

Emergence of a New Written Culture: The use of Hebrew script among the Krimchaks and the Karaim

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Abstract. Conversion to a religion usually has a positive impact on the written culture of a given community. The conversion may or may not result in the adoption of a new writing system. In the Turkic world, we find examples for both cases. The Karaims, by their conversion into Karaitism, adopted the Hebrew script. They used the Hebrew alphabet up till the beginning of the 20th century in their everyday life for writing; for example, private letters and secular and religious texts in Karaim.

Another Turkic speaking group, the heterogeneous Rabbanite community of Krimchaks (whose majority is of Sephardic origin) also used the Hebrew script to write their vernacular.

Some characteristics of the writing systems of the Karaim and of the Krimchaks have been described, but no comparative research has thus far been carried out. In this study, the peculiarities of the Hebrew alphabet used by both Turkic speaking peoples will be discussed and illustrated. For instance, the new characters, which were introduced in order to indicate specific Turkic phonetic values, and the ways the same Hebrew vowel sign or letter is used in the different Krimchak and Karaim manuscripts.

Cultures can be classified based on actions taken to reproduce culture through the generations. There are cultures in which the knowledge of one's ancestors is passed down through rites; i.e., the repetition of the rites is the main component in the reproduction of the culture. In other cultures, knowledge is preserved in sacred texts; i.e., interpretations of the canonical texts are the foundations of cultural cohesion (Assmann 1999, 87–91).

Judaism falls under the latter type. In 70 CE, the Second Temple was destroyed in Jerusalem; i.e., the place where the rites could have been repeated disappeared. Since then, the holy text, the Hebrew Bible, has been the transmitter of the ancient traditions in Judaism. The language and the script of the Hebrew Bible, therefore, are both considered sacred.

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This paper discusses the way in which Judaism reached the Turkic peoples and the effects it had on their culture. Examples will also be provided to illustrate how the Hebrew script was used by the Turkic peoples.

Since Karaim is the most documented extant Turkic language to have used the Hebrew script and the Karaim are the only Turkic group still practising their ancient faith, the paper will mainly focus on the characteristics and the history of the Hebrew script used by the Karaim. A discussion of the history of the Hebrew script in general and its use among the Karaim in particular will shed light on the possible reasons for the use of certain vowel signs and letters in Karaim texts and of the disappearance of the Hebrew script from the Karaim communities.

Judaism among the Turkic peoples

Although Judaism has not been a prevalent religion among the Turkic-speaking peoples, both mainstream Judaism and Karaitism have been represented by some Kipchak Turkic groups. In the late eighth and early ninth centuries, the ruling house of the Khazar Kaganate converted to Judaism, most probably to Rabbinic Judaism (Golden 1998, 223). Khazars were a Turkic people with their empire in the territory of the North Caucasus and the lower Volga delta between the seventh and ninth centuries (Golden 1980, 58–67). Since the sources written by the Khazars are very limited (see Golden 1980, 121–2), the Hebrew script used by them will not be covered in the paper.

The Krimchaks were also followers of Rabbinic Judaism. Jews migrated from the Byzantine Empire to the Crimea in the eleventh and twelfth centuries, Sephardic Jews who migrated to the Crimean Kaganate in the fourteenth to sixteenth centuries and Ashkenazi Jews from Eastern Europe together compose the Krimchak nation. Their language and culture has almost disappeared since World War II; now the traditional Krimchak lifestyle is only exemplified by Krimchak cuisine and feasts. The Krimchak community has dispersed throughout the world: a few hundred Krimchaks live still in the Crimea; the rest have settled in Russia, Ukraine, Israel and the USA (Kizilov 2009, 68).

Karaitism is represented by the Karaim of Eastern Europe. The Karaim have three main communities: the Crimean, Halich and Trakai Karaim communities. Linguistically, Karaim is considered a highly endangered language, since only its Trakai variety is spoken and the other two varieties, the Halich and Crimean varieties, can be regarded as extinct.¹ The religion of the Karaim is based on Karaitism,

¹ Speakers of Crimean Karaim shifted to Crimean Tatar in the nineteenth century (Jankowski 2003, 123). The Halich Karaim variety is spoken by a few elderly ladies (Csató 2002, 135). The Trakai variety has, however, approximately 50 speakers (Csató 2006, 395).

which was influenced by Islam early on and later by Christianity (Zajaczkowski 1961, 28–29).²

The main difference between Rabbinic Judaism and Karaism lies in the recognition of the post-biblical traditions. Karaite Judaism, which arose in the ninth century in present-day Iraq, only accepts the *Tanakh* and excludes the *Mishna*, the *Talmud* and the rabbinic traditions (Nemoy 1978, 603–4).

The circumstances and the date of the Krimchaks' conversion to Rabbinic Judaism and that of the Karaim to Karaism are unknown (Golden 1998, 222–3; Polinsky 1991, 123).

The history of the Hebrew script³

In Judaism, the Hebrew language is considered the medium of the sacred text, and therefore the language itself is also regarded as holy (Weitzman 2001, 71). For writing in Hebrew, the Phoenician-based palaeo-Hebrew script was first used up to the third century BCE, when it was altered by the Aramaic script. The Aramaic script had been used for secular purposes before the third century, but after that the new script was also employed for Torah scrolls, i.e., for religious purposes (Birnbaum 1954–7, 70–5; Yardeni 2002, 44–50). By that time, the general Aramaic script had become modified. This script, which is called Square Hebrew, spread in all Jewish communities and became the standard for Jewish book hand. The structural development of Square Hebrew ended around the tenth century (Birnbaum 1954–7, 174).

