Proposal to encode Dives Akuru in Unicode

Anshuman Pandey
pandey@umich.edu

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1 Introduction

1.1 Proposal history

This is a proposal to encode ‘Dives Akuru’ in Unicode. It supersedes the following documents:

- L2/09-191: Preliminary Proposal to Encode the Dhivehi Script in ISO/IEC 10646
- L2/10-213: Preliminary Proposal to Encode Dhives Akuru in ISO/IEC 10646
- L2/17-292: Proposal to encode Dives Akuru in Unicode

This document is a revision of L2/17-292 and contains the following changes:

- Change of spelling for the script identifier from ‘Dhives Akuru’ to ‘Dives Akuru’
- Revised glyphs for the letters and signs for U and UU
- Removal of the letter AI, and the letter and vowel sign for AU
- Reservation of code points for letters and signs for *EE, *AI, *OO, and *AU
- Revised analysis of the PREFIXED NASAL SIGN
- Removal of the gemination sign and explanation of gemination in secondary sources
- Addition of new characters for punctuation
- Expanded descriptions for proposed characters and additional specimens of usage

It incorporates comments provided by the UTC Script Ad Hoc Committee in:

- L2/17-384: Recommendations to UTC #153 October 2017 on Script Proposals

This proposal has been reviewed by the following experts:

- Jost Gippert (Goethe-Universität Frankfurt am Main)

1.2 Background

The 'Dives Akuru' was used from the 9th–20th centuries for recording Dhivehi (ISO 639-3: div), an Insular Indo-Aryan language, which is also known as 'Maldivian'. It is known indigenously as *dives akuru* and *divehi akuru*, both of which have the meaning of "islanders' letters". The script is written from left to right and is alpha-syllabic in structure. It is descended from Brahmi through Grantha, and it is related most closely to the medieval form of the Sinhala script (Fritz 2002: 6), and shares characteristics with the Tigalari (Tulu) script (Geiger 1919: 151). A comparison of Dives Akuru and Sinhala is given in figures 73–74, and a comparison with other scripts is shown in figure 76.

The earliest epigraphical record from Maldives is a coral stone block from the island of Landū that is dated to the 6th–8th centuries. Its inscription, however, is in a form of Grantha. A distinctive Dives Akuru first appears on two statues unearthed on Māle (see fig. 24–25). These statues (IC 009, IC 010) exhibit Vajrayana Buddhist inscriptions and features, and have been dated to the 9th–10th centuries (Gippert 2014: 112). Very few ancient Maldivian records have been preserved apart from these, as numerous objects were destroyed deliberately during the conversion of Maldives from Buddhism to Islam in the 12th century.

As a result, a consistent palaeographical record for Dives Akuru begins in the 12th century. From this time Dives Akuru was used as an official script by Maldivian rulers, starting with copper plate grants, known as *lōmāfānu*, which were issued for the building and maintenance of mosques. The earliest records are the *Gāmu Lōmāfānu* and *Isdū Lōmāfānu*, which were issued in 1194 during the reign of the king Gaganāditya. This ruler issued another in 1195, which is known as the *Daṁbidū Lōmāfānu* (see fig. 26). A fourth plate, the *Kudahuvādu Lōmāfānu*, is dated to 1237–8 and was produced during the reign of the queen Rāarādesvara. The script began to evolve during the 14th century, as is apparent from the style used for the *Boḍugalu Miskit Lōmāfānu*, issued during the reign of queen Rādaābarnna in 1357. A total of eight *lōmāfānu* have been reported, although three are no longer preserved at present. They are identified by scholars using the names of the islands upon which they were found, and are numbered as L1 through L8. Specimens of L3 and L6–L8 are given in fig. 26, 27–29.

By the 16th century, usage of *lōmāfānu* had given way to paper documents known as *fatkoḷu*. Some records were inscribed on wooden boards and are known as *fīlā fatkoḷu*. These official decrees are in a form of Dives Akuru that is more calligraphic and stylized than the type used on *lōmāfānu*. The earliest preserved paper document is the *Koḷufuśi Faṭkoḷu*, issued during the time of Muhammad Bodu Takurufanu (1573–1585). Several *fatkoḷu* were produced over the next two centuries, the latest being the *Havoḍḍā Fatkoḷu* from the second half of the 18th century. Thirteen *fatkoḷu* have been made accessible for scholarly investigation; they are identified as F1–F13 (see specimens of F1 and F6 in fig. 30 and 31).

The script was also used for writing dynastic chronicles, known as *rādavaḷi*, in the late 18th century. Of the three extant chronicles, two are in the Thaana script and one is in Dives Akuru. Other records include stone epitaphs from the 16th–18th century; wood engravings in the Hukuru Miskit and Galoḷu Bau Miskit on Māle; and inscribed pottery, such as a lacquer jar from Tuḷādū (see fig. 33). The first modern book written in the script, a work by Bodufenvalhuge Sidi titled *Divehi Akuru*, was commissioned by the prime minister Ibrahim Nasir and published by the government of Maldives in 1959 (see fig. 34–46).

When the early *lōmāfānu* were rediscovered by European colonial officials in the 19th century, it became apparent that the script and language on these records differed from the prevailing forms of *dives akuru* and the Dhivehi language. These plates were unintelligible to contemporary Maldivians. The British scholar H. C. P. Bell coined the term '*evēla akuru*', literally the "script of that time" in Dhivehi, for classifying the older style (1919: 149). He used the term '*dives akuru*', "islanders' letters"', for the contemporary style.

Although they were neologisms, the terms are convenient for periodizing Maldivian palaeography: the style used during the 12th–14th cnturies is '*evēla akuru*', and that used after the 14th century is '*dives akuru*' or '*divehi akuru*' proper.

Dives Akuru records exhibit linguistic and palaeographic diversity. The early *lōmāfānu* contain seals and occasional intralinear text in a script of the Nagari family, which bears some similarity to Nandinagari. Later plates contain Arabic text and script. Several *fatkoḷu* contain a significant amount of Arabic text.

Beginning in the early 18th century, another script began to appear alongside Dives Akuru. This new script, known as *tāna akuru*, or 'Tāna' and 'Thaana', is a right to left script consisting originally of 18 letters (for early scholarship on Thaana see Prinsep 1836: 794; Wilson 1841: 42). These 18 letters appear to be derived from the digits 1–9 of both the Dives Akuru and Arabic scripts (Gippert 2013: 97). From the 1700s until 1870, both Dives Akuru and Thaana were used for official purposes (Naseema 1999: 29). But, by the turn of the 19th century, Thaana had completely replaced Dives Akuru as the regular script for Dhivehi.

Despite the obsolescene of Dives Akuru by the 20th century, individual users and scholars continue to study and use the script. The Royal Asiatic Society of Sri Lanka published translations of the *Isdū Lōmāfānu* (Maniku and Wijayawardhana 1986) and *Daṁbidū Lōmāfānu*. The National Centre for Linguistic and Historical Research (NCLHR) in Māle published *Dhivehi Writing Systems* (1999) by Naseema Mohamed. But, native Maldivian scholarship on Dives Akuru has also declined. New information and studies of Dives Akuru is made possible by the meticulous work on palaeography and epigraphy (see Gippert 2003, 2004, 2013, 2014), Dhivehi language and linguistics (see Fritz 2002), and translations of Maldivian texts (see Romero-Frias 2003, 2012) performed by scholars outside of Maldives.

At present, Dives Akuru is not only extinct, but the very existence of it and its record is threatened. A few months after I first began working on this encoding in 2009, the president of Maldives, Mohammed Nasheed, held a cabinet meeting underwater in scuba gear in October to raise awareness of rising sea levels (*Daily Mail* 2009). But, the ocean is not the only physical threat to the island nation. During the political turmoil in February 2012 criminals burglarized the National Museum and vandalized thirty Buddhist artifacts, some dating back to the 6th century (*New York Times* 2012). The Vajrayana statute IC 009 mentioned at the outset of this section was demolished (Gippert, personal communication, October 2017). It now exists only through photographic records. While material objects cannot be replaced, it is hoped that this proposed Unicode encoding for Dives Akuru may assist in preserving the palaeographical and linguistic heritage of Maldives through digital technologies.

1.3 Overview of sources consulted

The proposed encoding for Dives Akuru is informed foremost by primary sources. Digitized images of these materials were made available to the proposal author courtesy of Jost Gippert and the TITUS (Thesaurus Indogermanischer Text- und Sprachmaterialien) Project. Secondary sources from the 19th century to the present have been used to supplement the primary materials and to expand the repertoire with characters not found in the historical documents. The following materials have been used and are referred to throughout the proposal using the abbreviation in the 'ID' column.

Statuary:

ID	Designation	Issuer	Year
IC 009	—	—	9th c.
IC 010	—	—	9th c.

Copper-plate documents (*lōmāfānu*):

ID	Designation	Issuer	Year
L1	*Gāmu Lōmāfānu*	Gaganāditya	1194
L2	*Isdū Lōmāfānu*	Gaganāditya	1194
L3	*Daṁbidū Lōmāfānu*	Gaganāditya	1195
L4	*Kudahuvādu Lōmāfānu*	Rāarādesvara	1237
L5	*Boḍugalu Miskit Lōmāfānu*	Rādaābarnna	1357
L6	Bell No. 1	unknown	unknown
L7	Bell No. 2	unknown	unknown
L8	Bell No. 3	unknown	unknown

Paper and wood documents (*fatkoḷu*):

ID	Designation	Issuer	Year
F1	*Koḷufuśi Faṭkoḷu*	Muhammad Bodu Takurufanu	1573–1585
F2	*Hasan Pāṭinā Faṭkoḷu*	unspecified	1627
F1058	‘Fatkoḷu of A.H. 1058’	unspecified	1648
F3	*Gan Faṭkoḷu*	Ibrahim Iskander I	1652
F4	*Bā Miskit Faṭkoḷu*	Ibrahim Iskander I	1652
F5	*Gāmu Faṭkoḷu*	Muhammad	1696
F6	*Hannamidu Faṭkoḷu*	Muhammad Imaduddin	1711
F7	*Isseri Faṭkoḷu*	Muzaffar Muhammad Imaduddin II	1711
F8	*Kaňḍūdū Faṭkoḷu*	Ibrahim Iskander II	1721–50
F1153	‘Fatkoḷu of A.H. 1153’	unspecified	1740
F9	*Kuramati Faṭkoḷu*	Ibrahim Iskander II	not given
F10	*Kuḍahuvadū Faṭkoḷu*	Ibrahim Iskander II	not given
F11	*Diamingli Faṭkoḷu*	Ibrahim Iskander II	1751
F12	*Tinadū Faṭkoḷu*	Ibrahim Iskander II	late 18th c.
F13	*Havoḍḍā Fatkoḷu*	unspecified	late 18th c.

Other primary documents:

ID	Author	Title	Year
HMK	Hajji Muhammad Kalegafanu	untitled	1927

Secondary sources:

The following secondary sources have been interpreted as primary sources:

ID	Author	Title	Year
G	Wilhelm Geiger	'Máldivian Linguistic Studies'	1919
S	Bodufenvalhuge Sidi	*Divehi Akuru*	1959
N	Naseema Mohamed	*Divehi Writing Systems*	1999

2 Approach to the encoding

2.1 Script identifier

The identifier 'Dives Akuru' is a compound of *dives* "islander's" + *akuru* "script". The element *dives* is an older attributive form of *divehi*, itself a compound of **divu-vesi* < *dipa-vāsi* < Sanskrit *dvipa-vāsin*, and references 'Maldivian'. The term *akuru* is derived from *akara* < *akhara* < Sanskrit *akṣara*, and has the meaning of 'letter' or 'script'.

The name is spelled variously in English: 'Divehi Akuru', 'Dives Akuru', 'Dhivehi Akuru', 'Dhives Akuru'. The terms 'Dhivehi' and 'Dhives' are variant spellings of 'Divehi' and 'Dives', which are the result of an idiosyncractic romanization scheme used in Maldives in the 1980s. In this system '*dh*' is used for the dental stop and '*d*' for the retroflex stop; the '*h*' does not indicate aspiration as in the conventional transliteration of Brahmi-based scripts. Although an earlier proposal (L2/10-213) referred to the script as 'Dhives Akuru', it has become clear since that time that 'Dives Akuru' and 'Divehi Akuru' are the spellings preferred in both western and Maldivian scholarship (eg. Gippert 2013, 2014; Naseema 1999: 21, see fig. 59; Romero-Frias 2003, see fig. 49–50). 'Dives' is an older attributive form that is no longer used today, but it was grammatically valid when it was coined. 'Dives Akuru' has been selected as it is the well-known name for the script in modern Maldives.

2.2 Unification

The 'Dives Akuru' block provides a unified encoding for *evēla akuru* and *dives akuru*. These two styles are major developmental phases of a single script. While there are some differences in the repertoire, letterforms, and orthography, they have the same basic structure and typology. A single Unicode encoding is practical for representing both styles.

2.3 Character repertoire

Dives Akuru has a nearly complete character repertoire that aligns with the basic Brahmi inventory. The fullest repertoire occurs in *evēla akuru* records. Over time, the repertoire was gradually reduced by the removal of letters that did not correspond to phonemes of the evolving Dhivehi language. The emergence of the Thaana script also resulted in truncation of the repertoire.

The modification of the base repertoire resulted in the displacement of various letters. The greatest change to the repertoire was the dropping of nearly the entire palatal series in *dives akuru*, which resulted from

the transformation of palatal sounds to dentals in Dhivehi. This was followed by the elimination of letters for aspirated consonants, leaving only *kha* and *dha*. The unassigned aspirate letters were, in turn, used as variants for their unaspirated counterparts. Nasal letters were replaced by either the dental *na*, or in the case of clusters, by a generic sign. The trend of assimilation occurred also with sibilants: the palatal *śa* and retroflex *ṣa* were replaced with the dental *sa*.

Unfortunately, there is no *varṇamālā*, or traditional script inventory, in the palaeographical nor any indigenous documentation that describes the changes to the script. The first charts of *divehi akuru* were compiled and published by European scholars in the 19th century, cf. Christopher (in Wilson 1841; see fig. 70), Geiger (1919; fig. 47–48, 71). While these charts provide a glimpse into the script at that time, the provenance of the letterforms is unclear. In many cases the European inventories of *divehi akuru* were conducted from the perspective of Thaana, and the published repertoires focused on comparisons with Thaana. These types of sources, therefore, do not provide a true sense of the original character inventory.

A legitimate and accurate character inventory can only be compiled by analyzing the letters and signs of the extant records. Fortunately, such an effort has been made. The most complete inventory has been offered by Jost Gippert (2013), who analyzed each *akṣara* in the available *lōmāfānu* and *fatkoḷu*. One of his published charts is given in figures 1–2.

The latest published work in Dives Akuru, Sidi's *Divehi Akuru* (1959), represents a Thaana-oriented view of Dives Akuru. It presents a curious case. While the style of writing and the letterforms correspond to those in *fatkoḷu*, the text contains characters that have not been identified in historical sources. For instance, it shows forms of *ya* and *na* that are unattested in the primary sources. Most importantly, the sources upon which Sidi based his work are not specified. His work may be considered as an attempt to inventorize what was known about the script in the 1950s. This attempt, however, was conducted without direct reference to any of the *lōmāfānu* and *fatkoḷu*. Thus, despite its importance in preserving Dives Akuru in the 20th century, its usage for understanding the evolution of the script and, in particular, the character repertoire must be handled with some caution.

The proposed repertoire has been prepared after consulting both primary and secondary sources enumerated in § 1.3. All distinctive characters attested in the available sources have been identified in terms of their palaeographic value in accordance with the character-glyph model used for Brahmi-based scripts in the Unicode Standard. Variant forms are not encoded independently and are to be managed through the selection of fonts. The proposed repertoire enables the complete representation of all extant text in Dives Akuru and is a superset of all particular orthographic styles.

2.4 Representative glyphs

In the absence of a standard for *evēla akuru* or *dives akuru*, the representative glyphs assigned to the proposed characters are normalizations of letterforms used in *lōmāfānu* and *fatkoḷu*. There are several stylistic differences in the scripts used in these two classes of sources, ranging from the shapes of letters and signs to the degree of calligraphy.

In terms of letterforms, the major stylistic tendencies observed in the sources are: hooked vs looped initial strokes, ie. 𑤂 and 𑤃 for *ma*; turned initial strokes, ie. 𑤂 and 𑤆 for *va*; open vs closed strokes, ie. 𑤉 and 𑤈 for *ka*; 𑤍 and 𑤌 for *ta*; lifted terminal strokes, ie. 𑤎 and 𑤏 for *ḍa*. There are also variations in letterforms between *evēla akuru* or *dives akuru*, ie. 𑤃 and 𑤄 for *i*; 𑤎 and 𑤐 for *u*; 𑤅 and 𑤇 for *ra*. There also appear to be idiosyncracies, eg. a 'new' form 𑤁 of 𑤋 *ṇa* borrowed from Thaana; various forms of *za*.

The glyphs used here aim to provide for the distinctive representation and to depict the identity of each Dives Akuru character. The glyphs are not intended to be typographically aesthetic. The display of styles of particular sources may be achieved through custom fonts.

2.5 Character names

Character names are based upon the convention used for Brahmi-based scripts in Unicode. Consonant letters have been assigned names corresponding to their palaeographic values.

In this document, character names in italics refer to transliterations, while names in small capitals refer to proposed Unicode characters, eg. 𑤀 is *ka* and DIVES AKURU LETTER KA. For sake of brevity the script identifier 'DIVES AKURU' and character descriptors, eg. 'LETTER' or 'SIGN', are dropped when refering to proposed characters, eg. DIVES AKURU LETTER KA may be referred to as KA. Characters of other scripts are designated by their full Unicode names.

2.6 Note on variant forms

Variant forms for several consonant letters are used in later documents (see fig. 62–64, 66). In some cases, one consonant is represented using more than one letter. For example, gemination of an unaspirated consonant may be indicated using a conjunct of the letters for the respective unaspirated conjunct and the aspirated counterpart. Secondly, an aspirated letter may be used for the corresponding unaspirated consonant in order to avoid repetitive usage of the unaspirated letter. These practices emerged from the removal of aspirate letters, but the retention of the letters as alternate forms in later styles of the script. All variants are treated as glyphic variants and are to be managed through fonts designed for a specific style used in a source document. In order to manage the usage of multiple letters for a single consonant in late Dives Akuru styles, the respective letters should be used as needed despite the character name, eg. DHA may be used for *da* in addition to DA, etc. Such usage is meaningful only at the graphical level; the underlying character semantics will remain underchanged.

3 Proposed Repetoire

The proposed repertoire contains 69 characters. The code chart and names list follow page 7.

3.1 Vowel letters

Two sets of characters are used for representing independent vowels in the primary materials:

	a	*ā*	*i*	*u*	*e*	*o*
'type 1'	𑤀	𑤁	𑤂	𑤃	𑤄	𑤅
'type 2'	𑤊	𑤊𑤵	𑤊𑤶	𑤊𑤷, 𑤊𑤸	𑤊𑤹	𑤊𑤹𑤵, 𑤊𑤹

The 'type 1' forms are distinctive letters. The 'type 2' forms are CV syllables of 𑤊 *ya* and dependent vowel signs, where *ya* represents the vowel *a* and functions as a carrier. Both types are used interchangably and appear concurrently in several documents (see fig. 3–7). There are no rules that specify the contexts of usage for either set. Therefore, it is necessary to support representation of both types.

The usage of the letter *ya* for representing independent and initial vowels likely resulted from the shift in Old Dhivehi of word-initial *ya* to *da* (Gippert 13: 84–85). The letter retains its function as the consonant *ya*, as evidenced by its occurrence as C_2 in conjuncts, as a base for the nasal consonant sign, and a carrier of the *halanta*. A new letter 𑤋 for *ya* is shown in S (fig. 34), where it is transcribed in Thaana as ށ *ya*, and the 𑤊 as ށ *a*. The letter 𑤋 also occurs in the early 20th century document HMK (see fig. 32).

In addition to the letters shown above, secondary sources show letters for vowels such as *ī*, *ū*, *ē*, and *ō*. These are not attested in the available primary materials. It is possible that they may have been used in documents that have not been preserved, or they may be later developments. As these letters appear in script charts, it is practical to encode those that are distinctive in order to provide the most complee repertoire. Distinctive letters for the Brahmi vocalic *r̥*, *r̥̄*, *l̥*, *l̥̄* are not attested.

The following encoding model enables the complete representation of vowel letters:

1. The 'type 1' set are encoded as independent vowel letters.

2. The letter 𑤊 is encoded as YA and defined as a consonant letter. Maintaining the original palaeographic identity of 𑤊 will enable it to function as a base for combining dependent vowel signs for expressing 'type 2' forms (see § 4.1). It will also permit the letter to participate in conjuncts (see § 4.3.3).

3. The alternate 𑤋 *ya* is encoded as YYA and defined as a consonant.

4. Letters for *ī* and *ū* are encoded as per distinctive attestations in secondary materials.

5. Space has been reserved for letters for *ē*, *ai*, *ō*, and *au*. Distinctive letters for these vowels are not attested in neither the available primary nor secondary materials.

Accordingly, the proposed repertoire contains the following 8 independent vowel letters. The representation of the 'type 2' (*ya*-forms) is described in § 4.1.

Glyph	Character name	Major variants	Latin	Thaana
𑤀	DIVES AKURU LETTER A		*a*	ހ
𑤁	DIVES AKURU LETTER AA		*ā*	ށ
𑤂	DIVES AKURU LETTER I	𑤃	*i*	ނ
𑤄	DIVES AKURU LETTER II	𑤃𑤆	*ī*	ރ
𑤅	DIVES AKURU LETTER U	𑤇	*u*	ބ
𑤈	DIVES AKURU LETTER UU	𑤉, 𑤊	*ū*	ޅ
𑤋	DIVES AKURU LETTER E		*e*	ކ
𑤌	DIVES AKURU LETTER O	𑤋𑤰, 𑤍	*o*	އ

Notes on the proposed vowel letters:

- I The 𑤂 occurs in *fatkoḷu* as the glyphic variant 𑤃 (see fig. 4).

- II The letter II does not occur in primary sources. It is shown in G as 𑤃𑤆, which is a more cursive variant of 𑤃 I used in *fatkoḷu* with the addition of the 𑤆 VOWEL SIGN II. The representative glyph 𑤄 for II is based upon 𑤂 I with a looped final stroke that is reflective of VOWEL SIGN II.

- U The 𑤅 occurs in *fatkoḷu* as 𑤇 (see fig. 5). This form is a glyphic variant that reflects the calligraphic style used in later paper documents.

- UU The letter UU does not occur in primary materials. It is shown as 𑤊 in S and as 𑤉 in G (see fig. 5). G also shows the *ya*-form 𑤋𑤪 produced using the 𑤪 VOWEL SIGN UU. The former two appear to be based upon the later variant 𑤇 of 𑤅 U modified by a curl. In 𑤊 the curl is at the terminal, while in 𑤉 it intersects the primary stroke. As 𑤇 is a rigid form of 𑤅, 𑤊 may be considered a less sinuous version of a hypothetical 𑤈. The 𑤈 has been selected as the representative glyph for UU on account of its congruence with 𑤅 U.

- E The letter 𑤋 has the stylistic variant 𑤌 in some L (see fig. 6). L. In various sources, the origin stroke of 𑤋 is turned or extended at obtuse angles, ie. 𑤋 in S (see fig. 44). N shows 𑤋 as being used for representing the Dhivehi long vowel *ē* (see fig. 57), but such used in unattested in the primary sources.

- O The letter O has the distinctive form 𑤌, which occurs in L and IC (see fig. 7). In later sources it is represented using the *ya*-form 𑤁𑤋𑤰 and the compound 𑤋𑤰 <𑤋 E, 𑤰 VOWEL SIGN AA> (see § 4.1). The secondary sources show some variants. N shows a stylized form of 𑤋𑤰 as well as 𑤁𑤋𑤱 for O (fig. 60). The latter is a *ya*-form written with a calligraphic variant 𑤱 of 𑤰 VOWEL SIGN AA. S shows the form 𑤍 (see fig. 44). It does not occur in other sources, and appears to be a stylized form of 𑤋𑤰 in which the origin stroke of 𑤋 is turned, eg. the variant 𑤋 in S, and its tail is fused with 𑤰, cf. the related form in N. An idiosyncratic and unclear form 𑤎 for O is shown in G, which bears some resemblace to the representative glyph 𑤌 when rotated 90° counter-clockwise.

Notes on vowel letters identified in the secondary materials, which are not proposed for encoding at present.

- *EE Although G and N show letters for the Dhivehi long vowel *ē*, a distinctive letter for this vowel does not occur in the primary materials. The forms in G are identical to the letter 𑤆 and *ya*-form 𑤁𑤆 for *e* (see fig. 6). N gives 𑤆 E as the letter used in Evela Akuru (see fig. 57), and 𑤁𑤆 and 𑤁𑤁𑤆 as used in Dives Akuru (see fig. 60). The 𑤁𑤆 is the *ya*-form also shown for *e*, while 𑤁𑤁𑤆 is the *ya*-form with 𑤁𑤁◌ VOWEL SIGN AI. These forms are found only in N. These may be represented using character sequences (see § 4.1). The inclusion of *ē* by G and N suggests an analysis of Dives Akuru vowels from a Thaana perspective.

- *AI Neither a distinctive letter nor a *ya*-form for the diphthong *ai* occurs in the available primary sources. However, a dependent form 𑤁𑤁◌ is attested and has been proposed for encoding as 𑤁𑤁◌ VOWEL SIGN AI (see § 3.2). Therefore, the 𑤁𑤁𑤆 given by N for *ē* would technically be a *ya*-form for *ai*. A space has been reserved for the letter *ai* in the event that a distinctive form is identified.

- *OO G, S, and N show letters used for representing the Dhivehi long vowel *ō*. However, a distinctive letter for this vowel does not occur in the primary materials, so the provenance of the following letters is unknown. G gives the same form 𑤃 for *o* and *ō*. N shows 𑤁𑤆𑤂 and 𑤆𑤉. These are the conventional *ya*-form of *o* and a stylized form of the compound 𑤆𑤂 for *o* in which the ◌𑤂 VOWEL SIGN AA is written with the calligraphic variant ◌𑤉, eg. 𑤆𑤉. A somewhat distinctive letter 𑤋𑤉 for *ō* occurs in S (see fig. 44). It resembles the S variant 𑤋𑤌 for *o*. It may be analyzed as *o* + the dependent sign for *ā*, where the 𑤋𑤌 *o* is interpreted as a distinctive letter instead of as a stylized rendering of the compound 𑤆𑤂 (and, therefore, at a base level it would be the compound 𑤆𑤂𑤂). The 𑤋𑤉 could be encoded as a letter, but it occurs only in S and its provenance is unknown. Theoretically, as other forms of *ō* are based upon *o*, the 𑤋𑤉 could be normalized as 𑤃𑤂 <O, VOWEL SIGN AA> and rendered using a font style.

- *AU Neither a distinctive letter nor a *ya*-form for the diphthong *au* occurs in the available primary sources. Space has been reserved for it in case it is identified.

3.2 Dependent vowel signs

Eight dependent vowel signs are proposed for encoding:

Glyph	Character name	Major variants	Latin	Thaana
◌𑤂	DIVES AKURU VOWEL SIGN AA		*ā*	◌𑤦
◌𑤃	DIVES AKURU VOWEL SIGN I		*i*	◌𑤧
◌𑤄	DIVES AKURU VOWEL SIGN II		*ī*	◌𑤨
◌𑤅	DIVES AKURU VOWEL SIGN U	◌𑤇 ◌𑤈	*u*	◌𑤩
◌𑤆	DIVES AKURU VOWEL SIGN UU	◌𑤉 ◌𑤊 ◌𑤋 ◌𑤌	*ū*	◌𑤪
𑤁◌	DIVES AKURU VOWEL SIGN E	𑤁◌ 𑤀◌	*e*	◌𑤫
𑤁𑤁◌	DIVES AKURU VOWEL SIGN AI	𑤁𑤁◌	*ai*	◌𑤬
𑤁◌𑤂	DIVES AKURU VOWEL SIGN O		*o*	◌𑤭

Details on the combining behavior of vowel signs is given in § 4.4. Notes on the signs are given below:

- VOWEL SIGN AA The stroke of 𑤵 is often elongated beneath the base as 𑤶 in later documents and may appear to connect to the base in some cases (see fig. 8). This elongation is a glyphic variation and a style of calligraphic writing.

- VOWEL SIGN I The sign 𑤷 is often elongated as 𑤸 in later documents as a result of calligraphic writing (see fig. 9). It is a glyphic variant pertaining to the style of a particular document.

