

Title: Preliminary Proposal to Encode Syriac Letters for Garshuni Malayalam
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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:

glyph	character name
𐪎	SYRIAC LETTER MALAYALAM NGA
𐪏	SYRIAC LETTER MALAYALAM JA
𐪐	SYRIAC LETTER MALAYALAM NYA
𐪑	SYRIAC LETTER MALAYALAM TTA
𐪒	SYRIAC LETTER MALAYALAM NNA
𐪓	SYRIAC LETTER MALAYALAM NNNNA
𐪔	SYRIAC LETTER MALAYALAM BHA
𐪕	SYRIAC LETTER MALAYALAM RA
𐪖	SYRIAC LETTER MALAYALAM LLA
𐪗	SYRIAC LETTER MALAYALAM LLLA
𐪘	SYRIAC LETTER MALAYALAM SSA

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:

	joining	final	medial	initial	isolated
SYRIAC LETTER MALAYALAM NGA	dual	𐪎	𐪎	𐪎	𐪎
SYRIAC LETTER MALAYALAM JA	non	—	—	—	𐪏
SYRIAC LETTER MALAYALAM NYA	dual	𐪑	𐪑	𐪑	𐪑
SYRIAC LETTER MALAYALAM TTA	dual	𐪒	𐪒	𐪒	𐪒
SYRIAC LETTER MALAYALAM NNA	dual	𐪓	𐪓	𐪓	𐪓
SYRIAC LETTER MALAYALAM NNNA	dual	𐪔	𐪔	𐪔	𐪔
SYRIAC LETTER MALAYALAM BHA	non	—	—	—	𐪕
SYRIAC LETTER MALAYALAM RA	right	𐪖	𐪖	𐪖	𐪖
SYRIAC LETTER MALAYALAM LLA	dual	𐪗	𐪗	𐪗	𐪗
SYRIAC LETTER MALAYALAM LLLA	right	𐪘	𐪘	𐪘	𐪘
SYRIAC LETTER MALAYALAM SSA	right	𐪙	𐪙	𐪙	𐪙

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

𐪏 SYRIAC LETTER MALAYALAM JA This letter represents 𐪏 *ja*, the palatal unaspirated stop /d͡ʒ/. It is a non-joining character. It's shape is derived directly from 𐪏 U+0D1C MALAYALAM LETTER JA. Although it may be possible to use U+0D1C within a Syriac environment, a separate encoding is needed for 𐪏 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.

𐤒 SYRIAC LETTER MALAYALAM NYA This letter represents 𐤒 *ṅa*, the palatal nasal /ɲ/. It is a dual-joining character. It corresponds to U+0D1E MALAYALAM LETTER NYA.

𐤓 SYRIAC LETTER MALAYALAM TTA This letter represents 𐤓 *ṭa*, the unvoiced retroflex stop /ʈ/, and 𐤔 *ḍa*, 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.

𐤕 SYRIAC LETTER MALAYALAM NNA This letter represents 𐤕 *ṇa*, the retroflex nasal /ɳ/. It is a dual-joining character. It corresponds to U+0D23 MALAYALAM LETTER NNA.

𐤖 SYRIAC LETTER MALAYALAM NNNNA This letter represents 𐤖 *ṇa*, the alveolar nasal /n/. It is a dual-joining character. It corresponds to U+0D29 MALAYALAM LETTER NNNNA.

𐤗 SYRIAC LETTER MALAYALAM BHA This letter represents 𐤗 *bha*, the labial aspirated stop /bʱ/. It is a non-joining character. It's shape is derived directly from 𐤗 U+0D2D MALAYALAM LETTER BHA. Although it may be possible to use U+0D2D within a Syriac environment, a separate encoding is needed for 𐤗 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.

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

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

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

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

3 Letters Not Proposed

𐤒𐤓 *The consonant ligature ṅṭa* The consonant ligature 𐤒𐤓 represents the Malayalam conjunct 𐤒𐤓 *ṅṭa*. The conjunct consists of 𐤕 U+0D23 MALAYALAM LETTER NNA and 𐤓 U+0D1F MALAYALAM LETTER TTA. The Syriac representation of *ṅṭa* is a combination of the proposed 𐤕 SYRIAC LETTER MALAYALAM NNA and 𐤓 SYRIAC LETTER MALAYALAM TTA, with the 𐤒 U+0748 SYRIAC OBLIQUE LINE BELOW rendered as a horizontal stroke. The presence of the horizontal stroke, or *mbatlana*, 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 *ṅṭa* in encoded text. If additional research indicates that 𐤒𐤓 should be encoded as an atomic character, then it may be added later.

