

Universal Multiple-Octet Coded Character Set
International Organization for Standardization
Organisation internationale de normalisation
Международная организация по стандартизации

Doc Type: Working Group Document
Title: Revised proposal to encode the Saurashtra script in the UCS
Source: Jeyakumar Chinnakkonda Krishnamoorthy and Michael Everson
Status: Expert Contribution
Date: 2003-08-13

A. Administrative

1. Title

Revised proposal to encode the Saurashtra script in the UCS.

2. Requester's name

Jeyakumar Chinnakkonda Krishnamoorthy and Michael Everson.

3. Requester type (Member body/Liaison/Individual contribution)

Individual contribution.

4. Submission date

2003-08-13

5. Requester's reference (if applicable)

6. Choose one of the following:

6a. This is a complete proposal

Yes.

6b. More information will be provided later

No.

B. Technical -- General

1. Choose one of the following:

1a. This proposal is for a new script (set of characters)

Yes.

Proposed name of script

Saurashtra.

1b. The proposal is for addition of character(s) to an existing block

No.

1b. Name of the existing block

2. Number of characters in proposal

79.

3. Proposed category (see section II, Character Categories)

Category A.

4a. Proposed Level of Implementation (1, 2 or 3) (see clause 14, ISO/IEC 10646-1: 2000)

Level 2.

4b. Is a rationale provided for the choice?

Yes.

4c. If YES, reference

Brahmic script with vowel signs.

5a. Is a repertoire including character names provided?

Yes.

5b. If YES, are the names in accordance with the character naming guidelines in Annex L of ISO/IEC 10646-1: 2000?

Yes.

5c. Are the character shapes attached in a legible form suitable for review?

Yes.

6a. Who will provide the appropriate computerized font (ordered preference: True Type, or PostScript format) for publishing the standard?

Jeyakumar C. K. (www.palkar.org) & Michael Everson (Everson Typography). TrueType.

6b. If available now, identify source(s) for the font (include address, e-mail, ftp-site, etc.) and indicate the tools used:

Jeyakumar C. K. (www.palkar.org) & Michael Everson (Everson Typography). Fontographer.

7a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided?

Yes (see below).

7b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached?

Yes.

8. 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)?

No.

9. Submitters are invited to provide any additional information about Properties of the proposed Character(s) or Script that will assist in correct understanding of and correct linguistic processing of the proposed character(s) or script. Examples of such properties are: Casing information, Numeric information, Currency information, Display behaviour information such as line breaks, widths etc., Combining behaviour, Spacing behaviour, Directional behaviour, Default Collation behaviour, relevance in Mark Up contexts, Compatibility equivalence and other Unicode normalization related information. See the Unicode standard at <http://www.unicode.org> for such information on other scripts. Also see Unicode Character Database <http://www.unicode.org/Public/UNIDATA/UnicodeCharacterDatabase.html> and associated Unicode Technical Reports for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.

See below for ordering and shaping behaviour.

C. Technical -- Justification

1. Has this proposal for addition of character(s) been submitted before? If YES, explain.

No.

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

Yes.

2b. If YES, with whom?

Mr Kubendiran, editor of *மீளும் மீளும்* *Bhāṣābhīmāni*.

2c. 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?

See below.

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

Rare.

4b. Reference

See below.

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

Yes.

5b. If YES, where?

In Tamil Nadu, Andhra Pradesh, Gujarat states of India. A monthly magazine called *Bhāṣābhīmāni* is published in Madurai, India.

6a. After giving due considerations to the principles in Principles and Procedures document (a WG 2 standing document) must the proposed characters be entirely in the BMP?

Yes.

6b. If YES, is a rationale provided?

Yes.

6c. If YES, reference

Accordance with the Roadmap. The final column shown in the chart should not necessarily be reserved.

7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?

Yes.

8a. Can any of the proposed characters be considered a presentation form of an existing character or character sequence?

No.

8b. If YES, is a rationale for its inclusion provided?

8c. If YES, reference

9a. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters?

No.

9b. If YES, is a rationale for its inclusion provided?

9c. If YES, reference

10a. Can any of the proposed character(s) be considered to be similar (in appearance or function) to an existing character?

No. There are superficial resemblances with related scripts, but Saurashtra is a unique script.

10b. If YES, is a rationale for its inclusion provided?

10c. If YES, reference

11a. Does the proposal include use of combining characters and/or use of composite sequences (see clauses 4.12 and 4.14 in ISO/IEC 10646-1: 2000)?

Yes.

11b. If YES, is a rationale for such use provided?

No.

11c. If YES, reference

Brahmic vowel signs.

12a. Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?

No.

12b. If YES, reference

13a. Does the proposal contain characters with any special properties such as control function or similar semantics?

No.