- VOWEL SIGN II The sign 𑤹 is conventionally written attached to the top-right edge or terminal of the base with the body of the sign written to the right. The position of the body is rotated as 𑤺 in some sources (L1, L4). In later documents it is written as 𑤻, which is a calligraphic form. These are glyphic variants pertaining to the styles of a particular document. See fig. 9 for specimens.

- VOWEL SIGN U The conventional form of the VOWEL SIGN U is 𑤼. It may be written slightly angled 𑤽 or with a crimp 𑤾. When written with letters with round strokes at the right edge, the 𑤼 takes the contextual form 𑤿, ie. 𑥂𑤼 *dhu* and 𑥃 *ku*. The usage of the contextual form is to be considered the default for such letters (see list in § 4.4). There are some stylistic differences, shown in fig. 10:

	L1–L5	L6	L7	L8	F1–F4	F5	F6	F7–F8	F9–F10	F11–F12	F13	F1058	F1153	S	G
-u	𑤼	𑤼	𑤼	𑤼	𑤼	𑤼	𑤼	𑤼	𑤼	𑤿	𑤼	𑤼	𑥁	𑤿	𑤿
-ū	𑤽	—	𑤽	—	𑤽	𑤾	𑤽	𑤾	—	—	𑤾	𑤽	𑥂	𑥁	𑥀

In F1153 the form 𑥁 is used, which is similar to the form of VOWEL SIGN UU in F11 and F12. It appears that the contextual form 𑤿 was used as the default sign and applied to all letters. The 𑤿 and 𑥁 may be treated as considered glyphic variants of 𑤼. As is evident from the distibution of the variants, the signs are not used concurrently in any source and are to be managed using fonts.

The *ya*-form 𑥄 *u* is produced using the sign 𑤾 HALANTA (see § 4.2).

- VOWEL SIGN UU The conventional form of the VOWEL SIGN UU is 𑤽. It may be written slightly angled 𑤾 or with a crimp 𑤽. There are some stylistic differences in the shape of the sign, as shown above. The variant 𑤾 occurs in F5, F7, F8, F13. It appears to be derived from the angled 𑤾 form with the loop moved to the left, cf. the form 𑥀 in G. The 𑥂 used in F1153 is based upon 𑤾 with the addition of a looped terminal. These glyphic variants appear to be stylized developments of the conventional 𑤽 form belonging to calligraphic styles used in the respective documents.

- VOWEL SIGN E The representative form 𑤶𑤾 appears as 𑤶𑤾 in later documents. A corruption of this sign into a circle is observed in some documents. A reversed form 𑤾𑤶 of 𑤶𑤾 occurs in F12. See specimens in fig. 11.

- VOWEL SIGN AI The representation of the sign 𑤶𑤶𑤾 contains two instances of 𑤶𑤾 VOWEL SIGN E. See specimens in fig. 11.

- VOWEL SIGN O The 𑤶𑤾𑤵 is a two-part vowel sign, with a decomposition of 𑤶𑤾 VOWEL SIGN E + 𑤾𑤵 VOWEL SIGN AA. See specimens in fig. 12. The right-side element 𑤾𑤵 is often elongated beneath the base as 𑤾𑤶 in later documents and may appear to connect to the base, eg. 𑤶𑤾𑤶. This occurs in documents where the VOWEL SIGN AA is also elongated in calligraphic writing.

Notes on other vowel signs that are not proposed for encoding at this time:

- *VOWEL SIGN VOCALIC R The sign 𑤽◌𑥃 may have been used for the Sanskrit vocalic *r̥* in L1 (see fig. 17). The syllable has been glossed as *pr̥*, but it may also be *pru*. Additional research is required to determine the actual value of the syllable and how to represent it.

- *VOWEL SIGN EE A distinctive sign for the Dhivehi long vowel *ē* is not attested. As shown by N, this vowel may be represented using 𑤽◌ VOWEL SIGN E and 𑤽𑤽◌ VOWEL SIGN AI (see fig. 61). Space has been reserved for the vowel sign if it is identified later.

- *VOWEL SIGN OO A distinctive sign for the Dhivehi long vowel *ō* is not attested. In the secondary materials, 𑤽◌𑥁 is used for both *o* and *ō*. In S, the sign 𑤽◌𑤾 used for *ō* is identical to that for *o* (see fig. 43). It is a glyphic variant of 𑤽◌𑥁 VOWEL SIGN O, in which the ◌𑥁 appears to connect to the base in some cases (see fig. 12). N appears to show a distinction between the signs 𑤽◌𑤾 *o* and 𑤽◌𑥁 *ō*, which align with the letters 𑤽𑤶𑤾 *o* and 𑤽𑤶𑥁 *ō* of the same source (see fig. 61), in which the right-side element in *o* connects to the base, eg. 𑤽𑤩𑤾 *ko* and 𑤽𑤩𑥁 *ō*. However, the connecting element in *o* appears to be unintentional, eg. the example 𑤽𑤵𑥁𑤽𑤻𑤶𑤲 *noramme* in N (see fig. 57). G shows 𑤽◌𑤴, 𑤽◌𑤾, and 𑤽◌𑥁 for '*ô*', of which the first two are also shown for '*o*'. While seemingly distinctive, the 𑤽◌𑤴 does not occur in other sources and its provenance is unknown. The element ◌𑤴 resembles the sign for *u* in G, which is a contextual and later glyphic variant of ◌𑤿 VOWEL SIGN U. Theoretically, the 𑤽◌𑤴 in G would be normalized as 𑤽◌𑤿, which follows the structure of signs for the diphthong *au* in other southern Brahmi-based scripts. But, a sign for either *ō* or *au* is not proposed for encoding at present. Space has been reserved for a potential *VOWEL SIGN OO. The 𑤽◌𑥁 VOWEL SIGN O may be used as necessary.

- *VOWEL SIGN AU Space has been reserved for a vowel sign for the diphthong *au*.

3.3 Consonants

There are 34 consonant letters:

Glyph	Character name	Major Variants	Latin	Thaana
𑤩	DIVES AKURU LETTER KA	𑤳	*ka*	ؘ
𑤪	DIVES AKURU LETTER KHA		*kha*	—
𑤫	DIVES AKURU LETTER GA		*ga*	ؙ
𑤬	DIVES AKURU LETTER GHA		*gha*	—
𑤭	DIVES AKURU LETTER NGA		*ṅa*	ؚ
𑤮	DIVES AKURU LETTER CA	𑤽	*ca*	؛
𑤯	DIVES AKURU LETTER CHA		*cha*	—
𑤰	DIVES AKURU LETTER JA	𑤷	*ja*	؝
𑤱	DIVES AKURU LETTER NYA		*ña*	؞
𑤲	DIVES AKURU LETTER TTA		*ṭa*	؟

𑤘	DIVES AKURU LETTER DDA		*ḍa*	𐠘
𑤙	DIVES AKURU LETTER DDHA		*ḍha*	—
𑤚	DIVES AKURU LETTER NNA	𑤛	*ṇa*	𐠙
𑤜	DIVES AKURU LETTER TA		*ta*	𐠚
𑤝	DIVES AKURU LETTER THA		*tha*	—
𑤞	DIVES AKURU LETTER DA	𑤟 𑤠	*da*	𐠛
𑤡	DIVES AKURU LETTER DHA		*dha*	—
𑤢	DIVES AKURU LETTER NA		*na*	𐠜
𑤣	DIVES AKURU LETTER PA		*pa*, *fa*	𐠝
𑤤	DIVES AKURU LETTER PHA		*pha*	𐠞
𑤥	DIVES AKURU LETTER BA		*ba*	𐠟
𑤦	DIVES AKURU LETTER BHA		*bha*	—
𑤧	DIVES AKURU LETTER MA		*ma*	𐠠
𑤨	DIVES AKURU LETTER YA		*ya*, *a*	𐠡
𑤩	DIVES AKURU LETTER YYA		*ya*	𐠡
𑤪	DIVES AKURU LETTER RA	𑤫	*ra*	𐠢
𑤬	DIVES AKURU LETTER LA	𑤭	*la*	𐠣
𑤮	DIVES AKURU LETTER VA		*va*	𐠤
𑤯	DIVES AKURU LETTER SHA		*śa*	𐠥
𑤰	DIVES AKURU LETTER SSA		*ṣa*	—
𑤱	DIVES AKURU LETTER SA		*sa*	𐠧
𑤲	DIVES AKURU LETTER HA		*ha*	𐠨
𑤳	DIVES AKURU LETTER LLA		*ḷa*	𐠣
𑤴	DIVES AKURU LETTER ZA	𑤵, 𑤶	*za*	𐠦

Each consonant letter possesses the inherent vowel *a*. The inherent vowel is silenced using the sign HALANTA to indicate a bare consonant. Consonant clusters are rendered as conjuncts (see § 4.3).

3.3.1 Notes on consonant letters

- KA The variant form 𑤃 occurs alongside the conventional 𑤄 in some sources. Given its shape, it may be suitable for encoding as a distinctive alternate after additional research has been performed.

- CA The variant forms 𑥤 and 𑥓 are shown in S and N, respectively. They are glyphic variants that belong to a later style of the script, and are not attested in the available primary sources. They differ from the representative form 𑤍 and appear to *halanta* forms of 𑤏 TA, ie. 𑤍𑥀.

- NGA The representative glyph for the letter has been abstracted from its cluster-initial form in conjuncts (see fig. 15).

- JA The variant form 𑥚 of 𑤘 is shown in S. It is a glyphic variant that belongs to a later style of the script.

- *JHA A distinctive letter for the palatal aspirate *jha* and has not been identified. Space has been reserved for it.

- TTA The letter 𑤎 TTA is shown as 𑥛 in S. This is the conjunct 𑤎𑤵 *ṭṭa*, which is interpreted as the letter *ṭa* in some cases (see fig. 55).

- *TTHA A distinctive letter for the retroflex aspirate *ṭha* and has not been identified. Space has been reserved for it.

- NNA The form 𑥞 is used for the retroflex nasal *ṇa* in place of the representative form 𑤚 in Sidi (see fig. 34). The letter is clearly related to the Thaana letter ނ *naviyani*, which represents the retroflex nasal. But, the rationale behind Sidi's usage of it is unclear. It does not occur in the primary sources. For purposes of the encoding, 𑥞 is classified as a glyphic variant. However, if concurrent usage of it and 𑤚 occurs, then it may be encoded as an alternate form.

- YA As explained in the discussion of the encoding model for vowel letters, the letter 𑤆 YA represents both the independent *a* and the consonant *ya*.

- YYA The letter 𑤈 YYA occurs in HMK (see fig. 19, 32). It is shown in S, but is not used outside of the charts. The letter does not occur in L or F, but its occurrence in HMK suggests that it was used in the early 20th century. The provenance of the letter is unknown.

- RA The letter RA underwent a simplification from the form 𑤉 used in early *lōmāfānu* (L1–L4) to the 𑤊 used in later sources (L5–L8) and in all *fatkoḷu*. The later form has been selected as the representative glyph on account of its more prevalent occurrence in the sources.

- ZA The representative form 𑥝 for ZA is based upon the form used in F1058 (see fig. 18). This letter has a few variants. The form 𑥔 is used by Sidi (see fig. 34). It occurs only in that source. Geiger shows the form 𑥕 (figure 48), which bears some resemblance to the representative glyph. While 𑥔 and 𑥕 are distinctive, their provenance is unknown. Additional research is required to determine their suitablity for encoding as alternate forms.

3.4 Nasalization signs

There are two distinctive nasalization signs (see fig. 13–13 and § 4.5):

Glyph	Character name	Variants	Latin	Thaana
◌𑤀	DIVES AKURU SIGN ANUSVARA		*ṃ*	ސް, ށް
◌𑤁	DIVES AKURU SIGN CANDRABINDU	◌𑤃	*m̐*, *ṁ*	ސް, ށް

3.5 Prefixed nasal sign

The following character is used for indicating a cluster-initial nasal consonant:

Glyph	Character name	Variants	Latin	Thaana
𑤂	DIVES AKURU PREFIXED NASAL SIGN		*ň*	ސް, ށް

The sign 𑤂◌ ligates with the following letter (see § 4.6). The glyph is placed within a dashed box in the code chart to indicate its special behavior. The character is derived from the cluster-initial form of the letter 𑤚 NGA, which was extended for use as a generic sign for a homorganic nasal. As shown clearly in fig. 15, the form of the PREFIXED NASAL SIGN differs from that of cluster-initial NGA.

3.6 Nukta

The following sign is used for representing new sounds (see § 4.8):

Glyph	Character name	Variants	Latin	Thaana
◌𑤽	DIVES AKURU SIGN NUKTA			

This character does not exist in the primary materials. It is described by N as being a new addition to the script (see fig. 59).

3.7 Halanta & Virama

The *halanta* and *virāma* are proposed for separate encoding:

Glyph	Character name	Variants	Latin	Thaana
◌𑤾	DIVES AKURU SIGN HALANTA	—	—	◌ް
𑤿	DIVES AKURU VIRAMA	—	—	—

The sign ◌𑤿 is used for silencing the inherent vowel, similar to the VIRAMA in other Brahmi-based scripts. However, as the sign has various meanings in Dives Akuru, it is proposed that the functions of VIRAMA be disunified and encoded in two separate characters. This approach will simplify the representation of the visible form of the sign and its conjunct-formation properties.

The Dives Akuru sign ◌𑤿 HALANTA is a visible *virāma*. It represents several features (see § 4.2). In addition to silencing the inherent vowel of a consonant letter, it represents an alternate form of the dependent vowel *u*. It is also used for indicating glottal stop. Naseema indicates that HALANTA has other functions when used for transliterating Thaana (see fig. 65 for details). In such cases, it is parallel to ◌ U+07B0 THAANA SIGN SUKUN. A separate encoding for HALANTA will be practical for users of Dives Akuru, who are also generally users of Thaana.

The conjunct formation properties are assigned to the Dives Akuru ◌ VIRAMA. This control character is used solely for producing conjuncts (see § 4.3 for details). The VIRAMA is represented in the code chart as ◌ in order to indicate that it is a special character.

3.8 Digits

The script has a full set of digits:

Glyph	Character name	Variants	Latin	Thaana
𑥐	DIVES AKURU DIGIT ZERO		0	
𑥑	DIVES AKURU DIGIT ONE		1	
𑥒	DIVES AKURU DIGIT TWO		2	
𑥓	DIVES AKURU DIGIT THREE		3	
𑥔	DIVES AKURU DIGIT FOUR		4	
𑥕	DIVES AKURU DIGIT FIVE		5	
𑥖	DIVES AKURU DIGIT SIX		6	
𑥗	DIVES AKURU DIGIT SEVEN		7	
𑥘	DIVES AKURU DIGIT EIGHT		8	
𑥙	DIVES AKURU DIGIT NINE		9	

3.9 Punctuation

The following signs of punctuation are used in the script (see fig. 22–23):

Glyph	Character name	Variants	Latin	Thaana
𑥄	DIVES AKURU DOUBLE DANDA		.	

𑥃 DIVES AKURU GAP FILLER

𑥄 DIVES AKURU END OF TEXT MARK

The Dives Akuru 𑥆 DOUBLE DANDA may be similar in appearance to ॥ U+0965 DEVANAGARI DOUBLE DANDA, but it is often written as two slightly curved strokes.

The 𑥃 GAP FILLER is used at the end of lines to fill space, as well as at the end of a document to signify completion of the text. It is often accompanied by the 𑥄 END OF TEXT MARK at the end of a document. The glyph for END OF TEXT MARK is based upon the form used in F9 (fig. 23). As shown in other sources, the horizontal stroke is elongated to fill space. Such swash strokes are stylistic. As is also evident from F9, the 𑥄 is distinct from the 𑥃 and is not a shorthand or abbreviation for a sequence of multiple GAP FILLER characters.

4 Encoded Representations

4.1 Representations of 'type 2' vowel letters

The 'type 2' set of vowel letters is represented as shown below (see also figure 47). The interactions between the base consonant and dependent vowel signs is described in § 4.4.

Vowel	'type 1'	'type 2'	Character sequence for 'type 2'
a	𑤌	𑤬	<𑤬 YA>
ā	𑤌𑤵	𑤬𑤵	<𑤬 YA, ◌𑤵 VOWEL SIGN AA>
i	𑤍	𑤭	<𑤬 YA, ◌𑤶 VOWEL SIGN I>
u	𑤎	𑤮	<𑤬 YA, ◌𑤷 VOWEL SIGN U>
ú	𑤎	𑤬𑥃	<𑤬 YA, ◌𑥃 HALANTA>
e	𑤏	𑤯𑤬	<𑤬 YA, 𑤯◌ VOWEL SIGN E>
o	𑤐	𑤯𑤵	<𑤬 YA, 𑤯◌𑤵 VOWEL SIGN O>
o	𑤐	𑤏𑤵	<𑤏 E, ◌𑤵 VOWEL SIGN AA>

Other *ya*-forms shown in secondary materials may be represented as follows:

Vowel	Glyph	Character sequence
ū	𑤬𑤸	<𑤬 YA, ◌𑤸 VOWEL SIGN UU>
ē	𑤯𑤯𑤬	<𑤬 YA, 𑤯𑤯◌ VOWEL SIGN AI>

4.2 *Halanta*

The sign ◌𑥃 HALANTA is used for silencing the inherent vowel of a consonant letter, but it is also used as an alternate sign for the vowel *u* and for marking glottal stop. Generally, it attaches to the right edge of a letter and forms a ligature with the base. The shape of some letters is modified.

k	𑤆𑥃	<𑤆 KA, ◌𑥃 HALANTA>
ṭ	𑤁𑥃	<𑤁 TTA, ◌𑥃 HALANTA>
t	𑤃𑥃	<𑤃 TA, ◌𑥃 HALANTA>
n	𑤉𑥃	<𑤉 NA, ◌𑥃 HALANTA>
s	𑤔𑥃	<𑤔 SA, ◌𑥃 HALANTA>

4.2.1 *Alternate sign for the vowel u*

Although consonants marked by HALANTA are devowelized, they are pronounced in Dhivehi in some cases as syllables with /u/. The HALANTA, therefore, also functions as an alternate vowel sign for *u*, eg. 𑋢𑋪 may be read as *ṭ* and *ṭú*. For example, the word 𑋦𑋢𑋩𑋪 in fig. 14 may be read as *sṭna*, but it actually represents *súṭúna*. That figure shows both signs used with the same letter, eg. 𑋢𑋪 *bú* and 𑋢𑋫 *bu*.

ṭú	𑋢𑋪	<𑋢 TTA, 𑋪 HALANTA>
dhú	𑋞𑋪	<𑋞 DHA, 𑋪 HALANTA>
bú	𑋢𑋪	<𑋢 BA, 𑋪 HALANTA>
sú	𑋦𑋪	<𑋦 SA, 𑋪 HALANTA>

There is no independent letter for this vowel sign, although it is written with 𑋩 YA when independent or initial, eg. 𑋩𑋪 *ú*.

While the HALANTA can be used for indicating *ú*, it may be necessary to distinguish usage of 𑋪 for marking clusters and *-u* syllables for purposes of text processing. Additional research is required for determining the suitability of encoding a separate character for this sign, eg. a *VOWEL SIGN MUTE U.

4.2.2 *Halanta clusters*

While consonant clusters are generally rendered as conjuncts, they may also be indicated by marking non-final letters with 𑋪 HALANTA (see fig. 14).

sta	𑋦𑋪𑋣	<𑋦 SA, 𑋪 HALANTA, 𑋣 TA>
sva	𑋦𑋪𑋧	<𑋦 SA, 𑋪 HALANTA, 𑋧 VA>

4.2.3 Glottal stop

In late *fatkoḷu*, the HALANTA was combined with 𑋜 KA, 𑋝 NA, 𑋢 TTA, 𑋣 TA for indicating a word-final glottal stop. These glottal stop *halanta* forms are written at or above the head height and may appear superscript. Fig. 14 shows the use of superscript 𑋠𑋪 *ta-halanta* <𑋣 TA, 𑋪 HALANTA> in F9 for denoting glottal stop.

The raised glottal stop *halanta* forms may be indicated using superscript layout features. However, another mechanism for distinguishing the special function of such forms from other combinations of a particular letter + HALANTA may be necessary.

Naseema describes combination of the above letters + HALANTA as ‘sukun letters’ (1999: 27, see fig. 65), and suggests that such forms were used for representing other features of Dhivehi, eg. 𑋝𑋪 *na-halanta* <𑋝 NA, 𑋪 HALANTA> for indicating a nasal geminate, and the 𑋠𑋪 *ta-halanta* for a *ya* off-glide.

4.3 Consonant conjuncts

Consonant clusters are rendered as conjuncts in Dives Akuru. The majority of conjuncts consist of clusters of two consonants, but conjuncts with up to three consonants are attested. Depending upon the shape of constituent letters, a conjunct may be rendered as either a distinctive ligature or as 'touching' ligature. The letters 𑤬 YA and 𑤵 RA have special behaviors in conjuncts, as described below. Conjuncts are represented in encoded text by placing the ◌𑥆 VIRAMA after each consonant letter in a cluster. Any accompanying vowel sign is placed after the last letter in the cluster.

4.3.1 *'Touching' ligatures*

This type is produced by joining letters linearly at adjacent edges. Letters are generally not modified.

kta	𑤇𑤩	<𑤇 KA, ◌𑥆 VIRAMA, 𑤩 TA>
nta	𑤘𑤩	<𑤘 NA, ◌𑥆 VIRAMA, 𑤩 TA>
nna	𑤘𑤘	<𑤘 NA, ◌𑥆 VIRAMA, 𑤘 NA>
mma	𑤥𑤥	<𑤥 MA, ◌𑥆 VIRAMA, 𑤥 MA>
spa	𑤦𑤬	<𑤦 SA, ◌𑥆 VIRAMA, 𑤬 PA>
ḷḷa	𑤶𑤶	<𑤶 LLA, ◌𑥆 VIRAMA, 𑤶 LLA>

4.3.2 *Distinctive ligatures*

Consonants may be combined into a distinctive ligature. In such representations, the constituent glyphs are modified in order to produce the ligature.

kṣa	𑤈𑤦	<𑤇 KA, ◌𑥆 VIRAMA, 𑤦 SSA>
ṅga	𑤄	<𑤃 NGA, ◌𑥆 VIRAMA, 𑤭 GA>
ṭṭa	𑤏	<𑤌 TTA, ◌𑥆 VIRAMA, 𑤌 TTA>
ṭva	𑤌𑤰	<𑤌 TTA, ◌𑥆 VIRAMA, 𑤰 VA>
ṇḍa	𑤐	<𑤙 NNA, ◌𑥆 VIRAMA, 𑤐 DDA>
ttha	𑤣	<𑤩 TA, ◌𑥆 VIRAMA, 𑤣 THA>
ntha	𑤝	<𑤘 NA, ◌𑥆 VIRAMA, 𑤣 THA>
ndha	𑤞	<𑤘 NA, ◌𑥆 VIRAMA, 𑤞 DHA>
mba	𑤲	<𑤥 MA, ◌𑥆 VIRAMA, 𑤫 BA>
bbha	𑤲𑤮	<𑤫 BA, ◌𑥆 VIRAMA, 𑤮 BHA>

ṣṭa	𑤮	<𑤬 SSA, 𑤿 VIRAMA, 𑤮 TTA>
sta	𑤩	<𑤬 SA, 𑤿 VIRAMA, 𑤣 TA>
sva	𑤳	<𑤬 SA, 𑤿 VIRAMA, 𑤵 VA>

4.3.3 The letter *YA*

When the letter 𑤬 YA is C_2 it takes the post-base form ◌𑤽 and is written as a ligature with C_1 by default (see fig. 16). In some cases the nominal form of YA is used, as described later in § 4.3.5.

tya	𑤯	<𑤣 TA, 𑤿 VIRAMA, 𑤬 YA>
dya	𑤱	<𑤢 DA, 𑤿 VIRAMA, 𑤬 YA>
dhya	𑤲	<𑤦 DHA, 𑤿 VIRAMA, 𑤬 YA>
sya	𑤰	<𑤬 SA, 𑤿 VIRAMA, 𑤬 YA>
yya	𑤬𑤽	<𑤬 YA, 𑤿 VIRAMA, 𑤬 YA>

4.3.4 The letter *RA*

The letter 𑤰 RA takes special forms when it occurs in conjuncts (see fig. 17). It is written as ◌𑤾 *repha* when C_1 in a cluster. The *repha* is placed above the following letter, or in the case of two-letter clusters, it is placed between the two letters:

rka	𑤾𑤧	<𑤰 RA, 𑤿 VIRAMA, 𑤧 KA>
rmma	𑤾𑤶𑤶	<𑤰 RA, 𑤿 VIRAMA, 𑤶 MA, 𑤿 VIRAMA, 𑤶 MA>

When non-initial in a cluster, RA is written as ◌𑤿 *ra-kāra*. The *ra-kāra* attaches to the right edge of the preceding letter and curves beneath the letter. In the case of multi-letter clusters, it attaches to the last letter and its curve may span the entire conjunct.

kra	𑤧𑤿	<𑤧 KA, 𑤿 VIRAMA, 𑤰 RA>
ntra	𑤭𑤣𑤿	<𑤭 NA, 𑤿 VIRAMA, 𑤣 TA, 𑤿 VIRAMA, 𑤰 RA>
pra	𑤫𑤿	<𑤫 PA, 𑤿 VIRAMA, 𑤰 RA>
śra	𑤪𑤿	<𑤪 SHA, 𑤿 VIRAMA, 𑤰 RA>
stra	𑤩𑤣𑤿	<𑤬 SA, 𑤿 VIRAMA, 𑤣 TA, 𑤿 VIRAMA, 𑤰 RA>
spra	𑤩𑤫𑤿	<𑤬 SA, 𑤿 VIRAMA, 𑤫 PA, 𑤿 VIRAMA, 𑤰 RA>

In some later records, the curve of *ra-kāra* is elongated as ◌𑤿 and may extend fully around the letter to the top left edge; compare 𑤖𑤿 and 𑤖𑤿 *kra*, 𑤣𑤬 and 𑤣𑤬 *stra*.

4.3.5 Modifying conjunct behavior

Default conjunct formation may be modified using [ZWJ] U+200D ZERO WIDTH JOINER, abbreviated as ZWJ. The main intent of using ZWJ in Dives Akuru is to prevent a formation of a default ligature for a consonant cluster.

As mentioned above, the letter 𑤬 YA is rendered using the post-base form ◌𑥂 when it is final in a cluster, eg. 𑤙𑥂 *nya*. In some cases, YA is rendered using its nominal form, eg. 𑤙𑤬 *n=a* (see fig. 16). The distinctions between these conjuncts may be encoded as follows:

nya	𑤙𑥂	<𑤙 NA, [◌𑥆] VIRAMA, 𑤬 YA>
n=a	𑤙𑤬	<𑤙 NA, [◌𑥆] VIRAMA, [ZWJ] ZWJ, 𑤬 YA>

4.3.6 Default representations

If a glyph for a ligature is not available in a font, the [◌𑥆] VIRAMA should be displayed beneath each letter in the cluster:

Available	Unavailable	Character sequence
𑤍𑤵	𑤐 + 𑤵 + 𑤵	<𑤐 RA, [◌𑥆] VIRAMA, 𑤵 MA, [◌𑥆] VIRAMA, 𑤵 MA>
𑤣𑤬	𑤣 + 𑤪 + 𑤐	<𑤣 SA, [◌𑥆] VIRAMA, 𑤪 TA, [◌𑥆] VIRAMA, 𑤐 RA>

4.4 Consonant-vowel combinations

Combinations of a consonant and dependent vowel sign are rendered following the pattern shown in § 4.1 for the 'type-2' vowel letters. Certain vowel signs have contextual forms when combined with certain consonants. Shown below are examples with other consonants and consonant clusters.

Vowel sign AA Written to the right of the base, detached from the letter: ◌𑤲.

kā	𑤖𑤲	<𑤖 KA, ◌𑤲 VOWEL SIGN AA>
mā	𑤵𑤲	<𑤵 MA, ◌𑤲 VOWEL SIGN AA>

In some *fatkoḷu*, the sign extends below the base, similar to VOWEL SIGN I, compare: 𑤖𑤲 and 𑤖𑤲 *kā*, 𑤵𑤲 and 𑤵𑤲 *mā*. In some instances it appears to connect to the base.