Vocalisation was introduced in the late seventh and early eighth century CE. Of the three main vocalisation types—Palestinian, Babylonian and Tiberian—only the Tiberian type is still in use (Gaur 2001, 222–3; Yardeni 2002, 93–5).⁴

Religions, as well as the alphabets used for sacred texts are, in general, considered conservative. So what might account for the substitution of the palaeo-Hebrew script with the Aramaic script used for the Scriptures? Birnbaum claims that the change was introduced by religious leaders. The shift was motivated by a desire to separate from the Samaritans, or as Epiphanius (ca. 315–403) puts it, “in order that the seed of Abraham should thereby be distinguished from the rest of the nation”. The sources usually name Ezra as the person who carried out the substitution of the script, meaning that the change took place between 458/7 and 428/7 BCE (Birnbaum 1954–7, 74–5).

² The Karaim reject any definition which binds them or their religion to Judaism. See more on this question and on their religion in Harviainen 2003b.

³ The term “Hebrew script” in Hebrew (*ktb 'bry*) means the palaeo-Hebrew script (Birnbaum 1954–7, 126). The term used in this paper refers to the script mentioned as *'swrit* in the Talmudic sources, i.e. a modified version of the Aramaic script (see the discussion).

⁴ For more about the different types of vowel marks, see Diringer (1953, 264–6).

In the Middle Ages, cursive hands also developed from Square Hebrew. In the beginning, the cursive hand was not really different from Square Hebrew but seemed much more like a simplified Square. The first cursive written documents occurred in the eleventh century, but Birnbaum assumes that this form of writing had evolved long before (Birnbaum 1954–7, 176).

Furthermore, in the course of time, with the spread of Judaism, not only cursive hands emerged, but also different types of Hebrew scripts, e.g., the Negeb script, the Ashkenazic and Karaitic types.

No uniform Karaitic type of writing exists, but different types that developed regionally out of Jewish types can be observed. The first Karaite manuscripts—from Egypt—show similarities with the writings of the local (Rabbinic) Jewish type. Even later, when the differences are more significant, the Rabbinic influence can still be detected. The Karaitic types of Hebrew script can be classified as Southern Karaitic, Yevano-Karaitic, Northern Karaitic and Parso-Karaitic (Birnbaum 1954–7, 312–6).

The Karaim manuscripts represent the Northern Karaitic type, which derived from the Yevano-Karaitic type in the Crimean region. However, the influence of the Ashkenazic type is noticeable, especially in sources written with cursive script (Birnbaum 1954–7, 316).

Main characteristics of the Hebrew script used by the Turkic peoples

The communities of the Karaim and Krimchaks used Hebrew script to write down their own Turkic vernacular. Although the basis for the orthography of both Turkic-speaking groups is the same, i.e., the Hebrew alphabet, differences in the use of the Hebrew characters can be observed. In the following, I will demonstrate how the Hebrew script was used in the different Turkic communities: differences, regularities and exceptional cases will be illustrated.⁵

Sources used for the investigation

The following Karaim sources were used for the present examination: Halich Karaim poems published by Grzegorzewski (1903 and 1917); a Halich Karaim translation of biblical texts published by Olach (2013); partial texts published by Kowalski in 1929; a Trakai Karaim translation of the *Book of Proverbs* published by Firkovičius (2000);

⁵ In this article, the description of the Hebrew script is based on the Tiberian tradition. Besides certain links to the Tiberian tradition, the pronunciation of Hebrew among Karaim shows traces of the Sephardic tradition as well, see more in Harviainen 2013b, 453–7. In the future, the connection between the pronunciation of Hebrew and the use of Hebrew script for writing Turkic must be studied in details.

a translation of Psalm 91 into Trakai Karaim published by Csató (2011); Crimean Karaim religious texts published by Sulimowicz (1972) and Jankowski (1997), and private letters in Lutsk Karaim published by Németh (2011).

The Halich Karaim religious poems published by Jan Grzegorzewski in 1903 were written in the nineteenth century. The authors of the poems are Abraham Leonowicz, Josef Mordkowicz and Jakob Josef Leonowicz (Grzegorzewski 1903, 72–3). The two poems published in *Język tach-karaitów* were written by Josef Ben Jeshua and Josef ben Shemuel in the seventeenth century (Grzegorzewski 1917, 25, 30).

The Halich Karaim translation of the biblical texts published by Olach forms parts of a family bible which is in the possession of the Abrahamovich family, who originally lived in Halich. It is handwritten and contains the Five Books of Moses and the *Haphtarot*, the reading portions from the writings of the prophets on Sabbaths and feasts (Olach 2013, 10–2).

Some fragments of Karaim Bible translations written in the Hebrew script were published by Kowalski: the beginning of *Genesis* from a manuscript written in 1723 in Derażnia; fragments of the *Book of Job*: a fragment in Trakai Karaim translated by Zacharja Mickiewicz in 1904, another fragment in Trakai Karaim translation published by Radloff, a further portion in Trakai Karaim translated by Pinachas Malecki, a fragment in Halich Karaim translated by Josef Mordkowicz between 1824 and 1830, and a portion translated into Crimean Karaim, quoted from the Gözleve Bible (1841); fragments of translations of the *Song of Songs* in Halich Karaim and in a Crimean Karaim translation of the Gözleve edition (1929, 282–9).

Short parts of four different Trakai Karaim translations of the *Lamentations* were presented by Zajączkowski (1932). One of the translations was made by Izajasz Rojecki in 1848, the other was created in 1860 by Levisz Ławrecki, and another one was composed by Jozef Łobanos in 1929. No author and date of the fourth translation is known (Zajączkowski 1932, 183, 186–7).

