A HISTORICAL PHONOLOGY OF WESTERN KARAIM. 
THE PROCESS OF ITS DIVERSIFICATION INTO DIALECTS

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Abstract

This article describes the emergence of the dialectal differences in phonology that eventually led to the division of Western Karaim into two dialects. The study is based on manuscripts and manuscript editions covering the period between the 17th and 20th centuries. Special attention is paid to the relative chronology of the phonological changes. A periodization of Western Karaim is also proposed.

1. Preliminary remarks

In an article published in 2010 I contended that, based on the materials that were at our disposal at the time, it was not possible to say with any certainty whether the Karaims ever had a common literary language (Németh 2010: 199, fn. 1). Meanwhile, Radloff (1888: 179), Kowalski (1929: xlviii–xlix), and Dubiński (1968: 215) claimed quite categorically that the dialectal differences between North- and South-Western Karaim must have already existed prior to the first wave of migrations to the territories of Poland and Lithuania.1 Now, however, this view must be revised in light

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1 Given the importance of these opinions and since it is difficult to gain access to some of these works I will quote the crux of the respective fragments: (1) Radloff (1888: 179): "[…] Beide Sprachen beweisen unumstößlich, dass die Karaimen, die vor Jahrhunderten in Luzk angesiedelt wurden, schon bei ihrer Einwanderung nach Volhynien eine andere Mundart des Krym-Dialectes sprachen, als die Karaimen von Troki." (2) Kowalski (1929: xlviii–xlix): "Fassen wir nun das bisher Gesagte zusammen, so können wir die oben gestellte Frage nach der beiden
of research published in the last four years (above all, Jankowski 2014; Németh 2011, 2014a, b, c) and the manuscripts I was fortunate enough to read. Having seen these, it becomes much more likely that the dialectal partition of Karaim – at least with regard to phonology – was a later phenomenon, and definitely not one that goes back to the time prior to their migration. Since, however, these findings concern Western Karaim dialects only, I will concentrate in this paper on the process whereby Western Karaim split into dialects.

Fortunately, the evidence that transpires from the publication of recently found manuscripts (all of which were written in Hebrew script) allows us not only to establish the relative chronology of the changes that led to linguistic partitioning between the northern and southern varieties of Western Karaim, but also to establish a preliminary time-frame for these changes. Obviously, this must be done with the proviso that future research may provide data that would allow us to establish this time-frame with greater accuracy.

For the sake of transparency, the differentiation process will be presented in chronological order in this article. The main dialectal differences observed in the 20th century are listed in table 1.1 and will be discussed in the following chapter, with the philological data that allows us to outline the time-frame of their occurrence provided. A number of other linguistic tendencies of less importance that are characteristic of either North- or South-Western Karaim will be discussed separately later in chapter 3 (see table 1.2).

2. The main dialectal differences and their chronology

The table below sets out the main sound differences between the northern and southern varieties of Modern Western Karaim. The annotations in the last column regarding chronology always concern the process indicated in a cell with greyed background.

Dialekte mit großer Wahrscheinlichkeit dahin beantworten, daß die Karaimen bereits bei ihrer Auswanderung nach dem Westen zwei voneinander abweichende Dialekte sprachen, deren Unterschiede sich im Laufe von Jahrhunderten durch spontane Entwicklung sowie durch den Einfluß der sprachlichen Umgebung noch vertieft und vermehrt haben. Die Siedlung der Kolonien in Luck und Halicz muß demnach aus einer anderen Gegend der Krim, bzw. des Gebietes um das Schwarze Meer, stattgefunden haben als die der Kolonien in Poniewież und Troki.” (3) Dubiński (1968: 215): “Öte yandan, bu [leksik] farklar Karaimlerin Litvanya ve Polonya topraklarına göçmeden önce çeşitli lehçeler kullandıklarını iddia eden Radloff’un ve Kowalski’nin tezini de kuvvetlendiriyor.” See also Shapira (2003: 669): “When the Karaites came to Galicia, then under Polish sovereignty, and to Lithuania, from the Golden Horde, they already spoke their Qışqçaq Türkic dialects, later known as the Halicz and Troki dialects, which would explain some of the differences between them.”

As we see, Shapira (2003: 661–662, 669; 2013: 157) asserts that Karaims migrated to Lithuania and Galicia not from the Crimea, but from the Golden Horde. For a linguist dealing with the history of Western Karaim it is not crucial to know the answer to this very intricate question, thus, at this point I refrain from joining this debate. It seems, however, that further historical evidence is needed to eventually validate both theories.
A historical phonology of Western Karaim. The process of its diversification into dialects

Table 1.1. The main dialectal differences between Western Karaim dialects

<table>
<thead>
<tr>
<th>Nr.</th>
<th>Middle Western Karaim</th>
<th>Modern North-Western Karaim</th>
<th>Modern South-Western Karaim</th>
<th>Time-frame of change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>*ŋ</td>
<td>j, n, n̄</td>
<td>n</td>
<td>late 17th c.</td>
</tr>
<tr>
<td>2.</td>
<td>vowel harmony</td>
<td>consonant harmony</td>
<td>vowel harmony</td>
<td>17th/18th c.</td>
</tr>
<tr>
<td>3.</td>
<td>š, ž, ě, ž̄</td>
<td>š̄, ž̄, ě̄, ž̄</td>
<td>s, z, c, ž̄</td>
<td>late 18th c.</td>
</tr>
<tr>
<td>4.</td>
<td>-ō̄-, -ū̄-</td>
<td>ō̄-, ŭ̄-</td>
<td>ē-, ī-</td>
<td>18th/19th c.</td>
</tr>
<tr>
<td>5.</td>
<td>-ō-, -ū-</td>
<td>-o-, -u-</td>
<td>-e-, -i-</td>
<td>18th/19th c.</td>
</tr>
<tr>
<td>6.</td>
<td>-ū</td>
<td>-u</td>
<td>-i</td>
<td>18th/19th c.</td>
</tr>
<tr>
<td>7.</td>
<td>syllable-closing aj</td>
<td>syllable-closing ej</td>
<td>syllable-closing aj</td>
<td>19th c.</td>
</tr>
<tr>
<td>8.</td>
<td>syllable-closing q</td>
<td>syllable-closing χ</td>
<td>syllable-closing k</td>
<td>19th c.</td>
</tr>
<tr>
<td>9.</td>
<td>-men, -sen</td>
<td>-myn ~ min, -syn ~ śini</td>
<td>-men, -sen</td>
<td>late 19th c.</td>
</tr>
</tbody>
</table>

