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THE OLDEST LINGUISTIC ATTESTATIONS
AND TEXTS IN THE SLAVIC LANGUAGES

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Czech and Sorbian in the 11th–13th century Judeo-Slavic glosses¹⁸⁶

Abstract: The West Slavic glosses in Mediaeval Hebrew texts are an important source for the study of the early development of the West Slavic languages. Although the majority of glosses are often regarded as Old Czech, it is argued in this paper that some of these glosses are more likely to reflect a Slavic vernacular that was ancestral to modern Upper Sorbian. They form an important addition to the known corpus of Mediaeval Sorbian. Some of the earliest phonological developments of Czech and Sorbian can be dated on the basis of the Judeo-Slavic glosses.

Key words: Judeo-Slavic, glosses, Old Czech, Sorbian, Mediaeval Slavic.

1. Introduction

The earliest attestations of the Slavic languages come in various forms. Before the 14th century, Slavic was written down in the form of:

- i. texts of a religious nature (Old Church Slavonic and the Church Slavonic redactions, the *Freising fragments*)
- ii. secular texts (the Old Russian birch bark letters, the *Primary Chronicle*, the *Igor Tale*, the Croatian *Vinodol Law Codex* etc.)
- iii. *probationes pennae* and other brief notes in the margins of Church Slavonic texts (cf. Krys'ko 2016).
- iv. inscriptions (e.g. in Bulgaria, Dalmatia, and even in France (Brun et al. 2014)).
- v. names and some appellatives in non-Slavic, mainly Latin and Greek texts, e.g. titles like *iuppanus* (*Charter of duke Trpimir*, 852, cf. Kapetanović & Krm-potić 2015), βραβάνος (*De administrando imperio*, ±950), *supanos* and *withasii* (a deed from the monastery on the Lauterberg near Halle, 1181). Some of these titles may have functioned as common nouns in the local non-Slavic vernaculars.
- vi. Slavic glosses in or in the margins of non-Slavic texts.

¹⁸⁶ Part of the research for this article was conducted within the project *Documentation and Interpretation of the Earliest Croatian* (2698), financed by the Croatian Science Foundation.

For an overview of the most important early attestations of the Slavic vernacular languages see Birnbaum (1999). If we focus on the genre of glosses in otherwise non-Slavic texts, the following can be dated before the 14th century:

- a. *hrehō*, a drypoint gloss in ms. C 78, Zentralbibliothek Zürich (9th c., Nievergelt & Schaeken 2003)
- b. *ukrivolsa* (*w kri wolša*) “aeleri stat in fructum” in Thietmar of Merseburg’s *Chronicle* (1012–1018, Schuster-Šewc 1989)
- c. the Judeo-Slavic glosses (11th–13th c.)
- d. the “St. Emmeram glosses” *ifiku komufdo*, *imeti* and *bepoveleni* (11th/12th c., “Sorbian Church Slavonic”?)¹⁸⁷
- e. *sdra brate sestritza* and *dobra deni* in Tzetzes’ *Theogony* (12th c. Russian)
- f. the “Jagić glosses” or “Vienna glosses” and “Patera glosses” or “St. Gregory glosses” (11th–12th c., Czech & Church Slavonic, Vintr 1986, Schaeken 1988, 1989).
- g. the authentic glosses in the *Mater verborum* (13th c., Czech) and a few dozen other Czech glosses in 12th and 13th century sources (Mann 1977: 144ff., Vintr 2005: 149, Dittmann & Bláha 2013: 67f.).
- h. the “Magdeburg glosses” (12th c., “Sorbian”?), Schuster-Šewc 1989)
- i. *liubi moi sinec*, a *probatio pennae* in ms. 113, Stiftsbibliothek Göttingen (13th c.)
- j. the glosses in Codex Clm. 615, Bavarian state library (13th/14th c., Old Polish, Quak 2012)

The present paper is concerned with the third item on the list: early attestations of Slavic in the form of glosses in Hebrew texts. In the 13th century, Bohemian Jewish exegetes used glosses in other languages, amongst which there was one Slavic language. That Slavic language, which they referred to as לשון כנען, *lešon Kena’an*, is often identified

¹⁸⁷ Mareš (1969) rightly rejected the idea that the St. Emmeram glosses would be copied directly from the (lost) 9th century Old Church Slavonic Nomocanon translation (thus Vašica *apud* Bartoňková et al. 1971: 233–236). Especially the absence of a vowel reflecting a weak yer in *komufdo* is incompatible with 9th century Old Church Slavonic. According to Mareš, the vocalism of *ifiku* and the form *bepoveleni* point to North-West Sorbian origin. His arguments are the following: a) Lower Sorbian is the only language in which **ę* produced *i* (or *i̇* written as *i*), cf. the form *knize* in the Magdeburg Glosses; b) the prefix ‘without’ is attested as **be* in 17th and 18th c. Upper Sorbian *bewfchoho*, Lower Sorbian *bze wšogo* ‘without any’; c) this construction must contain **be* because otherwise one would expect **bezo*, **bzeze* with a vocalized yer. The latter argument is not conclusive, because old compounds had **bez*, not **bezь* as their first member (ÉSSJ II: 7ff.). Muka’s explanation of Common Sorbian **bewš-* from dissimilated **bezwš-* (Mareš 1969: 13) seems more likely than Mareš’s hypothesis of a prepositional phrase inherited from pre-Proto-Slavic. The argument that the *i-* of *ifiku* points to an origin similar to that of the Magdeburg glosses remains valid, but this hypothesis is now based on one gloss, the Latin translation of which, ‘gentis’, points to some form of Church Slavonic (ibid.: 15).