The translation of the *Book of Proverbs* from Hebrew into Trakai Karaim was compiled in 1798 by Shelumiel, the son of the aged priest Shemuel, in Salocius, Lithuania. According to Firkovičius, it is unclear whether the text was originally translated by him or whether it was only a rewritten version of an earlier translation (2000, 169–70).

Csató published the Trakai Karaim translation of Psalm 91 (2011). The manuscript is kept at the Library of the Lithuanian Academy of Sciences.

Prayers translated into Crimean Karaim were published by Sulimowicz in 1972. Besides the Karaim texts in transcription, the article contains the copy of the manuscript as well (Sulimowicz 1972, 65–76).

Jankowski published the Crimean Karaim translation of the following biblical texts: *Genesis* 1:1–18; 6:9–18; 17:8–19; *Deuteronomy* 32:1–51; *Lamentations* 4:11–

15, 21. The manuscript of these texts is kept in the Rylands Library collection in Manchester. Jankowski published the texts with a transliteration and transcription, using a transliteration system that makes it possible to reconstruct the Hebrew orthography (1997).

Two fragments of prayers for the Day of Atonement translated into Lutsk Karaim were published by Jankowski (2011). The prayers were composed of biblical quotations in 1940; and the manuscripts were kept in the National Museum in Halich (Jankowski 2011, 158). Copies of the manuscripts are attached to the article (Jankowski 2011, 166–7).

Letters and circulars written in Lutsk Karaim were published by Németh (2011).⁶ Most of the 16 letters were written in the nineteenth century; only three of them were penned in the early twentieth century. Out of the 16 letters, six are vocalised and four are partly vocalised (Németh 2011).

As for Krimchak, there were only a limited amount of texts written in the Hebrew script at my disposal. All the features demonstrated in the following are based on the short texts published by Ianbay (2000) and the description given by Chernin (1988). Furthermore, I used Erdal and Ianbay's publications, in which they provide an account of the use of the Hebrew script in the *Book of Ruth* (1998) and the *Book of Miracles and Wonders* (2000).

Ianbay (2000) discusses the orthographic features of Krimchak translations of the books of later prophets, namely the books of Isaiah, Jeremiah, Hosea, Joel, Amos, Obadiah, Jonah and Micah, and presents the beginnings and the ends of each book in Hebrew script. Examples will be quoted from Ianbay's article (2000) and from the *Book of Ruth* (Ianbay, Erdal 1998).

Vocalisation

Biblical Hebrew distinguishes between reduced, short, changeable long and unchangeable long vowels, which are clearly indicated through the use of different vowel signs and their combinations (see the table below (Lambdin 1971, xiii–xxv)).

The Krimchak and the Karaim sound system, however, only contain short vowels (Polinsky 1991, 133; Pritsak 1959, 327). Therefore, naturally, the quality of the Hebrew vowel signs does not overlap the quality of the Krimchak and Karaim vowel signs.

In vocalised Krimchak texts, the front and back labial vowels, i.e., *o* ~ *ö* and *u* ~ *ü* are not distinguished (Erdal, Ianbay 2000, 41). The Hebrew combination *ḥōlem* +

⁶ It must be noted that the Lutsk Karaim letters are different from the rest of the documents used in the present study by being secular texts (private letters).

Table 1. Hebrew orthography

Hebrew orthography	Value of the vowel in Hebrew ⁷
<i>pátaḥ</i> ַ	short a
<i>qámeṣ</i> ָ	changeable long a
<i>səḡōl</i> ֿ	short e (open)
<i>šērē</i> ֶ	changeable long e (closed)
<i>hîreq</i> ִ	short i
<i>hólēm</i> ֹ	changeable long o
<i>qibbûṣ</i> ֻ	short u
Combinations with <i>yōd</i> ך	
<i>səḡōl</i> combined with a <i>yōd</i> ך	unchangeable long e (open)
<i>šērē</i> + <i>yōd</i> ך	unchangeable long e (closed)
<i>hîreq</i> combined with <i>yōd</i> ך	unchangeable long i
Combinations with <i>wāw</i> ם	
<i>hólēm</i> + <i>wāw</i> ם	unchangeable long o
<i>šûreq</i> ם	unchangeable long u
Reduced vowels	
<i>hāṭēp̄ pátaḥ</i> ַ	reduced a
<i>hāṭēp̄ səḡōl</i> ֿ	reduced e
<i>šəwā</i>	reduced vowel

wāw is used to represent *o* and *ö*, whereas *šûreq* denotes *u* and *ü*, e.g., בוגלונא *könlüne*⁸ ‘to her heart’, אוגילן *oylan* ‘boy’ and בולאי *bulay* ‘thus, this way’ (Ianbay, Erdal 1998, 7, 13).⁹

As for Karaim, we must consider the phonetic differences between the Karaim varieties. In modern Halich and Lutsk Karaim, due to the change *ö > e*, *ü > i*, there are no front labial vowels represented, e.g., איציןציי *icinci* ‘third’ < *üçünçü* ‘third’ in Halich Karaim (Pritsak 1959, 327; Olach 2013, 24), סזלרני *sezternii* ‘words (ACC)’ < *sözlerni* ‘words (ACC)’ (Németh 2011, 372).¹⁰ In the Crimean Karaim translation

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 “Sound and spelling” in Lambdin 1971, xv–xxviii.

⁸ Since the use of the Hebrew script is discussed in the present study, in the quoted examples, the original transcription systems used by the different authors were maintained, except in the case of Halich Karaim and those texts which have no transcription at all.

⁹ In the fragments published by Ianbay, the quality of labials are not plainly marked, e.g. סוז *söz* ‘word’, דוסטלרנים *dostlarim* ‘my friends’, כורגון *körgün* ‘look!’, בו *bu* ‘this’ (2000, 8–9).