𐤒𐤓𐤔 *The syllable jṅṭ* Figure 13 shows the syllable 𐤒𐤓𐤔 /jṅṭ/. This letter is the Malayalam syllable 𐤒𐤓𐤔 *jṅṭ* adapted directly into Syriac. It is a conjunct ligature formed from 𐤒 U+0D1E MALAYALAM LETTER NYA and 𐤒 U+0D1E MALAYALAM LETTER NYA, and the 𐤓 U+0D40 MALAYALAM VOWEL SIGN II. The form 𐤒𐤓𐤔 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`:

```
xx00;SYRIAC LETTER MALAYALAM NGA;Lo;0;AL;;;;;N;;;;;
xx01;SYRIAC LETTER MALAYALAM JA;Lo;0;AL;;;;;N;;;;;
xx02;SYRIAC LETTER MALAYALAM NYA;Lo;0;AL;;;;;N;;;;;
xx03;SYRIAC LETTER MALAYALAM TTA;Lo;0;AL;;;;;N;;;;;
xx04;SYRIAC LETTER MALAYALAM NNA;Lo;0;AL;;;;;N;;;;;
xx05;SYRIAC LETTER MALAYALAM NNNA;Lo;0;AL;;;;;N;;;;;
xx06;SYRIAC LETTER MALAYALAM BHA;Lo;0;AL;;;;;N;;;;;
xx07;SYRIAC LETTER MALAYALAM RA;Lo;0;AL;;;;;N;;;;;
xx08;SYRIAC LETTER MALAYALAM LLA;Lo;0;AL;;;;;N;;;;;
xx09;SYRIAC LETTER MALAYALAM LLLA;Lo;0;AL;;;;;N;;;;;
xx0A;SYRIAC LETTER MALAYALAM SSA;Lo;0;AL;;;;;N;;;;;
```

Linebreaking Linebreaking properties in the format of `LineBreak.txt`:

```
xx00..xx0A;AL # Lo [11] SYRIAC LETTER MALAYALAM NGA..SYRIAC LETTER MALAYALAM SSA
```

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

```
# Syriac Characters
xx00; MALAYALAM NGA; D; MALAYALAM NGA
xx01; MALAYALAM JA; U; MALAYALAM JA
xx02; MALAYALAM NYA; D; MALAYALAM NYA
xx03; MALAYALAM TTA; D; MALAYALAM TTA
xx04; MALAYALAM NNA; D; MALAYALAM NNA
xx05; MALAYALAM NNNA; D; MALAYALAM NNNA
xx06; MALAYALAM BHA; U; MALAYALAM BHA
xx07; MALAYALAM RA; R; MALAYALAM RRA
xx08; MALAYALAM LLA; D; MALAYALAM LLA
xx09; MALAYALAM LLLA; R; MALAYALAM LLLA
xx0A; MALAYALAM SSA; R; MALAYALAM SSA
```

5 References

- എമ്മാനുവൽ ആട്ടൽ [Ätzel, Emmanuval]. 2010. വേദതർക്കത്തിൻറെ ഭാഷാശാസ്ത്രഭൂമിക [Vedatarkkattinte bhāṣāśāstrabhūmika]. Trivandrum: Carmel International Publishing House.
- Faulmann, Carl. 1880. *Das Buch der Schrift: Enthaltend die Schriftzeichen und Alphabete aller Zeiten und aller Völker der Erdkreises*. Zweite Vermehrte und verbesserte Auflage. Wein: Der Kaiserlich-Königlichen Hof- und Staatsdruckerei.
- Nasrani Foundation. സുറിയാനി മലയാളം [“Suriyanī Malayālam”]. <http://www.nasranifoundation.org/articles/SyriacMalayalam.html>
- Perczel, István. 2014. “Garshuni Malayalam: A Witness to an Early Stage of Indian Christian Literature”. *Hugoye: Journal of Syriac Studies*, vol. 17, no. 2, pp. 263–323.

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.

	086	087
0	𐤀 0860	
1	𐤁 0861	
2	𐤂 0862	
3	𐤃 0863	
4	𐤄 0864	
5	𐤅 0865	
6	𐤆 0866	
7	𐤇 0867	
8	𐤈 0868	
9	𐤉 0869	
A	𐤊 086A	
B		
C		
D		
E		
F		

Malayalam letters

- 0860 𐤀 SYRIAC LETTER MALAYALAM NGA
- 0861 𐤁 SYRIAC LETTER MALAYALAM JA
- 0862 𐤂 SYRIAC LETTER MALAYALAM NYA
- 0863 𐤃 SYRIAC LETTER MALAYALAM TTA
- 0864 𐤄 SYRIAC LETTER MALAYALAM NNA
- 0865 𐤅 SYRIAC LETTER MALAYALAM NNNA
- 0866 𐤆 SYRIAC LETTER MALAYALAM BHA
- 0867 𐤇 SYRIAC LETTER MALAYALAM RA
- 0868 𐤈 SYRIAC LETTER MALAYALAM LLA
- 0869 𐤉 SYRIAC LETTER MALAYALAM LLLA
- 086A 𐤊 SYRIAC LETTER MALAYALAM SSA