13b. If YES, describe in detail (include attachment if necessary)

14a. Does the proposal contain any Ideographic compatibility character(s)?

No.

14b. If YES, is the equivalent corresponding unified ideographic character(s) identified?

14c. If YES, reference

D. Proposal

Introduction

Saurashtra is an Indo-European language, related to Gujarati and spoken by about 310,000 people (1997 India Missions Association) in southern India, mostly in the area around Madurai, Salem, and Thanjavur cities. The SIL *Ethnologue* describes it as “an Indo-European island surrounded by Dravidian languages”. Since the end of the 19th century the Telugu, Tamil, Devanagari, and Saurashtra scripts have been used to publish books in Saurashtra. At present, the Tamil script is most commonly used to write Saurashtra, augmented with the use of superscript digits and a colon to indicate sounds not available in the Tamil script.

The Saurashtra script is of the Brahmic type; its modern version was developed in the late 1800s. Like Tamil, Saurashtra does not make use of complex consonant clusters, preferring instead to mark the killed vowel with a visible subscript virama. An exception to this is the conjunct ூ *kṣa*, which is formed of KA + VIRAMA + SSA in this encoding, and which is sorted as a unique letter in older dictionaries. Early Saurashtra text makes use of additional conjuncts, which can be handled with the usual Brahmic shaping rules. So although, apart from *kṣa*, the virama is always visible in modern Saurashtra, it is best to encode modern Saurashtra with ZERO WIDTH NON-JOINER making the virama visible, rather than to consider it a general visible mark. This supports both older and newer Saurashtra text. Input methods may make it easy to type both the VIRAMA and the ZWNJ with a single keystroke.

Collating order

The usual Sanskrit ordering applies to Saurashtra: A AA I II U UU RU RUU LU LUU E EE AI O OO AU AM AH 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 SHA SSA SA HA LLA KSSA

Glyph placement

The vowel signs in Saurashtra follow the consonant to which they are applied. The vowels *-i* and *-ī*, however, are typographically joined to the top right corner of their consonant. Examples: **𑀓** *ka* + **𑀓** *-i* = **𑀓** *ki* (not **𑀓**), **𑀓** *ka* + **𑀓** *-ī* = **𑀓** *kī* (not **𑀓**), and **𑀓** *ta* + **𑀓** *-i* = **𑀓** *ti* (not **𑀓**), **𑀓** *ta* + **𑀓** *-ī* = **𑀓** *tī* (not **𑀓**).

Punctuation and digits

In the samples viewed at present, European COMMA, FULL STOP, and QUESTION MARK are used, as well as the Devanagari DANDA and DOUBLE DANDA. Digits have distinctive forms.

Saurashtra UPAKSHARA

A letter **𑀓** called UPAKSHARA is unique to Saurashtra, and does not have an equivalent in the Devanagari, Tamil, or Telugu scripts. It functions like the Tamil *āytam*, in that it is used to modify other letters to represent sounds not found in the basic Brahmic alphabet. In a chart from *Bashabhimāni*, four Saurashtra letters are shown in combination with this unidentified letter, which we transliterate *H* here: **𑀓** *rH*, **𑀓** *lH*, **𑀓** *mH*, **𑀓** *nH*. In this chart, the visible VIRAMA is used after the liquids and nasals and before the UPAKSHARA (and the Tamil letters are shown with the TAMIL SIGN VIRAMA) as reproduced here; but in running text the visible virama is not shown. The related language Marathi also has aspirated liquids and nasal such as these, which are shown as conjuncts with *ha*: **𑀓** *rha*, **𑀓** *lha*, **𑀓** *mha*, **𑀓** *nha*. Saurashtra UPAKSHARA functions as an independent letter, killing the inherent vowel of the letter to which it is applied; it also takes the dependent vowel when used. In the publication *Padārthun*, the words **𑀓** *nHāna* and **𑀓** *nHīna* are transliterated into Tamil-based orthography as **𑀓** *nā:na* and **𑀓** *nī:na*. **𑀓** *mHOR* and **𑀓** *nHannō* are transliterated as **𑀓** *mo:r* and **𑀓** *na:nnō*. The colon-like mark is used also in Tamil transliterations of this letter in *Bhāṣābhimāni*, where **𑀓** *nHittak* is written **𑀓** *nī:ttak*. This colon-like mark is not encoded in the Tamil block, and the exact meaning of either it or the Saurashtra letter is uncertain. Another example of a word written with the UPAKSHARA is **𑀓** *nHīnāv* (note again there is no visible VIRAMA drawn under the first letter). The Tamil transliteration given is **𑀓** *nHīnāv*, apparently with the wrong vowel in the first syllable, and with the (as yet unencoded for Tamil) colon. The Tamil translation given is **𑀓** *vazakkai* ‘bald’. The Hindi word for this is given (in Tamil script!) as **𑀓** *ka³ñjā*, i.e., *gañjā* ‘bald’. In L2/03-256 Daniel Kai has suggested that the aspirates be encoded as digraphs, but this is unnecessary. Often considerable space can be seen between the liquid or nasal and the UPAKSHARA.

