

Proposal to Encode the Takri Script in ISO/IEC 10646

Anshuman Pandey
 University of Michigan
 Ann Arbor, Michigan, U.S.A.
 pandey@umich.edu

December 14, 2007

Contents

| | |
|--|-----------|
| Proposal Summary Form | i |
| 1 Introduction | 1 |
| 1.1 Description | 1 |
| 1.2 Acknowledgments | 1 |
| 2 Characters Proposed | 3 |
| 2.1 Basis for Character Shapes | 5 |
| 3 Technical Features | 6 |
| 3.1 Name | 6 |
| 3.2 Classification | 6 |
| 3.3 Allocation | 6 |
| 3.4 Encoding Model | 6 |
| 3.5 Character Properties | 6 |
| 4 Relationship to Other Scripts | 9 |
| 5 References | 12 |

List of Tables

| | | |
|---|--|----|
| 1 | Glyph chart for the Takri script. | 2 |
| 2 | Comparison of metal and digitized Takri fonts | 4 |
| 3 | A comparison of consonants of Takri, Gurmukhi, Sharada, and Devanagari | 10 |
| 4 | A comparison of vowels of Takri, Gurmukhi, Sharada, and Devanagari | 11 |
| 5 | A comparison of digits of Takri, Gurmukhi, Sharada, and Devanagari | 11 |

ISO/IEC JTC 1/SC 2/WG 2
PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS
FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646¹

Please fill all the sections A, B and C below. Please read Principles and Procedures Document (P & P) from <http://www.dkuug.dk/JTC1/SC2/WG2/docs/principles.html> for guidelines and details before filling this form. Please ensure you are using the latest Form from <http://www.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html>. See also <http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html> for latest Roadmaps.

A. Administrative

1. Title: **Proposal to Encode the 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 14, 2007**
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.**

¹ 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? **Yes**
 - (a) Reference: **(Add details)**
4. The context of use for the proposed characters (type of use; common or rare): **Common**
 - (a) Reference: **Court records from colonial India, pedagogical materials from the Jammu and Kashmir region, commercial and accounting records; religious and literary texts; bibles 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. Also, specialists in the fields enumerated in C.3(a) are actively using the script.**
 - (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**

1 Introduction

This is a proposal to encode the Takri script in the Supplementary Multilingual Plane (Plane 1) of the Universal Character Set (ISO/IEC 10646).

The proposal provides technical details about the Takri script so that the Unicode Technical Committee may make a decision about its suitability for encoding in the UCS. Background information on the script and additional specimens will follow.

1.1 Description

The Takri script was used in northwestern South Asia, primarily in the area of Jammu and Kashmir, Himachal Pradesh, and Panjab. The script was used to write the Dogri and Panjabi language languages. Takri belongs to the Sharada family of Brahmi scripts, from which it became differentiated during the 16th century, and is related to Gurmukhi and Landa. It was patronized by Dogra rulers of Jammu and used extensively by them for correspondence and official decrees. The majority of records in Takri are official letters and copper-plate land grants. There are also temple inscriptions in the script. Following the practice of Dogra rulers, the British used Takri for official purposes in the 19th and 20th centuries. Takri appears in numerous philatelic documents, especially in the form of postmarks. In the first quarter of the 20th century, the British and Foreign Bible Society published a Christian bible in Chambali in printed Takri. Takri was eventually replaced with Devanagari in the middle 20th century. There is a movement to revive the use of Takri for Dogri, which followed the official recognition of Dogri as a scheduled language by the Government of India in 2004.

There are several varieties of Takri, of which the best-known are Dogra, Chamba, and Kangra. The form of Takri proposed for encoding is the Standard Chamba. The other varieties should be unified and the presentation distinctions of the three traditions should be considered a matter of font design and controlled at the font level.

1.2 Acknowledgments

This project was made possible in part by a grant from the United States National Endowment for the Humanities (NEH), which funded the Universal Scripts Project (part of the Script Encoding Initiative at the University of California, Berkeley).

| | 1168 | 1169 | 116A | 116B | 116C |
|---|------|------|------|------|------|
| 0 | ◌̇ | ॐ | ॥ | ी | • |
| 1 | ◌̈ | ॐ | ॥ | ु | ० |
| 2 | ॐ | ॥ | ॐ | ु | ॐ |
| 3 | ॐ | ॐ | ॐ | ◌̄ | ॐ |
| 4 | ॐ | ॐ | ॐ | ◌̅ | ॐ |
| 5 | ॐ | ॐ | ॐ | ◌̆ | ॐ |
| 6 | ॐ | ॐ | ॐ | ◌̇ | ॐ |
| 7 | ॐ | ॐ | ॐ | ◌̈ | ॐ |
| 8 | ॐ | ॐ | ॐ | | ॐ |
| 9 | ॐ | ॐ | ॐ | | ॐ |
| A | ॐ | ॐ | ॐ | | |
| B | ॐ | ॐ | ॐ | | |
| C | ॐ | ॐ | ॐ | | |
| D | ॐ | ॐ | ॐ | | |
| E | ॐ | ॐ | ◌̇ | | |
| F | ॐ | ॐ | ◌̈ | | |

Table 1: Glyph chart for the Takri script.

2 Characters Proposed

The 66 letters in this proposal comprise the core set of Takri letters and signs. This set is sufficient for the general encoding and processing of Takri documents.

Consonants There are 35 consonant letters:

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

Vowels There are 10 independent vowels:

| | | | | | |
|---|-----------------|---|-----------------|---|-----------------|
| अ | TAKRI LETTER A | उ | TAKRI LETTER U | ऊ | TAKRI LETTER O |
| आ | TAKRI LETTER AA | ऊ | TAKRI LETTER UU | ऋ | TAKRI LETTER AU |
| इ | TAKRI LETTER I | ऎ | TAKRI LETTER E | | |
| ई | TAKRI LETTER II | ए | TAKRI LETTER AI | | |

Vowel Signs There are 9 dependent vowel signs:

| | | | | | |
|------|---------------------|------|---------------------|------|---------------------|
| ◌̣ | TAKRI VOWEL SIGN AA | ◌̤ | TAKRI VOWEL SIGN U | ◌̥ | TAKRI VOWEL SIGN AI |
| ◌̣̣ | TAKRI VOWEL SIGN I | ◌̤̤ | TAKRI VOWEL SIGN UU | ◌̥̥ | TAKRI VOWEL SIGN O |
| ◌̣̣̣ | TAKRI VOWEL SIGN II | ◌̤̤̤ | TAKRI VOWEL SIGN E | ◌̥̥̥ | TAKRI VOWEL SIGN AU |

Various Signs There are 3 various signs:

| | | | | | |
|-------|---------------------|--------|--------------------|---------|-------------------|
| ◌̣̣̣̣ | TAKRI SIGN ANUSVARA | ◌̣̣̣̣̣ | TAKRI SIGN VISARGA | ◌̣̣̣̣̣̣ | TAKRI SIGN VIRAMA |
|-------|---------------------|--------|--------------------|---------|-------------------|

Digits There are 10 digits:

| | | | | | |
|---|-------------------|---|-------------------|---|-------------------|
| ० | TAKRI DIGIT ZERO | ४ | TAKRI DIGIT FOUR | ८ | TAKRI DIGIT EIGHT |
| १ | TAKRI DIGIT ONE | ५ | TAKRI DIGIT FIVE | ९ | TAKRI DIGIT NINE |
| २ | TAKRI DIGIT TWO | ६ | TAKRI DIGIT SIX | | |
| ३ | TAKRI DIGIT THREE | ७ | TAKRI DIGIT SEVEN | | |

CONSONANTS

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

VOWELS

| | A | B | | A | B | | A | B |
|---|---|---|----|---|---|----|----|----|
| A | अ | अ | U | उ | उ | O | ओ | ओ |
| Ā | आ | आ | Ū | ऊ | ऊ | AU | औ | औ |
| I | इ | इ | E | ए | ए | AM | अं | अं |
| Ī | ई | ई | AI | ऐ | ऐ | | | |

Table 2: Comparison of the Takri font used by Grierson in the *Linguistic Survey of India* (column ‘A’) with the digitized Takri font developed by Anshuman Pandey (column ‘B’).