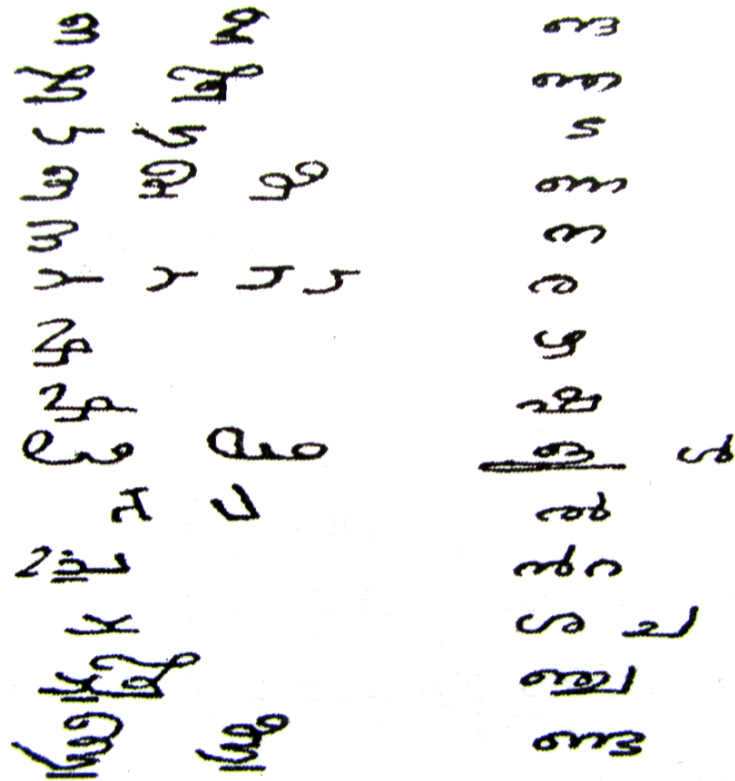


Figure 1: A hand-written chart of Syriac letters used for transcribing Malayalam (from Āṭṭel 2010: 35). Rows 1–9 show Garshuni Syriac letters that correspond to the Malayalam letters: ܐ = ഞ; ܐ = ഞ; ܐ = ഞ; ܐ = ഞ; ܐ = ഞ; ܐ = ഞ; ܐ = ഞ; ܐ = ഞ; ܐ = ഞ. Glyphic variants shown in the left column are unified with the representative glyph for each proposed letter. The letters in rows 10–13 are variant forms of existing Syriac letters. Row 10 = ܐ Row 11 = ܐ Row 12 ܐ = ܐ and ܐ. Row 13 ܐ = ܐ. Row 14 is ܐ = ܐ (see section 3).

MALABARISCH-SYRISCH.

Zeichen	Wert	Zeichen	Wert	Zeichen	Wert	Zeichen	Wert	Zeichen	Wert	Zeichen	Wert
ⲗ	a	ⲟ	w	ⲕ	k	ⲛ	3	ⲛ	z	ⲛ	t
ⲛ	b	ⲟ	z	ⲕ	l	ⲛ	ph	ⲛ	t	ⲛ	!
ⲛ	g	ⲟ	χ	ⲕ	m	ⲛ	s	ⲛ	n	ⲛ	r
ⲛ	d	ⲟ	ⲗ	ⲕ	n	ⲛ	q	ⲛ	n̄	ⲛ	š
ⲛ	h	ⲟ	y	ⲕ	s	ⲛ	r	ⲛ	n̄	ⲛ	r̄

Durch die Missionäre der Nestorianer gelangte die syrische Schrift auch nach Malabar, wo die christlichen Nachkommen der von diesen Bekehrten den Namen der St. Thomaschristen führen. Durch diese wurde die syrische Schrift

auch auf die dravidischen Sprachen angewendet und durch mehrere dem Malayalam entlehnte Zeichen vermehrt. Die Schrift hat noch den alterthümlichen Zug der syrischen Schrift des 8. Jahrhunderts.

SYRISCH.

Zeichen				Wert	Zeichen				Wert	Zeichen	Wert
Ende	Mitte	Anfang	Isolirt		Ende	Mitte	Anfang	Isolirt			
ⲗ	ⲛ	ⲛ	ⲛ	'a	ⲛ	ⲛ	ⲛ	l	Ligaturen.		
ⲛ	ⲛ	ⲛ	ⲛ	b, v	ⲛ	ⲛ	ⲛ	m	ⲛⲛ	'a	
ⲛ	ⲛ	ⲛ	ⲛ	g, γ	ⲛ	ⲛ	ⲛ	n	ⲛ	'a	
ⲛ	ⲛ	ⲛ	ⲛ	d, δ	ⲛ	ⲛ	ⲛ	s	ⲛⲛ	'al	
ⲛ	ⲛ	ⲛ	ⲛ	h	ⲛ	ⲛ	ⲛ	3	ⲛⲛ	ll	
ⲛ	ⲛ	ⲛ	ⲛ	w, u	ⲛ	ⲛ	ⲛ	p, f	ⲛⲛ	gg	
ⲛ	ⲛ	ⲛ	ⲛ	z	ⲛ	ⲛ	ⲛ	s			
ⲛ	ⲛ	ⲛ	ⲛ	χ	ⲛ	ⲛ	ⲛ	q			
ⲛ	ⲛ	ⲛ	ⲛ	ⲗ	ⲛ	ⲛ	ⲛ	r			
ⲛ	ⲛ	ⲛ	ⲛ	y	ⲛ	ⲛ	ⲛ	z			
ⲛ	ⲛ	ⲛ	ⲛ	k, χ	ⲛ	ⲛ	ⲛ	t, θ			

Vokalzeichen:

ⲗ a, ⲛ ē, ⲛ e, ⲛ ě, ⲛ ī, ⲛ o, ⲛ u.

