet.**

|      |          |             |        |
|------|----------|-------------|--------|
| a    | अ        | da          | द      |
| ā    | आ, उ, ऊ: | dha         | ध      |
| ī, i | इ:       | na          | न      |
| u, ū | उ        | pa          | प      |
| ē    | ए, ऐ     | pha         | फ      |
| ai   | ऐ        | ba          | ब      |
| ō    | ऊ, औ     | bha         | भ      |
| au   | औ        | ma          | म      |
| ka   | क        | mha         | म्ह    |
| kha  | ख, ग     | ya          | य      |
| ga   | ग        | ra          | र      |
| gha  | घ        | la          | ल      |
| cha  | च        | va          | व, उ   |
| chha | छ        | śa, śha, sa | स      |
| ja   | ज        | ha          | ह      |
| jha  | झ        | kā          | का, कः |
| ṭa   | ट        | ki, ki      | की     |
| ṭha  |          | ku, kū      | कु     |
| ḍa   | ड़, ड    | kē          | के, कै |
| ḍha  |          | kai         | कै     |
| va   | व, म     | kō          | को     |
| ta   | त        | kau         | कौ     |
| tha  | थ        |             |        |

Figure 31: Chart of the Mahasa (Kochi dialect) form of Takri (from Grierson 1916b: 614).

WESTERN PAHARI (KIÜTHALI)

Köchi DIALECT.

STATE BASHAR.

IN KÖCHI CHARACTERS.

ऐसी भविष्ये कुरु कुरु ये गोपके कुरुये वी मे वीमे ह वी  
 से उरे भाग्ये उ उरे वी वी मुगो कुरु मे उरे उरे उरे  
 भाग्ये कुरु वीमे वीमे वीमे ! उरे उरे कुरु मे वीमे कुरु  
 कुरु वीमे वीमे वीमे वीमे वीमे उरे उरे उरे उरे मेरे  
 5. भाग्ये कुरु मे वीमे ! उरे उरे मेरे उरे मेरे भाग्ये वीमे वीमे  
 उरे उरे उरे मुगो मे वीमे वीमे उरे मेरे वीमे उरे !  
 उरे मेरे ऐसी वीमे वीमे वीमे उरे मेरे उरे मेरे उरे  
 वीमे मे मुगो वीमे वीमे ! उरे मे मुगो मे वीमे उरे मेरे  
 उरे मेरे उरे उरे उरे उरे उरे उरे उरे ! उरे मेरे उरे मेरे  
 10. ऐसी वीमे उरे उरे उरे उरे उरे उरे उरे उरे उरे उरे  
 उरे उरे उरे उरे उरे उरे उरे उरे उरे उरे उरे उरे उरे  
 उरे उरे उरे उरे उरे उरे उरे उरे उरे उरे उरे उरे उरे  
 उरे उरे उरे उरे उरे उरे उरे उरे उरे उरे उरे उरे उरे  
 उरे उरे उरे उरे उरे उरे उरे उरे उरे उरे उरे उरे उरे  
 15. वीमे उरे उरे उरे उरे उरे उरे उरे उरे उरे उरे उरे उरे

Figure 32: Specimen of the Mahasa (Kochi dialect) form of Takri (from Grierson 1916b: 618).

**The Kului Alphabet.**

When letters are separated by a comma, the letter or letters before the comma are used in Upper Kulu, and those after the comma in Lower Kulu and Sirāj.

| Vowels. |      | Consonants. |                 | ṭha | ṭ, ṭ                    | ba     | ḍ, ṃ  |
|---------|------|-------------|-----------------|-----|-------------------------|--------|-------|
| a       | ṭ, ṭ | ka          | ṭ               | ḍa  | ṭ, ṭ                    | bha    | ṭ, ṭ  |
| ā       | ṭ, ṭ | kha         | ṭ               | ḍha | ṭ                       | ma     | ṭ, ṭ  |
| kā      | ṭ    | ga          | ṭ               | pa  | ṭ, ṭ                    | ya     | ṭ (ḍ) |
| i       | ṭ    | gha         | ṭ               | ta  | ṭ                       | ra     | ṭ     |
| ī       | ṭ    | cha         | ṭ, ṭ            | tha | ṭ <sup>or</sup><br>ṭ, ṭ | la     | ṭ     |
| ki, kī  | ṭ    | chha        | ṭ <sup>or</sup> | da  | ṭ                       | (va)   | (ḍ)   |
| u, ū    | ṭ    | ja          | ṭ, ṭ, E         | ḍha | ṭ, ṭ                    | ṭa, ṭa | ṭ, ṭ  |
| ē, ai   | ṭ, ṭ | jha         | ṭ, ṭ            | na  | ṭ, ṭ                    | ṭa     | ṭ, ṭ  |
| kē, kai | ṭ    | ṭa          | ṭ               | pa  | ṭ                       | ṭhu    | ṭ     |
| ō, au   | ṭ    | ṭa          | ṭ               | pha | ṭ, ṭ                    | ṭra    | ṭ     |
| ko, kau | ṭ    | ṭa          | ṭ               | pha | ṭ, ṭ                    | ṭra    | ṭ     |

