ISO/IEC JTC1/SC2/WG2 N3766 L2/10-011R 2010-02-09

Title: A Roadmap for Scripts of the Landa Family

Source: Script Encoding Initiative (SEI)

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1 Introduction

Landa is a writing system of South Asia that was used in the regions of Punjab and Sindh. It is a Brahmi-based script that is descended from Sharada and related to the Takri script (see Figure 1 and Figure 2). The name 'Landa' (laṇḍā) means 'clipped' and refers to certain characteristics of the script, such as the absence of vowel signs, the use of a single letter for representing an aspirated and unaspirated consonant pair, the absence of word spacing and punctuation, and other shorthand practices. There is no standard form of Landa and given its large geographic distribution, the script became regionally differentiated through its use by various merchant communities and administrative bodies. These varieties of Landa may be grouped into the two regional typological sub-classes of 'Punjabi' and 'Sindhi'. Although Landa is considered an 'incomplete' mercantile script, some varieties were reformed into literary and administrative scripts in order to meet the requirements of religious and social communities in Punjab and Sindh.

In the *Linguistic Survey of India*, George Grierson called Landa the "true alphabet of the Punjab". As the popular script of Punjab, Landa served as the model for the Gurmukhi script, which was designed in the 16th century by Angad, the second Sikh Guru, for the purpose of recording the teachings of Guru Nanak. Similarly, the forms of Landa used in Multan were adapted for printing by the Baptist Missionary Press, who developed metal types for Multani in order to produce Christian literature in the Siraiki language. Writing in 1916, Grierson noted that Landa was "current all over the Punjab, and is especially used by shop-keepers". Now, nearly a century later, Landa is present in Punjab only through its Gurmukhi descendent; the Multani form of Landa is now written in the Arabic script. However, it is possible that Landa is still maintained informally for mercantile purposes in the region.

In Sindh, the Landa script is known as "Baniyā" or "Wāṇikō", 3 names which allude to the mercantile nature of the script. By the 16th century, the Lohanaki variety of Landa was reformed to create an ecclesiastical script known as Khojki. Believed to have been introduced by Pir Sadruddin, an Ismaili missionary working with the Lohana merchant community, Khojki was used to record the ginān literature of the Nizari Ismaili sect. Khojki is still used by Ismailis in South Asia and was exported to east Africa, Canada, and other areas where the South Asian Ismaili diaspora settled. The Khojki script has been proposed for encoding in the UCS. 4 In the administrative sphere, the British government of Sindh developed a standard Sindhi script in 1868 that was called 'Hindu Sindhi'. 5 The term 'Hindu' refers to the Brahmi-based model for the script, as distinguished from the Arabic-based script that was also being developed for Sindhi by the government. This Standard Sindhi was used in education, book printing, and in courts. Sindhi is now written in the Arabic and Devanagari scripts; however, attempts have been made to revive haṭa-vāṇikā "merchant's alphabet", 6 and it is possible that the Sindhi scripts are still used informally.

¹ Grierson 1916: 624. ² Grierson 1916: 624. ³ Grierson 1919: 14. ⁴ Pandey 2009. ⁵ Grierson 1919: 18. ⁶ Jetley 1985.

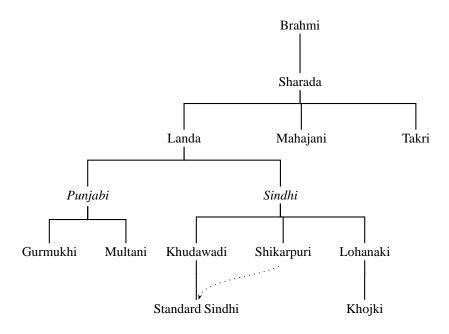


Figure 1: Family tree of Landa and related scripts

2 Analysis

Based upon typological differences that correlate with regional distribution, Landa may be divided into the 'Punjabi' and 'Sindhi' sub-classes. The primary differences between the Punjabi and Sindhi forms are character repertoire, glyph shapes, collation patterns, and orthographic practices. Additionally, local forms within the Punjabi and Sindhi sub-classes also exhibit differences from other members within their respective regional sub-classes.