Glyph variants

The shape of the vowel signs for *-l* and *-ī* is noteworthy. In one teaching book it appears that full-size glyphs are used, with a tilde beneath marking the long vowel: **𑀓** *kl*, **𑀓** *kī* (compare **𑀓** *kr* and **𑀓** *kṛ*). In earlier sources, however, the glyph for *-l* is reduced, and length is marked with *-ā*; the *Sangudhari* font supports this practice: **𑀓** *kl*, **𑀓** *kī* (compare *Sangudhari* **𑀓** *kr* and **𑀓** *kṛ*).

Implementations

There are a number TrueType implementations of the modern Saurashtra script in circulation on the internet. To date, no computer implementation of the older version of the script has been created. Previously, a letterpress was used to print *Bhashabimani* magazine. As printing technology advanced, the need for a Saurashtra script font was felt, and was created by local publishers. The *Suresh* font, designed by Suresh Thimma Ramdas, is used to print *Bhāṣābhīmāni.*; a later corrected version of that font is *Kuber*, which is used here. (The name *Kuber* is derived from Kubendiran, the name of the editor of this magazine.)

References

Norihiko Uchida, *Language of the Saurashtrians in Tirupati*. (In Latin script.)

Norihiko Uchida. *Saurashtra-English dictionary*. ISBN 3447030550. (In Latin script.)

(Uchida is a Japanese scholar who went to Madurai to research Saurashtra. He did his research at Madurai Kamarajar University. The local language in Madurai is Tamil; in the course of his research, he learned Saurashtra well and is said to speak Saurashtra as well as a native Saurashtrian.)

சுப்ரமணியன், ஸ்ரீ தாடா. 2000. *ஸவ்ராஷ்ட்ர பாத² மாலொ*.
மதுரை: ப்ரியா பதப்பகம் ப்ரியா டெக்னிகல் இன்ஸ்டிடியூட். [Śrī Tāṭā.
Cupramaniyan. 2000. *Savrāṣṭra pātha mālo = Savrāṣṭra pāṭ²a mālo*. Madurai: Priyā
Patappakam Priyā Teṅṅikal Inṣṭīyūṭ]

ஸவ்ராஷ்ட்ர பாத² மாலொ *Bhāṣābhīmāni*.

Unicode Character Properties

Rick McGowan provided the following text in L2/03-225.

The Saurashtra characters have properties similar to Devanagari and the other Indic scripts. Since Saurashtra uses no truly non-spacing marks, all of the combining classes are zero, with the exception of the virama. All of the letters are in the Letter other category, and have strong left-to-right directionality. The vowel signs all follow the consonants with which they are associated, and therefore are combining class zero as well, analogous to the Devanagari model. The virama has the same combining class (9) as other virama characters. The digits likewise are analogous to the Devanagari and other digits, with the same properties, including decimal digit values. The table below shows all of the properties defined in the UnicodeData.txt file.

```
AB00;SAURASHTRA SIGN ANUSVARA;Mc;0;L;;;;N;;;;;
AB01;SAURASHTRA SIGN VISARGA;Mc;0;L;;;;N;;;;;
AB02;SAURASHTRA LETTER A;Lo;0;L;;;;N;;;;;
AB03;SAURASHTRA LETTER AA;Lo;0;L;;;;N;;;;;
AB04;SAURASHTRA LETTER I;Lo;0;L;;;;N;;;;;
AB05;SAURASHTRA LETTER II;Lo;0;L;;;;N;;;;;
AB06;SAURASHTRA LETTER U;Lo;0;L;;;;N;;;;;
AB07;SAURASHTRA LETTER UU;Lo;0;L;;;;N;;;;;
AB08;SAURASHTRA LETTER VOCALIC R;Lo;0;L;;;;N;;;;;
AB09;SAURASHTRA LETTER VOCALIC RR;Lo;0;L;;;;N;;;;;
AB0A;SAURASHTRA LETTER VOCALIC L;Lo;0;L;;;;N;;;;;
AB0B;SAURASHTRA LETTER VOCALIC LL;Lo;0;L;;;;N;;;;;
AB0C;SAURASHTRA LETTER E;Lo;0;L;;;;N;;;;;
AB0D;SAURASHTRA LETTER EE;Lo;0;L;;;;N;;;;;
AB0E;SAURASHTRA LETTER AI;Lo;0;L;;;;N;;;;;
AB0F;SAURASHTRA LETTER O;Lo;0;L;;;;N;;;;;
```