Interpunktionen:

ⲛ ⲛ ⲛ ⲛ ⲛ

Die syrische Schrift, *Pešito* genannt, ist den westlichen Syrern, den Maroniten und Jakobiten, oder vielmehr den römisch-katholischen Syrern im Gegen-

satz zu den nestorianischen, eigen; sie ist eine sehr cursive Form der Estrangelo, wie dies namentlich in ⲛ ⲛ und ⲗ hervortritt.

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).

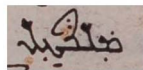
B. The additional Malayalam consonants of the Garshuni Malayalam alphabet

1. Malayalam *Na*



“Malayalam *Na*” = Modern Malayalam ന, റ്റ, 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:

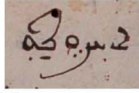


This is the word *malaNāTTil*, “in the mountainous region,” with a medial *Na* in the middle. The fourth letter is Malayalam *Ta*, reduplicated by the *mbatlānā* in the medial position (see below, no. 5.a.). The auxiliary signs are: *ptābā* on the *mem* (Malayalam *mā*),

Figure 3: Description and example of NNNA (from Perczel 2014: 311).

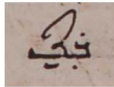
indicating the short vowel *a*, *ʒqāpā* in the upper compartment of the *Na*, indicating the long vowel *ā*, *mbatlānā* under the *Ta*, indicating reduplication, *hṽāṣā* under the *yōd*, indicating the vowel *i*. The lack of a vowel sign on the first *lāmad* indicates a short *a*, which is the basic vocalisation.

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



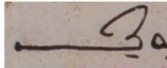
This is the word *ayirbuNNu* “had been.” *Na* is here in the penultimate position, before the *waw*, connecting only to the left. The fourth letter is a Malayalam *rba* connected to the right (see below, no. 7.a.). The beginning *alap*, having no vowel sign, is bearing the basic vowel *a*. It is followed by two *yōds*, the first having the value of the Malayalam consonant *ya* and the second, with the *hṽāṣā* underneath, indicating the vowel *i*. *ʿEṣāṣā allīṣā* under the two *waw*’s indicates the vowel *u*, the *mbatlānā* line under the *Na* indicates reduplication.

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



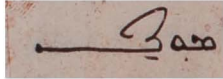
This is a final *Na* in the word *vaNNu* (“having gone”). One may see that *bēth* is used for the phoneme *v*, the *ptāḥā* is used for the vowel *a* and the underlining (*mbatlānā*) means the reduplication of the phoneme. The final *u* is, in fact, a *shva*.

d. *Final, stand alone position*.



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

Figure 4: Description and example of NNNA (from Perczel 2014: 312).



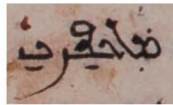
This is the word *mūNnu*, “three.” Here again, the final *u* is, in fact, a *shva*.

2. Malayalam *Nba*



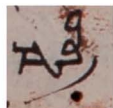
= Modern Malayalam ണ, ണ്ൻ “Malayalam *Nba*,” a retroflex nasal. It connects in both directions.

a. Medial position:



This is the word *malaNbkarakku*, “to Malankara,” with a medial *Nba* at the fourth position, in the letter combination *Nbka*. The letter combination is indicated by the *mbatlānā* under the *Nba*, 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 *Nba*, while the pronunciation is *aNbka*. The letter in the penultimate position is a Malayalam *rba* connected to the right (see below, no. 7.a.) and the final *ka* (Syriac *kāp*) is reduplicated by the *mbatlānā*. 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.

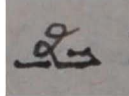


This is the word *rbaNbdam*, “two,” with an initial *Nba* at the second position. The first letter is Malayalam *rba* in a stand-alone position (see below, no. 7.b.), the third letter is Malayalam *Ta* (see

Figure 5: Description and example of NNA (from Perczel 2014: 313).

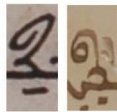
below, no. 5.a.) in medial position. There are no vowel signs, indicating that the appropriate consonants—*rba* and *Ta*—bear the basic vowel *a*.

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



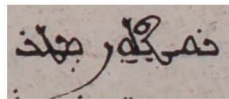
This is a final *Nba* in the word *vaNba* (“shape”).

3. Malayalam *nga*



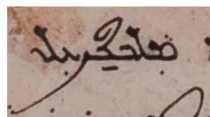
= Malayalam *nga* = Modern Malayalam ണ, pronunciation *ṅa* (*nga*), a velar nasal. It connects in both directions.

a. *Medial position:*



a.1.

This is the word *koDhangallurb*, standing for the town of Kodungallur/Cranganore, followed by *metr<āpōlita>*. 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.).



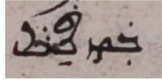
a.2.