2.1 Basis for Character Shapes

The Takri script proposed here is based on the forms of the Takri used in the erstwhile State of Chamba. Metal types of the Takri of Chamba are the only Takri fonts produced. Books were printed using the fonts. The Chamba Takri types were used by Grierson to print the Dogri and Kangra languages in the *Linguistic Survey of India*. A comparison of Grierson's types with the digitized forms drawn by Anshuman Pandey are given in Table 2. Letters not found in the Chamba types are based upon hand-written characters. The character TAKRI LETTER NYA is based on the Dogra form as shown in Figure 6.

3 Technical Features

3.1 Name

The name of the script in the UCS shall be Takri.

3.2 Classification

Takri is classified as a “Category C” (major extinct) as per the criteria specified in ISO/IEC JTC 1/SC 2/WG 2 N3002.¹ Takri is historically significant and there exists a substantial body of literature written and printed in the script.

3.3 Allocation

Takri is currently allocated in the Supplementary Multilingual Plane (SMP) (Plane 1) of the UCS at the range U+11680..U+116DF.² The six rows allocated for Takri in the SMP are sufficient for encoding the script. The entire script may be encoded in five rows with sufficient space remaining for the inclusion of additional characters, should the need arise. The glyph chart in Table 1 shows the characters proposed for encoding and the accompanying character properties are given in section 3.5.1

3.4 Encoding Model

The Takri script is an abugida of the Brahmic type. It is written from left to right. The formation of syllables in Takri follows the pattern common to north Indic scripts. The encoding model for Takri may be based on the model implemented for Gurmukhi.

Consonant letters bear the inherent vowel *a* (TAKRI LETTER A) when unaccompanied by a vowel sign. The inherent vowel is suppressed by the *virāma* (TAKRI SIGN VIRAMA) to produce the bare consonant. The inherent vowel is changed by applying a vowel sign to the consonant. With two exceptions, all vowel signs are written either above or below the consonant letter. The exceptions are TAKRI VOWEL SIGN I, which is written to the left of the consonant, and TAKRI VOWEL SIGN II, which is written to the right.

A sequence of consonants (in which all but the final consonant is bare) is written as a consonant conjunct, which may occur as (a) a true ligature; (b) half-forms of all consonants in the cluster except the final consonant, which assumes a full form; and (c) a sequence of full-form consonants marked with an explicit *virāma* except for the final consonant.

3.5 Character Properties

Vowels All independent vowels have the following properties:

General Category: Lo (Letter, Other)

Combining Class: 0 (Spacing, split, enclosing, reordrant, and Tibetan subjoined)

Bidirectional Class: L (Left-to-Right)

Vowel Signs The dependent vowel signs are divided into two classes based upon their spacing attributes. The first class consists of the non-spacing marks TAKRI VOWEL SIGN AA, TAKRI VOWEL SIGN U, TAKRI VOWEL SIGN UU, TAKRI VOWEL SIGN E, TAKRI VOWEL SIGN AI, TAKRI VOWEL SIGN O, and TAKRI VOWEL SIGN AU which have the following properties:

¹ International Organization for Standardization, 2005: 4. ² Unicode Roadmap Committee, 2007.

General Category: Mn (Mark, Nonspacing)
 Combining Class: 0 (Spacing, split, enclosing, reordrant, and Tibetan subjoined)
 Bidirectional Class: NSM (Non-Spacing Mark)

The second class consists of the spacing marks TAKRI VOWEL SIGN I and TAKRI VOWEL SIGN II, which have the following properties:

General Category: Mc (Mark, Spacing Combining)
 Combining Class: 0 (Spacing, split, enclosing, reordrant, and Tibetan subjoined)
 Bidirectional Class: L (Left-to-Right)

Consonants All consonants have the following properties:

General Category: Lo (Letter, Other)
 Combining Class: 0 (Spacing, split, enclosing, reordrant, and Tibetan subjoined)
 Bidirectional Class: L (Left-to-Right)

Various Signs The TAKRI SIGN ANUSVARA is a non-spacing mark that belongs to the general category “Mn,” is of combining class “0,” and possesses the bidirectional class value “NSM.”

The TAKRI SIGN VISARGA is a spacing mark that belongs to the general category “Mc,” is of combining class “0,” and possesses the bidirectional class value “NSM.”

The TAKRI SIGN VIRAMA is a non-spacing mark that belongs to the general category “Mn,” has a combining class value of “9” (Viramas), and has the bidirectional class value “NSM.”

Digits All digits have the following properties:

General Category: Nd (Number, Decimal Digit)
 Combining Class: 0 (Spacing, split, enclosing, reordrant, and Tibetan subjoined)
 Numerical Value: {0, 1, 2, 3, 4, 5, 6, 7, 8, 9}
 Bidirectional Class: L (Left-to-Right)

3.5.1 Unicode Character Database Format

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

```
11680;TAKRI SIGN ANUSVARA;Mn;0;NSM;;;;;N;;;;;
11681;TAKRI SIGN VISARGA;Mc;0;L;;;;;N;;;;;
11682;TAKRI LETTER A;Lo;0;L;;;;;N;;;;;
11683;TAKRI LETTER AA;Lo;0;L;;;;;N;;;;;
11684;TAKRI LETTER I;Lo;0;L;;;;;N;;;;;
11685;TAKRI LETTER II;Lo;0;L;;;;;N;;;;;
11686;TAKRI LETTER U;Lo;0;L;;;;;N;;;;;
11687;TAKRI LETTER UU;Lo;0;L;;;;;N;;;;;
11688;TAKRI LETTER E;Lo;0;L;;;;;N;;;;;
11689;TAKRI LETTER AI;Lo;0;L;;;;;N;;;;;
1168A;TAKRI LETTER O;Lo;0;L;;;;;N;;;;;
1168B;TAKRI LETTER AU;Lo;0;L;;;;;N;;;;;
1168C;TAKRI LETTER KA;Lo;0;L;;;;;N;;;;;
1168D;TAKRI LETTER KHA;Lo;0;L;;;;;N;;;;;
1168E;TAKRI LETTER GA;Lo;0;L;;;;;N;;;;;
1168F;TAKRI LETTER GHA;Lo;0;L;;;;;N;;;;;
11690;TAKRI LETTER NGA;Lo;0;L;;;;;N;;;;;
11691;TAKRI LETTER CA;Lo;0;L;;;;;N;;;;;
11692;TAKRI LETTER CHA;Lo;0;L;;;;;N;;;;;
11693;TAKRI LETTER JA;Lo;0;L;;;;;N;;;;;
```

