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Slavic numerals in the Heiligenkreuz Codex from the third quarter of the 12th century (Heiligenkreuz OCist., Cod. 250) in the context of Alpine Slavic and Early Slovenian

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1 This article is the author’s response to the contribution in Lewaszkiewicz & Wydra 2021 and is based predominantly on the publications in Šekli 2014, 2018a, 2018b, 2021, 2022a and 2022b. For a more detailed discussion on the historical linguistic context of Slavic numerals in the Heiligenkreuz Codex and the linguistic interpretation of the numerals themselves, cf. Šekli 2022a and 2022b. I am deeply grateful to Prof. Dr Vera Smole, Prof. Dr Jožica Škofic, Associate Member of Slovenian Academy of Sciences and Arts, and Acad. Prof. Dr Marko Snoj for their careful reading of my contributions in Šekli 2022a and 2022b as well as for their constructive suggestions. However, I assume full responsibility for possible errors in my texts.
1. The discovery of the Slavic numerals 1 through 10 in the Heiligenkreuz Codex from the third quarter of the 12th century

In last year’s edition of Rocznik Slawistyczny (n. 70, 2021), the Polish linguists Prof. Dr Tadeusz Lewaszkiewicz and Prof. Dr Wiesław Wydra published a scientific article with the title „Słoweńskie/karynckie/podjuńskie” (?) liczebniki w łacińskim rękopisie z trzeciej ćwierci XII wieku (Heiligenkreuz, Cod. 250) / “Slovenian/Carinthian/Jaun Valley dialect” numerals found in a Latin manuscript dated to the third quarter of 12th century (Heiligenkreuz, Cod. 250). The Latin codex was produced in the Cistercian monastery at Heiligenkreuz in the Vienna Woods (German Wienerwald) in the third quarter of the 12th century and is kept in the library of that monastery under the signature Heiligenkreuz OCist., Cod. 250. It consists of 181 individual folios of parchment and contains two works, viz. Collationes (Conlationes) (patrum), pars I–III (folios 1–167r) of John Cassian (Johannes Cassianus) (c. 360 – c. 435 AD) as well as Contra collatorem, cap. 13–22 (folios 169–181v) of Prosper of Aquitaine (Prosper Aquitanus) (c. 390 – after 455 AD). Page 168r is blank. Moreover, page 168v contains a sort of impressum, written in a mirror image (i.e. from right to left), asserting the codex was owned by the monastery at Heiligenkreuz. It is followed by an anathema, a postscript threatening that everyone who would not respect this fact would be banished. A set of numerals 1 through 10, each fully written out, that appear as catchwords at the bottom of pages 8v, 16v, 24v, 32v, 40v, 48v, 56v, 64v, 72v and 73r, dates back to the time of the production of the codex. The numerals are indubitably of Slavic origin. They are written out in two parts, namely to the left and right of a Roman numeral, most probably representing ordinal numerals I through X. To illustrate, ET.I⁹.NO. (8v), where I⁹ = primum ‘the first’ and ET.I⁹.NO. = ETNO. In the article cited above, the authors provide a graphematic and linguistic analysis of the newly discovered Slavic linguistic material, whereby they affirm that the exact genealogical linguistic attribution of the language of the Heiligenkreuz numerals is not possible\(^3\). On the basis of some linguistic features of the numerals (namely, the nasal reflex of the Proto-Slavic nasal vowel *ę, the cardinal numeral edno and the ordinal numeral tretji), the two scholars are inclined to recognize a variant of Slovenian in them, more precisely, one of its Carinthian dialects, most likely the Podjuna/Jauntal dialect, as this Slovenian dialect has retained the old nasal vowels

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\(^2\) This text was written using the ZRCola input system (http://zrcola.zrc-sazu.si), developed at the Research Centre of the Slovenian Academy of Sciences and Arts in Ljubljana (http://www.zrc-sazu.si) by Peter Weiss.

\(^3\) “Przeanalizowane zapisy liczebników dotyczą niewątpliwie liczebników słowiańskich, ale jednoznaczne wskazanie konkretnego języka słowiańskiego nie jest możliwe” (Lewaszkiewicz & Wydra 2021: 81).
until the present day. However, they do not exclude the possibility of the linguistic basis of the numerals being Polish either.

The Slavic numerals 1 through 10 in the Heiligenkreuz Codex from the third quarter of the 12th century are undoubtedly the most important discovery of new historical linguistic material in Slavic studies in recent times. The great credit of the discovery goes indisputably to the two Polish linguists. However, their statement that the exact attribution of the numerals to a concrete Slavic language is not possible poses a huge challenge to Slavic historical comparative linguistics. Linguistic material permitting, it is in fact historical comparative linguistics (as a part of genealogical linguistics) with its exact methodology that is able to establish the exact genealogical linguistic affiliation of a given linguistic system. In the 1870s, the Leipzig Neogrammarians came to the correct conclusion that sound change is by far the most systematic process among the changes that can affect a given language (cf. the Neogrammarian hypothesis of the regularity of sound change). Sound changes can be accurately captured by mathematically precise rules (rather appropriately, the Neogrammarians called them Lautgesetze, i.e. sound laws). As such, the historical phonology of a language is undeniably the most important criterion for an accurate genealogical classification of languages. The morphological criterion as well as syntactic and lexical features may complement this, but only if the areas of innovation in the other domains overlap with those involving sound change4.

This article aims to provide a genealogical linguistic attribution of the Slavic numerals in the Heiligenkreuz Codex. Firstly, the language of the newly discovered numerals is historically contextualized through what is known of the Slavic language in the Eastern Alpine and the western Pannonian regions in the period between the mid-6th and late 12th centuries. Furthermore, contemporaneous Slavic idioms to the immediate south and the immediate north of that linguistic area are considered as well. In this context, particular attention is paid to the language of the Freising Fragments (Slovenian Brižinski / Freisinški spomeniki), with a controversy over its linguistic affiliation still persisting in some scholarly works up to the present day. Secondly, through careful consideration of the historical phonology underlying the attested forms first divested of graphemic peculiarities and subjected to phonetic interpretation, the contribution arrives at a genealogical linguistic attribution to the particular Slavic language to which these numerals must belong.

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The locality of Heiligenkreuz happens to be situated in the Vienna Woods. It thus lies in the broader Eastern Alpine region along the Danube River, stretching from Traungau in the west to the western outskirts of the Pannonian Basin in the east. In the period from the second half of the 6th to the end of the 12th century, this territory was, to a great extent, part of the Slavic linguistic area. The Slavic settlement of the region took place in the second half of the 6th century, in two migration waves. After c. 550 the Slavs started to occupy their future “homeland” from the north-east (i.e. from the later West Slavic area) along the Danube and its tributaries, while in c. 585 immigration from the south-east (i.e. from the later South Slavic area) along the Sava River and its affluents took place, the latter together with and under the rule of the Avars. The first historical records of the Slavic presence in the Eastern Alps date back to the end of the 6th century and refer to the area along the upper course of the Drava/Drau River. Specifically, according to *Historia Langobardorum* ‘History of Lombards’ (IV, 7) by Paul the Deacon (Paulus Diaconus) (c. 720/730–799), a Lombard historian from Cividale/Cividát/Čedad, Duke Tassilo I of Bavaria (591–610) broke into the *Sclaborum provincia* ‘the region of the Slavs’ in c. 592, referring to the area in the vicinity of the ancient *Aguntum*, i.e. a Roman *municipium* near the present-day town of Lienz (Kos 1902: 144–145). However, after the Frankish-Avar wars (791–803), which saw the Eastern Alps come under the domain of the Franks, the Bavarians started to populate the land (south-)eastwards from Bavaria. In this way, Alpine Slavic came into direct contact with Bavarian Old High German. In the following centuries, the progressive recession of Slavic in favour of Bavarian can be clearly observed. The last attestations of the presence of the Slavs and their personal names in the area between Traungau and the Vienna Basin (German *Wiener Becken*) date back to the second half of the 12th century (cf. *Liuboszta Sclava, uxor Laztei de Sippach* [...], *Laztey sclavus* ‘the she-Slav Liuboszta, wife of Laztei from Sipbach [...], the Slav Laztey’ in the Necrologies of the Monastery of Saint Florian (Necrologia monasterii Sancti Floriani) (Sankt Florian in present-day Upper Austria), where *Liuboszta = *Ĺubosta, Laztei/Laztey = *Vlastěj*) (Kronsteiner 1975: 49, 85).