as Old Czech (Jakobson & Halle 1964 = 2014: 478f., Bláha et al. 2014: 120-122), although other scholars assume a greater variety of source languages. An overview of the history of the scholarship on these glosses can be found in Jakobson & Halle (1964 = 2014: 463ff.), who cover the period between the first mention of *lešon Kena'an* by Zunz in 1822 and the rich monograph on the Judeo-Slavic glosses by Kupfer & Lewicki (1956). Bláha et al. (2015: 88–142) also discuss the more recent literature. Renewed scholarly interest in recent years has resulted in a surge of new publications on the subject. In 2013 and 2014, two edited volumes were published that contain a number of articles discussing the glosses and many related subjects. The first was published in Prague (Bláha et al. 2013), the second in Moscow (Moskovič et al. 2014). The latter also contains (sometimes not entirely accurate) reprints of much of the older literature, some of which is otherwise difficult to obtain. These volumes are major contributions to the study of the Judeo-Slavic glosses and together with the new edition of the glosses (Bláha et al. 2015) they form a convenient starting point for further studies into the subject. The current paper aims to reassess the question which Mediaeval Slavic vernacular the glosses can be ascribed to and how they can be interpreted from a comparative Slavic perspective.

2. The main sources of Judeo-Czech glosses

The following 13th century texts are the most important sources in which Slavic glosses are found (abbreviations in brackets)

- a. *Or Zarua* (OZ) ('light is sown', halachic guide, 1246) by Isaac ben Moses (±1200–±1270)
- b. *Arugat ha-Bosem* (AB) ('bed of spices', commentary on the Maḥzor, 1234) by Abraham ben Azriel

The glosses in these two works are often associated with the Prague school of exegesis (Dittmann 2016: 19). This school was an offshoot of the exegetic school that flourished in 11th and 12th century northern France. Prominent members of the French school included Solomon bar Isaac ("Rashi", 1040–1105), Joseph ben Simeon ("Ḳara", 1060/1070–1130/40), Samuel ben Meïr ("Rashbam", ±1085–±1174) and Jacob ben Meïr ("Rabbenu Tam", 1100–1171). The oldest Slavic glosses in Hebrew texts are in fact found in (copies of) the works of Rashi and Ḳara. They would have been informed by their Slavic speaking students. The glosses in the works of Isaac ben Moses and Abraham ben Azriel, on the other hand, reflect their own Slavic vernacular. Their proficiency is shown by the fact that the Slavic forms match the grammar of their Hebrew or Aramaic equivalents (Uličná & Polakovič 2013: 311ff.). There are no indications in the glosses that the 13th century Judeo-Slavic vernacular was different from the language of the non-Jewish population, as was later the case with Yiddish.

3. A few notes on spelling

The most important difference between the Judeo-Slavic glosses and Slavic glosses in the Latin alphabet is the way in which vowels are spelled. How the vowels in the Judeo-Slavic glosses are spelled depends on whether the glossator used diacritics (*nekudot*) to indicate vowels or not. When no diacritics were used, *matres lectionis*, i.e. the signs for the consonants *yod* (י), *waw* (ו), *aleph* (א) and *he* (ה), were used to write vowels. Whether or not diacritics were used differs per gloss, most glossators provide both glosses with and without diacritics. In the major sources of Judeo-Slavic glosses, *Or Zarua*, *Arugat ha-Bosem* and two works by Ḳara, the *matres lectionis* spell Slavic vowels in the following way:

Yod (י) is used to write front vowels (*e, i, y, ě, ä*):¹⁸⁸

מקוביצה <mkwbych> *makovicä* (OZ)

מיטלא <mytl'> *metla* (OZ)

קופיטו <kwpytw> *kopyto* (OZ)

מרישא <mryš'> *mrěža* (AB)

Waw (ו) is used to write the back vowels *o* and *u*:

קופיטו <kwpytw> *kopyto* (OZ)

פזוחא <pzwh'> *pazucha* (OZ)

Aleph (א) is used to write *a* at the end of the word:

פזוחא <pzwh'> *pazucha* (OZ)

He (ה) is used once to write *ä* at the end of a word:

מקוביצה <mkwbych> *makovicä* (OZ)

The spelling with diacritics distinguishes five vowels: *a, e, i, o* and *u*. Vowel length distinctions are not indicated in spelling. The vowel <a> is usually spelled with *patach* (◌), the diacritic for traditional Hebrew short *a*. There is one attestation of *kamats* (◌) i.e. traditional Hebrew long *ā*, but this is purely orthographical:

בילחא <bēlhā> *blecha* (OZ)

The indiscriminate use of *kamats* and *patach* should be viewed in connection with the fact that, around the same time, the two were used indiscriminately in northern France and the Rhineland as well (Weinreich 2008: A391, Kiwitt 2014: 34). The vowels [e] and [ä] are spelled with *tsere* (◌). Ḳara once uses *segol* (◌) instead:

¹⁸⁸ I would like to express my gratitude to Benjamin Suchard for valuable advice on transliteration.

