

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 31, 2009

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.¹ 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”,² 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.³ 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.⁴

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

¹ Vogel 1911: 47. ² Grierson 1911: 802–803. ³ Kaul Deambi 2008: 70. ⁴ 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,⁵ 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.⁶ 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.⁷ 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.⁸

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.”⁹ 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)

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

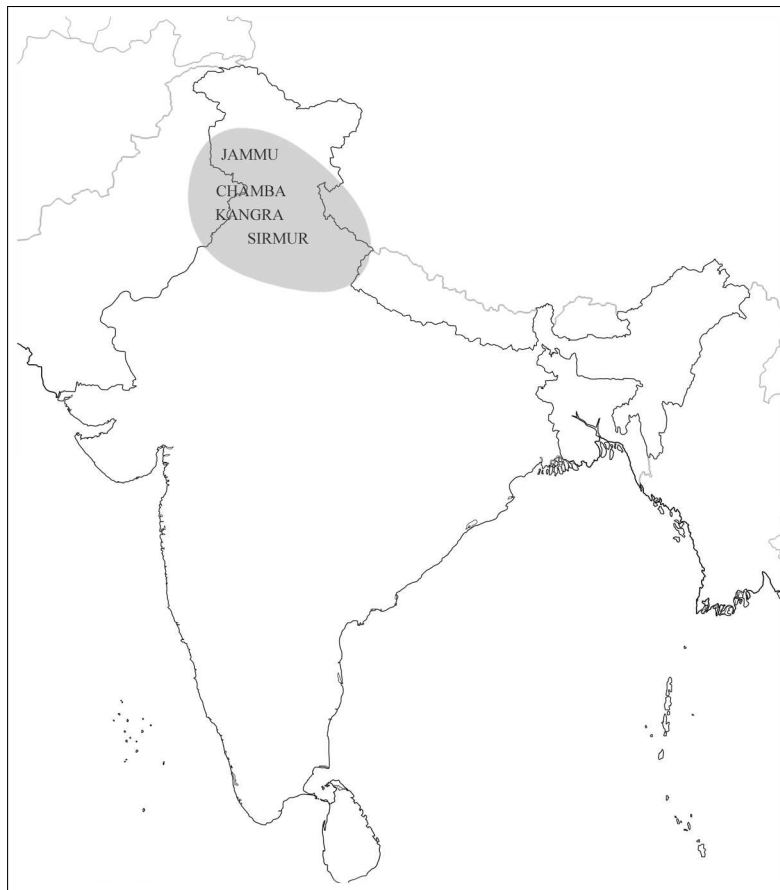


Figure 1: Historical geographic distribution of Takri

- 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]:¹⁰ 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.¹¹ 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 KA 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

¹⁰ The name 'Kulvi' is used by the Government of India (2001). ¹¹ 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[:] Ṭākārī.”¹² 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,¹³ 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 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 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.

¹² Kaul Deambi 2008: 70. ¹³ 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), *३ LLA (LA + NUKTA), and *३ 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 ˆ 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
𑂔 VOWEL LETTER AA	𑂔 VOWEL LETTER A + 𑂆 VOWEL SIGN AA
𑂚 VOWEL LETTER AI	𑂚 VOWEL LETTER E + 𑂇 VOWEL SIGN E
𑂞 VOWEL LETTER O	𑂞 VOWEL LETTER A + 𑂉 VOWEL SIGN O
𑂟 VOWEL LETTER AU	𑂞 VOWEL LETTER A + 𑂊 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 𑂎 MA and 𑂏 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;;;;;

```

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;;;;;

5 References

- The American Bible Society. 1938. *The Book of a Thousand Tongues: Being Some Account of the Translation and Publication of All or Part of The Holy Scriptures Into More Than a Thousand Languages and Dialects With Over 1100 Examples from the Text*. Edited by Eric M. North. New York and London: Harper & Brothers.
- Chhabra, B. Ch. 1957. *Antiquities of Chamba State*. Part II: Mediaeval and Later Inscriptions, with 33 plates. Memoirs of the Archaeological Survey of India, No. 72. Delhi: Manager of Publications.
- Goswamy, B. N. 1997. *Nainsukh of Guler: A great Indian painter from a small hill-state*. Zurich: Artibus Asiae Publishers.
- Government of India. 2001. “Abstract of Speakers’ Strength of Languages and Mother Tongues - 2001”. Census of India, Language, Statement 1. Office of the Registrar General & Census Commissioner, India. http://censusindia.gov.in/Census_Data_2001/Census_Data_Online/Language/Statement1.htm.
- 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.
- . 1911. “The Takri Alphabet.” In *The Journal of the Asiatic Society of Great Britain and Ireland* (1911), pp.802–803.
- . 1916a. *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.
- . 1916b. *The Linguistic Survey of India*. Vol. IX. Indo-Aryan Family. Central Group. Part IV. Specimens of Pahārī Languages and Gujuri. Calcutta: Office of the Superintendent of Government Printing, India.
- . 1919. *The Linguistic Survey of India*. Volume VIII. Indo-Aryan Family. North-Western Group. Part. II. Dardic or Piśācha Languages (Including Kāshmirī). Calcutta: Office of the Superintendent of Government Printing, India.
- The Hindustan Times*. 2006. “Himachal Pradesh scholars trying to revive ancient Tankri script”. February 9, 2006.
- Jensen, Hans. 1969. *Die Schrift: In Vergangenheit und Gegenwart*. Reprint der 3. Auflage. Berlin: Deutscher Verlag der Wissenschaften.
- Kaul Deambi, Bushan Kumar. 2008. *Śāradā and Ṭākari Alphabets: Origin and Development*. New Delhi: Indira Gandhi National Centre for the Arts.
- Mule, Guṇākara. 1974. *भारतिय 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.
- National Public Radio. 2006. “The Gaddi People of Dharamsala”. August 8, 2006. <http://www.npr.org/templates/story/story.php?storyId=5625318>.
- Ojhā, Gaurīśankara Hirācanda. 1971. *भारतिय प्राचीन लिपिमाला [Bhāratīya prācīna lipimālā = The Palaeog-*

raphy of India]. Reprint of the rev. and enl. 2nd ed., 1918; first ed. published in 1894 under the title *Prācīna lipimālā*. New Delhi: Munshiram Manoharlal.

Pandey, Anshuman. 2007. "Proposal to Encode North Indic Number Forms in ISO/IEC 10646." ISO/IEC JTC1/SC2/WG2 N3367 L2/07-354. October 7, 2007. <http://std.dkuug.dk/jtc1/sc2/wg2/docs/n3367.pdf>

Pathik, D. C. 1980. *Cultural Heritage of the Dogras*. New Delhi and Jammu: Light & Life Publishers.

Staal, Fritz. 1984. *Stamps of Jammu & Kashmir*. New York: The Collectors Club.