**Ad 1:** The Middle Karaim *ŋ* was eventually eliminated in Western Karaim and evolved in two ways: in North-Western Karaim it changed into j (voiced palatal approximant), n and n̄, whereas in South-Western Karaim it was only deverbialized into n. The following additional explanations are due:

In Eastern Karaim sources transcribed in Hebrew script ŋ were usually written with the letter gimel ‘ג’ or gimel with a rafe ‘ג’, but in the Western Karaim orthographic tradition this practice never developed; the original *ŋ*, as were its continuants with the exception of j, were always represented by the letter nun ‘נ’. The question remains whether this is because the ŋ > n change had come to an end before the time the oldest manuscripts we know were composed and that there was no need to write gimel in its place, or whether in Western Karaim scribal tradition the velar ŋ was always written with the letter nun. What we can say at this time is that documented evidence of the Crimean Karaim and Crimean Ottoman written traditions makes the former statement much more plausible (velar ŋ and dental n were also distinguished in Ottoman Turkish, see e.g. Korkmaz 1999: 153).

It is also difficult to say when the ŋ > j shift took place in the north-western dialect, even though the Hebrew script makes a clear distinction possible in this case, too. Recently, based on a critical edition of two manuscripts containing two poems of Isaac ben Abraham of Troki (1553–1594)² written in the north-western dialect, Jankowski (2014), attempted to prove that j must have appeared in the positions known from present-day North-Western Karaim before the end of the 17th century. Even though the weak point of the materials he had at his disposal is that both items were copies from the 18th century, his assumption seems plausible in light of the evidence we

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² For his biography see Broydé (1906) and Eljaševič (1993, part I: 36–37).
find in manuscript III-73, most of which was copied in 1720. This manuscript clearly shows that the \( \eta > j \) process must have ended prior to the 1720s – at least in some areas or idiolects, cf. e.g. רַקְינְיָה uvlujnum ‘of your son’ (19 v°), qajnataj ירֵיָה ‘your father-in-law’ (11 v°), סָײַה maja ‘to me’ (342 v°). All in all, further research is needed to establish with greater accuracy the time-frame for this change.\(^3\)

The question remains of what processes shaped the distribution of \( n \) and \( j \) in North-Western Karaim. We know that the \( j \) that stems from \( \eta \) appears in the following: (1) the 2\(^{nd} \) singular and plural possessive suffixes (e.g. *atax > ataj ~ atej ‘your father’), (2) the dative case forms of 1\(^{st} \) and 2\(^{nd} \) singular personal pronouns (e.g. *saja > saja ‘you (dative)’), (3) the 2\(^{nd} \) singular and plural person markers of the simple past tense and of those verbal forms which are based on the simple past tense (imperfect tense, pluperfect tense, perfect conditional mood, perfect optative mood; e.g. *bardyx > bardij ‘you went’, *barsa ediy > barsa edij ‘if you had gone’), (4) the 2\(^{nd} \) singular and plural person markers of the conditional mood (e.g. *barsaj > barsaj ‘if you go’), (5) the 2\(^{nd} \) plural person marker of the imperative mood, e.g. bar- jyz ‘go! (pl.)’, and (6) a number of single words such as e.g. *janaq > jajach (Kowalski 1929: xxxi, 197) ~ janaq ‘cheek’ (KarRPS: 225).\(^4\) On the other hand, the velar \( \eta \) evolved into \( n \) (and later into \( n \) in a palatalized-consonant environment, see point 2 below) in (i) the genitive suffix -nyny ~ -nîn (also in the possessive pronouns sénéň ‘yours’, anyn ‘his, her, its’) and (2) in most lexical stems, cf. e.g. *keyn > keen ‘wide’ (Kowalski 1929: 216; KarRPS: 304), *keyeš > keņaš ‘advice, intention’ (Kowalski 1929: 216; KarRPS: 305), *teńri > teņiņ ‘God’ (Kowalski 1929: 262; KarRPS: 521), köniļ > koņul ‘heart’ (KarRPS: 313), etc. Theoretically, various scenarios are possible, but it seems likely that the velar \( \eta \) was in the process of disappearing simultaneously in two ways, i.e. there could have been a period of time when \( n \) and \( j \) alternated with each other (i.e. *\( \eta \) > \( n \) ~ \( j \)) or, at least, both processes operated simultaneously (i.e. *\( \eta \) > \( n \) and *\( \eta \) > \( j \)). The latter, in fact, could have happened in South-Western Karaim, too, but this is a question that deserves a separate study (Németh (in preparation)).

**Ad 2:** In North-Western Karaim, the front vs. back vowel harmony evolved into a consonant-harmony. Since this process has been described in the greatest possible detail in Németh (2014c), with further reading provided, I will only recapitulate the final conclusions here and outline the evolution model of the harmony shift suggested in that paper.

The crux of this change was that the well-known vowel harmony, present in most Turkic languages, in which the quality of the vowel determines the quality of the vowel of the subsequent syllable, eventually changed into another harmony form, in which it is the consonants that must agree in a word with regard to their degree of palatality – i.e. a palatalized vs. non-palatalized consonant harmony evolved. To make such

\(^3\) Nearly a year after submitting this article I gained access to three folios of manuscript B 263 in which we find some short additions from 1671 in North-Western Karaim. These additions clearly confirm Jankowski’s opinion on the *\( \eta \) > \( j \) change, cf. saja ירֵיָה ‘you (dative)’ (28 ro), uliusuına ירֵיָה ‘your people (accusative)’ (28 ro).

\(^4\) Józefowicz (2008: 358) and Juchniewicz (2008: 145) note both forms, s.v. policzek.
a harmony possible, the language must have previously developed a system of phonological oppositions between palatalized and non-palatalized consonants, which could have happened due to the influence of the phonological, phonetic and phonotactic systems of the neighbouring Slavonic languages as well as Lithuanian. Most probably, this resulted in another crucial change, namely that the phonological opposition between vowels became of minor importance and eventually led to a backing of ō, ū (in non-initial position) and e (in non-first-syllabic position) into o, u and a.5

Ergo, from one point of view we can say that the front vowels disappeared according to the following pattern: ō > ō, ū > ū (cf. also ad 4–6) and e > a,6 but from diachronic point of view it seems much more probable that the harmony shift operated in two steps: first the number of palatal consonants increased significantly and only then did the vowels change their quality.

