1 Introduction

This is a preliminary proposal to encode the following eleven Syriac letters used for writing Suriyani Malayalam, which is also known as Garshuni (Karshoni) and Syriac Malayalam:

<table>
<thead>
<tr>
<th>glyph</th>
<th>character name</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SYRIAC LETTER MALAYALAM NGA</td>
</tr>
<tr>
<td></td>
<td>SYRIAC LETTER MALAYALAM JA</td>
</tr>
<tr>
<td></td>
<td>SYRIAC LETTER MALAYALAM NYA</td>
</tr>
<tr>
<td></td>
<td>SYRIAC LETTER MALAYALAM TTA</td>
</tr>
<tr>
<td></td>
<td>SYRIAC LETTER MALAYALAM NNA</td>
</tr>
<tr>
<td></td>
<td>SYRIAC LETTER MALAYALAM NNNA</td>
</tr>
<tr>
<td></td>
<td>SYRIAC LETTER MALAYALAM BHA</td>
</tr>
<tr>
<td></td>
<td>SYRIAC LETTER MALAYALAM RA</td>
</tr>
<tr>
<td></td>
<td>SYRIAC LETTER MALAYALAM LLA</td>
</tr>
<tr>
<td></td>
<td>SYRIAC LETTER MALAYALAM LLLA</td>
</tr>
<tr>
<td></td>
<td>SYRIAC LETTER MALAYALAM SSA</td>
</tr>
</tbody>
</table>

These characters are proposed for inclusion in a new block in the Basic Multilingual Plane (BMP) named ‘Syriac Extensions’, tentatively allocated to the range U+0860..087F.

This document provides a brief description of the characters and examples of usage. The names of characters are tentatively based upon Unicode names assigned to the corresponding letters of the Malayalam script. These names differ from the transliteration of Garshuni Malayalam letters given in Perczel (2014), but they are used at present simply for facilitating recognition of letter equivalents between the Syriac and Malayalam scripts. The encoded order of the letters follows the pattern of the Malayalam script. The representative glyphs of character are merely illustrative and are not intended to be normative. Provisional character properties have also been included.
The proposal author seeks feedback from the user community regarding the proposed characters, representative glyphs, and character properties. The information presented here may be incomplete and may change as more information on the characters is made available. Additional research on these characters is being performed and a formal proposal to encode them is forthcoming.

2 Description of Proposed Characters

The proposed characters occur in several manuscripts and are known to the scholarly community (see Perczel 2014). The characters have the following shapes when they occur in isolation and within words:

<table>
<thead>
<tr>
<th>Character Description</th>
<th>Joining</th>
<th>Final</th>
<th>Medial</th>
<th>Initial</th>
<th>Isolated</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYRIAC LETTER MALAYALAM NGA</td>
<td>dual</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SYRIAC LETTER MALAYALAM JA</td>
<td>non</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SYRIAC LETTER MALAYALAM NYA</td>
<td>dual</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SYRIAC LETTER MALAYALAM TTA</td>
<td>dual</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SYRIAC LETTER MALAYALAM NNA</td>
<td>dual</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SYRIAC LETTER MALAYALAM NNNA</td>
<td>dual</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SYRIAC LETTER MALAYALAM BHA</td>
<td>non</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SYRIAC LETTER MALAYALAM RA</td>
<td>right</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SYRIAC LETTER MALAYALAM LLA</td>
<td>dual</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SYRIAC LETTER MALAYALAM LLLA</td>
<td>right</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SYRIAC LETTER MALAYALAM SSA</td>
<td>right</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

 vời SYRIAC LETTER MALAYALAM NGA  This letter represents ಙ n̄a, the velar nasal /ŋ/. It is a dual-joining character. It corresponds to U+0D19 MALAYALAM LETTER NGA.

ῳ SYRIAC LETTER MALAYALAM JA  This letter represents ಝ ja, the palatal unaspirated stop /dʒ/. It is a non-joining character. Its shape is derived directly from ಝ U+0D1C MALAYALAM LETTER JA. Although it may be possible to use U+0D1C within a Syriac environment, a separate encoding is needed for ಝ so that Syriac vowel marks can be combined with the letter. Furthermore the differing directionalities of the Malayalam and Syriac scripts may cause problems for introducing a Malayalam character directly in Syriac sequences.
SYRIAC LETTER MALAYALAM NYA  This letter represents ೞ naï, the palatal nasal /ɲ/. It is a dual-joining character. It corresponds to U+0D1E MALAYALAM LETTER NYA.

