DEBATED ISSUES IN KARAIM HEBREW ORTHOGRAPHY[*]

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The present study compares the Hebrew alphabet used in different Karaim manuscripts. Religious and secular texts in all Karaim varieties provide a basis for the comparison. Since a comprehensive description of the relevant orthographic features would exceed the limits of an article, only two of the most debated characteristics, namely the writing of the *e* and *k* sounds, will be discussed here. An analysis of numerous manuscripts makes it possible to provide a general description of certain tendencies and preferences in the use of certain letters or letter combinations in each Karaim variety.

Keywords: Halich Karaim manuscripts, Lutsk Karaim manuscripts, Crimean Karaim manuscripts, Trakai Karaim manuscripts, Hebrew script used by the Karaim, the writing of *e* the sounds, the writing of the *k* sounds

Introduction

The Turkic-speaking Karaim are followers of Karaitism, which is based on Karaite Judaism under the influence of Islam and lately of Christianity (Zajączkowski 1961: 28–29). The main tenet of Karaite Judaism is "Search you through the Torah and do not rely on my opinion",

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i.e. the Karaites accept only the Torah and reject the post-biblical literature, such as the Talmud (Nemoy 1978: 603–604).

Karaitism arose in the 9th century in the territories of present-day Iraq, but its centre shifted from time to time from the Middle East to the Byzantine Empire in the thirteenth century and then to Eastern Europe. With the shift of the centre, the language of Karaite scholarly literature changed as well from Arabic to Hebrew.[1]

The scholars and leaders of the Karaim communities were educated in Hebrew and used the Hebrew alphabet for writing both in Hebrew and in their Turkic vernacular. Not only were translations of biblical texts and religious poems written in the Hebrew script, but also private letters (see Németh 2011). Although the Hebrew script remained in use until the 1940s, Karaim started to use the Cyrillic- and Latin-based alphabets in the nineteenth century (Csató & Nathan 2007).

Sources used in the present study

Karaim materials written with the Hebrew alphabet were first published in the nineteenth century and up to the 1940s. After a 30- to 50-year break, new sources – mostly religious texts – have been brought out lately by Turcologists and Hebraists (e.g. Sulimowicz 1972; Jankowski 1997; Csató 2011; Németh 2011; Shapira 2013). These publications have included texts in all varieties and sub-varieties of Karaim, which makes it possible to examine the Hebrew orthography of Karaim to determine whether overall systems or tendencies relevant to certain varieties can be described.

The following Karaim sources were used for the present paper: poems and biblical texts in Halich Karaim (Grzegorzewski 1903, 1917; Jankowski 2011; Olach 2013; Olach 2014; Olach (forthcoming)), short fragments of Bible translations in Karaim varieties (Kowalski 1929;

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[1]See more about the history of Karaitism in Nemoy (1978).

Zajączkowski 1934), the Trakai Karaim translation of the *Book of Proverbs* (Firkovičius 2000), the Trakai Karaim translation of Psalm 91 (Csató 2011), Crimean Karaim translations of biblical texts (Sulimowicz 1972; Jankowski 1997), and private letters in Lutsk Karaim (Németh 2011).

In 1903, Jan Grzegorzewski published Halich Karaim religious poems written by Abraham Leonowicz, Josef Mordkowicz and Jakob Josef Leonowicz in the nineteenth century. Two further poems penned by Josef Ben Jeshua and Josef ben Shemuel in the seventeenth century were brought out in *Język łach-karaitów* (Grzegorzewski 1917).

Two prayers for the Day of Atonement written in Halich Karaim were made available by Jankowski (2011) with copies of the manuscripts attached.

Sixty pages of a Halich Karaim family Bible were published by Olach in 2013. The manuscript is in the possession of the Abrahamovich family, who originally lived in Halich.

An evening prayer (PR2) and a morning prayer (F103 14 − 15) written in Halich Karaim were put out by Olach (2014 and forthcoming).

Copies of some fragments of Karaim Bible translations written in the Hebrew script were brought out by Kowalski: the beginning of *Genesis* rendered in 1723 in Deraźnia; different fragments of the *Book of Job* in different Karaim varieties; and fragments of Halich Karaim and Crimean Karaim translations of the *Song of Songs* (1929: 282–289).

In his comparative study, Zajączkowski published short parts of four different Trakai Karaim translations of *Lamentations* (1932; 1934).

The *Book of Proverbs* in Trakai Karaim was compiled or copied in 1798 in Saločiai (Lithuania) by Shelumiel, the son of the aged priest Shemuel (Firkovičius 2000: 169–170).

In 2011, a Trakai Karaim translation of Psalm 91 was made available by Csató. The manuscript is kept at the Library of the Lithuanian Academy of Sciences.

Prayers in Crimean Karaim translation were edited and published together with a copy of the manuscripts by Sulimowicz (1972).

Jankowski brought out the Crimean Karaim translation of *Genesis* 1:1–18; 6:9–18; 17:8–19; *Deuteronomy* 32:1–51; and *Lamentations* 4:11–15, 21 (1997). The manuscript for these biblical texts is kept in the Rylands Library collection in Manchester. Although no copy of the manuscript is attached to the article, Jankowski used a transliteration system that makes it possible to reconstruct the Hebrew orthography.

Németh published 16 letters and circulars written in Lutsk Karaim (2011). Most of the texts were written in the nineteenth century, but three of them were penned in the early twentieth. Six of the letters are vocalised, whereas four of the texts are only partly vocalised.

It is transparent from the list of materials used in this study that the corpus contains texts reflecting a spoken variety (the Lutsk Karaim private letters) as well as religious texts written by Karaim authors and translations of biblical texts. It must be emphasised that spoken Karaim differs significantly from the written language. Since creating and/or copying Bible translations has enjoyed a long tradition among the Karaim, the orthography of the biblical texts is more consistent and systematic. The Lutsk Karaim private letters, however, due to the subjective use of the Hebrew alphabet for writing in Karaim, show a variety of orthographic features (Németh 2011: 100–101). Yet basic notions about the use of the Hebrew script seem common in Karaim communities, and the different varieties and genres demonstrate shared characteristics.