The division of Landa into regional sub-classes is supported by primary and secondary sources. In *Grammar of the Sindhi Language* (1849), George Stack presented twelve sub-regional varieties of Landa used in Sindh and one form used in Punjab. George Grierson (1916) shows two different forms of Landa used in Punjab, of which one is the form used in Multan. William Leitner (1882) shows specimens and comparative tables of at least six forms of Landa used in Punjab and numerous local varieties used in Sindh. The nomenclature used to classify these forms of Landa is not uniform. Some scripts are named after the languages and dialects they are used for writing and others are given names of the regions or communities with which they are associated. Based on the above and other sources, an attempt is made below to classify various names given to Landa-based scripts according to their regional affiliation:

- Punjabi: Bhawalpuri, Gurmukhi, Landa, Lamawasi, Multani (Karikki, Lahnda, Ochiki Punjabi, Southern Lahnda), Thul (Dehrajat), Sarika (Dehrajat)
- *Sindhi*: Arora, Baniya, Bhatia, Haidarabadi, Karadi, Khudawadi, Khwaja (Khojki), Hatvanika, Landa, Larai, Lohanaki (Lohana), Maimon, Rajai, Sakkar, Shikarpuri, Sewhani Bhabhira, Thatta (Thattai), Vaniya, Wangai, Waniko

The differences between Punjabi and Sindhi forms of Landa is exemplified in Figure 3. This figure depicts written specimens of Standard Sindhi and a form of Landa used for writing Multani (Siraiki), a language spoken in Punjab. Figure 4 shows the differences between printed forms of Sindhi and Multani. The shapes of characters and style of writing are entirely different. Another comparison of the Punjabi and Sindhi forms

is made in Figure 5. In Figure 6, 'Landa' and 'Multani' are shown separately and 'Landa' is shown as the class name for 'Khudawadi' and 'Sindhi-Schrift' scripts. The variety of Landa forms used in Punjab is shown in Figure 10.

The regional forms are strongly influenced by the phonemic repertoire of local languages and, therefore, the Sindhi forms possess characters not found in the Punjabi varieties. General differences between the two sub-classes are:

- Character repertoire: Character repertoire is a major distinguishing factor between Punjabi and Sindhi forms of Landa. The Sindhi forms have characters for the Sindhi implosives (corresponding to the Devanagari letters GGA, JJA, DDDA, and BBA), which are not found in Punjabi or other Indo-Aryan languages.
- *Glyph shapes:* Based upon analysis of common letters such as A and KA it is possible to determine by glyph shape whether a script belongs to the Punjabi or Sindhi sub-class.
- *Orthography:* Vowel signs were introduced into Sindhi forms of Landa as part of standardization. The Punjabi forms of Landa do not use vowel signs; the vowel letter is often written with a consonant letter to indicate the composition of a syllable, eg. *ki* would be written as LETTER KA + LETTER I.
- *Collation order:* The collation order for the Punjabi and Sindhi forms are different; Punjabi Landa follows the sort order for Gurmukhi, which places sA and HA at the head of the consonants, while Sindhi Landa follows the Devanagari order.

3 Recommendation

For the purposes of encoding Landa in the UCS, it is recommended that the Punjabi and Sindhi sub-classes be encoded separately. Encoding a unified Landa block that may be used for both Punjabi and Sindhi regional forms is impractical because such an approach requires identifying a form of Landa that could adequately represent the character repertoires and glyph shapes used in Punjab as well as in Sindh. Furthermore, such a unified encoding for Landa would result in the unification of at least twenty different scripts.

Encoding the Punjabi and Sindhi forms separately offers a more effective means for managing the various regional forms of Landa on a model that adheres to the structural differences between the two sub-classes. Thus, a block to be named 'Sindhi' will serve to unify local Sindhi scripts such as Khudawadi, Shikarpuri, etc. The characters will be based upon the Standard Sindhi script. As Landa is considered by Grierson to be the "true alphabet of the Punjab", it is recommended that the name 'Landa' be retained as the name of the block that will unify the regional Landa forms of Punjab.