נוגביצע <nogbēce> *nogavicě*

Cf. Or Zarua נוגביציי <nogavicē>. Here, too, the glosses follow the tradition of northern France, where *tsere* and *segol* are used indiscriminately. The vowel *-u-* can be spelled in two ways. In OZ and AB, there are four instances in which *-u-* is spelled with the diacritic *kubbuts* (◌) followed by *waw*:

פוטע <puṭēc> *pútec* (OZ)

מוטובוז <moṭobuz> *motovíz* (OZ)

שטולצע <šṭulcē> ?*štulcě* (OZ)

סוק <suḵ> *suk* (AB)

In the remaining examples, *u* is spelled with *waw* + *shuruk* (ו), e.g.:

פוטע <puṭēc> *pútec* (AB, פוטיץ in OZ)

פולו <polu> *polu* (OZ)

The reflex of *jat*' is written the same way as /e/, with the exception of the gloss

לדווינא <ldwryn'> *lādviena* (OZ)

If this is not a spelling mistake, יי may render [ie], the diphthongal realization of *jat*'. In *Or Zarua*, *l* is spelled <yl> (2x), i.e. *il* or *el*, and in spellings with diacritics *l̄* and *l̄* are spelled as <el> (1x) and <ir> (1x):

במוילנא <bmwyln'> *bamvl̄na* (OZ)

פילט <pylṭ> *pl̄t* (OZ)

בלחא <bēlhā> *bl̄cha* (OZ)

צטוירט, צטוירט <ctwirt, ctwiryṭ> *čtvr̄t* (OZ)

One wonders whether the spellings <yl>, <el> and <ir> point to the presence of a svarabhakti vowel before the /l/ (Kulik 2014: 136).¹⁸⁹ The same has been suggested for the gloss *dellgi* in the Old Czech/Church Slavonic Vienna glosses (Večerka 1965: 508f., Vintr 1986: 83f.). In the Old Czech/Church Slavonic St. Gregory glosses, vocalic /l/ is preserved, e.g. *zplznetze* 'labetur'. In *Arugat ha-Bosem*, there is one alleged example of a vocalic resonant. It is spelled <ri>:

גריבוסא <gribosa> 'hurry (?)' (AB)

The interpretation of this gloss is, however, uncertain. Bláha et al. (2014: 127 and 2015: 510f.) give two different interpretations, **grⁱbi s'a* and **grⁱnu s'a*, both departing from the assumption that <ri> reflects a vocalic resonant, which is very uncertain. There is also one Judeo-Slavic example of **l̄* spelled with *waw*. It occurs in a marginal gloss by

¹⁸⁹ I find Kulik's alternative explanation that these glosses might be South Slavic unconvincing, because it does not offer an explanation for the svarabhakti vowels and there is no other evidence for South Slavic elements in any of the glosses.

an anonymous copyist of one of Rashi's commentaries, dated by Harkavy (1865 = 2014: 353) to the 13th or 14th century:

בולקדלקי <vwlḵudlāḵi> *v(u)lkodlaky* 'beasts of the field'

The spelling of consonants is less problematic. The main feature not reflected in the Judeo-Slavic glosses is palatalization of consonants. To spell the Slavic sibilants and affricates *š*, *ž*, *č*, and *c*, the letters *shin* (ש) and *tsade* (צ) of the Hebrew alphabet were used, for *ž* sometimes also *zayin* (ז) (Bláha et al. 2015: 231ff.). The phoneme /v/ is spelled with ב, single ו or double װ. It is not entirely clear whether the spelling of /v/ is in at least some cases motivated by phonetics or the surrounding sounds. According to Dittmann (2016: 26), following Jakobson, there is a tendency "to record /v/ by ב only if ו in the same word denotes a vowel". In those cases in which we have a sequence /ov/, /uv/ or /vo/, /vu/ this is understandable, but it remains unclear why a non-adjacent vowel spelled with ו would prompt the glossator to use ב for /v/. The examples with ב for /v/ and non-adjacent ו are the following:

פוייב <poyēba> (AB)

קונביצי <ḵwnbycy> (OZ)

אוסביטיסא <osbitis'> (AB)

Cf. also אוסביטיסא <osvēṭiṭisa> (AB) with the diacritic *rafe* indicating that ב should be read as a fricative. The gloss קוטיני <ḵoṭwi> (AB) is written with *tsaf eht fo etips ni ו* that earlier in the word the same letter denotes a vowel, and in קברטי <ḵbartē> (OZ) ב is used in spite of the fact that the word does not contain ו. The latter might be a way of spelling the sequence /va/, which OZ spells with double װ in another gloss:

גלווטיצי <glwwticy> *glavaticě* (OZ)

Bláha et al. (2014: 140, 151 fn. 117) plausibly suggest that here the double װ may be a way of rendering bilabial [u]. Something similar has been suggested for the gloss *duua* with double *-uu-* in the Vienna glosses (Vintr 1986: 81f.), but Schaecken (1988: 477) reads *duua* as *dvva*. Cf. also the spellings וולטווא, וילטווא <wylṭww', wylṭww'> *Vltava*, *Viltava* for the Vltava river in other, undated texts (Bláha et al. 2015: 254) and טוורוג <ṭwrrwg> *tvarog* found in a text by Ḥayyim ben Isaac Or Zarua (13th c.), again before /a/. The gloss קונביצי mentioned above is problematic, because it is spelled in four different ways:

קונביצי, קונפיצי, קוביצי, קונביצי <ḵwnbycy, ḵwbycy, ḵwnpicy, ḵwpicy> *konvicě*, *kupicě*, *koficě*, *konficě*

If קונפיצי should be interpreted as a genuine form *ko(n)ficě* (cf. the discussion in Bláha et al. 2015: 268f., 436ff.), the language would have had the phoneme *f*, in which case it is quite possible that the phoneme /v/ was its voiced counterpart and could be realized as a voiced fricative (cf. Vaillant 1950: 26f.).