AB10; SAURASHTRA LETTER OO;Lo;0;L;;;;N;;;;;
 AB11; SAURASHTRA LETTER AU;Lo;0;L;;;;N;;;;;
 AB12; SAURASHTRA LETTER KA;Lo;0;L;;;;N;;;;;
 AB13; SAURASHTRA LETTER KHA;Lo;0;L;;;;N;;;;;
 AB14; SAURASHTRA LETTER GA;Lo;0;L;;;;N;;;;;
 AB15; SAURASHTRA LETTER GHA;Lo;0;L;;;;N;;;;;
 AB16; SAURASHTRA LETTER NGA;Lo;0;L;;;;N;;;;;
 AB17; SAURASHTRA LETTER CA;Lo;0;L;;;;N;;;;;
 AB18; SAURASHTRA LETTER CHA;Lo;0;L;;;;N;;;;;
 AB19; SAURASHTRA LETTER JA;Lo;0;L;;;;N;;;;;
 AB1A; SAURASHTRA LETTER JHA;Lo;0;L;;;;N;;;;;
 AB1B; SAURASHTRA LETTER NYA;Lo;0;L;;;;N;;;;;
 AB1C; SAURASHTRA LETTER TTA;Lo;0;L;;;;N;;;;;
 AB1D; SAURASHTRA LETTER TTHA;Lo;0;L;;;;N;;;;;
 AB1E; SAURASHTRA LETTER DDA;Lo;0;L;;;;N;;;;;
 AB1F; SAURASHTRA LETTER DDHA;Lo;0;L;;;;N;;;;;
 AB20; SAURASHTRA LETTER NNA;Lo;0;L;;;;N;;;;;
 AB21; SAURASHTRA LETTER TA;Lo;0;L;;;;N;;;;;
 AB22; SAURASHTRA LETTER THA;Lo;0;L;;;;N;;;;;
 AB23; SAURASHTRA LETTER DA;Lo;0;L;;;;N;;;;;
 AB24; SAURASHTRA LETTER DHA;Lo;0;L;;;;N;;;;;
 AB25; SAURASHTRA LETTER NA;Lo;0;L;;;;N;;;;;
 AB26; SAURASHTRA LETTER PA;Lo;0;L;;;;N;;;;;
 AB27; SAURASHTRA LETTER PHA;Lo;0;L;;;;N;;;;;
 AB28; SAURASHTRA LETTER BA;Lo;0;L;;;;N;;;;;
 AB29; SAURASHTRA LETTER BHA;Lo;0;L;;;;N;;;;;
 AB2A; SAURASHTRA LETTER MA;Lo;0;L;;;;N;;;;;
 AB2B; SAURASHTRA LETTER YA;Lo;0;L;;;;N;;;;;
 AB2C; SAURASHTRA LETTER RA;Lo;0;L;;;;N;;;;;
 AB2D; SAURASHTRA LETTER LA;Lo;0;L;;;;N;;;;;
 AB2E; SAURASHTRA LETTER VA;Lo;0;L;;;;N;;;;;
 AB2F; SAURASHTRA LETTER SHA;Lo;0;L;;;;N;;;;;
 AB30; SAURASHTRA LETTER SSA;Lo;0;L;;;;N;;;;;
 AB31; SAURASHTRA LETTER SA;Lo;0;L;;;;N;;;;;
 AB32; SAURASHTRA LETTER HA;Lo;0;L;;;;N;;;;;
 AB33; SAURASHTRA LETTER LLA;Lo;0;L;;;;N;;;;;
 AB34; SAURASHTRA LETTER UPAKSHARA;Lo;0;L;;;;N;;;;;
 AB35; SAURASHTRA VOWEL SIGN AA;Mc;0;L;;;;N;;;;;
 AB36; SAURASHTRA VOWEL SIGN I;Mc;0;L;;;;N;;;;;
 AB37; SAURASHTRA VOWEL SIGN II;Mc;0;L;;;;N;;;;;
 AB38; SAURASHTRA VOWEL SIGN U;Mc;0;L;;;;N;;;;;
 AB39; SAURASHTRA VOWEL SIGN UU;Mc;0;L;;;;N;;;;;
 AB3A; SAURASHTRA VOWEL SIGN VOCALIC R;Mc;0;L;;;;N;;;;;
 AB3B; SAURASHTRA VOWEL SIGN VOCALIC RR;Mc;0;L;;;;N;;;;;
 AB3C; SAURASHTRA VOWEL SIGN VOCALIC L;Mc;0;L;;;;N;;;;;
 AB3D; SAURASHTRA VOWEL SIGN VOCALIC LL;Mc;0;L;;;;N;;;;;
 AB3E; SAURASHTRA VOWEL SIGN E;Mc;0;L;;;;N;;;;;
 AB3F; SAURASHTRA VOWEL SIGN EE;Mc;0;L;;;;N;;;;;
 AB40; SAURASHTRA VOWEL SIGN AI;Mc;0;L;;;;N;;;;;
 AB41; SAURASHTRA VOWEL SIGN O;Mc;0;L;;;;N;;;;;
 AB42; SAURASHTRA VOWEL SIGN OO;Mc;0;L;;;;N;;;;;
 AB43; SAURASHTRA VOWEL SIGN AU;Mc;0;L;;;;N;;;;;
 AB44; SAURASHTRA SIGN VIRAMA;Mn;9;NSM;;;;N;;;;;
 AB45; SAURASHTRA DIGIT ZERO;Nd;0;L;0;0;0;N;;;;;
 AB47; SAURASHTRA DIGIT ONE;Nd;0;L;1;1;1;N;;;;;
 AB48; SAURASHTRA DIGIT TWO;Nd;0;L;2;2;2;N;;;;;
 AB49; SAURASHTRA DIGIT THREE;Nd;0;L;3;3;3;N;;;;;
 AB4A; SAURASHTRA DIGIT FOUR;Nd;0;L;4;4;4;N;;;;;
 AB4B; SAURASHTRA DIGIT FIVE;Nd;0;L;5;5;5;N;;;;;
 AB4C; SAURASHTRA DIGIT SIX;Nd;0;L;6;6;6;N;;;;;
 AB4D; SAURASHTRA DIGIT SEVEN;Nd;0;L;7;7;7;N;;;;;
 AB4E; SAURASHTRA DIGIT EIGHT;Nd;0;L;8;8;8;N;;;;;
 AB4F; SAURASHTRA DIGIT NINE;Nd;0;L;9;9;9;N;;;;;