¹⁰ The present study focuses on the orthographic features of manuscripts written in modern Karaim varieties. Thus, the characteristics of manuscripts written earlier and / or in the period of transition, i.e. before and during of *ö > e* and *ü > i* started to operate, will not be discussed here.

of biblical texts published by Jankowski, the distinction is not indicated in the non-vocalised parts; i.e., *wāw* is used to represent the vowels *o*, *ö*, *u* and *ü*. In vocalised texts, however, the vowels *o* and *ö* are signified by the Hebrew vowel sign *ḥólem* or by *ḥólem* + *wāw*, whereas *šúreq* indicates the vowels *u* and *ü* (Jankowski 1997, 4, 6), e.g., אוצון *üčün* ‘because, for’ (Kowalski 1929, 287), בושטליקלר *bošattlyqlar* ‘remissions’, כוּגְלִימִזְנִי *kóglyimizni* ‘our heart (ACC)’, קולו *qulu* ‘slave of’, ירוּמָה *júrúma* ‘to walk’ (Sulimowicz 1972, 65).

Trakai Karaim has a well-developed set of signs for indicating the distinction. In vocalised texts, the Hebrew vowel sign combination *ḥólem* + *wāw* is the usual notation for the vowel *o* and *šúreq* represents the vowel *u*. Trakai Karaim uses vowel sign combinations with *yōd* to indicate front labial vowels. Thus, the vowel *ö* is written with *yōd* + *ḥólem* + *wāw*, and *yōd* + *šúreq* signifies the vowel *ü*, e.g., כּוּלְגִיסִינְדֵי *kölägäsindä* ‘in its shadow’ and כּוּצְלִי *küčlü* ‘strong’ (Csató 2011, 15).

Table 2. The representation of labial vowels in Krimchak and Karaim

Hebrew orthography	Value of the vowel in Hebrew	Krimchak	Crimean Karaim	Trakai Karaim	Halich Karaim	Lutsk Karaim
<i>ḥólem</i> ם	changeable long o	–	o, ö	o	o	o
<i>qibbûš</i> ך	short u	u	–	u	u	u
Combinations with <i>wāw</i> ם						
<i>ḥólem</i> + <i>wāw</i> ם	unchangeable long o	o, ö	o, ö	o	o	o
<i>šúreq</i> ף	unchangeable long u	u, ü	u, ü	u	u	u
Combinations with <i>yōd</i> ם						
<i>ḥólem</i> + <i>wāw</i> + <i>yōd</i> ם	–	–	–	ö	–	–
<i>šúreq</i> + <i>yōd</i> ם	–	–	–	ü	–	–

The case of the vowels *a*, *e* and *ä* is rather complicated. In Krimchak, the vowel *a* is indicated by either the vowel sign *pátaḥ* or the vowel sign *qámeš* in vocalised texts, e.g., וַר *var* ‘there is/are’, קאַצן *qačan* ‘when’ (Ianbay, Erdal 1998, 6, 10) and קרנדשלירים *qardašlarim* ‘my brothers’ (Ianbay 2000, 8). The vowel sign combination *qámeš* + *álep* occurs as well, e.g., באַראַבאַר *barabar* ‘together’ and וַר *var* ‘there is/are’ (Ianbay, Erdal 1998, 6). In the translation of the Book of Ruth, the open *ä* is written with the vowel sign *səḡōl*, whereas the closed *e* is signified by the vowel sign *šērê*, e.g., גַּגְאַ *geḡä* ‘night’ (Erdal, Ianbay 2000, 41; Ianbay, Erdal 1998, 6).¹¹ In Krimchak prayers,

¹¹ In the *Book of Ruth*, Erdal and Ianbay only use *e* in the transcription; however, the idea that the two different vowel signs, *šērê* and *səḡōl*, represent probable phonetic differences is introduced (1998, 6).

Ianbay does not distinguish *ä* and *e* in her transcription, see גֵּלְדִי *geldi* ‘(they) came’ written with *səḡōl* and אֵלִינְדֵי *elinde* ‘in his hand’ written with *šērê*. Consider also the use of *pátah* for writing *e*-sound in אֵלִינְדֵי *elinde* ‘in his hand’. Further examples: אֵיִלְיִם *eyleyim* ‘I shall do’, סִיזֵי *size* ‘to you (PL)’ (Ianbay 2000, 8). The combination *šērê* + *yōd* is used as well, e.g., שִׁירְעֻצְצִי *šeraatči* ‘judge’ (Ianbay, Erdal 1998, 6), אֵיגֵר *eger* ‘if’ (Ianbay 2000, 8).

In the Crimean Karaim texts, only the Hebrew vowel sign *šērê* occurs in the vocalised parts, and it represents the vowel *e* in the first syllable. Besides *šērê*, the vowel sign *səḡōl* is also used in the first syllable in the Crimean Karaim prayers, e.g., סֵנִי *seni* ‘you (ACC)’, דֵּלִלִיגִימִזִּי *deliligimiz* ‘our madness’ (Sulimowicz 1972, 66). Just like the vowel *a*, the vowel *ä* is indicated by the vowel sign *pátah*, e.g., מֵנְדָן *mendän* ‘from me’ in the *Book of Job* (Kowalski 1929, 287), בִּלָּן *bilán* ‘with’, אֵסִיטְמָדִיק *ešitmädik* ‘we didn’t hear’ in the prayers (Sulimowicz 1972, 65). In final position, the vowel *ä* is written either with the combination of the vowel sign *pátah/qāmeš* and ‘*álep*’, e.g., כֵּצָא *kečä* ‘night’ (Kowalski 1929, 287), סוֹזִינָא *sóziná* ‘to the word of’, כוֹכְגָא *kókgá* ‘to the sky’; or with *pátah/qāmeš* + *hē*, e.g., יוֹרוּמָא *júrúmá* ‘to walk’, בִּיזְגָא *bizgá* ‘to us’, בִּיזְגָא *bizgá* ‘to us’ (Sulimowicz 1972, 65–6).