Mirroring the presence of different ethno-linguistic identities and the actual administrative organisation, the stretch of land along the Danube carried various...
denominations in written sources. In the decades following the Frankish-Avar wars, the area was still called *partes Sclavorum et Avarorum* ‘the area of the Slavs and Avars’ (805), *Avaria* (811) or *Sclavinia* (837) (Holzer 2001a: 24, 35; Kos 1906: 40, 100–101). Nonetheless, after the reformation of the Holy Roman Empire in 828, the whole area populated by the Slavs, encompassing the whole Eastern Alpine region, was organised into the Bavarian *plaga orientalis* (German *Ostland*) ‘eastern land’ (the Latin name is attested for the first time c. 870)\(^7\). Within this new administrative entity, the Eastern March (German *Ostmark*) was established along the Danube. In 976 *Luitpoldus*, i.e. Leopold I of Babenberg (976–994), became the *marchio* ‘margrave’ of this new *marcha* ‘march’, which was then ruled by members of the House of Babenberg up to their extinction in 1246. In 1133 Margrave Leopold III (1095–1136) founded the Cistercian monastery at Heiligenkreuz. The name of the march itself was attested for the first time in 996 as *Ostarrîchi* (> German *Österreich* ‘Austria’)\(^8\). Finally, in 1156 the March of Austria was elevated to the Duchy of Austria.

In the period from the second half of the 6th up to the end of the 12th century, the Slavic settlement area in the Eastern Alps and western Pannonia spanned the approximate area from the Danube in the north to the Adriatic Coast and the Kolpa/Kupa River in the south as well as to the western outskirts of the Pannonian Basin in the east\(^9\). This medieval Slavic-speaking area is solidly confirmed by several facts, viz. 1) the historical records of the time, all in Latin, attest to the presence of the Slavs in the Eastern Alps, providing the Latin denominations for them and their new homeland\(^10\), as well as the epichoric geographical and personal names of Slavic origin\(^11\); 2) the geographical names of pre-Slavic and Slavic origin integrated as loanwords from Slavic into Bavarian High German\(^12\); 3) the geographical names displaying the element *Windisch*– ‘Slavic’ (in the south later semantically narrowed to ‘Slovenian’, cf. the titles of the first two Slovenian printed books *Catechism In der Windischen Sprach* and *Abecedarium vnd der klein Catechismus In der Windischen Sprach*, published in Schwäbisch Hall in 1550 by Primož Trubar (1508–1586)) started to appear in written sources in the

\(^7\) “Diese *plaga orientalis* deckte sich also fast genau mit dem slavisch besiedelten Gebiet im bairischen Machtbereich” (Holzer 2007: 235).

\(^8\) Although most probably interlinguistic synonyms, the terms *plaga orientalis* and *Ostarrîchi* do not denote the same area. While *plaga orientalis* refers to the whole Eastern Alpine region populated by the Slavs, *Ostarrîchi* became limited to its stretch of land along the Danube.

\(^9\) Cf. the map *Slovenci po naselitvi* in Kos 1955: 75 (however, the denomination *Slovenci* ‘Slovenians’ is not appropriate for the period of the Early Middle Ages) as well as *Karte 167.2 Siedlungsnamen slawischer Herkunft in Österreich* in Wiesinger 1995 and *Karte 235.1 Slavische Gewässernamen mit dem Suffix -ica* in Udolph 1995: 1542.


\(^12\) Cf. Ramovš 1924 and 1936: passim; Snoj 2009: passim.
12th century, in the period when Slavs in the northern part of the Eastern Alpine region already constituted a minority in relation to the Bavarian population; the adjective is attested for the first time in 1111, cf. the place name Windisscendorf ‘Slavic Village’ near Eggenburg in the vicinity of the Schmide River, i.e. a northern tributary of the Danube in present-day Lower Austria (Kronsteiner 1975: 197–198); 4) the archeological evidence; 5) the so called *decima sclavonica* ‘the Slavic tithe’, documented for the period 800–1100; 6) the actual Slovenian linguistic area, which represents just the remanants of a once much larger Alpine Slavic / Early Slovenian speech territory.

3. The Slavic language in the Eastern Alps and western Pannonia in the period c. 550–1200

In the period between c. 550 and c. 1200, the Slavic language in the Eastern Alpine and western Pannonian regions developed gradually from Proto-Slavic to Slovenian. Taking into consideration the modelling of the linguogenesis and the internal linguistic history of Slovenian, the following Slavic chronolects (i.e. chronological varieties) and geolects (i.e. spatial varieties) can be defined: Proto-Slavic (c. 550–800) – Alpine (South) Slavic (c. 800–1000) – Early Slovenian (c. 1000–1200) – Dialectal Slovenian (c. 1200–). Early Slovenian was the common starting point of all Slovenian dialects and was, as such, not yet dialectally differentiated. At the beginning of the last period, i.e. c. 1200, Slovenian split at first into two main macrogeolects, viz. Northwestern and Southeastern Slovenian. Within these two original dialect continua, the Slovenian dialectal bases were gradually formed (by the end of the 14th century), which were (and still are) further splitting into dialects (some of them into subdialects) and their local varieties. In the following Alpine Slavic and Early Slovenian are briefly presented as mirrored in written sources.

Alpine Slavic and Early Slovenian are fragmentarily documented in several geographical and personal names dispersed through several contemporaneous epichoric documents written in Latin. Alpine Slavic turning into Early Slovenian is directly attested in the language of the *Freising Fragments* (Monumenta

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13 Cf. Reitinger 1980 and the other archeological articles in the publication *Baiern und Slawen in Oberösterreich* (Holter 1980) for the situation in the northwestern margins of the former Slavic settlement area (i.e. in present-day Upper Austria).
14 Cf. Tremel 1966, citation according to Kronsteinter 1975: 199.
15 Cf. Ramovš 1936: 1–2; Logar & Rigler 1983; SLA 1–(2) (2011–(2016)).
Frisingensia = MF) (c. 972–1039). As far as orthography is concerned, the Slavic attestations reflect the Bavarian High German writing system of the Bavarian scriptoria of the time. This means that the Slavic sounds were represented by the graphemic signs utilized for writing out the equivalent or similar sounds in Bavarian (Old and Middle) High German. To illustrate, the Bavarian spelling <ſ> for [ʃ/ʒ] was used to represent the Slavic palatals š, ž, č (Ramovš & Kos 1937: 6) (cf. MF naſ (II, 1) = naš ‘our’ < PSl. *našь; MF ſivuot (I, 9) = život ‘life’ < PSl. *životъ; considering č see the discussion of the numeral CeS.III9.TIRI. in section 5.). Furthermore, in the second and the third Freising Fragment, for example, some vowels were equipped with circumflex signs (cf. MF Npl m Tîge (II, 41) = tije ‘the same’ < PSl. *tiReducer; MF Nsg m ptc. praes. act. bdê (III, 32) = bdę ‘sleeping’ < PSl. *będę) marking long accented vowels in Old and Middle High German.