In the following, two debated characteristics of Karaim Hebrew orthography, namely the writing of the *e* and *k* sounds will be discussed in detail; further research is required to describe other characteristics.

Notation of the *e* sounds

The writing of the *e* sounds shows great diversity in Karaim. Furthermore, we must distinguish the notation in vocalised and non-vocalised texts. In what follows, I discuss the forms of writing of the vowel *e* according to its occurrence in vocalised and non-vocalised texts.

In the literature, two types of *e* sounds (an open *ä* and a closed *e*) are distinguished in the Lutsk-Halich Karaim varieties. According to earlier studies, the occurrence of the closed *e* − due to the process of $q\ddot{\imath} > k\acute{}e$ − results from the influence of the surrounding Ukrainian varieties (Grzegorzewski 1917: 7–8; Pritsak 1959: 327; Dubiński 1978: 36).[2] On the other hand, Dubiński describes another process in Lutsk-Halich Karaim: *ä > e* before a syllable with the vowel *i* (1978: 36). Németh suggests Western Ukrainian influence in this latter process as well (2011: 73).

The open *ä* and the closed *e* are also distinguished in Crimean Karaim (Sulimowicz 1972: 42; Jankowski 1997: 4–5). The closed *e*, however, occurs only in the first syllable (Jankowski 1997: 8).

Descriptions of the *e* sounds occurring in Trakai Karaim − sometimes introducing the idea of consonant harmony (see Kowalski 1929: XXX–XXXI; Pritsak 1959: 328) − are often rather obscure (Kowalski 1929: XXVIII–XXIX; Musaev 1964: 46–47). Different qualities of *e* sounds which are distinguished even in the present Lithuanian-based orthography (see Firkovičius 1996), however, can be described: [e], [ɛ] and [æ] (Csató 2012: 36).

Now let's turn to the use of the different letters and letter combinations for writing the *e* sounds.

In non-vocalised texts:

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[2] It seems that the $q\ddot{\imath} > k\acute{}e$ process is less productive in Lutsk Karaim, which is understandable since it is not recorded in the Ukrainian varieties in the region of Lutsk (Németh 2011: 74).

The notation of the vowel *e/ä* often overlaps with the writing of the vowel *i/ï* in Karaim non-vocalised texts:[3] both are written with the letter *ắlep̄* + *yōḏ* in initial position, e.g. 11: 20 *ezi* 'himself' (איזי) and 54[11]: 26 *engi* 'now' (אינגי) vs. 11: 15 *isteme* 'to ask, want' (אישטימי) and 54[11]: 38 *icin* 'for' (איצין) (Németh 2011: 385, 398).[4] The initial *e* sounds, however, can only be signified with an *ắlep̄*, i.e. without *yōḏ* as well, e.g. 8: 7 *ekinci* 'secondly' (אכינצי),[5] 46[11]: 15 *elimi* 'his death' (אלימי) (Németh 2011: 382, 387).[6]

Medial *e* is mostly rendered by *yōḏ*; in numerous cases, however, it may not be indicated at all, e.g. 8: 7 *bitiklerine* 'to your letters' (ביטיקלירִינִי) and 10: 5 *kelme* 'to come' (כילמי) vs. 10: 16 *izlewci* 'the one who seeks' (איזלווצי) and 46[11]: 1 *men* 'I' (מן) (Németh 2011: 382, 384, 387). Yet this is not the case in suffixes, e.g. 54[11]: 21 *klemedler* 'they did not want' (כלימידליר) (Németh 2011: 398). For final *e*, we find *yōḏ* or, slightly less frequently, *yōḏ* and *ắlep̄*, e.g. 11: 12 *haliginede* 'in these times' (הליגינידי), 54[11]: 18 *ne* 'which' (ני), and 10: 5 *biyencine* 'to her wedding' (ביינצינִיא) (Németh 2011: 384, 385, 397).

According to Jankowski, like the vowel *a*, the vowel *e/ä* is usually not marked in medial position in the Crimean Karaim Bible translations (1997: 5).

In vocalised texts:

The notation of the vowel *ä* is only indicated in the Trakai Karaim and Crimean Karaim sources. In Trakai Karaim, the combination *pátaḥ* + *yōḏ* is used to signify the vowel *ä*, e.g. *kečänin* 'of the night' (כֵּיצִיאנִין) from Psalm 91 (Csató 2011: 15), *telilär* 'fools' (טֵילִילִיר) from

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[3] In another consonantal alphabet of Semitic origin used for writing Turkic, that is, in Arabic script the same letter (*yā*) is used both for the notation of /e/ and /i/ (Róna-Tas 1998: 131).

[4] In the quoted examples, my own transcription system is employed. I use the following vowel sings in my transcription: a, e, ä, i, ï, o and u. The following consonants occur: b, c, č, d, f, g, ġ, h, χ, y, k, q, l, m, n, p, r, s, ś, t, w, z and '. The letter *ś* represents the Hebrew letter *śîn/šîn*. In my transcription, I do not mark palatalisation. The original transcription of an example is given in square brackets only when it is relevant for the discussion.

[5] The word *ekinci* is written with *ắlep̄* + *yōḏ* in initial position a few lines later in the same text: 8: 14 *ekinci* 'secondly' (איכינצי) (Németh 2011: 382).

[6] Németh writes the word as אילימי, that is, *ắlep̄* + *yōḏ* is given in initial position; see footnote 305 in Németh 2011 (185). In the facsimile, however, I do not see a *yōḏ* written between the *ắlep̄* and the *lắmeḏ* (Németh 2011: 387).