Ya is usually indicated by initial ṭ, and wa by initial u. Thus ṭṭā yā, ṭṭā wā.

Figure 33: Chart of the Kulvi ('Kului') form of Takri (from Grierson 1916b: 671).

WESTERN PAHARI (KULVI).

ॐ नमो भगवते वासुदेवाय  
 गीतगोविन्दं कुरुक्षेत्रे भक्त्युत्थितं  
 श्रीकृष्णार्जुनसंवादे उवाच ॥  
 शुक उवाच ॥ अर्जुन उवाच ॥  
 ॐ नमो भगवते वासुदेवाय ॥  
 श्रीकृष्ण उवाच ॥ अर्जुन उवाच ॥  
 ॐ नमो भगवते वासुदेवाय ॥  
 श्रीकृष्ण उवाच ॥ अर्जुन उवाच ॥  
 ॐ नमो भगवते वासुदेवाय ॥

Figure 34: Specimen of the Kulvi ('Kului') form of Takri (from Grierson 1916b: 680).

KANARESE

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Kanarese characters

ದರೂ ಸಾಕ್ಷಿ ಕೊಡುವುದು ಅವಶ್ಯವಿರಲಿಲ್ಲ; ಯಾಕಂದರೆ ಅವನು ಮನುಷ್ಯನೊಳಗೆ ಇರುವದನ್ನು ಅರಿತನು.

೩ ಸಂಧಿ

- ೧ ಫರಿಸಾಯರಲ್ಲಿ ಯೆಹೂದ್ಯರ ಅಧಿಪತಿಯಾದ ನಿಕೊದೇಮನೊಬ್ಬ ಮನುಷ್ಯನಿದ್ದನು. ಇವನು ರಾತ್ರಿಯಲ್ಲಿ ಯೇಸುವನ ಬಳಿಗೆ ಬಂದು, ಅವನಿಗೆ, ರಭಿಯೇ, ನೀನು ದೇವರ ಬಳಿಯಿಂದ ಬಂದ ಬೋಧಕನೆಂದು, ಬಲ್ಲೆವು; ಹಾಗಾದರೆ ದೇವರು ಅವನ ಸಂಗಡ ಇಲ್ಲದಿದ್ದರೆ, ಯಾವನೂ ನೀನು ಮಾಡುವ ಈ ಲಕ್ಷಣಗಳನ್ನು ಮಾಡಲಾರನು, ಅಂದನು.
- ೨ ಯೇಸು ಅವನಿಗೆ ಪ್ರತ್ಯುತ್ತರವಾಗಿ, ನಿತ್ಯ ಯವಾಗ ನಿತ್ಯ ಯವಾಗಿ ನಿನಗೆ ಹೇಳುತ್ತೇನೆ, ಒಬ್ಬನು ಮೇಲಿನಿಂದ ಹುಟ್ಟಿದಿದ್ದರೆ, ದೇವರ ರಾಜ್ಯವನ್ನು ನೋಡಲಾರನು, ಅಂದನು. ನಿಕೊದೇಮನು ಅವನಿಗೆ, ಮುದುಕನಾದ ಮನುಷ್ಯನು ಹುಟ್ಟುವುದು ಹಾಗೆ? ಅವನ ತಾಯಿಯ ಗರ್ಭದಲ್ಲಿ ತಿರಿಗಿ ಪ್ರವೇಶಿಸಿ, ಹುಟ್ಟುವುದು ಅದೀತೋ? ಅಂದನು. ಯೇಸು ಪ್ರ