The vowel *a* is generally indicated with the Hebrew vowel sign *pátah*, e.g., אֵטְלֵרִין *atarin* ‘their fathers (ACC)’ (Kowalski 1929, 287), יִזְקָלִי *jazyqly* ‘sinful’, אֵטְלֵרִימִזְנִי *atarymiznyj* ‘of our fathers’ (Sulimowicz 1972, 65). The vowel sign combination *pátah* + ‘*álep*’ or *qāmeš* + ‘*álep*’ is used, in general, in final position, e.g., קִילְמָמָא *qylmama(q)qa* ‘for not doing’ (Sulimowicz 1972, 65). Rarely, the combination *qāmeš* + *hē* occurs in back words in final position, e.g., אֵלְדִיגָא *aldygha* ‘in front of you’ (ibid.).

Similarly, in the Trakai Karaim sources, the opposition of the vowels *e* and *ä* is signified by *šērê* and *pátah*, but in combination with *yōd*, i.e., *šērê* + *yōd* indicate the vowel *e* and *pátah* + *yōd* represent the vowel *ä*, e.g., כֵּצִיאֲנִין *kečänin* ‘of the night’ from Psalm 91 (Csató 2011, 15). Further vowels and combinations, e.g., *šērê*, *səḡōl* and *səḡōl* + *yōd*, are only used sporadically.

The vowel sign *pátah* is usually used in Trakai Karaim to indicate the vowel *a*, e.g., מַיָּא *maja* ‘to me’ in the *Book of Job* translated by Pinachas Malecki (Kowalski 1929, 285). The Hebrew vowel sign *qāmeš* occurs rarely, often next to the consonant *y*, e.g., יַנִּיגְדָן *janijdan* ‘from your side’ in Psalm 91 (Csató 2011, 15).

The Halich Karaim sources display the greatest variety in signifying *a*- and *e*-sounds. The *e*-sounds are indicated with the following Hebrew vowel signs and combinations: *šērê*, *səḡōl*, *šērê* + *yōd* and *səḡōl* + *yōd*. Certain tendencies can be observed in the use of the different vowel signs and their combinations. The Hebrew vowel signs combined with *yōd* are the usual forms used for writing *e*-sounds, whereas

ṣērê and *səḡōl* without *yōd* only occur in certain lexical and grammatical forms, e.g., *כִּיצֵיִא kece* ‘night’, *רְשִׁמְלֵרִימְנִי rešimlirimni* ‘my statues (ACC)’ and *טְנָרִי tenri* ‘God’ (Olach 2013, 31–7). The vowel sign *pátaḥ* is not used to represent the vowel *ä*.

The vowel signs and their combinations *ṣērê*, *səḡōl*, *ṣērê + yōd* and *səḡōl + yōd* occur in vocalised texts written in Lutsk Karaim. The vowel *e* is usually signified by the vowel sign *ṣērê* or *ṣērê + yōd*, e.g., *זֶרֶט zeret* ‘cemetery’ and *נֶעֶצֵי nece* ‘several’ (Németh 2011, 378), *אִזְלֵנִי izleniz* ‘seek! (PL)’, *פִּיכִירְלֵרִים fikirlerim* ‘my thoughts’ (Jankowski 2011, 166). The vowel sign *səḡōl* and the vowel sign combination *səḡōl + yōd* are only used in a few words: *טְנָרִי tenri* ‘God’, *עֶשׂוֹוִיֶּכֶ עšwovičke* ‘to Ešwovič’ and *כֶּלְמֵיֶדִי kelmejdi* ‘it has not come’ (Németh 2011, 378, 384, 397). In the Lutsk Karaim prayers, the use of *səḡōl* and *səḡōl + yōd* is not exceptional: *אֶקְטְמְלִיק ektemlik* ‘pride’, *אִוְרֶטְסֵן iwretsen* ‘if you teach’, *סֵנְדֵדִיר sendedir* ‘is in You’ (Jankowski 2011, 166–7).

The graphic representations of *a*-sounds show great variation in both Halich Karaim and Lutsk Karaim materials: *pátaḥ*, *pátaḥ + ‘álep*, *qámeš* and *qámeš + ‘álep*,

Table 3. The representation of *a*-sounds and *e*-sounds

Hebrew orthography	Value of the vowel in Hebrew	Krimchaks	Crimean Karaim	Trakai Karaim	Halich Karaim	Lutsk Karaim
<i>pátaḥ</i> ׀	short a	a	a, ä	a	a	a
<i>qámeš</i> ׀	changeable long a	a, o	a, ä	a	a	a
<i>səḡōl</i> ׀	short e (open)	ä	e	e	e	e
<i>ṣērê</i> ׀	changeable long e (closed)	e	e	e	e	e
Combinations with <i>yōd</i> ׀						
<i>səḡōl + yōd</i> ׀	unchangeable long e (open)	–	–	e	e	e
<i>ṣērê + yōd</i> ׀	unchangeable long e (closed)	e	–	e	e	e
<i>pátaḥ + yōd</i>		–	–	ä	–	–
Combinations with ‘ <i>álep</i> ׀						
<i>pátaḥ + ‘álep</i> ׀	–	–	– (only in final position)	a	a	a
<i>qámeš + ‘álep</i> ׀	–	a	– (only in final position)	a	a	a

e.g., קוזלִסִינִלֶר *qozlasınlar* ‘let them teem’ and דְּזָאן *dzan* ‘soul’ in Halich Karaim (Olach 2013, 24–31) as well as סַלְדָן *satadan* ‘from village’ and בּוֹלְחָאִי *bothaj* ‘should be’ (Németh 2011, 380, 381). The vowel sign *pátah* is the most used variant. It seems that the allographs with *‘álep* in medial position represent a kind of prominence in certain words.