Proverbs 1 (Firkovičius 2000: 97), and *keräkli* 'necessary' (כֵּירִיכְלִי) (Kowalski 1929: 285).

Sometimes, however, the vowel *ä* is only written with the letter *páṭaḥ*, e.g. in final position in

the word *haleginä* 'now' (הַלֵֶגִינַא) and in the third syllable in *kičiräklär* 'smaller ones'

(כִיצִירַכְלָיר) (Kowalski 1929: 285).

The letter *páṭaḥ* indicating open *ä* is general in Crimean Karaim, e.g. *kečä* 'night' (כֶּצַא),

mendän 'from me' (מֶנְדַן) in the *Book of Job* (Kowalski 1929: 287), 1 (13r°): 11 *bizgä* 'to us'

(בִיזְגַה), and 2 (13v°): 15 *eǧär* 'if' (אֶגַּר) (Sulimowicz 1972: 65-66).

Further Hebrew letters and letter combinations are used to write the vowel *e*: *ṣērê*, *səḡōl*,

ṣērê + yōḏ and *səḡōl + yōḏ*. A general overview of how the vowel *e* is written in Karaim

manuscripts can be seen in the following table; that is, all the letters and letter combinations

which have occurred in the manuscripts published so far are provided.

1. Hebrew letters and letter combinations for writing *e* sounds

Hebrew orthography	Value of the vowel in Hebrew[7]	Crimean Karaim	Trakai Karaim	Halich Karaim	Lutsk Karaim
páṭaḥ ◌ֽ	short a	a, ä	a, ä	a	a
səḡōl ◌	short e (open)	-	e	e	e
ṣērê ◌	changeable long e (closed)	e	e	e	e
Combinations with *yōḏ* י					
páṭaḥ + yōḏ יֽ◌	---	-	ä	-	-
səḡōl + yōḏ יְ◌	unchangeable long e (open)	-	e	e	e
ṣērê + yōḏ יֽ◌	unchangeable long e (closed)	-	e	e	e

Now let's see whether all these forms of writing indicate any phonetic differences or not and

if there is any tendency within a certain Karaim variety?

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[7] The value of Hebrew vowels can change according to stress patterns; see, for instance, the rules of vowel reduction (Lambdin 1971: XIX–XX). For more, see the chapter on *Sound and spelling* in Lambdin 1971 (XV–XXVIII).

Most of the forms mentioned above (*ṣērê*, *səḡōl*, *ṣērê* + *yōḏ* and *səḡōl* + *yōḏ*) can be attested in the Halich Karaim sources. Variants with the letter *yōḏ* are used in initial position, e.g. Nr. II: 8 *erkim* 'my strength' (אֵירְכִים) (Grzegorzewski 1903: 64), HKB 3: 13 *erkek* 'male' (אֵירְכֵיק), Nr. IV: 28 *elge* 'to people' (אֵילְגֵי) (Grzegorzewski 1903: 66), F103 14 – 15: 14 *elni* 'people (ACC)' (אֵילְנִי), HKB 332: 6 *erenler* 'men' (אֵירֵינְלֵיר), and F103 14 – 15: 16 *ez* 'self' (אֵיז), while *ṣērê* and *səḡōl* only occur sporadically, e.g. HKB 489: 10 *epkeyler* 'they shall kiss' (אֶפְכֵיְילֵיר).

In final position, only variants with *yōḏ* are used, usually followed by the letter *'ālep̄*, signifying a final vowel, e.g. Nr. II: 1 *izleme* 'to search' (אִיזְלֵיְמֵיא), Nr. IV: 31 *tirligine* 'to his life' (טִירְלִיגִינֵיא) (Grzegorzewski 1903: 64, 66), HKB 332: 12 *śebetine* 'to the tribe of' (שֶׁבֶּטִינֵיא), and HKB 1: 8 *kece* 'night' (כֵיצֵיא) and F103 14 – 15: 17 *klegice* 'according to his will' (כְלֵיגִיצֵיא). The *'ālep̄*, however, is rather often omitted in this position, e.g. Nr. II: 1 *yerde* 'on earth' (יֵירְדֵי), Nr. III: 22 *kelege* 'shadow' (כֵילֵיגֵי) (Grzegorzewski 1903: 64, 65), KUK: 1 *kinde* 'on the day' (כִינְדֵי), KUK: 8 *bizge* 'to us' (בִּיזְגֵי) (Jankowski 2011: 166), and F103 14 – 15: 2 *tenrige* 'to God' (טֶנְרִיגֵי). In rare cases, the final *e* is written without *yōḏ* (and followed by *'ālep̄*): PR2: 8 *tirlikke* 'to life' (טִירְלִיקְקֶא) (Olach 2014: 323), KUK: 8 *hammese* 'continually' (הַמְמֶסֶא) (Jankowski 2011: 166), and S: 14 *yireklerinde* 'in the hearts of' (יִירֵקְלֶרִינְדֶא) (Jankowski 2011: 167).

In medial position, all graphic variants occur in the Halich Karaim sources, but the proportion of variants with *yōḏ* is significantly higher than that of variants without it, e.g. Nr. III: 21 *raχmetlerden* 'from mercy' (רַחְמֶיטְלֶירְדֵין), Nr. IV: 33 *dert* 'four' (דֵירְט) (Grzegorzewski 1903: 65, 66), HKB 1:1 *keklerni* 'skies (ACC)' (כֵיקְלֵירְנִי), PR2: 10 *kerti* 'true' (כֵירְטִי) (Olach 2014: 323), F103 14 – 15: 5 *berdi* 'he gave' (בֵירְדִי), Nr. III: 26 *iwretiwci* 'teacher' (אִיוְרֵיטִיוְצִי), Nr. IV: 9 *tengiz* 'sea' (טֵינְגִיז) (Grzegorzewski 1903: 65, 66), HKB 7: 27 *nege* 'why?' (נֵיגֵיא), and F103 14 – 15: 23 *hec* 'empty' (הֵיץ).