ದಲ್ಲಿರುವ, ಮನುಷ್ಯನ ಮಗನೇ ಹೊತು, ಯಾವನೂ ಪರಲೋಕಕ್ಕೆ ಏರಿ ಹೋಗಲಿಲ್ಲ. ಇದಲ್ಲದೆ ಮೋಶೆಯು ಅರಣ್ಯದಲ್ಲಿ ಹ್ಯಾಗೆ ಸರ್ಪವನ್ನು ಎತ್ತಿದನೋ, ಹಾಗೆಯೇ ಮನುಷ್ಯನ ಮಗನು, ಅವನಲ್ಲಿ ವಿಶ್ವಾಸವಿಡುವವರೆಲ್ಲರು ನಾಶಕವಾಗದೆ, ನಿತ್ಯಜೀವವನ್ನು ಹೊಂದುವ ಹಾಗೆ, ಎತ್ತಲ್ಪಡಬೇಕು. ಯಾಕಂದರೆ ಅವನಲ್ಲಿ ವಿಶ್ವಾಸವಿಡುವವರೆಲ್ಲರು ನಾಶವಾಗದೆ, ನಿತ್ಯಜೀವವನ್ನು ಹೊಂದುವ ಬಗ್ಯೆ, ದೇವರು ಒಬ್ಬನಾಗಿ ಹುಟ್ಟಿದ ತನ್ನ ಮಗನನ್ನು ಕೊಡುವ ಹಾಗೆ, ಲೋಕವನ್ನು ಆಷ್ಟು ಪ್ರೀತಿ ಮಾಡಿದನು. ಯಾಕಂದರೆ ಲೋಕಕ್ಕೆ ಆಜ್ಞೆ ನಿರ್ಣಯಿಸುವದಕ್ಕಲ್ಲ, ಲೋಕವು ಅವನಿಂದ ರಕ್ಷಿಸಲ್ಪಡುವ ಹಾಗೆ, ದೇವರು ತನ್ನ ಮಗನನ್ನು ಲೋಕಕ್ಕೆ ಕಳುಹಿಸಿದನು. ಅವನಲ್ಲಿ ವಿಶ್ವಾಸಿಸುವವನಿಗೆ ಆಜ್ಞೆ ನಿರ್ಣಯವಿಲ್ಲ. ಆದರೆ ವಿಶ್ವಾಸಿಸದವನಿಗೆ, ದೇವರ ಒಬ್ಬನಾಗಿ ಹುಟ್ಟಿದ ಮಗನ ಹೆಸರಿನಲ್ಲಿ ವಿಶ್ವಾಸಿಸದ ಕಾರಣ, ಈಗಲೇ ಆಜ್ಞೆ ನಿರ್ಣಯವಾಯಿತು. ಆಜ್ಞೆ ನಿರ್ಣಯ

Spoken by about 10,000,000 people in Mysore and adjacent parts of southern India. First publication, St. Matthew's, St. Mark's, and St. Luke's Gospels in 1812; tr. by John Hands. Gospels and Acts, Madras, BFBS, 1820; Ephesians and Philipians, 1822(?). New Testament, 1823, Serampore; tr. by the Serampore Missionaries (See No. 87). Hands version, BFBS, at Bellary, 1830, supervised by William Reeve, LMS. Bible, BFBS, Bellary, 1831; tr. by Mr. Hands and Mr. Reeve. Other versions of note: Hands version revised,

Jn. 2.25-Jn. 3, 4, 13-18; 1884 1837, by Mr. Hands and John Reid. Revised Version: New Testament, BFBS, Bangalore, 1850; by a committee of which G. H. Weigle Basel Missionary Society, was the most active. Re-revised, 1854; Old Testament, 1865. New version: St. Matthew, BFBS, Mangalore, 1893; New Testament, 1901; Bible, Bangalore, 1934 ('35), by a committee of missionaries of the LMS, Basel MS, and the Wesleyan Methodist Missionary Society. CP: BFBS.

KANARESE: Badaga dialect 446

Kanarese characters

ವಿಕಾಂದಲೆ, ದೇವರ ಚಿತ್ತದ ಪರಕಾರ ನಡೆವವಂ ನಿಯವನೋ ಅವನೇ ಎನಗ ಅಣ್ಣ ತಮ್ಮನೂ ಅಕ್ಕ ತಂಗಿಯೂ, ಅವೆಯೂ ಆಗಿದ್ದನೆಂ ಎನ್ನಂ.

Mk. 3:35

Tamil characters

ಎಕಾಂತಲೊ, ದೇವರ ಚಿತ್ತಕ್ಕೆ ಪ್ರಕಾರ ನಡೆವವಂ ನಿಯವನೋ ಅವನೇ ಎನಗ ಅಣ್ಣ ತಮ್ಮನೂ ಅಕ್ಕ ತಂಗಿಯೂ, ಅವೆಯೂ ಆಗಿದ್ದನೆಂ ಎನ್ನಂ.

