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Journal

Scando Slavica, 60(1)

ISSN

0080-6765

Author

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Publication Date

2014-01-02

DOI

10.1080/00806765.2014.910002

Peer reviewed

This article was downloaded by: [Henning Andersen]

On: 12 June 2014, At: 14:22

Publisher: Routledge

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Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH,
UK



Scando-Slavica

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/ssl20>

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Published online: 23 May 2014.

To cite this article: Henning Andersen (2014) Early Vowel Contraction in Slavic: 1. i-Verbs. 2. The Imperfect. 3. The vòlja/súša Nouns, Scando-Slavica, 60:1, 54-107, DOI: [10.1080/00806765.2014.910002](https://doi.org/10.1080/00806765.2014.910002)

To link to this article: <http://dx.doi.org/10.1080/00806765.2014.910002>

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Early Vowel Contraction in Slavic: 1. i-Verbs. 2. The Imperfect. 3. The *vòlja/súša* Nouns

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Abstract

Three closely related studies show how three Common Slavic suffixes were changed in an early wave of glide loss and vowel contraction that occurred between the Late Common Slavic quantity-to-quality vowel shift and the earliest texts. The studies examine the Present suffix, Common Slavic *-eje-*, of iterative, causative, and denominative *i*-verbs; the Imperfect suffix, Common Slavic *-ějā-*, *-ājā-*; and the suffix of lexicalized relative adjectives *-ej-(ā)*. Each study presupposes a detailed understanding of vowel contraction and due attention to the functional relations between the given elements and similar or contrasting stem-forming suffixes.

Keywords: Comparative Slavic, vowel contraction, intensity shift, coalescence, accent, neoacute, iterative, causative, lexicalization.

1. Introduction

The following pages are devoted to three issues in Slavic comparative phonology that have traditionally been examined in skewed perspectives and in isolation from the diachronic and structural context in which they belong. Scholars who have labored under these traditional handicaps have either produced desperate, implausible proposals in their attempts to explicate the data, or they have given up in the hope that future advances would shed light on them.¹

1 I am grateful to Professor Donald S. Cooper, who years ago drew my attention to the complementary distributions described in section 5.2 below. I also thank him and Christina Bethin, Thomas Olander, and Marek Majer, who read a prefinal version of this paper, for their thoughtful advice, as well as members of the audience of Indo-Europeanists and Slavists at a seminar at the University of Copenhagen in June 2013 for useful comments on the three studies. I owe a special debt of gratitude to the Norwegian Center for Advanced Study in Oslo, where the research for this paper was begun, in particular to its director and staff for creating an ideal working environment and to my colleagues there for their warm support.

<http://dx.doi.org/10.1080/00806765.2014.910002>

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Here I will argue that each of them is part of the Late Common Slavic development of Vowel Contraction, a series of changes that occurred over several centuries in the Middle Ages. The development began in some Balkan Slavic dialects well before the first translations into Slavic (ca. AD 863). It surely occurred at different times in other parts of the Slavic-speaking territories, but in terms of its relative chronology it was initiated everywhere at the same juncture, viz. shortly after the Second Common Slavic Vowel Shift, the change in which inherited vowel distinctions in quantity were reanalysed as qualitative; more on this in section 2.3.

Each of the issues to be discussed here boasts a long history of scholarly interest. Almost all of this history will be referenced only indirectly in the following, for I will largely limit myself to crediting or countering ideas that have been advocated during the last couple of decades.

2. Some Theoretical Prerequisites

I will begin by describing some prerequisites for the following exposition. They include some basic facts about the Late Common Slavic Vowel Contraction (section 2.1), some notions concerning the gradualness of sound change (section 2.2), and clarification of what is meant by **Late Common Slavic** in the following (section 2.3).

2.1. Common Slavic Vowel Contraction

Vowel Contraction (VCon) is the traditional term for a complex of phonological changes, one could call it a drift, that occurred in the Middle Ages. It affected early stages of all the Slavic languages, but to different extents and with different outcomes.²

² Notational conventions, abbreviations, and definitions.

Notational conventions. Attested wordforms are in italics. Reconstructed wordforms are written without asterisk and in normal font; their labeling (PIE, ECS, CS, LCS; see below) makes it clear they are reconstructed. Arrows: → (is synchronically realized as), > (changes to), ⇒ (is reinterpreted as). In the examples, || separates geographical variants of forms as well as meanings.