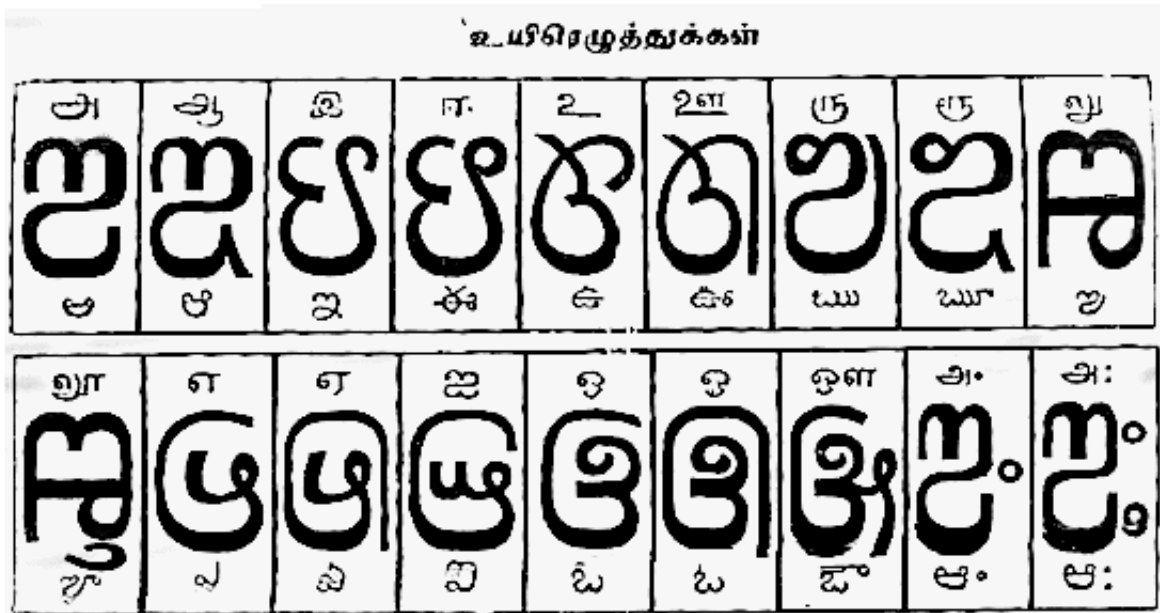


Figure 1. Saurashtra vowels, with equivalents in Tamil and Telugu scripts.