The 'Landa' and 'Sindhi' blocks will provide an effective means for managing the Landa family of scripts through unification. However, some of the scripts belonging to these sub-classes may be encoded as independent scripts, depending upon user requirements and other factors. Khojki is one such example; Multani may prove to be another. The following proposals have been submitted in support of this recommendation:

- N3767 L2/10-012R "Preliminary Proposal to Encode the Sindhi Script in ISO/IEC 10646"
- N3768 L2/10-013R "Preliminary Proposal to Encode the Landa Script in ISO/IEC 10646"

The present document is intended to accompany the above proposals. The individual proposals for encoding the Landa and Sindhi scripts provide additional details and specimens, including code charts and nameslists.

4 References

- Faulmann, Carl. 1880. Das Buch der Schrift: Enthaltend die Schriftzeichen und Alphabete aller Zeiten und aller Völker der Erdkreises. Zweite Vermehrte und verbesserte Auflage. Wein: Der Kaiserlich-Königlichen Hof- und Staatsdruckerei.
- 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.
- ——. 1919. *The Linguistic Survey of India*. Vol. VIII. Indo-Aryan Family. North-Western Group. Part III. Sindhī and Lahndā. Calcutta: Office of the Superintendent of Government Printing, India.
- Jensen, Hans. 1969. *Die Schrift: In Vergangenheit und Gegenwart*. Reprint der 3. Auflage. Berlin: Deutscher Verlag der Wissenschaften.
- Jetley, Kishinchand Topanlal. 1985. *The Date of Sindhi [हट-वाणिका] Script & The Need to Propagate It.* Pune: Akhil Bharatiya Sindhi Sahitya Vidvat Parishad.
- Leitner, Gottlieb William. 1882. "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". In *History of Indigenous Educaion in the Punjab*. Lahore: Anjuman-i-Punjab Press.
- Mule, Guṇākara. 1974. भारतिय लिपियों की कहानी [The Story of Indian Scripts]. Dillī: Rājakamala Prakāśana.
- Pandey, Anshuman. 2009. "Proposal to Encode the Khojki Script in ISO/IEC 10646." N3596 L2/09-101. March 25, 2009. http://std.dkuug.dk/JTC1/SC2/WG2/docs/n3596.pdf
- ——. 2010. "Preliminary Proposal to Encode the Landa Script in ISO/IEC 10646." N3768 L2/10-013R. February 9, 2010. http://std.dkuug.dk/JTC1/SC2/WG2/docs/n3768.pdf
- ——. 2010. "Preliminary Proposal to Encode the Sindhi Script in ISO/IEC 10646." N3767 L2/10-012R. February 9, 2010. http://std.dkuug.dk/JTC1/SC2/WG2/docs/n3767.pdf
- Prinsep, James. 1837. Review: "A Grammar of the Sindhí Language, dedicated to the Right Honorable Sir Robert Grant, governor of Bombay, by W. H. Wathen, Esq." In *Journal of the Asiatic Society of Bengal*, vol. VI, pt. I (January to June 1837), pp. 347–354. Calcutta: Baptist Mission Press.
- Shackle, C. 1983. From Wuch to Southern Lahnda: A Century of Siraiki Studies in English. Multan: Bazm-e-Saqafat.
- Stack, George. 1849. A Grammar of the Sindhi Language. Bombay: American Mission Press.
- Taylor, Issac. 1883. *The Alphabet: An Account of the Origin and Development of Letters*. Vol II. Aryan Alphabets. London: Kegal Paul, Trench, & Co.