The use of allographs without *yōḏ* shows certain regularities: they are preferred in certain lexical items, e.g. *tenri* 'God' (טֶנְרִי), and in the personal pronouns 'I' and 'you' as well as in the personal suffixes for the first and second person singular, i.e. *men* and *sen*. In general, the letter *səḡōl* is used in these cases, e.g. Nr. II: 15 *sen* 'you' (סֶן), Nr. III: 21 *tolusen* 'you are full' (טוֹלוּסֶן) (Grzegorzewski 1903: 64, 65), HKB 8: 10 *men* 'I' (מֶן), and F103 14 – 15: 4 *kelgensen* 'you came' (כֶּילְגֶּינְסֶן).

Sporadically, the usual form of writing with *yōḏ* is replaced by allographs without *yōḏ*. For instance, the regular way of writing the palatal form of the locative and the ablative suffix (i.e. *-de* and *-den*) is with *yōḏ*, e.g. Nr. II: *yerde* 'on the earth' (יֶירְדֶי) (Grzegorzewski 1903: 64), HKB 328: 16 *kezlerinde* 'in the eyes of' (כֶּיזְלֶירִינְדֶי), Nr. III: 21 *raχmetlerden* 'from mercy' (רַחְמֶיטְלֶירְדֶין) (Grzegorzewski 1903: 65), and HKB 101: 17 *erkinden* 'from your power' (אֶירְכִינְדֶין); however, in the same text it is sometimes written with the letter *səḡōl*: HKB 487: 18 *iwlerinde* 'in their houses' (אִיוְולֶירִינְדֶא), HKB 160: 25 *elimden* 'from Elim' (אֶילִימְדֶן), and HKB 487: 17 *yerinden* 'from the land of' (יֶירִינְדֶן).

Examples with more than one form of writing can also be attested: Nr. II: 16 *kerers* 'you will see' (כֶּירֶירְס) vs. Nr. II: 17 *ker!* 'see (IMP)' (כֶּיר) (Grzegorzewski 1903: 64), HKB 7: 11 *haligine* 'now' (הָלִיגִינֶיא) vs. HKB 8: 12 *haligine* 'now' (הָלִיגִינֶיא), and HKB 161: 12 *ne* 'what?' (נֶיא) vs. HKB 5: 8 *ne* 'what?' (נֶיא). Thus, the distinction between *səḡōl* and *ṣērê* seems to be a free graphic variation in Halich Karaim.

The use of the letter *ṣērê* is rather limited in the Halich Karaim sources, e.g. Nr. II: 21 *ye'udlarnï* 'Jews (ACC)' (יֵיעוּדְלַרְנִי) (Grzegorzewski 1903: 64), T2: 71 *keśkin!* 'cut off (IMP)' (כֵשְׁכִּין) (Grzegorzewski 1917: 23), and HKB 489: 9 *ceyaliği* 'pretension of' (צֵייָאלִיגִיא).

In the Lutsk Karaim sources, in contrast with the Halich Karaim materials, the letter *ṣērê* and its combination with *yōḏ* are widely used and the letter *səḡōl* and its combination with *yōḏ* rarely occur (Németh 2011: 108).

Initial *e* is usually represented as *ṣērê* + *yōḏ*, preceded by an *'ǎlep̄* to indicate the initial vowel, e.g. 6 (81): 6 *ekinci* 'second' (אֵיכִינְצִי) and 41: 7 *ezi* 'itself' (אֵיזִי) (Németh 2011: 378, 386). In rare cases, the Hebrew letter is used without *yōḏ*; that is, only the letter *ṣērê* occurs, e.g. 9/2: 8 *ezimiz* 'ourselves' (אֵזִימֵז) (Németh 2011: 383).

In medial position, the vowel *e* is usually signified by *ṣērê* + *yōḏ*, e.g. 3 (78): 18 *bes* 'five' (בֵּיס) and 52[11]: 12 *widdïχatetmedim* 'I did not take rest' (וִוִידִיחַטֵיטְמֵידִים) (Németh 2011: 375, 394), or, a little less frequently, only with *ṣērê*, specially in the environment of the consonant *y*, e.g. 7 (82): 30 *iyer* 'he will send' (אִייֵר) and 52[11]: 17 *meni* 'me (ACC)' (מֵנִי) (Németh 2011: 380, 394). Final *e* is generally written with *ṣērê* + *yōḏ*, e.g. 5 (80): 7 *bitiklerde* 'in letters' (בִּיטְקְלֵרְדֵי) (Németh 2011: 101–102, 377). The letter *'ǎlep̄* representing the final vowel can also occur after the letter combination *ṣērê* + *yōḏ*, e.g. 3 (78): 21 *neksigede* 'to no one' (נֵיקְסִיגֵידֵיא) and 51[11] (2): 31 *kere* 'according to' (כֵּירֵיא) (Németh 2011: 375, 392).

The letter *səḡōl* rarely occurs in the Lutsk Karaim manuscripts. In initial position, it is used with *'áyin* in the word 10: 8 *Ešwowičke* 'to Ešwowicz' (עֶשְׁווֹיצְכֵי) (Németh 2011: 384). Sometimes *səḡōl* can be attested in medial position, e.g. 7 (82): 25 *gezeradan* 'from the misfortune' (גֶזֶרָדָן) (Németh 2011: 380). The letter *səḡōl* does not occur in final position. As for the letter combination *səḡōl* + *yōḏ*, it can only be found in a few words, e.g. 54[11]: 16 *kelmeydi* 'it does not come' (כֶּילְמֶיְיְדִי) (Németh 2011: 108).