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 *mbatlānā* 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 *MalaNbkara*, see above, 2.a.

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



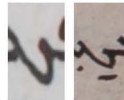
This is the word *vazhanggakā*, “being in obedience,” with an initial *nga* in the third position, reduplicated by the *mbatlānā*. The first letter is Malayalam *va*, indicated by a *bēth*, the second is Malayalam *zha* in a final position (see below, no. 8.b.).

4. Malayalam *nya*



= Modern Malayalam ന്ന, pronunciation *ñā* (*nya*), a palatal nasal. It connects in both directions.

5. Malayalam *Ta*, *Da*



a. Malayalam *Ta* = Modern Malayalam ണ, transcription *Ta*, 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 *teth* (transcription: *T*, 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).






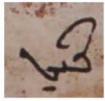
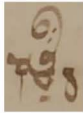
- b1. 
- Here *Ta* is connected to a final *ālap* in the syllable *Dē*. It is to be distinguished from the way the *ṯēth* is being connected to the following *ālap*. See below, 5.c.
- b2. 
- Here *Ta* is connected to a *kaap* in the syllabic combination *Daka*.
- b3. 
- Here *Ta* is connected to a *naw* in the syllable *TTu*.
- b4. 
- Here a reduplicated *Ta* is connected to a *Na* on the right and to a *yod* on the left. The pronunciation is *NāTTil* from the word *malaNāTTil*, “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 *NiTTu* from *mesbihā piraNiTTu* (“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).

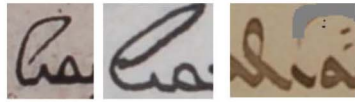
This is the word *rhaNhdām* (second), where one can see that the *Ta* is written underneath the *Nba*. This reproduces the composite letter *NbDa* (𐤎𐤁𐤃) in Modern Malayalam.



c.

This is how the Syriac *tēth* (*t*) is written in Garshuni Malayalam. This letter is only added here as a comparison to the *Ta*. Perhaps, its shape was influenced by the grapheme of the *Ta*. The *tēth* is only used in Syriac and European loanwords. On these two images it is connected to an *ālap*. On the first image, this is the final syllable from the word *karmeliṭā* (Carmelite), on the second, from the word *metropolīṭā*

6. Malayalam *lba*



Modern Malayalam ല , or final ൾ , transcribed as *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, *lba* is connected in both directions. On this picture it is followed by a *waw*.

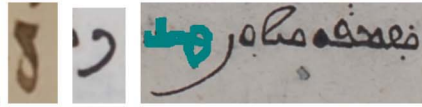
7. Malayalam *rba*



a.

= Modern Malayalam ര , transcribed as *rba*, an alveolar trill, while the Syriac *rēsh* is used to express the consonant ر , a retroflex trill, such as the *r* of the Italians. The letter *rba* connects only to the right, never to the left and its body is under the line; it can be written like the final *nun*, but with an additional curve at the end, or as an Arabic *r*, pointing leftward.

Figure 9: Description and example of LLA and RA (from Perczel 2014: 317).



b.

This is how the *rha* looks like when it is not connected in either direction. On the third picture one sees the place name *Sampaulhurb* (the city of Saint Paul) with a *rha* at the end. The *lha* (third letter from the left) stands alone, as it follows a *waw*. 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 *Sampallhurb* (with reduplicated *llha*).

8. Malayalam *ṣha*, *ṣha*, *ja*




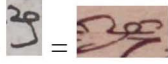


This letter stands for three different Modern Malayalam letters and sounds. Either for ṣ , transcription *ṣha*: a retroflex central approximant, pronounced as a sound between *l*, *r*, and *ʒ*; or for ṣ , transcription *ṣha*, pronounced as a retroflex sibilant fricative (ʃ), or for ṣ , transcription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

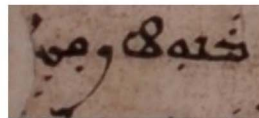
9. Malayalam *ṣha*, *ja*



= Modern Malayalam ṣ , *ṣha*, pronounced as a retroflex sibilant fricative (ʃ), or Modern Malayalam ṣ , *ja*. In some manuscripts, such as Mannanam MS Syr 74, this grapheme is used in Sanskrit loanwords, such as *mānuṣhan* (man), or *puruṣhan* (man, soul, god). In the same MS other occurrences of the phoneme *ṣha* are written

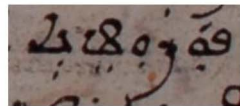
Figure 10: Description and example of LLLA and SSA (from Perczel 2014: 318).

by . In Mannanam Syr 74, this letter does not connect either to the right or to the left. In this manuscript, the letter combination *keSha* (ܟܫܐ) is written as a ligature of *ka* and *sha* (ܟܫܐ = ). Yet, in other, quite old, manuscripts, such as Bangalore Dharmaram College Syr 32,  is treated as a normal element of the Garshuni alphabet, which indicates both the *Sha* and *ja* sounds and connects to the right. In this MS the letter combination *keSha* (ܟܫܐ) is written as a ligature of *ka* + *Sha* (ܟܫܐ = ). This letter, which is sometimes inserted in the ductus of the script and sometimes is not, which is taken from the *Arya ezbutthu* 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.