The Tribune. 2009. "State to groom new talent in folk arts" January 15, 2009. Online Edition. Chandigarh. <http://www.tribuneindia.com/2009/20090115/himachal.htm#3>

Vogel, Jean Philippe. 1911. *Antiquities of Chamba State*. Part I: Inscriptions of the Pre-Muhammadan Period, with 40 plates and 30 text-illustrations. Edited under the authority of the Government of India. Archaeological Survey of India, New Imperial Series, Vol. XXXVI. Calcutta: Superintendent Government Printing.

6 Acknowledgments

This project was made possible in part by a grant from the United States National Endowment for the Humanities, which funded the Universal Scripts Project (part of the Script Encoding Initiative at the University of California, Berkeley). Any views, findings, conclusions or recommendations expressed in this publication do not necessarily reflect those of the National Endowment of the Humanities.

	1168	1169	116A	116B	116C
0	𑌗 11680	𑌘 11690	𑌙 116A0	𑌚 116B0	𑌛 116C0
1	𑌜 11681	𑌝 11691	𑌞 116A1	𑌟 116B1	𑌠 116C1
2	𑌡 11682	𑌢 11692	𑌣 116A2	𑌤 116B2	𑌥 116C2
3	𑌧 11683	𑌨 11693	𑌩 116A3	𑌪 116B3	𑌫 116C3
4	𑌭 11684	𑌮 11694	𑌯 116A4	𑌰 116B4	𑌱 116C4
5	𑌵 11685	𑌶 11695	𑌷 116A5	𑌸 116B5	𑌹 116C5
6	𑌼 11686	𑌽 11696	𑌾 116A6	𑌿 116B6	𑍀 116C6
7	𑍄 11687	𑍅 11697	𑍆 116A7	𑍇 116B7	𑍈 116C7
8	𑍊 11688	𑍋 11698	𑍌 116A8		𑍍 116C8
9	𑍏 11689	𑍐 11699	𑍑 116A9		𑍒 116C9
A	𑍖 1168A	𑍗 1169A	𑍘 116AA		
B	𑍜 1168B	𑍝 1169B	𑍞 116AB		
C	𑍢 1168C	𑍣 1169C	𑍤 116AC		
D	𑍪 1168D	𑍫 1169D	𑍬 116AD		
E	𑍲 1168E	𑍳 1169E	𑍴 116AE		
F	𑍺 1168F	𑍻 1169F	𑍼 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: Proposed names list for Takri

CONSONANTS

	A	B		A	B		A	B
KA	क	क	DDA	क	क	BA	ख	ख
KHA	ख	ख	(DDDHA)	(क)	(क)	BHA	ड	ड
GA	ग	ग	DDHA	ग	ग	MA	म	म
GHA	ग	ग	(RHA)	(ग)	(ग)	YA	य	य
NGA	ङ	ङ	NNA	ञ	ञ	RA	र	र
CA	च	च	TA	त	त	LA	ल	ल
CHA	च	च	THA	थ	थ	(LLA)	(ल)	(ल)
JA	ज	ज	DA	ड	ड	VA	व	व
JHA	ज	ज	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	—	—	—	SHA	श	ਸ਼	श	श
DDHA	ढ	ਢ	ढ	ढ	SSA	—	—	ष	ष
RHA	ऱ	—	—	ऱ	SA	स	ਸ	स	स
NNA	ण	ਣ	ण	ण	HA	ह	ਹ	ह	ह
TA	त	ਤ	त	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	ਊ	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)
DEVĀŚEṢĀ - TĀKARĪ ALPHABET
(17th - 18th 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	Mindhāl 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
(17th - 18th 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 Prthvisintha V.S. 1698	Chamba Plate of Prthvisintha V.S. 1702	Divkhari Plate of Prthvisintha V.S. 1718	Lakṣmīnārāyaṇa Temple Plate of Satrusintha	Lakṣmīnārāyaṇa Temple Niche Inscription	Cabūtrā Stone Inscription	Treaty Between Rājāsīntha 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
(17th - 18th 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 Ṭakarī
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
ā	जा 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	कु	कु	कु	कु	कु	कु	कु	कु	कु	कु
u with k	कु	कु	कु	कु	कु	कु		कु	कु	
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	ᳵ	ᳶ	ᳵ	ᳵ	ᳵ	ᳵ	ᳵ	ᳶ
2		᳷		᳷		᳷	᳷	᳷
3	᳸	᳹	᳸		᳸		᳸	
4		ᳺ		᳻	᳻			᳻
5		᳼	᳼	᳼			᳼	᳽
6		᳾᳾	᳿	᳿	᳿	᳿	᳿	
7	᳼	᳼			᳼	᳿	ᳵ	
8	᳽					᳽	᳽	᳽
9		᳾		᳿		᳿		
MODERN ṬĀKARĪ								
1 to zero	ᳵ ᳽	ᳶ ᳿	᳸ ᳾	᳻ ᳼	᳸ ᳾	᳷ ᳿	᳷ ᳽	
ᳶ	ᳶ	᳸	᳻	᳼	᳾	᳿	᳽	᳿

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).

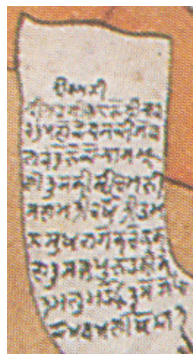


Figure 9: Enlargement of Takri letter shown in Figure 8

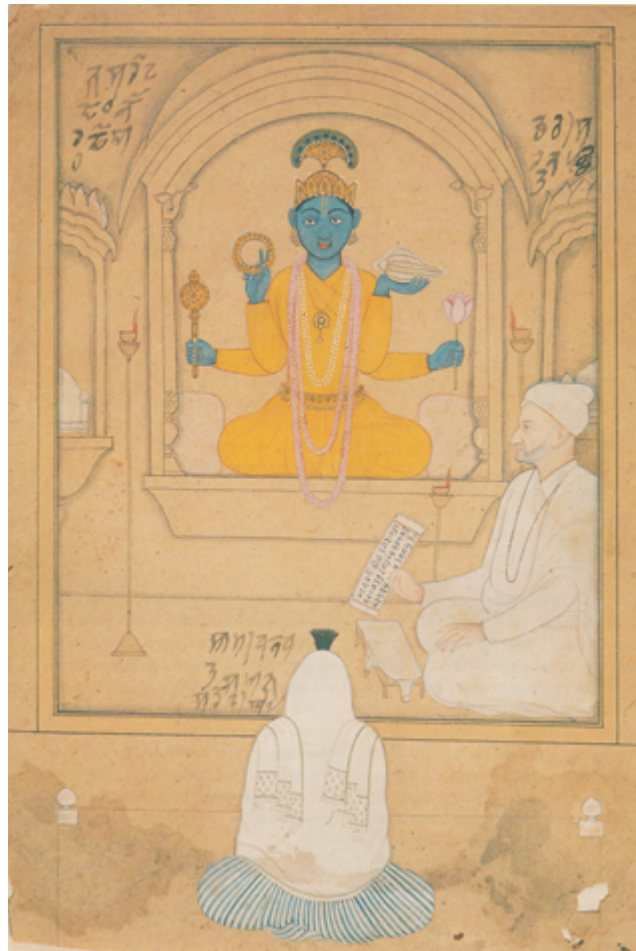


Figure 10: A painting (c. 1760) by Nainsukh of Balwant Singh, prince of Jasrota, in the *thākurdvāra* (from Goswami 1997: 200–201).