Alpine Slavic (c. 800–1000) is an intermediate chronolect between Proto-Slavic and Early Slovenian. The most important documents of this period happen to be two “collections of personal names”, viz. the Confraternity Book of the Abbey of Saint Peter in Salzburg (Liber confraternitatum Sancti Petri Salisburgensis) (784–907), consisting of two parts, i.e. the older Liber confraternitatum vetustior (LCv, pp. 4–44) and the younger Liber confraternitatum recentior (LCr, pp. 45–56) (Kos 1906: 256–257), as well as the Gospel of Cividale (Codex Foroiuliensis = CF) (9–10th century) (Kos 1906: 248–256). However, toward the end of the 10th century, the most important linguistic document of that period was produced, namely the already mentioned Freising Fragments. The codex contains three religious texts produced in the Carolingian minuscule. These texts were composed in the Ottonian era, probably between 972 and 1039, but most likely not after 1000 (Ramoš & Kos 1937: 7; Grdina 1992/2004: 23). The fragments consist of the following three texts: I Glagolite po naž redka sloveža = Glagolite po nas rědka slovesa ‘Say after us [these] few words’ (formula for confession), II Ecçe bi dëd naf ne zegrefil = Eče bi děd naš ne səgrĕšil

17 „Als ich zum ersten male unter Leskiens anleitung diese [Freisinger] denkmäler las, machte dieser auf verschiedene absonderlichkeiten der orthographie aufmerksam und vermutete, dass dieselben aus dem deutschen ihre erklärung finden möchten**). Die richtigkeit dieser vermutung war mir sofort klar; es liegt ja auch so nahe, dass der oder die verfasser, mit der damals für das ahd. üblichen orthographie vertraut, deutsche lautbezeichnungen auf das slavische anzuwenden suchten.

‘If our forefather had not sinned’ (sermon on sin and repentance), and III Iaz ze zaglagolo zlogeiu = Jaz se zaglagolo zlodějů ‘I renounce the devil’ (formula for confession). Using the theory and methodology of genealogical linguistics, the Slavic language of this codex can be defined as Alpine Slavic turning into Early Slovenian.

Alpine Slavic can be, in terms of relative and absolute chronology, clearly delimited both from Proto-Slavic, on the one hand, and Early Slovenian on the other. Its terminus post quem is represented by the Slavic liquid metathesis, datable to c. 800, with across-the-board vowel-lengthening in South Slavic, including the old-acuted and non-old-acuted anlauting sequence *oRC- (cf. the place name Labanta attested in 860 = *Labǫtъ (> Sln. Lábot, borrowed into German as Lavant, i.e. after the metathesis, but before the denasalisation) < PSl. *Olbǫtъ, an early integration of the substrate name Albanta (Ramovš 1936: 24, 27; Snoj 2009: 222, 80; Repanšek 2016: 119, 123), and the personal name Razemuzza attested in 864 at Krka/Gurk in Carinthia = *Rastimysla < PSl. *Orstimysla (Kos 1886: 133, 1906: 146–148; Kronsteiner 1975: 60), as well as the metathesized forms in MF such as razumeti (II 29) = razuměti ‘to understand’ (> Sln. razuměti) < PSl. *orzuměti, and Asg m anim. laʃna (II 44–45) = lačna ‘hungry’ < PSl. *olčšna). On the other hand, the terminus ante quem of Alpine Slavic could be represented by the South Slavic fronting of the Proto-Slavic middle high vowel *y, turning it into a front high vowel *i, and, above all, the common Slovenian simplification of the sequence *tv in some post-Proto-Slavic complex consonant clusters. Both sound changes are datable to c. 1000 and are documented in the language of the Freising Fragments, where they were still in progress. As far as the fronting of Proto-Slavic *y is concerned, y occurs only sporadically after labial consonants (written as <ui>, <ugi>, <u>) (cf. MF 2sg imper. muzlite (II 84) = myslite ‘think!’ < PSL. *myslite; MF buiti (II 42) = byti ‘to be’ < PSL. *byti), while in the majority of cases i seems to be attested (cf. MF biti (I 7, III 21) = biti ‘to be’ < PSL. *byti; MF Npl zinouue (II 16) = sinove ‘sons’ < PSL. *synove), the ratio between the two reflexes being 5 vs. 53 in favour of i. A similar process is to be found in the reflexes of the post-Proto-Slavic consonant cluster stv (cf. MF Nsg ptc. praet. act. ztioril (I 12) = storil vs. MF ztoriti (II 107) = storiti ‘to do, create, commit, make’ < PSL. *stɔ̚toriti, cf. Sln. storīti). As far as Proto-Slavic nasal vowels are concerned, Alpine Slavic undoubtedly attests to their presence (cf. the personal name Zunduco (LCv, 13) = *Sǫdъkъ (Kronsteiner 1975: 65)). However, in written documents they are not consistently marked. In fact, the Freising Fragments do not mark them systematically, consider MF Gpl m vuenʃih (I 23) = věʃjix ‘of bigger’ < PSL. *vęʃjixъ vs. MF zueti (II 89) = svęti ‘holy’ < PSL. *svętъjъ; MF 1sg praes.

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18 „Pisava z e in o brez n je deloma že zelo zgodnja, na drugi strani pa se tradicionalna en in on dolgo držita. Treba je poudariti, da se nosni izgovor večkrat ni grafično izrazil” (Ramovš 1936: 31).
poronſo (I 29) = porǫčǫ 'I give, I deliver' < PSl. *porǫčǫ as opposed to MF poruſo (III 61) = porǫčǫ 'I give, I deliver' < PSl. *porǫčǫ, and MF Asg m inanim. zodni (I 27) = sǫdni 'of judgement' < PSl. *sǫdnięь.

**Early Slovenian (c. 1000–1200)** is an intermediate linguistic stage between Alpine Slavic and Dialectal Slovenian. There are no texts preserved from this period. As in the previous period, the language is documented in epichoric proper names. The most important “collection of personal names” is represented by the *Seckau Confraternity Book* (*Liber confraternitatum Seccoviensis = LCS*), which was produced in the Benedictine monastery in Seckau (German *Seckau* originates from Early Slovenian *Sěkova*) in Upper Styria in the second half of the 12th century, most probably after 1180 (Kos 1913; Kos 1915: 471–475). Early Slovenian shows further linguistic changes towards contemporary Slovenian. However, these changes are still common Slovenian, i.e. characteristic of the whole past and current Slovenian linguistic area. Common Slovenian linguistic changes predominantly encompass accent changes, which, however, are not discernible from medieval texts, which are provided with no accent signs. The *terminus ante quem* of Early Slovenian can be set before the denasalization of the Proto-Slavic nasal vowels *ę* and *ǫ* in Southeastern, but not in Northwestern Slovenian, where the nasals were preserved. In fact, they are retained in a part of the Podjuna/Jauntal dialect in Carinthia up to the present day (cf. Zdovc 1972: 74–85). Thus, the denasalization in the southeastern part of Slovenian denotes the beginning of the dialectal fragmentation of Slovenian into the two dialect areas already mentioned above.

An in-depth analysis of all the sparse, but very important linguistic fragments confirms a relative linguistic uniformity of the Slavic language in this span of time in the whole Eastern Alpine (as well as, most probably, in the western Pannonian) region. During the 11th and 12th centuries, the Slavic speech territory still spanned the approxiamate area from the Danube in the north to the Kolpa/Kupa in the south. Early Slovenian can be defined on the basis of some specific linguistic features, predominantly in the domain of phonetics but not disregarding morphology and lexicon either. These specific linguistic phenomena, be they archaisms or innovations, delimited Early Slovenian from the adjacent Slavic geololds present to the north and to the south of that linguistic area, i.e. from the language later developing into Czech and Slovak on the one hand and the Central South Slavic continuum, more specifically Kajkavian and Čakavian, on the other.