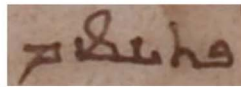
a.

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



b.

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



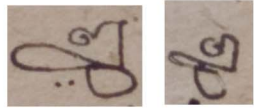
c.

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

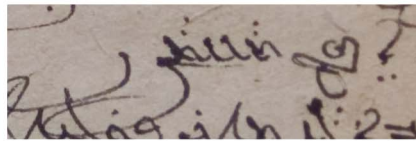
Figure 11: Description and example of ssa (from Perczel 2014: 319).

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 **ꠞ**: *ja* and **ꠟ**: *bha*, found in a letter on foll. 515r-516r, in Ernakulam Major Archbishop's House MS Syr 7.



1. a.
= Modern Malayalam **ꠞ**, *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 *ejamānanmāraru* (“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.



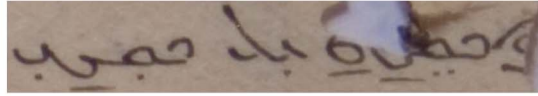
- b.
This is how the word *ejamānanmāraru* is written in the manuscript. Note that the *ja* does not connect to any side and, also, the two allongated *rha*'s at the end of the word, interfering with the next line.



- 2.a.
= Modern Malayalam **ꠟ**, *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 *bhāgamettil kuTTi* (“with the side”).



b.


Here is the expression *bhāgamettil kuTTi*. Note that the *bba* is not connected to the left—and that, certainly, it would not be connected to the right either—and also that the *kāp* serves both for expressing the Malayalam letters *ka* (ക: unaspirated voiceless velar stop in *kuTTi*) and *ga* (ഗ: unaspirated voiced velar stop in *bhāgam*), unless here the Garshuni text reproduces an earlier or dialectal pronunciation.

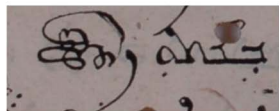
3. Mannanam Syr 49, fol. 31r-32r contains a text, where the word *rhājnyī* – രാജ്ഞി: “Queen,” occurs several times. For this, the scribe has adopted Garshuni Malayalam *rba* as a stand-alone character (see above, 7.b.) with the *zqāpā* indicating the vocalisation of the first syllable with the long vowel *ā*, plus the single complex grapheme ജ്ഞി used in Modern Malayalam (or, rather, its predecessor, the *Arya ezbutthu*) for *jnyī*:



This is *rhājnyī* (രാജ്ഞി) on fol. 31r; it is noteworthy that, in the combination, the *nyā* is not written in its Garshuni Malayalam form



as , but the modern Malayalam form ണ is being used. Also, instead of the Garshuni way of using a *yōd* with a *hvasā* for writing the vowel *ī*, it uses the connected form of the Modern Malayalam ണു (ണി).



This is *VēNadu rhājnyī*, “the Queen of Vēnad” on fol. 32r.

Figure 13: Description of the Malayalam conjunct syllable *jñī* (from Perczel 2014: 321).