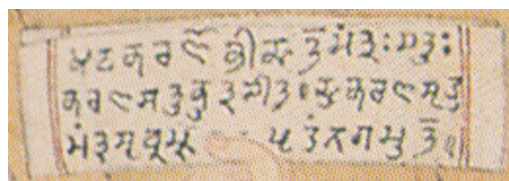


Figure 11: Enlargement of Sanskrit text in Takri shown in Figure 10

The printed Chamba Tākri alphabet is as follows:—

Vowels.

ढ a ढ ā ङ i ङ ī ङ u ङ ū
 २ ē २ ai ढ ō ढ au ढ.

Consonants.

ढ ka	ख kha	ग ga	ग ghā	ङ na
च cha	छ chha	ज ja	ज jha	
ट ta	ठ tha	ड da	ड dha	ण na
त ta	थ tha	ड da	ड 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	र ra	ल la	श sha

Conjuncts.

य ya थ thi ह hi स su पु pu उ or हु hi
 ३ tē ३ hai ३ yō ३ yau ३ ram or rā ३ chhya
 ५ pra ३ tra ३ mha.

Numerals.

१ 1, ३ 2, ३ 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 ढि३ *ditiā*, 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:—

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

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

SPECIMENS OF COMPOUND CONSONANTS.

𑆳 kya 𑆳 khya 𑆳 kra 𑆳 tra 𑆳 dra 𑆳 lha

NUMERALS.

𑆳 1, 𑆳 2, 𑆳 3, 𑆳 4, 𑆳 5, 𑆳 6, 𑆳 7, 𑆳 8, 𑆳 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 अंउरं॥

।३। ऊँ यंउ उग मीं गमीदरं। षं उी लुट लैम। उं
गिंमिउं उँउ दिउरं॥

।२। उँ उगुउ उरिष लंउीदरि गमीदरं उँउरं। ङिउ दिउ
गिलिउ गमीदरि अंउरं॥

।४। उँ उरुउ गउउउ मंउदम षं दिम उंम। उँ गिंमि
उं उँउ दिउरं॥

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 । ॐ३३ न३३ ढि३३
 पु३ ६६ म३ गल३ ६६ ३ ७० ६३ ३ ३३
 न३३ ३ न३ ढि३३ म३ । ३३ ॐ३ ढप३ ल३प३
 ॐ३३ ३ ६३ ढि३३ । ढ३ ३३३ ढि३३३ ढि३३
 ल३३३ पु३ ग३ ढि३३ ६३३३ ६३३३ म३ ३३
 म३३ ३ म३३ ग३३ ढ३३ ॐ३३ ढप३ ल३प३
 पु३ म३३ ढि३३ ग३३३ । ३३ न३ ग३३ ढि३३
 ग३३३३ ६३३ ३३ ॐ३३ म३३ न३३ ६३३ ढ३३३३ प३३३
 ढ३३ ॐ३३ ३३ ३३३३ प३३३ । ३३ ३३ ३३३३ म३३ ॐ३३
 म३३३ ३ ॐ३३ ढम३३३ ३ ल३३ ल३३३ ढ३३ ॐ३३ ॐ३३३
 ढप३३ ३३३३ न३३ ग३३ म३३३३ ३३ ३३३३ ढ३३ ॐ३३ म३३३३
 ३३ ढि३३३३ ग३३३३ ग३३३ ३३३३ षि३३ ॐ३३३ म३३३ ढप३३

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
 ਲੇਖ ਯਯੀ ਪੰਯ ਰੁਪਯੋ ਧਯੀ ਯੋਯ ਯਯੋ ।
 ਠਿਯੀ ਠੀ ਯੁਯੀ ਤਿਸ ਤ ਪਯੋ ਪਯੋ ਸੈਯ
 ਯਯੀ ਯਯੀ ਲੰਯੀ ਰਠੀ । ਕੰ ਠਿਯੀ ਲੇਖ
 ਤੋਯੋ ਤੰ ਪੰਯ ਰੁਪਯੋ ਧਯੀ ਠੀ
 ਯੁਯੀਯੋ ਸੁਯੀ ਸਟ । ੋਯ ਸਲਯ ਸਲਯ
 ਲੇਯੋ ਤਤ ਯਯੀਤੋ ਕੋ
 ਪੰਯ ਪੰਯਤੋ ਲੋ ਸਟ ਪੰਯ ਯਯੀ ਲੋ ਪਯੋ ।
 ਯਯ ਯਯਤੋ ਯਯੋ ਪੋ ਤੰ ਯੁਯੀ ਯਯੋ ਕਯੋ॥

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

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

Vowels.

INITIAL FORMS.

क a, क ā, ङ i or ī, ङ u or ū, र or र
e, ē or ai, ङ ō or au, . in or ~

NON-INITIAL FORMS.

क ka, क kā, क ki or kī, क or क ku, क kū, क ke or kē,
क kai, क kō, क kau, क 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—

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

Consonants.

क ka, क kha, ग ga, ग gha, न na;
च cha, च chha, ज ja, ज jha, ङ ñ;
त ta, त tha, द da, द dha, न or न nas;
ड ta, ड tha, द da, द dha, न na;
प pa, प pha, ब ba, ब bha, म ma;
य ya, र ra, ल la, य va, wa;
श sha, स sa, ह ha, र 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.	Kāngrā.	Dōgrā.		Gurmukhi.	Kāngrā.	Dōgrā.	