I was working on the oldest hitherto described Western Karaim Torah translation (III-73), copied in Kukizów in 1720 by Simcha ben Chananiel (died in the 1720s, for a description of this item see Németh 2014a), which allows us to establish the time-frame of the shift in question quite accurately. The language of the Torah translation found in this manuscript clearly shows that it must have been written or copied in a period when the harmony shift was still an ongoing process. This is because the fully vocalised text shows the e > a change very precisely.7 Based on this material we can say that the harmony shift already operated at that time in the final syllables, and more precisely in all types of suffixes and in the only primary postposition that contained non-first-syllabic *e, namely in *kōre, in which -re has occasionally changed into -rå. This process, however, did not affect at that time the stem vowels, so there is not a single word in that manuscript that would be fully assimilated. Moreover, in this manuscript words affected by the harmony shift are outnumbered by words in which there are no traces of such a change. To sum up, the innovative forms alternate with the dominating original ones, cf. e.g. אִיְוּנֶי bizge (99 v°) vs. bizgá אִיְוּנֶי, אַיְוּרינְדֵי jerinde (100 v°) vs. אָיִוּרינְדֵי jerinda (100 v°), אָיִטְמֵי etme (114 r°) vs. אָיִטְמֶי etma (114 r°), etc.

The backing of vowels, then, started in word-final syllables, regardless of whether the syllable was stressed or not, and gradually spread towards the initial syllables, which corresponds with the fact that in the word-initial position ō- and ū- remained unchanged in North-Western Karaim until the present day.

5 An essentially similar process took place in the proto-Polish dialects, namely a *e, *ē > ō, a change occurred after palatal consonants and in front of dental consonants.
6 I use the sign ' to denote the palatality of the preceding consonant. There was no i > y (back, high, unrounded) change as it is rather difficult to combine the pronunciation of the furthest back vowel y with palatalized consonants.
7 We cannot say much about the ō > ō and ū > ū changes since they remain hidden behind the orthography. Both pairs of original and the innovative sounds were or could have been written in the same way, with the letters yodh and waw with a hōlām or shūrāq, respectively, i.e. ‘v and ‘v, so that we do not know whether the letter yodh indicates here the frontness of ō and ū, or the palatality of consonants preceding the younger ō and ū. We can therefore merely suppose that these processes operated simultaneously with the e > a change.
8 For a presentation of the transcription system used to transcribe the linguistic data from this manuscript see Németh (2014a, 2014c).
The backing of vowels was still in progress in 1750 when the manuscript III-78 was written. Importantly, however, in the texts copied in this prayer book, the $e > 'a$ process affected not only word-final suffixes, but it is documented in the stems and other non-final syllables, too, cf. e.g. בִײָנְצְבִילָא bijančbyla ‘with happiness’ (244 r°), צֵיבָר čebar ‘nice’ (244 r°), קָלֶיְדְלַיר kĺajdĺar ‘they want’ (244 r°), סָויְזָלָירִין sözĺarin ‘their words (accusative)’, etc. At the same time, these texts contain also words with no $e > 'a$ change attested or in which it appears only in the last syllable (as is the case in III-73), cf. e.g. בֵיסְלֵיגֵינְדָא beslegen ‘when feeding’ (243 v°), קוּרְגְזֶגֶינְנְדָא kör­güzgeninda ‘when showing’ (243 v°) or טיוּגֵיל tügel ‘perfect’ (243 v°), i.e. the process very possibly did not come to its end at the time the manuscript was copied.

As far as the time-frame of this change is concerned additional, valuable data ought to be mentioned here. Namely, manuscript III-73 also contains fragments of the Haphtarah copied by the same hand, but in a language that reflects a fully developed consonant harmony. Moreover, the testimony of manuscript B 263 from Trakai (1662/1671) mentioned in fn. 2 shows that in some areas or idiolects the harmony shift operated at least several decades earlier, cf. e.g. בִיזְגָא bizga ‘us (dative)’ (28 r°), כֶנֶאֵשִי keńaši ‘his counsel’ (26 v°), בָּרְיֵא izlavüšuna ‘to all ones who seek’ (26 v°). We can therefore assume that the harmony shift stared to operate, in certain areas or idiolects, in the last decades of the 17th c. the latest (cf. manuscript B 263 from Trakai), whereas in other areas or idiolects it could have operated even until the 1750s (cf. manuscript III-73 from Kukizów and III-78).

Ad 3: One of the most characteristic features of the south-western dialect is its lack of alveolar fricatives and affricates š, č, ž, and ʒ, which had evolved into their dental counterparts, i.e. into s, c, z, and ʒ. In essence, a process similar to “Polish mazuration” took place. However, based on the linguistic evidence from a number of manuscripts (Torah translations and prayer books catalogued under numbers JSul.III.01, JSul.III.03, JSul.III.63, JSul.III.69, and JSul.III.79) we can say that the South-Western Karaim dealveolarisation has historically nothing in common with the process that took place in Polish. The latter operated ca. from the second half of the 12th century until the 14th century and never spread to the area inhabited by Karaims (there has been a long-lasting debate on the chronology of this change in Polish; see e.g. Klemensiewicz 1974: 35–36, 44), whereas in South-Western Karaim this change operated, as will be shown below, in the second half of the 18th century (presumably most intensively in its final decades).

Recently, I published a detailed discussion of this phenomenon and presented the available philological data essential to establish the time-frame of this change, see Németh (2014b). Here, I will present my conclusions in a nutshell and will take the opportunity to supplement the philological data I previously used with what I have additionally gathered after submitting my article a year ago.

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9 The manuscript III-78 contains also texts which were originally not vocalised, but the vowel point were added afterwards by someone else (the colour of the ink and the way of writing them is clearly different). In these, there is no trace of harmony shift.
First of all, it should be pointed out that the only aspect of the South-Western Karaim devoice process that can be confirmed by philological data is the š > s change, since this was the only phoneme pair that could be distinguished in writing by using shin ‘ש’ for š and samekh ‘ס’ for s. Thus, all we can say about the process that led to a wider systemic change is based on this one shift. The three other shifts, i.e. ž > z, and š > ʒ, may have operated simultaneously with the š > s change, but we have no linguistic evidence for this.