Gurmukbi.	Landa.	Ţākrī.	Śāradā.		Gurmukhi.	Landa.	Ţākri.	Šāradā.	
H	m	य	म	'āiŗā'	3	3	3	5	da
8	0	G	G*	' इं? इं '	હ	૨	પ્ર	To	dha
8	6	6	3	'ūŗā'	3	ح	=	m	ņa
ઉ	6	E 8	p	ō	3	3	3	3	ta
ਸ	ろ	n	ਸ	8a	8	a	R	ਬ	tha
J	5	5	Ն	hạ	5	V	×	Z	da
व	વે	36	क	ka	P	9	Ħ	σ	dha
А	מע	Ħ	M	kha	ぁ	٨	7	7	na
ת	41	π	ਸ	ga	ų	ч	٦	ч	pa
CH	41	uj	W	gha	ढ	6	6	6	pha
ক	ょ	3	r	'na	B	2	य	व	ba
3	2	D	ਸ	cha	3	3	3	5	bha
E Q	40	પ્ર	ぁ	chha	મ	78	η	н	ma
ふ	7	*	g	ja	ય	21		य	ya
平	5	m	रा	jha	ਰ	d	J	7	ra
Ş	*		K	ñ	ਲ	0 1	7	त	la
2	4	G	r	ļa	ક	2	24	व	væ
ゟ	8	0	0	ţha	3	3	う	••-	ŗa

Figure 2: Comparison of Gurmukhi, Landa, Takri, and Sharada letters (from Grierson 1916: 625).

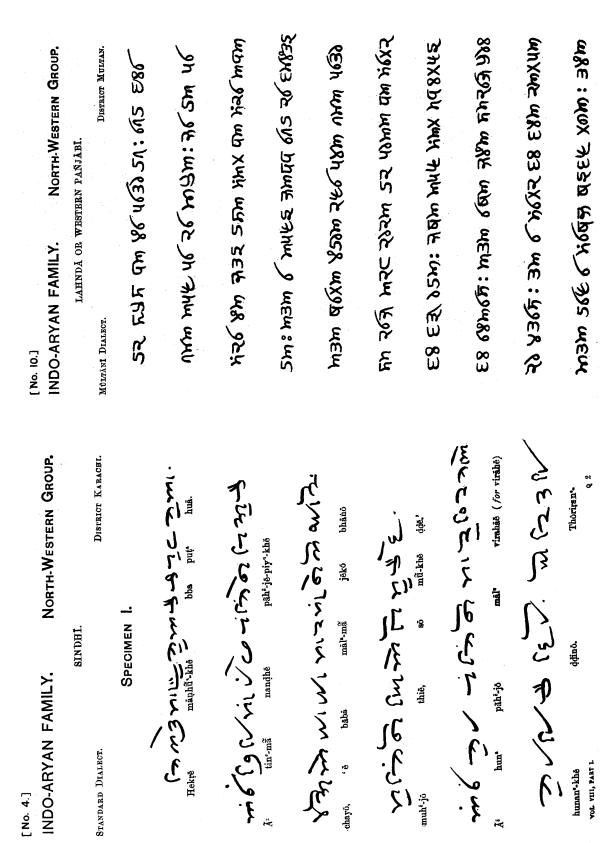


Figure 3: Specimens of Standard Sindhi and Multani Landa (from Grierson 1919: 115, 315).