SYRIAC LETTER MALAYALAM TTA  This letter represents Š ta, the unvoiced retroflex stop /ʈ/, and Š̱ da, the voiced retroflex stop /ɖ/. It is a dual-joining character. It corresponds to U+0D1F MALAYALAM LETTER TTA and U+0D21 MALAYALAM LETTER DDA.

SYRIAC LETTER MALAYALAM NNA  This letter represents ೞ na, the retroflex nasal /n/. It is a dual-joining character. It corresponds to U+0D23 MALAYALAM LETTER NNA.

SYRIAC LETTER MALAYALAM NNNA  This letter represents ೞ na, the alveolar nasal /n/. It is a dual-joining character. It corresponds to U+0D29 MALAYALAM LETTER NNNA.

SYRIAC LETTER MALAYALAM BHA  This letter represents ೟ bha, the labial aspirated stop /bʱ/. It is a non-joining character. Its shape is derived directly from ೟ U+0D2D MALAYALAM LETTER BHA. Although it may be possible to use U+0D2D within a Syriac environment, a separate encoding is needed for ೟ so that Syriac vowel marks can be combined with the letter. Furthermore the differing directionalities of the Malayalam and Syriac scripts may cause problems for introducing a Malayalam character directly in Syriac sequences.

SYRIAC LETTER MALAYALAM RA  This letter represents ೟ ra, the alveolar trill /ɾ/. It is a right-joining character. It corresponds to U+0D30 MALAYALAM LETTER RA.

SYRIAC LETTER MALAYALAM LLA  This letter represents ೟ la, the retroflex lateral approximant /ɭ/. It is a dual-joining character. It corresponds to U+0D33 MALAYALAM LETTER LLA.

SYRIAC LETTER MALAYALAM LLLA  This letter represents ೟ la, the retroflex central approximant /ɭ/. It is a right-joining character. It corresponds to U+0D34 MALAYALAM LETTER LLLA.

SYRIAC LETTER MALAYALAM SSA  This letter represents ೟ sa, the retroflex sibilant /ʂ/. It is a right-joining character. It corresponds to U+0D37 MALAYALAM LETTER SSA.

3 Letters Not Proposed

The consonant ligature ṇṭa  The consonant ligature ṇṭ represents the Malayalam conjunct ೞʈa. The conjunct consists of ೞ U+0D23 MALAYALAM LETTER NNA and Š U+0D1F MALAYALAM LETTER TTA. The Syriac representation of ṇṭa is a combination of the proposed ṇ SYRIAC LETTER MALAYALAM NNA and Š SYRIAC LETTER MALAYALAM TTA, with the Š̱ U+0748 SYRIAC OBLIQUE LINE BELOW rendered as a horizontal stroke. The presence of the horizontal stroke, or mbatiana, beneath the Syriac combination suggests that the ligature is not considered an independent letter. It is recommended that the Syriac sequence mentioned above be used for representing ṇṭa in encoded text. If additional research indicates that ṇ should be encoded as an atomic character, then it may be added later.

The syllable jiĩĩ  Figure 13 shows the syllable jiĩĩ /jĩĩ/. This letter is the Malayalam syllable ೞ jĩĩ adapted directly into Syriac. It is a conjunct ligature formed from ೞ U+0D1E MALAYALAM LETTER NYA and ೞ U+0D1E MALAYALAM LETTER NYA, and the U+0D40 MALAYALAM VOWEL SIGN ΓI. The form jiĩĩ occurs in two instances in a single manuscript. Additional research is required for determining the actual extent of its usage.
4 Character Data