As for the question of difference in quality indicated by the use of different letters, numerous examples seem to disprove such a hypothesis. In the Halich and Lutsk Karaim varieties, we would expect closed *e* in the first syllable and open *ä* in subsequent syllables. Although there are certain preferences in each variety, as the examples show, both *ṣērê* and *səḡōl* as well as their combinations with *yōḏ* are used in the first syllable in the Halich Karaim and Lutsk Karaim sources. Similarly, all the Hebrew letters and letter combinations for writing the *e* sounds occur in the second syllable or any syllable thereafter; however, the use

of *sə̄ḡōl* and *sə̄ḡōl* + *yōḏ* is rather restricted in Lutsk Karaim, and no letters without *yōḏ* can be found in final position in the Halich Karaim texts. Thus, we cannot classify the Hebrew letters and letter combinations as being representative of certain vowel qualities. Words in several forms of writing might confirm this assertion as well.

The Crimean Karaim authors only use the letters *ṣērê* and *sə̄ḡōl*; letters combined with *yōḏ* do not occur. Both *ṣērê* and *sə̄ḡōl* are employed in initial and medial positions, e.g. 1 (13 r°): 5 *ešitmedik* 'we did not hear' (אֶשְׁטְמֶדְכּ), 4 (14 v°): 3 *keldim* 'I came' (כֶּלְדִם), 4 (14 v°): 12 *endi* 'now' (אֶנְדִי), and 2 (13 v°): 4 *nečik* 'as' (נֶצִיכּ) (Sulimowicz 1972: 65, 66, 68). There are words in which the two letters seem to be interchangeable, e.g. 3 (14 r°): 5 *eḡär* 'if' (אֶגָּר) vs. 2 (13 v°): 15 *eḡär* 'if' (אֵגָּר) and 2 (13 v°): 26 *ettik* 'we did' (אֶטְטְכּ) vs. 2 (13 v°): 14 *ettik* 'we did' (אֵטְטְכּ) (Sulimowicz 1972: 66). In final position, only the open *ä* is used (see above). Since a clear distinction exists between the writing of open *ä* and closed *e* in the Crimean Karaim orthography, the use of the letter *ṣērê* or *sə̄ḡōl* in different positions seems to be equivalent.

In Trakai Karaim, we mostly see the use of the letter combination *ṣērê* + *yōḏ* or the letter *ṣērê* (often in the environment of the consonant *y*), e.g. *seni* 'you (ACC)' (סֵינִי), *keräkli* 'necessary' (כֵּירֵיכְּלִי), *tenridän* 'from God' (טֵנְרִידִן), and *aley* 'so' (אֵלֵיי) (Kowalski 1929: 285, 288; Firkovičius 2000: 107, 110). The letter combination *ṣērê* + *yōḏ* usually occurs in initial position, e.g. *edi* 'was' (אֵידִי) and *eger* 'if' (אֵיגֵיר) (Zajączkowski 1932: 184; Firkovičius 2000: 98). In rare cases, however, the letter *ṣērê* is used in initial position, e.g. (χor) *etkäydim* 'I would have disdained' (אֵטְכַיְדִים) (Kowalski 1929: 285). The letter *sə̄ḡōl* rarely occurs, whereas the letter combination *sə̄ḡōl* + *yōḏ* is the least used form for writing the vowel *e*, e.g. *yergä* 'to earth' (יֶירְגֶיא) and *nečik* 'as' (נֶיצִיכּ) (Kowalski 1929: 285; Zajączkowski 1932: 184). The latter two occur only in medial position. It is mostly open *ä* written with *páṭaḥ* + *yōḏ* or *páṭaḥ* that can be found in final position (see above), but, in some exceptions, the letter combination *ṣērê* + *yōḏ* (sometimes followed by *'ā́lep̄*) is used, e.g. *vale* 'but' (ווַלֵיי) and *kelse* 'if he comes'

(כִּלְסֵיא) (Firkovičius 2000: 103, 116).[8] As the examples demonstrate, the distinction indicated in the present Trakai Karaim orthography does not correspond to the distribution of the Hebrew letters and letter combinations used in the manuscripts.

To sum up, the following tendencies can be observed in the Karaim sources for writing the *e* sounds. Halich Karaim writers prefer to use letter combinations with *yōḏ*. In Lutsk Karaim and Trakai Karaim, it is mostly the letter combination *ṣērê* + *yōḏ* or the letter *ṣērê* that is used, whereas no letter combinations with *yōḏ* can be attested in the Crimean Karaim texts. See the details in the following table, where the sign +++ denotes the most often used form, ++ marks the rather usual form and the least used sporadically occurring letters and letter combinations are indicated with +.

2. Tendencies for writing the *e* sounds

Preferences		Crimean Karaim	Trakai Karaim	Halich Karaim	Lutsk Karaim
	pátaḥ	+++	+	-	-
	pátaḥ + *yōḏ*	-	+++	-	-
letters without *yōḏ*	*ṣērê*	+++	+++	++	++
	səḡōl	+++	+	++	+
letters with *yōḏ*	*ṣērê* + *yōḏ*	-	+++	+++	+++
	səḡōl + *yōḏ*	-	+	+++	+

Although the way in which the Hebrew letters and letter combinations are used does not always reflect the linguistic descriptions of Karaim varieties, certain tendencies can be observed. With regard to the writing of the vowel *e* in the Karaim manuscripts that use the Hebrew alphabet, the Crimean Karaim (i.e. the Eastern Karaim) orthography preferring letters without *yōḏ* is distinct from the orthographic features of the other Karaim varieties (i.e. of the

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[8] Note that Firkovičius transcribes the word *kelse* 'if he comes' as [*kielʹsia*], that is *ṣērê* + *yōḏ* followed by *ʾálep̄* denotes *ä* in this case, whereas the same letter combination is used for writing *e* in the word *vale* [*valie*] 'but' (2000: 5, 14).