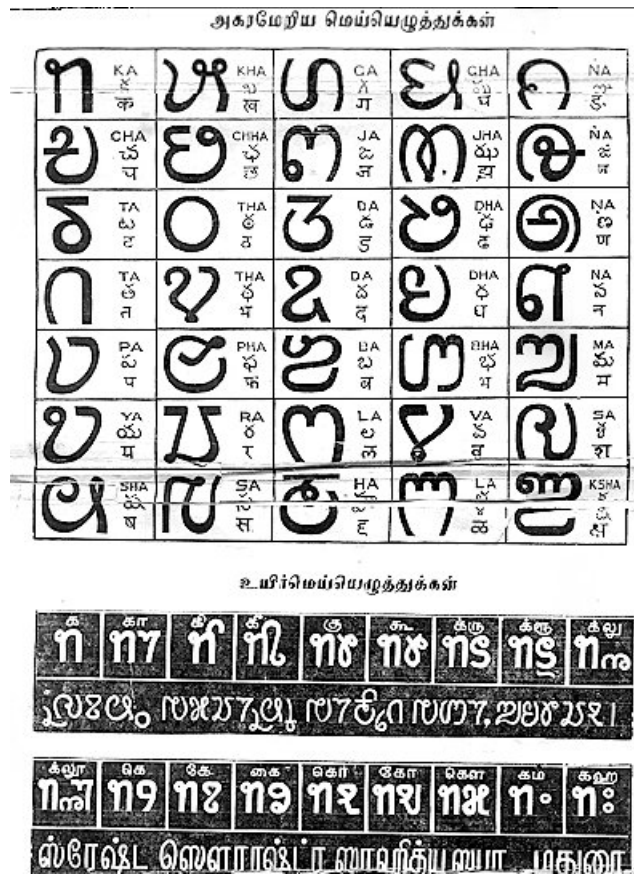


Figure 2. The text in the bottom half of this figure is given in Saurashtra and Tamil script; the Saurashtra appears to be in an early form of the script as it shows conjunct consonants. It is rendered here with modern orthography and transliteration:

ஸ்ரேஷ்ட ஸௌராஷ்டிர ஸாஹித்ய ஸபா, மதுரை
 śreṣṭha saurāṣṭra sāhitya sabhā, machuro |
 ஸ்ரேஷ்ட ஸௌராஷ்டிர ஸாஹித்ய ஸபா, மதுரை
 śreṣṭha saurāṣṭra sāhītya sapā, maturai

ஸௌராஷ்டிர லிபிநு
அஙுநு

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| அ | ஆ | இ | ஈ | உ | ஊ | ஊ | ஊ | ஊ |
| அ | ஆ | இ | ஈ | உ | ஊ | ஊ | - | - |
| ஊ | ஊ | ஊ | ஊ | ஊ | ஊ | ஊ | ஊ | ஊ |
| - | - | ஊ | ஊ | - | ஊ | ஊ | ஊ | ஊ |

ஓபநு

| | | | | |
|---------------------|---------------------|---------------------|---------------------|---|
| க ¹ க | க ² க | க ³ க | க ⁴ க | ங |
| க ¹ க | க ² க | க ³ க | க ⁴ க | ங |
| க ¹ க | க ² க | க ³ க | க ⁴ க | ங |
| க ¹ க | க ² க | க ³ க | க ⁴ க | ங |
| க ¹ க | க ² க | க ³ க | க ⁴ க | ங |
| க ¹ க | க ² க | க ³ க | க ⁴ க | ங |
| க ¹ க | க ² க | க ³ க | க ⁴ க | ங |
| க ¹ க | க ² க | க ³ க | க ⁴ க | ங |
| க ¹ க | க ² க | க ³ க | க ⁴ க | ங |
| க ¹ க | க ² க | க ³ க | க ⁴ க | ங |

Figure 3. Saurashtra vowels, with equivalents in Tamil and Devanagari scripts.

தநுநு

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| க | க | க | க | க | க | க | க | க | க |
| க | க | க | க | க | க | க | க | க | க |
| க | க | க | க | க | க | க | க | க | க |
| க | க | க | க | க | க | க | க | க | க |
| க | க | க | க | க | க | க | க | க | க |
| க | க | க | க | க | க | க | க | க | க |
| க | க | க | க | க | க | க | க | க | க |
| க | க | க | க | க | க | க | க | க | க |
| க | க | க | க | க | க | க | க | க | க |
| க | க | க | க | க | க | க | க | க | க |

Handwritten text in Saurashtra script, likely a religious or philosophical pamphlet. The text is dense and includes a signature at the bottom: 'நாமுயர் சீலசபா, (மரபிள்)மஃ.உ. மதுரையர்'.

Figure 4. Handwritten pamphlet showing the UPAKSHARA character. The word is உபகக்ஷர calarhiya.

Figure 5. Saurashtra vowels, with equivalents in Tamil. The UPAKSHARA character is shown in combination with killed consonants, indicated with the arrow.

ரோமன் எழுத்து - ஸௌராஷ்டிர மொழி
- ஜடபாலி

ரோமன் (ஆங்கில) எழுத்துகளைக் கொண்டு ஸௌராஷ்டிர மொழியை எழுதப் பயன்படுத்தும் முறை. வெளிநாடுகளில் வாழும் ஸௌராஷ்டிரர்கள் இம் முறையினைப் பயன்படுத்தி தம் உறவினர்களுக்கும் நண்பர்களுக்கும் கடிதம் மற்றும் E-mailகளை அனுப்பலாம். ஏன், இங்குள்ளவர்களும் வயது முதிர்ந்த - புது வகை வரி வடிவத்தினைக் கற்றுக் கொள்ள முடியாது என்று நம்புவர்கள் - இதனைப் பயன்படுத்தலாமே.