Character Properties  Properties in the format of UnicodeData.txt:

\[
\begin{align*}
\text{xx00;SYRIAC LETTER MALAYALAM NGA;Lo;0;AL;;;;;N;;;;;}
\text{xx01;SYRIAC LETTER MALAYALAM JA;Lo;0;AL;;;;;N;;;;;}
\text{xx02;SYRIAC LETTER MALAYALAM NYA;Lo;0;AL;;;;;N;;;;;}
\text{xx03;SYRIAC LETTER MALAYALAM TTA;Lo;0;AL;;;;;N;;;;;}
\text{xx04;SYRIAC LETTER MALAYALAM NNA;Lo;0;AL;;;;;N;;;;;}
\text{xx05;SYRIAC LETTER MALAYALAM NNNA;Lo;0;AL;;;;;N;;;;;}
\text{xx06;SYRIAC LETTER MALAYALAM BHA;Lo;0;AL;;;;;N;;;;;}
\text{xx07;SYRIAC LETTER MALAYALAM RA;Lo;0;AL;;;;;N;;;;;}
\text{xx08;SYRIAC LETTER MALAYALAM LLA;Lo;0;AL;;;;;N;;;;;}
\text{xx09;SYRIAC LETTER MALAYALAM LLLA;Lo;0;AL;;;;;N;;;;;}
\text{xx0A;SYRIAC LETTER MALAYALAM SSA;Lo;0;AL;;;;;N;;;;;}
\end{align*}
\]

Linebreaking  Linebreaking properties in the format of LineBreak.txt:

\[
\begin{align*}
\text{xx00..xx0A;AL # Lo [11] SYRIAC LETTER MALAYALAM NGA..SYRIAC LETTER MALAYALAM SSA}
\end{align*}
\]

Arabic Shaping  Joining properties in the format of ArabicShaping.txt:

\[
\begin{align*}
\# Syriac Characters
\text{xx00; MALAYALAM NGA; D; MALAYALAM NGA}
\text{xx01; MALAYALAM JA; U; MALAYALAM JA}
\text{xx02; MALAYALAM NYA; D; MALAYALAM NYA}
\text{xx03; MALAYALAM TTA; D; MALAYALAM TTA}
\text{xx04; MALAYALAM NNA; D; MALAYALAM NNA}
\text{xx05; MALAYALAM NNNA; D; MALAYALAM NNNA}
\text{xx06; MALAYALAM BHA; U; MALAYALAM BHA}
\text{xx07; MALAYALAM RA; R; MALAYALAM RRA}
\text{xx08; MALAYALAM LLA; D; MALAYALAM LLLA}
\text{xx09; MALAYALAM LLLA; R; MALAYALAM LLLA}
\text{xx0A; MALAYALAM SSA; R; MALAYALAM SSA}
\end{align*}
\]

5 References


Perczel, István. 2014. “Garshuni Malayalam: A Witness to an Early Stage of Indian Christian Literature”.

6 Acknowledgments

I would like to express my gratitude to István Perczel for his valuable comments on an earlier version of this proposal. I would also like to thank Shiju Alex and Cibu Johnny for providing me with materials in Garshuni Malayalam. Thank you also to George Kiraz for motivating me to delve further into the representations of the Malayalam language in the Syriac script.
Malayalam letters

0860 _SYRIAC LETTER MALAYALAM NGA
0861 _SYRIAC LETTER MALAYALAM JA
0862 _SYRIAC LETTER MALAYALAM NYA
0863 _SYRIAC LETTER MALAYALAM TTA
0864 _SYRIAC LETTER MALAYALAM NNA
0865 _SYRIAC LETTER MALAYALAM NNNA
0866 _SYRIAC LETTER MALAYALAM BHA
0867 _SYRIAC LETTER MALAYALAM RA
0868 _SYRIAC LETTER MALAYALAM LLA
0869 _SYRIAC LETTER MALAYALAM LLLA
086A _SYRIAC LETTER MALAYALAM SSA
Figure 1: A hand-written chart of Syriac letters used for transcribing Malayalam (from Āṭṭel 2010: 35). Rows 1–9 show Garshuni Syriac letters that correspond to the Malayalam letters: ١ = ೙; ٢ = ೚; ٣ = ೛; ٤ = ೟; ٥ = ೠ; ٦ = ೡ; ٧ = ೢ; ٨ = ೣ and ٩. Glyphic variants shown in the left column are unified with the representative glyph for each proposed letter. The letters in rows 10–13 are variant forms of existing Syriac letters. Row 10 = ﻞ; Row 11 = ﻧ; Row 12 = ﻨ; Row 13 = ﻖ. Row 14 is ﻞ = ﻖ (see section 3).
### Preliminary Proposal to Encode Syriac Letters for Garshuni Malayalam

Anshuman Pandey

**Figure 2:** Specimen of metal type fonts for some Garshuni Malayalam letters (‘Malabarisch-Syrisch’) that were cut in Europe in the 19th century (from Faulmann 1880: 87).