11694;TAKRI LETTER JHA;Lo;0;L;;;;N;;;;;
 11695;TAKRI LETTER NYA;Lo;0;L;;;;N;;;;;
 11696;TAKRI LETTER TTA;Lo;0;L;;;;N;;;;;
 11697;TAKRI LETTER TTHA;Lo;0;L;;;;N;;;;;
 11698;TAKRI LETTER DDA;Lo;0;L;;;;N;;;;;
 11699;TAKRI LETTER DDDHA;Lo;0;L;;;;N;;;;;
 1169A;TAKRI LETTER DDHA;Lo;0;L;;;;N;;;;;
 1169B;TAKRI LETTER NNA;Lo;0;L;;;;N;;;;;
 1169C;TAKRI LETTER TA;Lo;0;L;;;;N;;;;;
 1169D;TAKRI LETTER THA;Lo;0;L;;;;N;;;;;
 1169E;TAKRI LETTER DA;Lo;0;L;;;;N;;;;;
 1169F;TAKRI LETTER DHA;Lo;0;L;;;;N;;;;;
 116A0;TAKRI LETTER NA;Lo;0;L;;;;N;;;;;
 116A1;TAKRI LETTER PA;Lo;0;L;;;;N;;;;;
 116A2;TAKRI LETTER PHA;Lo;0;L;;;;N;;;;;
 116A3;TAKRI LETTER BA;Lo;0;L;;;;N;;;;;
 116A4;TAKRI LETTER BHA;Lo;0;L;;;;N;;;;;
 116A5;TAKRI LETTER MA;Lo;0;L;;;;N;;;;;
 116A6;TAKRI LETTER YA;Lo;0;L;;;;N;;;;;
 116A7;TAKRI LETTER RA;Lo;0;L;;;;N;;;;;
 116A8;TAKRI LETTER LA;Lo;0;L;;;;N;;;;;
 116A9;TAKRI LETTER LLA;Lo;0;L;;;;N;;;;;
 116AA;TAKRI LETTER VA;Lo;0;L;;;;N;;;;;
 116AB;TAKRI LETTER SHA;Lo;0;L;;;;N;;;;;
 116AC;TAKRI LETTER SA;Lo;0;L;;;;N;;;;;
 116AD;TAKRI LETTER HA;Lo;0;L;;;;N;;;;;
 116AE;TAKRI VOWEL SIGN AA;Mn;0;NSM;;;;N;;;;;
 116AF;TAKRI VOWEL SIGN I;Mc;0;L;;;;N;;;;;
 116B0;TAKRI VOWEL SIGN II;Mc;0;L;;;;N;;;;;
 116B1;TAKRI VOWEL SIGN U;Mn;0;NSM;;;;N;;;;;
 116B2;TAKRI VOWEL SIGN UU;Mn;0;NSM;;;;N;;;;;
 116B3;TAKRI VOWEL SIGN E;Mn;0;NSM;;;;N;;;;;
 116B4;TAKRI VOWEL SIGN AI;Mn;0;NSM;;;;N;;;;;
 116B5;TAKRI VOWEL SIGN O;Mn;0;NSM;;;;N;;;;;
 116B6;TAKRI VOWEL SIGN AU;Mn;0;NSM;;;;N;;;;;
 116B7;TAKRI SIGN VIRAMA;Mn;9;NSM;;;;N;;;;;
 116B8;<reserved>
 116B9;<reserved>
 116BA;<reserved>
 116BB;<reserved>
 116BC;<reserved>
 116BD;<reserved>
 116BE;<reserved>
 116CF;<reserved>
 116C0;TAKRI DIGIT ZERO;Nd;0;L;;0;0;0;N;;;;;
 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;;;;;
 116CA;<reserved>
 116CB;<reserved>
 116CC;<reserved>
 116CD;<reserved>
 116CE;<reserved>
 116CF;<reserved>

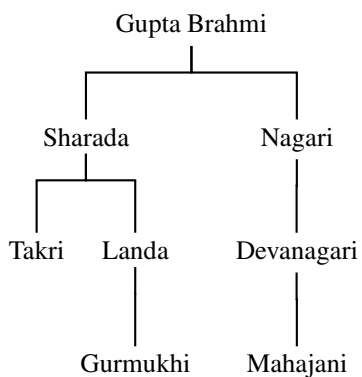


Figure 1: Relationship of Takri to other Nagari-based scripts

4 Relationship to Other Scripts

Takri is descended from the Sharada script and is related to Gurmukhi and Landa. Figure 1 shows the relationship of Takri to other scripts. A comparison of Takri, Gurmukhi, Sharada, and Devanagari is given in Table 3 (consonants), Table 4 (vowels), and Table 5 (digits).

| | TAKRI | GURMUKHI | SHARADA | DEVANAGARI | | TAKRI | GURMUKHI | SHARADA | SYLOTI NAGRI |
|------------|-------|----------|---------|------------|------------|-------|----------|---------|-----------------|
| <i>ka</i> | क | ਕ | क | क | <i>tha</i> | थ | ਥ | थ | थ |
| <i>kha</i> | ख | ਖ | ख | ख | <i>da</i> | द | ਦ | द | द |
| <i>ga</i> | ग | ਗ | ग | ग | <i>dha</i> | ध | ਧ | ध | ध |
| <i>gha</i> | घ | ਘ | घ | घ | <i>na</i> | न | ਨ | न | न |
| <i>ña</i> | ङ | ਙ | ङ | ङ | <i>pa</i> | प | ਪ | प | प |
| <i>ca</i> | च | ਚ | च | च | <i>pha</i> | फ | ਫ | फ | फ |
| <i>cha</i> | छ | ਛ | छ | छ | <i>ba</i> | ब | ਬ | ब | ब |
| <i>ja</i> | ज | ਜ | ज | ज | <i>bha</i> | भ | ਭ | भ | भ |
| <i>jha</i> | झ | ਝ | झ | झ | <i>ma</i> | म | ਮ | म | म |
| <i>ña</i> | ञ | ਞ | ञ | ञ | <i>ya</i> | य | ਯ | य | य |
| <i>ṭa</i> | ट | ਟ | ट | ट | <i>ra</i> | र | ਰ | र | र |
| <i>ṭha</i> | ठ | ਠ | ठ | ठ | <i>la</i> | ल | ਲ | ल | ल |
| <i>ḍa</i> | ड | ਡ | ड | ड | <i>ḷa</i> | ळ | ਞ | ळ | ळ |
| <i>ṛa</i> | ऋ | ੜ | — | ऋ | <i>va</i> | व | ਵ | व | व |
| <i>ḍha</i> | ढ | ਢ | ढ | ढ | <i>śa</i> | श | ਸ | श | श |
| <i>ṛha</i> | — | — | — | ऌ | <i>ṣa</i> | ष | — | ष | ष |
| <i>ṇa</i> | ण | ਨ | ण | ण | <i>sa</i> | स | ਸ | स | स |
| <i>ta</i> | त | ਤ | त | त | <i>ha</i> | ह | ਹ | ह | ह |