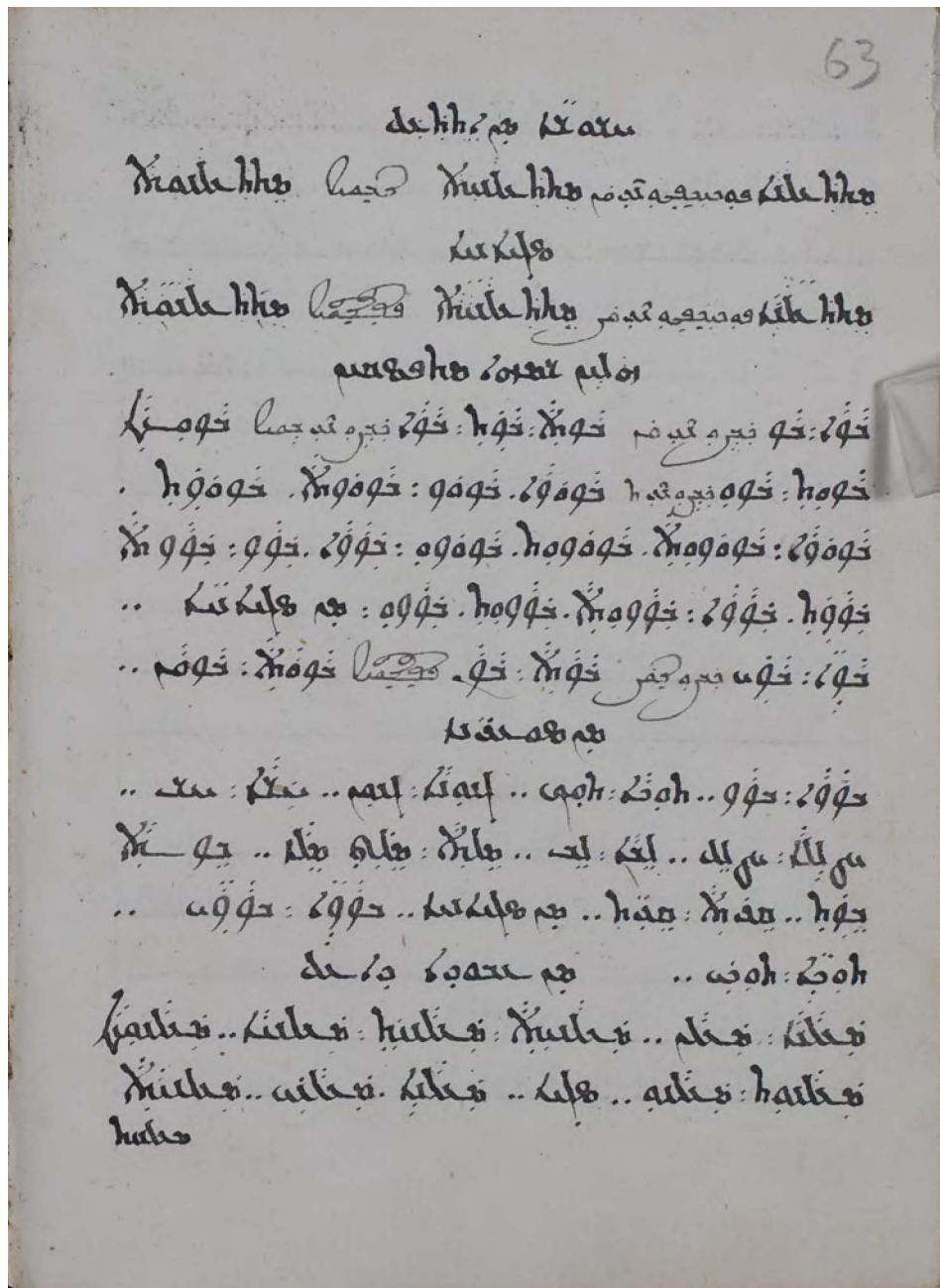


Figure 14: Excerpt from a Syriac grammar (Dharmaram Syr. Ms. 53, folio 63a). Garshuni Malayalam is written more cursively in lighter ink.