In Hebrew, the vowel sign *hîreq* signifies the short *i*, whereas the combination of *hîreq* + *yōd* indicates the unchangeable long *i*. Since no long vowels exist in Krimchak and Karaim, the two forms represent no distinction in length. On the other hand, as in Turkic languages in general, front *i* and back *ï* are distinguished in spoken languages. So the question arises: do the two types of *i*-sounds in Krimchak and Karaim manuscripts correspond to the two written forms in Hebrew? The investigation clearly shows that the different written forms only represent graphic variants. Even if there are two ways of writing the *i*-sounds, the distribution of these do not correspond to the possible distribution of the front *i* and back *ï*, e.g., כִּיבִיכ *kibik* ‘like’, יִגִּיט *yigit* ‘young man’ and קִילִיץ *qilič* ‘sword’ (Ianbay, Erdal 1998, 7, 10), אִגְלַיִם *iglayim* ‘I shall cry’, אִשְׁלֵרִיז *išleriñiz* ‘your works’, דּוֹסְטֵלֵרִים *dostlarım* ‘my friends’, בִּיר *bir* ‘one’ in Krimchak (Ianbay 2000, 8–9); גִּיבִי *gibi* ‘like’ and אַטְלֵרִין *atarın* ‘their fathers (ACC)’ in Crimean Karaim (Kowalski 1929, 287); כִּיבִיכ *kibik* ‘like’ and אַטְלֵרִין *ataryn* ‘their fathers (ACC)’ in Trakai Karaim (Kowalski 1929, 285); טִיוּוֹדִילֵר *tiwildiler* ‘they are not’, קַטִּינְגָא *qatıñga* ‘to the woman’, אִיִּצִינְצִי *icinci* ‘third’ and צִיקְטִיק *cıqtıq* ‘we went out’ in Halich Karaim (Olach 2013, 24); and בֵּישִׁינְצִי *beşinci* ‘fifth’ and קִירְק *kyrk* ‘forty’ in Lutsk Karaim (Németh 2011, 378).

Consonants

Basically, the Krimchak and Karaim consonants in the manuscripts correspond to the Hebrew originals. Therefore, I will not go into a detailed description of the manner in which consonants are represented in Krimchak and Karaim here. Only a few special features will be mentioned.

Hebrew offers an option to indicate fricative consonants. When a dot called a *dagesh* is used in a consonant letter, it means the consonant is pronounced as a plosive, i.e., *b, p, d, t, k* and *g*. When the dot is missing, the pronunciation changes to a fricative, i.e., *v, f, δ, θ, χ* and *γ*.

In Turkic manuscripts written with the Hebrew alphabet, the *dagesh* is usually not used. However, it can be found in the Krimchak text published by Erdal and Ianbay and in the Crimean Karaim text in the Gözleve edition, e.g., סוּב *suv* ‘water’ and בַּשְׂקָא *başqa* ‘other’ in Krimchak (Ianbay, Erdal 1998, 10, 13) as well as קוּוַטִי *kuwati* ‘its strength’ and גִּיבִי *gibi* ‘like’ in Crimean Karaim (Kowalski 1929, 287). See also the table of consonant letters used in the *Book of Ruth* in Erdal, Ianbay (1998, 14).

Besides, an apostrophe-like mark called a *geresh* following the consonant is employed in the Krimchak texts to indicate the fricatives *v* and *χ*, *γ* and *f*, e.g., אַזְגִּיאָנָא *azyana* ‘a little’ and אַפֿינְדִי *efendi* ‘mister, sir’ (Ianbay, Erdal 1998, 13), כאַן לַרִי *xan-lari* ‘the kings of’, אורמגיא *(baš) urmaya* ‘for bowing down’, סאפֿיאַר *safar (etildi)* ‘it was written’ (Ianbay 2000, 5–6, 9). The *geresh* combined with the letter *gîmel* denotes also the nasal sonorant *ŋ*, e.g., טַגֿ *tay* ‘dawn’ (Ianbay, Erdal 1998, 12), ייגֿי נִיגֿ *iyey-niy* ‘of the Lord’, (Ianbay 2000, 6).

A further feature can be observed in Krimchak. The letter *gîmel* is written with a dot to indicate the affricate *ʃ*, e.g., גֿן *ʃan* ‘soul’ (Ianbay, Erdal 1998, 11), קויגֿו *qoyju* ‘herdman’ (Ianbay 2000, 6).¹²

Fricative consonants are usually indicated in Krimchak and Karaim texts with a short line above the consonant called a *rāp̄eh*. Its use is, however, rather inconsistent (see below the written form of *tatuwu* ‘its taste’ in Halich Karaim).