Abbreviations. The following abbreviations are used: AP (accent paradigm), Bg. (Bulgarian), Br. (Belarussian), Ča. (Čakavian), CS (Common Slavic), dial. (dialect, dialectal), ECS (Early Common Slavic), E (east, eastern), E Lechitic (East Lechitic), ES (East Slavic), imf. (imperfect), Gk. (Greek), Ka. (Kashubian), LCS (Late Common Slavic), Lat. (Latin), Li. (Lithuanian), o. (old, obsolete), OCS (Old Church Slavonic),

In Old Church Slavonic (OCS) it is particularly prominent in the inflection of definite adjectives. Although originally composed of an inflected adjective followed by an inflected enclitic determiner (e.g., LCS *nov-a=j-ego.gen.sg*, *nov-u=j-emu.dat.sg* ‘new’), attested definite adjective forms document several stages in the VCon change, Glide Loss (OCS *novaego*, *novuemu*), Assimilation (OCS *novaago*, *novuumu*), and Monosyllabication (OCS *novago*, *novumu*); cf. Diels (1932, 112–115; 193–198); Vaillant (1964, 55–56; 121). There is some diversity among the Slavic dialects in the outcomes of VCon; contrast the OCS forms just cited with P *nowego*, *nowemu*, Cz. *nového*, *novému*. VCon also affects lexical stems, e.g., CS *pa=jās-a*, LCS *pojas-ŭ* ‘belt’, R *pójas*, but SBC *pòjas*, *pās*, Sn. *pás*, Cz *pás*, P *pas*. There will be more to say about some of these details below.

Handbooks of comparative Slavic mostly present VCon in terms of its morphological effects and limit the phonological description of VCon to a few illustrative diachronic correspondences; see Bräuer (1961, 153–154), Bernštejn (1961, 247), Stieber (1979, 58), Schenker (1995, 101). Phonologically systematic exemplifications are presented in Vaillant (1950, 193–199) and Shevelov (1965, 524–528). A comprehensive account of the phonological, morphological, and lexical outcomes of VCon remains a desideratum. But Marvan’s (1979) investigation makes significant progress in distinguishing those different levels of conditioning. It is also valuable by its attention to the different extension of VCon in different regions. And it establishes a chronology for at least the West Slavic VCon changes in conjugation, dating them to a period from before A.D. 850 to the 1300s. Still, Marvan rightly concludes that much more needs to be done (170).

In Marvan’s theory, the first step in any VCon change is the loss of a morpheme boundary, which exposes an intervocalic /j/ to elision (loss). The present study, and hopefully future investigations, will approach VCon with a more articulate conceptual apparatus.

OCz. (Old Czech), OP (Old Polish), OR (Old Russian), OS (Old Slavic), P (Polish), Pb. (Polabian), PIE (Proto-Indo-European), prosp. (prospective, “future”), prs. (present), prt. (preterite), R (Russian), S (south, southern), SBC (Serbian–Bosnian–Croatian), Sc. (Slovincian), Sn. (Slovenian), Srb. (Serbian), SS (South Slavic), st. (standard), Što. (Štokavian), U (Ukrainian), US (Upper Sorbian), VCon (Vowel Contraction), VS₁, VS₂, VS₃ (the three CS vowel shifts; see section 2.3), W (west, western), WS (West Slavic).

Definitions. Forms labeled ECS and CS represent different reconstructed stages in deeper and more recent prehistory. Forms labeled LCS represent a stage in the LCS period; see section 2.3. LCS forms with regional features will be specified as dialectal.

First of all, as can be seen in the examples in the preceding paragraph, the defining feature of VCon is not the first step of the process, but the last step, here called Monosyllabication, by which two syllables appear to be “contracted” into one. There are numerous instances of Monosyllabication in Slavic languages that are not preceded by Glide Loss (see just below), and it makes no sense to define VCon in a way that excludes them.

Secondly, since VCon involves both segmental and suprasegmental changes, the traditional approach, which simply states before-and-after relations in terms of segments, must be dropped in favor of a detailed account of the individual phases in each VCon change, including changes in quantity or accent. The first benefit of such an account is the realization that the individual phases of VCon are separately motivated; see sections 3.1, 4.1, 5.3.