VOWELS - உயிரெழுத்துகள்

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ஐ | ஐ | ஐ | ஐ | ஐ | ஐ | ஐ | ஐ | ஐ | ஐ |
| அ | ஆ | இ | ஈ | உ | ஊ | எ | ஏ | ஓ | ஔ |
| A | Ā | I | Ī | U | Ū | E | Ē | O | Ō |

CONSONANTS - மெய்யெழுத்துகள்

| | | | | | | | | | |
|----|----|---|----|-----|------|------|------|------|----|
| க | க | க | க | ங் | ச | ச | ஜ | ஜ | ஞ |
| K | Kh | G | Gh | Ng | C | Ch | J | Jh | Ņg |
| த | த | த | த | ண் | த் | த் | த் | த் | ந் |
| T | Th | D | Dh | Ṇ | T | Th | D | Dh | N |
| ப | ப | ப | ப | ம் | ய் | ர் | ல் | வ் | ஸ் |
| P | Ph | B | Bh | M | Y | R | L | V | S |
| ஷ | ஸ | ஹ | ள் | க்ஷ | ர்ஹ் | ல்ஹ் | ம்ஹ் | ந்ஹ் | |
| Sh | S | H | L | Ksh | Rh | Lh | Mh | Nh | |

CONSONANT ADDED VOWELS - உயிர் மெய்யெழுத்துகள்

| | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|----|
| க | கா | கி | கீ | கு | கூ | கெ | கே | கொ | கோ |
| KA | KĀ | KI | KĪ | KU | KŪ | KE | KĒ | KO | KŌ |

EXAMPLES - உதாரணங்கள்

| | |
|---|---|
| <p>பாஷாபிமாணி BhĀShĀBhīMĀṆī</p> <p>ஸௌராஷ்டிர மணி SAVRĀShĪTRA MAṆī</p> | <p>இயெ அநுசரி அம்தெநு லேகுந் லிக்குவொ IYE ANUCARI AMTENU LĒKUN LIKKUVO</p> <p>ஒண்டெதிம் சிக்குல்டுவாயி OṆṬEDIM SIKKULḌUVĀYī</p> |
|---|---|

Row AB: SAURASHTRA

| | AB00 | AB01 | AB02 | AB03 | AB04 | AB05 |
|---|------|------|------|------|------|------|
| 0 | ◌̇ | ଐ | ଐ | ଐ | ଐ | |
| 1 | ◌̈ | ଐ | ଐ | ଐ | ଐ | |
| 2 | ଐ | ଐ | ଐ | ଐ | ଐ | |
| 3 | ଐ | ଐ | ଐ | ଐ | ଐ | |
| 4 | ଐ | ଐ | ଐ | ଐ | ଐ | |
| 5 | ଐ | ଐ | ଐ | ଐ | | |
| 6 | ଐ | ଐ | ଐ | ଐ | ଐ | |
| 7 | ଐ | ଐ | ଐ | ଐ | ଐ | |
| 8 | ଐ | ଐ | ଐ | ଐ | ଐ | |
| 9 | ଐ | ଐ | ଐ | ଐ | ଐ | |
| A | ଐ | ଐ | ଐ | ଐ | ଐ | |
| B | ଐ | ଐ | ଐ | ଐ | ଐ | |
| C | ଐ | ଐ | ଐ | ଐ | ଐ | |
| D | ଐ | ଐ | ଐ | ଐ | ଐ | |
| E | ଐ | ଐ | ଐ | ଐ | ଐ | |
| F | ଐ | ଐ | ଐ | ଐ | ଐ | |