To trace back the time-frame of the š > s shift, in Németh (2014b) I compared four copies of a piyut translation, present in four prayer books (JSul.III.03, JSul.III.63, JSul.III.69, and JSul.III.79). In the oldest of these (JSul.III.63) from ca. 1778 the original *š was clearly preserved, whereas in the second oldest manuscript (JSul.III.03), copied shortly after 1805, it was almost completely eliminated, and remained only in three loanwords (10% of the relevant vocabulary): in דוושמנים dušmannyn ‘of the enemy’ (100 v), פשמן א템 fašman etme ‘to regret’ (101 r), andشاריהנה šaharyna ‘to his city’ (101 r). The other two manuscripts, which appeared later and were copied sometime between 1851 and 1866, exhibit, on the one hand, s in place of the original *š, and, on the other, š that comes from s < *š and s < *s if preceded by i or a syllable that contained i.¹⁰ In the latter case, š is written with the letter shin, which after the loss of š may have been used for this purpose (this practice can also be observed in the 19th-century private correspondence critically edited in Németh 2011b). It is important to emphasize that in the two later manuscripts the letter shin cannot stand for š for it is s that originates from both *š and *s that is written with this letter in the position mentioned above.¹¹

We can therefore say that the devoice process, or, more precisely, at least the š > s change, came to an end in South-Western Karaim most probably in the final decades of the 18th century. It could have started, however, much earlier, and that is earlier than 1772, i.e. prior to the First Partition of Poland, since it took place both in Halych and Lutsk, simultaneously, despite the fact that after 1772 contacts between the members of these two Karaim communities became far more problematic. The replacement of š with s cannot therefore be identified as an inherited feature from the period of the Karaim unity, as is affirmed by Munkácsi (1902: 50–52) and Grzegorzewski (1914–1915: 93).

Ad 4–6: Another characteristic feature of Western Karaim is the almost complete lack of the front labial ō and ŭ in both dialects. As was mentioned above (point 2), it has been preserved in the north-western dialect only in the word-initial position – in every other position it has been eliminated by the harmony shift. But since the sounds ō and ’o, as well as ŭ and ’u could not have been distinguished in Hebrew script, we cannot say anything precise about the chronology of the ō > ’o, and ŭ > ’u changes beyond what has been expressed in point 2 above.

¹⁰ The š > s change mentioned here is well documented, see Németh (2011a: 74–80).
¹¹ This, obviously, does not apply to Hebrew words, which were always written in their original orthography.
Much more transparent is the case of the ö > e and ü > i change in the south-western dialect, for the writing here gives us a clear picture. Based on the same set of manuscripts as listed above in point 3 we can say that the process must also have operated at least in the last decades of the 18th century, but came to an end slightly later than the ś > s change, presumably around 1800. The evidence for this comes from the second oldest manuscript JSul.III.03 from ca. 1805, which contains almost no words with the original *ś sound preserved (except for three loans), but, at the same time, its language exhibits a far-reaching ö ~ e and ü ~ i alternation. There are a number of words with the original sounds left intact like e.g. (12) ‘my beauty’ (100 v°), köplügünden ‘from the plenty’ (100 r°), üzümlü ‘my house (accusative)’ (100 v°), and a slightly larger number of “innovative” forms with e and i, such as, e.g., sivümlü (< *süvümlü) ‘beloved’ (100 r°), kökimni ‘my beauty’ (100 v°), sızine ‘to his words’ (101 r°), etc.

Importantly, this process could have possibly started prior to 1772, too, for the same reasons as mentioned above in point 3.

As a matter of fact, the latter forms show that the delabialisation process (also, cf. point 2 above) spread from word-ending syllables towards the beginning of the word. The only exception was the suffix -ivcü, in which ü was also long preserved.

By way of contrast, the oldest of the four manuscripts being compared here, i.e. JSul.III.63, exhibited ö and ü, without exceptions, see e.g. köplügünden ‘from the plenty’ (35 v°), sivümlü ‘beloved’ (35 v°), tüslü ‘various’ (35 v°), üvüümüznü ‘our house (accusative)’ (35 v°), etc., whereas in the two earliest prayer books, in JSul.III.69 and JSul.III.79 only the innovative forms are used, see e.g. köplügünden ‘from the plenty’ (219 v°), in JSul.III.69 or e.g. (12) ‘day’, ättre ‘law’ (271 v°) in JSul.III.79.

Ad 7: The aj > ej change in Trakai Karaim occurred only in the syllable-closing position: (1) on morphologic boundaries (i.e. if the suffix starts with j- and joins a stem ending in a) and (2) in suffixes. We have, therefore, forms like ata ‘father’ + the -j 2nd sg. possessive suffix → atej ‘your father’ or bu ‘this’ + the -laj derivative suffix building adverbs → bulej ‘this way, in this manner’, but forms like karaj ‘Karaim’ → *karej or aj ‘1. month; 2. moon’ → *ej are non-existent.

The chronology of this change has not so far been sufficiently well documented. We can say, however, is that in the youngest part of manuscript III-73, in the Book of Ruth from the 1720s, as well as in manuscript III-78, the change is not recorded, cf. e.g. in III-73: בָּרָאָה לְוִיעָה bolaj ‘you would believe’ (342 r°), יָשִּׂגַּאֲדִיָּה isangajedijiz ‘you would believe’ (342 v°), בָּרָאָה berej ‘if you go’ (343 r°), בָּלַע bulaj ‘this way, in this manner’ (343 r°), אָרָמָא דָא אָרָײָא arama da ara’ja ‘between me and you’ (343 r°), etc., in III-78: בָּלַע bolaj ‘may it be’ (243 v°), אַװָלְדַגִֿילָאײְ avaldayyają ‘fomerly’ (244 r°), etc. whereas in texts from the

12 I use the symbol “→” to indicate derivation.
second half of the 19th century we encounter ej regularly being used in this position, see e.g. in JSul.III.31: usėdir 'suits' (21 r), toxtėdir 'dwells' (21 r), toledir 'pays' (21 r), etc. or in III-68: synejmyn 'I experience' (51 r). The process, therefore, must have taken place roughly in the period between the second half of the 18th century and the second half of the 19th century.