Mk. 3:35

Spoken by some 35,000 people in the Nilgiri Hills, South India. First publication, St. Luke's Gospel in 1825 at Mangalore by the Basel Missionary Society; tr. by George Casamajor, of the Madras Civil Service, and C. Maerike, BMS. St. Luke's Gospel, BFBS, Mangalore, 1890; revised by C. W. Lütze and others: St. Mark's Gospel, 1896; tr. by W. Sikemeier; reprinted in Tamil characters, 1897: Jonah, 1902, in Kanarese and Tamil characters; tr. by J. Kanaka, a native pastor. CP: BFBS.

KANAURI 447

Devanagari characters

कूदे हतिअड ईश्वरु मोगडु मापक युगतो । ह्रीदोई अड बया अड रिडस अड अमा नीओी ॥

Mk. 3:35

Tankri characters

कु हतिअड ईश्वरु मोगडु मापक युगतो । ह्रीदोई अड बया अड रिडस अड अमा नीओी ॥

Spoken in the Bashahr State, northwest India, on the borders of Tibet. First publication, St. Mark's Gospel in 1909 at Allahabad by the BFBS; tr. by the Rev. and Mrs. J. T. Bruske of the Moravian Mission. St. John's Gospel in Tankri characters, BFBS, 1917; tr. by Ensign F. Mortimer, of the Salvation Army.

Figure 35: Entry for the Kinnauri ('Kanauri') language in *The Book of a Thousand Tongues* showing a specimen of a bible printed in Takri type (from American Bible Society 1938: 188).

**Mandēāji Alphabet**

| Vowels. |       | Consonants. |     |                 |     |      |   |
|---------|-------|-------------|-----|-----------------|-----|------|---|
| a       | 𑂀     | ka          | 𑂁   | da              | 𑂂   | ha   | 𑂃 |
| ā       | 𑂄 𑂅   | kha         | 𑂆 𑂇 | dha             | 𑂈   | tha  | 𑂉 |
| kā      | 𑂊 𑂋   | ga          | 𑂌   | na              | 𑂍   | pha  | 𑂎 |
| i       | 𑂏     | gha         | 𑂐   | pa              | 𑂑   | nha  | 𑂒 |
| ki      | 𑂓     | cha         | 𑂔   | pha             | 𑂕   | jya  | 𑂖 |
| ī       | 𑂗 𑂘   | chha        | 𑂙   | ba              | 𑂚   | dhya | 𑂛 |
| ki      | 𑂜     | ja          | 𑂝   | bha             | 𑂞   | nhy  | 𑂟 |
| u, ū    | 𑂠     | jha         | 𑂡   | ma              | 𑂢   | tra  | 𑂣 |
| ku, kū  | 𑂤     | ḥa          | 𑂥   | ya              | 𑂦   | pra  | 𑂧 |
| ḍ       | 𑂨     | sha         | 𑂩   | ra              | 𑂪 𑂫 | raḥ  | 𑂬 |
| kh      | 𑂭     | ḍa          | 𑂮   | la              | 𑂯   | kḥwa | 𑂰 |
| ai      | 𑂱     | ḍha         | 𑂲   | va              | 𑂳   | gwa  | 𑂴 |
| kai     | 𑂵     | pa          | 𑂶   | ḥa, cha,<br>sa. | 𑂷   | dwa  | 𑂸 |
| ō, au   | 𑂹 𑂺 𑂻 | ta          | 𑂼   | ka              | 𑂽   | rwa  | 𑂾 |
| kō, kau | 𑂿     | tha         | 𑃀   | ḥa              | 𑃁   |      |   |

NOTE.—The letter *sa* is represented by the sign for *gō*, and an initial *s* is also optionally represented by the same character. The letters *pa* and *ma* are usually written with *anuvāsa* over the preceding syllable.

Figure 36: Chart of the Mandēali form of Takri (from Grierson 1916b: 719).

## WESTERN PAHARI (MANDĀLĪ).

## SPECIMEN I.

|     |         |        |          |         |        |      |      |
|-----|---------|--------|----------|---------|--------|------|------|
|     | ऐकी     | मंरुथे | रे       | रुड     | गंठक   | बे   | भडे  |
|     | गंठक    | ऐ      | श्रंथंली | थं      | मंठिगी |      | थं   |
|     | हे      | मंरु   | मण्डलटे  | नी      | थंरु   |      | हे   |
|     | मंठिगी  | ठंमं   | रुड      | रे      | ठं     | उमरे | थं   |
| 5.  | उमरी    | थंरु   | मण्डलटे  | नी      | उमरु   |      | रुड  |
|     | लीकी    | रुड    | रुड      | नी      | थंरु   |      | कीरु |
|     | भडे     | गंठक   | ऐ        | मण्डलटे | मड     |      | रुड  |
|     | रुड     | रुड    | रुड      | रुड     | रुड    |      | रुड  |
|     | मणं     | गथं    | उकी      | मणपंरु  | मंरु   |      | मड   |
| 10. | मण्डलटे | रुड    | रुड      | रुड     | कीरु   |      | मड   |

Figure 37: Specimen of the Mandeali form of Takri (from Grierson 1916b: 730).