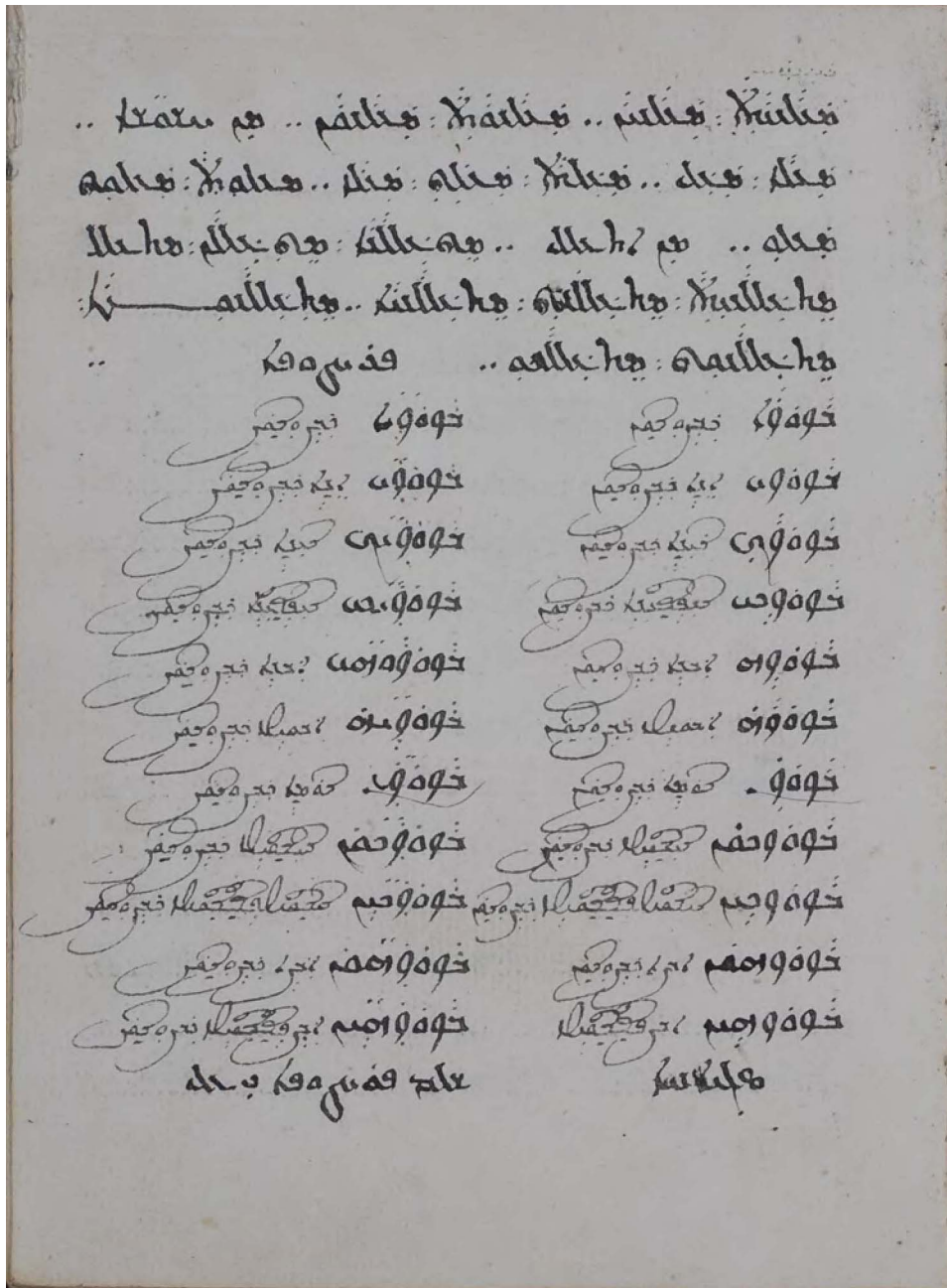


Figure 15: Excerpt from a Syriac grammar (Dharmaram Syr. Ms. 53, folio 63b). Garshuni Malayalam is written more cursively in lighter ink.

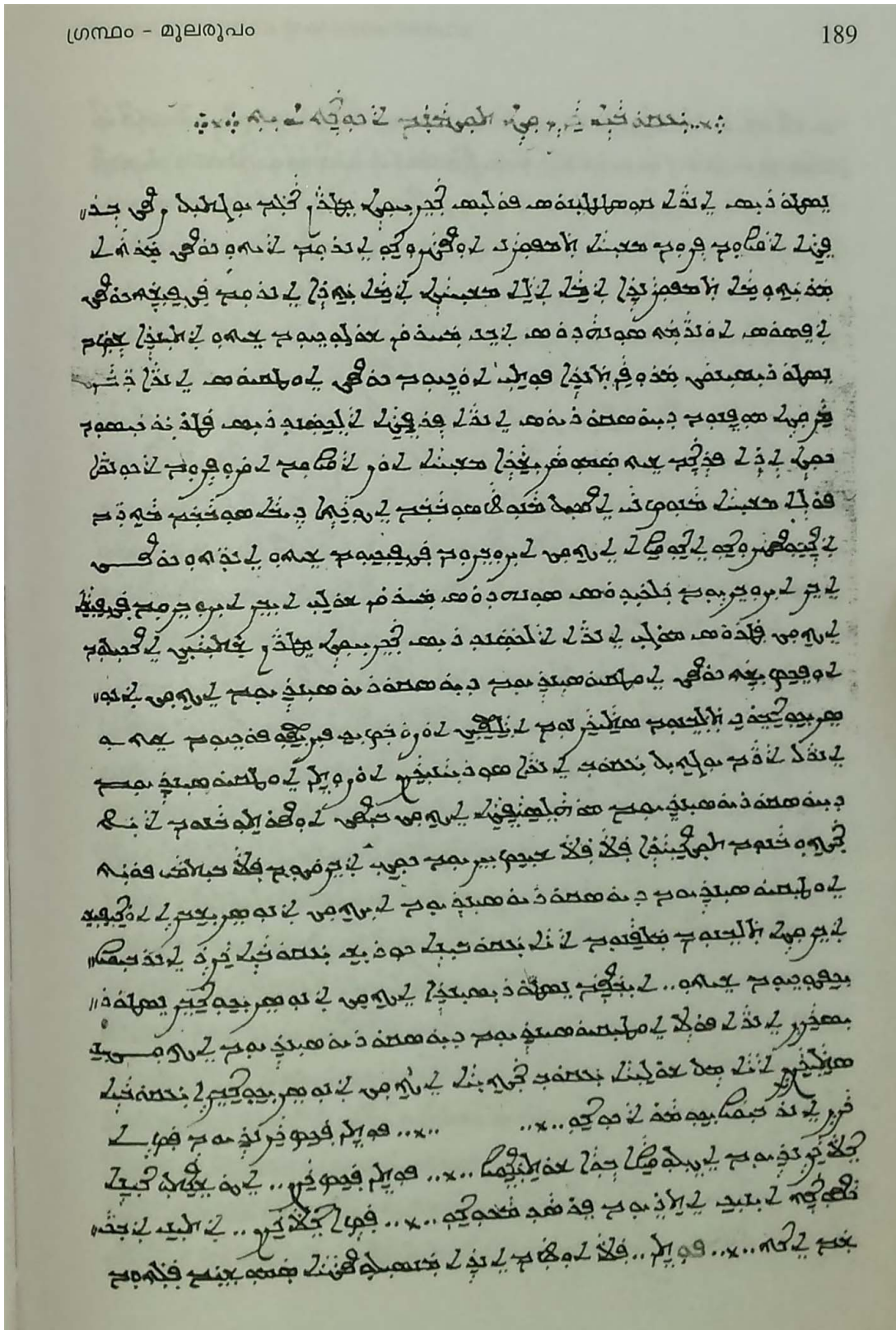


Figure 16: A specimen of Garshuni Malayalam (from Ätzel 2010: 189).

Addendum to Acknowledgments

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