Divested of the “Bavarian High German” graphemic peculiarities in the written sources of the period in question, the linguistic features that carry diagnostic value for the geolinguistic delimitation and, consequently, genealogical definition of Early Slovenian are as follows: 1) the South Slavic reflex of liquid metathesis displaying vowel lengthening in the metathesized Proto-Slavic non-old-acuted anlauting sequence *oRC*- (cf. the place-name *Rauna* attested in 1108–1125 (> German *Ranna* in the vicinity of Mühldorf near Melk) ← *Раўна* (Anreiter 2015: 471–475).
(114) < PSl. *Orvъna ← *orvъnъ ‘level, even, flat’ and the 12th-century attestation of the personal name Raztegoy at Leoben (Kos 1913: 19; Kronsteiner 1975: 59) = *Rastigoj < PSl. *Orstigojъ ← *orsti ‘to grow’; 2) the Slovenian and Central South Slavic reflex of the Proto-Slavic palatal *í yielding *í (> *č > *č), which was integrated into Bavarian High German as k, hence the graphemic representation of Slavic *í by Bavarian <c, k, ch, ck> (Ramovš 1924: 265–268, 1936: 51) (cf. PSl. *Pečane ‘inhabitants of rocks’, Lpl *Pećah ← German Pöckau ‘Peče/Pöckau (in Carinthia)’ (Ramovš 1936: 52; Snoj 2009: 303; Zdovc 2010: 82); 1170 Tobiric (Wiener Neustadt) (Kronsteiner 1975: 32) = *Dobrič < PSl. *Dobrićь; 1170 Zverich (in present-day Upper Austria) (Kronsteiner 1975: 89) = *Zvěříčь; 3) the completion of the South Slavic fronting of the Proto-Slavic middle high vowel *y, resulting in the front high vowel *i in all positions (as demonstrable for the 12th century by the likes of Mabilka, which was attested at Kremsmünster (Kronsteiner 1975: 50) and must be interpreted as *Mabilka ← PSl. *Domabylъka); 4) the completion of the common Slovenian simplification of the Proto-Slavic sequence *tv in some complex consonant clusters (cf. Tridislav at Sankt Michael, upper part of Styria, documented in 1188 (Kos 1886: 141, 1915: 372; Kronsteiner 1975: 78) and indubitably spelling *Tvrdislov < PSl. *Tvъrdislavъ); 5) the perseverance of Proto-Slavic nasal vowels (cf. the 12th-century attestation of the name Zwento at Sankt Florian (in present-day Upper Austria) (Kronsteiner 1975: 73) = *Svęt < PSl. *Svętъ; 6) the South Slavic form of the pronominal stem *seb‑ (reduced to *se‑) ‘of oneself’ (cf. the personal name Zebon (Kos 1906: 83; Kronsteiner 1975: 61) = *Sebonь attested in 827 in Puchenau (in present-day Upper Austria), which continues the PSl. *Sebonь, a hypocoristic form of the compounds with the *sebě‑ element); further examples: 864 Zebedrach (Krka/Gurk), 1134 Zebdrach (Otmanje/Ottmanach in Carinthia) (Kos 1886: 134, 1906: 147, 1915: 73; Kronsteiner 1975: 60) = *Sebědragъ < PSl. *Sebědorgъ); 7) the South Slavic form of the adjective *toplъ ‘warm’ (cf. the German place name Döbling (Vienna) deriving from *Toplikъ ← SSl. *tophь (Anreiter 2015: 76)).

The two features that carry irrefutable diagnostic value for the delimitation of Early Slovenian from the adjacent Slavic geolects present to the north and to the south are the common Slovenian simplification of some complex clusters involving *tv and the retention of Proto-Slavic nasal vowels. This is because both Czecho-Slovak and Kajkavian-Čakavian linguistic areas feature a perseverance of the consonant cluster *tv (cf. the personal names Old Czech Turdimir (12th century) = Tvrdimír (Pleskalová 1998: 143) < PSl. *Tvъrdimírъ and Kajkavian-Čakavian TVRD(O)SLAV(I)Č (Ozalj, 1544) (Fučić 1982: 275) = *Tvъrdoslavić < PSl. *Tvъrdoslavíč) as well as an early denasalization of Proto-Slavic *ę and *ǫ that cannot actually be younger than the 11th century, when the change is first documented (the 11th-century Prague Fragments (Czech Pražské hlaholské zlomky) attest to 3pl aor. kupiša ‘they bought’ < PSl. *kupišę
and 3sg aor. prěstupi ‘he sinned’ < PSl. *perstǫpi, while the Krk Inscription (Croatian Krčki natpis) from the island of Krk (in the Čakavian speech area) dating to the 11th century reads RUGOTA (Fučić 1982: 223) for PSl. *Rǫgota).

4. A short note on the linguistic affiliation of the language of the Freising Fragments

In spite of nearly a century of serious inquiry in historiography and historical linguistics (cf. Grafenauer 1936; Ramovš & Kos 1937) as well as a new critical edition equipped with a complete scientific bibliography (cf. Brižinski spomeniki 1992/2004) a now rather outdated view still seems to persist in Paleoslavic studies of the second half of the 20th and the beginning of the 21st century that the language of the Freising Fragments represents a “Pannonian Slovenian” recension of Old Church Slavic etc.19. After an in-depth analysis of the two attested Old Slavic language varieties within the theoretical and methodological framework of genealogical linguistics, one can but ascertain that Old Church Slavic and the language of the Freising Fragments represent two distinct South Slavic geolects. Furthremore, the difference between the two is not only spatial, but chronological as well. Taking into consideration the linguistic features of the Classical Cyrillo-Methodian era (863–885), Old Church Slavic can be defined as Eastern South Slavic of the 9th century (in a great majority of the cases, the oldest preserved texts from the end of the 10th and from the 11th century reflect faithfully the language of the 9th century), i.e. Early Eastern South Slavic or, alternatively, Early Bulgarian and Macedonian, still undifferentiated at that time. On the contrary, the language of the Freising Fragments represents Western South Slavic from the end of the 10th century, or Alpine Slavic turning into Early Slovenian, to be precise. This fact is irrefutably confirmed by a mere enumeration of the sound changes in both linguistic systems that are diagnostic in the determination of the genealogical linguistic status of the two linguistic systems20.

Old Chuch Slavic (OCS) displays a number of very early sound changes typical of Eastern South Slavic, among which a rather diagnostic one seems to be the coalescence of the Proto-Slavic palatals *j̊ and *d̊ and the palatal consonant clusters *šč and *žď, yielding the typically Eastern South Slavic clusters št and žd (cf. PSl. *svěšta ‘lamp, torch, candle; fire’ = PSl. *puščati > OCS puštati ‘to be leaving, to keep leaving’; PSl. *mežda > OCS mežda ‘border,