ੳ	ਯ	ਯ	'āirā'	ੳ	ੳ	ਊੳ	da
ਏ	ਏ	ਏ	'ēṛē'	ਏ	ਏ	ਏਏ	dha
ਓ	ਓ	ਓ	'ūṛā'	ਓ	ਓ	ਓਓ	na
ਊ	ਊ	ਊ	ō	ਤ	ਤ	ਤ	ta
ਸ	ਸ	ਸ	sa	ਬ	ਬ	ਬਬ	tha
ਹ	ਹ	ਹ	ha	ਦ	ਦ	ਦਦ	da
ਕ	ਕ	ਕ	ka	ਪ	ਪ	ਪਪ	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	ੳੳ	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
 ਕਾਰ ਕੈਰਪ ਪੰਧਵਾ ਲਯੋਲ ਕਰ ਤਪ ਧੰ
 ਕੁੰਪਸੁਤਾ ਸਲਾ ਕੁਪ ਤੋਸੇ ਸੋਕਾ ਜੋਕੁੰਦ-
 ਤੇਪ ਸਤ ਸੋਕਾ ਸਭ-ਸਭ ਤਲ ਸਿਨੇ ਸਲ
 ਠਿਪਕਾ ਪਗਾ-ਸਭ ਸੁਭੇ ਆਸਿ ਸੇਦ ਜੋਦੁ
 ਕੋਕੇਠੇ ਜੁਤਰ = ਕਰ ਸਪ-ਕੋਕੇ ਕੰਠ - ਕਰ
 ਸਭੇ ਸੋਪ ਸਲਾ ਜੋਲਲ ਕਾਰ ਸੁਭੇ ਠਿ
 ਸਾਗਲ ਸਲ ਲੁਸ ਗਣੇ ਕੁਪ ਗੋਲਾ-ਸੁਭ
 ਸੁਭ ਕੁਸ ਸਪ ਆਸ ਕਰ ਸਭੇ ਠਿ
 ਸਲਿਯਾ ਪਾਸ ਪਗ ਕਲ ਗਾਗਲ ਸੁਭ
 ਤੇ ਤੇ ਕੰਗਲ ਤੇ ਕਗ ਸੁਭ ਠਿ ਸੋਲਯਮ
 ਠਿ ਪਗ ਕੁੰਪਸੁਤਾ ਧਲ ਸਭ ਕੋਕੇ ਕਗ

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

३४१	शुदरुण	३४१	शुदरुण
७४६१४३४	)।	३१४३	≡)
१४५४१४३४	)॥	शुद३१४३	≡)।
१४५४१४३४	)॥	शु३१४३	≡)॥
१४३४	-)	१४३४३४३४३४	≡)॥
शुद३४३४	-)।	शु३४३४३४)।
३४३४३४३४	-)॥	शुद३४३४३४३४)।

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	ᳵ	ka	क	क	ta	त	ᳵ
ā	आ	ᳶ	kha	ख	ख	tha	थ	ᳶ
i	इ	᳷	ga	ग	ग	da	द	᳷
ī	ई	᳸	gha	घ	घ	dha	ध	᳸
u	उ	᳹	nga	ङ	ङ	na	न	᳹
ū	ऊ	ᳺ						
e	ए	᳻	ca	च	च	pa	प	᳻
ai	ऐ	᳼	cha	छ	छ	pha	फ	᳼
o	ओ	᳽	ja	ज	ज	ba	ब	᳽
au	औ	᳾	jha	झ	झ	bha	भ	᳾
am (nasalized vowel)	अं	᳿	ña	ञ	ञ	ma	म	᳿
śa	श	ᳺ	ṭa	ट	ट	ya	य	ᳺ
ṣa	ष	᳻	ṭha	ठ	ठ	ra	र	᳻
sa	स	᳼	ḍa	ड	ड	la	ल	᳼
ha	ह	᳽	dha	ढ	ढ	va	व	᳽
			ṇa	ण	ण			

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

	Nagari		Dogri			Nagari		Dogri	
kā	क	क	ख	ख	gā	ग	ग	ग	ग
ki	कि	कि	खि	खि	gī	गि	गि	गि	गि
kī	की	की	खी	खी	gi	गी	गी	गी	गी
ku	कु	कु	खु	खु	gu	गु	गु	गु	गु
kū	कू	कू	खू	खू	gū	गू	गू	गू	गू
ke	के	के	खे	खे	ge	गे	गे	गे	गे
kai	कै	कै	खे	खे	gai	गै	गै	गै	गै
ko	को	को	खे	खे	go	गो	गो	गो	गो
kau	कौ	कौ	खे	खे	gau	गौ	गौ	गौ	गौ
kaṃ	कं	कं	खं	खं	gaṃ	गं	गं	गं	गं
k	क	क	ख	ख	g	ग	ग	ग	ग

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

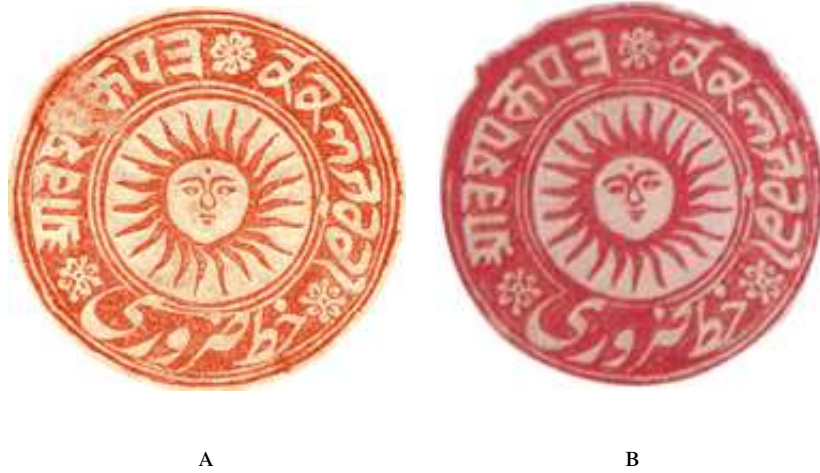


Figure 24: Two specimens of a trilingual stamp for expedited mail from Jammu State in Dogri Takri, Persian, and Devanagari scripts. The Takri reads **ਕਕਲ ਜਰੂਰੀ** *kakal jarurī* (note the use of Dogri forms for KA, JA, RA, and VOWEL SIGN II). The Persian reads **خط ضروری** *khaṭ zarūrī*; the Devanagari 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 **ਜਮੂ** ‘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 آنه ۱۹۲۳ ۱۹۲۳** *[samvat] nim ānah* ‘half ānnā’; the second line of the center is Takri **ਯਯ ਯਯ** *ada ana* ‘half ānnā’. In C, the first line of the center is Persian **یک آنه** *yak ānah* ‘one ānnā’; the second line of the center is Takri **ਯਯਯਯ**. 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.’