Western Karaim). Meanwhile, a tendency can be observed among the Western Karaim varieties in the use of either *ṣērê + yōḏ* or simply *ṣērê*.

The use of the letters *kap̄* and *qōp*

Two letters are used to write the consonant *k* in Hebrew: *kap̄* כ and *qōp* ק. In Biblical Hebrew, the phonetic value of *kap̄* is front *k*, while that of *qōp* is back *q* (Lambdin 1971: XXIII). In the Karaim sources, both letters are used to indicate the *k* sounds. Is it the case that the phonetic values represented by *kap̄* and *qōp* in Hebrew are also represented as such in the Karaim manuscripts? Or are they used for signifying some other phonetic differences?

The question of the *k* sounds is not well described in the early literature on the Karaim varieties. It is usually the palatalising effect of *ki* and *k′e* on the preceding consonant which is noted (Grzegorzewski 1917: 6; Kowalski 1929: XLI; Zajączkowski 1931: 8). In the table of Karaim consonants, Pritsak only lists *q*, *k′* and *ɣ* as elements of the Halich Karaim consonant inventory. However, according to him, the following *k* sounds can be found in initial position: *q-* and *k-*.[9] Pritsak observes that consonants become palatalised before the vowel *i* and that the palatalised consonants *ć*, *ś*, *ź* and *ń* occur before certain syllables, among them *k′i* and *k′ä* (1959: 328). The vowel *ä* has basically no palatalising influence on surrounding consonants, except on the preceding *k* (Pritsak 1959: 327). According to Dubiński, consonants in Halich Karaim undergo palatalisation in the environment of palatal vowels but the consonant *k* becomes palatalised only before the vowel *e*, e.g. *k′erme* 'to see' and *iśk′e* 'to work' (1978: 38–39).[10]

As for a description of the notation of the *k* sounds in the Karaim manuscripts written with the Hebrew alphabet, there is a common point in the literature: *kap̄* is basically used to write

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[9] In the list of Halich Karaim consonants, there is no consonant *k*, and *k′* is not mentioned in initial position; however, the examples provided by Pritsak include *k′älǵänlär* 'those who came' (1959: 327–329).
[10] Consider Dubiński's examples with the consonant *k* before the vowel *i*: *ićki* 'drink', *kicli* 'strong' and *miśkin* 'poor' (1978: 38–39).

the *k* sounds in front words and *qōp* to represent *k* in back words (Munkácsi 1909: 192; Pritsak 1959: 327; Németh 2011: 103–104). The occurrence of *qōp* in front words, however, is described and explained in different ways. Munkácsi states that the letter *qōp* can occur between a palatal vowel and a consonant, i.e. in word-internal position (1909: 192). Pritsak observes that *k* can be written with *qōp* in the syllable-final position (Pritsak 1959: 327). According to Sulimowicz, in Halich Karaim, *kap̄* and *qōp* were used interchangeably and no rules defined their usage (1972: 45). Németh has proposed that the two letters in Lutsk Karaim tend to render the palatalised and the non-palatalised *k* sounds; that is, *kap̄* is used for palatalised *k* and *qōp* represents non-palatalised *k* (2011: 103–104).

In the Halich Karaim manuscripts, the letter *kap̄* is generally used – mostly in initial and medial positions – to signify the consonant *k* in front words, e.g. in Nr. II: 19 *kle*! 'want (IMP)' (כְּלְיָא) (Grzegorzewski 1903: 64), T1: 13 *keldim* 'I came' (כֶּלְדִים) (Grzegorzewski 1917: 19), HKB 393: 7 *kelme* 'to come' (כֵּילְמֶיא), F103 14–15: 28 *kleginbe* 'with your will' (כְּלְיָגִינְבֵי), Nr. IV: 15 *miśkin* 'poor' (מִישְׁכִּין) (Grzegorzewski 1903: 66), and HKB 1: 16 *ekinci kin* 'the second day' (אֵיכִינְצִי כִּין). It can also occur in back environments in loanwords, such as KUK: 1 *kohen* 'priest' (כֹּהֵן) (Jankowski 2011: 166).

The letter *qōp* is used in back words in all positions, e.g. Nr. III: 8 *qoyun* 'lamb' (קוֹיוּן) (Grzegorzewski 1903: 65), T1: 12 *qorqtum* 'I feared' (קוֹרְקְטוּם) (Grzegorzewski 1917: 19), HKB 1: 3 *qaranġīlïq* 'darkness' (קַרַנְגִּילִיק), HKB 397: 14 *cuqcumaġïn* 'your fomentation' (צוּקְצוּמַגִּין), PR2: 5 *saqlaġay*! 'may he protect (me)' (סָקְלַגַּי) (Olach 2014: 323), and F103 14–15: 21 *qabulluq* 'acceptance' (קַבּוּלְלוּק). It appears, however, even in palatal words, mostly in syllable- or word-final positions, e.g. T1: 52 *kekten* 'from the sky' (כֵּיקְטֵין) (Grzegorzewski 1917: 20), S: 20 *eśiklerimni* 'my gates (ACC)' (אֵישִׁיקְלֵרִימְנִי) (Jankowski 2011: 167), HKB 239: 16 *ekśilśin* 'shall be cut off' (אֵיקְשִׁילְשִׁין), Nr. III: 22 *kibik* 'like' (כִּיבִיק) (Grzegorzewski 1903: 65), HKB 3: 13 *erkek* 'male' (אֵירְכֵּיק), and F103 14–15: 26 *śirinlik* 'forgiveness' (שִׁירִינְלִיק). In

rare cases, the letter *qōp* occurs in initial position in front words, e.g. HKB 155: 3 *kezlerin* 'your eyes' (קֶיזְלֵירִין) and PR2: 6 *kiri* (*tutqay!*) 'may he keep (me) alive' (קִירִי) (Olach 2014: 323).