The set of consonants with *rāp̄eh* is mainly common in Karaim and Krimchak (*bêṭ* + *rāp̄eh* = ̄, *gîmel* + *rāp̄eh* = ̄, *pēh* + *rāp̄eh* = ̄), but the combination of *kap̄* + *rāp̄eh* = ̄ can only be observed in Krimchak, Crimean Karaim and Lutsk Karaim texts to indicate fricative *χ*, e.g., סָאָא *saŋa* ‘to you’, יַאֲשֵׁי *yaχšy* ‘good’ (Sulimowicz 1972, 66), סָאָסְטָא *χasta* ‘sick’ (Németh 2011, 382), קִילִוֶבְצִוֶלְרָנָא *qyluwcutarha* ‘to those who act’, סָגִיֶסְלֶרִין *sahystaryn* ‘their thoughts’ (Jankowski 2011, 166). Certain signs only occur in Krimchak texts, such as *dālet* + *rāp̄eh* = ̄ and *tāw* + *rāp̄eh* = ̄. The following Hebrew letters with *rāp̄eh* are only used by authors in the Lutsk Karaim variety: *záyin* + *rāp̄eh* = ̄ to represent *ž* and *sámeḵ* + *rāp̄eh* = ̄ to indicate *ś*, e.g., זָאָדְנִי *.žadnyj* ‘no, none’ and סִיְוֶרִי *śiwery* ‘dear, beloved’ (Németh 2011, 397, 376).

The diacritical mark *rāp̄eh* was used in masoretic and older manuscripts, and it is still used in Yiddish. Certain letters which were/are characteristic of medieval Hebrew and Yiddish are used in Turkic texts, e.g., double *wāw* and double *yōd*, see below.

The writing of *v*-sounds shows a number of variations. In Turkic texts, single and double *wāw* and the letter *bêṭ* and *bêṭ* with *rāp̄eh* are used to represent *v*-sounds, e.g., in Trakai Karaim טִוֶלְוִין *tölewin* ‘its payment (ACC)’ and אִוְלְטִוֶרֶבְצִו *olturuβču* ‘dweller’ in Psalm 91 (Csató 2011, 15); אַוּוֶר *awur* ‘heavy’, אַוּוֶזֶן *awzun* ‘its mouth (ACC)’ and טַטִוּוּ *tatuwu* vs. טַטִוּוּ *tatuwu* ‘its taste’ in Halich Karaim (Olach 2013, 40); and טִלְוּוּ *telew* ‘payment’ and קַרִוּוּ *karuw* ‘answer’ vs. קַרִוּוּ *karuw* ‘answer’ in Lutsk Karaim (Németh 2011, 390). Furthermore, the combination of the letter *bêṭ* and a *geresh* also occurs in Krimchak, e.g., אַרִוּוּבְלֶנְ- *aruvlan-* ‘to become pure’ (Ianbay, Erdal 1998, 13).

¹² Ianbay transcribes the word as *qoyji*, but the use of *wāw* clearly indicates a labial vowel in final position.

Spoken Karaim contains palatalised consonants due to Slavic influence (Pritsak 1959, 328). According to Pritsak, the palatalised consonants are systematically represented by *yōd* in Trakai Karaim and partly in Halich Karaim texts (Pritsak 1959, 326). If we consider how the examples provided by Pritsak are written in the Trakai Karaim translation of the *Book of Proverbs*, we see the following:¹³

Table 4. The function of the Hebrew letter *yōd* in Trakai Karaim texts

Words in Pritsak's transcription	Words occurring in the <i>Book of Proverbs</i>
<i>d'äyīn</i> 'until, till'	ד'ינ
<i>üst'uīa</i> 'onto'	אוסט'ינא
<i>öz</i> 'self'	אז

It is clear that there is no *yōd* following the consonant *z* in *öz* 'self', after the consonant *s* in *üst'uīa* 'onto' or after the consonant *n* in *d'äyīn* 'until, till'. This means that the palatalisation is not indicated in the text or only partly. If the *yōd* does not indicate palatalisation, then it functions as a part of the vowel; i.e., the *yōd* is the element of the vowel sign combination that represents *ä* in *d'äyīn* 'until, till', it is part of the vowel *ö* in *öz* 'self', and it forms part of the vowel *ü* in *üst'uīa* 'onto'. If the *yōd* functions to indicate palatalisation, it is not indicated consistently in the Karaim texts. The most obvious case can be observed in Lutsk Karaim materials, where *yōd* serves a clear palatalisation function; however, it occurs only once in the word 'God' in letter no. 5: ט'ינ'רי *teñri* 'God' (Németh 2011, 377). In Halich Karaim texts, the palatalisation is not indicated at all.

History of the Hebrew script among the Turkic peoples

The notion that conversion to a religion results in the establishment of the alphabet of that particular religion is generally accepted. Since there is no written historical evidence for a conversion to Judaism among the Turkic-speaking peoples, no circumstances of the introduction of the Hebrew script into the Turkic groups are known.

However, it is not only the lack of historical sources that poses challenges in the study of the Turkic-Hebrew script, but also, for example, in the case of the Krimchaks, the shortage of materials published in their language and of scholarly studies on the use of the Hebrew script in it. It is thus an important task to locate additional sources and make them available for future investigations into the Krimchak language and orthography.

¹³ Examples were taken from Pritsak 1959, 332–3.

The history of the Hebrew script used in Turkic-speaking groups is much better documented in the Karaim communities; i.e., the most publications in the Hebrew script are available in Karaim and it is the changes in the orthography used by the Karaim that can best be examined. Therefore, in the following, I describe the history of Karaim orthography and the key factors that shaped its development.

In the Middle Ages and up to the beginning of the nationalist movements in the nineteenth century, the collective identity was usually based on religion, e.g., the self-identification of the Krimchaks was *yehudi* ‘Jews’ or *srel balalari* ‘children of Israel’ until the end of the nineteenth century, when they started to call themselves Krimchaks (Zand, Kharuv 2007, 357). Similarly to the Krimchaks, the Karaim used religion-based terms for themselves, such as *yehudim* ‘Jews’ or *yehudim qara'im* ‘Karaim Jews’ (Harviainen 2003a, 642).