Ad 8: The shift from the syllable-closing and the suffix-initial q into the velar unvoiced fricative χ occurred in North-Western Karaim during the 19th century. Manuscripts from the second half of the 18th century, such as for instance JSul.III.05 from 1782/1783, still exhibit the original q written with the letter koph and there is no trace of the innovative χ (written predominantly with the letter cheth), see e.g. savluqta ‘in health’ (14 r), agyllanma ‘to grow wise’ (15 r), qorqma ‘to fear’ (15 r), tynčlyqta ‘quiet’ (51 r), etc. In contrast, texts from the first half of the 19th century on clearly show that the q > χ process had already taken place, cf. e.g. in III-68 (in a text probably from the early 19th c.): סװלוקטא ‘to the kingdom’ (1 v), שלחיקלא ‘in kingdoms’ (49 r), קורְחְטָא ‘sinful’ (49 r), and in III-68 from 1881–1882: קולח ‘slavery’ (1 v), קײּינמה ‘torment’ (1 v), קורְחַטו (‘he feared’ (2 r), אַגַלִיח ‘rule, power’ (23 v), etc., or in JSul.III.31: barlyχ ‘everything that exists’ (21 v), טבולמאץ ‘their stay (accusative)’ (22 r), חַנְלִיחְכַא ‘to the kingdom’ (2 v), etc., or in JSul.III.05: synejmyn ‘I experience’ (51 r), which is often preserved, see e.g., in JSul.III.31: ביל’elle ‘I know’ (22 r), synejmyn ‘I know’ (51 r), sen ‘you are’ (22 r), בַרלִיח ‘I give’ (22 r), בַרלְיַך ‘you give’ (22 r). The oldest manuscript I have worked on in which the innovative and archaic forms alternate with each other, is the one catalogued under number III-68 and copied in the years 1881–1882. Here we find, on the one hand, forms like תְבוּלַמָח ‘I praise’ (51 r) and, on the other hand, words like תִיבָרָאָנ ‘you understand’ (51 r), בְָרָאָנ ‘I give’, סֵיָנִים ‘experience’ (51 r).

Based on the latter linguistic evidence from manuscript III-68, in which the innovative forms evidently outnumber the archaic -men and -sen forms, we can say that the process took place in the late 19th century. Moreover, given that we know that the consonant harmony had evolved much earlier (see point 2), we can propose with some certainty the following scenario of its evolution: -men (17th c.) > -men ~ -meњ (17th/18th c.) > -mynj ~ -mın (late 19th c.).

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13 The suffix-initial q remained unchanged and evolved later into k if preceded by word-final χ.
3. Minor dialectal differences

Table 1.2 below contains further dialectal differences, which were of limited range and constituted mainly in phonotactic tendencies.\textsuperscript{14}

<table>
<thead>
<tr>
<th>Nr.</th>
<th>Middle Western Karaim</th>
<th>Modern North-Western Karaim</th>
<th>Modern South-Western Karaim</th>
<th>Time-frame of change</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.</td>
<td>$ti, di$</td>
<td>$ti, di$</td>
<td>$ti, di \sim ki, \acute{g}i$</td>
<td>19\textsuperscript{th} c. (?)</td>
</tr>
<tr>
<td>11.</td>
<td>$qy$</td>
<td>$ky$</td>
<td>$ky \sim k\acute{e}$</td>
<td>19\textsuperscript{th} c. (?)</td>
</tr>
<tr>
<td>12.</td>
<td>$*l, *l$</td>
<td>$l, l$</td>
<td>$l, l$ (le)</td>
<td>19\textsuperscript{th} c. (?)</td>
</tr>
<tr>
<td>13.</td>
<td>$*l\acute{l}$</td>
<td>$l\acute{l} \sim n\acute{l}$</td>
<td>$l\acute{l}$</td>
<td>late 19\textsuperscript{th} c.</td>
</tr>
<tr>
<td>14.</td>
<td>$*l\acute{z}$</td>
<td>$l\acute{z} \sim n\acute{z}$</td>
<td>$l\acute{z}$</td>
<td>late 19\textsuperscript{th} c.</td>
</tr>
<tr>
<td>15.</td>
<td>$jj$</td>
<td>$jj \sim n\acute{j}$</td>
<td>$jj$</td>
<td></td>
</tr>
</tbody>
</table>

Table 1.2. Different phonotactic tendencies in Western Karaim dialects

**Ad 10:** In the south-western dialect the pronunciation of the palatal (or dorsal, for an explanation and the transcription used see Németh 2011a: 80–85) $t$ and $d$ (not to be confused with the the palatodental $\acute{r}$ and $\acute{d}$) in front of $i$ resembles the pronunciation of /k/ and /g/, respectively, in the same position. This eventually led to an alternation of $ti \sim ki$ and $di \sim \acute{g}i$, but only in those lexemes which etymologically had /t/ and /d/ in these segments,\textsuperscript{15} see e.g. ייקרל'مه dyikrîlmè ‘to live’ (Németh 2011b: 163, 297) alternating with tir-$i$- (KarRPS: 530) < *tir-$i$- or Ћיבֿילמֲנִי dyivîlmèn ‘I am not’ (Németh 2011b: 211, 281; with the 1\textsuperscript{st} sg. copula suffix -men) alternating with di-$vîl$ (KarRPS: 177) < *di-$vîl$ ‘not’.

This phenomenon is a result of Ukrainian dialectal influences (in the latter case the pronunciation of the consonants in question is dorsal), which has been argued in a detailed way in Németh (2011a: 80–85) and has its roots most probably in the 19\textsuperscript{th} century – we are not yet able to establish the time-frame with greater accuracy.

Importantly, this alternation did not spread to the whole vocabulary and was rather idiolectal in form. In fact, the number of words in which this alternation is attested is very limited. Moreover, the alternation is characteristic above all of the Halych variety of the south-western dialect for the simple reason that the above-mentioned Ukrainian dialectal process mainly occurred in the Dniestrian region (including Halych) and in territories south and south-east of this region, whereas in the Volhynia region (where Lutsk lies) it appeared only occasionally (see Dejna 1957: 64, 66–67; Žylko 1958: 93–94; Zilynškyj 1979: 92).

\textsuperscript{14} The closing of e to y was facilitated by the unstressed position; the appearance of i in -nînî was forced by the neighbouring palatalized consonants. The entire process may have been fuelled by the analogy of the 1\textsuperscript{st} and 2\textsuperscript{nd} plural personal markers -biz > -byz \sim -bîz and -siz > -syz \sim -šîz.