4. The provenance of the Judeo-Slavic glosses

A 13th c. copy of Ẕara's commentaries to the Haftarat contains what is probably the second oldest attested West Slavic sentence after Thietmar of Merseburg's *ukrivolsa* mentioned at the beginning of this paper:

טוליִקוּ בודי סטטי אנמיסא אי גיפיצי <toliko budi staṭi anēmisa i nēpēci> *toliko budi státy a neměj sā iné pēci!* (in the Old Czech interpretation of Bláha et al. 2014: 134f.) 'only be steadfast and have no other cares' (Kulik 2014: 134)

The same text by Ẕara also contains other Slavic glosses. The Slavic speaking Jewish students in northern France were from various parts of Slavic speaking Europe (Ibid.: 123), so the question which particular Slavic vernacular is represented in the glosses will have to be established by analysing the glosses themselves. The following are relevant for the question which particular Slavic vernacular formed the source of Ẕara's glosses. We will assume that, unless there is clear evidence to the contrary, Slavic glosses in the same text go back to a single source and a single vernacular. The readings are based on Kupfer & Lewicki (1956: 109ff.) and Bláha et al. (2015):

מידלו <mydlw> *mydlo* 'natron'

בילידלו <bylydlw> *bělidlo* 'alkali'

The cluster *dl* in these glosses points to West Slavic origin (Bláha et al. 2014: 122). Non-Polish origin is suggested by the absence of a trace of the original nasal vowel in the following gloss (Ibid.: 121):

אוגלי <'wgly> *ugle* 'coal'

Bláha et al. (l.c.) also rule out Sorbian origin on account of the absence of a prothetic glide, cf. Upper Sorbian *wuhlo*. However, this argument is invalid in view of the general absence of a prothetic glide in Sorbian toponyms that are attested from the 11th until the 14th century (Schaarschmidt 1997: 51f.).

קובילא <kwbyl> *kobela* 'bag, basket'

This word is a borrowing from Middle High German *kobel*. In Old Czech, the borrowing is otherwise attested as *kabele*, while variants with *-o-* are found in Upper Sorbian *kobjel*, Lower Sorbian *kobjela*, Old Slovak *kobela* and Old Polish *kobiel(a)* (cf. Newerkla 2011: 344f.). The form with *-o-* might once have existed in Bohemia, too.

מושט <mwšt> *mošt*

Reinhart (2000: 169) states that the latter word can hardly be from Czech, because it is not otherwise attested in older Czech. The word for 'must' was borrowed from Middle High German into Czech, Polish, Upper Sorbian, Ukrainian, Slovenian and Croatian. In other Slavic languages, similar words exist, but they are borrowings from other sources than Middle High German (cf. Bezljaj 1982: 196). The word is attested as *moszcz* in Old Polish and as *mosht* in 16th century Slovene, and it could have been present as **mošt* in Bohemia as well. The absence of the word in later Czech sources would

then be due to replacement or coincidence. Five more glosses are found in Ẕara's commentaries on the Prophets and Job. Three are of interest to us:

אודיזא <'wdyz> *odeza* 'mantles'

The *-z-* < Proto-Slavic **-dž-* points to Czech or Sorbian provenance. The word is not otherwise attested in Czech or Sorbian. Kulik suggested that the word should perhaps be read as *odeža*, in which case it could be East Slavic.

מוניסטא <mwynst> *monista* (also with diacritics but corrupted מוניסטא <monistš>)

This word is interesting because it is well-known in East Slavic but not otherwise attested in West Slavic, except in Polabian *mūmajstū* 'bead, pearl', with assimilation from **monisto*. Ẕara's gloss, the Slavic plural מוניסטא, translates the Hebrew plural שחרנים 'necklace', lit. 'crescents', describing it as coloured beads on a string (Kupfer & Lewicki 1956: 111).

פלינקא <plynk> *plenka*

This word cannot be East Slavic, because in that case we would have expected **פלינקא* <pylnk> **pelenka* (Kulik 2014: 132, Dittmann 2016: 19). This means that in this text of Ẕara's, too, the glosses are from either Czech or Sorbian (or a submerged West Slavic dialect similar to Sorbian). We cannot be more precise, because the differences between these languages were small at the time. The fact that the words מושט, קובילא and מוניסטא do not occur in other Old Czech sources is noteworthy but not conclusive evidence against Old Czech origin.

Jakobson & Halle (1964 = 2014: 479) insist that, with the exception of a few clearly East Slavic forms, the Canaanite glosses are "Czech solely", a viewpoint also argued for by Bláha et al. (2014: 122) and, in more detail, Dittmann (2016: 19ff.). As Kulik pointed out (2014: 124f.), it is reasonable to assume that glosses in one particular work are all Czech if some of them can be shown to be Czech, but the fact that works by some authors contain indisputable Czech glosses does not mean that Slavic glosses in works by other, or, in the case of Ẕara's glosses, even the same Jewish authors, need to be Czech as well.