**Kashtawāri Alphabet.**

|             |       |      |   |     |    |
|-------------|-------|------|---|-----|----|
| a, ā        | ᳚     | ka   | ᳚ | ta  | ᳚  |
| i, ī, ē     | ᳛     | kha  | ᳛ | tha | ᳛  |
| u, ū, ō, au | ᳜     | ga   | ᳜ | da  | ᳜  |
| ai          | ᳚᳛    | gha  | ᳛ | dha | ᳜᳛ |
| āi          | ᳚᳛    | cha  | ᳚ | na  | ᳚  |
| ā           | ..... | chha | ᳚ | pa  | ᳚  |
| ka          | ᳚     | ja   | ᳚ | pha | ᳜  |
| kā          | ᳚᳚ ᳚᳚ | za   | ᳚ | ba  | ᳜  |
| ki, kī      | ᳚᳚    | jha  | ᳚ | bha | ᳚  |
| ku          | ᳚     | ᳚    | ᳚ | ma  | ᳚  |
| kū          | ᳚᳚    | ᳚    | ᳚ | ya  | ᳚  |
| kō          | ᳚     | ᳚    | ᳚ | ra  | ᳚  |
| kau         | ᳚᳚    | ᳚    | ᳚ | la  | ᳚  |
| karā        | ᳚     | ᳚    | ᳚ | va  | ᳚  |
|             |       | ᳚    | ᳚ | sha | ᳚  |
|             |       | ᳚    | ᳚ | sa  | ᳚  |
|             |       | ᳚    | ᳚ | ka  | ᳚  |

Figure 38: Chart of Kishtwari form of Takri (from Grierson 1919: 344).



KĀSHMIRĪ.

KASHTAWĀRĪ DIALECT.

SPECIMEN II.

(Kashmir Darbār.)

|    |    |    |    |    |    |
|----|----|----|----|----|----|
|    | 32 | ३३ | ३३ | ३३ | ३३ |
|    | ३३ | ३३ | ३३ | ३३ | ३३ |
|    | ३३ | ३३ | ३३ | ३३ | ३३ |
| 5  | ३३ | ३३ | ३३ | ३३ | ३३ |
|    | ३३ | ३३ | ३३ | ३३ | ३३ |
|    | ३३ | ३३ | ३३ | ३३ | ३३ |
|    | ३३ | ३३ | ३३ | ३३ | ३३ |
|    | ३३ | ३३ | ३३ | ३३ | ३३ |
| 10 | ३३ | ३३ | ३३ | ३३ | ३३ |
|    | ३३ | ३३ | ३३ | ३३ | ३३ |

Figure 39: Specimen of Kishtwari form of Takri (from Grierson 1919: 386).

The Śāradā and Kaśṭawāri Alphabets.

| Roman. | Śāradā. | Kaśṭawāri. | Roman. | Śāradā. | Kaśṭawāri. | Roman. | Śāradā. | Kaśṭawāri. |
|--------|---------|------------|--------|---------|------------|--------|---------|------------|
| a      | अ       | 𑂀          | ka     | क       | 𑂑          | da     | द       | 𑂒          |
| ā      | आ       | 𑂁          | kha    | ख       | 𑂓          | dha    | ढ       | 𑂔          |
| i      | इ       | 𑂂          | ga     | ग       | 𑂕          | na     | न       | 𑂖          |
| ī      | ई       | 𑂃          | gha    | घ       | 𑂗          | pa     | प       | 𑂘          |
| u      | उ       | 𑂄          | na     | र       |            | pha    | फ       | 𑂙          |
| ū      | ऊ       | 𑂅          | cha    | स       | 𑂚          | ba     | ब       | 𑂛          |
| ri     | ऋ       |            | chha   | छ       | 𑂜          | bha    | ठ       | 𑂝          |
| ri     | ॠ       |            | ja     | ज       | 𑂞          | ma     | म       | 𑂟          |
| l      | ऌ       |            | jha    | झ       |            | ya     | य       | 𑂠          |
| li     | ॡ       |            | āa     | ण       |            | ra     | र       | 𑂡          |
| e      | ए       | 𑂆          | ta     | ट       |            | la     | ल       | 𑂢          |
| ai     | ऐ       | 𑂇          | tha    | ठ       | 𑂏          | oa     | व       | 𑂣          |
| ō      | ओ       | 𑂈          | da     | ड       | 𑂐          | śa     | श       | 𑂤          |
| au     | औ       | 𑂉          | gha    | झ       | 𑂑          | sha    | ष       | 𑂥          |
| m      | ः       | .....      | na     | ञ       | 𑂒          | sa     | स       | 𑂦          |
| ~      | ◌       |            | ta     | उ       | 𑂓          | ha     | ह       | 𑂧          |
| †      | ◌       |            | tha    | ष       | 𑂔          | h      | क       |            |