20 For a detailed discussion on the linguistic affiliation of Old Church Slavic and the language of the Freising Fragments, cf. Šekli 2014 and 2018b.
road’ = PSl. *drožďe > OCS droždьę ‘yeast’). On the other hand, the language of the Freising Fragments does not display a single Eastern South Slavic diagnostic linguistic feature, but only Western South Slavic (i.e. Slovenian, Kajkavian, Čakavian and West Štokavian) sound changes such as: 1) PSl. *tъ, *dъ > Slovenian, West Kajkavian, Čakavian *tъ, *dъ > MF tъ, j (PSl. *pomoštь > OCS pomošь ‘help’ vs. MF Lsg na pomoki (III 20) = na pomoš ‘in help’; PSl. *žęždьę > OCS žęždьę ‘thirsty’ vs. MF Asg m anim. žegna (II 45‑46) = žegna ‘thirsty’); 2) PSl. *šč, *žǯ > Slovenian, Kajkavian, Čakavian, West Štokavian *šč, *žǯ > MF šč [*s‘/*š‘] (*žǯ is not attested) (PSl. Nsg m ptc. praet. pass. *krščenъ > OCS krštenъ ‘baptized’ vs. MF crišken (I 13) = křščen ‘baptized’); 3) PSl. *pъ, *pъ> Western South Slavic *pъ > MF pъ, i.e. the merger of Proto-Slavic jers in strong position to a mid-vowel quality (in MF graphically represented by <e> or <i> irrespective of their Proto-Slavic origin) is a common Western South Slavic innovation (PSl. *vъšъ ≥ *vъšъ > OCS vъšъ ‘whole’ vs. MF Asg m inanim. vuez (I 3), vuiž (I 27) = vas ‘whole’; PSl. *dъnъ > OCS dъnъ ‘day’ vs. MF Asg. den (I 9, 12, 32) = den ‘day’; PSl. *sъlъ > OCS sъlъ ‘messenger’ vs. MF Gpl zil (II 15) = səl ‘of messengers’; 4) PSl. *VžV > Slovenian, Kajkavian, Čakavian, West Štokavian VžV > VrV, MF VžV > VrV, i.e. the change of the Proto-Slavic intervocalic *ž to r (rhotacism) was a non-common South Slavic innovation (it only occurred regularly in Slovenian, Kajkavian, Čakavian and West Štokavian): PSl. 1pl praes. *možemъ > OCS možemъ ‘we can’, MF mošem (II 41) = možem ‘we can’; PSl. *te že > OCS te že vs. MF tere (II 32, 110) = tere ‘and’, cf. Sln. ter). The only properly “Slovenian” linguistic innovation could potentially be recognized in the common Slovenian simplification of the post-Proto-Slavic consonant cluster stv > st (see above).

To conclude, the language of the Freising Fragments does not reflect an admixture of the older autochthonous Eastern South Slavic features and younger allochthonous “Slovenian” characteristics. Consequently, as is clearly discernible from the changes on the level of phonology that took place between the Proto-Slavic period and the language of the Freising Fragments, the hypothesis that the latter represents a “Pannonian Slovenian” recension of Old Church Slavic fails to convince. Nevertheless, the genealogical linguistic approach does not exclude any cultural and, consequently, textual interference between the Bavarian Old High German (OHG), “Alpine Slavic” and Old Church Slavic texts in the Eastern Alps and western Pannonia, most probably in the regions linked to Carantania, Carniola, and Lower Pannonia. It is in fact very probable that the three idioms came into contact during the stay of Constantine-Cyril (826/827–869) and Methodius (814–885) at the court of Duke Kocel (861–874) in Lower Pannonia between 867 and 874. To illustrate, the texts of the confession formula display a striking resemblance in the three languages in question, viz. OHG Trohtīn, dir uuirdu ih pigihtik allero mînero suntônō enti missatāteo (Altbairisches/St. Emmeramer Gebet, 1–2), MF Bože, gospodi milostiuvi, otze bože, tebe izpovude vuez moi greh = Bože, gospodi milostivи, otče bože, tebę izpovědě vəs...
moj grêx (Freising Fragments, I 1–2), and OCS G[ospod]i b[o]ţe, tebê bôdô azţ
ispovêdenţ vseţ moîx grêx (Euchologium Sinaticum, 72a 5–6, more precisely Činê
nâdê ispovêdajoštiim se). Furthermore, some coinciding passages have been
established in the MF II sermon on sin and repentance (the first sentence reciting
Eccê bi detd naʃ ne zegrešil = Eie bi dêd naš ne səgřešil) and the OCS homiletic
text Poučenije na pamjatö apostola ili mučenika, ascribed to Clement of Ohrid
(c. 830/840–916), disciple of Constantine-Cyril and Methodius, as well. However,
the potential interferences on the textual level cannot change the genealogical
status of a given idiom.

5. The Slavic numerals 1 through 10 in the Heiligenkreuz Codex

The language of the Slavic numerals 1 through 10 in the Heiligenkreuz Codex
displays the phonetic features of the Early Slovenian of the 11th and 12th
centuries. This section provides a graphematic and phonetic analysis of the
numerals, paying particular attention to those aspects in which the present
interpretation of the linguistic material differs from that in Lewaszkiewicz &
Wydra 2021. The documentation and interpretation of each numeral are organized
as follows: the Proto-Slavic reconstruction is followed by the intermediate
Common Slovenian form (presented on both segmental and suprasegmental levels)
as well as its historical records (i.e. the oldest attestation, dialect form if significant
for historical linguistic interpretation, and modern standard form)21.

ET.Iº.NO. (8°) = ETNO = *edno. The spelling <T> for d is quite common, as
speakers of Bavarian High German used to mix up (Slavic) voiced and voiceless
obstruents. In fact, in written souces both the spelling <t> for d (cf. 1134 Ratus
(Loka/Latschach in the vicinity of Štalenska gora/Magdalensberg in Carinthia)
(Kronsteiner 1975: 59) = *Raduš < PSl. *Radušôn) as well as the spelling <d> for t
(cf. 957–993 Lazdimir (Lurnsko Polje/Lurnfeld in Carinthia) (Kronsteiner 1975:
85) = *(V)lastimir < PSl. *Volstimirë; 1240 Widetz, 1250 Widitz (Styria)
(Kronsteiner 1975: 84) = *Vîtac < PSl. *Vîtacă) occur. The form *edno is the
neuter form of the cardinal numeral ‘one’, viz. PSl. *(j)eďôn, *(j)eďônà, *(j)eďônô
ednà, *(j)eďô (Stična Manuscript II (c. 1440) edn (IV 15, V 50) = edn, dial. Sln.
adnô, adnà, adnô = Nadiža/Natisone dialect (in the locality of Jevšček) a’dan, ad
’na, ad ’no (the original *e was partially reduced to a in a pretonic syllable), Std.

21 The reconstruction of the Proto-Slavic accent is based on the works of Ch.S. Stang and V.A.
Dybo (cf. Stang 1957; Dybo 1981, 2000) as well as the interpretations of M. S. (i.e. Marko Snoj)
Slovenian accent is deduced from its Proto-Slavic strarting point in concomitance with Ramovš
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<sup>22</sup> The photographs of the entire codex Heiligenkreuz OCist., Cod. 250, from which the Slavic numerals 1 through 10 have been cropped, is available on the following page: https://www.scriptoria.at/cgi-bin/digi.php?ms=AT3500-250.
Sln. éden [édan] used as a noun, and èn in the adjectival function, éna, éno (with simplification of the consonant cluster \( dn > n \)).

**DRV.II\(^9\).GI.** (16\(^v\)) = DRVGI = \(^*\)drugi. The form \(^*\)drugi is the masculine form of the ordinal numeral ‘the second’ and descends from the original pronominal adjective PSl. \(^*\)drȗgъ ‘other (than this)’ (Ramovš 1952: 113; Bezlaj 1976: 118; Snoj \(^3\) 2016: 156) > Sln. drȗg, which was secondarily used as the ordinal numeral ‘the second’, as such appearing in the definite form \(^*\)drugbjb/*drȗgnjyb > Sln. \(^*\)drȗgi (Lower Carniolan dialect drȗgi, Std. Sln. drȗgi).

**TRE.III\(^9\).TIGI.** (24\(^v\)) = TRETIGI = \(^*\)tretji. The spelling <G> for \( j \) is expected. In Old High German, the glide \( j \) in front of the front vowels \( e, i \) was graphemically represented by <g> in most cases (and rarely by <i>) (cf. OHG jéhan ‘to confess, to swear, to speak’, spelled as both <gehan> and <iéhan>) (Braune \( ^{16} \) 2018: 155–156). Indeed, the spelling <g> for \( j \) occurs in the Freising Fragments as well (cf. MF Dsg m gemu (II 2, 7, 96) = jemu ‘to him’ < PSl. \(^*\)jemu; MF Asg m anim. fęgna (II 45–46) = żęgna ‘thirsty’ < PSl. \(^*\)żędna). The form \(^*\)tretji is the masculine form of the ordinal numeral ‘the third’, viz. PSl. \(^*\)trètъjь-(-jь)\(^{23}\), \(^*\)trètъja(ja), \(^*\)trètъje(ge) > Sln. \(^*\)trètji, \(^*\)trètja, \(^*\)trètje (Ratecˇe or Celovec/Klagenfurt Manuscript (2nd half of the 14th cent.) trettyi (III 6) = tretji, Std. Sln. tretji, tretja, tretje). In Lewaszkiewicz & Wydra 2021: 71, the form TRETIGI is supposed to spell tretji. However, from the etymological point of view, this interpretation runs contrary to the facts. The sequence IGI seems to be just a graphemic representation of \(^*\)ji. In fact, the sequences \( j + \) vowel were often spelled with a “pleonastic” \( i \), which is documented in the Freising Fragments as well, where je is spelled <ige> (cf. MF ugonenige (II 23) = ugo[en]je ‘comtemplation, satisfaction’ < PSl. \(^*\)ugodenje); thus, if <ige> = je then <IGI> = \( j \).