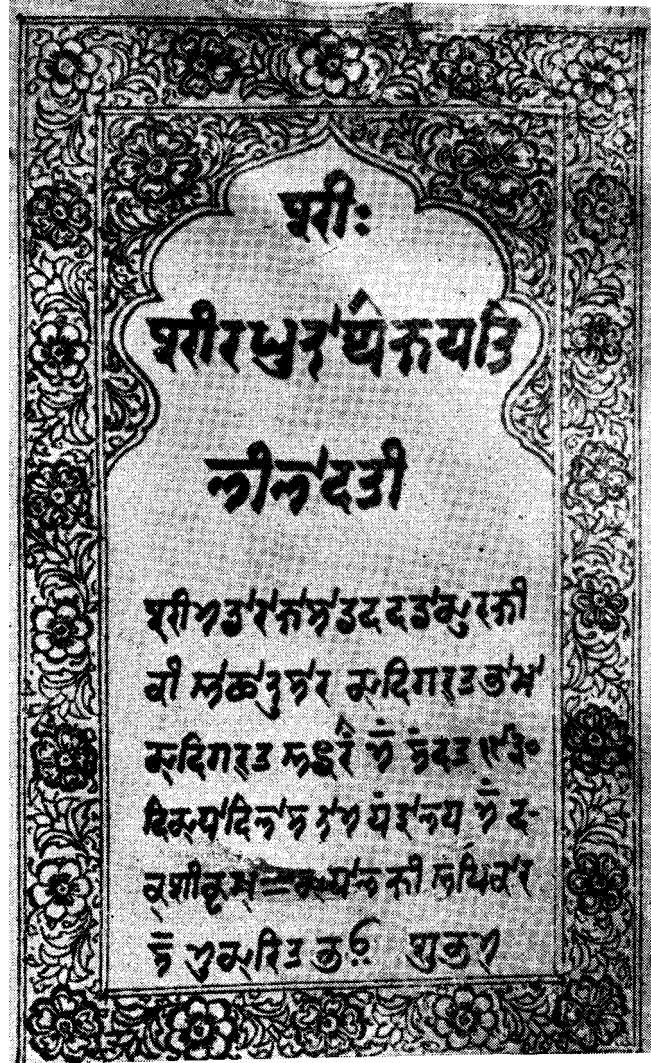


Figure 26: A folio of the *Līlavatī*, a treatise on mathematics, printed in the standardized Dogri Takri script known as ‘Dogra Akkhar’ (from Pathik 1980: Plate 3). The translation of the *Līlavatī* of Bhāskarācārya from Sanskrit into Dogri was commissioned by Maharaja Ranbir Singh and printed in the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

	CHAMBEALI	DOGRI		CHAMBEALI	DOGRI
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)	(ड)	—	VA	व	व
DDHA	ढ	ढ	SHA	(श)	श
(RHA)	(र)	(र)	SA	स	स
NNA	ॠ	ॠ	HA	ह	ह
TA	ॢ	ॢ	RRA	—	ॠ

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	⌒ x)	kau	३	tha
३), ३))	ā	ख	kā	८	da
७	i	ख	ka	५	dha
७	ī	७	kha	१	na
७	u	३)	ga	५	pa
७	ū	७)	gha	५	pha
७, ७	ě, ē	—	na	१	ba
७	ai	५	cha	८	bha
७)	ō, ō	७	chha	१	ma
७)	au	३)	ja	५	ya
.	~	५	jha	१	ra
५	ka	—	ña	३	la
३)	kū	✓	tā	१	wa
५)	ki	✓ ७	thā	५	śa
५)	kī	५ ७	ḍa	७	śha
५)	ku	५	ra	५	sa
५)	kū	७	ḍha	८	ha
५)	kě, kē	७	rha		
५)	kai	३)	ṛa		
५)	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	ε̄
i, i & ḍ	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	ε̄
cha	∩	śa	9
chha	5	sha	5
ja	∩	sa	9
jha	∩	ha	ε
ṭa	∩	kā	x
ṭha	6	ki, ki	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, ऊः	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
ṣa	ष, म	kō	को
ṭa	उ	kau	कौ
ṭha	व		

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

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, ṭ̄	ba	ḅ, ḅ̄
a	ṭ, ṭ̄	ka	ḅ	ḅa	ḅ, ḅ̄	bha	ḅ̄, ḅ̄̄
ā	ṭ̄, ṭ̄̄	kha	ḅ̄	ḅ̄a	ḅ̄, ḅ̄̄	ma	ḅ̄, ḅ̄̄
kā	ḅ̄	ga	ḅ̄̄	ḅ̄̄a	ḅ̄̄, ḅ̄̄̄	ya	ḅ̄̄ (ḅ̄̄̄)
i	ḅ̄̄	gha	ḅ̄̄̄	ḅ̄̄̄a	ḅ̄̄̄, ḅ̄̄̄̄	ra	ḅ̄̄̄
ki, kī	ḅ̄̄̄	cha	ḅ̄̄̄̄, ḅ̄̄̄̄̄	ḅ̄̄̄̄a	ḅ̄̄̄̄, ḅ̄̄̄̄̄	la	ḅ̄̄̄̄
u, ū	ḅ̄̄̄̄	chha	ḅ̄̄̄̄̄	ḅ̄̄̄̄̄a	ḅ̄̄̄̄̄, ḅ̄̄̄̄̄̄	(va)	(ḅ̄̄̄̄̄̄)
ku, kū	ḅ̄̄̄̄̄	ja	ḅ̄̄̄̄̄̄, ḅ̄̄̄̄̄̄̄	ḅ̄̄̄̄̄̄a	ḅ̄̄̄̄̄̄, ḅ̄̄̄̄̄̄̄	sa, sa	ḅ̄̄̄̄̄̄, ḅ̄̄̄̄̄̄̄
ē, ai	ḅ̄̄̄̄̄̄, ḅ̄̄̄̄̄̄̄	jha	ḅ̄̄̄̄̄̄̄, ḅ̄̄̄̄̄̄̄̄	ḅ̄̄̄̄̄̄̄a	ḅ̄̄̄̄̄̄̄, ḅ̄̄̄̄̄̄̄̄	ha	ḅ̄̄̄̄̄̄̄, ḅ̄̄̄̄̄̄̄̄
kē, kai	ḅ̄̄̄̄̄̄̄	ḥa	ḅ̄̄̄̄̄̄̄̄	ḅ̄̄̄̄̄̄̄̄a	ḅ̄̄̄̄̄̄̄̄, ḅ̄̄̄̄̄̄̄̄̄	phu	ḅ̄̄̄̄̄̄̄̄̄
ō, au	ḅ̄̄̄̄̄̄̄̄	ṭa	ḅ̄̄̄̄̄̄̄̄̄	ḅ̄̄̄̄̄̄̄̄̄a	ḅ̄̄̄̄̄̄̄̄̄, ḅ̄̄̄̄̄̄̄̄̄̄	tra	ḅ̄̄̄̄̄̄̄̄̄̄

Ya is usually indicated by initial ḅ̄̄̄̄̄̄̄, and wa by initial ḅ̄̄̄̄̄̄̄̄̄. Thus ḅ̄̄̄̄̄̄̄̄̄ yā, ḅ̄̄̄̄̄̄̄̄̄̄̄̄ wā.

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

WESTERN PAHARI (KULVI).

