THE SLOVENE SOUND SYSTEM THROUGH TIME

The paper sketches selected changes discussed in Marc L. Greenberg’s *A Historical Phonology of the Slovene Languages* (Heidelberg: Universitätsverlag Carl Winter, 2000) in which innovative explanations shed new light on the complexity of the developments in the early stages of the emergence of the Slovenian speech territory. The explanations demonstrate the interplay of geographical, structural, social, and cognitive factors in sound change.

V razpravi avtor prikaže nekaj glasovnih sprememb, ki jih obravnava v svojem delu *A Historical Phonology of the Slovene Language* (Heidelberg: Universitätsverlag Carl Winter, 2000), v katerem z novimi razlagami osvetljuje zapleten razvoj v zgodnjih fazah oblikovanja slovenskega jezikovnega prostora. Te razlage ponazarjajo prepletost zemljepisnih, strukturnih, družbenih in spoznavnih dejavnikov pri glasovnih spremembah.

**Key words:** Slovene language, historical phonology, sound change, dialectology, historical sociolinguistics

**Ključne besede:** slovenski jezik, zgodovinsko glasoslovje, glasovna sprememba, dialekologija, zgodovinska sociolingvistika

0 Introduction

0.1 The present paper aims to give an overview of progress in the historical phonology of Slovene, largely limited to the treatment given in Greenberg 2000 (and its Slovene translation in 2002, the two items hereafter referred to collectively as G). While this work can hardly be claimed to represent all of the progress that has been made in this field over the last decade or so (the time frame set out by the editors of this volume), it is nevertheless the only monograph devoted to the topic in this period. In turn, the volume itself refers to works relevant to the phonological history of Slovenian from the beginnings of modern Slavic philology to about the time of publication.

0.2 The enterprise of tracing the sound changes in the service of compiling historical narratives about Slavic languages has been out of fashion for at least a decade, the conversation in phonological circles having turned to theoretical issues and phonetics having concerned itself primarily with synchronic matters (for a partial overview see Bethin 2000). At least partly for this reason the series *Historical Phonology of the Slavic Languages* (Universitätsverlag Carl Winter), begun in the 1960s, remains
The series nevertheless represents and summarizes the achievements of Prague School phonology in the development of which the Slavic languages played a central role. To date seven of a series of at least thirteen volumes of the Historical Phonology have been published: Polish (Stieber 1973), Slovak (Krajčovič 1975), Belarusian (Wexler 1977), Ukrainian (Shevelov 1979), Macedonian (Koneski 1983), on Sorbian (Schaarschmidt 1997), and Slovene (G). Among these volumes certain departures and advances were made from traditional structural treatments, notably, Wexler 1977 is informed by advances in contact linguistics and in particular the confrontation of Baltic and Jewish-language influences on Belarusian; G emphasizes post-Stangian accentological considerations as well as sociolinguistic factors. Future treatments of diachronic phonology of individual Slavic languages, should the Zeitgeist ever return to such projects, will build on the foundation of this series but also capitalize on the theoretical, analytical, and technological advances in phonology and phonetics that are now elaborating the complex interconnections of syntax, sentence-level intonation, word-formation and pragmatics with the sound structure of languages.

0.3 As mentioned above, G draws broadly on the theoretical underpinnings of the Prague School structural phonology, owing a particular debt to and building upon the pioneering work in Slovene historical phonology of Ramoš and Rigler, the latter point having been emphasized in Lisac’s review (2003a, 2000b), as well as on the work of other scholars. Especially in the sections on early Slovenian development and concerning toponymy and hydronymy, G owes a significant debt to the achievements of Bezlaj and his students. G goes beyond traditional works in considering accentological issues, relying significantly on the work of the Moscow and Leiden Accentological Schools, though not accepting their tenets wholesale (see, for example, Kortlandt 2003, Babik 2005). From a theoretical viewpoint, sound change is conceptualized along the lines of Henning Andersen’s model, in which deductively developed (phonetic) changes create ambiguities that are resolved by abductive decisions by speakers about the underlying phonemic relationships (see Andersen 1973). Furthermore, diachronic sociolinguistic factors are taken into consideration with regard to changes that are amenable to such explanations (e.g., the reversal of the ž > r change, G 20 and Greenberg 1999; the reversal of lenited mediae, G 38 and Greenberg 2001). While structural factors (deductive change or drift, abductive change or phonemic reinterpretation) drive sound change in one direction, stylistic considerations for speakers, the relative prestige value placed one or another in a set of alternative pronunciations, can drive sound change in other directions, including backwards, i.e., reversing the effects of structural sound changes. In general, sound changes are viewed as (often long-term) processes, which, in contrast to the stylization required

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2 Though progress is being made, according to the series editor, Paul Wexler, who is now preparing the volume on Russian.