Vowel sign I The sign ◌𑤳 attaches to the top or top-right edge of the base and curves around to the right edge.

ki	𑤆𑤰	<𑤆 KA, 𑤰 VOWEL SIGN I>
di	𑤃𑤰	<𑤃 DA, 𑤰 VOWEL SIGN I>
dhi	𑤇𑤰	<𑤇 DHA, 𑤰 VOWEL SIGN I>
pi	𑤊𑤰	<𑤊 PA, 𑤰 VOWEL SIGN I>
si	𑤔𑤰	<𑤔 SA, 𑤰 VOWEL SIGN I>
hi	𑤙𑤰	<𑤙 HA, 𑤰 VOWEL SIGN I>

When written with cluster-final *ra*, the VOWEL SIGN I attaches to the *ra-kāra*:

kri	𑤆𑤲𑤰	<𑤆 KA, ◌𑤲 VIRAMA, 𑤲 RA, 𑤰 VOWEL SIGN I>
śri	𑤓𑤲𑤰	<𑤓 SHA, ◌𑤲 VIRAMA, 𑤲 RA, 𑤰 VOWEL SIGN I>

In *fatkoḷu*, the sign is often elongated and may loop beneath the base, eg. 𑤇𑤰 *dhi*, 𑤙𑤰 *hi*, 𑤆𑤲𑤰 *kri*, 𑤓𑤲𑤰 *śri*.

Vowel sign II Behaves like VOWEL SIGN I.

kī	𑤆𑤱	<𑤆 KA, 𑤱 VOWEL SIGN II>
dhī	𑤇𑤱	<𑤇 DHA, 𑤱 VOWEL SIGN II>

In L1, the VOWEL SIGN II is written occurs attached above the letter as 𑤯, eg. 𑤆𑤯 *kī*, 𑤇𑤯 *dhī*. It is a glyphic variant for the representative form. In later sources, the sign is written to the right, eg. 𑤆𑤱 *kī*, 𑤇𑤱 *dhī*.

Vowel sign U The shape of the dependent form of *u* is determined by the shape of the base letter. For most letters, the representative form 𑤳 is used, which attaches to the right edge:

dhu	𑤇𑤳	<𑤇 DHA, 𑤳 VOWEL SIGN U>
mu	𑤨𑤳	<𑤨 MA, 𑤳 VOWEL SIGN U>
pu	𑤊𑤳	<𑤊 PA, 𑤳 VOWEL SIGN U>
su	𑤔𑤳	<𑤔 SA, 𑤳 VOWEL SIGN U>

For letters with curves at the right edge, the sign takes the form 𑤴 and is written as a ligature with the base:

ku	𑤆𑤴	<𑤆 KA, 𑤳 VOWEL SIGN U>
nu	𑤉𑤴	<𑤉 NA, 𑤳 VOWEL SIGN U>
ru	𑤲𑤴	<𑤲 RA, 𑤳 VOWEL SIGN U>

With some letters, the sign attaches near or below the base:

du 𑤖𑤶 <𑤖 DA, ◌𑤶 VOWEL SIGN U>

The sign forms a special ligature when combined with the following letter:

ḷu 𑤳 <𑤳 LLA, ◌𑤶 VOWEL SIGN U>

Vowel sign UU The sign attaches to the right edge of a letter and forms a ligature with the base:

kū 𑤏𑤷 <𑤏 KA, ◌𑤷 VOWEL SIGN UU>

Vowel sign VOCALIC R Written to the right of the base and curves beneath.

pṛ 𑤥𑤹 <𑤥 PA, ◌𑤹 VOWEL SIGN VOCALIC R>

Vowel sign E Written to the left of the base.

ke 𑤇𑤏 <𑤏 KA, 𑤇◌ VOWEL SIGN E>

re 𑤇𑤕 <𑤕 RA, 𑤇◌ VOWEL SIGN E>

Vowel sign AI Written to the left of the base.

lai 𑤇𑤇𑤴 <𑤳 LA, 𑤇𑤇◌ VOWEL SIGN AI>

Vowel sign O Written to the left and right of the base. When occuring with a consonant cluster, the left and right elements of the sign are rendered before the first and last letters, respectively.

ko 𑤇𑤏𑤺 <𑤏 KA, 𑤇◌𑤺 VOWEL SIGN O>

nno 𑤇𑤙𑤙𑤺 <𑤙 NA, 𑤍 VIRAMA, 𑤙 NA, 𑤇◌𑤺 VOWEL SIGN O>

mo 𑤇𑤨𑤺 <𑤨 MA, 𑤇◌𑤺 VOWEL SIGN O>

In sources where the elongated form of VOWEL SIGN AA is used, the right-side element of VOWEL SIGN O is similarly elongated, compare: 𑤇𑤏𑤺 and 𑤇𑤏𑤻 *ko*, 𑤇𑤨𑤺 and 𑤇𑤨𑤻 *mo*.

4.5 Vowel nasalization

Post-vocalic nasalization is indicated using the signs ◌𑤀 CANDRABINDU and ◌𑤁 ANUSVARA:

oṁ 𑤉𑤿 <𑤉 O, 𑤿 SIGN CANDRABINDU>

kaṃ 𑤏𑤾 <𑤏 KA, 𑤾 SIGN ANUSVARA>

kāṃ 𑤏𑤰𑤾 <𑤏 KA, 𑤰 VOWEL SIGN AA, 𑤾 SIGN ANUSVARA>

4.6 Prefixed nasal sign

The 𑤽 PREFIXED NASAL SIGN is placed before a letter in the input sequence. The VIRAMA is not used with it. It is generally rendered as a ligature, attached to the top of the following letter. The example below occurs in L4, as shown in fig. 15:

ṅga 𑤽𑤏 <𑤃 NGA, 𑤴 VIRAMA, 𑤏 GA>

ňga 𑤽𑤏 <𑤽 PREFIXED NASAL SIGN, 𑤏 GA>

The PREFIXED NASAL SIGN is detached and raised from the base in some sources, as shown in the below example from fig. 20:

Syllable	Attached	Detached	Character sequence
ňsa	𑤽𑤔	𑤽𑤔	<𑤽 PREFIXED NASAL SIGN, 𑤔 SA>

The raised sign is typical in the Dives Akuru calligraphy in late *fatkoḷu*, while the attached form is common in *lōmāfānu*. The positions are stylistic features and both representations of the sign are semantically identical. Usage of the two positional forms is not contrastive: one or the other is used consistently throughout a document. The attached and detached forms should be treated as glyphic variants belonging to particular styles of the script.

4.6.1 Comparison to the Burmese *kinzi*

Encoding the 𑤽 as a distinctive character provides for the simplest implementation. The superficial aspects of the sign, and its derivation from 𑤃 NGA, are similar to the 𑁹 *kinzi* in the Burmese ('Myanmar') script. It is, therefore, interesting to evaluate the potential of adopting the *kinzi* model for the Dives Akuru prefixed nasal letter. In Burmese, the absence of the inherent vowel of င U+1004 MYANMAR LETTER NGA is rendered as င် *ṅ*, in which င *ṅa* is marked with a visible ် *virāma*. When *ṅ* occurs in cluster-initial position, it is rendered as a superscript form of င် known as ် *kinzi*, which is positioned above the following letter: င်္က *ṅka*. The Unicode model for Burmese uses the control character 𑤴 U+1039 MYANMAR SIGN VIRAMA for producing conjuncts. Therefore, logically, the cluster *ṅka* would be represented using <င U+U1004, ္ U+1039, က U+1000>. However, this produces the conjunct င္က, a stack consisting of of င *ṅa* and က *ka*. The correct rendering of *kinzi* requires the *virāma* to be both a visible sign and a control character; however, it is defined solely as the latter. In order to produce the *kinzi*, the character ် U+1004 MYANMAR SIGN ASAT is required in the input sequence after MYANMAR LETTER NGA and before MYANMAR SIGN VIRAMA: <င U+1004, ် U+103A, ္ U+1039, က U+1000>, which provides the expected င်္က *ṅka*.

The graphical resemblance between these Dives Akuru and Burmese signs is coincidental. Indeed, they seem to be mirror images, but their structures are inherently different. The *kinzi* possesses a visible *virāma*, while the Dives Akuru sign does not. If the *kinzi* model were adopted for Dives Akuru, the ◌𑥂 HALANTA would be the equivalent of MYANMAR SIGN ASAT. Accordingly, 𑥖𑥃𑥆*ňsa* would be generated using <𑥖 NGA, ◌𑥂 HALANTA, ◌𑥆 VIRAMA, 𑥆 SA>. Such a model is not practical for Dives Akuru. Usage of HALANTA in such a context is superfluous as it is not part of the graphical representation. Secondly, this model requires four characters to produce *ňsa*, while the prefixed nasal sign requires two. For this reason, the proposed ◌𑥃 PREFIXED NASAL SIGN is the most suitable option.

4.7 'Gemination'

Naseema (1990) show the signs ◌𑥃, ◌𑥅, etc. used for indicating gemination, or doubled consonants (see fig. 57, 66). These signs are not true gemination signs and have different semantics in the primary sources. The interpretation of these signs as marking gemination may have been the result of sound changes in spoken Dhivehi. The so-called 'gemination signs' are analyzed below:

1. 'Gemination sign' Naseema illustrates usage of ◌𑥃 as a gemination sign in the word 𑥖𑥃𑥇𑥉, which is glossed as '*kallage*'. This word is originally *kaňlage*, an instance of which occurs in L2 (plate 23, line 2). The sign ◌𑥃 is identical to the proposed ◌𑥃 PREFIXED NASAL SIGN. The transliteration of 𑥖𑥃𑥇𑥉 as *kallage* in N reflects a change in the pronunication of nasal + stop sequences to a doubling of the stop. In this sense, the PREFIXED NASAL SIGN indicated a nasal in Old Dhivehi, but is read as a gemination of the base letter from the perspective of modern Divehi phonology.

glyph	'geminate'	real cluster	character sequence
𑥃𑥇	'*lla*'	*ňla*	<◌𑥃 PREFIXED NASAL SIGN, 𑥇 LA>

2. *Conjunct with THA* In some cases the sign ◌𑥈 may be interpreted as a gemination sign. In actuality, it is the conjoining form of 𑥈 THA. In later forms of the script, this aspirate letter lost its original value of *tha*. A common conjunct containing *tha* as C_2 is 𑥁𑥈 *ttha*, which was read as *tta* in later Dhivehi. It is possible that the ◌𑥈 in '*tta*' was interpreted as a doubling of 𑥉. Similarly, 𑥅𑥈 *ntha* was read as '*nna*'. Usage of C_2 THA as a gemination mark was extended beyond the dental class. An isolated example is 𑥖𑥈, which reads *ktha*, but is used for '*kka*' (see fig. 21). Such forms are a matter of orthography and should be treated as regular conjuncts.

glyph	'geminate'	real cluster	character sequence
𑥖𑥈	'*kka*'	*ktha*	<𑥖 KA, ◌𑥆 VIRAMA, 𑥈 THA>
𑥁𑥈	'*tta*'	*ttha*	<𑥉 TA, ◌𑥆 VIRAMA, 𑥈 THA>
𑥅𑥈	'*nna*'	*ntha*	<𑥅 NA, ◌𑥆 VIRAMA, 𑥈 THA>

Some ligatures that indicate doubled consonants, eg 𑥊𑥊 *vva*, appear as if they contain the ◌𑥈 element. The curled terminals of 𑥈 THA and 𑥊 VA may lead to such interpretations. While 𑥊𑥊 may be analyzed as a conjunct of 𑥊 VA + 𑥈 THA, it is accurate to analyze it as a conjunct of 𑥊 VA + 𑥊 VA.

3. *Conjunct with* YA In later documents, such as Sidi, conjuncts with the letter 𑤲 as C_2 are read as a geminate cluster of C_1, eg. 𑤳𑤲 *sya* = '*ssa*' (see fig. 21). In such cases, the post-base form ◌𑤽 of YA is interpreted as a gemination sign. Possibly, the absence of *-ya* clusters in Dhivehi resulted in the respective conjuncts being reassigned for indicating geminates. The usage of *-ya* conjuncts as geminates are matter of orthography and or reinterpretation of conventional conjuncts. For this reason, these geminates are to be treated as regular conjuncts of the actual underlying letters.

glyph	'geminate'	real cluster	character sequence
𑤯𑤲	'*tta*'	*tya*	<𑤯 TA, ◌𑤹 VIRAMA, 𑤲 YA>
𑤳𑤲	'*ssa*'	*sya*	<𑤳 SA, ◌𑤹 VIRAMA, 𑤲 YA>

4.8 Nukta

The ◌𑤾 NUKTA is used for representing new sounds. It is written beneath a letter whose base value most closely approximates the foreign sound.

fa 𑤦𑤾 <𑤦 PA, ◌𑤾 NUKTA>

4.9 Line-breaking

Formal rules for line-breaking do not exist. Hyphenation and other continuation marks are not used. A word may be broken along orthographic syllables at any position at the end of a line. Two-part vowel signs are broken across lines in some sources, with the left-side element at the end of line and the base and right-side ligature at the beginning of the next line. Allowance for such line breaks is needed for accurately representing text as it appears in a particular source. However, for general purposes, the components of two-part vowel signs should be kept together with the base, for example, the left-side element should not be separated from the syllable at the end of line.

4.10 Collation

The default sort order for the script is based upon the Brahmi pattern:

𑤀 A < 𑤁 AA < 𑤂 I < 𑤃 II < 𑤄 U < 𑤅 UU < 𑤆 E < 𑤇 O < 𑤉 KA <

𑤊 KHA < 𑤋 GA < 𑤌 GHA < 𑤍 CA < 𑤎 CHA < 𑤏 JA < 𑤐 NYA < 𑤑 TTA <

𑤒 DDA < 𑤓 DDHA < 𑤔 NNA < 𑤕 TA < 𑤖 THA < 𑤗 DA < 𑤘 DHA <

𑤙 NA < 𑤚 PA < 𑤛 PHA < 𑤜 BA < 𑤝 BHA < 𑤞 MA < 𑤲 YA < 𑤵 YYA <

𑤠 RA < 𑤡 LA < 𑤢 VA < 𑤣 SHA < 𑤤 SSA < 𑤥 SA < 𑤦 HA < 𑤧 LLA < 𑤨 ZA <

◌𑥃 VOWEL SIGN AA < ◌𑥄 VOWEL SIGN I < ◌𑥅 VOWEL SIGN II < ◌𑥆 VOWEL SIGN U <

◌𑥇 VOWEL SIGN UU < 𑥁◌ VOWEL SIGN E < 𑥁𑥁◌ VOWEL SIGN AI < 𑥁◌𑥃 VOWEL SIGN O

The following characters have secondary weights:

◌𑥀 ANUSVARA, ◌𑥁 CANDRABINDU, ◌𑥈 NUKTA, ◌𑥐 HALANTA, ◌𑥂 PREFIXED NASAL SIGN

5 Character Data

5.1 Unicode character data: `UnicodeData.txt`

```
11B00;DIVES AKURU LETTER A;Lo;0;L;;;;;N;;;;;
11B01;DIVES AKURU LETTER AA;Lo;0;L;;;;;N;;;;;
11B02;DIVES AKURU LETTER I;Lo;0;L;;;;;N;;;;;
11B03;DIVES AKURU LETTER II;Lo;0;L;;;;;N;;;;;
11B04;DIVES AKURU LETTER U;Lo;0;L;;;;;N;;;;;
11B05;DIVES AKURU LETTER UU;Lo;0;L;;;;;N;;;;;
11B06;DIVES AKURU LETTER E;Lo;0;L;;;;;N;;;;;
11B07;<reserved>
11B08;<reserved>
11B09;DIVES AKURU LETTER O;Lo;0;L;;;;;N;;;;;
11B0A;<reserved>
11B0B;<reserved>
11B0C;DIVES AKURU LETTER KA;Lo;0;L;;;;;N;;;;;
11B0D;DIVES AKURU LETTER KHA;Lo;0;L;;;;;N;;;;;
11B0E;DIVES AKURU LETTER GA;Lo;0;L;;;;;N;;;;;
11B0F;DIVES AKURU LETTER GHA;Lo;0;L;;;;;N;;;;;
11B10;DIVES AKURU LETTER NGA;Lo;0;L;;;;;N;;;;;
11B11;DIVES AKURU LETTER CA;Lo;0;L;;;;;N;;;;;
11B12;DIVES AKURU LETTER CHA;Lo;0;L;;;;;N;;;;;
11B13;DIVES AKURU LETTER JA;Lo;0;L;;;;;N;;;;;
11B14;<reserved>
11B15;DIVES AKURU LETTER NYA;Lo;0;L;;;;;N;;;;;
11B16;DIVES AKURU LETTER TTA;Lo;0;L;;;;;N;;;;;
11B17;<reserved>
11B18;DIVES AKURU LETTER DDA;Lo;0;L;;;;;N;;;;;
11B19;DIVES AKURU LETTER DDHA;Lo;0;L;;;;;N;;;;;
11B1A;DIVES AKURU LETTER NNA;Lo;0;L;;;;;N;;;;;
11B1B;DIVES AKURU LETTER TA;Lo;0;L;;;;;N;;;;;
11B1C;DIVES AKURU LETTER THA;Lo;0;L;;;;;N;;;;;
11B1D;DIVES AKURU LETTER DA;Lo;0;L;;;;;N;;;;;
11B1E;DIVES AKURU LETTER DHA;Lo;0;L;;;;;N;;;;;
11B1F;DIVES AKURU LETTER NA;Lo;0;L;;;;;N;;;;;
11B20;DIVES AKURU LETTER PA;Lo;0;L;;;;;N;;;;;
11B21;DIVES AKURU LETTER PHA;Lo;0;L;;;;;N;;;;;
11B22;DIVES AKURU LETTER BA;Lo;0;L;;;;;N;;;;;
11B23;DIVES AKURU LETTER BHA;Lo;0;L;;;;;N;;;;;
11B24;DIVES AKURU LETTER MA;Lo;0;L;;;;;N;;;;;
11B25;DIVES AKURU LETTER YA;Lo;0;L;;;;;N;;;;;
11B26;DIVES AKURU LETTER YYA;Lo;0;L;;;;;N;;;;;
11B27;DIVES AKURU LETTER RA;Lo;0;L;;;;;N;;;;;
11B28;DIVES AKURU LETTER LA;Lo;0;L;;;;;N;;;;;
```

```
11B29;DIVES AKURU LETTER VA;Lo;0;L;;;;;N;;;;;
11B2A;DIVES AKURU LETTER SHA;Lo;0;L;;;;;N;;;;;
11B2B;DIVES AKURU LETTER SSA;Lo;0;L;;;;;N;;;;;
11B2C;DIVES AKURU LETTER SA;Lo;0;L;;;;;N;;;;;
11B2D;DIVES AKURU LETTER HA;Lo;0;L;;;;;N;;;;;
11B2E;DIVES AKURU LETTER LLA;Lo;0;L;;;;;N;;;;;
11B2F;DIVES AKURU LETTER ZA;Lo;0;L;;;;;N;;;;;
11B30;DIVES AKURU VOWEL SIGN AA;Mc;0;L;;;;;N;;;;;
11B31;DIVES AKURU VOWEL SIGN I;Mc;0;L;;;;;N;;;;;
11B32;DIVES AKURU VOWEL SIGN II;Mc;0;L;;;;;N;;;;;
11B33;DIVES AKURU VOWEL SIGN U;Mc;0;L;;;;;N;;;;;
11B34;DIVES AKURU VOWEL SIGN UU;Mc;0;L;;;;;N;;;;;
11B35;DIVES AKURU VOWEL SIGN E;Mc;0;L;;;;;N;;;;;
11B36;<reserved>
11B37;DIVES AKURU VOWEL SIGN AI;Mc;0;L;;;;;N;;;;;
11B38;DIVES AKURU VOWEL SIGN O;Mc;0;L;11B35 11B30;;;;N;;;;;
11B39;<reserved>
11B3A;<reserved>
11B3B;DIVES AKURU SIGN ANUSVARA;Mn;0;NSM;;;;;N;;;;;
11B3C;DIVES AKURU SIGN CANDRABINDU;Mn;0;NSM;;;;;N;;;;;
11B3D;DIVES AKURU SIGN HALANTA;Mc;9;L;;;;;N;;;;;
11B3E;DIVES AKURU VIRAMA;Mn;9;NSM;;;;;N;;;;;
11B3F;DIVES AKURU PREFIXED NASAL SIGN;Mn;0;NSM;;;;;N;;;;;
11B40;DIVES AKURU SIGN NUKTA;Mn;7;NSM;;;;;N;;;;;
11B41;DIVES AKURU DOUBLE DANDA;Po;0;L;;;;;N;;;;;
11B42;DIVES AKURU GAP FILLER;Po;0;L;;;;;N;;;;;
11B43;DIVES AKURU END OF TEXT MARK;Po;0;L;;;;;N;;;;;
11B50;DIVES AKURU DIGIT ZERO;Nd;0;L;;0;0;0;N;;;;;
11B51;DIVES AKURU DIGIT ONE;Nd;0;L;;1;1;1;N;;;;;
11B52;DIVES AKURU DIGIT TWO;Nd;0;L;;2;2;2;N;;;;;
11B53;DIVES AKURU DIGIT THREE;Nd;0;L;;3;3;3;N;;;;;
11B54;DIVES AKURU DIGIT FOUR;Nd;0;L;;4;4;4;N;;;;;
11B55;DIVES AKURU DIGIT FIVE;Nd;0;L;;5;5;5;N;;;;;
11B56;DIVES AKURU DIGIT SIX;Nd;0;L;;6;6;6;N;;;;;
11B57;DIVES AKURU DIGIT SEVEN;Nd;0;L;;7;7;7;N;;;;;
11B58;DIVES AKURU DIGIT EIGHT;Nd;0;L;;8;8;8;N;;;;;
11B59;DIVES AKURU DIGIT NINE;Nd;0;L;;9;9;9;N;;;;;
```

5.1.1 Linebreak data: `LineBreak.txt`

```
11B00..11B06;AL    # DIVES AKURU LETTER A..DIVES AKURU LETTER E
11B08;AL           # DIVES AKURU LETTER O
11B0C..11B13;AL    # DIVES AKURU LETTER KA..DIVES AKURU LETTER JA
11B15..11B16;AL    # DIVES AKURU LETTER NYA..DIVES AKURU LETTER TTA
11B18..11B2F;AL    # DIVES AKURU LETTER DDA..DIVES AKURU LETTER ZA
11B30..11B35;CM    # DIVES AKURU VOWEL SIGN AA..DIVES AKURU VOWEL SIGN E
11B37..11B38;CM    # DIVES AKURU VOWEL SIGN AI..DIVES AKURU VOWEL SIGN O
11B3B..11B3D;CM    # DIVES AKURU SIGN ANUSVARA..DIVES AKURU SIGN HALANTA
11B3E;CM           # DIVES AKURU VIRAMA
11B3F;CM           # DIVES AKURU PREFIXED NASAL SIGN
11B40;CM           # DIVES AKURU SIGN NUKTA
11B41..11B43;BA    # DIVES AKURU DOUBLE DANDA..DIVES AKURU END OF TEXT MARK
11B50..11B59;NU    # DIVES AKURU DIGIT ZERO..DIVES AKURU DIGIT NINE
```

5.1.2 Indic syllabic categories: `IndicSyllabicCategory.txt`

```
# Indic_Syllabic_Category=Bindu
```

```
11B3D..11B3E ; Bindu             # Mn   [2] DIVES AKURU SIGN ANUSVARA..
                                           DIVES AKURU SIGN CANDRABINDU

# Indic_Syllabic_Category=Nukta

11B40        ; Nukta             # Mn       DIVES AKURU SIGN NUKTA

# Indic_Syllabic_Category=Pure_Killer

11B3D        ; Pure_Killer       # Mn       DIVES AKURU SIGN HALANTA

# Indic_Syllabic_Category=Invisible_Stacker

11B3F        ; Invisible_Stacker # Mn       DIVES AKURU VIRAMA

# Indic_Syllabic_Category=Vowel_Independent

11B00..11B06 ; Vowel_Independent # Lo   [7] DIVES AKURU LETTER A..
                                           DIVES AKURU LETTER E

11B09        ; Vowel_Independent # Lo   [2] DIVES AKURU LETTER O

# Indic_Syllabic_Category=Vowel_Dependent

11B30..11B35 ; Vowel_Dependent   # Mc   [6] DIVES AKURU VOWEL SIGN AA..
                                           DIVES AKURU VOWEL SIGN E

11B37..11B38 ; Vowel_Dependent   # Mc   [2] DIVES AKURU VOWEL SIGN AI..
                                           DIVES AKURU VOWEL SIGN O

# Indic_Syllabic_Category=Consonant

11B0C..11B13 ; Consonant         # Lo   [8] DIVES AKURU LETTER KA..
                                           DIVES AKURU LETTER JA

11B15..11B15 ; Consonant         # Lo   [2] DIVES AKURU LETTER NYA..
                                           DIVES AKURU LETTER TTA

11B18..11B2F ; Consonant         # Lo  [25] DIVES AKURU LETTER NYA..
                                           DIVES AKURU LETTER ZA

# Indic_Syllabic_Category=Consonant_Prefixed

11B3F  ; Consonant_Prefixed      # Lo       DIVES AKURU PREFIXED NASAL SIGN

# Indic_Syllabic_Category=Number

11B50..11B59 ; Number            # Nd  [10] DIVES AKURU DIGIT ZERO..
                                           DIVES AKURU DIGIT NINE
```

5.1.3 Indic positional categories: `IndicPositionalCategory.txt`

```
# Indic_Positional_Category=Right

11B30..11B34 ; Right          # Mc   [5] DIVES AKURU VOWEL SIGN AA..
                                         DIVES AKURU VOWEL SIGN UU
11B3D        ; Right          # Mc       DIVES AKURU SIGN HALANTA
```

```
# Indic_Positional_Category=Left

11B35        ; Left           # Mc       DIVES AKURU VOWEL SIGN E
11B37        ; Left           # Mc       DIVES AKURU VOWEL SIGN AI

# Indic_Positional_Category=Left_And_Right

11B38        ; Left_And_Right # Mc       DIVES AKURU VOWEL SIGN O

# Indic_Positional_Category=Top

11B3B..11B3C ; Top            # Mn   [2] DIVES AKURU SIGN ANUSVARA..
                                        DIVES AKURU SIGN CANDRABINDU
11B3F        ; Top            # Mn       DIVES AKURU PREFIXED NASAL SIGN

# Indic_Positional_Category=Bottom

11B40        ; Bottom         # Mn       DIVES AKURU SIGN NUKTA
```

6 References

Anderson, Deborah, et. al. 2017 “Recommendations to UTC #153 October 2017 on Script Proposals”. L2/17-384. https://www.unicode.org/L2/L2017/17384-script-ad-hoc-recs.pdf

Bell, H[arry]. C[harles]. P[urvis]. 1919. “The Old and Modern Maldivian Alphabets”. In “Máldivian Linguistic Studies”. *Journal of the Ceylon Branch of the Royal Asiatic Society*. Vol. XXVII – Extra Number. Appendix C, pp. 149–167.

———. 1929. “Excerpta Máldiviana, No. 8 – Mulaku Atol: Koḷu-Fuṛi Island”. *Journal of the Ceylon Branch of the Royal Asiatic Society*, vol. XXXI, no. 82, pp. 400–415.

———. 1930. “Excerpta Máldiviana, No. 9 – Lómáfánu”. *Journal of the Ceylon Branch of the Royal Asiatic Society*, vol. XXXI, no. 83, pp. 539–578

ﷺ ﷺ [= Bodufenvalhuge Sidi]. 1959. ﷺ [= *Divehi Akuru*]. ﷺ [= *evvana bai* (‘part I’)]. Male.

Daily Mail. “Maldives government highlights the impact of climate change... by meeting underwater.” October 20, 2009. http://www.dailymail.co.uk/news/article-1221021/Maldives-underwater-cabinet-meeting-held-highlight-impact-climate-change.html

Fritz, Sonja. 2002. *The Dhivehi Language: A Descriptive and Historical Grammar of Maldivian and its Dialects*. Beiträge zur Südasienforschung, Südasien-Institut, Universität Heidelberg, Band 191. Würzburg: Ergon Verlag.

Geiger, Wilhelm. 1919. “Máldivian Linguistic Studies”. *Journal of the Ceylon Branch of the Royal Asiatic Society*. Vol. XXVII – Extra Number. Translated from the German by J. C. White; edited by H. C. P. Bell. Colombo: H. C. Cottle.

Gippert, Jost. 2003. “Early New Persian as A Medium of Spreading Islam.” *Persian Origins – Judaeo-Persian and the Emergence of New Persian*, pp. 31–48. Collected Papers of the Symposium, Göttingen 1999. Edited by Ludwig Paul. Wiesbaden: Harrassowitz Verlag.

———. 2004. “A Glimpse into the Buddhist Past of the Maldives; I. An Early Prakrit Inscription.” *Wiener Zeitschrift für die Kunde Südasiens* [Vienna Journal of South Asian Studies], vol. 48 (2004), pp. 81–109.

———. 2013. “An Outline of the History of Maldivian Writing”. *Grammatica et verba: Glamor and verve*. Studies in South Asian, historical, and Indo-European linguistics in honor of Hans Henrich Hock on the occasion of his seventy-fifth birthday, pp. 81–98, edited by Shu-Fen Chen and Benjamin Slade. Beech Stave Press.