ॐ नमो भगवते वासुदेवाय
 श्रीगणेशाय नमः ॥ श्रीगणेशाय नमः ॥ श्रीगणेशाय नमः ॥
 श्रीगणेशाय नमः ॥ श्रीगणेशाय नमः ॥ श्रीगणेशाय नमः ॥
 श्रीगणेशाय नमः ॥ श्रीगणेशाय नमः ॥ श्रीगणेशाय नमः ॥
 श्रीगणेशाय नमः ॥ श्रीगणेशाय नमः ॥ श्रीगणेशाय नमः ॥
 श्रीगणेशाय नमः ॥ श्रीगणेशाय नमः ॥ श्रीगणेशाय नमः ॥
 श्रीगणेशाय नमः ॥ श्रीगणेशाय नमः ॥ श्रीगणेशाय नमः ॥
 श्रीगणेशाय नमः ॥ श्रीगणेशाय नमः ॥ श्रीगणेशाय नमः ॥

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

KANARESE

445

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 ಯಾವಾಗ ನಿತ್ಯ ಯಾವಾಗ 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 ಆಜ್ಞೆನಿರ್ವಯಿಸುವದಕ್ಕಲ್ಲ, ಲೋಕವು ಅವನಿಂದ ರಕ್ಷಿಸಲ್ಪಡುವ ಹಾಗೆ, ದೇವರು ತನ್ನ ಮಗನನ್ನು ಲೋಕಕ್ಕೆ ಕಳುಹಿಸಿದನು.

ಅವನಲ್ಲಿ ವಿಶ್ವಾಸಿಸುವವನಿಗೆ ಆಜ್ಞೆನಿರ್ವಯಿಸಿಲ್ಲ. ಆದರೆ ವಿಶ್ವಾಸಿಸದವನಿಗೆ, ದೇವರ ಒಬ್ಬನಾಗಿ ಹುಟ್ಟಿದ ಮಗನ ಹೆಸರಿನಲ್ಲಿ ವಿಶ್ವಾಸಿಸದ ಕಾರಣ, ಈಗಲೇ ಆಜ್ಞೆನಿರ್ವಯವಾಯಿತು. ಆಜ್ಞೆನಿರ್ವಯ

Jn. 2.25-Jn. 3, 4, 13-18; 1884

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,

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

ಎಕಾಂಥಲೊ, ದೇವರ ಚಿತ್ತಕ 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

कूदे 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	ja	𑂥	ya	𑂦	pra	𑂧
o	𑂨	sha	𑂩	ra	𑂪 𑂫	ra	𑂬
ko	𑂭	ḍa	𑂮	la	𑂯	khwa	𑂰
oi	𑂱	dha	𑂲	va	𑂳	gwa	𑂴
kai	𑂵	pa	𑂶	ka, cha, sa.	𑂷	dwa	𑂸
ō, au	𑂹 𑂺 𑂻	ta	𑂼	ka	𑂽	rwa	𑂾
kō, kau	𑂿	tha	𑃀	ka	𑃁		

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	मंरुये	रे	रुड	गंठक	ये	भडे
	गंठक	ऐ	श्रुयंली	व्यं	मंरुंगी		येरु
	हे	मंरुं	मरुडरुटे	री	यंरु		हे
	मंरुंगी	ठेमं	रुड	रे	ठं	उमरु	व्ये
5.	उमरु	यंरु	मरुडरुटे	री	उमरुं		रुड
	रीरु	रुंरु	रुंरु	गु	यंरु		कीरु
	भडे	गंठक	ऐ	मरुडरुटे	मड		रुड
	रुगी	रु	वरु	रुंरु	सामरुं		रुं
	मरुं	गरु	उरुगी	मरुयंरुं	मंरु		मड
10.	मरुडरुटे	रुंरु	रीरु	रुंरु	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	᳚
		dha	᳚	sha	᳚
		rha	᳚᳚	sa	᳚
		ra	᳚	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 Kaṣṭawāri Alphabets.

Roman.	Śāradā.	Kaṣṭawāri.	Roman.	Śāradā.	Kaṣṭawāri.	Roman.	Śāradā.	Kaṣṭawāri.
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	va	व	𑂣
ō	ओ	𑂈	da	ड	𑂐	śa	श	𑂤
au	औ	𑂉	gha	घ	𑂑	sha	ष	𑂥
m	ः	.....	na	न	𑂒	sa	स	𑂦
~	◌̣		ta	त	𑂓	ha	ह	𑂧
†	◌̤		tha	थ	𑂔	ka	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.

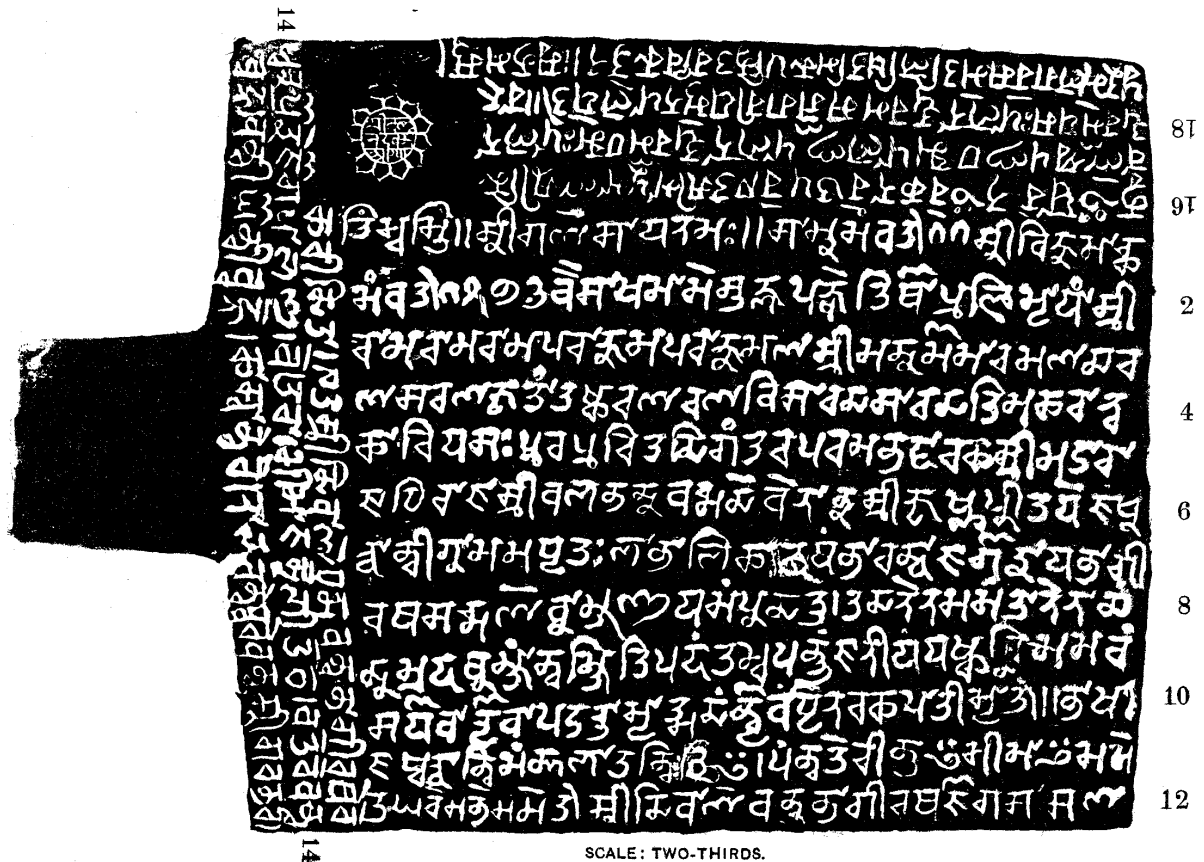


Figure 43: A copper plate from Chamba containing text in Sanskrit and Chambeali written in the Devāśeṣa ancestor of Takri. The plate is a document attesting a grant of land by the king Balabhadrarvarman to the brahmin Bhāgīrathāśarman (from Chhabra 1957: 127–129; Plate XXV: Chamba Plate of Balabhadra; vikram samvat 1692 (1635 CE). Copper plate 7³/₈" × 8³/₄", excluding left handle. 19 lines).