\textsuperscript{15} The only exception I know of is the Halych Karaim term edîrek ‘better’ ← egi ‘good’ + the -rek comparative suffix.
Ad 11: Also the *ky ~ kē* [ky ~ kē] alternation is characteristic of the Halych variety of South-Western Karaim. Although it has been observed by several researchers, among others by Grzegorzewski (1916–1918: 254, 256; 1917: 3), Kowalski (1929: xlii), and Zajączkowski (1931: 7), it was the latter author who emphasized the fact that the process took place mostly in Halych.

Years later, Pritsak (1959: 327) and Dubiński (1978: 36) mentioned that the alternation is Ukrainian in origin, but the relevant Ukrainian dialectal data has been identified in Németh (2011a: 72–74) based on Żylko (1958: 113–117), Dejna (1957: 132), and Zilynśkyj (1979: 48–49, 55). From the latter sources we know that the *ky > kē* process was characteristic above all of the upper Dniestrian Ukrainian dialects (i.e. in those territories surrounding Halych), which explains why it has not been hitherto attested in texts from Lutsk. The only difference between the Ukrainian and Karaim dialectal phenomena is that in Karaim this process took place regardless of the accent, whereas in Ukrainian it is only reported in the case of accented syllables.

As far as the linguistic data are concerned, we do not have sufficient material to establish the time-frame for this change. In fact, I have not encountered this feature in texts written in Hebrew script, nor has been it reported by other researchers, which may suggest that the alternation is relatively recent. The examples that we have at our disposal come from the above-mentioned studies conducted in the 20th century. These provide such examples as e.g. *akēł* < *akył* ‘intellect’, *kējyn* < *kyjyn* ‘torment’ (Zajączkowski 1931: 7), *akēłłi* < *akyłły* ‘wise’, *kēłmak* ‘deed’ < *kyłmak* (Kowalski 1929: xlii; Dubiński 1978: 36).

The latter two phonetic features, presented in points 10 and 11, are the only ones that diversify the Halych and Lutsk varieties of South-Western Karaim.

Ad 12: In South-Western Karaim, under the influence of local Ukrainian dialects16 the distribution of the Middle Karaim alveolar lateral consonant *l* (standing probably in front of front vowels) and the dental lateral consonant *ł* (used probably with back vowels) changed: *ł* replaced *l* in front of *e* (for further details see Németh 2011a: 85–87), whereas *l* was only used in front of *i*, and in front of the segments *ŧi*, *đi*.17

In texts written in the Hebrew script the alveolar *l* and dental *ł* was not distinguished; both liquids were written with the letter *lamedh* ו. We know, however, that this distinction existed at least from the end of the 19th century, given that the first field research conducted personally by Grzegorzewski (1903, 1917, 1916–1918) in Halych report its presence, which cannot be ignored even if we know that his observations were perceptive although not entirely pertinent (see Németh 2011a: 85–86). Later, in the interwar period, the orthography created for South-Western Karaim on the basis of the Polish alphabet made a clear distinction between *ł* and *l* possible and

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16 The depalatalization of consonants in front of *e* is a characteristic feature of Ukrainian (see e.g. Medvedev 1955: 91).

17 The other two originally existing front vowels, *ö* and *ü* had been eliminated from the system, most probably somewhat earlier (see point 4 above).
allowed us to reconstruct the above-mentioned distribution. Yet, for the time being, we cannot say much more as far as the chronology of this change is concerned.

We know, however, that the orthography reflected a literary standard which may have varied in both speech and writing. In eloquent (archaic?) pronunciation I may also have appeared in front of other palatalized consonants than t and d, as asserted by Zajączkowski (1931: 9). We can also see this in the works of A. Mardkowicz in which we can encounter forms like e.g. kelniz ‘come (2nd pl. imperative)’ (Mardkowicz 1933: 6). The above distribution must therefore be treated merely as a strong tendency, and not one free from exceptions.

Ad 13–15: The three phonotactic differences presented in the table above refer to North-Western Karaim alternating forms, the innovative variants of which have never entirely replaced the original sound combinations. The dissimilation process of North-Western Karaim geminated laterals and jj seen in points 13–15 was, as far as I know, first described by Kowalski (1929: xxxii), but during the time Kowalski conducted his field work the non-dissimilated forms, i.e. those containing ĺľ, ĺł, and jj, co-existed with the innovative forms smtp, nł, and nj18 – even though Kowalski does not mention this fact. In the literature and journal articles contemporaneous with Kowalski we easily encounter forms such as ułłju ‘big, major’ , instead of the uŋłu recorded by Kowalski (1929: xxxii, 274), see e.g. Firkowicz Sz. (1930: 2), Firkowicz Z. (1932: 11), and Ćaprocki (1939: 3, 4). The latter source shows that ułłju was used not only in Trakai, where Kowalski collected his materials, but also in Panevėžys, which became part of Lithuania (not Poland) in the interwar period. Finally, it is also worth mentioning that the existence of an njl ~ ńł alternation in the late 19th century is confirmed by some hypercorrect forms in which the etymologically “correct” ńł was replaced by lł, see e.g. alla- ‘to understand’ ← anla- (Németh 2013a: 249).

The range of use of these innovative sound combinations, however, is limited to a certain group of words, only. Firstly, in the available North-Western Karaim dictionaries (Kowalski 1929: 149–280; KarRPS; Józefowicz 2008; Juchniewicz 2009) we find only one word that had the original jj in it, namely the Arabic loan kajjam, meaning ‘unshakeably’. I know of no other word in which the jj > nj dissimilation could have taken or took place. Secondly, the ĺľ > smtp > ńł and ĺł > njl > nl processes appear very rarely on morphological boundaries,19 which considerably reduces the number of potential examples.20