VERNACULAR ALPHABETS OF

			Авваш.	Kutila.	Gurumukhi.	Nagari.	Bengali.	Orissa.	Gujarati.	Sindi.	Multani.	Telugu.	Canarese.	Grantha. (Tulu.)	Tamil.
	Vowels.	a i u e a	अ ६ ६ प आ	म् ः उ ए मा	अ के हे भा	क्ष इ.स.च इ.स.च	ब रू ह	 ම ල ල ල	ામ દક્ષિ અ	ல் வ	m 6 B	ಕಾದಿವಿ	8 8 3 3	രക്കു സഹ അഇള എ ആ	न हा हा हा
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PENINSULA OF	Semivowels.	y r l v	यर्थव	ध { ल ब	থ প ণ য	च ଔ भ म	ব ম ম	ಭ ಶ ಶ	य २ ६ व	なない	घठ ४ ६	∞ 8 e ≾	ಕ್ಕ ಕ ಕ ಕ	@ 9 E D	្នំ កំ ខំ
THE PENI	Labials,	p ph b bh m	प वृक्ष	प पत्रबस्भ	त व म ल भ	ਸ ** "ਬੋ ਦੇ	य (ध प्र स्थ	ප ර ජ ස	મ % થ ભ મ	F % & + h	४ प्छ ज	5 \$ 0 \$ X	ಚ ಜ ಜ ಬ	പരമബഭ മ	
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305 थयप्रम K ധന ഉ **ന യ**്യം**സസ**ം ട F ī Œ ೯ \mathcal{X} \mathfrak{r} ۰۲٦ qyQ Þ Þ ಶ æ አۍ 13-× Dentals. ヷ \mathfrak{A} Ţ Ŋ G v Ø w 12 ty $\boldsymbol{\omega}$ 3 B ನ ಸ 4 百 歹 ð **3**3ĸ π T G **YD** 19 19 m ٥ŧ ε g и. Ø ? 5 Ю G দ্ত $\tilde{\mathbf{z}}$ Þ 3, \mathbb{S} $\dot{q}p$ ø ju 12 G •• প্ত Cerebrals, Ю S Ю 13-ัช ช r. 5 প্ত IL) m છ က **~** ho ij. 0 0 Ю ~ ىچ ю ю -10 0 3 ∿. ~ ŋ వ ا. N N حار 10 ω 18 رئ 7 చ ఛ జఝాఞ 8 Þÿ K Ð m ch chh j jh ず × Æ €⁄ 5 ₹ Palatals. ह ಗ K \mathfrak{g} 8 સ 퓌 न ഗ്ര Ø ศ 3 % 5 IJ. 8 0 æ Ø 18 C\$ ಖ × ø G ĸ 9 D Þ ط •Ф ಬ ಗ ರು ಜ :2 နာ X်သွာဆ RI Ng છ ю Ġ M ß 图 g_h ष श्र त B ੜ Þ Gutturals. M ਰ 买 kh g कित्व 듁 ಗ = 8 PLS ۲ ₹ ದ = 3 ₩ Ø टड ກ 7 7 E Œ æ চ 15 16 × þ m 56 ٠Ŋ 14 16 91 17 18 19 21 3

Figure 4: Specimens of Printed Sindhi and Multani Landa (from Taylor 1883: 338-339).

Marwari Alphabet, with and without matra.

32 Alphabet, with and without matra.

32 Alphabet, with and without matra.

32 Alphabet, with and without matra.

x { y b x 5 6 2 6 4 4 6 8 6 3 3 4

Sridata dhanko subhawa bala mahi khago ghatang Ai puthaj dadhyu Uchare chhuthan jhapang

Sindhi or Khudawadi Alphabel.

Multani er Sarai Alphabet.

Puja salamatí horen ghani bhái tek chand Chhábra nath ráedh gajánikhatripha dáu.

प अ ४ × भ 3 द्र न्या ११ ३ ६ द र प व् इ ध ३ ४ ४ ४ ४ ४ ७ १ ३४ १ १ १ १ १

Countersign of a Sindhi hundi.

My & Contersign of a Sindhi hundi.

My & Contersign of a Sindhi hundi.

My & Contersign of a Sindhi hundi.

nimerup iye panjaih tahinja bina rupiya panjah hura bhare deun.

Figure 5: Comparison of Sindhi and Multani forms of Landa with Marwari (from Prinsep 1837: 352).

Gur-
nī Gur- mukhī
স্তুস্মধ্যমধ্য প্র সুত্ত তেওঁ তুল সুত্ত সূত্র ভাষ বা ক্ষেত্র সূত্র সূত্

Figure 6: A chart showing the scripts of the Sharada family (from Jensen 1969: 366). The 'Khudawadi' and 'Sindhi-Schrift' are shown as forms of 'Landa', while 'Multani' is classified separately. Here, the 'Landa' scripts refer to those used in Sindh; the 'Multani' represents the Punjabi style.