**CeS.III\(^9\).TIRI.** (32\(^v\)) = CeSTIRI. The spelling CeSTIRI appears very problematic for a plausible linguistic interpretation. The authors of the first

\(^{23}\) It is usually assumed that Sln. tretji must have originated in the definite form PSl. \(^*\)tretъjyb (Ramovš 1952: 114; Snoj \(^3\) 2016: 803–804). However, this is not the only possible interpretation (cf. Šivic-Dular 1998: 10–14). The origin of the post-Proto-Slavic sequences of the type \(^*\)jī, \(^*\)jā, \(^*\)jē, reflecting the Proto-Slavic adjective in \(^*\)-bjb, \(^*\)-bja, \(^*\)-bje (PSl. kŏrvъb, kŏrvъja, kŏrvъje ‘of / relating to cow’ ≥ Sln. krâvji, krâvja, krâvje > Std. Sln. krâvji, krâvja, krâvje), can be interpreted in at least two different ways. On the one hand, because of their relational meaning, this type of adjectives could have had the Proto-Slavic indefinite forms (Ramovš 1952: 104) which were later subject to contraction: PSl. \(^*\)-bjb, \(^*\)-bja, \(^*\)-bje > post-PSl. \(^*\)-jī, \(^*\)-jā, \(^*\)-jē. However, they could have had the indefinite forms PSl. \(^*\)-bjb, \(^*\)-bja, \(^*\)-bje as well (Šivic-Dular 1998: 10–14), yielding the same result after three different changes: because of the weakening of the auslauting jer, the form in \(^*\)-bjb was subject to contraction (PSl. \(^*\)-bjb > post-PSl. \(^*\)-j), while the other two forms experienced just a compensatory lengthening because of the loss of weak jers (PSl. \(^*\)-bja, \(^*\)-bje > post-PSl. \(^*\)-jā, \(^*\)-jē); the latter, being reinterpreted as contracted forms of the definite ones, caused the recomposition of PSl. \(^*\)-\( i \) to \(^*\)-jī (for recomposition cf. Hock \(^3\) 2021: 219–222).
publication favour the reading CeS.IIIº.TIRI., but they do not exclude the reading CCS.IIIº.TIRI. either. In a footnote they point out the reviewer’s opinion that the numeral in question should read č(e)štiri, i.e. some sort of hybrid form between č(e)tiri and štiri (Lewaszkiewicz & Wydra 2021: 72, 77). The form must, most probably, read CeSTIRI24, which, however, cannot be explained unequivocally in a satisfactory way.

If <e> has no actual phonetic value, the form must most probably be interpreted *CSTIRI = *čečtiri, whereby it seems more plausible that the spelling <CS> stands for the affricate *č, and not for the fricative *š. In fact, in the Freising Fragments the spelling <cf>, which occurs twice, must read č in both cases (cf. MF Asg n vüecfne (I 34) = věčně ‘eternal’ < PSl. *věčn̈oje; MF Asg m inanim. vüecfni (I 34) = věčn̈i ‘eternal’ < PSl. *věčn̈oje) (on the contrary, č is spelled in many other ways, viz. <ž>, <ť>, <ťz>, <č>, <ľ>, <š>, <ž>). If <e> does have actual phonetic value and in fact reflects a certain e, it is very possible that the spelling represents a sort of hybrid form of the type *čečtiri/*češtiri. If this is the case, the question arises whether <e> is just a misspelling or it mirrors a real existing form. Anyway, one gets the impression that *čečtiri/*češtiri is a sort of hybrid between the continuants of the Proto-Slavic ordinal numeral *četv̈rẗjь ‘the fourth’ and the Proto-Slavic cardinal numeral *čẗyri ‘four’, both characteristic of the Slovenian linguistic area. Indeed, the Slavic numerals in the Heigenkreuz Codex happen to be both ordinal (cf. *drugi, *tretji) and cardinal (cf. *edno, *pęt etc.). If *čečtiri/*češtiri is a misspelling, it is possible to hypothesize that the scribe started to write the ordinal numeral, which came next to *tretji, ordinal as well, thus *Ce = *če-, but changed his mind and continued to write out the cardinal numeral *STIRI = *čẗiri/*štiri. If the form in question is not a misspelling, but a real form, the explanation of its origin must consider the same possibility of contamination.

Thus, the explanation of the numeral ‘four’/‘fourth’ must take into consideration both the ordinal and the cardinal numeral. The ordinal numerals in the Slavic languages are continuants of two original forms, viz. PSl. *čeťvőrẗjь ‘the fourth’ > (OCS četv̈rẗjь, New Štokavian četv̈r̈ẗi) Sln. *čeťẗi and PSl. *čeťvőrẗjь (> Old Czech čẗvr̈ẗy > Czech čtvr̈ty, Slovak štvrtý) (Snoj 32016: 115)25. The Proto-Slavic cardinal

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24 I would like to thank Acad. Prof. Dr Peter Štih for his help in disambiguating between the readings CeS and CCS. Without any doubt, he reads CeS.

25 The form *čeťvőrẗjь is usually interpreted as being characteristic of West Slavic (Snoj 32016: 115). The form of dial. Sln. št̄ri ‘the fourth’ most probably arose by analogical levelling under the influence of štr̄je, št̄iri ‘four’. However, as Northwestern Slovenian displays some “West Slavic” features (cf. the retention of the consonant clusters *tl, *dl and *m, *dn as well as the verbal prefix *vy- ‘out of’), the form št̄ir̄i in Northwestern Slovenian could theoretically be related to the West Slavic ones (cf. the attestations in the Zilja/Gaštalt dialect (Brdo/Egg and Potoče/Potschach) št̄ir̄a m, št̄iri f/n ‘four’, št̄iri ‘the fourth’ (Pronk 2009: 97) and the Rezija/Resia dialect (Bila/San Giorgio) št̄ir̄i m, št̄iri f/n ‘four’, št̄ir̄nji ‘the fourth’ (Steenwijk 1992: 317)).
numerals, on the other hand, were PSl. *četěre m, *četěři f/n ‘four’ (> OCS četyre, četyři, Doric Greek τέτορες, Attic Greek τετταρες, Old Indic catvāras < Proto-Indo-European *kʰet-), and PSl. *čtyře m, *čtyři f/n (Homeric and Aeolic Greek πίσυρες, Latin quattuor < Proto-Indo-European *kʰot-, i.e. the reduced root grade with an anaptyctic vowel, traditionally referred to as schwa secundum) (Ramovš 1952: 111; Bezlaj 2005: 114; Snoj 2016: 764; Mayrhofer 2012: 161–162, 175–176; Fritz, Meier-Brügger 2021: 90) > Sln. *čtìre, *čtìri > *štìre, *štìri (Std. Sln. štìrje, štìri; the form štìrje instead of the expected *štìre arose by analogical levelling, remodelled on trije (Ramovš 1952: 111); cf. the four-part analogy (Hock 2021: 200–207): a = tri, a′ = trije vs. b = štìri, thus b′ = štìrje). In the Heiligenkreuz Codex the feminine/neuter form *čtìri/*štìri occurs.