#### MALABARISCH-SYRISCH.

<table>
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<th>Zeichen</th>
<th>Wert</th>
<th>Zeichen</th>
<th>Wert</th>
<th>Zeichen</th>
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<th>Zeichen</th>
<th>Wert</th>
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<th>Wert</th>
<th>Zeichen</th>
<th>Wert</th>
</tr>
</thead>
<tbody>
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<td>ph</td>
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<td>s</td>
<td>ק</td>
<td>k</td>
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</tbody>
</table>


#### SYRISCH.

<table>
<thead>
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<th>Wert</th>
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</thead>
<tbody>
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<td>w</td>
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<td>ח</td>
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<td>z</td>
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<td>s</td>
<td>ח</td>
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<td>ה</td>
<td>ה</td>
<td>י</td>
<td>y</td>
<td>י</td>
<td>s</td>
<td>ח</td>
<td>x</td>
</tr>
<tr>
<td>ו</td>
<td>ו</td>
<td>ח</td>
<td>h</td>
<td>ח</td>
<td>s</td>
<td>י</td>
<td>y</td>
</tr>
<tr>
<td>ז</td>
<td>ז</td>
<td>ח</td>
<td>h</td>
<td>ח</td>
<td>s</td>
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<td>ח</td>
<td>h</td>
<td>ח</td>
<td>s</td>
<td>י</td>
<td>y</td>
</tr>
</tbody>
</table>

**Vokalzeichen:**

- a, e, i, o, u

**Interpunktionen:**

- : s, n

Die syrische Schrift, *Peshito* genannt, ist den westlichen Syrern, den Maroniten und Jakobiten, oder vielmehr den römisch-katholischen Syrern im Gegen-
B. The additional Malayalam consonants of the Garshuni Malayalam alphabet

1. Malayalam Na

“Malayalam Na” = Modern Malayalam ə, Ṣ, transcription, for the present purpose, Na (nun being the “Malayalam na”), pronounced like the n’s in banana, but more a kind of an alveolar nasal. It connects in both directions.

a. Medial position:

This is the word malaNāTTiḍ, “in the mountainous region,” with a medial Na in the middle. The fourth letter is Malayalam Ṭa, reduplicated by the mbatlaṇā in the medial position (see below, no. 5.a.). The auxiliary signs are: pīḍā on the mem (Malayalam mā),

Figure 3: Description and example of NNNA (from Perczel 2014: 311).
indicating the short vowel a, ṣgāpā in the upper compartment of the Na, indicating the long vowel ā, ṣbatānā under the Ta, indicating reduplication, ṣvāṣā under the yod, indicating the vowel i. The lack of a vowel sign on the first lāmād indicates a short a, which is the basic vocalisation.

b. *Initial position*, including the one within the word, after a letter that does not connect to the left.

This is the word āyirbaNNu “had been.” Na is here in the penultimate position, before the waaw, connecting only to the left. The fourth letter is a Malayalam rha connected to the right (see below, no. 7.a.). The beginning alap, having no vowel sign, is bearing the basic vowel a. It is followed by two yodās, the first having the value of the Malayalam consonant ya and the second, with the ṣvāṣā underneath, indicating the vowel i. ṣvāṣā allṣā under the two waaw’s indicates the vowel u, the mbatānā line under the Na indicates reduplication.

c. *Final position, connected to the right.*

This is a final Na in the word vaNNu (“having gone”). One may see that beh is used for the phoneme v, the ṣṭāhā is used for the vowel a and the underlining (mbatānā) means the reduplication of the phoneme. The final u is, in fact, a shwa.

d. *Final, stand alone position.*

This is the grapheme for aNNu at the end of a word. This is a stand-alone Na, with an elongated tail at the end. The line under the grapheme (mbatānā) indicates reduplication. Here is the entire word:

Figure 4: Description and example of NNNA (from Perczel 2014: 312).
This is the word muNNu, “three.” Here again, the final u is, in fact, a shwa.