Figure 40: Comparison of Sharada and Kishtwari (from Grierson 1919: 255).



ALPHABETICAL CHART

|    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|
| ॐ  | ॐ  | ॐ  | ॐ  | ॐ  | ॐ  | ॐ  | ॐ  |
| 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  |
| ॐ  | ॐ  | ॐ  | ॐ  | ॐ  | ॐ  | ॐ  | ॐ  |
| 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| ॐ  | ॐ  | ॐ  | ॐ  | ॐ  | ॐ  | ॐ  | ॐ  |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| ॐ  | ॐ  | ॐ  | ॐ  | ॐ  | ॐ  | ॐ  | ॐ  |
| 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |
| ॐ  | ॐ  | ॐ  | ॐ  | ॐ  | ॐ  | ॐ  | ॐ  |
| 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| ॐ  | ॐ  | ॐ  | ॐ  | ॐ  | ॐ  | ॐ  | ॐ  |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 |
| ॐ  | ॐ  | ॐ  | ॐ  | ॐ  | ॐ  | ॐ  | ॐ  |
| 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 |
| ॐ  | ॐ  | ॐ  | ॐ  | ॐ  | ॐ  | ॐ  | ॐ  |
| 58 | 59 | 60 | 61 | 62 | 63 | 64 |    |
| ॐ  | ॐ  | ॐ  | ॐ  | ॐ  | ॐ  | ॐ  | ॐ  |
| 65 | 66 | 67 | 68 | 69 | 70 |    |    |
| ॐ  | ॐ  | ॐ  | ॐ  | ॐ  | ॐ  | ॐ  | ॐ  |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 |    |

GAURI JHANKER

Figure 42: Specimens of Devāṣeṣa, the intermediary between Sharada and Takri (from Chhabra 1957: Plate between pages 4 and 5).

PLATE XXV.

A.—CHAMBA PLATE OF BALABHADRA; V. S. 1692.