The phonetic interpretation of the numeral *čtìri/*štìri cannot avoid answering the question of the chronology of the common Slovenian simplification of the consonant cluster *čt [*tšt] to *št. As far as the language of the Freising Fragments is concerned, Ramovš drew attention to the fact that “že v briž. spom. beremo poſtete II. 111, poſtenih I. 22” (Ramovš 1924: 292). However, later on he apparently changed his mind and interpreted the spelling <ſt> standing for čt (Ramovš & Kos 1937: 19, 24). Anyway, for the language of the Freising Fragments, it seems more plausible to reconstruct the unsimplified forms (MF Lsg vʒiniſtue (I 16) = v səničtvę ‘in fornication’ < PSL. *vъ sъničьstvę; MF Gpl m poſtenih (I 22) = počtenih ‘of enumerated’ < PSL. *počъtenъjixъ; MF 2sg imper. poſtete (II 111) = počtěte ‘enumerate!’ < PSL. *počъtěte). This assumption could be confirmed by the fact that the affricate č is often spelled <ſ>26. To conclude, the hypothesized spelling *CSTIRI most probably does not display the change *čt > *št and thus confirms a later date of this simplification (the perseverance of the consonant cluster *čt is well attested in West Slavic)27. On the other hand, the spelling *STIRI can read both *čtìri and *štìri. Anyway, both spellings do attest to the fronting of the middle high vowel *y to the front high vowel *i, which was absent in the West Slavic of the period in question (Old Czech čtyři > Czech čtyři, Slovak štyri, Old Polish cztyry > cztery > Polish cztery28. Kashubian sztërë, Lower Sorbian styri, Uppen Sorbian štyri).

26 The spelling <ſ> for č in the Freising Fragments: Dpl mufenicom (I 5) = mǫčenikom ‘to the martyrs’; 1sg præs. poronſo (I 29), poruſo (III 61) = porǫčǫ ‘I give, I deliver’; 1pl præs. nareſemze (II 16–17) = narečem sę ‘we are called’, 1pl præs. naſnem (II 43) = načnem ‘we begin’; Asg m anim. laſna (II 44–45) = lačna ‘hungry’; Ldu ofisma (II 76, 86, III 55) = očima ‘with (two) eyes’; 1pl cluſi (II 102) = klucë ‘with hooks’; 2pl præs. rafite (III 20) = račite ‘you bless’, Gpl mofenic (III 16–17) = močenik ‘of martyrs’; Lpl refih (III 34) = rěčəx ‘(in the) things’.

27 If in the Heiligenkreuz Codex the form *čtìri (and not *štìri) has to be postulated, the reading *št reconstructed for the Freising Fragments in Ramovš 1924: 292 and, under his influence, in Šekli 2014: 387 fails to be correct.

28 The sound change Old Polish cztyry > cztery reflects the lowering of the high vowels *i and *y to *e in the position before *r. It occurs in Polish, Pomaranian, Polabian and Sorbian (cf. PSl.

SCI’.VI⁹.ZT. (48v)²⁹ = SCIẒT = *šest. The spelling <SC> could stand for *š. The graphemic representation of inlauting *s before a consonant by <Z> is quite predictable as well (cf. MF milozt (I 26) = milost ‘mercy’ < PSL. *milostь). The form *šest originates in the cardinal numeral for ‘six’, viz. PSL. *šěstь (Ramovš 1952: 111; Bezljaj 2005: 35–36; Snoj 2016: 746) > Sln. *šěst (Videm/Udine Manuscript (1458) řef = šes (with the simplification of the auslauting consonant cluster *‑st > -s of the type prst > prs ‘finger’ in dialect Slovenian), Std. Sln. šěst). However, the spelling <I> for e seems much less clear. The vacillation in the spelling of e is well attested in other sources, too (cf. 958–991 Zidraga (Salzburg) = *Sedraga (Kronsteiner 1975: 61) ← PSL. *Sebědorga vs. 1065–1075 Zedrach (Milje/Millstatt in Carinthia), 12th cent. Zedrach (Seckau) = *Sedrag (Kronsteiner 1975: 61) ← PSL. *Sebědorgь). The function of the sign ’ next to <I> is not quite clear. It could be an accent mark, specifically a circumflex ˄, which was used to mark long accented vowels in Old and Middle High German as well as in the second and the third Freising Fragment (for examples see above). If the assumption is correct, a long accented *ę could be marked in this way.

ZED.VII⁹.EM. (56v) = ZEDEM = *sedəm. The spelling <Z> for anlauting s is quite common (cf. MF na zem zuete (I 8) = na sem svěťe ‘in this world’ < PSL. *na semь svěťe). The form *sedəm represents the cardinal numeral ‘seven’, viz. PSL. *sèdəmь (Ramovš 1952: 111; Bezljaj 1995: 222; Snoj 2016: 666) > Sln. *sèdəm (Videm/Udine Manuscript (1458) řefem = sedem, Std. Sln. sèdəm [sèdəm]).

OZ.VIII⁹.ZEM. (64v) = OZZEM = *osəm. The spelling <ZZ> for intervocalic s is very common (cf. MF Asg m anim. bozza (II 46) = bosa ‘barefoot’ < PSL. *bosa). The form *osəm goes back to the cardinal numeral ‘eight’, viz. PSL. *ısəmь.

²⁹ The alternative reading Seſ.VI⁹.ZT. in Lewaszkiewicz & Wydra 2021: 71 seems to be less probable.

*širokъjь ‘wide, broad’ > Old Polish szyroki > szeroki > Polish szeroki, Kashubian szeroczi, Polabian sarůtě, Upper Sorbian šeroki). Furthermore, a parallel development is observable in the secondary sequence *ir, the reflex of post-Proto-Slavic front/palatalized syllabic liquid *r̥ in the position not in front of hard dentals (in broader sense) *t, *d, *n, *l, *r, *s, *z in Lechitic and Sorbian (cf. PSL. *sъmьrtь ‘death’ > Old Polish śmierć > Polish śmierć, Kashubian smierc, Polabian sămart, Lower Sorbian smjerć, Upper Sorbian smjerć).
SLAVIC NUMERALS IN THE HEILIGENKREUZ CODEX

(Videm/Udine Manuscript (1458) ofam = osam, Std. Sln. òsem [òsam]).


DE.X9.ZeNΘ. (73r) = DEZeNΘ = *deset. The form mirrors the cardinal numeral ‘ten’, viz. PSl. *desęt (Ramovš 1952: 111; Bezlaj 1976: 98; Snoj 2016: 133) > Sln. *desęt (Videm/Udine Manuscript (1458) defet = deset, Podjuna/Jauntal dialect (Rinkole/Rinkolach) Gpl du desašte, ordinal numeral ta desqti (Zdovc 1972: 85), Std. Sln. desęt). In contrast to the position after labials occurring in *ŋet and *devęt, the reflex of the Proto-Slavic *ę is spelled as <eN> after a dental in a broader sense (in fact, alveolar).

To sum up, the Slavic numerals 1 through 10 in the Heiligenkreuz Codex display the following phonetic features: 1) the perseverance of Proto-Slavic nasal vowels, where the reflex of *ę is attested three times, viz. the spellings <aN>, <AN> in the position after labials (PaNT = *ŋet < PSl. *ŋet, DEWANΘ = *devet < PSl. *devęt) and the spelling <eN> in the position after dentals in a broader sense (DEZeNΘ = *desęt < PSl. *desęt); 2) the presence of the post-Proto-Slavic consonant cluster *čt (*čtiri < PSl. *čtyri); 3) the retention of the post-Proto-Slavic consonant cluster *dn in the numeral ‘one’ (ETNO = *edno < PSl. *ednö); 4) the fronting of the Proto-Slavic middle high vowel *y to a front high vowel *i (*čtiri < PSl. *čtyri); 5) the rise of a secondary, anaptyctic vowel in the auslauting consonant clusters obstruent + resonant, the vowel being conventionally interpreted as a schwa [*ə] (ZEDEM = *sedəm, OZZEM = *osəm).