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18 Their actual present day phonetic values tend to be ńł, ńł, and nj, respectively.
19 With regard to morphological boundaries the process in question appears only in substantive forms with derivative suffixes; I have found the following examples: kuvulai- ‘to decide’ (Józefowicz 2008: 87, s.v. decydować się; Juchniewicz 2008: 38, s.v. decydować się); tugal ‘wholeness, entirety’ → tuganlik ‘perfection, piousness’ (Juchniewicz 2008: 42, s.v. doskonałość; Kowalski 1929: 268: tuganlik), tiuganla- ‘to perform, to accomplish’ (Józefowicz 2008: 589, s.v. wykonywać; Juchniewicz 2008: 238, s.v. wykonywać); tavul ‘storm’ → tavunlu ‘stormy’ (Józefowicz 2008: 54, s.v. burzliwy; Juchniewicz 2008: 16, s.v. burzliwy), tavunla- ‘to blow’ (Józefowicz 2008: 559–560, s.v. wieć; Juchniewicz 2008: 226, s.v. wieć, uderzać (o huraganie); Kowalski 1929: 261: tavunla-), uvul ‘son’ → uvunlu ‘having a son (adjective)’ (Józefowicz 2008: 485–486, s.v. syn; Juchniewicz 2008: 86, s.v. mający syna).
The fact that the alternation was still in progress in the 20th century suggests that the dissimilation process in question is a rather recent phenomenon. This seems to be supported by the philological data: even in the manuscript JSul.III.31 from the late 19th century we regularly find forms like: אַקִלְלִי akylly 'wise' (21 r), וּאוּלְלָה ullu 'big' (22 r), וּאַוּלְלוּ֘וֹגַה ulluluhuna 'to his greatness' (22 r). I have not encountered any innovative forms in this case.

Interestingly, this tendency to dissimilate geminated consonants has influenced also the way Karaims in Trakai pronounced Hebrew texts, see Hebr. צִוִּ֥֥יתָה śiwwītāh ‘you have ordained’ pronounced as čiṅūtā by Mykolas Firkovičius (recorded in 1988, see Harviainen 2013: 457).

4. The process of diversification into dialects

4.1. General remarks

The chronology and relative chronology of the dialectal differences between the two dialects of Western Karaim allows us to present a preliminary sketch of their diversification, see figure 1. Since some of the data we have at our disposal is approximate, the content of the figure must remain partially hypothetical, too.

Figure 1. The diversification of Western Karaim into dialects

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20 In the above dictionaries I have found four stems in which the dissimilation process occurred, namely: kanla ‘fiancée’ < Hebrew נַלְנִי id. (Józefowicz 2008: 249, s.v. narzeczona; Juchniewicz 2008: 101, s.v. narzeczona; KarRPS: 289; Kowalski 1929: 211: kanła), kultux ~ kunļux ‘slavery’ (Józefowicz 2008: 286, s.v. niewolnictwo; Juchniewicz 2008: 109, s.v. niewolnictwo; KarRPS: 346, 347; Kowalski 1929: 226: kunļux), tefinla ‘prayer’ (Józefowicz 2008: 222, s.v. modlitwa; Juchniewicz 2008: 93, s.v. modlitwa; KarRPS: 522; Kowalski 1929: 261: tefinļa), and ułlu ~ unlu ‘big, major’ (Józefowicz 2008: 109, s.v. duży; Juchniewicz 2008: 46, s.v. duży; KarRPS: 577, 579; Kowalski 1929: 274: užļu).

21 Shapira (2003: 682–683) claims, firstly, that (I retain the original spelling) “the majority of the Karaites of Wolhynia arrived there […] in a few waves of migration from Lithuania, and for this reason their sub-dialect derives ultimately from the ‘Northern’ […] dialect” and, secondly, that “the sub-dialect of Wolhynia, as mentioned above, derives from the Karaim
Some additional remarks are necessary:

It seems very probable that the first dialectal differences in the sound systems did not emerge until the second half of the 17th century, i.e. dialectal diversification most probably did not date back to the times of the Karaim unity. For the sake of transparency, I would suggest naming this period, i.e. the period prior to the first emigration wave that took place presumably in the late 14th century, Old Karaim. Some differences may have existed in Old Karaim, for instance in the lexicon as asserted by Dubiński (1968; for examples, see table 2), but defending such an assertion would be a very difficult task due to a lack of relevant written sources. Additionally, the lexical differences may equally have stemmed from the diverging paths of the dialects in the centuries after the split took place, for instance as a result of the dissimilar development of already existing Old Karaim alternations, irregular (assimilative, dissimilative etc.) sound changes or due to later contacts between Western Karaims and their Crimean brethren – i.e. as interdialectal loanwords.

From the point of view of the evolution of the sound system, the south-western dialect was a continuation of the early Middle Karaim system without considerable changes occurring for approximately one century longer than was the case in North-Western Karaim, which seems to accord with the above-mentioned supposition that the south-western branch of the Karaim emigration wave took place somewhat later.

dialect of Lithuania and is typified by its thorough palatalization, marked by an additional yod after the palatalized consonant”, but the only philological evidence he offers is the testimony of manuscripts from Kukizów, a community founded in 1688 by Trakai Karaims and later (first in 1692) inhabited by immigrants from Halych, where manuscripts were written predominantly in the north-western dialect. But even if we agree that Karaims of Kukizów migrated to other Karaim communities, among them also to Lutsk or Halych, we still do not have philological evidence for Shapira’s assertion. It is true that a number of consonants are palatalized in both North- and South-Western Karaim, but the systems of the palatal and palatalized consonantal phonemes and allophones are significantly different in these dialects and are end results of very much different processes that operated separately (see Németh 2011a and 2014c). I see no linguistic evidence that would support Shapira’s idea (which is used by him to underpin other far-fetching claims concerning the dialectal structure of Karaim).

22 For the time being, there is no historic evidence that would confirm incontrovertibly that Karaims had already settled in, generally speaking, the 14th century in Trakai, and Lutsk, and in the 13th century in Halych, see e.g. Abrahamowicz (2001: 5) or Gąsiorowski (2008: 146–152, 165–169). However, there are sources that make this fact likely. As far as the Karaims of Lithuania are concerned, historians regard the end of the 14th century as a plausible date for their settlement, see Gąsiorowski (2008: 169–173). Shapira (2003: 669) asserts that Karaims arrived to Lithuania and Galicia in the late 14th century, whereas in Shapira (2013: 148) he claims that the oldest Trakai Karaim document dates back to 1483. What can be said with certainty regarding South-Western Karaims is that their community in Lutsk already existed in the late 15th century since in a document issued in 1506 the Karaims were mentioned as members of their own community with their own temple (see Gąsiorowski 2008: 146–148). The first reliable document that reports the existence of the Halych community originates from 1578, see Gąsiorowski (2008: 188).