Table 3: A comparison of the consonant letters of the Takri, Gurmukhi, Sharada, and Devanagari scripts

| | INDEPENDENT VOWELS | | | | DEPENDENT VOWEL SIGNS | | | |
|-----------|--------------------|----------|---------|------------|-----------------------|----------|---------|------------|
| | TAKRI | GURMUKHI | SHARADA | DEVANAGARI | TAKRI | GURMUKHI | SHARADA | DEVANAGARI |
| <i>a</i> | ਠ | ਅ | अ | अ | -a | — | — | — |
| <i>ā</i> | ਠੰ | ਆ | आ | आ | -ā | ँ | ा | ा |
| <i>i</i> | ਏ | ਇ | इ | इ | -i | ि | ि | ि |
| <i>ī</i> | ਏੰ | ਈ | ई | ई | -ī | ी | ी | ी |
| <i>u</i> | ਊ | ਉ | उ | उ | -u | ु | ु | ु |
| <i>ū</i> | ਊੰ | ਊ | ऊ | ऊ | -ū | ू | ू | ू |
| <i>r</i> | — | — | र | ऋ | -r | — | ्र | ्र |
| <i>e</i> | ॲ | ਏ | ए | ए | -e | े | े | े |
| <i>ai</i> | ॲੰ | ਐ | ऐ | ऐ | -ai | ै | ै | ै |
| <i>o</i> | ਠੰ | ਓ | ओ | ओ | -o | ँ | ँ | ँ |
| <i>au</i> | ਠੰ | ਔ | औ | औ | -au | ँ | ँ | ँ |

Table 4: A comparison of vowel letters and signs of the Takri, Gurmukhi, Sharada, and Devanagari scripts

| | TAKRI | GURMUKHI | SHARADA | DEVANAGARI | TAKRI | GURMUKHI | SHARADA | DEVANAGARI |
|---|-------|----------|---------|------------|-------|----------|---------|------------|
| 0 | • | ੦ | • | ० | 5 | ੫ | ५ | ५ |
| 1 | ੧ | ੧ | ੦ | १ | 6 | ੬ | ੬ | ६ |
| 2 | ੩ | ੨ | ੩ | २ | 7 | ੭ | ੭ | ७ |
| 3 | ੨ | ੩ | ੩ | ३ | 8 | ੮ | ੮ | ८ |
| 4 | ੪ | ੪ | ੪ | ४ | 9 | ੯ | ੯ | ९ |

Table 5: A comparison of digits of the Takri, Gurmukhi, Sharada, and Devanagari scripts.

5 References

- Grierson, George A. 1904. “On the Modern Indo-Aryan Alphabets of North-Western India.” In *The Journal of the Asiatic Society of Great Britain and Ireland*, 1904, pp.67–73.
- . 1916. *The Linguistic Survey of India*. Vol. IX. Indo-Aryan Family. Central Group. Part I. Specimens of Western Hindī and Pañjābī. Calcutta: Office of the Superintendent of Government Printing, India.
- Kaul, P. K. 2001. *Antiquities of the Chenāb Valley in Jammu: Inscriptions-Copper Plates-Sanads-Grants-Firmāns & Letters in Brāhmi-Shārda-Tākri-Persian & Devnāgri Scripts*. Delhi: Eastern Book Linkers.
- Leitner, Gottlieb William. 1883?. *A Collection of Specimens of Commercial and Other Alphabets and Handwritings as also of Multiplication Tables Current in Various Parts of the Panjab, Sind and the North West Provinces*. Lahore: Anjuman-i-Punjab Press.
- Mule, Guṇākara. 1974. भारतीय लिपियों की कहानी [The Story of Indian Scripts]. Dillī: Rājakamala Prakāśana.
- Naik, Bapurao S. 1971. *Typography of Devanagari*. 1st rev. ed. Vols. 1, 2, and 3. Bombay: Directorate of Languages, Government of Maharashtra.

| GURMUKHĪ. | LANḌĀ. | ṬĀKRĪ. | ŚĀRADĀ. | | GURMUKHĪ. | LANḌĀ. | ṬĀKRĪ. | ŚĀRADĀ. | |
|-----------|--------|--------|---------|--------|-----------|--------|--------|---------|------|
| ਅ | 𑂀 | 𑂁 | 𑂂 (a) | 'āṛā.' | 𑂃 | 𑂄 | 𑂅 | 𑂆 | gha. |
| ੲ | 𑂇 | 𑂈 | 𑂉 (i) | 'īṛi.' | 𑂊 | 𑂋 | 𑂌 | 𑂍 | ṅa. |
| ਭ | 𑂎 | 𑂏 | 𑂐 (u) | 'ūṛā.' | 𑂑 | 𑂒 | 𑂓 | 𑂔 | ca. |
| ਠ | 𑂕 | 𑂖 | 𑂗 | ō. | 𑂘 | 𑂙 | 𑂚 | 𑂛 | cha. |
| ਸ | 𑂜 | 𑂝 | 𑂞 | sa. | 𑂟 | 𑂠 | 𑂡 | 𑂢 | ja. |
| ਹ | 𑂣 | 𑂤 | 𑂥 | ha. | 𑂦 | 𑂧 | 𑂨 | 𑂩 | jha. |
| ਖ | 𑂪 | 𑂫 | 𑂬 | ka. | 𑂭 | 𑂮 | ... | 𑂯 | ṅa. |
| ਖ | 𑂱 | 𑂲 | 𑂳 | kha. | 𑂴 | 𑂵 | 𑂶 | 𑂷 | ṭa. |
| ਗ | 𑂸 | 𑂹 | 𑂺 | ga. | 𑂻 | 𑂼 | 𑂽 | 𑂾 | ṭha. |

Figure 2: Comparison of Gurmukhi, Landa, Takri, and Sharada letters (from Grierson, 1904: 70–71).

| GURMUKHĪ. | LAṆDĀ. | TĀKRĪ. | ŚĀRADĀ. | |
|-----------|--------|--------|---------|-------------|
| ੳ | उ | उ | ऌ | <i>ḍa.</i> |
| ਙ | ८ | ८ | फ़ | <i>ḍha.</i> |
| ਙ | २ | = | ३ | <i>ṇa.</i> |
| ਤ | ३ | उ | ३ | <i>ta.</i> |
| ਥ | ५ | ५ | ४ | <i>tha.</i> |
| ਦ | ४ | ४ | २ | <i>ḍa.</i> |
| ਧ | ६ | ८ | ८ | <i>ḍha.</i> |
| ਨ | १ | २ | ७ | <i>na.</i> |
| ਪ | ५ | २ | ५ | <i>pa.</i> |

| GURMUKHĪ. | LAṆDĀ. | TĀKRĪ. | ŚĀRADĀ. | |
|-----------|--------|--------|---------|-------------|
| ਫ | ७ | ७ | ७ | <i>pha.</i> |
| ਬ | ९ | ५ | ४ | <i>ba.</i> |
| ਭ | ३ | ३ | ८ | <i>bha.</i> |
| ਮ | १० | १ | ५ | <i>ma.</i> |
| ਯ | ४ | ... | ५ | <i>ya.</i> |
| ਰ | १ | १ | ४ | <i>ra.</i> |
| ਲ | ७ | ३ | ८ | <i>la.</i> |
| ਵ | २ | ३ | ४ | <i>va.</i> |
| ਕ | ३ | ३ | ... | <i>ka.</i> |

Figure 3: Comparison of Gurmukhi, Landa, Takri, and Sharada letters (from Grierson, 1904: 72–73).