Certain changes in Karaim self-identification ensued in the early nineteenth century after most of the Karaim communities fell under the control of the Russian Empire with the partition of Poland in 1772, 1793 and 1795.

In 1795, the Crimean Karaim sent a delegation to St Petersburg to request an exemption from the double taxation levied on Jews in the Russian Empire. Claiming that they were Karaites, they succeeded in persuading the Russian authorities to exempt the Karaim from paying double taxes (Harviainen 2003a, 648).

In 1827, the Karaim again sent a delegation to St. Petersburg to be released from the military service expected of Jews in return for paying a special tax. The process continued with the official separation from the administrative bodies of the Rabbanite Jews in 1837 with the establishment of the Karaim Spiritual Consistory (Harviainen 2003a, 649).

The nationalist movement in nineteenth-century Europe also influenced the Karaim movement,¹⁴ as captured in their desire to seek out their origins, which prompted them to turn to their Turkic roots and to strengthen their Turkic self-identification. Shifting from a religious minority to an ethnic minority caused many changes, for instance, in their attitude to the Karaim language. Soon the Karaim started to publish in their vernacular, e.g., *Zemerler*, a collection of Karaim canonical and semi-canonical poetry and the literary almanac *Onarmach* ‘Development, Success’.¹⁵ Moreover, their Karaim language was introduced into the ceremonies held in *kenesa*, the house of prayer (Harviainen 2003a, 650).

The growing gap between Rabbanite Jews and the Karaim and the change in self-identification and attitude towards the Karaim language also caused changes in their attitude towards the Hebrew script that the Karaim had used for centuries.

¹⁴ Harviainen calls this period “Emancipation” (2003a, 648–51).

¹⁵ For publications in Karaim language, see Walfish (2003). For a periodisation of Karaim literature, see Shapira (2003, 665–6).

First, the Crimean Karaim community switched from the Hebrew orthography. They shifted from Karaim to Crimean Tatar—and also to Russian—during the nineteenth century. They had therefore lost their ability to read the Hebrew script by that time. They also introduced the Cyrillic alphabet for writing Karaim texts (Csató, Nathan 2007, 211). The first publication with the new alphabet was a book of poems (*Yrlar* ‘Poems’) written in 1904 by Kobiecki, a Russian officer of Karaim descent, in the Trakai Karaim variety (Shapira 2003, 676). The new literacy tradition still continues among the Karaim of Russia.

Halich and Trakai Karaim communities used Hebrew script up to Soviet times, but they also developed a Latin script based on Polish orthography (Csató, Nathan 2007, 212). Among the first publications in this alphabet was a journal, the *Karaj awazy* edited by Aleksander Mardkowicz from 1931 on, and a dictionary, the *Karaj sez-bitigi* ‘Karaim Dictionary’ published also by Aleksander Mardkowicz in 1935.

World War II prompted new changes in Karaim orthography. Lithuania fell under the supremacy of the Soviet Union, and thus the medium of education became Lithuanian and Russian. Since then, the Trakai Karaim community started to use Cyrillic orthography. In order to escape Russian control, many members of the Halich Karaim community migrated from their homeland to Poland during the Soviet period and continued to use the Polish-based Latin alphabet (Csató, Nathan 2007, 213).

The collapse of the Soviet Union resulted in another change in the Karaim orthography as the Lithuanian-based Latin orthography was created in the Karaim community of newly independent Lithuania, e.g., *Karaj koltchalary* ‘Prayers of Karaim’) edited by Mykolas Firkovičius and published in 1993, *Mieñ karajče iirianiam* ‘I learn Karaim’) written by Mykolas Firkovičius and published in 1996.

Nowadays, the Karaim are not literate in the Hebrew script.

Conclusions

The history of the Karaim and the history of Karaim orthography show an interesting parallelism with the European nationalist movements that started in the nineteenth century. At the outset, the Karaim movement had a religious background, since the desire to be dealt with separately from the Rabbanite Jews in the region motivated the first actions.

Later, however, the movement entered the domain of ethnic issues. This was, on the one hand, inspired by representatives of the Russian authorities who, in 1839, put a number of questions related to the origins of the Karaim and their faith to the Karaim Spiritual Consistory (Harviainen 2003c: 880). This change in the Karaim movement was also the result of influence from the surrounding societies with whom the Karaim had constant and close contact. As Harviainen states: “it would be a real

miracle if the Karaims ... had remained untouched by other national movements [in Europe—Zs. O.]” (2013a, 53).

Although the theory of a Khazar origin was first deeply investigated by Abraham Firkowicz, who was entrusted by the Karaim to ascertain the answers to questions from the Russian authorities, according to Troskovaite, it was Seraja Szapszal who played the most important role in the formation of a pure Turkic self-identification among the Karaim (2013, 217).

It is also remarkable how the orthography reflects a parallel history with Karaim self-identification. As long as the Karaim regarded themselves as Karaite believers, the Hebrew language and the Hebrew script played an almost exclusive role in Karaim written culture. The strengthening of Turkic self-identification, however, had a weakening effect on the importance of the Hebrew language and thus on the use of the Hebrew script.

Nevertheless, it would be narrow-minded to disregard the role of contemporary political and historical circumstances in the process of shifts in orthography. For instance, the language, religion and minority policy of the Soviet Union contributed to the disappearance of religious practice, e.g., among Krimchaks, and to the dispersion of communities—including those of the Karaim. As a result, the Turkic vernacular vanished among the Krimchaks and that of the Karaim has become extremely endangered.

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