One of Rashi's glosses is of interest here, because it concerns a lexeme of otherwise limited distribution:

אוקרין <'wkrjn> 'water vessel'

This gloss can be from Bohemia (cf. Old Czech *okrin*), but also from Moravia or the eastern parts of present day Germany (cf. LSorb. dial. *hokšin*). It is not attested in East Slavic, and in South Slavic only in the Old Church Slavonic hapax Lsg *okrině* (Euch.). Most other Slavic glosses in copies of Rashi's work are marginal glosses that were probably inserted later by copyists. It has been argued that of these marginal glosses at least one is East Slavic because it contains <o> as the reflex of **b* (but cf. also Slk. *doska*):

דוסקא <doska> 'board'

One might argue that for historical reasons it is likely that Kara's and Rashi's sources were from Bohemia: the earliest evidence for Jewish presence there is from the 9th century and there is plenty of evidence for a scholarly tradition in Prague in the late 12th century, with scholars like Isaac ben Jacob ha-Lavan, who was a pupil of Rabenu Tam in France, as well as the other scholars listed by Dittmann (2016: 19). For other parts of Slavic speaking Central Europe, evidence of Jewish presence is found only later or there is no evidence for an early scholarly tradition (Beider 2014: 65f.). This is, however, an *argumentum ex silentio*. Moreover, it is known that some of Rabenu Tam's pupils were from other parts of eastern and central Europe than Bohemia, e.g. Moses of Kiev (JEnc. VII: 39; Kulik 2014: 123). In fact, we will see that the linguistic data suggest that in at least one text associated with Bohemia the glosses cannot be Old Czech.

The text in question is *Arugat ha-Bosem* by Abraham ben Azriel, considered to have "probably lived at Prague" (JEnc. I: 98). His glosses, like those of Kara, are from a West Slavic language in which the nasal vowels developed into **ǣ* and **u*. There is general consensus that the glosses are Old Czech (cf. Kulik 2014: 125, 136). There is, however, one feature that forces us to conclude that the glosses are not Old Czech: the change *e* > *o* after a palatal consonant:

דלוק <dalok> דלוקו, דלוק <dalokō, dalok> *daloko, dalok*

דנוס <dnws> *dnjom*¹⁹⁰

חבושתישצו <ḥbwštišcw> *chvoštiščo*

The loss of the nasal vowels in combination with the change *e* > *o* after a palatal consonant and before a non-palatal consonant indicates that the glosses in *Arugat ha-Bosem* are from 13th century Sorbian or a closely related Slavic dialect (cf. USorb. *daloko, dnjom*, 18th c. *kooschczischczo*, LSorb. *daloko, dnjom, koščiščo*).¹⁹¹ The change *e* > *o* is not found in Old Czech. Sorbian toponyms date the change to approximately the 12th century (Schuster-Šewc 1996, Schaarschmidt 1997: 86). Altbauer (*apud* Dittmann 2016: 23) has already argued for Sorbian origin of דלוק <dalok> and דלוקו <dalokō> on account of the their spelling with *ř*. Dittmann (l.c.), who argued for Czech origin for the glosses in *Arugat ha-Bosem*, did not accept Altbauer's analysis and assumed dittography in דלוקו, which would then stand for **daleko*. Not only does this leave דלוק unexplained, it also ignores the structural character of the occurrence of <o> or <w> for **e* in *Arugat ha-Bosem*. Bláha et al. (2014) considered דנוס and חבושתישצו to be spelling mistakes. They further argue that Sorbian origin is impossible for the infinitive אוריט <'wbyṭ> *objat*' (Ibid.: 121), because it appears to lack the Sorbian assibilation of **t*' to

¹⁹⁰ Final -s is a copying mistake due to the similarity between final *mem* (-m) and *samech* (-s).

¹⁹¹ The gloss חבושתישצו <ḥbwštišcw> *chvoštiščo* shows initial *chvo-*. In such sequences -v- is regularly lost in Sorbian, cf. USorb. 18th c. *kooschczischczo*, LSorb. 17th c. *chwoschzischzio, choschischtscho*. The first signs of this loss are found in 12th c. toponyms (Schaarschmidt 1997: 129), but forms with *chvo-* are still found in later centuries as well.

ć. This argument is unconvincing. The assibilation in question first turns up in Sorbian toponyms in the 13th century, i.e. around the time of writing of the *Arugat ha-Bosem* (Schaarschmidt 1997: 98). To Abraham ben Azriel, the final consonant of אוריט was apparently a palatal [ʃ] or [tʃ], still distinct from **c* and **č*, which he writes with *tsade* (צ).

The conclusion that Abraham ben Azriel's mother tongue was Sorbian is not as surprising as it might seem. He is known to have been from Bohemia (Bláha et al. 2015: 504) and 13th century Bohemia included Upper Lusatia, which had been under Bohemian rule since the year 1076. Because Lower Lusatia was not part of Bohemia in the 13th century, it seems most likely that Abraham ben Azriel's Slavic was (Old) Upper Sorbian. We have seen above that Kara's Slavic informant(s) may have been speaking (Old) Upper Sorbian as well.