| Gurmukhi. | Lanḍā. | Takri. | Śarada. | | Gurmukhi. | Lanḍā. | Takri. | Śarada. | |
|-----------|--------|--------|---------|--------|-----------|--------|--------|---------|-----|
| ਮ | ᳵ | 𑀮 | 𑀮 | 'āīrā' | ੳ | ᳶ | 𑀮 | 𑀮 | ḍa |
| ਠ | ᳶ | 𑀮 | 𑀮 | 'īrī' | ੳ | ᳶ | 𑀮 | 𑀮 | ḍha |
| ਠ | ᳶ | 𑀮 | 𑀮 | 'ūrā' | ੳ | ᳶ | 𑀮 | 𑀮 | ṇa |
| ਠ | ᳶ | 𑀮 | 𑀮 | ō | ੳ | ᳶ | 𑀮 | 𑀮 | ta |
| ਸ | ᳶ | 𑀮 | 𑀮 | sa | ੳ | ᳶ | 𑀮 | 𑀮 | tha |
| ੜ | ᳶ | 𑀮 | 𑀮 | ha | ੳ | ᳶ | 𑀮 | 𑀮 | da |
| ਕ | ᳶ | 𑀮 | 𑀮 | ka | ੳ | ᳶ | 𑀮 | 𑀮 | dha |
| ਖ | ᳶ | 𑀮 | 𑀮 | kha | ੳ | ᳶ | 𑀮 | 𑀮 | na |
| ਗ | ᳶ | 𑀮 | 𑀮 | ga | ੳ | ᳶ | 𑀮 | 𑀮 | pa |
| ਘ | ᳶ | 𑀮 | 𑀮 | gha | ੳ | ᳶ | 𑀮 | 𑀮 | pha |
| ਙ | ᳶ | 𑀮 | 𑀮 | ṅa | ੳ | ᳶ | 𑀮 | 𑀮 | ba |
| ਚ | ᳶ | 𑀮 | 𑀮 | cha | ੳ | ᳶ | 𑀮 | 𑀮 | bha |
| ਛ | ᳶ | 𑀮 | 𑀮 | chha | ੳ | ᳶ | 𑀮 | 𑀮 | ma |
| ਜ | ᳶ | 𑀮 | 𑀮 | ja | ੳ | ᳶ | 𑀮 | 𑀮 | ya |
| ਝ | ᳶ | 𑀮 | 𑀮 | jha | ੳ | ᳶ | 𑀮 | 𑀮 | ra |
| ੲ | ᳶ | ... | 𑀮 | ṛ | ੳ | ᳶ | 𑀮 | 𑀮 | la |
| ੳ | ᳶ | ᳶ | ᳶ | ṛa | ੳ | ᳶ | 𑀮 | 𑀮 | va |
| ੴ | ᳶ | ੴ | ੴ | ṛha | ੳ | ᳶ | 𑀮 | ... | ra |

Figure 4: Comparison of Gurmukhi, Landa, Takri, and Sharada letters (from Grierson, 1916: 625).

The printed Chamba Tākri alphabet is as follows:—

Vowels.

ᱠ a ᱡ ā ᱢ i ᱣ ī ᱤ u ᱥ ū
 2 ē 3 ai ᱦ ō ᱧ au ᱨ m.

Consonants.

| | | | | |
|-------|--------|------|-------|-------|
| ᱛ ka | ᱜ kha | ᱝ ga | ᱞ gha | ᱟ na |
| ᱠ cha | ᱡ chha | ᱢ ja | ᱣ jha | |
| ᱤ ṭa | ᱥ ṭha | ᱦ ḍa | ᱧ ḍha | ᱨ na |
| ᱩ ta | ᱪ tha | ᱫ da | ᱬ dha | ᱭ na |
| ᱮ pa | ᱯ pha | ᱰ ba | ᱱ bha | ᱲ ma |
| ᱳ ya | ᱴ ra | ᱵ la | ᱶ va | |
| ᱷ sa | ᱸ ha | ᱹ ra | ᱺ la | ᱻ sha |

Conjuncts.

ᱠᱡ yā ᱢᱣ thi ᱤᱨ hī ᱦᱮ su ᱵᱮ pū ᱵᱟ or ᱵᱨ hū
 3 tē 3 hai ᱦᱮ yō ᱦᱮ yau ᱦᱮᱢᱣ raṁ or rā ᱦᱮᱣ chhya
 ᱵ pra 3 tra ᱦᱮ mha.

Numerals.

ᱠ 1, ᱢ 2, ᱤ 3, ᱦ 4, ᱵ 5, ᱷ 6,
 ᱹ 7, ᱮ 8, ᱯ 9, • 0.

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

Figure 5: The Standard Chamba form of Takri in print (from Grierson, 1916: 640).

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, ō 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—

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

Consonants.

ka, kha, ga, gha, na;

 cha, chha, ja, jha, ñ;

 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 6: (from Grierson, 1916: 641).

| Gurmukhi. | Kāṅgrā. | Dōgrā. | | Gurmukhi. | Kāṅgrā. | Dōgrā. | |
|-----------|---------|--------|--------|-----------|---------|--------|-----|
| ਅ | ਯ | ਯ | 'āiṙā' | ੳ | ੳ | ਊਯ | ḍa |
| ੲ | ਠ | ਠ | 'īṙī' | ਊ | ਯ | ਯ | ḍha |
| ਠ | ਠ | ਠ | 'ūṙā' | ਯ | = | ≈ਏ | ṇa |
| ਊ | ਊ | ਊ | ō | ਤ | ਤ | ਤ | ta |
| ਸ | ਯ | ਯ | sa | ਬ | ਯ | ਬਯ | tha |
| ਹ | ਹ | ਤ | ha | ਦ | ਯ | ਯ | da |
| ਕ | ਯ | ਕ | ka | ਪ | ਯ | ਪਯ | dha |
| ਖ | ਖ | ਯ | kha | ਨ | ਯ | ਯ | na |
| ਗ | ਗ | ਯ | ga | ਪ | ਯ | ਯ | pa |
| ਘ | ਯ | ਯ | gha | ਠ | ਠ | ਊ | pha |
| ਙ | ਤ | ਯ | ṅa | ਬ | ਯ | ਯ | ba |
| ਚ | ਚ | ਯ | cha | ਤ | ਤ | ਯ | bha |
| ਛ | ਯ | ਯ | chha | ਯ | ਯ | ਯ | ma |
| ਜ | ਯ | ਯ | ja | ਯ | ... | ਯ | ya |
| ਝ | ਯ | ਯ | jha | ਰ | ਯ | ਯ | ra |
| ਞ | ... | ਯ | ṅa | ਲ | ਯ | ਯ | la |
| ਟ | ਹ | ਤ | ṭa | ਵ | ਯ | ਯ | wa |
| ਠ | ੳ | ੳ | ṭha | ਕ | ਯ | ਯ | ra |

Figure 7: (from Grierson, 1916: 642).

PAÑJĀBĪ.

ḌOGRĀ DIALECT.

(STATE JAMMU.)

SPECIMEN I.

CHAMBA TĀKRI CHARACTER.