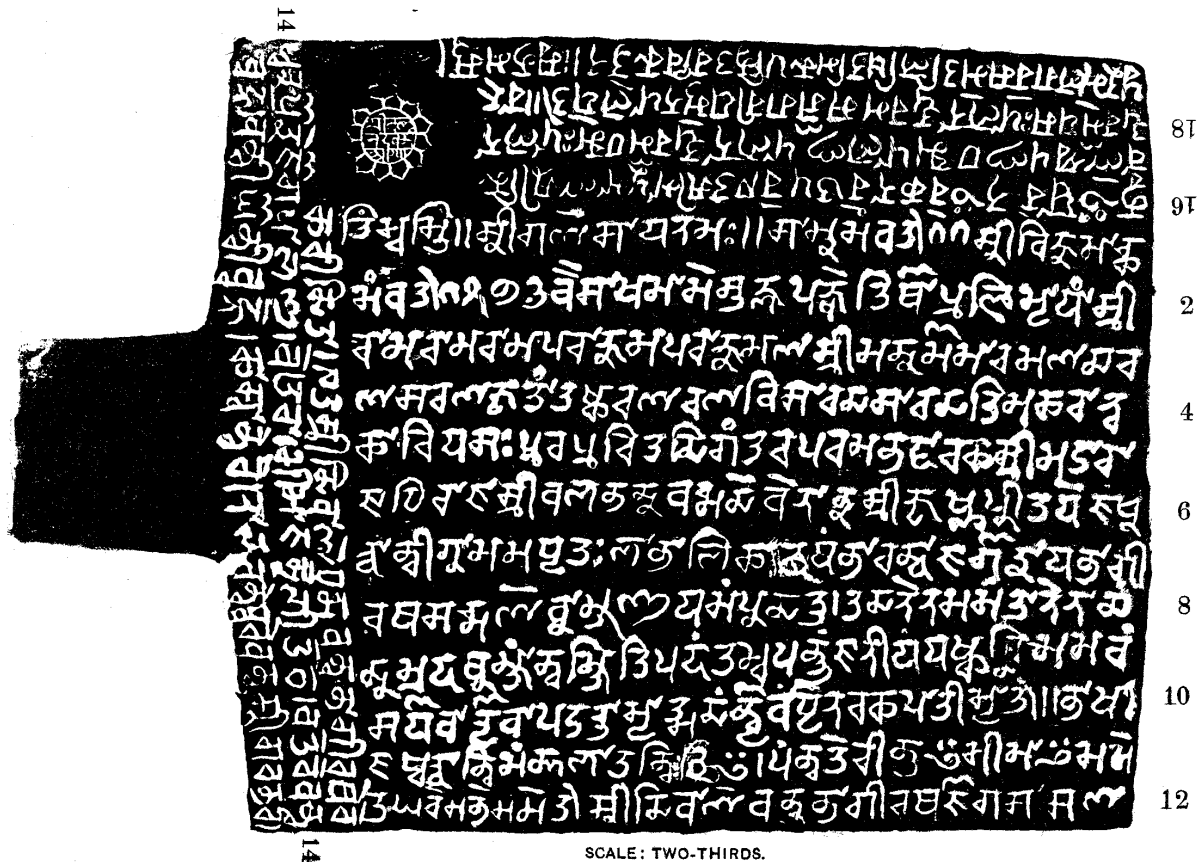


Figure 43: A copper plate from Chamba containing text in Sanskrit and Chambeali written in the Devāśeṣa ancestor of Takri. The plate is a document attesting a grant of land by the king Balabhadravarmān to the brahmin Bhāgīrathāśarman (from Chhabra 1957: 127–129; Plate XXV: Chamba Plate of Balabhadra; vikram samvat 1692 (1635 CE). Copper plate 7 3/8" × 8 3/4", excluding left handle. 19 lines).









| Gurmukhi. | Landa. | Takri. | Śarada. |        | Gurmukhi. | Landa. | Takri. | Śarada. |     |
|-----------|--------|--------|---------|--------|-----------|--------|--------|---------|-----|
| ਮ         | ᳵ      | 𑂔      | 𑂔       | 'āīrā' | ੳ         | ੳ      | ੳ      | 𑂔       | da  |
| ਫ         | ᳶ      | 𑂕      | 𑂕       | 'īpī'  | ਫ         | ਫ      | ਫ      | 𑂕       | dha |
| ਭ         | ᳷      | 𑂖      | 𑂖       | 'ūrā'  | ਭ         | ਭ      | ਭ      | 𑂖       | ra  |
| ਠ         | ᳸      | 𑂗      | 𑂗       | ō      | ੳ         | ੳ      | ੳ      | ੳ       | ta  |
| ਸ         | ᳹      | 𑂘      | 𑂘       | sa     | ਬ         | ਬ      | ਬ      | ਬ       | tha |
| ਹ         | ᳺ      | 𑂙      | 𑂙       | ha     | ਦ         | ਦ      | ਦ      | ਦ       | da  |
| ਕ         | ᳻      | 𑂚      | 𑂚       | ka     | ਪ         | ਪ      | ਪ      | ਪ       | dha |
| ਖ         | ᳼      | 𑂛      | 𑂛       | kha    | ਨ         | ਨ      | ਨ      | ਨ       | na  |
| ਗ         | ᳽      | 𑂜      | 𑂜       | ga     | ਪ         | ਪ      | ਪ      | ਪ       | pa  |
| ਘ         | ᳾      | 𑂝      | 𑂝       | gha    | ਠ         | ਠ      | ਠ      | ਠ       | pha |
| ਙ         | ᳿      | 𑂞      | 𑂞       | na     | ਬ         | ਬ      | ਬ      | ਬ       | ba  |
| ਚ         | ᳺ      | 𑂟      | 𑂟       | cha    | ਤ         | ਤ      | ਤ      | ਤ       | bha |
| ਛ         | ᳻      | 𑂠      | 𑂠       | chha   | ਮ         | ਮ      | ਮ      | ਮ       | ma  |
| ਜ         | ᳼      | 𑂡      | 𑂡       | ja     | ਯ         | ਯ      | ...    | ਯ       | ya  |
| ਝ         | ᳽      | 𑂢      | 𑂢       | jha    | ਰ         | ਰ      | ਰ      | ਰ       | ra  |
| ਞ         | ᳾      | ...    | 𑂣       | ṅ      | ਲ         | ਲ      | ਲ      | ਲ       | la  |
| ਟ         | ᳿      | 𑂤      | 𑂤       | ṭa     | ੲ         | ੲ      | ੲ      | ੲ       | va  |
| ਠ         | ੳ      | ੳ      | ੳ       | ṭha    | ੳ         | ੳ      | ੳ      | ...     | ra  |

Figure 47: Comparison of Gurmukhi, Landa, Takri, and Sharada letters (from Grierson 1916a: 625).