2. Malayalam Nha

= Modern Malayalam ೃ, ೂ “Malayalam Nba,” a retroflex nasal. It connects in both directions.

a. Medial position:

This is the word malaNbkarakku, “to Malankara,” with a medial Nha at the fourth position, in the letter combination Nbkka. The letter combination is indicated by the mhatlānā under the Nha, which, here, does not indicate reduplication. Another interesting feature is that the order of the two combining phonemes is reversed: first the ka (Syriac kāp) is written and second the Nha, while the pronunciation is aNbkka. The letter in the penultimate position is a Malayalam rha connected to the right (see below, no. 7.a.) and the final ka (Syriac kāp) is reduplicated by the mhatlānā. In the same manuscript we also find the spelling Malangkara, see below, 3.a.2.

b. Initial position, including the one within the word, after a letter that does not connect to the left.

This is the word rhaNhbDam, “two,” with an initial Nha at the second position. The first letter is Malayalam rha in a stand-alone position (see below, no. 7.b.), the third letter is Malayalam Ta (see

Figure 5: Description and example of NNA (from Perczel 2014: 313).
below, no. 5.a.) in medial position. There are no vowel signs, indicating that the appropriate consonants—rba and Ta—bear the basic vowel a.

c. Final position, connected to the right.

This is a final Nba in the word vaNba (“shape”).

3. Malayalam nga

= Malayalam nga = Modern Malayalam θ, pronunciation nga (ngə), a velar nasal. It connects in both directions.

a. Medial position.

a.1. This is the word koDhanggallurū, standing for the town of Kodungallur/Cranganore, followed by metr<apolita>. At the third position is a Malayalam Ta (see below, no. 5.a.), the last letter is a Malayalam rba, standing alone (see below, no. 7.b.).

a.2. This is the word malangkarbil, “in Malankara,” with a medial nga at the fourth position, in the letter combination ngk. The letter combination is indicated by the mbatāna under the nga, which, here, does not indicate reduplication. Another interesting feature is that the order of the two combining phonemes is reversed: first the ka (Syriac kāp) is written and second the nga, while the pronunciation is angka. The third letter from the end is a Malayalam rba connected

Figure 6: Description and example of nga (from Perczel 2014: 314).
to the right (see below, no. 7.a.). In the same manuscript we also find the spelling Malanlokara, see above, 2.a.

b. Initial position, including the one within the word, after a letter that does not connect to the left.

This is the word vazhangakā, “being in obedience,” with an initial nga in the third position, reduplicated by the mbatlāna. The first letter is Malayalam va, indicated by a beth, the second is Malayalam ḥa in a final position (see below, no. 8.b.).

4. Malayalam nya

= Modern Malayalam ɕ, pronunciation ṇa (nya), a palatal nasal. It connects in both directions.

5. Malayalam Ta, Da

a. Malayalam Ta = Modern Malayalam ś, transcription Tā, pronounced as a retroflex plain stop, which is voiced if it stands single (Da) and is voiceless when it is reduplicated (TTa). The main body of the letter is situated below the bottom line. This is the version connected both ways, that is, to the right and to the left. From the right it is connected by a horizontal line, while the left branch goes up and comes down. However, it is to be distinguished from the Syriac tet (transcription: ṭ, see below, 5c.), which is similarly written, but with a longer left branch. In the second image, the line underneath indicates reduplication.

b. diverse connections of the letter Ta to the subsequent letter:

Figure 7: Description and example of nya and tta (from Perczel 2014: 315).
b1. Here ‘Tₐ’ is connected to a final ʿālap in the syllable Ḍē. It is to be distinguished from the way the ṭēb is being connected to the following ʿālap. See below, 5.c.

b2. Here ‘Tₐ’ is connected to a ʿāp in the syllabic combination Daka.

b3. Here ‘Tₐ’ is connected to a ʿaw in the syllable TTu.

b4. Here a reduplicated ‘Tₐ’ is connected to a ʿNₐ’ on the right and to a ʿyod on the left. The pronunciation is NāTTu from the word malaNāTTu, “in the mountainous region,” see above, 1.a.

b5. This is the final ‘Tₐ’. The mbatlānā indicates reduplication. Pronunciation: TTu.

b6. This is the syllabic combination NİTTu from mēshībā pīrāNİTTu (“according to the year of Christ”). Here the final ‘Tₐ’ is written differently from the one shown above in b5. The mbatlānā indicates reduplication.

b7.