ੱਠ ਠਮਗੀਮ ਮਿ ਪੁਤਾ ਬ। ੱਮ ਖਿਮ ਰਿਠਠੇ ਵਢੇਠੀ ਠਖਿਠ ਠ ੱ
 ਖਪੁਠੀ ਠੰਠਮਤੀਮ ਠ ਰਿਠ ਰਿਠੀ ਪੁਠਕ ੱ ਰੀ ਰਿਠੀ ਮਠੇ ਮਠੇ। ਤੰ ੱਠੀ
 ਗਲ ੱਠੇਠੀ ਖਤੀ ਮਿਤ। ਠਤੋ ਬੋਠੇ ਮਿਠੰ ਪਿਠੰ ਰਿਠਠੇ ਪੁਤਰੇ ਗਠਠਿਠ ਰਿਠ
 ਠੀ ਮੁ ਮੁਠਿਮ ਪੰਠ ਠੀਤ ਠਤੋ ੱਠ ਠਪਰ ਗਲ ਲੁਮਪਠ ਠਤੋ ੱਠੇ ਮਿਤ।
 ਠਤੋ ਠਮ ਗਠ ਖਠਮ ਠੀ ਮੁਠਿਠ ੱਠ ਗੁਲਖੇ ਖਿਮ ਖਤ ਠਲ ਪਠੇ ਗਿਠ ਠਤੋ
 ਠੋੜ ਠਗਲ ੱਠੇ ਲਗਿਠ। ਠਤੋ ੱਠ ਗੁਲਖੇਮ ੱਠ ਵਠ ਠੰਠਮਤੀਖਲੇਮ ਠਠੇ
 ਲਗਿਠ। ੱਠੀ ੱਠੀ ਖਤੋ ਖਿਮ ਗੁ ਮੁਠੇ ਠਖਿਠ। ਠਤੋ ੱਠਮੀ ਗਠੀ ਬੀ
 ਠ ੱਠੇ ਰਿਠਠੰ ਠਠੇ ਠਠਠੇ ਗੁ ਖਮੇ ਠਪਠ ਮਿਠ ੱਠ ਠ ਠਠੇ ੱਠੀ ਪੀ
 ਮਿਮ ਬ। ਠਮ ੱਠੀ ਖਿਮ ਠਠੇ ਠਖਿਠ ਗਠੇ ਵਢੇਮ ਰਿਠੇ ਗੁਠੰ ਠੀ
 ਗਤੀ ੱਠੀ ੱ ਠਤੋ ਠਠੇ ੱਠ ਗਠ। ਗੰ ੱਠੀਠ ਠਪਠ ਵਢੇ ਠਠ ਠੰਠ ਠਤੋ
 ੱਠੀ ਠਖਿਠ ਠ ੱ ਖਪੁਠੀ ਗੰ ਠਮਗੀਮ ਠਤੋ ਤੁਠਠ ਪਠਮ ਠੀਤ ੱ। ੱਠ
 ਠਮ ਪੀ ਠ ੱਠੀ ਤੁਠਠ ਪੁਤਾ ਖਠ। ਰਿਠੀ ਠਪਠ ਗੁਠੀ ਖਿਮ ੱਠ ਰਿਠੇ

Figure 8: (from Grierson, 1916: 757).

५५६ । ३ ॐ३२ २५६ ५६ ५६ ५६ । ३ २५६ ५६ ५६ ५६ ।
 ५६६ । ॐ३२ ५६६६ ५६६ ५६६ ५६६ ५६६ ५६६ ५६६ ।
 ५६६ ५६६ ५६६ । ५६६६ ५६६६ ५६६६ ५६६६ ५६६६ ५६६६ ।
 ५६६६ ५६६६ ५६६६ ५६६६ ५६६६ ५६६६ । ५६६६ ५६६६ ५६६६ ५६६६ ।
 ५६६६ ५६६६ ५६६६ ५६६६ ५६६६ ५६६६ । ५६६६ ५६६६ ५६६६ ५६६६ ।
 ५६६६ ५६६६ ५६६६ ५६६६ ५६६६ ५६६६ । ५६६६ ५६६६ ५६६६ ५६६६ ।
 ५६६६ ५६६६ ५६६६ ५६६६ ५६६६ ५६६६ । ५६६६ ५६६६ ५६६६ ५६६६ ।

५६६६ ५६६६ ५६६६ ५६६६ ५६६६ ५६६६ । ५६६६ ५६६६ ५६६६ ५६६६ ।
 ५६६६ ५६६६ ५६६६ ५६६६ ५६६६ ५६६६ । ५६६६ ५६६६ ५६६६ ५६६६ ।
 ५६६६ ५६६६ ५६६६ ५६६६ ५६६६ ५६६६ । ५६६६ ५६६६ ५६६६ ५६६६ ।
 ५६६६ ५६६६ ५६६६ ५६६६ ५६६६ ५६६६ । ५६६६ ५६६६ ५६६६ ५६६६ ।
 ५६६६ ५६६६ ५६६६ ५६६६ ५६६६ ५६६६ । ५६६६ ५६६६ ५६६६ ५६६६ ।
 ५६६६ ५६६६ ५६६६ ५६६६ ५६६६ ५६६६ । ५६६६ ५६६६ ५६६६ ५६६६ ।
 ५६६६ ५६६६ ५६६६ ५६६६ ५६६६ ५६६६ । ५६६६ ५६६६ ५६६६ ५६६६ ।
 ५६६६ ५६६६ ५६६६ ५६६६ ५६६६ ५६६६ । ५६६६ ५६६६ ५६६६ ५६६६ ।
 ५६६६ ५६६६ ५६६६ ५६६६ ५६६६ ५६६६ । ५६६६ ५६६६ ५६६६ ५६६६ ।

Figure 9: (from Grierson, 1916: 758).

PAÑJĀBĪ.

DŌGRA DIALECT.

(JAMMU STATE.)

SPECIMEN I.

DŌGRA CHARACTER.

ਪੰਚ ਨਾਮਾ ਸੋ ਸੋ ਜੁੱਤੋ ਆਪ ਸਿ ਪਾਸ
 ਨਾਰ ਕੈਤਵ ਪੰ ਪ ਵਾ ਲਯੋਲ ਕਾ ਤੁ ਤੁ ਪੰ
 ਕੁੰਪੁਸੁਤਾ ਸਕਾ ਤੁਪ ਤੁਸੇ ਸੇਕਾ ਜੋਕੁਦ-
 ਤੁਪ ਨਤ ਸੇਕਾ ਸੁੰ-ਸੁੰ ਤੁਲ ਸਿਤੁੰ ਸੁੰਲ
 ਕੁੰਪੁਕਾ ਪਾਨਾ-ਸੁੰ ਲੁਕੁੰ ਆਕੁੰ ਸੇਦ ਸੇਦੁੰ
 ਕੁੰਕੁੰ ਜੁਤੁੰ = ਕੁੰ ਸੁਪ-ਕੁੰ ਕੁੰ - ਕੁੰ
 ਸੁੰ ਸੁੰਪ ਸੁੰ ਸੁੰ ਸੁੰ ਕੁੰ ਲੁਕੁੰ ਕੁੰ
 ਸੁੰ ਸੁੰਲ ਸੁੰਲ ਲੁਸ ਸੁੰ ਕੁੰ ਕੁੰ - ਸੁੰ
 ਲੁਕੁੰ ਕੁੰ ਸੁੰ ਸੁੰ ਸੁੰ ਕੁੰ ਸੁੰ ਸੁੰ
 ਸੁੰਲ ਸੁੰ ਪਾਸ ਪਾਸ ਕੁੰ ਸੁੰਲ ਸੁੰਲ
 ਤੁੰ ਕੁੰਲ ਤੁੰ ਕੁੰ ਲੁਕੁੰ ਕੁੰ ਸੁੰਲ ਸੁੰ
 ਕੁੰ ਪਾਸ ਕੁੰਲ ਸੁੰਲ ਕੁੰਲ ਕੁੰਲ

Figure 10: (from Grierson, 1916: 760).