SINDH- UND MULTANSCHRIFT.

Sin	ıdh	Mu	ltan	Sin	ıdh	Mul	tan	Sir	ıdh	Mul	tan
Zeichen	Wert	Zeichen	Wert	Zeichen	Wert	Zeichen	Wert	Zeichen	Wert	Zeichen	Wert
m	a	m 6	a	13 (1)	'na, ńa ţa			<u>ት</u> ንን	pha ba	ુ ખ ઇ	pha ba
(3)	u ka	(e) 2	u ka	મું છ	țha da	<u>ر</u> ا	da.	শ	bha ma	ฑ	ma
3	kha	J. J.	kha	")}	ņa	υ 3	ņa ta	弘 2	ya	ล	ya
19	ga gha	10	¦ga. 	9 4	ta tha	26	tha	2	ra la	४	ra la
૪ હ	tša tšha	8	tša tšha	6	d a dha	ک ان	da dha) 14	va sa	8	va sa
કો જ	dža džha	31	dža	K	na pa	3	na pa	3	ha tra	5	ha tra

Die vorstehenden Schriften sind in doppelter Art beachtenswert, erstens weil sie in gleicher Weise wie die semitischen Schriften die Vokale in der Mitte der Wörter nicht schreiben, z. B. Sindhisch 9331 tuhidžo, zweitens weil ihre Zeichen sich an die semitischen Schriften anlehnen, anderseits sich in der Devanagarischrift vorfinden, wenn diese von der Paliform abweicht; so hat 3 dieselbe Bedeutung auf Pehlewi-Münzen, 3 entspricht dem 3 im Aramäischen, 19 erinnert an die phönikische Form 📙 \chi, '4 an das phönikische 4 8. Den von den Inschriftformen abweichenden Devanagarizeichen क ka entspricht Multan 2, dem E kha (Inschrift 1) entspricht Sindh 19 gha, π kann ebensowohl von der Inschrift Ω , wie von Sindh It ga abstammen, dem 🕏 tšha entspricht Sindh 🍪 tšha, dagegen Inschrist do tšha dem Devanagari 5 la, Devanagari W hat seine Analogie nur in Sindh W (dagegen Inschrift I na), ebenso I Sindh Y (Inschrift L), I p, Sindh 4 (Inschrift 11).

Die auffallenden Abweichungen der beiden Schriften von Sindh und Multan beweisen, dass von einer einfachen Entlehnung keine Rede sein kann, denn wir finden Sindh & tša als Multan & ra, Sindh \(\mathcal{4}\) tha als Multan \(\mathcal{4}\) tha in Übereinstimmung mit Sindh \(\mathcal{5}\) tša.

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

Figure 7: A comparison of standard forms of Landa as found in Sindh and Multan (from Faulmann 1880: 121).

121

Gurmukhi.	Landa	Transliteration.	Gurmukhi.	Laņdā.	Transliteratio
M	س	a ('āiṛā')	3	3	ḍa
प्र	6	i ('iṛī')	ર	૨	dha
8	6	u (' ūrā ')	ક	٤	ņa
G	6	ō	3	3	ta
म	う	sa	B	a	tha
J .	5	ha	9	Y	da
ಷ.	a	ka	प	9	dho
A	לל	kha	ろ	٨	no
ח	16	ga	ч	ч	pa
વ્ય	4	gha	ठ	6	phu
হ	ል	'nα	В	<u>z</u> ,	ba
8	2	cha	ਭ	3	bha
EQ	40	chha	મ	76	ma
\$	コ	ja	ય	21	ya
द	×	jha	ठ)	ra
ટ્	<i>\</i>	ña	ਲ	ത	la
5	4	ţa.	3	2	va
3	68	tha	3	3	ra

Figure 8: Form of Landa used to write the Lahnda language of Punjab (from Grierson 1919: 248).