Figure 8: Description and example of TTa (from Perczel 2014: 316).
This is the word \textit{rhaNbD\={a}m} (second), where one can see that the \textstress{Ta} is written underneath the \textstress{Nha}. This reproduces the composite letter \textstress{NbDu} (ຊ) in Modern Malayalam.

\begin{figure}[ht]
\centering
\includegraphics[width=0.5\textwidth]{example_image}
\caption{Description and example of අඅൺandඋൺ (from Perczel 2014: 317).}
\end{figure}

6. Malayalam \textit{lba}

Modern Malayalam \textstress{g}, or final \textstress{\=g}, transcribed as \textstress{lba}, a retroflex lateral approximant; normally it only connects to the right and not to the left. However, in some manuscripts, represented by picture 3, \textstress{lba} is connected in both directions. On this picture it is followed by a \textstress{waw}.

7. Malayalam \textit{rha}

\begin{enumerate}
\item Modern Malayalam \textstress{\=o}, transcribed as \textstress{rha}, an alveolar trill, while the Syriac \textstress{resh} is used to express the consonant \textstress{o}, a retroflex trill, such as the \textstress{r} of the Italians. The letter \textstress{rha} connects only to the right, never to the left and its body is under the line; it can be written like the final \textstress{num}, but with an additional curve at the end, or as an Arabic \textstress{r}, pointing leftward.
\end{enumerate}

Figure 9: Description and example of \textit{ll\=a} and \textit{ra} (from Perczel 2014: 317).
This is how the rba looks like when it is not connected in either direction. On the third picture one sees the place name Sampalibhur (the city of Saint Paul) with a rba at the end. The lha (third letter from the left) stands alone, as it follows a vav. Noteworthy is also the diphthong au in the syllable pau, which reproduces an earlier pronunciation of a Portuguese loanword (São Paulo), close to the Portuguese pronunciation, which later changed to Sampalibhur (with reduplicated lha).

8. Malayalam ṣba, Ḡba, ja

This letter stands for three different Modern Malayalam letters and sounds. Either for ƙ, transcription ṣba: a retroflex central approximant, pronounced as a sound between l, r, and ẑ; or for ʣ, transcription Ḡba, pronounced as a retroflex sibilant fricative (§), or for ʒ, transcription ja, a palatal voiced stop used mostly in Sanskrit loanwords, such as raja (“king”). However, in some later manuscripts ja is indicated by the Modern Malayalam letter ʂ (see below, §C.1.). This letter only connects to the right and never to the left.

9. Malayalam Ḡba, ja

= Modern Malayalam Ḡ, Ḡba, pronounced as a retroflex sibilant fricative (§), or Modern Malayalam ʂ, ja. In some manuscripts, such as Mannanam MS Syr 74, this grapheme is used in Sanskrit loanwords, such as manuShan (man), or puraShan (man, soul, god). In the same MS other occurrences of the phoneme Ḡba are written

Figure 10: Description and example of lla and ssa (from Perczel 2014: 318).
by [11]. In Mannanam Syr 74, this letter does not connect either to the right or to the left. In this manuscript, the letter combination $kSb$ (ק$ס$) is written as a ligature of $ka$ and $zha$ ($ק + ז$). Yet, in other, quite old, manuscripts, such as Bangalore Dharmaram College Syr 32, $zha$ is treated as a normal element of the Garshuni alphabet, which indicates both the $Shu$ and $ja$ sounds and connects to the right. In this MS the letter combination $kSb$ (ק$ס$) is written as a ligature of $ka + Sb$ ($ק + ס$). This letter, which is sometimes inserted in the ductus of the script and sometimes is not, which is taken from the Arya ezhuṭṭhu script and not the old Malayalam, brings the number of the originally added Malayalam characters to nine and forms a transition toward the Modern Malayalam additions to the alphabet.

a. This is how the word $mānuSharnDē$, “of men,” is written in in Mannanam MS Syr 74, fol. 2r.

b. This is how the word $purnShenē$, “a man” (accusative), is written in in Mannanam MS Syr 74, fol. 2v.

c. This is how the word $padhinəqam$ (according to present-day pronunciation: $padhinəqam$), “fifteen” is written in Bangalore Dharmaram College MS Syr 32, fol. 2r.