3 At some point I hope to respond to some of the suggestions made in these and other reviews. There is hardly room to do so here.

4 Hereafter the designation G n refers to chapter numbers in Greenberg 2000 and 2002.
by the format of the book, cannot be in all cases readily placed into discrete sequential order. In this regard, analysis of linguistic geography frequently reveals important patterns and the interaction of successive layers of change affecting the same structural point. Moreover, the book assumes that drawing a direct correspondence between a proto-language and its modern form is a fiction – dialects, given sufficient time, will reorganize, die out, transform themselves, influence one another; individual innovations can get started, spread rapidly or not, and sometimes have their effects reversed. At best one can only attempt to make a broad generalization about the diachrony of a speech territory based on an analysis of the intricate interaction and layering of changes, realizing that such a generalization cannot capture the complexity to which the linguistic events attest.

0.3.1 Following the methodology and format of the *Historical Phonology* series, Greenberg 2002 integrates sources of evidence ranging from texts, toponymy and hydronymy, to dialect variation. In view of the relative dearth of an uninterrupted medieval textual tradition and the relative wealth of dialect variation, the work relied to a greater extent on dialect variation from published and unpublished sources, including the author’s own field notes pertaining to Prekmurje, Međimurje, and Upper Carniola, and analysis of the geographical spread of innovations.

0.4 A brief introduction sketches complex issues such as the relatedness of Slovenian dialects to other Slavic dialects, especially »Pannonian« Slavic (G 0.5; see also more recently Richards 2003 and Greenberg 2004), Croatian and other Western South Slavic dialects (G 0.6), and to Romance, German and Hungarian dialects (G 0.7).

0.5 In the following some representative examples demonstrate recent advances in our understanding in the development of Slovene historical phonology.

1 Heterogeneity at the time of settlement: the Sava divide

1.1.0 The work assumes, following Bezlaj’s formulation (»[r]jstvo slovenščine moramo postaviti v dobo slovanske naselitve v Alpah« [1958: 677]), that the hypothetical construct »Proto-Slovene« emerged as a consequence of settlement in its present-day territory. Several pieces of evidence point to an early Slavic speech territory in today’s Slovenia and adjoining Croatian territory that was already dialectally differentiated. Following Andersen’s observations, G demonstrates that the future Slovene territory (as other Slavic post-migratory territories) was settled by speakers of heterogeneous dialect provenience. For example, we find cases of o- || e- (o- appears sporadically in the N and W) and -no- || -ni- in the infinitive of Leskien Class II verbs (-no- appears in the NW and NE), isoglosses that go back to the earliest stages of Slavic dialect differentiation and point to different pre-migration loci (Andersen 1996, 1999; G 0.4). Roughly speaking, these differences pattern in such a way that one group emerges north of and the other south of the Sava river (with this bifurcation continuing into today’s Croatian Kajkavian territory), a geographical division which
is later reflected by further isoglosses (see below). The northern dialect (hereafter Sava-N) is continued by today’s Carinthian, Northern Styrian, and Pannonian dialects (and Kajkavian dialects north of the Sava), and the southern dialect (hereafter Sava-S) is continued by today’s Slovene Littoral, Upper and Lower Carniolan, and Southern Styrian (and Kajkavian dialects south of the Sava). There is a reasonable chance that Sava-N and Sava-S hark back to two distinct dialects that emerged by virtue of settlement on opposite banks of the Sava River, given not only the geographic patterning of isoglosses that move from this locus, but also the central importance the river must have had for the in-migration of the Slavic population from its origins beyond the Danube. Later this division became obscured, though not completely, by successive waves of further innovation. Map 2 in G shows the territorial delimitation of these and other isoglosses, which have moved towards the periphery of the Slovene territory as their areals have become marginalized eroded, generally speaking, by the influence of the Carniolan central dialects as these grew in prestige over the following centuries.