PAÑJĀBĪ.

ḌOGRĀ DIALECT.

(STATE JAMMU.)

SPEOIMEN II.

CHAMBA ṬAKRĪ CHARAOTER.

।१। ਤੋਂ ਕੀਤ ਆਖਤੈਮ। ਇਤ ਸੋ ਗਮੀਟਠੀ ਸਭੰਮ। ਜਿਤ
ਖਿਏ ਗਿਲਿਟ ਗਮੀਟਠੀ ਕਠੋਠੇ॥

।३। ਤੋਂ ਪੰਕ ਠਗ ਸੋ ਗਮੀਟਮ। ਸੁ ਠੀ ਲੁਟ ਲੈਮ। ਤੋਂ
ਗਿੰਮੀਤੁੰ ਵੈਠ ਖਿਠੋਠੇ॥

।२। ਤੋਂ ਗੋਠ ਠਕਿਖ ਲਠੀਟਠੀ ਗਮੀਟਮ ਤੋਠੇ। ਜਿਤ ਖਿਏ
ਗਿਲਿਟ ਗਮੀਟਠੀ ਕਠੋਠੇ॥

।४। ਤੋਂ ਠਠਠ ਗਠਕ ਸੁਟਮ ਸੁ ਖਿਠ ਠਮੋ। ਤੋਂ ਗਿੰਮੀ
ਤੁੰ ਵੈਠ ਖਿਠੋਠੇ॥

Figure 11: (from Grierson, 1916: 770).

PAÑJĀBĪ.

ḌOGRĀ DIALECT.

(JAMMU STATE.)

SPECIMEN II.

ḌOGRĀ CHARACTER.

੧ ਤੰਗੁ ਭਾਲੁ ਆਤਖਾਂਡੈ ਸੁਭੁ ਗਰੁ
 ਗਮਪਵਾਂ. ਸਭਤਖੁ ਕੁਭੁ ਖੰਮੁ ਗਾਲੁ
 ਗਮਪਵਾਂ ਗੁਪਵੁ

੨ ਤੰਗੁ ਚੰਗੁ ਠਾਗੁ . ਸਭੰਗੁ ਗਮਪਵੁ
 ਠਗੁ ਠੁਗੁ ਠਗੁ ਠੰਗੁ ਠੁਗੁ ਠਗੁ
 ਠਗੁ ਠੰਗੁ ਠੁਗੁ

੩ ਤੰਗੁ ਠੰਗੁ ਠੰਗੁ ਠੰਗੁ ਠੰਗੁ
 ਗਮਪੁ ਠੰਗੁ ਠੰਗੁ ਕੁਭੁ ਖੰਮੁ ਗਮਪੁ
 ਗਮਪੁ ਠੰਗੁ ਠੰਗੁ

੪ ਤੰਗੁ ਠੰਗੁ ਠੰਗੁ ਠੰਗੁ ਠੰਗੁ
 ਠੰਗੁ ਠੰਗੁ ਠੰਗੁ ਠੰਗੁ ਠੰਗੁ ਠੰਗੁ
 ਠੰਗੁ ਠੰਗੁ

Figure 12: (from Grierson, 1916: 772).

PAÑJĀBĪ.

KĀNGRĀ DIALECT.

(DISTRICT, KANGRĀ.)

SPECIMEN II

ੳੳ ਸੀ ਧਯੀਟੰ ਪੰਕਤ ਰੁਪਏ ੳੳ ਸੀ
 ਯਯੳ ਫਲ ਬੈਯੀ ਰਖ ਬੈ ਯਯੳ ਤਿਸਤੋ ਯਯੀ ਯਯੀ
 ਧੁਯੀ ਬੈੳ ਬੈੳ ਸੈਯ ਲੰਯੀ ਬੀ। ਕੰ ੳੳ ਸਿਯ
 ਧੁਯੀਟੰ ਯਯੳ ਤੋ ਯਯਯੀ ਬੈਯੀ ਗੰਗੀ ਤੰ ਯਯੳ
 ਲੇਖ ਯਯੀ ਪੰਯ ਰੁਪਏ ਧੁਯੀ ਯਯੳ ਯਯੳ ।
 ਠਿਯੀ ਭੀ ਧੁਯੀ ਤਿਸ ਤੋ ਪਯੈ ਪਯੈ ਸੈਯ
 ਯਯੀ ਯਯੀ ਲੰਯੀ ਰਤੀ। ਕੰ ਠਿਯੀ ਲੇਖ
 ਤੈਯੈ ਤੰ ਪੰਯ ਰੁਪਏ ਧੁਯੀ ਭੀ
 ਧੁਯੀਯੈ ਸੁਯੀ ਸਟ। ੳੳ ਸ ਗਲਯ ਗਲਯ
 ਲੇਯੈ ਤੋ ਯਯੀ ਤੰ ਕੰ
 ਪੰਯ ਪੰਯੳ ਲੋ ਸਟ ਪੰਯ ਯਯੀ ਲੋ ਪਯੈ ।
 ਯਯ ਯਯੳ ਯਯੈ ਪੋਯ ਤੰ ਧੁਯੀ ਯਯੈ ਕੁਯੈ॥

Figure 13: (from Grierson, 1916: 788).

PAÑJĀBĪ.

BHATĀLĪ DIALECT.

(STATE CHAMBA.)

ੋ:ਅ ਚਮਚਾਰੈ ਨੈ ਨੈ ਨੰਨਮ ਚੈ ਓੜੈ ਪੜਮ ਗਮ ਪੜੈ
 ਮੈ ਗਨਧੰ ਤੋ ਪੰਧ ਪਾਧੰਮ ਨ ਤੋਠੰ ਨ ਮੇਯ ਗਗਨੰ
 ਤੋ ਗੇਯ ਨੋ ਓੜੈ ਪਾਧੰਮ ਪੰਠੈ ਯੜੈ ਚੈਧੰਧੰ ਤੋਠੰ
 ਓੜੈ ਗਮ ਗੰਨਮ ਗੰਠ ਮਧ ਮਧੰ ਮਾ ਮ ਮੁਗਧੰ
 ਮ ਗਧੰ ਓੜੈ ਨੰਨੋ: ਮਾ ਨੋ ਚਪੜੈ ਪਾਧੰਮ ਚੈ ਮੈ
 ਗੁਧੜੈ ਗਮ ਗੁਠੋ: ਨੋ ਗੰਠ ਮੁਯ ਗਧੰ ਓਠੰ ਮੁਗਧੰ
 ਗਮ ਪੜੈ ਮੰਨ ਪੰਧੰ ਚੜੈ ਚੈ ਮੰਨੰਨ ਤੋਠੋ: ਗਧੰ ਤੋ
 ਓਠੰ ਮੁਗਧੰ ੋ:ਮ ਗੰਨ ਮੰਨੋ ਮਧ ਨੰਨੋ: ਤੋਠੰ ਓੜੈ
 ਚਪੜੈ ਚੈੜੈ ਗਮ ਗੁਗੰ ਗੰਗੰ ਗੁ ਗੰਠੰ ਚੜੈ ਓਠੰ
 ਮਾਗੰ ਚੈ ਨੋ ਨੋ ਗੰਗੰ ਗੁ ਧੰਨੰ ਮੈ ਮੈ ਪਾ ਧੰ
 ਚਪੜੈ ਓਠੰ ਮੰਨੋ: ਗੰਨੰ ਤੋ ਚੈ ਤੋ ਚਪੜੈ-ਧੰ
 ਗੁਗੰ ਗਮ ਚੋ: ਮਾ ਗਗਧੰ ਨੋ ਮੈ ਪੜੈ ਨੋ ਗੰਗੰ