———. 2014. “A Glimpse into the Buddhist Past of the Maldives: II. Two Sanskrit Inscriptions.” *Wiener Zeitschrift für die Kunde Südasiens* [Vienna Journal of South Asian Studies], vol. 55 (2013–2014), pp. 111-144

Naseema Mohamed. 1999. *Divehi Writing Systems*. Male: National Centre for Linguistic and Historical Research.

New York Times. “Vandalism at Maldives Museum Stirs Fears of Extremism.” Vikas Bajaj, February 13, 2012. http://www.nytimes.com/2012/02/14/world/asia/political-turmoil-threatens-archaeological-treasures-in-maldives.html

Pandey, Anshuman. 2009. “Preliminary Proposal to Encode the Dhivehi Script in ISO/IEC 10646.” L2/09-191. http://www.unicode.org/L2/L2009/09191-dhivehi.pdf

———. 2010. “Preliminary Proposal to Encode Dhives Akuru in ISO/IEC 10646.” N3848 L2/10-213. http://www.unicode.org/L2/L2010/10213-dhivesakuru.pdf

Prinsep, James. 1836. “Note on the Maldive Alphabet”. *Journal of the Royal Asiatic Society of Bengal*, vol. 5, p. 794.

Romero-Frias, Xavier [ed]. 2003. ދިވެހި ބަހުގެ [= *Divehi Akuru*]. ހަވީދާ ބައި [= *evvana bai* (‘part ıv’)]. Reprint of first edition of 1959 by Bodufenvalhuge Sidi. Edited with introduction and appendices. Trivandrum: Nova Ethnographia Indica.

———. 2012. *Folk Tales of Maldives*. Nordic Institute of Asian Studies: Copenhagen.

Wikimedia Commons. “Coat of Arms of the Maldives”. http://en.wikipedia.org/wiki/File:Coat_of_Arms_of_Maldives.svg

Wikipedia. “ދަންބިދޫ ލޯމާފާނު” [= *Daṁbidū Lōmāfānu*]. http://dv.wikipedia.org/wiki/ދަންބިދޫ_ލޯމާފާނު.

Wilson, John. 1841. “Vocabulary of the Maldivian Language, Compiled by Lieut. W. Christopher, I. N. Communicated to the Bombay Branch of the Royal Asiatic Society”. *Journal of the Royal Asiatic Society of Great Britain and Ireland*, vol. 6, pp. 42-76.

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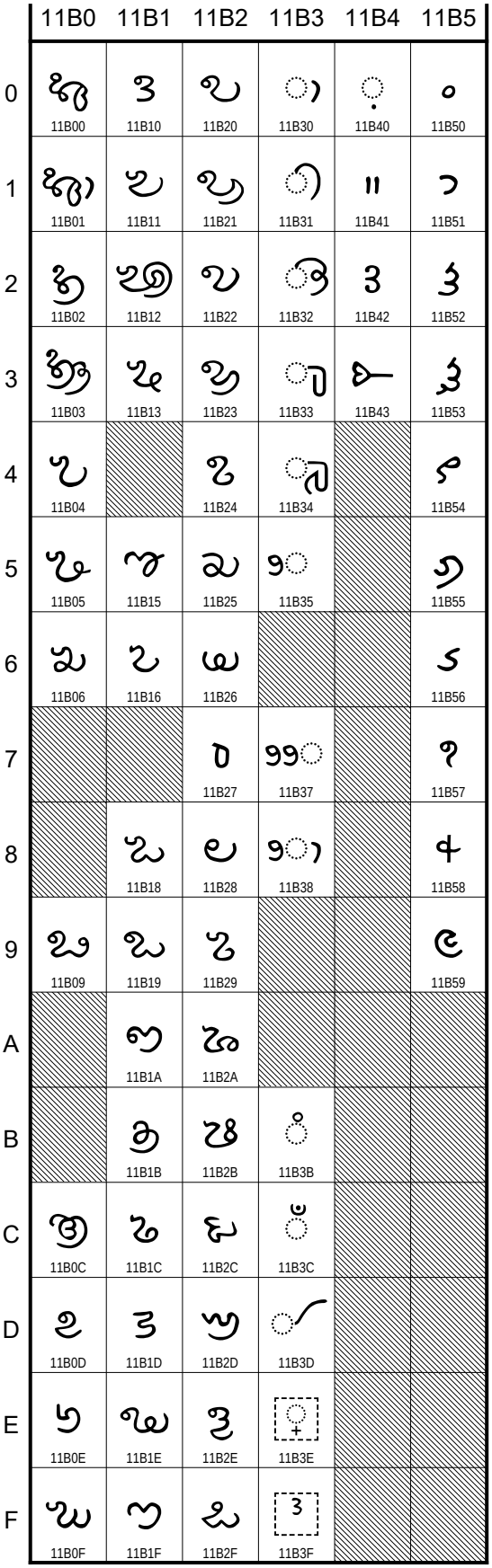

11B0 11B1 11B2 11B3 11B4 11B5
0 11B00 11B10 11B20 11B30 11B40 11B50
1 11B01 11B11 11B21 11B31 11B41 11B51
2 11B02 11B12 11B22 11B32 11B42 11B52
3 11B03 11B13 11B23 11B33 11B43 11B53
4 11B04 11B24 11B34 11B54
5 11B05 11B15 11B25 11B35 11B55
6 11B06 11B16 11B26 11B56
7 11B27 11B37 11B57
8 11B18 11B28 11B38 11B58
9 11B09 11B19 11B29 11B59
A 11B1A 11B2A
B 11B1B 11B2B 11B3B
C 11B0C 11B1C 11B2C 11B3C
D 11B0D 11B1D 11B2D 11B3D
E 11B0E 11B1E 11B2E 11B3E
F 11B0F 11B1F 11B2F 11B3F

This block supports both Evela Akuru and Dives Akuru.

Independent vowels

11B00 𑤀 DIVES AKURU LETTER A
11B01 𑤁 DIVES AKURU LETTER AA
11B02 𑤂 DIVES AKURU LETTER I
11B03 𑤃 DIVES AKURU LETTER II
11B04 𑤄 DIVES AKURU LETTER U
11B05 𑤅 DIVES AKURU LETTER UU
11B06 𑤆 DIVES AKURU LETTER E
11B07 <reserved>
11B08 <reserved>
11B09 𑤉 DIVES AKURU LETTER O
11B0A <reserved>
11B0B <reserved>

Consonants

11B0C 𑤌 DIVES AKURU LETTER KA
11B0D 𑤍 DIVES AKURU LETTER KHA
11B0E 𑤎 DIVES AKURU LETTER GA
11B0F 𑤏 DIVES AKURU LETTER GHA
11B10 𑤐 DIVES AKURU LETTER NGA
11B11 𑤑 DIVES AKURU LETTER CA
11B12 𑤒 DIVES AKURU LETTER CHA
11B13 𑤓 DIVES AKURU LETTER JA
11B14 <reserved>
11B15 𑤕 DIVES AKURU LETTER NYA
11B16 𑤖 DIVES AKURU LETTER TTA
11B17 <reserved>
11B18 𑤘 DIVES AKURU LETTER DDA
11B19 𑤙 DIVES AKURU LETTER DDHA
11B1A 𑤚 DIVES AKURU LETTER NNA
11B1B 𑤛 DIVES AKURU LETTER TA
11B1C 𑤜 DIVES AKURU LETTER THA
11B1D 𑤝 DIVES AKURU LETTER DA
11B1E 𑤞 DIVES AKURU LETTER DHA
11B1F 𑤟 DIVES AKURU LETTER NA
11B20 𑤠 DIVES AKURU LETTER PA
11B21 𑤡 DIVES AKURU LETTER PHA
11B22 𑤢 DIVES AKURU LETTER BA
11B23 𑤣 DIVES AKURU LETTER BHA
11B24 𑤤 DIVES AKURU LETTER MA
11B25 𑤥 DIVES AKURU LETTER YA
• used as a carrier for representing independent and initial vowels
11B26 𑤦 DIVES AKURU LETTER YYA
11B27 𑤧 DIVES AKURU LETTER RA
11B28 𑤨 DIVES AKURU LETTER LA
11B29 𑤩 DIVES AKURU LETTER VA
11B2A 𑤪 DIVES AKURU LETTER SHA
11B2B 𑤫 DIVES AKURU LETTER SSA
11B2C 𑤬 DIVES AKURU LETTER SA
11B2D 𑤭 DIVES AKURU LETTER HA
11B2E 𑤮 DIVES AKURU LETTER LLA
11B2F 𑤯 DIVES AKURU LETTER ZA

Dependent vowel signs

11B30 ◌𑤰 DIVES AKURU VOWEL SIGN AA
11B31 ◌𑤱 DIVES AKURU VOWEL SIGN I
11B32 ◌𑤲 DIVES AKURU VOWEL SIGN II
11B33 ◌𑤳 DIVES AKURU VOWEL SIGN U
11B34 ◌𑤴 DIVES AKURU VOWEL SIGN UU
11B35 𑤵◌ DIVES AKURU VOWEL SIGN E
11B36 <reserved>
11B37 𑤵𑤵◌ DIVES AKURU VOWEL SIGN AI
11B38 𑤵◌𑤰 DIVES AKURU VOWEL SIGN O
≡ 11B35 𑤵◌ 11B30 ◌𑤰
11B39 <reserved>
11B3A <reserved>

Nasalization signs

11B3B ◌𑤸 DIVES AKURU SIGN ANUSVARA
11B3C ◌𑤹 DIVES AKURU SIGN CANDRABINDU

Halanta

11B3D ◌𑤽 DIVES AKURU SIGN HALANTA
= sukun
• silences the inherent vowel

Virama

11B3E ◌𑤾 DIVES AKURU VIRAMA
• used only for conjunct production

Prefixed nasal sign

11B3F ◌𑤿 DIVES AKURU PREFIXED NASAL SIGN
• used for cluster-initial homorganic nasal

Nukta

11B40 ◌𑥀 DIVES AKURU SIGN NUKTA
• modern sign used for extending the alphabet

Punctuation

11B41 𑥁 DIVES AKURU DOUBLE DANDA
11B42 𑥂 DIVES AKURU GAP FILLER
11B43 𑥃 DIVES AKURU END OF TEXT MARK

Digits

11B50 𑥐 DIVES AKURU DIGIT ZERO
11B51 𑥑 DIVES AKURU DIGIT ONE
11B52 𑥒 DIVES AKURU DIGIT TWO
11B53 𑥓 DIVES AKURU DIGIT THREE
11B54 𑥔 DIVES AKURU DIGIT FOUR
11B55 𑥕 DIVES AKURU DIGIT FIVE
11B56 𑥖 DIVES AKURU DIGIT SIX
11B57 𑥗 DIVES AKURU DIGIT SEVEN
11B58 𑥘 DIVES AKURU DIGIT EIGHT
11B59 𑥙 DIVES AKURU DIGIT NINE

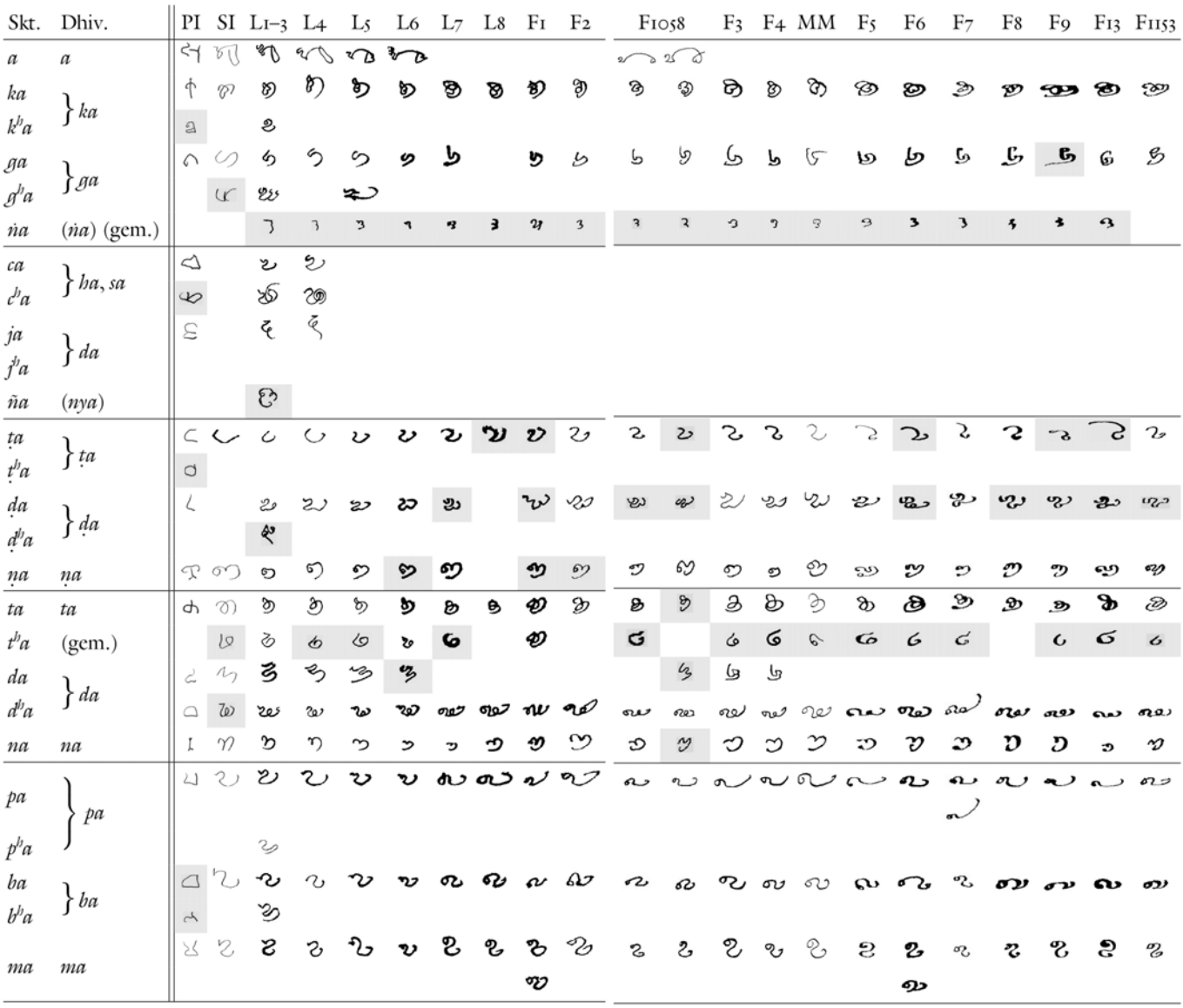


Figure 1: Inventory of Dives Akuru letters A, KA .. MA across various *lōmāfānu* and *fatkoḷu* (from Gippert 2013: Table 1). Continued in figure 2.

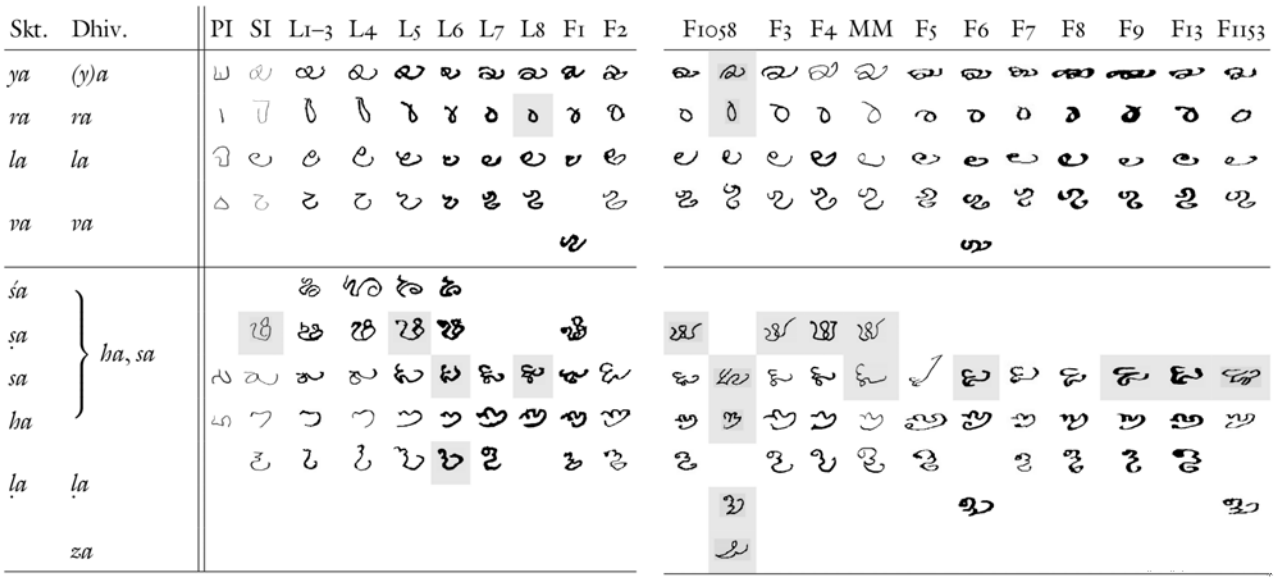
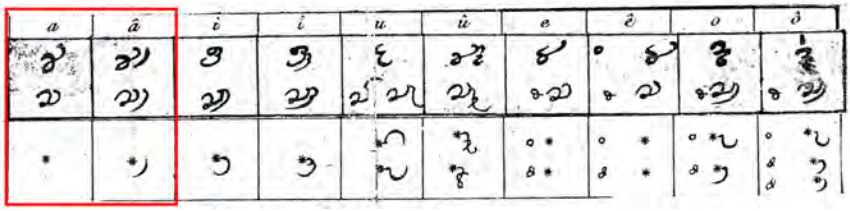


Figure 2: Inventory of Dives Akuru letters YA .. ZA across various *lōmāfānu* and *fatkoḷu* (from Gippert 2013: Table 1). Continued from figure 1.

Usage of *ya* forms for 𑤀 *a* (red) and 𑤁 *aa* (blue) in L2.

Usage of 𑤃 A (red) and 𑤄 AA (blue) in L3.

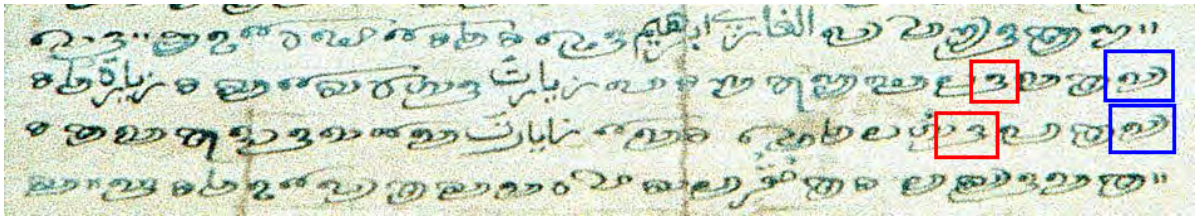


Forms used for *a* in G (excerpted from fig. 47).

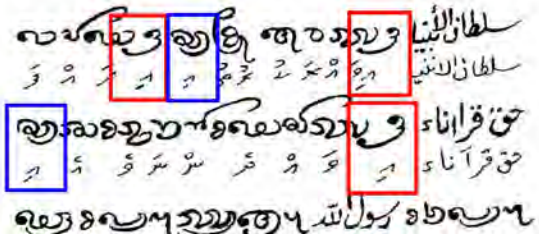
Figure 3: Specimens of the vowel letters A and AA.

Usage of the vowel letter 𑤆 I and the *ya*-form *yi* in L2.

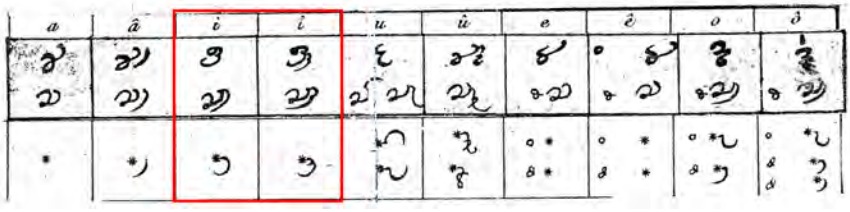
Usage of the vowel letter 𑤆 I in L3.



Usage of the vowel letter 𑤆 I and the *ya*-form *yi* in F6.



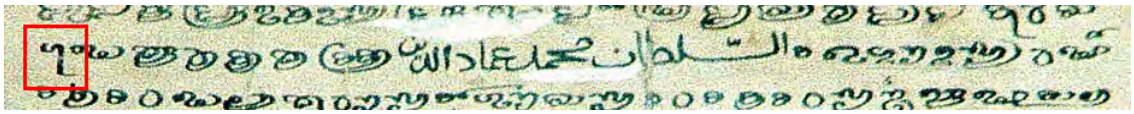
Independent form of *i* written using the variant 𑤃 (red) of 𑤆 I and the *ya*-form 𑤇 *yi* (blue) in Sidi (1959: 16).



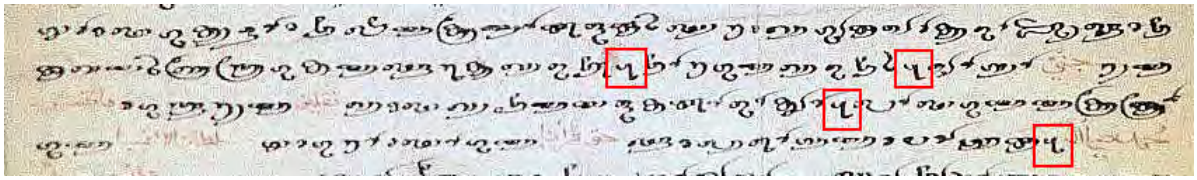
Specimen of *i* in G (excerpted from fig. 47).

Figure 4: Specimens of the vowel letter I.

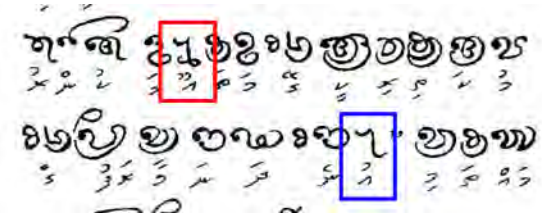
Usage of 𑤉 U in L3.



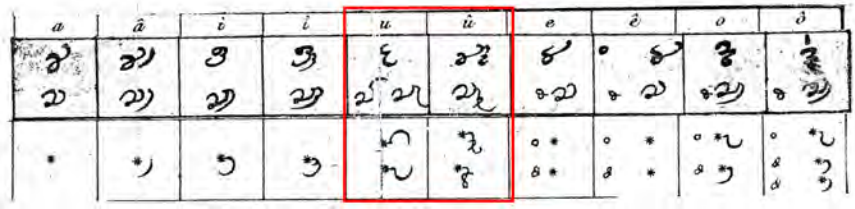
Shape of 𑤉 U in F6.



Shape of 𑤉 U in F8.



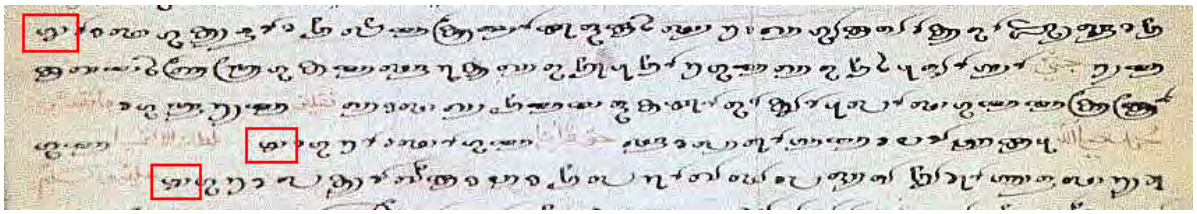
Representation of 𑤉 U as 𑤇 (blue) and 𑤊 UU as variant 𑤈 (red) in Sidi (1959: 29).



Specimen of *u* in G (excerpted from fig. 47).

Figure 5: Specimens of the vowel letters U and UU.

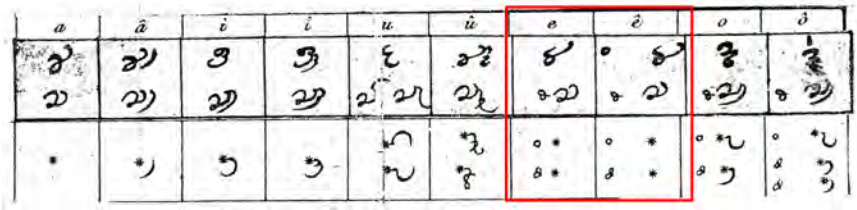
Usage of 𑤆 E and the *ya*-form *ye* in L4.



Shape of 𑤆 E in F8.

Shape of 𑤆 E in F9.

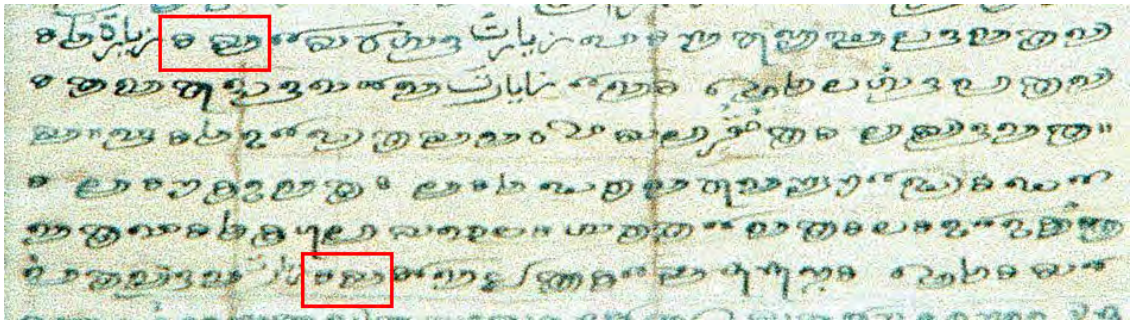
Shape of 𑤆 E in F11.



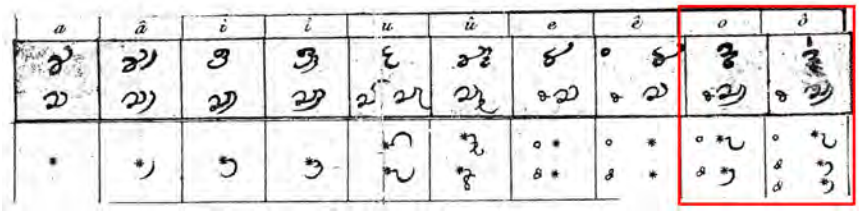
Specimen of *e* in G (excerpted from fig. 47).

Figure 6: Specimens of the vowel letter E.

Usage of 𑤮 o in L3.



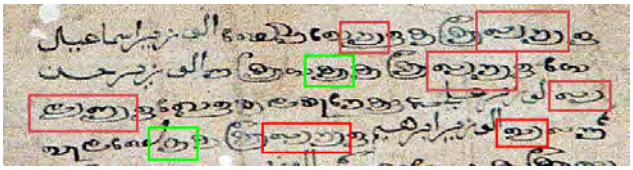
Usage of the *ya*-form of 𑤬𑤰 *o* in F6.



Specimen of *o* in G (excerpted from fig. 47).

Figure 7: Specimens of the vowel letter o.

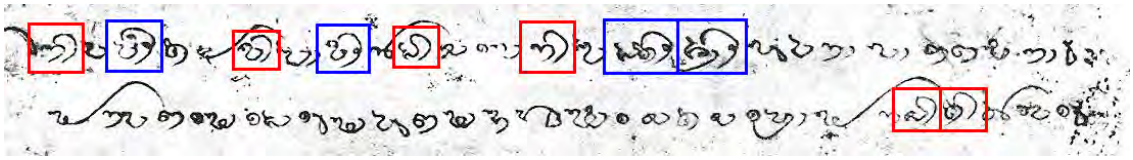
Shape of VOWEL SIGN AA in L1.



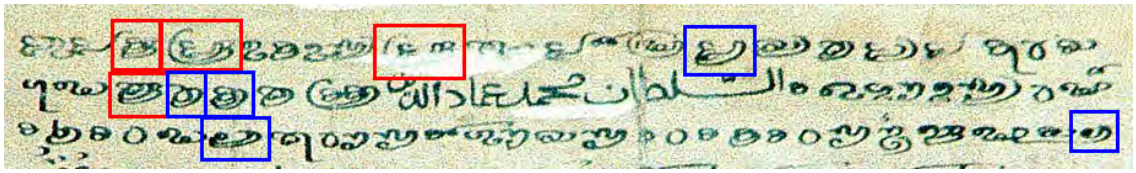
Shape of VOWEL SIGN AA in F12. Compare to VOWEL SIGN I (green).

Figure 8: Specimens of VOWEL SIGN AA.