In the Lutsk Karaim sources, there is also a tendency attested in the use of *kap̄* and *qōp*. Similarly to the Halich Karaim materials, the letter *kap̄* is used in front words and the letter *qōp* in back words, e.g. 41: 5 *keldi* 'it came' (כֵּילְדִי), 47[11]: 14 *ekinci* 'second' (איכינצ), and 46[11]: 13 *terk* 'quick, quickly' (טירכ), on the one hand, and 10: 4 *qolamen* 'I ask' (קולא מן), 6 (81): 12 *basqa* 'other' (בַשְׁקָא), and 9: 13 *bas yapmaq* 'to cover (the bride's) head' (בס ייפמק), on the other (Németh 2011: 378, 383–384, 386–388).

The letter *kap̄*, however, is also used in a few back words of foreign origin, e.g. 5 (80): 6 *kabul* 'acceptance' (כַּבּוּל), 10: 16 *kanuzġa* 'to sire' (כנוזגא), and 51[11]: 5 *kawodlarïnïzġa* 'to sire (PL)' (כַּבּוֹדְלָרִינִזְגָּא) (Németh 2011: 377, 384, 391).

Nevertheless, the letter *qōp* often occurs in medial and final positions in front words, e.g. 3 (78): 28 *ezinkileri* 'his (relatives)' (אֵיזִינְקִילֵירִי), 54[11]: 31 *kerkli* 'beautiful' (כירקלי), 2 (77): 25 *terk* 'quick' (טֵירְק), 2 (77): 25 *kerek* 'necessary' (כֵּירֵיק), 5 (80): 8 *bitik* 'letter' (בִּיטִיק), 7 (82): 16 *necik* 'as' (נֵיצִיק), and 7 (82): 22 *yiśraellik* 'Karaims' (ישראללּיק) (Németh 2011: 372, 376–377, 380, 398). Furthermore, the letter *qōp* is used rather often in initial position in front words, e.g. 3 (78): 11 *kezlerinizde* 'in your eyes' (קֵזְלֵירִינִיזְדֵיא) and 52[11]: 9 *kirgeysiz* 'you shall go in (PL)' (קִירְגֵייְסִיז), and in derivatives of the verbal stem *kle-* 'to want, wish', e.g. 47[11]: 32 *klep* 'wishing' (קליף) (Németh 2011: 375, 389, 394).

There are items which are sometimes written with the letter *kap̄* and other times with the letter *qōp*. The word *kerkli* 'beautiful', for instance, occurs five times in the Lutsk Karaim texts: four times with *kap̄* in medial position and once with *qōp*. Derivatives of *kle-* 'to want, wish' appear seventeen times: twelve times written with *kap̄* and five times with *qōp*. Further examples are 10:7 *laskawïy* 'generous' (לאסקאווייי) vs. 8: 9 *laskawïy* 'generous' (לסכאבּיי), 2

(77): 3 *necik* 'as' (נֵיצִיק) vs. 46: 13 *necik* 'as' (ניציכ), and 54[11]: 38 *kin* 'day' (קין) vs. 6 (81): 6 *kin* 'day' (כִין) (Németh 2011: 372, 382, 384, 387).

Németh suggests that the reason behind the use of *qōp* in front words is the phonetic rule that it is always *k* that is signified by *qōp* in word-final position, not palatalised *k'* (2011: 103-104). Exceptions, on the other hand, can also be attested, e.g. 3 (78): 28 *ezinkileri* [eźińkiłeri] 'the relatives of' (אֵיזִנְקִילֵירִי).

The consonant *k* is always written with the letter *kap̄* in front words in Trakai Karaim, e.g. *kičiräklär* 'smaller ones' (כִּיצִירֵיכְלֵיר), *kibik* 'like' (כִּיבִיכ), and *eminlik* 'certainty' (אֵימִינְלִיכ) (Kowalski 1929: 285; Firkovičius 2000: 100). In initial position in back words, back *q* is preserved in Trakai Karaim, while it changes to *χ* in syllable- and stem-final positions (Pritsak 1959: 329). The phonetic difference, however, is not indicated in any position; the letter *qōp* represents both back *q* and *χ*, e.g. *yaχšïraχ* 'better' (ייחשִׁירֵק) and *qorχmaχ* 'fear' (קוֹרְקמַק) (Kowalski 1929: 288; Firkovičius 2000: 97). Thus, this characteristic in Halich and Lutsk Karaim orthography cannot be observed in Trakai Karaim. The only exception occurs in a translation which was in the possession of Zacharja Mickiewicz in 1929: *ešeklär* 'donkeys' (אֵשֵׁקלֵיר) (Kowalski 1929: 282).

In general, front *k* is written with the letter *kap̄* in Crimean Karaim, and back *q* is represented by the letter *qōp*, e.g. 2 (13 v°): 2 *köp* 'many' (כוֹפ), 5 (15 r°): 22 *fikirimdän* 'from my thought' (פִּיכְרִמְדֵן), 1 (13 r°): 6 *qullarï* 'the slaves of' (קוּלְלַרִיא), and 1 (13 r°): 19 *saqlamamaqqa* 'to not preserving' (סַקְלַמַמַקְקָא) (Sulimowicz 1972: 65, 66, 69). The distinction is also made in syllable- and stem-final positions; that is, front *k* is written with *kap̄* and back *q* with *qōp*, e.g. 2 (13 v°): 12 *kökgä* 'to the sky' (כוֹכְגָּא), 3 (14 r°): 6 *kibik* 'like' (כִּיבִכ), 1 (13 r°): 10 *yazïqlï* 'sin' (יַזִיקְלִי), and 7 (16 r°): 4 *bošatlïq* 'forgiveness' (בּוֹשַׁטְלִק) (Sulimowicz 1972: 65, 66, 67, 71). Thus, syllable- or stem-final front *k* is never written with the letter *qōp* in

Crimean Karaim. In loanwords, however, the letter *kap̄* may occur in back words as well, e.g. 4 (14 v°): 21 *aškaradïrlar* 'they are clean' (אָשְׁכַרָהדִרְלֹר) (Sulimowicz 1972: 68).