ISO/IEC JTC 1/SC 2/WG 2  
PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS  
FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646<sup>14</sup>

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.

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#### A. Administrative

1. Title: **Proposal to Encode the Takri Script in ISO/IEC 10646**
2. Requester's name: **University of California, Berkeley Script Encoding Initiative (Universal Scripts Project); author: Anshuman Pandey (pandey@umich.edu)**
3. Requester type (Member Body/Liaison/Individual contribution): **Liaison contribution**
4. Submission date: **December 31, 2009**
5. Requester's reference (if applicable): **N/A**
6. Choose one of the following:
  - (a) This is a complete proposal: **No**
  - (b) or, More information will be provided later: **Yes**

#### B. Technical - General

1. Choose one of the following:
  - (a) This proposal is for a new script (set of characters): **Yes**
    - i. Proposed name of script: **Takri**
  - (b) The proposal is for addition of character(s) to an existing block: **No**
    - i. Name of the existing block: **N/A**
2. Number of characters in proposal: **66**
3. Proposed category: **C - Major extinct**
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. Who will provide the appropriate computerized font (ordered preference: True Type, or PostScript format) for publishing the standard?: **Anshuman Pandey; True Type format**
  - (a) If available now, identify source(s) for the font and indicate the tools used: **The letters of the digitized Takri font are based on normalized forms of letters of Takri metal fonts and, in some cases, on written forms. The font was drawn by Anshuman Pandey with Metafont and converted to True Type with FontForge.**
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:
  - (a) Does the proposal address other aspects of character data processing (if applicable) such as input, presentation, sorting, searching, indexing, transliteration etc. (if yes please enclose information)? **Yes; see proposal for additional details..**
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 <http://www.unicode.org/Public/UNIDATA/UCD.html> and associated Unicode Technical Reports for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard. **Character properties and numeric information are included.**

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<sup>14</sup> Form number: N3102-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)

### C. Technical - Justification

1. Has this proposal for addition of character(s) been submitted before?: **No**
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**
  - (a) If Yes, with whom?: **N/A**
    - i. If Yes, available relevant documents: **N/A**
3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included? **No**
  - (a) Reference: **N/A**
4. The context of use for the proposed characters (type of use; common or rare): **Common**
  - (a) Reference: **Administrative records from Himachal Pradesh, Jammu, Kashmir, and Panjab; commercial and accounting records; letters and other correspondence; books printed during the 19th century.**
5. Are the proposed characters in current use by the user community?: **No. However, there are efforts to reinstate the script in the Jammu region, primarily for the Dogri language.**
  - (a) If Yes, where? Reference: **In India, the United States, and other localities.**
6. After giving due considerations to the principles in the P&P document must the proposed characters be entirely in the BMP?: **No**
  - (a) If Yes, is a rationale provided?: **N/A**
    - i. If Yes, reference: **N/A**
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**
  - (a) If Yes, is a rationale for its inclusion provided?: **N/A**
    - i. If Yes, reference: **N/A**
9. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters? **No**
  - (a) If Yes, is a rationale provided?: **N/A**
    - i. If Yes, reference: **N/A**
10. Can any of the proposed character(s) be considered to be similar (in appearance or function) to an existing character? **Yes**
  - (a) If Yes, is a rationale for its inclusion provided? **Yes**
    - i. If Yes, reference: **See text of proposal**
11. Does the proposal include use of combining characters and/or use of composite sequences? **Yes**
  - (a) If Yes, is a rationale for such use provided? **Yes**
    - i. If Yes, reference: **See text of proposal**
  - (b) Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided? **N/A**
    - i. If Yes, reference: **N/A**
12. Does the proposal contain characters with any special properties such as control function or similar semantics? **Yes**
  - (a) If Yes, describe in detail (include attachment if necessary): **Virama**
13. Does the proposal contain any Ideographic compatibility character(s)? **No**
  - (a) If Yes, is the equivalent corresponding unified ideographic character(s) identified? **N/A**
    - i. If Yes, reference: **N/A**