Shape of VOWEL SIGN I and VOWEL SIGN II in L2.



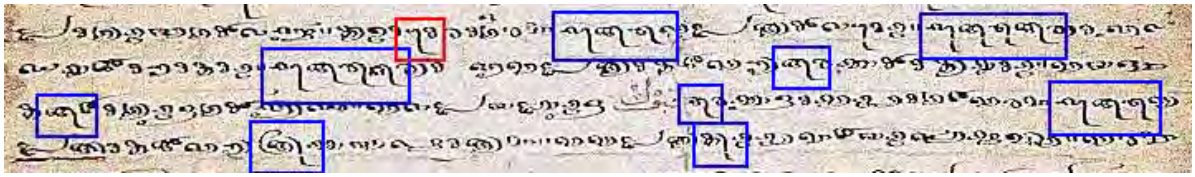
Shape of VOWEL SIGN I and VOWEL SIGN II in L5.



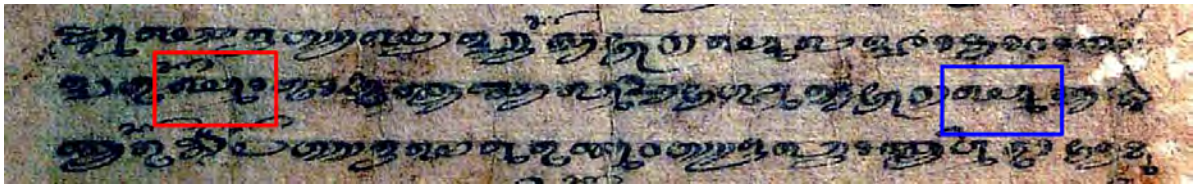
Shape of VOWEL SIGN I and VOWEL SIGN II in F6.

Figure 9: Specimens of VOWEL SIGN I and VOWEL SIGN II.

The ◌ු VOWEL SIGN U (red) and ◌ූ VOWEL SIGN UU (blue) in L4.



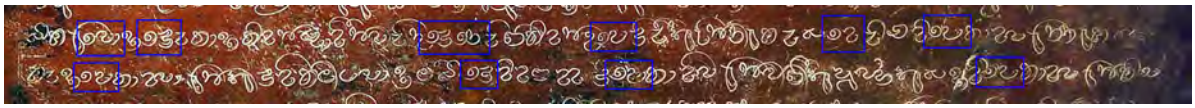
The ◌ු VOWEL SIGN U written with the later form ◌ු in F5.



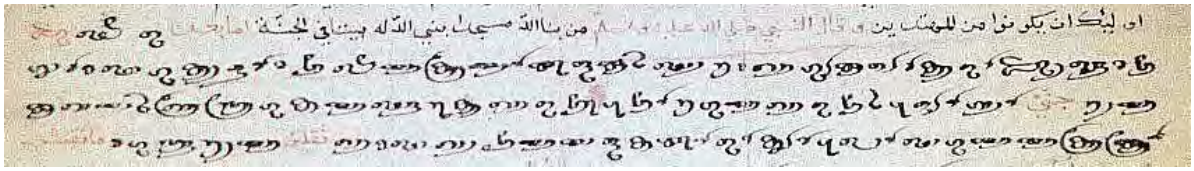
The ◌ු VOWEL SIGN U and ◌ූ VOWEL SIGN UU in F1153 written, respectively, with the forms ◌ු and ◌ූ in *dhu* and *dhū*.

Usage of ◌ූ VOWEL SIGN UU in L2.

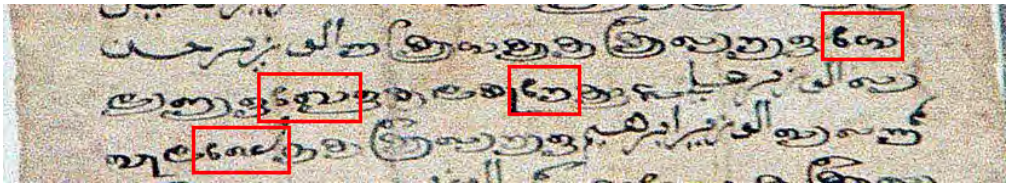
Figure 10: Specimens of the ◌ු VOWEL SIGN U and ◌ූ VOWEL SIGN UU.



Usage of 𑤉◌ VOWEL SIGN E in L1.



Usage of 𑤉◌ VOWEL SIGN E in F8.

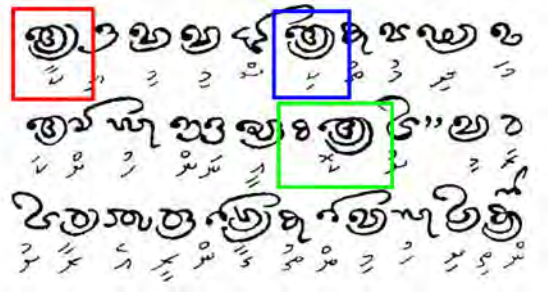


Idiosyncratic form □ of 𑤉◌ VOWEL SIGN E in F12.

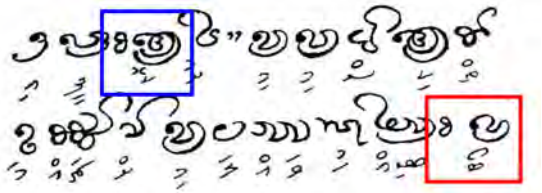
Usage of 𑤊𑤉◌ VOWEL SIGN AI in *lai* in L2.

Figure 11: Specimens of VOWEL SIGN E and VOWEL SIGN AI.

Usage of VOWEL SIGN O in L2.



Representation of the vowel signs *a*, *i*, and *o* with *ka* in Sidi (1959: 24). The excerpt shows the syllable *ko* (green) written with a variant of 𑤷◌𑤰 VOWEL SIGN O whose right-side element attaches to the base, similar to the behavior of the ◌𑤲 VOWEL SIGN I in *ki* (blue), which differs from the ◌𑤰 VOWEL SIGN AA, which does not attach to the base.

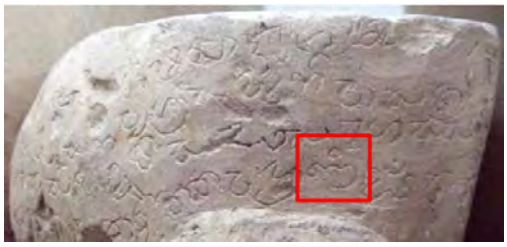


Representation of dependent signs for the vowels *o* and *ō* in Sidi (1959: 24). The excerpt shows the syllable *ko* and *bō*, both written using the same vowel sign. It suggests that these vowels were not differentiated by the time of Sidi's writing. Both vowels may be represented using the proposed 𑤷◌𑤰 VOWEL SIGN O.

Figure 12: Specimens of VOWEL SIGN O.

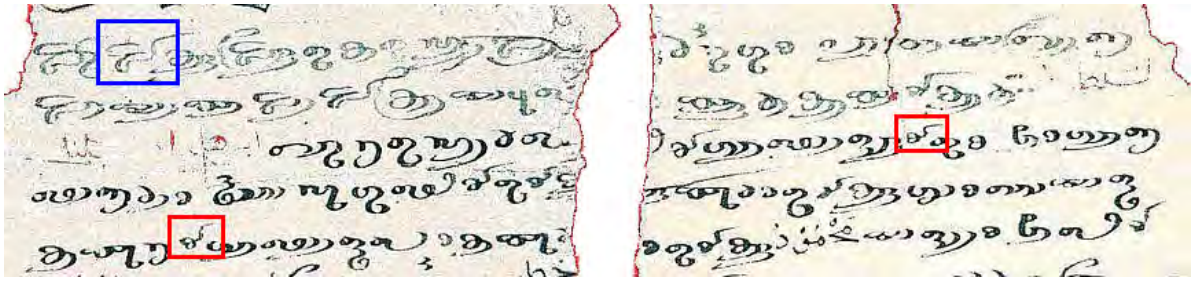
Usage of ◌ඁ CANDRABINDU in *oṁ* in IC 009, upper part (from Gippert 2014: fig. 7b).

Usage of ◌ං ANUSVARA in *mmaṃ* in L1.

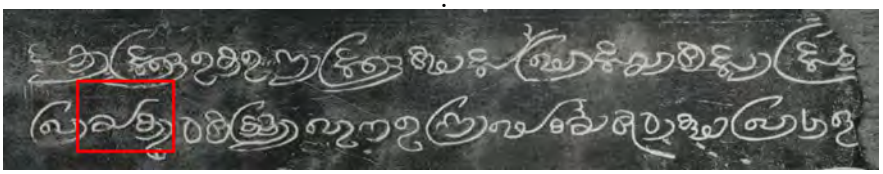


Usage of ◌ං ANUSVARA in *ṇāṃ* in IC 009 (from Gippert 2014: fig. 7b).

Figure 13: Specimens of CANDRABINDU and ANUSVARA.

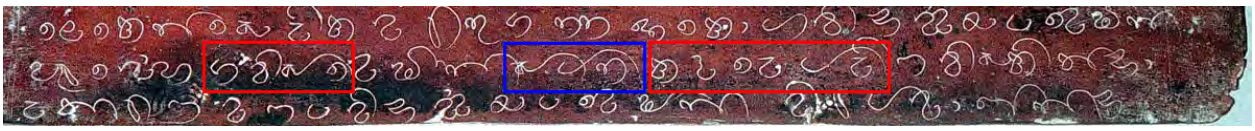


Usage of ◌෴ HALANTA for marking ඍ SA in the cluster ඍ්ත *sta* (blue), and with ත TA for indicating glottal stop using අ෴ (red) in F9.



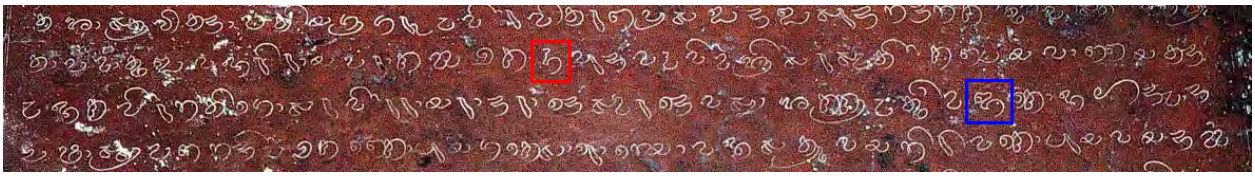
Usage of ◌෴ HALANTA with ඇ YA for representing *ú* in *uttara* in L8.

Usage of ◌෴ HALANTA and ◌ු VOWEL SIGN U for writing *bu* in L3: the former sign occurs in බ෴ *bú* in *dhabúduvú* (red) and the latter in බු in *budu* (blue).

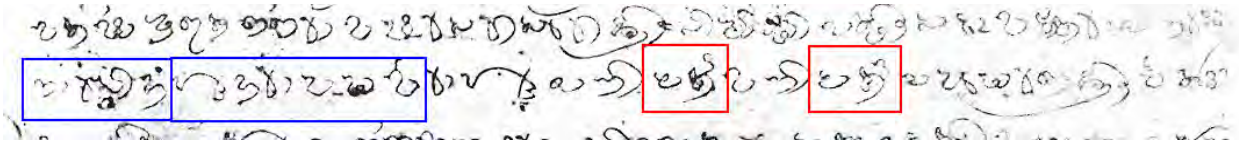


Usage of ◌෴ HALANTA for marking both the vowel *ú* and bare consonants in L4. The sign represents the *ú* in the word *súṭúna* (blue) with ඍ SA in ඍ෴ *sú* and ට෴ *ṭú*. The word *gamis* (red) contains a bare *s* written with HALANTA as ඍ෴. The word *kaḷaveṭ* (red) contains word-final *ṭ* written as ට෴.

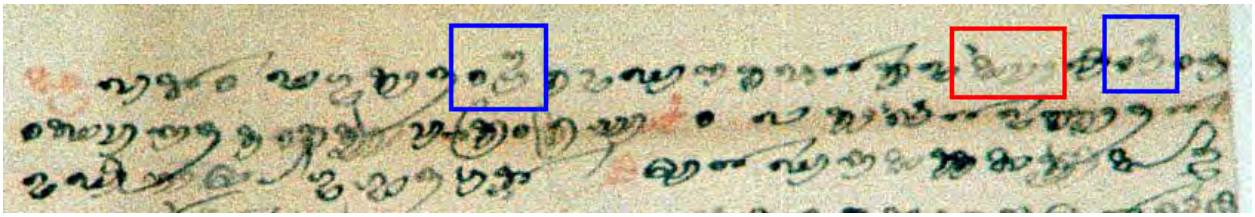
Figure 14: Representations of HALANTA.



The syllable 𑥅 *ṅga* written using the 𑥳 PREFIXED NASAL SIGN (red) and 𑥄 *ṅga* written as a conjunct.

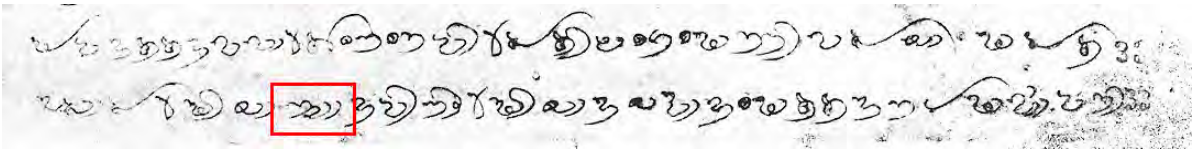


𑥄 NGA in the clusters *ṅka* and *ṅga* in L5: *nārasiṅga* (blue), *aṅgarāvadhama* (blue), and two instances of *laṅka* (red).



𑥄 NGA in the conjunct *ṅge* (red) and 𑥳 PREFIXED NASAL SIGN in the syllable *ṅsvā* in F2.

Figure 15: Representations of the letter NGA.



Default form of 𑤬 YA as ◌𑥂 in the conjunct *nya* in L5.

Usage of nominal form of 𑤬 YA in the conjunct *n=i* in L5.

Examples of *-ya* conjuncts in L3: *tya* (red) in the name *gaghanādītya* and *dya* (blue) in the word *rādya*.

Figure 16: Representations of 𑤬 YA.

◌𑤾 *repha* in the *rmma* in the name *daṛmmānanda* (red), and ◌𑤿 *ra-kāra* in *tri* in *triṅśati* and *śrī* in L2. Also note the old form 𑤢 of 𑤣 RA (green).

A syllable which might be interpreted as either *pṛ* or *pru*, in which the VOWEL SIGN U is written as a loop at the terminal of the *ra-kāra*.

Figure 17: Representations of 𑤣 RA.

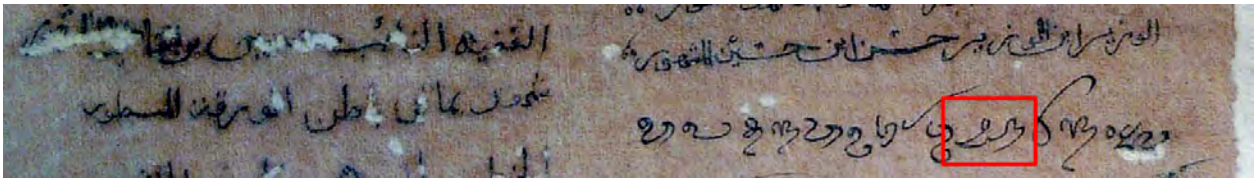
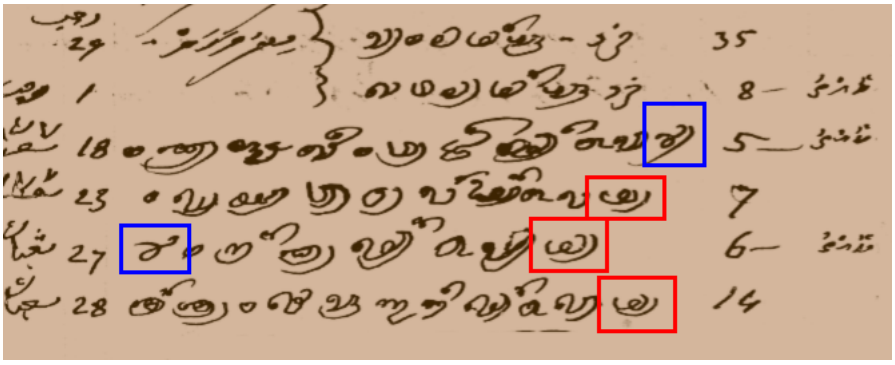
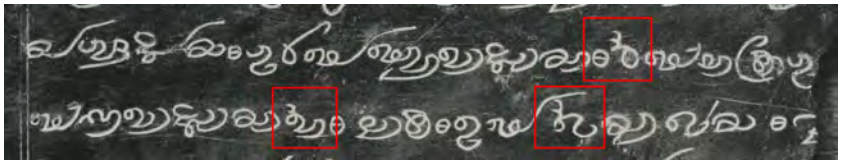


Figure 18: Usage of 𑤮 ZA in the syllable *zī* in *vazīru* in F1058.

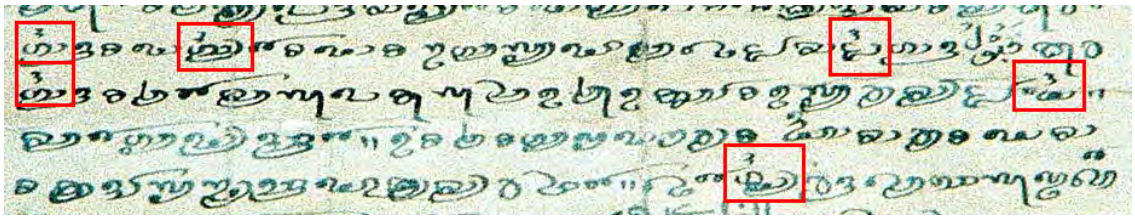


Usage of 𑤬 YYA in *yā* (red) in the word *rupiyā* in HMK (excerpted from fig. 32). Shown for contrastive usage is 𑤫 YA in the *ya*-forms *ā* and *a* (blue).

Figure 19: Representations of the letter YYA.



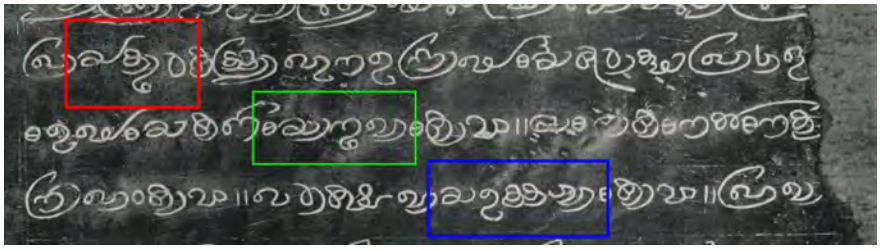
Usage of the 𑤿 PREFIXED NASAL SIGN in the syllables *ňre*, *ňmi*, and *ňba* in L8.



Usage of the 𑤿 PREFIXED NASAL SIGN in F6, written detached from the letter in *ňva*, *ňvā*, *ňsa*, *ňva*, *ňdha*, *ňḍā*.

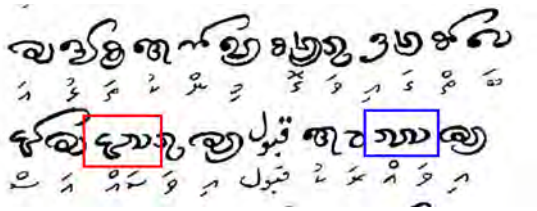
Compare the attached *ňsa* in L8 (here) with the detached *ňsa* in F6.

Figure 20: Representations of the PREFIXED NASAL SIGN.



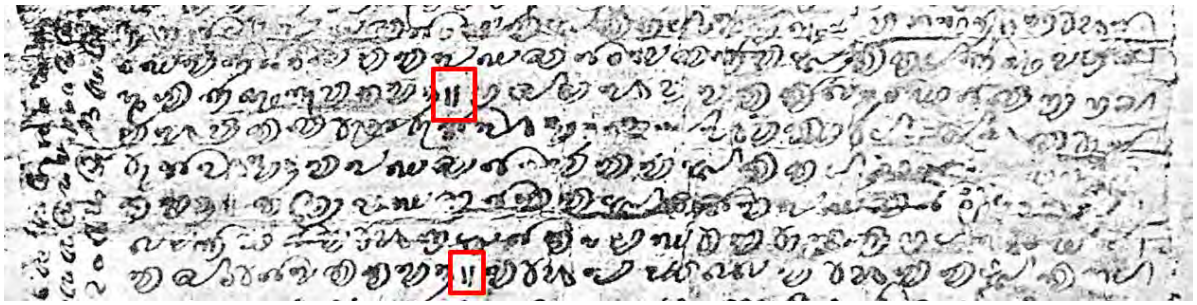
Representations of geminate clusters *tta* and *nna* in L8. The first *tta* occurs in *uttara* (red) as the ligature 𑤯 (𑤟 TA + 𑤵 THA). The second in *amattavi* (blue) as the touching conjunct 𑤟𑤟 (𑤟 TA + 𑤟 TA). The *nna* occurs in *onnami* (green) as the ligature 𑤶 (𑤺 NA + 𑤵 THA).

The geminate cluster *kka* represented as 𑤰 *ktha* in the word *dakka'i* in F3.

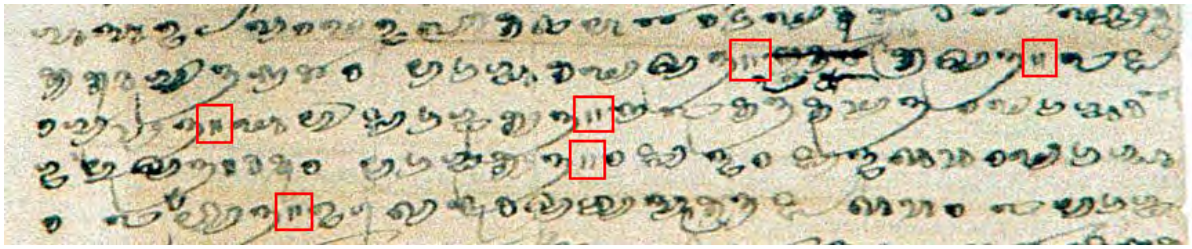


The geminate clusters *ssa* and *vva* represented as 𑤣 (𑤢 SA + 𑤬 YA) (red) and 𑤦 (𑤧 VA + 𑤬 YA) (blue), respectively in Sidi (1959: 22).

Figure 21: Representation of geminates using conjuncts.



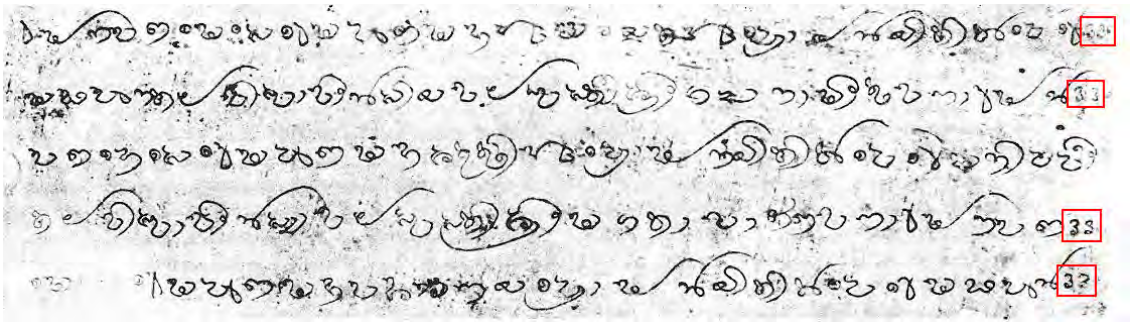
Usage of the 𑥄 DOUBLE DANDA in F1.



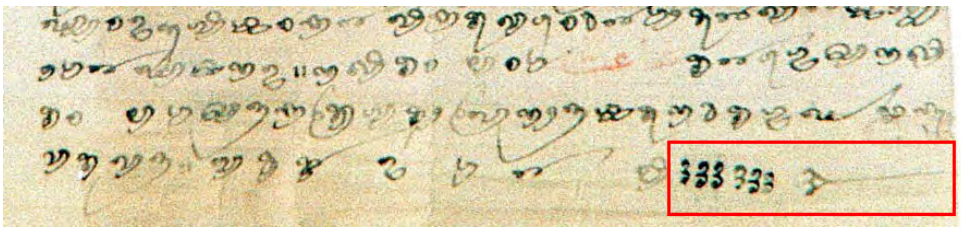
Usage of the 𑥄 DOUBLE DANDA in F2.

Usage of the 𑥄 DOUBLE DANDA in F9.

Figure 22: Usage of the 𑥄 DOUBLE DANDA.

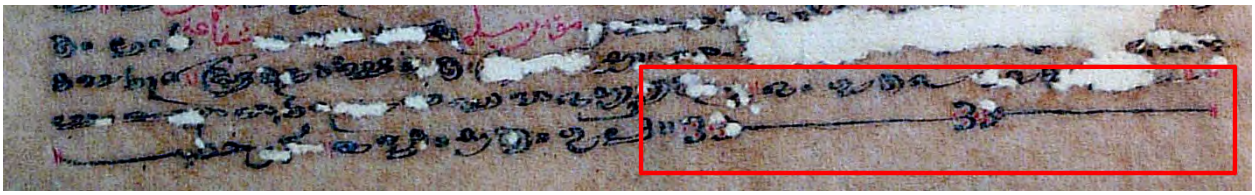


𑥐 GAP FILLER at the end of lines in L5.



Usage of the 𑥐 GAP FILLER and 𑥄 END OF TEXT MARK at the end of F2.

𑥐 GAP FILLER and 𑥄 END OF TEXT MARK at the end of F9.



𑥅 DOUBLE DANDA, 𑥐 GAP FILLER, and 𑥄 END OF TEXT MARK in F1058.

Figure 23: Representations of 𑥅 DOUBLE DANDA, 𑥐 GAP FILLER, and 𑥄 END OF TEXT MARK.

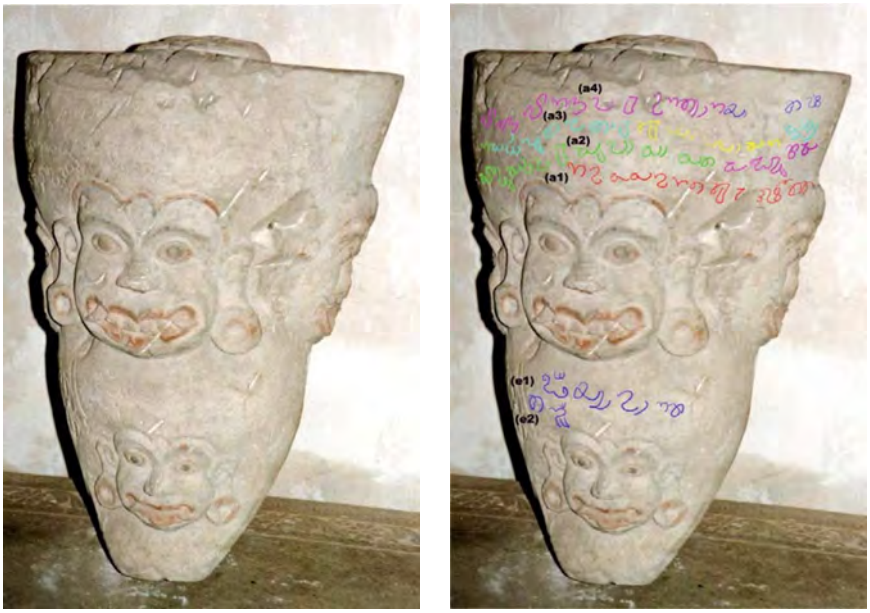


Figure 24: IC 009: a Vajrayana statue from Māle (from Gippert 2013: figures 1, 3). The inscription has been traced in color by Gippert.

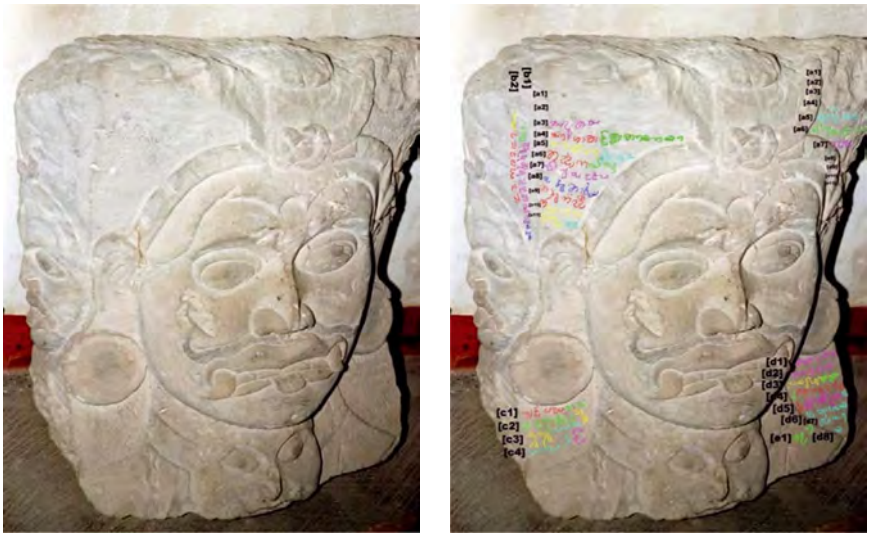


Figure 25: IC 010: a Vajrayana statue from Māle (from Gippert 2013: figures 2, 4). The inscription has been traced in color by Gippert.