G = 00
P = 01

Row AB: SAURASHTRA

| hex | Name |
|------|-----------------------------------|
| AB00 | SAURASHTRA SIGN ANUSVARA |
| AB01 | SAURASHTRA SIGN VISARGA |
| AB02 | SAURASHTRA LETTER A |
| AB03 | SAURASHTRA LETTER AA |
| AB04 | SAURASHTRA LETTER I |
| AB05 | SAURASHTRA LETTER II |
| AB06 | SAURASHTRA LETTER U |
| AB07 | SAURASHTRA LETTER UU |
| AB08 | SAURASHTRA LETTER VOCALIC R |
| AB09 | SAURASHTRA LETTER VOCALIC RR |
| AB0A | SAURASHTRA LETTER VOCALIC L |
| A0BB | SAURASHTRA LETTER VOCALIC LL |
| AB0C | SAURASHTRA LETTER E |
| AB0D | SAURASHTRA LETTER EE |
| AB0E | SAURASHTRA LETTER AI |
| AB0F | SAURASHTRA LETTER O |
| AB10 | SAURASHTRA LETTER OO |
| AB11 | SAURASHTRA LETTER AU |
| AB12 | SAURASHTRA LETTER KA |
| AB13 | SAURASHTRA LETTER KHA |
| AB14 | SAURASHTRA LETTER GA |
| AB15 | SAURASHTRA LETTER GHA |
| AB16 | SAURASHTRA LETTER NGA |
| AB17 | SAURASHTRA LETTER CA |
| AB18 | SAURASHTRA LETTER CHA |
| AB19 | SAURASHTRA LETTER JA |
| AB1A | SAURASHTRA LETTER JHA |
| AB1B | SAURASHTRA LETTER NYA |
| AB1C | SAURASHTRA LETTER TTA |
| AB1D | SAURASHTRA LETTER TTHA |
| AB1E | SAURASHTRA LETTER DDA |
| AB1F | SAURASHTRA LETTER DDHA |
| AB20 | SAURASHTRA LETTER NNA |
| AB21 | SAURASHTRA LETTER TA |
| AB22 | SAURASHTRA LETTER THA |
| AB23 | SAURASHTRA LETTER DA |
| AB24 | SAURASHTRA LETTER DHA |
| AB25 | SAURASHTRA LETTER NA |
| AB26 | SAURASHTRA LETTER PA |
| AB27 | SAURASHTRA LETTER PHA |
| AB28 | SAURASHTRA LETTER BA |
| AB29 | SAURASHTRA LETTER BHA |
| AB2A | SAURASHTRA LETTER MA |
| AB2B | SAURASHTRA LETTER YA |
| AB2C | SAURASHTRA LETTER RA |
| AB2D | SAURASHTRA LETTER LA |
| AB2E | SAURASHTRA LETTER VA |
| AB2F | SAURASHTRA LETTER SHA |
| AB30 | SAURASHTRA LETTER SSA |
| AB31 | SAURASHTRA LETTER SA |
| AB32 | SAURASHTRA LETTER HA |
| AB33 | SAURASHTRA LETTER LLA |
| AB34 | SAURASHTRA LETTER UPAKSHARA |
| AB35 | SAURASHTRA VOWEL SIGN AA |
| AB36 | SAURASHTRA VOWEL SIGN I |
| AB37 | SAURASHTRA VOWEL SIGN II |
| AB38 | SAURASHTRA VOWEL SIGN U |
| AB39 | SAURASHTRA VOWEL SIGN UU |
| AB3A | SAURASHTRA VOWEL SIGN VOCALIC R |
| AB3B | SAURASHTRA VOWEL SIGN VOCALIC RR |
| AB3C | SAURASHTRA VOWEL SIGN VOCALIC L |
| AB3D | SAURASHTRA VOWEL SIGN VOCALIC LL |
| AB3E | SAURASHTRA VOWEL SIGN E |
| AB3F | SAURASHTRA VOWEL SIGN EE |
| AB40 | SAURASHTRA VOWEL SIGN AI |
| AB41 | SAURASHTRA VOWEL SIGN O |
| AB42 | SAURASHTRA VOWEL SIGN OO |
| AB43 | SAURASHTRA VOWEL SIGN AU |
| AB44 | SAURASHTRA SIGN VIRAMA |
| AB45 | (This position shall not be used) |
| AB46 | SAURASHTRA DIGIT ZERO |
| AB47 | SAURASHTRA DIGIT ONE |
| AB48 | SAURASHTRA DIGIT TWO |
| AB49 | SAURASHTRA DIGIT THREE |
| AB4A | SAURASHTRA DIGIT FOUR |
| AB4B | SAURASHTRA DIGIT FIVE |
| AB4C | SAURASHTRA DIGIT SIX |
| AB4D | SAURASHTRA DIGIT SEVEN |
| AB4E | SAURASHTRA DIGIT EIGHT |
| AB4F | SAURASHTRA DIGIT NINE |
| AB50 | (This position shall not be used) |
| AB51 | (This position shall not be used) |
| AB52 | (This position shall not be used) |
| AB53 | (This position shall not be used) |
| AB54 | (This position shall not be used) |
| AB55 | (This position shall not be used) |
| AB56 | (This position shall not be used) |
| AB57 | (This position shall not be used) |
| AB58 | (This position shall not be used) |

| hex | Name |
|------|-----------------------------------|
| AB59 | (This position shall not be used) |
| AB5A | (This position shall not be used) |
| AB5B | (This position shall not be used) |
| AB5C | (This position shall not be used) |
| AB5D | (This position shall not be used) |
| AB5E | (This position shall not be used) |
| AB5F | (This position shall not be used) |