There are a few other cases in which there are indications that one or more Judeo-Slavic glosses do not represent Old Czech. An uncontroversial example of an East Slavic gloss is found in *Sefer ha-Shoham* by Moses ben Isaac ha-Nesi'ah in a quote from the 12th scholar Isaac of Chernigov (Bláha et al. 2015: 173, Kulik 2014: 119f.):

יבום <ybw> **jebem* 'we copulate'

Two other glosses which probably are not Old Czech are the following:

דוסי <šṭrnyy dwsy> *črnie dusi* (Eliezer ben Nathan, "Ra'aven", Mainz 1090–1170)¹⁹²

טרבונו <trēbono> *treb'ono* (Mainz Talmud commentary, 11th c., Gershom Me'or ha-Gola, oldest ms. from 1292)

Kupfer & Lewicki (1956: 132f.) identify the former as possibly Old Russian because of the lack of contraction of -ie, which would also explain the <s> in *dusi*, where one would expect *<š> in West Slavic (Kulik 2014: 136). Kupfer & Lewicki (Ibid.: 27) identify the gloss from the Mainz Talmud commentary as Polish because of the apparent umlaut of -eno to -'ono. Because the same umlaut is found in Sorbian (Schaarschmidt 1997: 34), טרבונו could also be Old Sorbian. In modern Upper Sorbian, the participle suffix was generalized as -en- from case forms in which the ending contained a front vowel. Kulik (2014: 126) suggested that טרבונו should perhaps be interpreted as an adjectival form **trēbno*, with <o> as a reflex of the *yer*. This seems unnecessary and it requires the additional assumption that the original front *yer* had undergone umlaut to a back vowel to explain the spelling with <o>.

Jakobson & Halle (= 2014: 479), on the other hand, argued that טרבונו must stand for *trēbeno* (OCz. *tříbeno*), because another gloss in the Mainz commentary, טיג <tyg> *těg?*, which translates Aramaic ערקומא 'tarsal bone', would be identifiable as Czech. They refer to Old Czech *těh, tieh* 'knee joint', a form without an etymology or known

¹⁹² Eliezer ben Nathan's second gloss, דיגטי, דיגט <dygt, dygyty> *degat?*, is inconclusive with regard to its provenance.

cognates. I have not been able to find the Old Czech word in the sources available to me, but the semantic difference with the Hebrew casts doubt on this interpretation. According to Kupfer & Lewicki (1956: 31), we should perhaps read *[s]teg, referring to the Slavic root *steg- ‘pole, pivot, axle’. It seems best to ignore the gloss טיג altogether. Another gloss in the Mainz commentary, פלצא <plc’> *pleča*?, according to Dittmann (2016: 21) “perfectly corresponds to a reconstructed Czech form”. The gloss, if correctly interpreted, can only reflect a plural *pleca or *pleča, which could as easily be from, e.g., Old Polish or Old Russian as from Old Czech.¹⁹³ Because the Aramaic equivalent stands in the singular, Kulik (2014: 126) reads the gloss as *plečo*, with final *aleph* standing for *-o* as sometimes happens in Romance glosses. This interpretation would point to Russian (*plečo*) or Sorbian (Upper Sorbian *pleco*, Lower Sorbian *placo*) origin. Finally, the Mainz commentary gloss כמיל <kmyl’> *xmel* could be from any Slavic language (Kulik, l.c.). We can conclude, with Kulik (l.c.), that the exact provenance of the glosses in the Mainz commentary is unclear, but, if we take טרבונו <trebono> at face value, Polish or Sorbian(-like) origin seems most likely.

Like Jakobson & Halle, Dittmann (2016: 23) interpreted טרבונו <trebono> as Old Czech and explained the first *ı* as a result of dittography. This seems rather unnecessary, cf. the discussion of the alleged dittography in the gloss דלוקו <daloko> above.

Summarizing, while the glosses in Or Zarua can be identified as Old Czech without doubt, those in the other sources cannot. The glosses in Arugat ha-Bosem reflect 13th century (Upper) Sorbian or a closely related dialect. The glosses in the Mainz commentary probably reflect Polish or Sorbian, but this is not entirely certain because it depends on the interpretation of a single gloss. The glosses in Kara’s commentaries to the Haftarat and in his commentaries on the Prophets and Job are Sorbian or Czech, the former being slightly more likely, because two of the glosses are of lexemes that are attested in later Sorbian, but not in Czech.

5. The Judeo-Slavic glosses and the historical phonology of Czech and Sorbian

5.1 The nasal vowels

The Proto-Slavic nasal vowels preserved their nasalization in Czech until at least the 10th century, as the names *Wenceslaus* and *Suentopulcus* show us (Lamprecht et al. 1986: 45). In Sorbian, the earliest toponyms that attest to loss of nasalization are from the 10th century (Schaarschmidt 1997: 54). In 14th century Old Czech, the nasalization had been lost and the resulting vowels had undergone further developments, e.g. *maffo* < **męso*, but *knyez* < **kъnędzъ*. The loss of nasality is also observed in the 12th century Vienna glosses and St. Gregory glosses, e.g. *poztideli ze zut* [postiděli s’ä sūt] < **sę sptb*. The spelling of *censto* [čensto] (GG, but JG *ce<s>to*) with a nasal can probably be explained as a Church Slavonicism (cf. Schaecken 1989: 186). The fact that the reflex

of **ę* was spelled with <e> in the Vienna glosses was analyzed by Jagić as a result of Old Croatian influence. This was accepted by Hamm (1952), who argued that the glosses were written by Duh, the first bishop of Zagreb, who was probably of Czech origin. Trávníček (1948: 164f.), on the other hand, argued that the spelling <e> stands for a low front vowel [æ], the 12th century reflex of **ę*, preserved as such in present-day Slovak. This explanation is less complicated than that of Jagić and Hamm and in line with what we know about the development of **ę* in Old Czech. Particularly telling is the gloss *uednuunt* [vädnúť] < **vęd-*, which spells the reflex of the nasal vowel with <e> and preserves the cluster *-dn-*, a feature which unequivocally points to Czech origin (cf. Vintr 1986: 88). In the Hebrew glosses, too, the nasal vowels had lost their nasality (Bláha et al. 2014: 121). In the *Arugat ha-Bosem*, **ę* is reflected as <a>, which represents [ä], e.g.