6. Conclusion

The Latin manuscript Cod. 250, kept in the Cistercian monastery at Heiligenkreuz in the Vienna Woods, dates back to the third quarter of the 12th century and was produced in that monastery, founded in 1133 by Leopold III (1095–1136), the Margrave of Austria and a member of the House of Babenberg. A set of the first ten numerals, each fully written out, that appear as catchwords at the bottom of individual pages and must indubitably belong to a contemporaneous Slavic idiom of the Eastern Alpine region, goes back to the time of its production. These are ET19.NO. (8v3), DRV29.GI. (16v), TRE39.TIGI. (24v), CeS39.TIRI. (32v), PaV9.NT. (40v), SCP9.ZT. (48v), ZED9.EM. (56v), OZ9.ZEM. (64v), DEVIII9.WANΘ. (72v), DE.X9.ZeNΘ. (73v), which, divested of all linguistically insignificant graphemic peculiarities, are revealed to stand for
ETNO, DRVGI, TRETIGI, CeSTIRI, PaNT, SCIŽT, ZEDEM, OZZEM, DEWANΘ, DEZeNΘ and must be interpreted to spell *edno, *drugi, *tretji, *če-/čtiri/*štiri, *pet, *šest, *sedem, *osom, *devet and *deset. The purely linguistically characterized forms of the attested forms fortunately involve two symptomatic features (one conservative, the other innovative) that are decisive for their genealogical attribution. These are 1) the perseverance of Proto-Slavic nasal vowels (PaNT = *pet < PSl. *petь, DEWANΘ = *devet < PSl. *devetь, DEZeNΘ = *deset < PSl. *desetь), and 2) the completion of the fronting process that affected the Proto-Slavic middle high *y, turning it into a front high *i (*čtiri/ *štiri < PSl. *čtiri/*štiri). When taken seriously, these features cannot but call for an interpretation that will recognize the language to which these numerals must have belonged as Early Slovenian of c. 1000–1200.

Early Slovenian of the 11th and 12th centuries spanned the entire Eastern Alpine region (as well as the western part of Pannonia) and is fragmentarily documented in several geographical and personal names dispersed through several contemporaneous epichoric documents. In the Danube region of the Bavarian Ostarrîchi ‘Eastern March’, which in 1156 was to become the Duchy of Austria, there are several instances of Slavic personal names recorded in 12th-century manuscripts from Kremsmünster, Sipbach (Neuhofen an der Krems), Sankt Florian, Melk, and Wiener Neustadt. Just like the numerals from the Heiligenkreuz Codex, these, too, attest to a perseverance of Proto-Slavic nasal vowels (cf. the 12th-cent. attestation of the personal name Zwento at Sankt Florian = *Svęt < PSl. *Svętъ) and to an already completed process of *y to *i fronting (as demonstrable for the 12th cent. by the likes of Mabilka, which was attested at Kremsmünster and must be interpreted as *Mabilka ← PSl. *Domabylъka). In addition to across-the-board vowel lengthening in the metathesized Proto-Slavic anlauting sequence *oRC- (cf. the place name Rauna attested in 1108–1125 (> German Ranna in the vicinity of Mühldorf near Melk) ← *Rаvьna < PSl. *Orvьnъ ‘level, even, flat’ and the 12th-cent. attestation of the personal name Raztegoy at Leoben = *Rastigoj < PSl. *Orstigojъ ← *orsti ‘to grow’), and the common Slovenian simplification of some complex consonant clusters involving *nv (cf. Tridislav at Sankt Michael, upper part of Styria, documented in 1188 and indubitably spelling *Tridislav < PSl. *Tvьrdislavъ), which are not represented in the scarce material from Heiligenkreuz, it is exactly those two features that happen to carry an equally irrefutable diagnostic value for the geolinguistic delimitation of Early Slovenian from the adjacent Slavic geolects present to the north and to the south of that linguistic area. In particular, both Czecho-Slovak and Kajkavian-Čakavian linguistic areas display an early denasalization of Proto-Slavic *ę and *ǫ that cannot actually be younger than the 11th century, when the change is first documented (the 11th-cent. Prague Fragments attest to 3pl aor. kupiša ‘they bought’ < PSl. *kupišę and 3sg aor. prěstupi ‘he sinned’ < PSl. *perstopi, while the Krk Inscription (from the Čakavian speech area), dating to the 11th century, reads...
RUGOTA for PSl. *Rǫgota). Moreover, the West Slavic languages, as opposed to Slovenian, Kajkavian and Čakavian, show no early sign of any kind of jery fronting (cf. PSl. NApl f/n *čtyri ‘four’ > Old Czech čtyři > Czech čtyři, Slovak štyri, Old Polish cztyry > cztery > Polish cztery, Lower Sorbian styri, Upper Sorbian štyri).

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Povzetek

Slovanski števnik v Heiligenkreuškem rokopisu iz tretje četrtnine 12. stoletja (Heiligenkreuz OCist., Cod. 250) v kontekstu alpske slovanščine in zgodnje slovenščine


V prvem delu je predstavljen slovanski jezik v Vzhodnih Alpah in zahodni Panonski nižini od sredine 6. do konca 12. stoletja, in sicer predvsem v odnosu do zemljepisno stičnih slovanskih geolektov severno in južno od tega. V časovnem

Grafična in glasoslovna interpretacija heiligenkreuških števnikov se glasi:

- ET.I\(^9\).NO. (8\(^v\)) = ETNO = *edno
- DRV.I\(^9\).GI. (16\(^v\)) = DRVGI = *drugi
- TRE.III\(^9\).TIGI. (24\(^v\)) = TRETIGI = *tretji
- CeS.III\(^9\).TIRI. (32\(^v\)) = CeSTIRI = *če-, *čtiri/*štiri
- Pa.V\(^9\).NT. (40\(^v\)) = PaNT = *pet
- SCI.VI\(^9\).ZT. (48\(^v\)) = SCIZT = *šest
- ZED.VII\(^9\).EM. (56\(^v\)) = ZEDEM = *sedam
- DE.VIII\(^9\).WANΘ. (72\(^v\)) = DEWANΘ = *devet
- DE.ZeNΘ. (73r) = DEZeNΘ = *deset


**Ključne besede:** primerjalno slovansko jezikoslovje, alpska slovanščina, zgodnja slovenščina, števniki, Heiligenkreuz, OCist., Cod. 250.

**Summary**

Slavic numerals in the Heiligenkreuz Codex from the third quarter of the 12th century (Heiligenkreuz OCist., Cod. 250)
in the context of Alpine Slavic and Early Slovenian

This article aims to provide a genealogical linguistic attribution of the Slavic numerals in the Heiligenkreuz Codex. Firstly, the language of the newly discovered numerals is historically contextualized through what is known of the Slavic language in the Eastern Alpine and the western Pannonian regions in the period between the mid-6th and late 12th centuries. Furthermore, contemporar-
neous Slavic idioms to the immediate south and the immediate north of that linguistic area are considered as well. In this context, particular attention is paid to the language of the Freising Fragments (Slovenian Brižinski / Freisinški spomeniki), with a controversy over its linguistic affiliation still persisting in some scholarly works up to the present day. Secondly, through careful consideration of the historical phonology underlying the attested forms first divested of graphemic peculiarities and subjected to phonetic interpretation, the contribution arrives at a genealogical linguistic attribution to the particular Slavic language to which these numerals must belong.

**Keywords:** comparative Slavic linguistics, Alpine Slavic, Early Slovenian, numerals, Heiligenkreuz Codex, OCist., Cod. 250.