1.1.1 An example of the systemic persistence of a Sava-N vs. Sava-S division lies in the reflexes of vocalized jers, which in turn goes back to the distinction between a system in which the contrast between low vowels were marked by round vs. non-round (Sava-N) and front vs. back (Sava-S), where Sava-S represents the innovative system (G 19, 24). In Sava-N, which preserved Proto-Slavic *a with labialization at the time of the vocalization of strong jers, the reflexes of vocalized long jers systematically merge with low front vowels, the identity of which depended on which low front vowels were available at the moment at which this happened. For example, in Carinthian and Pannonian the merger occurred at a moment when *ě presumably having become already diphthongized, had raised, such that lengthened strong jers could have merged only with *e (and later *ε); in Kajkavian (Sava-N) the merger occurred with *e at a time before its diphthongization and raising. Wherever labialization of *a was not preserved, strong jers under conditions of length merged with *a. The developments, illustrated in Figures 1–5, must be viewed as a series of overlapping innovations unfolding at different speeds. For example, diphthongization and raising of *ě occurs later in Sava-N Kajkavian, represented in Figure 5, is not a discrete development but a later arrival of the same innovation as in Figure 3 (Sava-N) with different results owing to the systemic realignment of phonetic values as illustrated in Figure 4.5 Figures 1 and 2 assume the archaic square pattern of four vowels before the rephonologization of quantity to quality: Í/Ĭ – Ū/Ŭ – Ė/Ĕ – Ā/Ă. In Figure 2 the square bracketed vowels indicate explicit phonetic values where this becomes relevant for the changes discussed, so *Ě = [ă] (jat), Sava-N *Ă = [ă], Sava-S *Ă > [a]. Figure 3 represents a later stage, after the merger of *I and Ū, here represented as [a] (though it may have at this stage been a tense [e]). At the same time *Ě shifts to [e] as part of the quantity > quality rephonologization process, avoiding merger with *Ě [ă]. However,

5 The Kajkavian part of this explanation owes to a modification of an insight by Vermeer in his seminal 1983 paper.
as Figure 4 illustrates, the diphthongization process does not occur instantaneously, but rather, spreads \( W > E \), during which time in Proto-Kajkavian the reflexes of \(*\hat{E}, *\hat{I}, *\hat{U}\) had hitherto merged as \( [\text{ä}] \). Once diphthongization reached Proto-Kajkavian, the innovation affected both \( jat \) and \( jers \) (Figure 5). In this respect, Pannonian Slovenian and Kajkavian end up having a superficially similar contrast, including in phonetic detail, of \( \text{ä}–\text{å} \) in its low-vowel series, albeit with a divergent distribution of the historical entities.

1.1.2 The retraction of neo-circumflex («Ivšić’s Retraction«, G 23; see also Pronk forthcoming) gives another example of the persistence of a Sava-N || Sava-S divide. In this instance, Carinthian, Pannonian, and Kajkavian dialects regularly reflect the retraction of internal long-falling-stressed syllables that arose from acute-stressed («neo-circumflex», G 22) with the type \(*\tilde{z}\tilde{a}b\tilde{a}v\tilde{a} > \text{z\,\,b\,\,a\,v}\). This retraction occurred only onto long syllables, meaning that syllables that had undergone initial-syllable shortening (G 12) and, later, advancement of stress (G 21), would not have been subject to this rule (e.g., the type \( o\tilde{k}\tilde{o}, g o\tilde{l}\tilde{o}b \) is unaffected).

2 Unifying changes

2.1 Among the changes that characterize the emergence of Slovene as a part of a wider association of speech styles is one that has its roots in an innovation that has a broad South Slavic areal spread, namely, the change of \( \tilde{z} > r \) (Greenberg 1999, G 20), often referred to as «rhotacism». The phonetic phase of this change most likely occurred by the eighth century A.D. and it is known from Proto-Slovenian (attested in the Freising Folia) as well as the entire South Slavic area inclusive of Macedo-Bul-
garian dialects, being attested also in old Bulgarian borrowings into Romanian. The phonetic phase of the change was conditioned in that it occurred only in post-tonic position and most consistently between two mid-vowels. The phonetic restrictions limited the occurrence of the change to a small number of lexical items, notably the voc. sg. *bo`e > bore 'O, God!', *mo`e(t) > more 's/he can', compound forms of the present tense of *ĝnati (*-ţene[t] > -rete) and relativizers in *-ţ(e) > -r(e).

The result of the change was carried over into the lexically innovative form morati 'to have to'. By the fourteenth century the forms all but disappear in the eastern half of the South Slavic territory, roughly along the Jireček line, replaced by the archaic variants in ژ. The lexically motivated reversal of the change did not penetrate South Slavic dialects spoken by Catholics. For this reason it appears that the reversal of the change was a stylistically motivated one that marked confessional allegiance. The reversal process probably proceeded in the following manner: -ژ- forms with competing -r- variants were considered higher prestige in Orthodox contexts, based, for example, on conservative Church Slavic pronunciation of relativizers such as ژe, eژe 'which (masc., neut. sg.)'. The reversal even affected some forms non-etymologically, e.g., veçer > ve çe, in which the final segment had been reinterpreted as a deictic particle. On the other hand, west of the Jireček line, the -r- (< *-ţe) forms gained in prestige and were structurally reinforced in the system of relativizers under the influence of *k̂ter- 'which', itself reinterpreted as consisting of a pro-form + relativizing particle (-r-). A trace of the earlier variation is found in the Slovene form nihče (< *niktf]-ţe) 'nobody'.