23 Dubiński (1968: 210–215) provides a number of lexical differences, a large number of which can be explained by the above factors, cf. table 2 (the abbreviation CC stands here for the language of the Codex Comanicus).
4.2. Time limits

Needless to say, establishing specific time periods in the evolution of a language is quite a demanding task; in fact, various solutions may be valid. The sketch presented above reflects my observations, according to which the period between the end of the 17th century and the end of the 18th seems to be the most eventful period in the history of Western Karaim. In these 100 years the main characteristic features of both dialects emerged, i.e. the *ŋ > j change (this change, however, could have occurred somewhat earlier) and the consonant harmony as well as the emergence of a large number palatalized consonants in North-Western Karaim, as well as the de-alveolarisation of the alveolar š (and presumably of č, ž and ǯ, too) and the elimination of the front labial ŏ and ū in the south-western dialect. These processes led to systemic changes that affected Western Karaim phonology, which increases their importance and justifies treating the end of the 18th century as the changeover point between Middle Karaim and Modern Karaim. We must also remember that in this period we can observe a decrease of the Karaim population (among others due to wars and the plague in 1710) which paved the way for a dominant Slavonic influx.

But let us step back to the chronologically older period and present in consecutive order all the relevant time limits.

As was mentioned above, it seems reasonable to mark the Middle Karaim period as beginning with the first wave of emigration to the Polish-Lithuanian territories, i.e. around the last decades of the 14th century. According to our reasoning, the first, early stage of Middle Karaim lasted until the first fundamental change in North-Western Karaim, i.e. until the *ŋ > j change, which could have taken place roughly
in the second half of the 17th century. A good ending date for the Middle Western Karaim period could be 1802, i.e. the year of the birth of Jeshua-Josef Mordko-wicz (1802–1884), a prominent, well-educated copyist and clergyman living in the Halych community who copied a great number of manuscripts, including those catalogued under number JSul.III.69 and JSul.III.79 in which there is no trace of the alveolar š and the front labials.

Another good reference date for the end of the Middle Western Karaim period might be 1795, i.e. the date of the Third Partition of Poland, because even though it was after the First Partition of Poland in 1772 that Halych became a part of the Habsburg Empire, the isolation of this community from the other Karaim settlements became even acute after 1795, when Lutsk and Trakai became part of the Russian Empire (obviously, the Crimean communities were already in the Russian Empire at that time) and crossing the Austro-Russian border started to pose considerable problems (cf. e.g. Radloff 1888: 180).

Somewhat less obvious is the dividing line between Early Modern Karaim and present-day Modern Karaim. Indeed, it is debatable whether such a distinction is needed at all. My aim was to distinguish the period when on the one hand, the 1st and 2nd person endings in North-Western Karaim underwent phonetic development and, on the other, new intradialectal differences appeared within South-Western Karaim. Since the latter phenomena are difficult to chronologize, for the time being I will use as a cut-off date the creation of manuscript III-68, in which the -men ~ -myn, -meń ~ -miń, and -sen ~ -syn, -šeń ~ -şiń alternations are attested.

References


Muchowski P. 2015. Personal communication: an e-mail sent to Michał Németh on October 4.


MICHAŁ NÉMETH


Shapira D. 2013. The Karaim translation of the Book of Nehemia copied in the 17th century’s Crimea and printed in 1840/1841 at Gözleve, on the copyist of the manuscript, and some related issues. – Karaite Archives 1: 133–198.


Handwritten sources


JSul.III.01 = A handwritten, vocalised translation of the Torah and selected passages from the books of the Prophets (haftarah) into South-Western Karaim from Halych from the 19th century. Stored in the private archive of Anna Sulimowicz.

JSul.III.03 = Handwritten, vocalised additions in Hebrew and South-Western Karaim from ca. 1778 added to a printed prayer book (in Hebrew) from 1736/1737. Kept in the private archive of Anna Sulimowicz.

JSul.III.05 = Handwritten, not-vocalised prayer book in Hebrew and North-Western Karaim from Kukizów from ca. 1782. Kept in the private archive of Anna Sulimowicz.

JSul.III.31 = Handwritten, vocalised additions in Hebrew and North-Western Karaim from the second half of the 19th century added to a printed prayer book (in Hebrew) consisting of two parts published in 1868 and 1872. Kept in the private archive of Anna Sulimowicz.

JSul.III.63 = Handwritten, vocalised additions in Hebrew and South-Western Karaim from the 19th c. added to a printed prayer book (in Hebrew) from 1804/1805. Kept in the private archive of Anna Sulimowicz.

24 I would like to express my thanks to Prof. Piotr Muchowski (Poznań), who provided access to monochrome copies (of low resolution) of folios 26 v° – 28 r°.
A historical phonology of Western Karaim. The process of its diversification into dialects

JSl.III.69 = Handwritten, vocalised prayer book in Hebrew and South-Western Karaim from Halych from the period between 1851–1866. Kept in the private archive of Anna Sulimowicz.

JSl.III.74 = Handwritten, vocalised additions in Hebrew and South-Western Karaim from ca. 1805 added to a printed prayer book (in Hebrew) from 1736/1737. Kept in the private archive of Anna Sulimowicz.

JSl.III.79 = Handwritten, vocalised prayer book in Hebrew and South-Western Karaim from Halych from the period between 1851–1866. Kept in the private archive of Anna Sulimowicz.

III-68 = Handwritten, vocalised translation of the Haggadah into North-Western Karaim copied in Trakai in 1881–1882. Kept in a private archive, whose owner wishes to remain, for the time being, anonymous.

III-73 = Handwritten, vocalised translation of the Torah, the Book of Ruth, the Book of Jeremiah, Ecclesiastes, and the Book of Esther into North-Western Karaim from Kukizów from 1720 (the Torah) and ca. the 1720s (the other books). Kept in a private archive whose owner wishes to remain, for the time being, anonymous.

III-78 = Handwritten, vocalised prayer book in Hebrew, South-Western Karaim and North-Western Karaim from ca. 1750. Kept in a private archive whose owner wishes to remain, for the time being, anonymous.

III-86 = Handwritten, partially vocalised prayer book copied by a number of copyists in Hebrew and North-Western Karaim in the second half of the 18th c. and the first half of the 19th c. Kept in a private archive whose owner wishes to remain, for the time being, anonymous.

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