Figure 11: Description and example of $s$ (from Perczel 2014: 319).
C. Additional Modern Malayalam characters or combinations, incidentally occurring in Garshuni Malayalam

In later manuscripts, incidentally, some letters of the Modern Malayalam alphabet have also been incorporated, in order to express Malayalam sounds that were not part of the old Malayalam alphabet, nor are expressible through standard Syriac characters, that is, Sanskrit sounds. Such are the letters ⱚ: ja and ⱝ: bha, found in a letter on foll. 515r-516r, in Ernakulam Major Archbishop’s House MS Syr 7.

1. a. 

= Modern Malayalam ⱚ, ja, whose form it almost perfectly reproduces. It is pronounced as a palatal plain voiced stop, corresponding to the English j. The first image is from the word jenam (people) and the second, from the word ejanjanamarakuru ("the leaders, lords: that is, pagan kings"). It is conspicuous that this letter, as a later borrowing from Modern Malayalam, stands as a foreign body in the script. It does not connect to any side either on the right, or the left.

b. 

This is how the word ejanjanamarakuru is written in the manuscript. Note that the ja does not connect to any side and, also, the two allongated rha’s at the end of the word, interfering with the next line.

2.a. 

= Modern Malayalam ⱝ, bha, whose form it reproduces. The letter indicates a labial aspirate voiced stop. This is a unique occurrence, even in the present manuscript. The right part of the letter is cut. It

Figure 12: Description and example of JA and BHA (from Perczel 2014: 320).
stands at the beginning of the word combination *bhūgamettil kuTTi* ("with the side").

b. Here is the expression *bhūgamettil kuTTi*. Note that the *bha* is not connected to the left—and that, certainly, it would not be connected to the right either—and also that the *kuṭṭ* serves both for expressing the Malayalam letters *ka* (अ: unaspirated voiceless velar stop in *kuTTi*) and *ga* (Ga: unaspirated voiced velar stop in *bhūgam*), unless here the Garshuni text reproduces an earlier or dialectal pronunciation.

3. Mannanam Syr 49, fol. 31r-32r contains a text, where the word *rājiyi* — (రాణి) “Queen,” occurs several times. For this, the scribe has adopted Garshuni Malayalam *r̥ha* as a stand-alone character (see above, 7.b.) with the *gīpā* indicating the vocalisation of the first syllable with the long vowel ō, plus the single complex grapheme *ṇaṭṭi* used in Modern Malayalam (or, rather, its predecessor, the *Arya ezhuttha*) for *jñi*:  

This is *rājiyi* (రాణి) on fol. 31r; it is noteworthy that, in the combination, the *nya* is not written in its Garshuni Malayalam form as *ṇa*, but the modern Malayalam form *ṇa* is being used. Also, instead of the Garshuni way of using a *yod* with a *hvisá* for writing the vowel ō, it uses the connected form of the Modern Malayalam न (ṇa).

This is *Veṇadu rājiyi,* “the Queen of Vēnad” on fol. 32r.

Figure 13: Description of the Malayalam conjunct syllable *jñi* (from Perczel 2014: 321).
Figure 14: Excerpt from a Syriac grammar (Dharmaram Syr. Ms. 53, folio 63a). Garshuni Malayalam is written more cursively in lighter ink.
Figure 15: Excerpt from a Syriac grammar (Dharmaram Syr. Ms. 53, folio 63b). Garshuni Malayalam is written more cursively in lighter ink.
Figure 16: A specimen of Garshuni Malayalam (from Āṭṭel 2010: 189).
Addendum to Acknowledgments

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