2.2 In a paper written before but published after the English-language edition of G (Greenberg 2001), I claimed that another significant long-term innovation, which, in effect, characterizes primarily the territory of modern-day Slovenian, is the lenition of the stops *b, *d, *g (G 9, 33) to fricatives β, ð, γ. The lenitions of these segments probably developed gradually and in stages, the lenition of *g > γ being part of a much larger central Slavic areal, following by *b > β, known also in Czech dialects. This innovation, or set of innovations, later became reversed or replaced through sociolinguistic pressure in most of the territory, receding in the eastern and central Slovenian dialects and leaving traces in the west and the north. It had originally spread throughout most of the Slovene speech territory virtually to the modern border with Croatia, e.g., the place name Rogatce (eastern Štajerska) is attested in 1130 as <Roas>, in 1192 as <Rohats>, and 1363 as <Rohats>. The impetus for the change is the fortis: lenis opposition in what are traditionally considered voiceless:voiced stops. The Carinthian reflex of the q (glottal stop) as the reflex of Proto-Slavic *k suggests that speakers focused on glottal tension/stricture rather than on the presence or absence of voicing – or even velar closure – as the primary marker of the opposition between *p, *t, *k : *b, *d, *g. Lenition is evident today in western and central dialects that attest the change *g > γ as well as in Carinthian localities that have the full set of lenited stops, e.g., Kneža / Grafenbach брошва 'bee' (St ćebela), ćwoqa 'body hair' (St dlaka), ćrođ 'castle' (St grad). Manuscript evidence attests to widespread lenition through the fifteenth century, e.g., in the Stična ms. <zwefčýdo> 'with the word', <woga> 'God
The lenited and non-lenited variants must have persisted side-by-side, either as local differences or as stylistic variants, in which case the non-lenited variants subsequently prevailed by virtue of higher social prestige. As evidence of reversal, we find examples of toponyms in which the speakers’ sense of the identity of the original initial segment (realized as [β] or [v]) had been lost and the substitution (i.e., the reversal of the change) was made non-etymologically in particular lexical items, e.g., the names Benetke (< *venet-), Bodovlje (< *vodol-).

2.3 Another unifying sound change is the advancement of the ictus corresponding to the Proto-Slavic circumflex (the type okô, golô). As I have indicated in a number of publications (Greenberg 1992, 1994; G 12, 21), the innovation developed in a number of stages, proceeding in a hierarchical manner depending on relative syllable weight of the initial and post-initial syllable. I agree with Kortlandt that it was triggered by a general tendency in western dialects of Proto-Slavic towards shortening of the circumflex (attested in Czech and Polish; see Kortlandt 1975: 33), which evidently had as a result a compensatory lengthening of the following syllable, the greater length of which increased the odds that subsequent generations of speakers would interpret the second syllable as stressed. The geography of the change is such that it indicates a typical center-periphery expansion and at the peripheries the more restricted environments do not carry through the shift (e.g., in Rezijanski dialect in the W, Prekmurski and Prileški dialect in the NE). Moreover, the innovation in restricted environments reaches into Kajkavian (see, for example, Vermeer 1979).

3 Conclusion

3.0 The above sketch of selected changes, which depart in a number of ways from traditional explanations for Slovene sound changes, illustrates the dynamic nature of the development of the Slovene linguistic territory, which, after being settled by heterogeneous Proto-Slavic dialect speakers, emerged gradually by virtue of unifying changes that, in turn, had their roots in broader Proto-Slavic or South Slavic areal changes. The changes discussed illustrate the necessity of viewing sound changes as long-term and driven by competing factors including structural change, cognitive reinterpretation, and sociolinguistic pressure.

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POVZETEK

V razpravi avtor prikaže nekaj glasovnih sprememb, ki jih obravnava v svojem delu A Historical Phonology of the Slovene Language (Heidelberg: Universitätsverlag Carl Winter, 2000), v katerem z novimi razlagami osvetljuje zapleten razvoj v zgodnjih fazah oblikovanja slovenskega jezikovnega prostora. Zaris izbranih sprememb, ki se v manogočem oddaljuje od tradicionalnih razlag slovenskih glasovnih sprememb, ponazarja dinamiko razvoja slovenskega jezikovnega prostora. Ta se je po naselitvi govorcev raznovrstnih praslovanskih narečij oblikoval postopoma s povezovalnimi spremembami, ki so imele osnovo v širših praslovanskih in južnoslovenskih spremembah. Obravnavane spremembe ponazarjajo potrebo po tem, da gledamo na glasovne spremembe kot na dolgoročni proces, ki ga vzpostavljajo nasprotujoči si dejavniki, med njimi strukturne spremembe, kognitivna preinterpretacija in sociolingvistični pritisk.