Lautwert	Śāradā 804	Kasch- mirī	Ṭākri		Laṇḍā		Multani	Gur- mukhi
			Jaun- sari	Cha- meāli	Khu- dāwādi	Sindhī- Schrift		
a	अ	अ	अ	अ	अ	अ	अ	ਅ
i	इ	इ	इ	इ	इ	इ	इ	ਇ
u	उ	उ	उ	उ	उ	उ	उ	ਉ
e	ए	ए	ए	ए	ए	ए	ए	ਏ
o	ओ	ओ	ओ	ओ	ओ	ओ	ओ	ਓ
ā	आ	आ	आ	आ	आ	आ	आ	ਆ
ka	क	क	क	क	क	क	क	ਕ
kha	ख	ख	ख	ख	ख	ख	ख	ਖ
ga	ग	ग	ग	ग	ग	ग	ग	ਗ
gha	घ	घ	घ	घ	घ	घ	घ	ਘ
ṅa	ङ	ङ	ङ	ङ	ङ	ङ	ङ	ਙ
ḥa	ह	ह	ह	ह	ह	ह	ह	ਹ
ḡa	घ	घ	घ	घ	घ	घ	घ	ਘ
ḥa	ह	ह	ह	ह	ह	ह	ह	ਹ
ḡa	घ	घ	घ	घ	घ	घ	घ	ਘ
ṅa	ङ	ङ	ङ	ङ	ङ	ङ	ङ	ਙ
ṭa	ट	ट	ट	ट	ट	ट	ट	ਟ
ṭha	ठ	ठ	ठ	ठ	ठ	ठ	ठ	ਠ
ḍa	ड	ड	ड	ड	ड	ड	ड	ਡ
ḍha	ढ	ढ	ढ	ढ	ढ	ढ	ढ	ਢ
na	न	न	न	न	न	न	न	ਨ
ta	त	त	त	त	त	त	त	ਤ
tha	थ	थ	थ	थ	थ	थ	थ	ਥ
da	द	द	द	द	द	द	द	ਦ
dha	ध	ध	ध	ध	ध	ध	ध	ਧ
na	न	न	न	न	न	न	न	ਨ
pa	प	प	प	प	प	प	प	ਪ
pha	फ	फ	फ	फ	फ	फ	फ	ਫ
ba	ब	ब	ब	ब	ब	ब	ब	ਬ
bha	भ	भ	भ	भ	भ	भ	भ	ਭ
ma	म	म	म	म	म	म	म	ਮ
ya	य	य	य	य	य	य	य	ਯ
ra	र	र	र	र	र	र	र	ਰ
la	ल	ल	ल	ल	ल	ल	ल	ਲ
va	व	व	व	व	व	व	व	ਵ
śa	श	श	श	श	श	श	श	ਸ਼
ṣa	ष	ष	ष	ष	ष	ष	ष	ਸ਼
sa	स	स	स	स	स	स	स	ਸ
ha	ह	ह	ह	ह	ह	ह	ह	ਹ

Figure 45: Comparison of Takri with Sharada and related scripts (from Jensen 1969: 366).

Gurmukhī.	Lāṇḍā.	Tākri.	Śāradā.	Gurmukhī.	Lāṇḍā.	Tākri.	Śāradā.	Gurmukhī.	Lāṇḍā.	Tākri.	Śāradā.	Gurmukhī.	Lāṇḍā.	Tākri.	Śāradā.	Gurmukhī.	Lāṇḍā.	Tākri.	Śāradā.
अ	ᳵ	𑆑	𑆑	'āyā.'	𑆑	𑆑	𑆑	𑆑	𑆑	𑆑	𑆑	𑆑	𑆑	𑆑	𑆑	𑆑	𑆑	𑆑	𑆑
इ	𑆒	𑆒	𑆒	'īyā.'	𑆒	𑆒	𑆒	𑆒	𑆒	𑆒	𑆒	𑆒	𑆒	𑆒	𑆒	𑆒	𑆒	𑆒	𑆒
उ	𑆓	𑆓	𑆓	'ūyā.'	𑆓	𑆓	𑆓	𑆓	𑆓	𑆓	𑆓	𑆓	𑆓	𑆓	𑆓	𑆓	𑆓	𑆓	𑆓
ऋ	𑆔	𑆔	𑆔	ṛ.	𑆔	𑆔	𑆔	𑆔	𑆔	𑆔	𑆔	𑆔	𑆔	𑆔	𑆔	𑆔	𑆔	𑆔	𑆔
ऌ	𑆕	𑆕	𑆕	ṣa.	𑆕	𑆕	𑆕	𑆕	𑆕	𑆕	𑆕	𑆕	𑆕	𑆕	𑆕	𑆕	𑆕	𑆕	𑆕
क	𑆖	𑆖	𑆖	ka.	𑆖	𑆖	𑆖	𑆖	𑆖	𑆖	𑆖	𑆖	𑆖	𑆖	𑆖	𑆖	𑆖	𑆖	𑆖
ख	𑆗	𑆗	𑆗	khā.	𑆗	𑆗	𑆗	𑆗	𑆗	𑆗	𑆗	𑆗	𑆗	𑆗	𑆗	𑆗	𑆗	𑆗	𑆗
ग	𑆘	𑆘	𑆘	ga.	𑆘	𑆘	𑆘	𑆘	𑆘	𑆘	𑆘	𑆘	𑆘	𑆘	𑆘	𑆘	𑆘	𑆘	𑆘

Figure 46: Comparison of Gurmukhī, Landa, Takri, and Sharada letters (from Grierson 1904: 72–73).