Figure 26: L3: '*Dambidū Lōmāfānu*'. Plates 1, 2 of 16. Image from Wikimedia Commons.

Figure 27: L6: Single plate. From Bell 1930: Plate I, “Lómáfánu No. 1”.

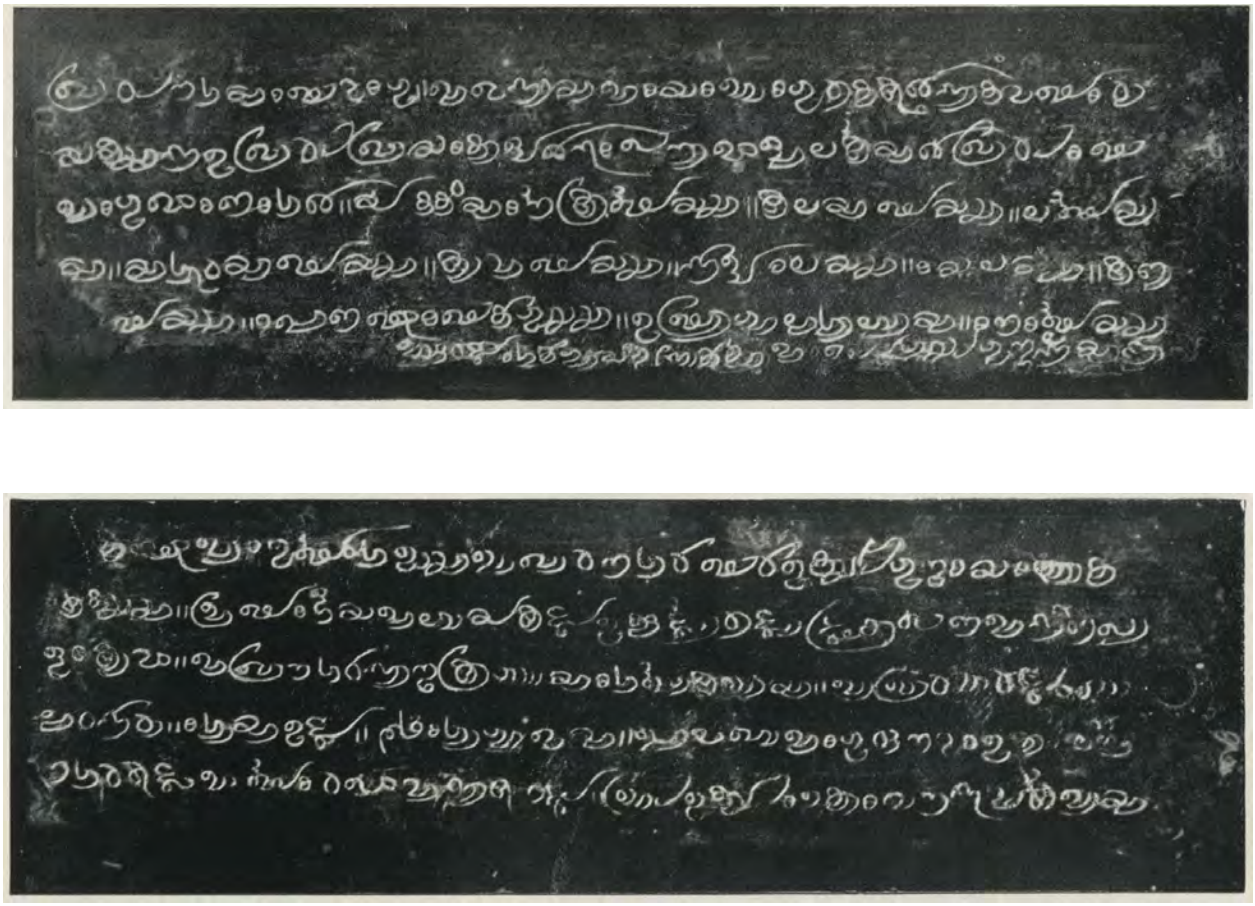


Figure 28: L7: Single plate. From Bell 1930: Plate II, “Lómáfánu No. 2”.

Figure 29: L8: Single plate (fragment). From Bell 1930: Plate III, IV, “Lómáfánu No. 3”.

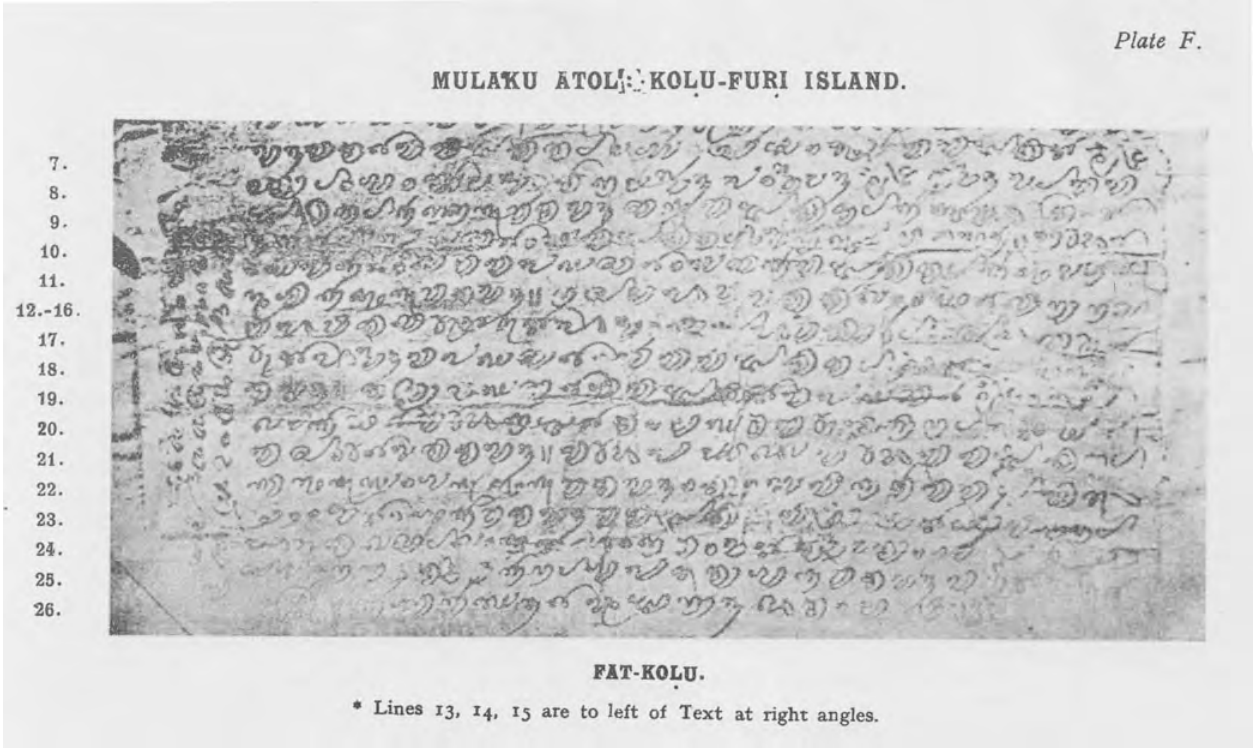


Figure 30: F1: ‘Koḷufuśi Faṭkoḷu’ (from Bell 1929: Plate E and Plate F).

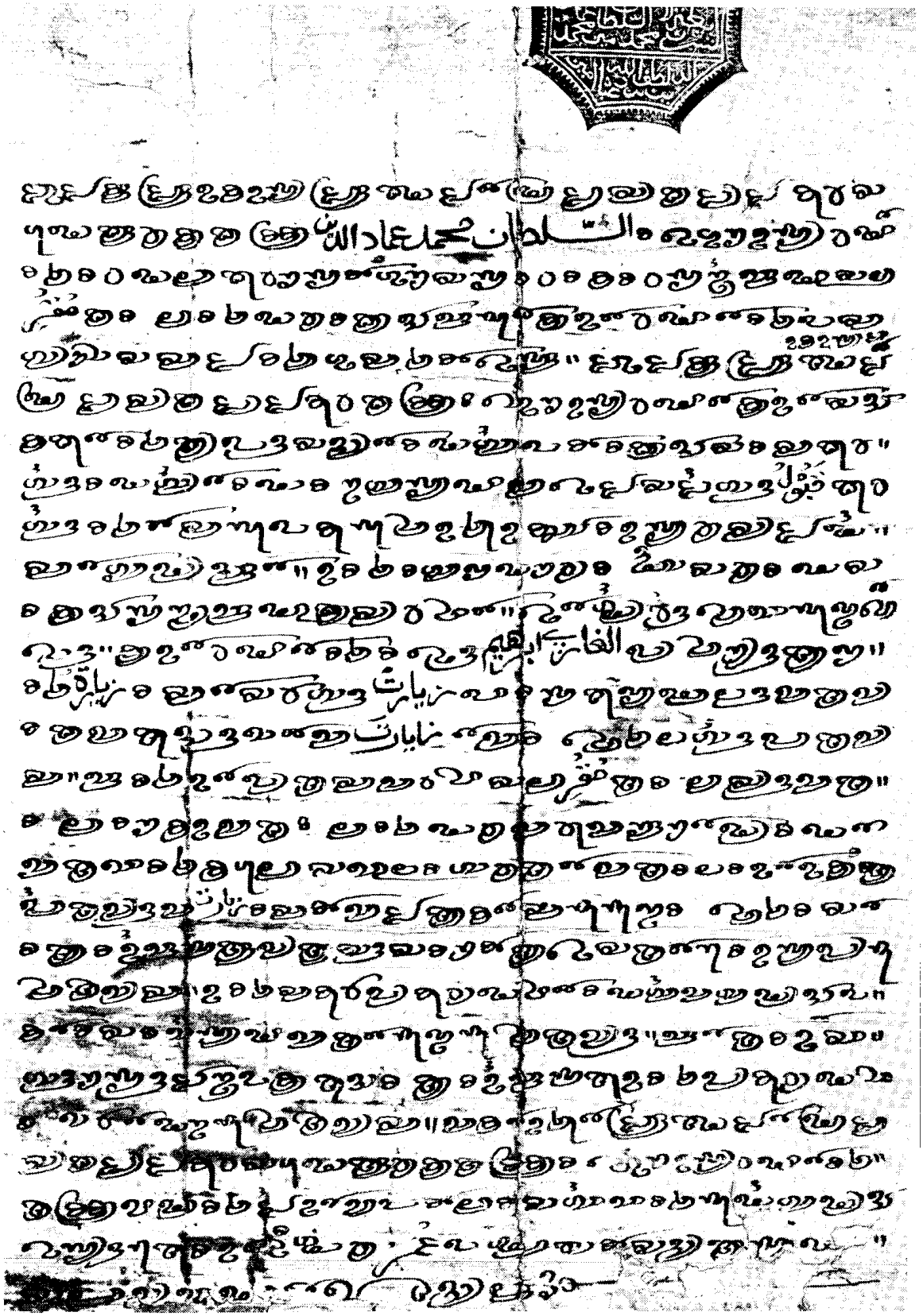


Figure 31: F6: 'Hannamīdū Fatkoḷu' of Muhammad Imaduddin (from Naseema 1999: 30).

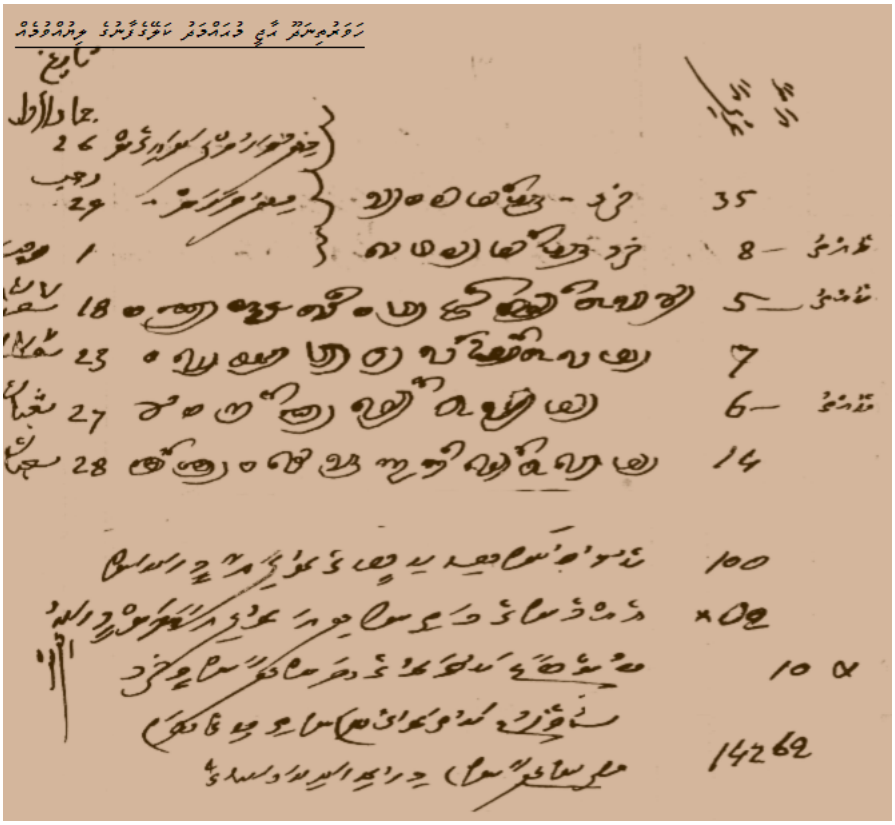


Figure 32: A document of Hajji Muhammad Kalegefanu from Havaru Tinadu in Huvadu atoll written in Dives Akuru, Thaana, and Arabic, dated 1346 AH (c. 1927 CE). Image from `www.galehiri.com`.

Figure 33: A lacquer jar with Dhives Akuru inscription from Tuḷādū in Baa Atoll, early 20th century. Image courtesy of Xavier Romero-Frias. Photo: Stephan Rebsamen, Bernisches Historisches Museum.

Figure 34: Representation of 18th century Dives Akuru based upon Thaana features: Basic consonant letters (from Sidi 1959: 4). The order follows that of Thaana.

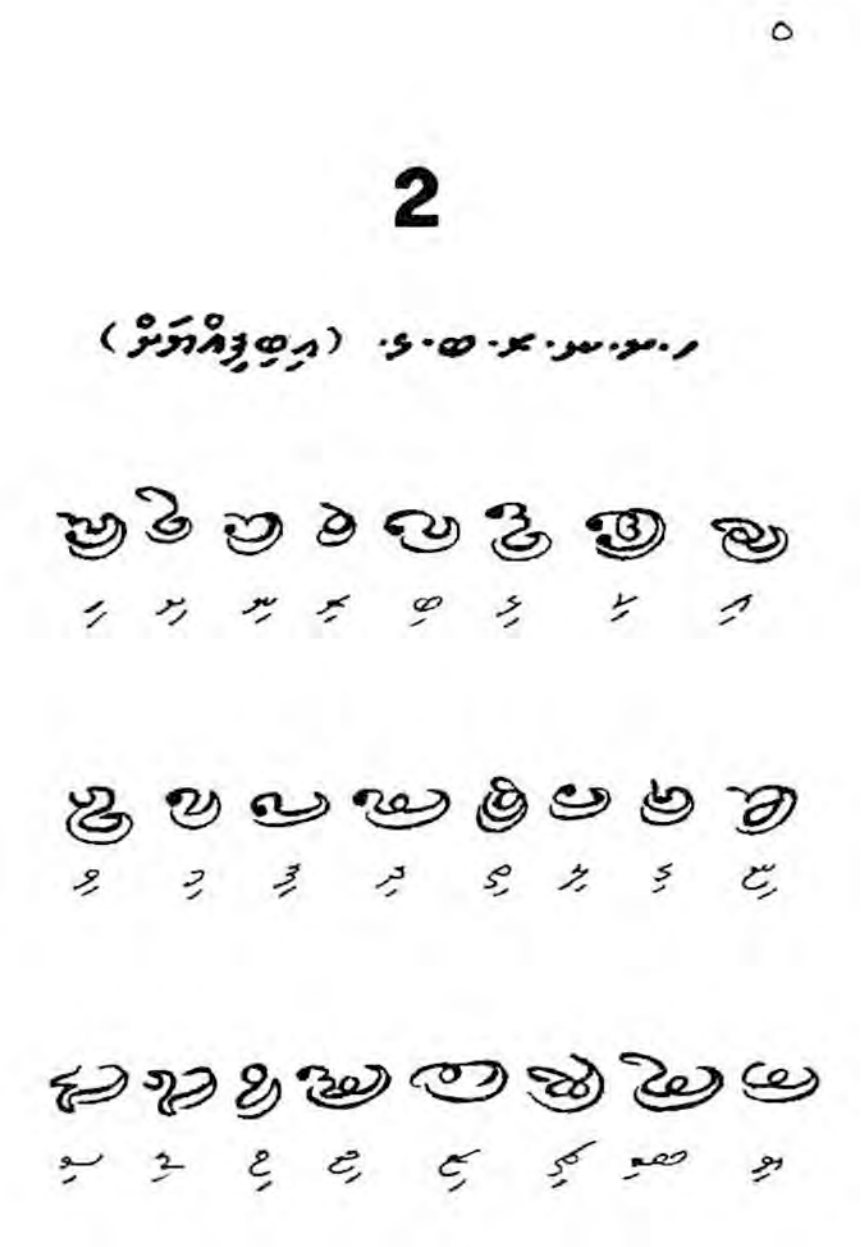


Figure 35: Representation of 18th century Dives Akuru based upon Thaana features: Consonant vowel combination with VOWEL SIGN I (from Sidi 1959: 5).

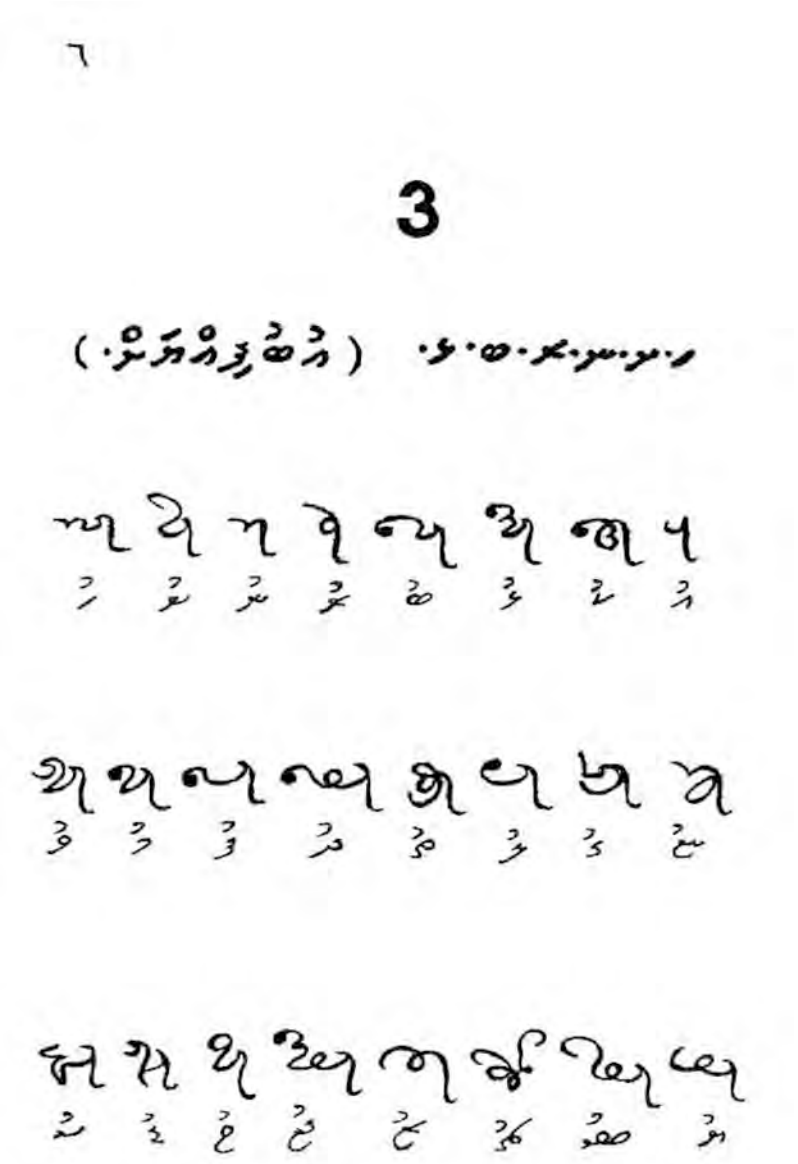


Figure 36: Representation of 18th century Dives Akuru based upon Thaana features: Consonant vowel combination with VOWEL SIGN U (from Sidi 1959: 6).

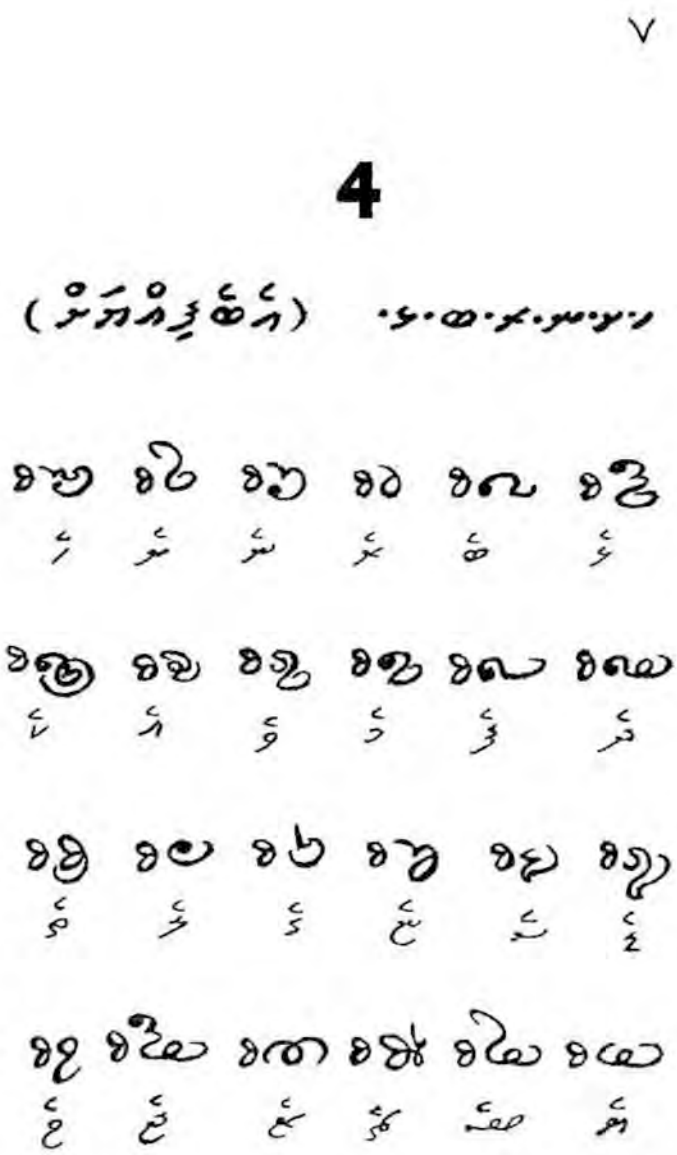


Figure 37: Representation of 18th century Dives Akuru based upon Thaana features: Consonant vowel combination with VOWEL SIGN E (from Sidi 1959: 7).

Figure 38: Representation of 18th century Dives Akuru based upon Thaana features: Consonant vowel combination with VOWEL SIGN O (from Sidi 1959: 8).

Figure 39: Representation of 18th century Dives Akuru based upon Thaana features: Consonant vowel combination with VOWEL SIGN AA (from Sidi 1959: 9).

Figure 40: Representation of 18th century Dives Akuru based upon Thaana features: Consonant vowel combination with VOWEL SIGN II (from Sidi 1959: 10).

Figure 41: Representation of 18th century Dives Akuru based upon Thaana features: Consonant vowel combination with VOWEL SIGN UU (from Sidi 1959: 11).

Figure 42: Representation of 18th century Dives Akuru based upon Thaana features: Consonant vowel combination with VOWEL SIGN E for representing the Dhivehi long vowel *ē* (from Sidi 1959: 12).

Figure 43: Representation of 18th century Dives Akuru based upon Thaana features: Consonant vowel combination with VOWEL SIGN O for representing the Dhivehi long vowel *ō* (from Sidi 1959: 13).

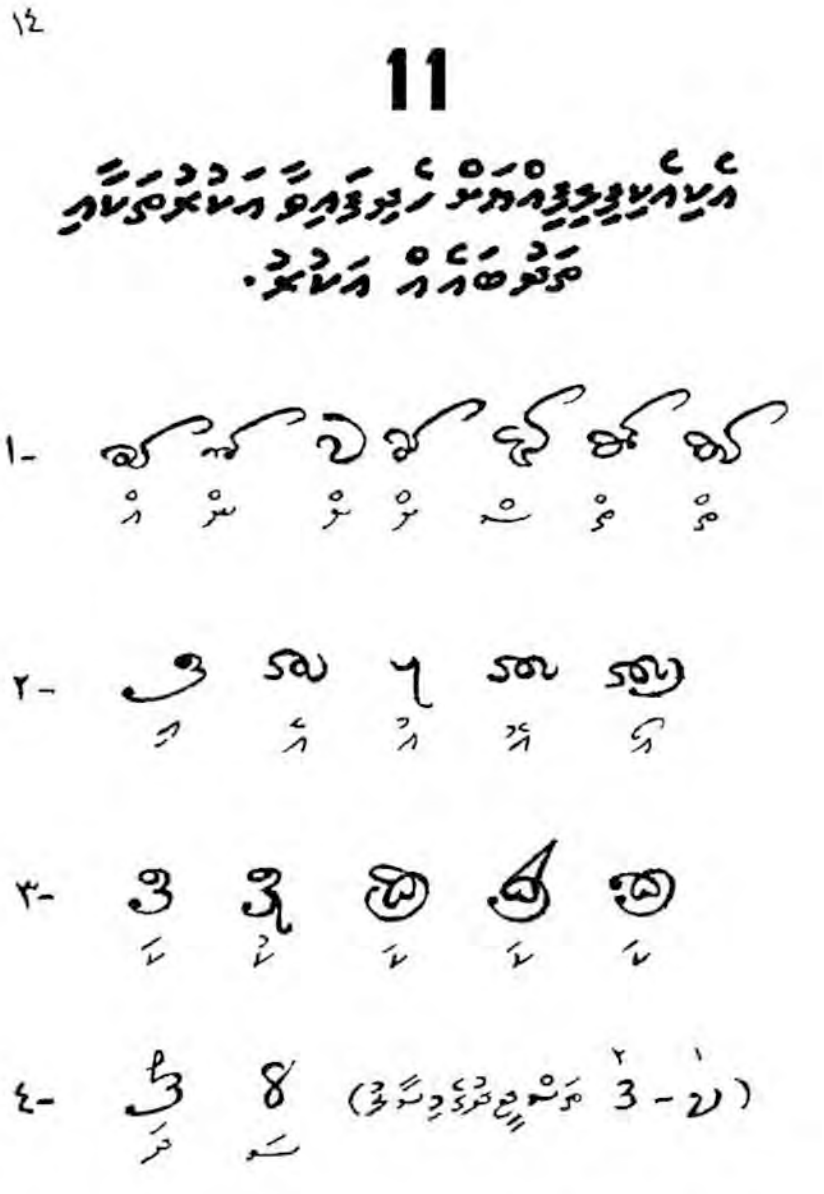


Figure 44: Representation of 18th century Dives Akuru based upon Thaana features: Various alternate forms of letters and some Dives Akuru forms of Thaana *sukun* letters (from Sidi 1959: 14).