Figure 14: (from Grierson, 1916: 798).

| नागरी | ब्राह्मी | शारदा | टाकरी | लंडा | महाजनी | गुरुमुखी |
|-------|----------|-------|-------|------|--------|----------|
| अ | 𑀅 | 𑀓 | 𑀇 | 𑀓 | 𑀅 | 𑀅 |
| आ | 𑀆 | 𑀔 | 𑀈 | 𑀔 | 𑀆 | 𑀆 |
| का | 𑀇 | 𑀕 | 𑀉 | 𑀕 | 𑀇 | 𑀇 |
| ख | 𑀈 | 𑀖 | 𑀊 | 𑀖 | 𑀈 | 𑀈 |
| ग | 𑀉 | 𑀗 | 𑀋 | 𑀗 | 𑀉 | 𑀉 |
| ङ | 𑀊 | 𑀘 | 𑀌 | 𑀘 | 𑀊 | 𑀊 |
| च | 𑀋 | 𑀙 | 𑀍 | 𑀙 | 𑀋 | 𑀋 |
| कि | 𑀌 | 𑀚 | 𑀎 | 𑀚 | 𑀌 | 𑀌 |
| की | 𑀍 | 𑀛 | 𑀏 | 𑀛 | 𑀍 | 𑀍 |
| ल | 𑀎 | 𑀜 | 𑀐 | 𑀜 | 𑀎 | 𑀎 |
| कु | 𑀏 | 𑀝 | 𑀑 | 𑀝 | 𑀏 | 𑀏 |
| ऊ | 𑀐 | 𑀞 | 𑀒 | 𑀞 | 𑀐 | 𑀐 |
| क | 𑀑 | 𑀟 | 𑀓 | 𑀟 | 𑀑 | 𑀑 |
| ए | 𑀒 | 𑀠 | 𑀔 | 𑀠 | 𑀒 | 𑀒 |
| ऐ | 𑀓 | 𑀡 | 𑀕 | 𑀡 | 𑀓 | 𑀓 |
| ओ | 𑀔 | 𑀢 | 𑀖 | 𑀢 | 𑀔 | 𑀔 |
| औ | 𑀕 | 𑀣 | 𑀗 | 𑀣 | 𑀕 | 𑀕 |
| औ | 𑀖 | 𑀤 | 𑀘 | 𑀤 | 𑀖 | 𑀖 |
| औ | 𑀗 | 𑀥 | 𑀙 | 𑀥 | 𑀗 | 𑀗 |

| नागरी | ब्राह्मी | शारदा | टाकरी | लंडा | महाजनी | गुरुमुखी |
|-------|----------|-------|-------|------|--------|----------|
| क | 𑀅 | 𑀓 | 𑀇 | 𑀓 | 𑀅 | 𑀅 |
| ख | 𑀆 | 𑀔 | 𑀈 | 𑀔 | 𑀆 | 𑀆 |
| ग | 𑀇 | 𑀕 | 𑀉 | 𑀕 | 𑀇 | 𑀇 |
| ङ | 𑀈 | 𑀖 | 𑀊 | 𑀖 | 𑀈 | 𑀈 |
| च | 𑀉 | 𑀗 | 𑀋 | 𑀗 | 𑀉 | 𑀉 |
| छ | 𑀊 | 𑀘 | 𑀌 | 𑀘 | 𑀊 | 𑀊 |
| ज | 𑀋 | 𑀙 | 𑀍 | 𑀙 | 𑀋 | 𑀋 |
| झ | 𑀌 | 𑀚 | 𑀎 | 𑀚 | 𑀌 | 𑀌 |
| ञ | 𑀍 | 𑀛 | 𑀏 | 𑀛 | 𑀍 | 𑀍 |
| ट | 𑀎 | 𑀜 | 𑀐 | 𑀜 | 𑀎 | 𑀎 |
| ठ | 𑀏 | 𑀝 | 𑀑 | 𑀝 | 𑀏 | 𑀏 |
| ड | 𑀐 | 𑀞 | 𑀒 | 𑀞 | 𑀐 | 𑀐 |
| ढ | 𑀑 | 𑀟 | 𑀓 | 𑀟 | 𑀑 | 𑀑 |
| ण | 𑀒 | 𑀠 | 𑀔 | 𑀠 | 𑀒 | 𑀒 |
| त | 𑀓 | 𑀡 | 𑀕 | 𑀡 | 𑀓 | 𑀓 |
| थ | 𑀔 | 𑀢 | 𑀖 | 𑀢 | 𑀔 | 𑀔 |
| द | 𑀕 | 𑀣 | 𑀗 | 𑀣 | 𑀕 | 𑀕 |
| ध | 𑀖 | 𑀤 | 𑀘 | 𑀤 | 𑀖 | 𑀖 |
| न | 𑀗 | 𑀥 | 𑀙 | 𑀥 | 𑀗 | 𑀗 |

| नागरी | ब्राह्मी | शारदा | टाकरी | लंडा | महाजनी | गुरुमुखी |
|-------|----------|-------|-------|------|--------|----------|
| प | 𑀅 | 𑀓 | 𑀇 | 𑀓 | 𑀅 | 𑀅 |
| फ | 𑀆 | 𑀔 | 𑀈 | 𑀔 | 𑀆 | 𑀆 |
| ब | 𑀇 | 𑀕 | 𑀉 | 𑀕 | 𑀇 | 𑀇 |
| भ | 𑀈 | 𑀖 | 𑀊 | 𑀖 | 𑀈 | 𑀈 |
| म | 𑀉 | 𑀗 | 𑀋 | 𑀗 | 𑀉 | 𑀉 |
| य | 𑀊 | 𑀘 | 𑀌 | 𑀘 | 𑀊 | 𑀊 |
| र | 𑀋 | 𑀙 | 𑀍 | 𑀙 | 𑀋 | 𑀋 |
| ल | 𑀌 | 𑀚 | 𑀎 | 𑀚 | 𑀌 | 𑀌 |
| व | 𑀍 | 𑀛 | 𑀏 | 𑀛 | 𑀍 | 𑀍 |
| श | 𑀎 | 𑀜 | 𑀐 | 𑀜 | 𑀎 | 𑀎 |
| ष | 𑀏 | 𑀝 | 𑀑 | 𑀝 | 𑀏 | 𑀏 |
| स | 𑀐 | 𑀞 | 𑀒 | 𑀞 | 𑀐 | 𑀐 |
| ह | 𑀑 | 𑀟 | 𑀓 | 𑀟 | 𑀑 | 𑀑 |
| ळ | 𑀒 | 𑀠 | 𑀔 | 𑀠 | 𑀒 | 𑀒 |
| ळ | 𑀓 | 𑀡 | 𑀕 | 𑀡 | 𑀓 | 𑀓 |
| ळ | 𑀔 | 𑀢 | 𑀖 | 𑀢 | 𑀔 | 𑀔 |
| ळ | 𑀕 | 𑀣 | 𑀗 | 𑀣 | 𑀕 | 𑀕 |

Figure 15: Comparison of Takri with other Indic scripts (from Mule, 1974: 160–162).