Although the usual way of writing spirant *χ* in Crimean Karaim is with the letter *ḥēt̲*, e.g. 2 (13 v°): 18 *günaχnï* 'sin (ACC)' (גוּנָחנִי), sometimes the letter *kap̄* is used in conjunction with the diacritical mark *rāp̄eh*, e.g. 3 (14 r°): 8 *yaχšïlïq* 'goodness' (יַכְֿשִׁילִק) (Sulimowicz 1972: 67).

In summary, the Hebrew letters *kap̄* and *qōp*, based on the frontness and backness of a particular word, are used rather consistently in Trakai Karaim and Crimean Karaim. In Halich Karaim and Lutsk Karaim, on the other hand, besides the typical distribution of the Hebrew letters, *qōp* also occurs in front words and *kap̄* in back words. The following table illustrates the occurrences in the Halich Karaim and Lutsk Karaim manuscripts.

3. The use of the letters *kap̄* and *qōp* in the Halich Karaim and Lutsk Karaim sources

	In front words				In back words			
	The letter *kap̄*		The letter *qōp*		The letter *kap̄*		The letter *qōp*	
	Halich Karaim	Lutsk Karaim	Halich Karaim	Lutsk Karaim	Halich Karaim	Lutsk Karaim	Halich Karaim	Lutsk Karaim
initial	+++	+++	+	+++	+	++	+++	+++
medial	+++	+++	+++	+++	+	++	+++	+++
final	-	+	+++	+++	-	+	+++	+++

Given the results of my research, I cannot agree with Sulimowicz's statement about the interchangeability of the letters *kap̄* and *qōp* in the Halich Karaim and Lutsk Karaim manuscripts. Numerous examples seem to contradict Németh's assumption that *kap̄* signifies palatalised *k´* and that *qōp* is used for non-palatalised *k*, for instance, the occurrence of *qōp* in initial and medial positions in front words which are transcribed with a palatal *k´* by Németh: 3 (78): 11 *kezlerinizde* [*k´ezłerińizde*] 'in your eyes' (קֶזְלֵירִינִיזְדֶיא), 5 (80): 4 *kelsen* [*k´ełsen*] 'if

you come' (קֶלְשֵׁין), 5 (80): 4 *Kiwerecki* [*K′iẃeŕeck′i*] 'being from Kiwerce' (קִיוֶרֶצְכִי), 52[11]: 9

kirgeysiz [*k′irġejśiz*] 'you may go in' (קִירְגֵיְיסִיז), 3 (78): 10 *nemeckiy* [*ńeḿećk′ij*] 'Niemieckie'

(נֵימֵיצְקִיְ), 3 (78): 28 *ezinkileri* [*eźińk′iłeri*] 'his (relatives)' (אֵיזִינְקִילֵירִי), and 5 (80): 4 *wertepke*

[*ẃert′epk′e*] 'to the puppet theatre' (וֶרְטְפָּקֵי) (2011: 375, 376, 377, 394).

The unexpected use of the letter *kap̄* in initial position in certain front words, e.g. the twelve occurrences in words derived from the stem *kle-* – which, applying Németh's rule, had to be transcribed as *k′le-* 'to want, wish' – might be due to the reflection of the original front *k′-* in this position: *tile-* 'to want, wish' > *k′ile-* > *kle-*. Most of the unusual appearances of the letter *kap̄* in back words can be explained by the maintenance of the original form of writing, e.g. in the original Hebrew word *kawod* 'sir, sire' and its derivation *kanuz* 'sir, sire' (< *kawnuz* < *kawodunuz*) < Hebrew *kāwōd* 'honour, splendour, glory' (כָּבוֹד).

It seems that the orthography does not reflect the theories and assumptions on the representations of the *k* sounds and that there are still many questions left open about the use of the letters *kap̄* and *qōp*. Involving new manuscripts in the research might bring us new results.

Conclusion

As the examples have demonstrated, new editions of texts in different Karaim varieties provide a good basis for a description of Karaim orthography. Based on the writing of the *e* sounds and the use of different Hebrew letters for realising the *k* sounds, we can see that it is not possible to describe a unified orthography applicable to all Karaim varieties. On the contrary, a different writing system is used for each Karaim variety. An analysis of the Karaim manuscripts, as we have seen, makes it possible to describe dialectal tendencies. So far, the Crimean Karaim orthography, which avoids the use of several letter combinations and

complicated rules, seems to be the simplest one, whereas the most complicated rules and most

letter combinations are employed in the Halich Karaim and Lutsk Karaim varieties.

Abbreviations

Sources

F103 14 – 15	a morning prayer written in Halich Karaim, published by Olach (forthcoming)
HKB	Halich Karaim Bible, the Halich Karaim translation of biblical texts published by Olach (2013)
KUK	*Ki uspu kinde*, a prayer for the Day of Atonement written in Halich Karaim, published by Jankowski (2011)
Nr. II	a poem written in Halich Karaim, published by Grzegorzewski (1903)
Nr. III	a poem written in Halich Karaim, published by Grzegorzewski (1903)
Nr. IV	a poem written in Halich Karaim, published by Grzegorzewski (1903)
PR2	an evening prayer written in Halich Karaim, published by Olach (2014)
S	*Sandyr*, a prayer for the Day of Atonement written in Halich Karaim, published by Jankowski (2011)
T1	a poem written in Halich Karaim, published by Grzegorzewski (1917)
T2	a poem written in Halich Karaim, published by Grzegorzewski (1917)

Glosses of Karaim examples

ACC	Accusative
IMP	Imperative
PL	Plural

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