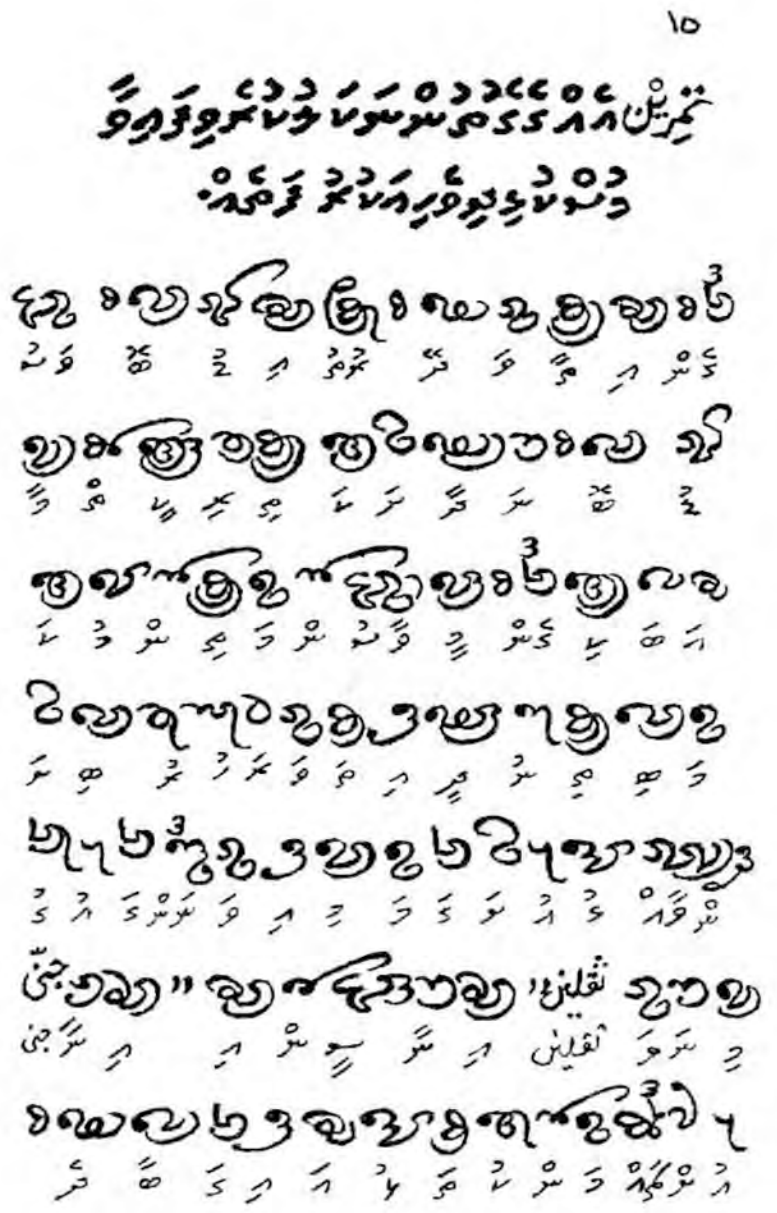


Figure 45: Specimen of 20th century Dives Akuru in Sidi (1959: 15).

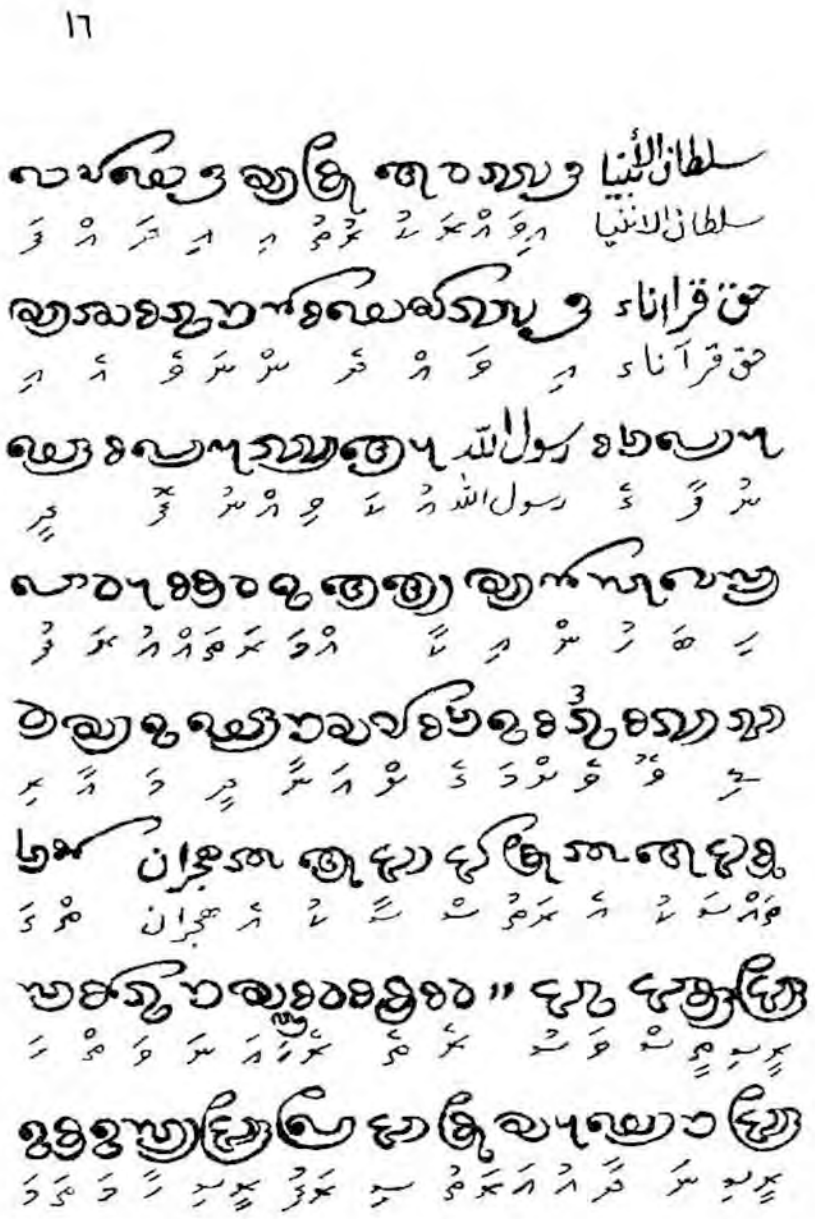


Figure 46: Specimen of 20th century Dives Akuru in Sidi (1959: 16).

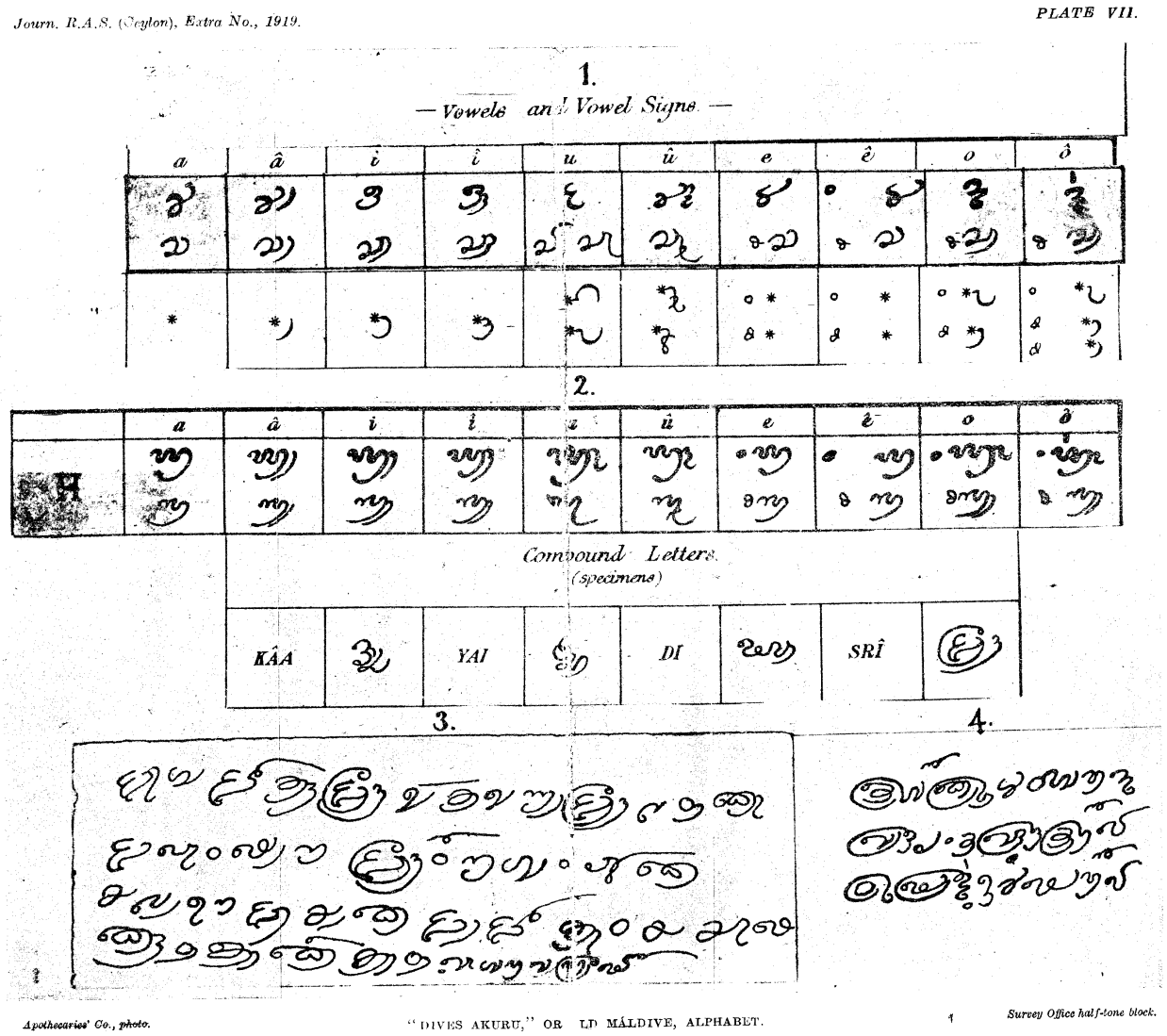


Figure 47: Wilhelm Geiger's table showing vowel letters, 2) consonant-vowel combinations for *ha*, 3) and 4) specimens of '*dives akuru*' (1919: Plate VII).

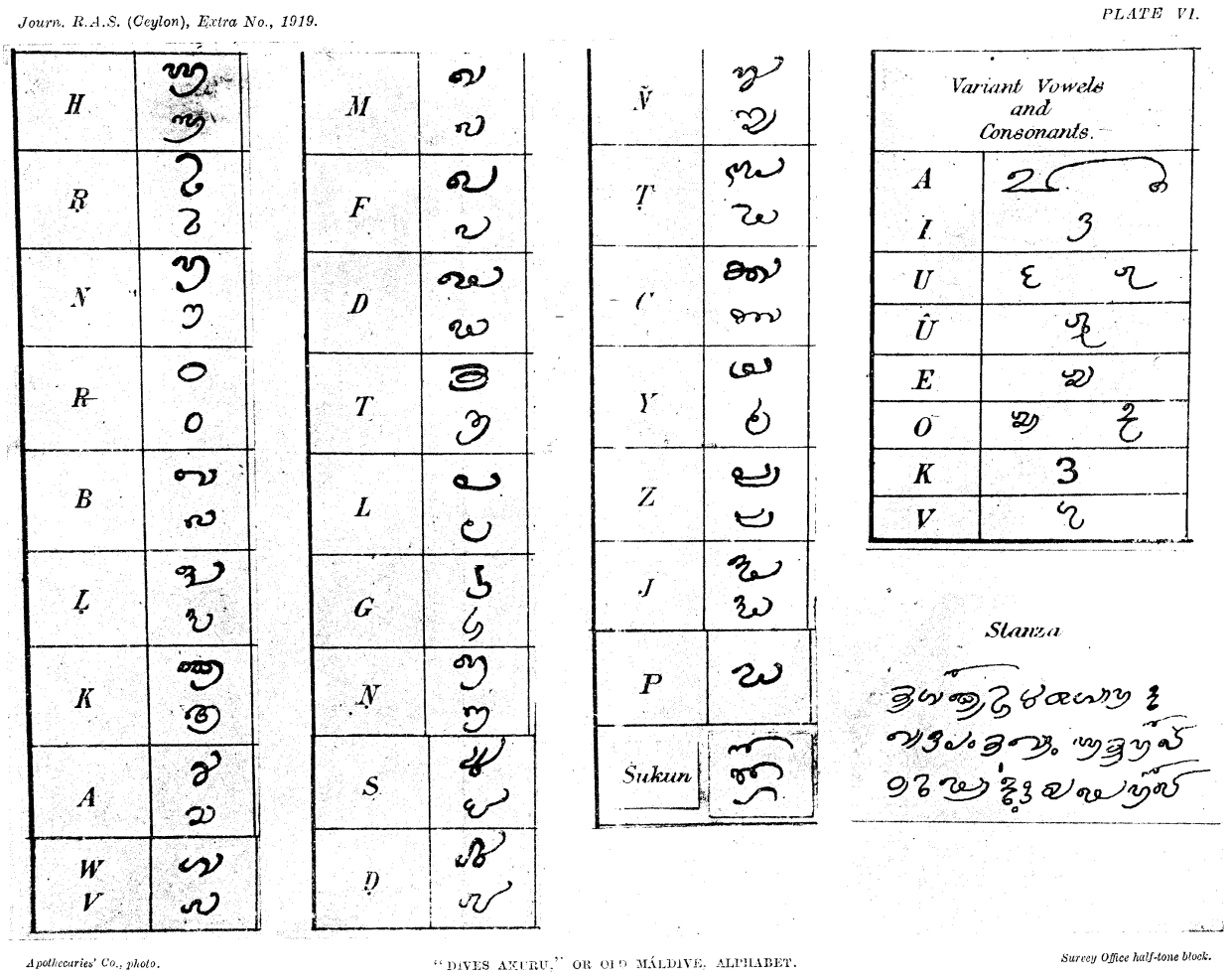


Figure 48: Wilhelm Geiger's chart comparing '*dives akuru*' and '*evēla akuru*' (1919: Plate VI).

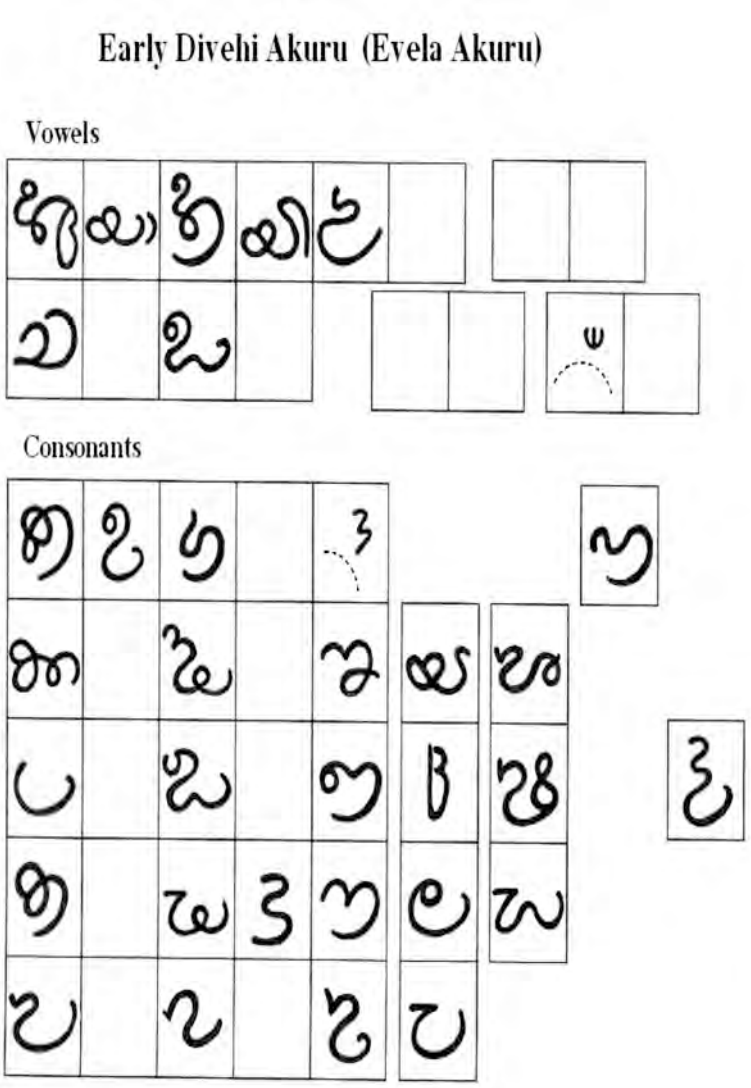


Figure 49: Chart of 'Early Divehi Akuru' (from Romero-Frias 2003).

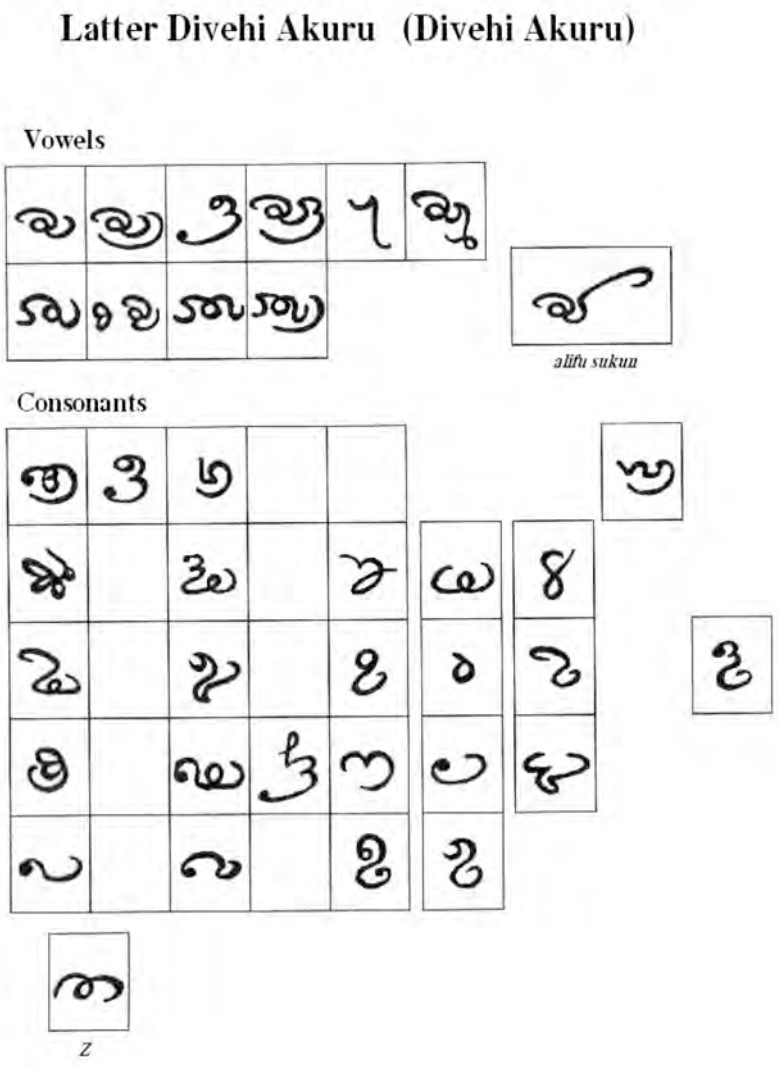


Figure 50: Chart of 'Later Divehi Akuru' (from Romero-Frias 2003).

Eveyla Akuru

'Eveyla Akuru' is the system of writing used in Maldives in the 12th century AD and possibly some centuries earlier. Early 'Eveyla Akuru' writing has been found on madrepore stelae, tentatively dated to *circa* 9th - 10th century AD. The later 'Eveyla Akuru' is found in copperplate writings of the late 12th century, i.e. 1194/1195, called *loamaafaanu*, official records of land grants awarded to mosques built by ruling sultans after the conversion to Islam. These later scripts have been deciphered and their transliteration gives us a guide to ancient Divehi writing and language.

All ancient scripts were called *'Dives Akuru'* or *'Divehi Akuru'*, literally meaning 'scripts of island people', by Maldivians. When H. C. P. Bell visited Maldives in 1922, he styled this particular ancient script, 'Eveyla Akuru' for convenient distinguishment from its' later variant called Dives Akuru (Bell. 1922). *Eveyla* means 'ancient' in the Divehi language. (The word *e* means 'that' and *veyla* is time or period; thus together *eveyla* means 'that time', or 'ancient'). Eveyla Akuru, therefore simply means 'ancient letters' and the name has remained until the present time.

The Eveyla script in this book dates back to 1194/1195 AD, and is taken from copperplate grants of the twelfth century as well as from the work done by the late Divehi scholar, Ali Najeeb. The script in general bears a strong resemblance to the old Grantha, Vatteluttu and Sinhala Elu scripts and the present day Malayalam script. This leads to the conjecture that the old Eveyla script could be a direct descendent from the Southern scripts of the Indian sub-continent.

The close resemblance of this script to the Sinhala Elu script of the 10th to the 12th century AD, has been remarked by many writers. According to M. W. Sugathapala de Silva, Wilhelm Geiger, who studied Eveyla Akuru, said that the affinity was 'not so much with Medieval Sinhalese as to the Tulu of the Malabar District of Southern India, which lie opposite the Laccadive and Maldive Islands, or doubtless, even more nearly to an older Grantha type of Tulu-Malayalam, or *Arya Eḷuttu*'.

The system of writing in Eveyla Akuru is syllabic in structure. Letters are written from left to right, spacing of words is not observed and the writing is broken off at the end of a line. As a result, the line may end or begin in the middle of a word.

The letters represent two categories of sounds, vowels and consonants. In the initial position vowels are represented in general by separate letters. Non-initially, they are shown by vowel-strokes or *fili*. A fili may occur in front of, after, above or below a consonant. When a consonant is written separately,

11

Figure 51: Description of *evēla akuru* (from Naseema 1999: 11).

without a fili and unattached to another letter, it symbolizes the consonant sound with the inherent vowel sound *a*.

e.g.: 𑤊 ka , 𑤎 ga , 𑤕 ma.

The vowel symbols used in Eveyla Akuru are listed with their corresponding phonological values in TABLE NO 1. (Maniku, Wijewardene, 1986) These symbols were generally used in the initial position of words, and fili (vowel strokes) were used in non-initial positions.

TABLE NO.1. VOWEL SYMBOLS

Symbol	Sound
𑤀	a
𑤁	a
𑤀𑤰	ā
𑤁𑤰	ā
𑤂	i
𑤂𑤰	i
𑤃	u
𑤄	e or ē
𑤄𑤰	o or ō

12

Figure 52: Description of *evēla akuru* (from Naseema 1999: 12).

The following 'fili' (vowel strokes) are used to represent vowel sounds (Najeeb, Shafeeq, 1993).

TABLE NO.2. FILI (VOWEL STROKES)

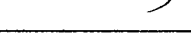
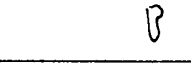
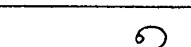
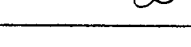
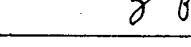
Fili	Sound	Example	Transliteration
)	ā	)	kā
)	i	)	ki
)	ī	)	kī
)	u	)	ku
)	u	)	ku
)	u	)	fu, pu
)	u	)	ru
)	ū	)	fū, pū
)	e	)	ke
)	ē	)	kē
)	ai	)	kai
)	o	)	ko
)	ō	)	kō

13

Figure 53: Description of *evēla akuru* (from Naseema 1999: 13).

The consonant symbols in Eveyla Akuru along with their phonological values are listed below (Maniku, Wijewardene 1986, Najeeb, Shafeeq 1993).

TABLE NO.3. CONSONANT SYMBOLS.

Letter	Sound
	h
	ś or ṭ
	n
	ṇ
	r
	b
	ḷ
	k
	kh (aspirate)
	a
	a
	v
	m
	f, p
	ḍ

14

Figure 54: Description of *evēla akuru* (from Naseema 1999: 14).

TABLE NO. 3 CONTINUED

Letter	Sound
ڈ	d
ڊ	d
ڈ	t
ڶ	l
ڳ	g
ڛ	s
ڜ	sh or ś
ڜ	sh or ś
ڜ	sh
ڏ	dh (aspirate)
ڐ	ṭ or ṭṭ
ڑ	y

In the transliteration and translation work done by the Maldivian scholars, the late Ali Najeeb and Ahmed Shafeeq, the letter ڜ was given the phonological value *ś* and the letter ڐ the value *ṭ*.

In the transliteration and the translation of the *Isdhoo* and *Dhambidhoo Loamaafaanus* by Maldivian scholar Hassan Ahmed Maniku and Sri Lankan Professors C. D. Wijewardana and J. B. Dissanayeke, the letter ڜ was given the phonological value of *ṭ* and ڐ was transliterated as *ṭṭ*.

15

Figure 55: Description of *evēla akuru* (from Naseema 1999: 5).

The phonological value *ś* in Divehi is said by linguists to have evolved from the *ţ* of earlier times (Cain, 1996). In modern Divehi, the words incorporating the symbol ෂ in the copperplate writings of the 12th century are used with the phonological value *ś* and not with the *ţ* value.

The team of scholars who deciphered the *Isdhoo Loamaafaanu* in 1986 concluded that there were the following aspirate letters in the document (TABLE NO. 4).

TABLE NO.4

ඛ	kh
ඨ	dh

They also concluded that the symbol ඍ was used for both *a* and *y*.

Three sibilants corresponding to palatal *ś*, cerebral *sh* and dental *s* in Sanskrit were also found in the document, but it is likely that they were pronounced alike. These are given in TABLE NO. 5

TABLE NO.5

ශ	sh or ś
ෂ	sh
ස	s

In their work, Ali Najeeb and Ahmed Shafeeq gave both ඥ and ඦ the phonological value *sh*.

Dental and cerebral *n* existed in Divehi until the 20th century and different letters were used for these sounds. The Southern atolls still differentiate between these sounds, but standard Divehi only has the symbol for dental *n*.

The symbol ෆ was used for *f* and *p* although in latter centuries, *p* was represented in Dives Akuru by ෆ්, the same symbol with a dot below the letter.

Since research on the Eveyla Akuru writing system in the *loamaafaanus* is continuing, it is likely that more symbols which are not included here may be discovered. The symbols represented here are those included in published works.

16

Figure 56: Description of *evēla akuru* (from Naseema 1999: 16).

In the writing system, the following consonantal strokes are used: -

1- ◌ This stroke indicates that the inherent vowel in the letter is deleted.

e.g.: ދ ާ ރ ސ ް (maarasun)

It corresponds to the sukun 'o' in the Tāna script.

2- ◌ This is used to indicate that the consonant to which it is attached is doubled.

e.g.: ކ ◌ ල ާ ގ (kallage)

3- ◌ This stroke shows that the consonant to which it is attached is preceded by a nasal consonant.

e.g.: ވ ◌ ަ (vansá)

4- ◌ This sign placed above the letters, indicates that the consonant cluster to which it is attached has the consonant 'r' as its first sound.

e.g.: ޕ ާ ދ ◌ ެ (purbbe).

Doubling of the consonant ތ (t) is usually by attaching the symbol ◌ to the bottom of the letter.

e.g.: ދ ◌ ތ ަ (uttara).

The most frequent way of writing a double consonant is by writing them close together so that they touch one another.

e.g.: ނ ޮ ރ ާ ދ ެ (noramme).

In the case of ން (n) one letter is placed slightly higher than the other.

e.g.: ސ ◌ ් ލ ަ ން ޏ ު ވ ◌ ි (srīlannaduvi).

17

Figure 57: Description of *evēla akuru* (from Naseema 1999: 17).

When two consonants are written touching one another, the fili denoting the vowel ⁹ (*e*) is placed in front of the cluster.

e.g.:  (komme).

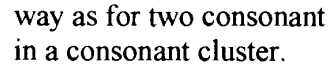
Similarly, in the case of the vowel *o*, two components of the fili, ⁹ and ⁾ , are placed on either side of the cluster.

e.g.:  (duppoḷi).

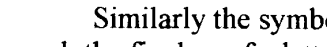
Dissimilar consonant clusters are also written in the same way, placing the two consonant symbols together, touching one another.

e.g.:  (sintha)

 (fange).

In such clusters, the fili for the vowels *e* and *o* are attached in the same way as for two consonant clusters. The symbol  is used to denote the final *ya* in a consonant cluster.

e.g.:  (vyana).

Similarly the symbol  attached to the lower part of the letter is used to mark the final *ra* of a letter.

e.g.:  (krana)

 (driti).

In some instances, conjoint symbols comprising the components of the two letters are employed to write dissimilar consonant clusters.

e.g.:  (laksha),

 (fansha),

 (kandorāi)

After the conversion of Maldives to Islam, it became clear that Eveyla Akuru had shortcomings when Arabic words had to be written in official documentation. This probably led to the formation of new symbols and modifications in the writing system, which eventually led to the gradual evolution of its successor, *Dives Akuru*.

18

Figure 58: Description of *evēla akuru* (from Naseema 1999: 18).