מנוזסא <mnozasa> *množä sä* (AB)

קנזסטבו <knazstvo> *kněžstvo* (AB)

סא <sa> *sä* (AB)

There is one case in which the vowel is spelled with *yod*, which betrays the fact that we are dealing with a fronted vowel:

סטפיצי <stpicē> *stpicä*

The *Or Zarua* renders **ę* with a front vowel in four examples:

פיוצי <pywcy> *pijavicä*

נוגביצע <nogbēce> *nogavicä*

גלווטיצי <glwwtycy> *glavaticä*

גוביצי <gwbycy> *gubicä*

In two other cases, however, no *mater lectionis* is used, as is normally the case with the vowel /a/:

פטא <pt’> *päta*

לדווינא <ldwyy’n’> *lädviena*

The spelling of פטא could be attributed to the Old Czech change **ä* > *a*, cf. Czech *pata*, but this is impossible for לדווינא, cf. Czech *ledvina*. It seems, therefore, that *Or Zarua* also preserved the front vowel reflex [ä] of **ę*.

5.2 The spelling and development of **ä*

The Czech umlaut **a* > **ä* after palatals was already under way in the 12th century, as evidenced by the Vienna glosses and St. Gregory glosses, e.g. *priztafe* [pristašä], *bife* [bišä] (VG), *ozuzaize* [osúzajä s’ä] (GG). Reinhart (2000: 170) suggested that the

¹⁹³ Note that Czech *plec* (f.) does not point to an older feminine form **plecě*, but is a back-formation from the old dual, now plural *pleci*.

spelling of the OZ gloss מקוביצה <mkwbych> *makovica* with final *he* shows that **a* after palatals was still distinct from other front vowels, cf. the examples at the end of the preceding section. Reinhart also adduced מרעשא <mreša> *mrěža* (AB) as an example with (absence of) umlaut of **a*, but since that form is from the *Arugat ha-Bosem*, it is (Upper) Sorbian and the absence of Czech umlaut is expected (cf. Old Czech *diežě*, but Upper Sorbian *džěža*, Lower Sorbian *žěža* ‘kneading trough’; **merža* has not been preserved in later Sorbian). This seriously weakens Reinhart’s case for the alleged preservation of the distinction between Old Czech **ę* and **a* in the Judeo-Slavic glosses.

The change **ę* > **ä* discussed in the preceding section is in all likelihood older than **a* > **ä* because the former is found in a larger area. In Czech and western Slovak, **ę* and **a* merged into **ä* (*holubě* < **-ę*, *ulice* < **ulicě* < **-a*), but in Upper Sorbian (*holbjo* but *wulica*) and part of central Slovak (*holúbä* but *ul’ica*, Krajčovič 1971: 60) they remained distinct. The Czech fronting of **a* can be dated to the 13th century, because this is when we find the first attestations with <e>, e.g. *berne* (*berně*, 1208), *tone* (*tuň*, 1222), *ielenye gora* (1241) (Lamprecht et al. 1986: 65). The *Chronica Boemorum* (1119–1125) has *-a*: *Lubussa*, *Brunica*, *Mza* (Ibid.), which could spell [ä]. In Czech, the merger of **ę* and **a* took place before the change **ä* > **a* before a non-palatal consonant except **k*, which in turn was earlier than the change **ä* > **ě*, cf. *ležeti*, supine *ležat* < **lež’ä-* < **leža-*, and *světiti*, *svatý* < **sv’ät-* < **svět-*.¹⁹⁴ Because it is unlikely that final *he* in הצבוקמ is meant to render final [a], which is otherwise consistently written with *aleph*, it probably renders [ä] and was identical to the final vowel of נוגביצע and פיוצי < **-ę*. The three different spellings merely reflect the uncertainty of the glossator how to write [ä].

5.3 Weak yers

In south-western West Slavic, weak yers in non-final position were lost in the course of the 12th century. In the 12th century Vienna glosses, weak yers in initial syllables are preserved and written as *i* (*ziblizni*, *cito*, *lize*, *zimocr*, *citbo*, *ni*, *zinimvm*) or *u* (*duua*) (Schaecken 1988: 477), cf. also the 12th century hydronym *Istobenize* < *(j)ьstьbьnikě (*Istbenik*) from north-western Slovakia (Krajčovič 1971: 53) and the 11th c. TN *Rubinicha* < **rybьnika* (*Raming*) from Upper Austria (Holzer 1996: 103f.). More to the north, several forms indicate that weak yers had already been lost by the beginning of the 11th century: *ukrivolsa* < **vbь kьri* (*u*)*olьša* (1012–1018), *Libzi* < **lib/pьc-* (*Leipzig*) (1015), both from Merseburg (Thietmar) and TN *Ostrusna* < **ostrožьna* (*Ostritz on the Neiße*) (1006, Schuster-Šewc 2006: 68).

There is little good evidence for a reflex of weak yers in the Hebrew glosses. The sometimes adduced מקו <mkw>, which translates Hebrew פרגין ‘sesame’, would stand for **maku* or **mako*, i.e. *makь* with a reflex of the weak yer in final position. The gloss is found in Rashi’s commentary and in the work *Arukh* by Nathan ben Jehiel (1101)

(Bláha et al. 2015: 588, 594). For the latter work, we have the alternative manuscript reading מקום <mkwm>, and for Rashi’s commentary מק <mk>, i.e. *mak* ‘appearing in this form in early manuscripts’ (Dittmann 2016: 21). Because of the variation in spelling, no conclusions can be based on the gloss מקו.