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

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

गुल्मुब्बी	ਪ	ਭ	ਬ	ਭ	ਮ	ਯ	ਰ	ਲ	ਵ	ਸ਼	ਸ	ਸ	ਹ	ੜ	ੜ
महाजनी	ਪ	ਭ	ਭ	ਭ	ਮ	ਯ	ਰ	ਲ	ਵ	ਸ਼	ਸ	ਸ	ਹ	ੜ	ੜ
लडा	ਪ	ਭ	ਭ	ਭ	ਮ	ਯ	ਰ	ਲ	ਵ	ਸ਼	ਸ	ਸ	ਹ	ੜ	ੜ
टाकरी	ਪ	ਭ	ਭ	ਭ	ਮ	ਯ	ਰ	ਲ	ਵ	ਸ਼	ਸ	ਸ	ਹ	ੜ	ੜ
शाखा	ਪ	ਭ	ਭ	ਭ	ਮ	ਯ	ਰ	ਲ	ਵ	ਸ਼	ਸ	ਸ	ਹ	ੜ	ੜ
ब्राहमी	ਪ	ਭ	ਭ	ਭ	ਮ	ਯ	ਰ	ਲ	ਵ	ਸ਼	ਸ	ਸ	ਹ	ੜ	ੜ
नागरी	प	भ	ब	भ	म	य	र	ल	व	श	स	स	ह	ड़	ड़

गुल्मुब्बी	ਕ	ਖ	ਗ	ਘ	ਗ	ਘ	ਘ	ਘ	ਘ	ਘ	ਘ	ਘ	ਘ	ਘ	ਘ
महाजनी	ਕ	ਖ	ਗ	ਘ	ਗ	ਘ	ਘ	ਘ	ਘ	ਘ	ਘ	ਘ	ਘ	ਘ	ਘ
लडा	ਕ	ਖ	ਗ	ਘ	ਗ	ਘ	ਘ	ਘ	ਘ	ਘ	ਘ	ਘ	ਘ	ਘ	ਘ
टाकरी	ਕ	ਖ	ਗ	ਘ	ਗ	ਘ	ਘ	ਘ	ਘ	ਘ	ਘ	ਘ	ਘ	ਘ	ਘ
शाखा	ਕ	ਖ	ਗ	ਘ	ਗ	ਘ	ਘ	ਘ	ਘ	ਘ	ਘ	ਘ	ਘ	ਘ	ਘ
ब्राहमी	क	ख	ग	घ	ग	घ	घ	घ	घ	घ	घ	घ	घ	घ	घ
नागरी	क	ख	ग	घ	ग	घ	घ	घ	घ	घ	घ	घ	घ	घ	घ

गुल्मुब्बी	ਅ	ਆ	ਕਾ	ਇ	ਕਿ	ਈ	ਕੀ	ਉ	ਕੁ	ਊ	ਕੂ	ੜ	ੜ	ੜ	ੜ
महाजनी	ਅ	ਆ	ਕਾ	ਇ	ਕਿ	ਈ	ਕੀ	ਉ	ਕੁ	ਊ	ਕੂ	ੜ	ੜ	ੜ	ੜ
लडा	ਅ	ਆ	ਕਾ	ਇ	ਕਿ	ਈ	ਕੀ	ਉ	ਕੁ	ਊ	ਕੂ	ੜ	ੜ	ੜ	ੜ
टाकरी	ਅ	ਆ	ਕਾ	ਇ	ਕਿ	ਈ	ਕੀ	ਉ	ਕੁ	ਊ	ਕੂ	ੜ	ੜ	ੜ	ੜ
शाखा	ਅ	ਆ	ਕਾ	ਇ	ਕਿ	ਈ	ਕੀ	ਉ	ਕੁ	ਊ	ਕੂ	ੜ	ੜ	ੜ	ੜ
ब्राहमी	अ	आ	का	इ	कि	ई	की	उ	कु	ऊ	कू	ड़	ड़	ड़	ड़
नागरी	अ	आ	का	इ	कि	ई	की	उ	कु	ऊ	कू	ड़	ड़	ड़	ड़

Figure 48: Comparison of Takri with other Indic scripts (from Mule 1974: 160–162).

Devanagari	Grantha	Kaithi	Maithili	Tulu	Sarada	Takari	Gurmukhi
अ	अ	अ	अ	अ	अ	अ	अ
आ	आ	आ	आ	आ	आ	आ	आ
इ	इ	इ	इ	इ	इ	इ	इ
ई	ई	ई	ई	ई	ई	ई	ई
उ	उ	उ	उ	उ	उ	उ	उ
ऊ	ऊ	ऊ	ऊ	ऊ	ऊ	ऊ	ऊ
ए	ए	ए	ए	ए	ए	ए	ए
ऐ	ऐ	ऐ	ऐ	ऐ	ऐ	ऐ	ऐ
ओ	ओ	ओ	ओ	ओ	ओ	ओ	ओ
क	क	क	क	क	क	क	क
ख	ख	ख	ख	ख	ख	ख	ख
ग	ग	ग	ग	ग	ग	ग	ग
घ	घ	घ	घ	घ	घ	घ	घ
ङ	ङ	ङ	ङ	ङ	ङ	ङ	ङ
च	च	च	च	च	च	च	च
छ	छ	छ	छ	छ	छ	छ	छ
ज	ज	ज	ज	ज	ज	ज	ज
झ	झ	झ	झ	झ	झ	झ	झ
ञ	ञ	ञ	ञ	ञ	ञ	ञ	ञ
ट	ट	ट	ट	ट	ट	ट	ट
ठ	ठ	ठ	ठ	ठ	ठ	ठ	ठ
ड	ड	ड	ड	ड	ड	ड	ड
ढ	ढ	ढ	ढ	ढ	ढ	ढ	ढ
ण	ण	ण	ण	ण	ण	ण	ण
त	त	त	त	त	त	त	त
थ	थ	थ	थ	थ	थ	थ	थ
द	द	द	द	द	द	द	द
ध	ध	ध	ध	ध	ध	ध	ध
न	न	न	न	न	न	न	न
प	प	प	प	प	प	प	प
फ	फ	फ	फ	फ	फ	फ	फ
ब	ब	ब	ब	ब	ब	ब	ब
भ	भ	भ	भ	भ	भ	भ	भ
म	म	म	म	म	म	म	म
य	य	य	य	य	य	य	य
र	र	र	र	र	र	र	र
ल	ल	ल	ल	ल	ल	ल	ल
व	व	व	व	व	व	व	व
श	श	श	श	श	श	श	श
ष	ष	ष	ष	ष	ष	ष	ष
स	स	स	स	स	स	स	स
ह	ह	ह	ह	ह	ह	ह	ह
ळ	ळ	ळ	ळ	ळ	ळ	ळ	ळ
वृ	वृ	वृ	वृ	वृ	वृ	वृ	वृ
श्र	श्र	श्र	श्र	श्र	श्र	श्र	श्र

Figure 49: Comparison of Takri with other Indic scripts (from Naik 1971: Table 13).

ISO/IEC JTC 1/SC 2/WG 2
PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS
FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646¹⁴

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 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.**

¹⁴ 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**