Dives Akuru

The ancient Eveyla Akuru found in the twelfth century copperplates and on the coral–stone relics, evolved into the more advanced *Dives Akuru* over a period of about two hundred years.

A copperplate grant of 1357 AD, called '*Bodugalu Miskit Loamaafaanu*' and written in the sixteenth year of Sultana Rehendi Khadeeja's reign, is the earliest example of this script. This copper-plate grant showed distinct changes in the characters seen in the earlier copperplates, indicating the beginning of the Eveyla script's evolution into the later style called '*Dives Akuru*'(Bell. 1922).

The examples of Dives Akuru found in this book date back to the late eighteenth century. They are taken mainly from the book '*Divehi Akuru*' written by As-sayyid Hussain ibn Mohamed Al-Husaini, known to Maldivians as Bodufenvalhuge Seedi, a celebrated Maldivian scholar, poet and author of the mid-twentieth century. His book, 'Divehi Akuru', revived interest in this script among Maldivian scholars and paved the way for the transliteration of existing old documents written in Dives Akuru.

Some of the other materials used in this book are taken from a booklet called '*Dives Akuru*', compiled by the late Ali Najeeb and Ahmed Shafeeq for Maldivian students of this script.

The best examples of Dives Akuru can be seen in the inscriptions in the beautiful Hukuru Miskit (Friday Mosque) in Male', on tombstones, and in some finely written official land grants inscribed on parchment. This script was extensively used for official documentation until the beginning of the eighteenth century. From 1705 A.D onwards, official documents were written in Tāna and Dives Akuru, but after 1780 the Dives Akuru script fell into disuse, it's place taken by the Tāna script.

Some features of Eveyla Akuru have been retained in the Dives script. As in the earlier Eveyla Akuru, Dives Akuru also represents two categories of sounds, vowels and consonants. It is also written from left to right and consonant characters standing on their own have the inherent *a* sound. However, many modifications have been made to the shape of letters and new symbols have been incorporated into the alphabet, to represent new sounds. These are the symbols for *z*, *j*, and *c* : In Dives Akuru *p* is represented by ؏ and *f* is shown by ؏ , the same letter, but without the dot below. A new symbol was also formed to express the palatal *n*.

Vowel symbols and diacritics on consonants are used to represent vowels and new symbols have been formed to represent doubling and joining of consonants.

21

Figure 59: Description of *dives akuru* (from Naseema 1999: 21).

The Alphabet

Given below are the vowel symbols. (TABLE NO. 6)

TABLE NO.6

Vowel	Sound
𑤀	a
𑤁	ā
𑤂	i
𑤃	i
𑤄	ī
𑤅	u
𑤆	ū
𑤇	e
𑤈	e
𑤀𑤇	ē
𑤁𑤇	ē
𑤉	o
𑤀𑤉	o
𑤁𑤉	ō
𑤀𑤊	ō

22

Figure 60: Description of *dives akuru* (from Naseema 1999: 22).

In Dives Akuru, the following *fili* (vowel strokes) are used to represent vowel sounds. (TABLE NO. 7).

TABLE NO.7. FILI (VOWEL STROKES).

Fili	Sound	Example	Transliteration
)	ā	𑤎)	kā
)	i	𑤎)	ki
𑤳	ī	𑤎𑤳	kī
𑤲	u	𑤎𑤲	ku
𑤱	u	𑤎𑤱	du
𑤴	ū	𑤎𑤴	kū
𑤵	e	𑤵𑤎	ke
𑤵𑤵	ē	𑤵𑤵𑤎	kē
𑤵	ē	𑤵𑤎	kē
𑤵)	o	𑤵𑤎)	ko
𑤵)	ō	𑤵𑤎))	kō

The consonant symbols of Dives Akuru, along with their phonological values are listed in TABLE NO. 8 . Here the existing consonant symbols from Eveyla Akuru have been modified and new symbols to represent sound values for *z*, *j* and *c* have been introduced. Also, the symbol which stood for both *p* and *f* sounds,

23

Figure 61: Description of *dives akuru* (from Naseema 1999: 23).

was given to *f* and the same symbol with a dot added below was given to the value *p*. A new symbol for the palatal *ñ* was also introduced.

TABLE NO.8. CONSONANT SYMBOLS.

Letter	Sound
𑤳	h
𑤲	ś
𑤱	n
𑤱	n
𑤰	r
𑤰	r
𑤮	b
𑤮	b
𑤭	ḷ
𑤫	k
𑤫	k
𑤫	k

24

Figure 62: Description of *dives akuru* (from Naseema 1999: 24).

TABLE NO. 8 CONTINUED

Letter	Sound
𑤃	kh (aspirate k)
𑤀	a
𑤀𑤰	a
𑤅	v
𑤅	v
𑤂	m
𑤁	f
𑤆	d
𑤆	d
𑤆	d
𑤇	t
𑤉	l
𑤉	l
𑤄	g

25

Figure 63: Description of *dives akuru* (from Naseema 1999: 25).

TABLE NO. 8 CONTINUED

Letter	Sound
𑤏	g
𑤐	g
𑤑	ñ
𑤒	s
𑤓	sh
𑤔	sh
𑤕	ḍ
𑤖	ḍ
𑤗	z
𑤘	ṭ
𑤙	y
𑤚	p
𑤛	j
𑤜	c
𑤝	c

26

Figure 64: Description of *dives akuru* (from Naseema 1999: 26).

'Sukun' or deleting the inherent vowel sound in the word.

Sukun was used in Dives Akuru with a special diacritic symbol, to indicate deletion of the inherent *a* vowel sound of the letter in the written word. In these instances the symbol ◌̽ was placed on the upper right hand side of the letter. e.g. 𑤆𑤽 , 𑤂𑤽 , 𑤌𑤽

In Dives Akuru as well as in the Tāna script there are five letters which became special 'sukun letters'. These had different symbols. They are the following:

TABLE NO. 9. SUKUN.

Letter	Sukun symbol
𑤆 (a)	𑤆𑤽
𑤂 (ś)	𑤂𑤽
𑤉 (n)	𑤉𑤽
𑤌 (s)	𑤌𑤽
𑤇 (t)	𑤇𑤽

The 𑤆 sukun 𑤆𑤽 and the 𑤂 sukun 𑤂𑤽 show glottal stops. The 𑤉 sukun 𑤉𑤽 represents a double nasal sound and the 𑤌 sukun 𑤌𑤽 is pronounced as a vowel-less *s* sibilant. The 𑤇 sukun 𑤇𑤽 represents a *y* off-glide on the vowel preceding the sukun.

Doubling letters.

In the later Dives script, doubling of letters was represented not by two symbols written together, but by writing three different diacritics.

27

Figure 65: Description of *dives akuru* (from Naseema 1999: 27).

These were changeable and any one of the three could be used in a given situation. (TABLE NO. 10)

TABLE NO.10. DOUBLING LETTERS.

Sign	Example	Transliteration	Meaning
		bappa	father
		bappa	father
		bappa	father

In Dives Akuru, as also in the earlier Eveyla Akuru, we find that in many instances more than one symbol is used to represent the same consonant sound.

TABLE NO.11.

Sound	Symbols
d	
l	
g	
sh	
c	
k	
ḍ	

28

Figure 66: Description of *dives akuru* (from Naseema 1999: 28).

It may be that the same phonological value was given to more than one consonant symbol. It could also mean that the phonological values of some of these symbols had earlier variations. Over time, sound changes having taken place, aspirate sounds were lost and dental and cerebral sounds began to be pronounced alike, but the different symbols were retained.

When the consonants 𑤭 (*r*) and 𑤯 (*v*) are written in a word where the consonants have to be joined to the consonant before them, (when the fili for the first consonant is *u*, or when the inherent *a* vowel sound of the consonant is deleted), the shape of both consonant letters undergo modification: -

e.g.: If 𑤯 (*v*) is the consonant to be joined for example, to 𑤱 (*s*), then the modification is 𑤱𑤯.


swastī.

If 𑤭 (*r*) is the second consonant to be joined, the shape of the 𑤭 (*r*) changes to 𑤮 as in: -


(kureegai)


(shukuru)

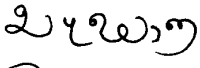

(umuru)

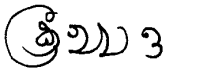
In Dives Akuru, diphthongs are represented by the addition of an *i* or *u* at the end of the vowel glide.

These symbols are written as independent vowels.

e.g.


(koilu)


(audāna)


(kuravvai)

From the early years of the eighteenth century until about 1870 AD, Dives Akuru and Tāna Akuru were used together for official documentation. But at the end of this period, Dives Akuru was superseded by Tāna.

29

Figure 67: Description of *dives akuru* (from Naseema 1999: 29).

TABLE NO.12 (THE TĀNA ALPHABET)

No.	Arabic numeral	Letter	Transliteration	Modern name	Old name*
1	١	ހ	h	hā	haviyani
2	٢	ށ	ś	śaviyani	śaviyani
3	٣	ނ	n	nūnu	naviyani
4	٤	ރ	r	rā	raviyani
5	٥	ބ	b	bā	baviyani
6	٦	ޅ	ḷ	ḷaviyani	ḷaviyani
7	٧	ކ	k	kāfu	kaviyani
8	٨	އ	a	alifu	aviyani
9	٩	ވ	v	vāvu	vaviyani
No.	Divehi numeral	Letter	Transliteration	Modern name	Old name
1	٥	ދ	m	meemu	maviyani
2	٦	ފ	f	fāfu	faviyani
3	٧	ދ	d	dālu	daviyani
4	٨	ތ	t	tā	taviyani
5	٩	ލ	l	lāmu	laviyani**
6	٠	ގ	g	gāfu	gaviyani
7	١	ގ	ñ	ñaviyani	ñaviyani

* Old names are taken from W.Geiger's Maldivian Linguistic Studies (1919).
** Not included by Geiger.

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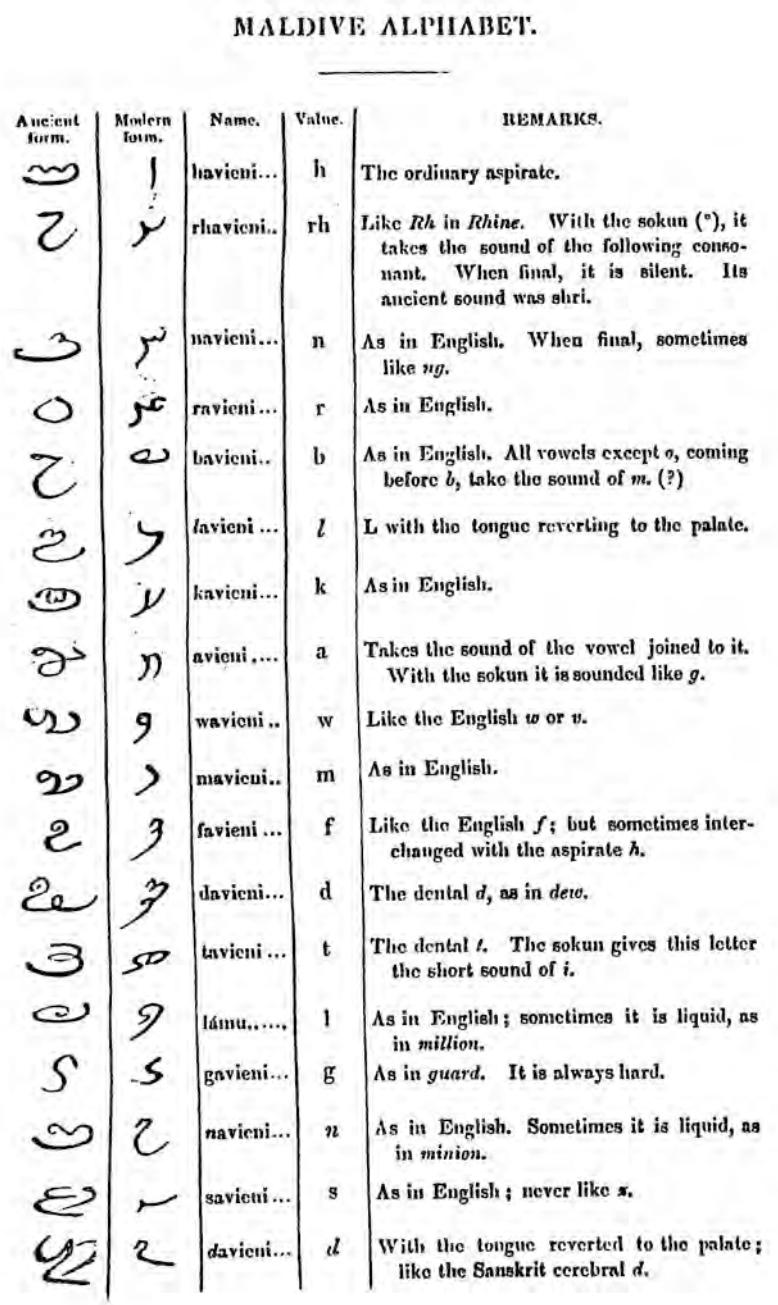
Figure 68: Comparison of Dives Akuru and Arabic digits and Thaana letters (from Naseema 1999: 32).

TABLE NO. 12 CONTINUED

No.	Divehi numeral	Letter	Transliteration	Modern name	Old name
8	٨	ﷺ	s	seenu	saviyani
9	٩	ﷺ	ḍ	ḍaviyani	ḍaviyani
		ﷺ	z	zaviyani	zaviyani
		ﷺ	✓ ṭ	ṭaviyani	ṭaviyani
		ﷺ	y	yā	yaviyani
		ﷺ	p	paviyani	paviyani
		ﷺ	j	javiyani	javiyani
		ﷺ	c	chaviyani	chaviyani

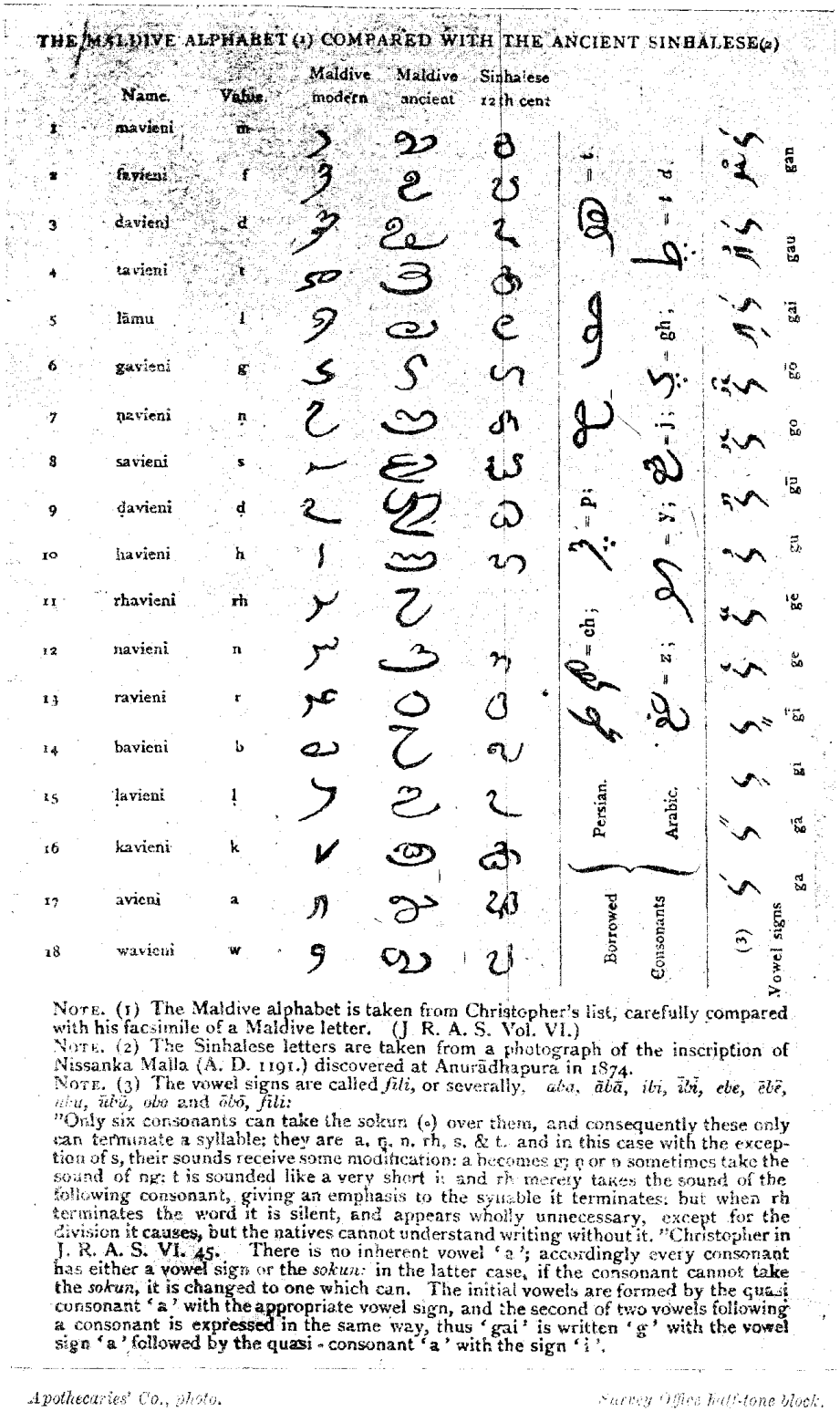
Figure 69: Comparison of Dives Akuru and Arabic digits and Thaana letters (from Naseema 1999: 33).



MALDIVE ALPHABET.

Ancient form.	Modern form.	Name.	Value.	REMARKS.
	ا	havieni...	h	The ordinary aspirate.
	ر	rhavieni..	rh	Like *Rh* in *Rhine*. With the sokun (°), it takes the sound of the following consonant. When final, it is silent. Its ancient sound was shri.
	ن	navieni...	n	As in English. When final, sometimes like *ng*.
	ز	ravieni...	r	As in English.
	ب	bavieni..	b	As in English. All vowels except *o*, coming before *b*, take the sound of *m*. (?)
	ل	lavieni ...	*l*	L with the tongue reverting to the palate.
	ك	kavieni...	k	As in English.
	ا	avieni	a	Takes the sound of the vowel joined to it. With the sokun it is sounded like *g*.
	و	wavieni ..	w	Like the English *w* or *v*.
	م	mavieni..	m	As in English.
	ف	favieni ...	f	Like the English *f*; but sometimes interchanged with the aspirate *h*.
	ذ	davieni...	d	The dental *d*, as in *dew*.
	ت	tavieni ...	t	The dental *t*. The sokun gives this letter the short sound of *i*.
	ل	lámu.....	l	As in English; sometimes it is liquid, as in *million*.
	ګ	gavieni...	g	As in *guard*. It is always hard.
	ن	*n*avieni...	*n*	As in English. Sometimes it is liquid, as in *minion*.
	س	savieni ...	s	As in English; never like *z*.
	ڏ	davieni...	*d*	With the tongue reverted to the palate; like the Sanskrit cerebral *d*.

Figure 70: Willmott Christopher's chart of Maldivian scripts showing Dives Akuru (left) and Thaana (right) letters (Wilson 1841: 44).



Journ. R.A.S. (Ceylon), Extra No., 1919. *PLATE II.*

THE MALDIVE ALPHABET (1) COMPARED WITH THE ANCIENT SINHALESE(2)

	Name.	Value.	Maldive modern	Maldive ancient	Sinhalese 12th cent
1	mavieni	m			
2	favieni	f			
3	davieni	d			
4	tavieni	t			
5	lāmu	l			
6	gavieni	g			
7	ṇavieni	ṇ			
8	savieni	s			
9	ḍavieni	ḍ			
10	havieni	h			
11	rhavieni	rh			
12	navieni	n			
13	ravieni	r			
14	bavieni	b			
15	ḷavieni	ḷ			
16	kavieni	k			
17	avieni	a			
18	wavieni	w			

Borrowed Consonants — Persian. — = t. = p; = ch; — Arabic. = z; = y; = j; = gh; = d.

(3) Vowel signs: ga gā gi gī ge gē gu gū go gō gai gau gan

NOTE. (1) The Maldive alphabet is taken from Christopher's list, carefully compared with his facsimile of a Maldive letter. (J. R. A. S. Vol. VI.)

NOTE. (2) The Sinhalese letters are taken from a photograph of the inscription of Nissanka Malla (A. D. 1191.) discovered at Anurādhapura in 1874.

NOTE. (3) The vowel signs are called *fili*, or severally, *aba, ābā, ibi, ībī, ebe, ēbē, ubu, ūbū, obo* and *ōbō, fili:*

"Only six consonants can take the sokun (◦) over them, and consequently these only can terminate a syllable; they are a, ṇ, n, rh, s, & t. and in this case with the exception of s, their sounds receive some modification: a becomes g; ṇ or n sometimes take the sound of ng: t is sounded like a very short i: and rh merely takes the sound of the following consonant, giving an emphasis to the syllable it terminates: but when rh terminates the word it is silent, and appears wholly unnecessary, except for the division it causes, but the natives cannot understand writing without it." Christopher in J. R. A. S. VI. 45. There is no inherent vowel 'a'; accordingly every consonant has either a vowel sign or the *sokun:* in the latter case, if the consonant cannot take the *sokun*, it is changed to one which can. The initial vowels are formed by the quasi consonant 'a' with the appropriate vowel sign, and the second of two vowels following a consonant is expressed in the same way, thus 'gai' is written 'g' with the vowel sign 'a' followed by the quasi - consonant 'a' with the sign 'i'.

Apothecaries' Co., photo. *Survey Office half-tone block.*

Figure 71: Wilhelm Geiger's charts of Maldivian scripts (1919: Plate II).

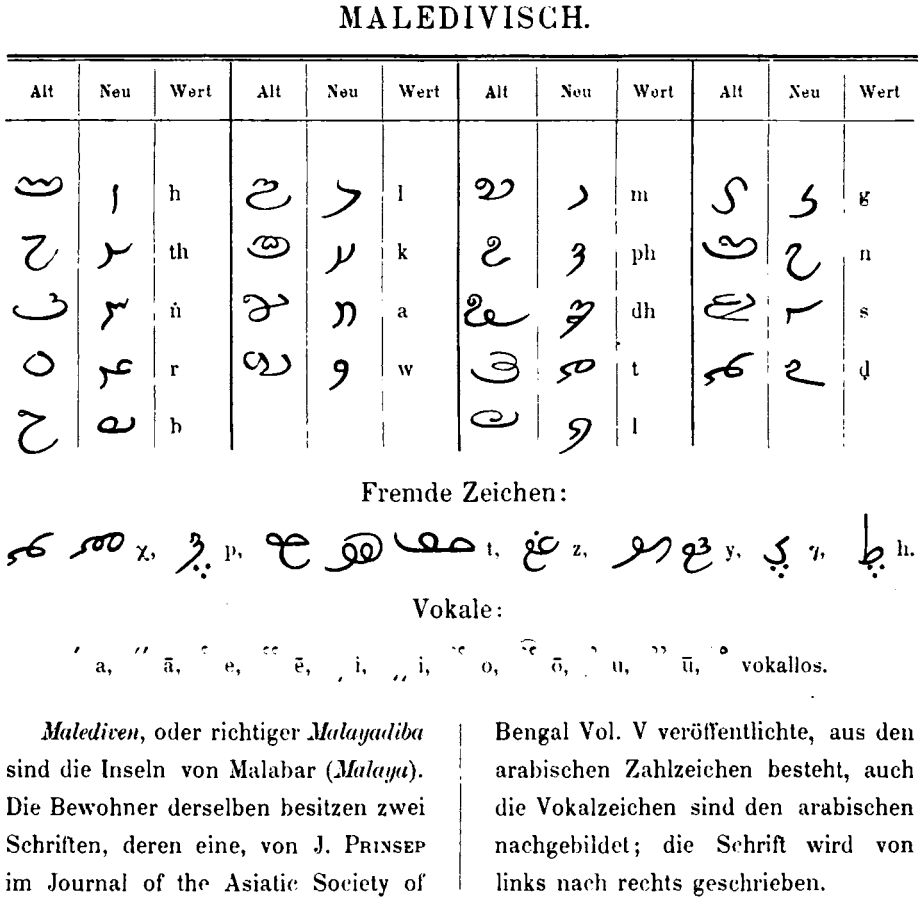


Figure 72: Chart showing some characters from 'old' and 'new' forms of Maldivian writing (from Faulmann 1880: 155). The 'old' forms are Dives Akuru and the 'new' are Thaana.

	Dives Akuru	Sinhala
A	𑤀	අ
AA	𑤁	ආ
I	𑤂	ඉ
II	𑤃	ඊ
U	𑤄	උ
UU	𑤅	ඌ
E	𑤆	එ
EE	—	ඒ
AI	—	ඓ
O	𑤇	ඔ
OO	—	ඕ
AU	—	ඖ

Figure 73: Comparison of Dives Akuru and Sinhala vowel letters.

	Dives Akuru	Sinhala		Dives Akuru	Sinhala
KA	𑤓	කා	DHA	𑤢	ධ
KHA	𑤔	ඛ	NA	𑤣	න
GA	𑤕	ග	PA	𑤤	ප
GHA	𑤖	ඝ	PHA	𑤥	ඵ
NGA	𑤗	ඞ	BA	𑤦	බ
CA	𑤘	ච	BHA	𑤧	භ
CHA	𑤙	ඡ	MA	𑤨	ම
JA	𑤚	ජ	YA	𑤩	ය
JHA	—	ඣ	RA	𑤪	ර
NYA	𑤛	ඤ	LA	𑤫	ල
TTA	𑤜	ට	VA	𑤬	ව
TTHA	𑤝	ඨ	SHA	𑤭	ශ
DDA	𑤞	ඩ	SSA	𑤮	ෂ
DDHA	𑤟	ඪ	SA	𑤯	ස
NNA	𑤠	ණ	HA	𑤰	හ
TA	𑤡	ත	LLA	𑤱	ළ
THA	𑤢	ථ	FA	—	ෆ
DA	𑤣	ද	ZA	𑤲	—

Figure 74: Comparison of Dives Akuru and Sinhala consonants.

Consonants

D	T	name
𑤃	ހ	HAA
𑤄	ށ	SHAVIYANI
𑤅	ނ	NOONU
𑤆	ރ	RAA
𑤇	ބ	BAA
𑤈	ޅ	LHAVIYANI
𑤉	ކ	KAAFU
𑤊	އ	ALIFU
𑤋	ވ	VAAVU
𑤌	މ	MEEMU
𑤍	ފ	FAAFU
𑤎	ދ	DHAALU
𑤏	ތ	THAA

D	T	name
𑤐	ލ	LAAMU
𑤑	ގ	GAAFU
𑤒	ޏ	GNAVIYANI
𑤓	ސ	SEENU
𑤔	ޑ	DAVIYANI
𑤕	ޒ	ZAVIYANI
𑤖	ޓ	TAVIYANI
𑤗	ޔ	YAA
𑤘	ޕ	PAVIYANI
𑤙	ޖ	JAVIYANI
𑤚	ޗ	CHAVIYANI
𑤛	ޙ	NAA

Vowels

D	T	name
—	◌ަ	ABAFILI
◌𑤞	◌ާ	AABAAFILI
◌𑤟	◌ި	IBIFILI
◌𑤠	◌ީ	EEBEEFILI
◌𑤡	◌ު	UBUFILI
◌𑤢	◌ޫ	OOBOOFILI

D	T	name
◌𑤣	◌ެ	EBEFILI
◌𑤤	◌ޭ	EYBEYFILI
◌𑤥	◌ޮ	OBOFILI
◌𑤦	◌ޯ	OABOAFILI
◌𑤧	◌ް	SUKUN

Figure 75: Correspondences between Dives Akuru (‘D’) and Thaana (‘T’), based upon Sidi (1959). Thaana names are based upon names in the Unicode ‘Thaana’ block.

Figure 76: Comparison of 'Evela Akuru' and 'Dives Akuru' with other southern Brahmi-based scripts (from Naseema 1999: Table no. 16).

Coat of arms of Maldives (from Wikimedia Commons). The Arabic text on the scroll reads: *al-dawlat al-maḥaldībiyat* "State of the Mahal Dibiyat".

A version of the coat of arms of Maldives in which the Arabic text *al-dawlat al-maḥaldībiyat* "State of the Mahal Dibiyat" is replaced with *divehi rājje* "Republic of Maldives" in Dives Akuru. According to Xavier Romero-Frias (personal communication, 2011), the modified coat of arms was proposed by a Member of the Parliament in Māle in 1997–1998 with the rationale that the Dives Akuru version would better represent Maldivian culture. The proposal was rejected on the grounds that Arabic reflects the Muslim character of the country.

Figure 77: A proposed coat of arms of Maldives with text in Dives Akuru. Image courtesy of Xavier Romero-Frias.