The 13th century glosses show no reflexes of weak yers. The *matres lectionis* are never found where a weak yer would be expected. In glosses with diacritics, a consonant before another consonant is written with a *sheva* (,), regardless whether the cluster originally contained a yer. The same spelling is also found at the end of the word, but less consistently:

מְפֹרְט <ctřwrt > *čtvrť* (OZ)

קְנָזְטְו <knazstvo> *knažstvo* (AB)

וִידְלָא <widla> *vidla* (AB)

מַמְסְט <masť> *mast* (AB)

There is one instance in which the diacritic *patach* is used instead of *sheva*, but this is probably a mistake:

קְוֵטְנִי <kwětani> *květný* (OZ)

5.4 The fricativization of *g

Mazon (1927) argued that the spelling of /g/ with *gimel* in the Judeo-Slavic glosses points to preservation of the occlusive character of the consonant (similarly Kulik 2014), but this cannot be maintained. The spelling with *gimel*, like the spelling with *g* in 12th c. glosses in the Latin alphabet and in Cosmas’ *Chronica Boemorum* (*Dragomir*, *Spytignev*), only indicates that in Old Czech the phoneme was still pronounced as a voiced velar fricative **ɣ* and not yet as a voiced glottal fricative (Reinhart 2000: 170, fn. 25, Dittmann 2016: 22). In a few glosses, the fricative nature of the velar is actually indicated with the help of the diacritic *rafe*, which indicates that a consonant should not be read as an occlusive but as a fricative (Bláha et al. 2015: 258):

יַגֹּדִי <yagodi> *jagody* ‘strawberry’ (OZ)

גְּלִיזְט <glězť> *glezno* ‘ankle’ (OZ, גְּלִיזְנו <gleznu> for the same body part in another ms.)

קְרוּג <kruγ> *krug* ‘pair of compasses’ (Rashi’s commentary, marginal gloss)

Because the last gloss is a marginal gloss, it seems unlikely that the gloss goes back to Rashi himself. It should rather be ascribed to a copyist. These three glosses show that the fricativization took place no later than the first half of the thirteenth century. In fact, there are good arguments to think that the fricativization of **g* took place much earlier (cf. Trubetzkoy 1988: 279f.). The geography of the change **g* > **ɣ*, which took place in southern East Slavic, southern West Slavic and north-western South Slavic, indicates

¹⁹⁴ Cf. Lamprecht et al. (1986: 61–64) with a slightly more complicated scenario.

that the change must have taken place at the end of the Common Slavic period, which pushes it back into the 9th century. The same absolute chronology is also suggested by the fact that in parts of this area the fricativization of *g was anterior to the loss of weak yers (Andersen 1969). There are only few attested forms before the 13th century that can corroborate this early date. There is one attestation of the name *Bohuslaus* (1169), which can hardly be dismissed as “foreign spelling”, as was done by Lamprecht et al. (1986: 83). Secondly, there is the gloss *hreho* in a manuscript kept in the Zentralbibliothek in Zurich. This gloss has been interpreted as Nsg or Gpl *grěxъ and may be as old as the beginning of the 9th century (Nievergelt & Schaeken 2003). Its initial *h-* may reflect a fricativized *g (Ibid.: 270). Finally, there is one early Judeo-Slavic gloss that was argued to confirm the non-occlusive pronunciation of /g/:

שניר <šnyr> *sněy?* ‘snow’ (Rashi)

The idea was that Rashi wrote שניר to render a voiced fricative [ɣ], cf. Old Czech *snieh* (Altbauer 1928). Altbauer assumed that in Rashi’s native 12th century (Judeo-)French, /r/ would have been a guttural sound. It seems more likely, however, that it was realized as an alveolar trill at the time (Kiwitt 2014: 34), cf. Judeo-French *malbre* for *marbre* and *albre* for *arbre*, with a dissimilation of *r* to *l* (Kiwitt & Dörr 2016: 145f.), which is best understood if /r/ was an alveolar trill. Also detrimental to Altbauer’s analysis is the fact that it is uncertain that שניר is actually supposed to reflect a Slavic word, even if Rashi says that it is from the לשון כנען (*lešon Kena’an*). Olszowy-Schlanger (2013) argued that, in this case, *lešon Kena’an* probably refers to the language of Biblical Canaan instead.

We may conclude that comparative evidence points to a fricative pronunciation of *g in central Slavic from the 9th century onwards, but that the textual evidence for it is scant until the 14th century.

6. Conclusion

The Judeo-Slavic glosses are an important source for the study of early Slavic. The vast majority of glosses can be identified as West Slavic. Isaac ben Moses’ *Or Zarua* contains Old Czech glosses. Abraham ben Azriel’s *Arugat ha-Bosem* contains Old (Upper) Sorbian glosses. The glosses in Kara’s commentaries to the Haftarat and on the Prophets and Job can be from Old Czech or (a now extinct dialect similar to) Old Sorbian. The glosses in the Mainz commentary are probably from Old Polish or (a now extinct dialect similar to) Old Sorbian. The Judeo-Slavic glosses help us to determine that by the middle of the 13th century, Old Czech and Old Sorbian had lost the weak yers, *g was realized as a voiced velar fricative, *g had become *ä and in Old Czech it had merged with *a after a palatal consonant.

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