		MÜLTÄNİ O	P MULTAN.		311
	Lands	Lands of Multan.		Lap ds.	Lands of Multan
a ('āiŗā')	اس	m	фa	3	8
i (' iŗi ')	6	ફ	dha ⁴	ર	X
u ('ūŗā')	6	6	# a	ک	ų
•	لد	m	ta	3	3
ð	6	6	tha	य	ज
8a	ゝ	お	da	Y	य
k a	- 5	5	dla	9	ᅜ
ka	વ	P	ne	Α.	η
kha	か	y	pa	4	4
ga	81	െ	pha	6	\$
gka	41	щ	ba	5	ઘ
Aa	ょ	•••	bha	3	h
cha	2	8	#IG	200	ਮ
chka	40	8	ya	v	• • •
je	73	73	re	۵	>
jka	7	ਜ	la	മാ	X
กิด	K	3	va	4	ε
ţa	6	C	ŗa	3	9
‡ha	88	C	Ţha	• • •	59

Figure 9: Form of Landa used to write the Multani (Siraiki) language of Punjab (from Grierson 1919: 248).

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bgri	13	Knaki							
E jane	1111	Dogri	6	4	P:	A	3	B	X
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Figure 10: Chart comparing different forms of Landa used in Punjab (from Leitner 1882: App. VII, Part A, 6).

The Alphabet.

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Reman characters.	Dēvanāgarī.	Khudāwāģī.•	Shikarpurt	Sakkar.	Luhanas.	Blațiac.	La _r ti.	Wangal.	Rajjat.	Khwējās.	Thatts.	Haidarābād.	Sowhani Bhabhirae.	Southern Lahyde.
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The Khudawadi is the character used at Haidarabad and by most of the respectable merchants throughout the country. That of the Shikarpur and Sakkar merchants differs but little from it.

Figure 11: Chart showing the different forms of Landa used in Sindh (from Grierson 1919: 15). The final column shows a Punjabi form. Adapted by Grierson from Stack (1849: 3–8). Chart continued in Figure 12.

[†] These are, however, never written in commencing a word. In lieu of them Mi is used.

The Alphabet.

fers.					Тнат	ŢĀI.		·			MAX	Mons.	hirts.	ndji.
Roman characters.	Dēvanāgarī.	Khudā wādī.	Shikarpari.	Sakkar.	Lahsnis.	Bhația.	Lapsi	Wahgal	Rajjet.	Khwejie.	Thatts.	Haidarabad.	Sewhâņī Bhábhirts.	Southern Lahnda.
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jha	झ	9,31	م	छा	ス	2	21	n	372	3	1	1	ಣ	31 મ
ña	ञ	2:3:	ત્ર	n	m	en.	200	٩:	2.0	2:	3:	3:	ெ	3:
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Figure 12: Chart showing the different forms of Landa used in Sindh (from Grierson 1919: 16). The final column shows a Punjabi form. Continued from Figure 11.

The Alphabet.

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s. He					Тнат	ĮŢĀI.					MATI	KONS.	irās.	槽
Roman character.s.	Dēvanāgarī	Khudawādī.	Shikarparî.	Sakkar.	Luhānās.	Bhațiss.	Laraī.	Wangal.	Rājjāī.	Khwajas.	Țhațța.	Haidarabad.	Sewhāņī Bhābhirās.	Southern Lahnds.
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ma	म	'n	n	n	B	က	n	η	3	J.	'n	3	7	N
ya	य	r.	37	31	75	か	21	·m	31	カ	a	^	6	Œ
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eha	ष	١٢	امر	ių	m	٠٠٠	14	w	14	المم	1,2	17	m	3
.	स	14	14	14	m	12	١٧	W	14	۱۳	14	17	m	32
ha	ह	F	ろ	7	٤٦	٤٦	ゝ	ح	२	3	2	3	2	5
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Figure 13: Chart showing the different forms of Landa used in Sindh (from Grierson 1919: 17). The final column shows a Punjabi form. Continued from Figure 12.

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Figure 14: Comparison of Landa with other Indic scripts (from Mule 1974: 160-162).