Thirdly, the analysis must recognize that VCon does not necessarily presuppose a loss of boundaries. Boundaries may condition phonetic variation, but they themselves are not “lost” the way phonetic elements may be lost. Consider the VCon reflected in LCS *moje.nom.sg.nt* ‘my’ > OCz. *mé*, well attested till the 1500s (but then superseded by the generalization of OCz. *moje*, with the original stem alternant). Here a simple morphological analysis, and the mere insertion of hyphens to mark boundaries (*moj-e* > *m-é*), shows that VCon produced a change in both stem and desinence, but no boundary was lost. Or take the development reflected in OCz. *apostol*, but *k ápostolóm* ‘to the apostles’ (LCS *kū apostolomū*). It shows Monosyllabication of LCS dial. [kūa] > [ka:] but no loss of the clitic boundary that separates the preposition from its object: LCS *kū=a...* > OCz. *k=á....* Synchronically, in Old Czech, this “initial vowel lengthening after preposition” was conditioned precisely by the clitic boundary; see Gebauer ([1894] 1963, 233–236). We return to these examples in section 5.2.

To understand such changes, one needs a theory of language transmission with such basic concepts as innovation, adoption, stylistic variation, and reanalysis, as well as a phonetically explicit theory of VCon that can explicate the main outcome types, specifically the different types of Monosyllabication. For this, see below.

Finally, and importantly for a reconstruction of the changes to be examined below, some idea of the normal progression of phonological change is essential.

2.2. On the Actualization of Vowel Contraction

In Marvan's (1979) account VCon is a centuries long process, much of which is played out as a series of analogical changes in different environments, some motivated by surface forms others by underlying representations.

But the primary process of (phonological) VCon must itself have been gradual in each environment and from environment to environment. We can assume that the gradual progression of each of its constituent phases (Glide Loss, Assimilation, Monosyllabication) was conditioned in the same way as all other changes are conditioned: Each innovation is produced, accepted, and codified earlier in contexts defined by unmarked categories than in contexts defined by the corresponding marked categories, be they medium, genre, style, syntactic, lexical, morphological, morphosyntactic, or phonological; see Andersen (2001).

In addition we can recognize the changes that cumulatively result in VCon as similar in type. They are reductive: Glide Loss reduces a segment to zero, Assimilation reduces the difference between contiguous vowels, and Monosyllabication reduces two syllables to one. This shared character determines their function as synchronic processes and in synchronic variation: They are integrative; see Andersen (1986, 7). As a consequence they are more likely to occur where no boundary separates given segments than across a boundary, and more likely if an intervening boundary is weak than if it is strong, assuming a boundary-strength scale as in (1):

- (1) word##word > word#=clitic > stem+ending > stem-internal > ending-internal > none

In chronological terms, this means that VCon changes will occur earlier where there is no boundary than across a boundary, and earlier across lower-ranking boundaries, and later across higher-ranking ones; for a parallel, see the study of "voicing sandhi" in Andersen (1986).

Against this background it is interesting that our earliest texts show VCon in progress at word#=clitic, stem+ending, and stem-internal boundaries, but not at ending-internal boundaries; see Diels (1932, 114). This suggests that if there were any LCS VCon changes across ending-internal boundaries, they were completed before our earliest texts.

Timberlake (1978) introduces an important complementary perspective on the gradualness of sound change, which is particularly relevant with regard to word-internal environments. The study demonstrates that phonetic innovations occur earlier in uniform (i.e. nonalternating) than in alternating environments. The importance of this distinction will become clear below.

2.3. Late Common Slavic

For the purposes of this paper **Late Common Slavic** is understood (i) as a period and (ii) as a stage of development.

The period that is referred to here as Late Common Slavic is the period between the Second CS Vowel Shift (VS₂) and the Third (VS₃).

To explain, we can define a First Vowel Shift (VS₁), in which oral diphthongs were monophthongized while CS *ū* was delabialized to *ȳ*; on its date, see below. In the Second Vowel Shift (VS₂) long and short vowels were reanalysed as, respectively, tense and lax: (i) *ī* vs. *i* > *i* vs. *ɪ*, (ii) *ū* vs. *u* > *u* vs. *ʊ*, (iii) *ē* vs. *e* > *ě* vs. *e*, (iv) *ā* vs. *a* > *a* vs. *o*. At the same time and soon after, new quantitative relations were established, conditioned by a variety of factors, one of them being VCon. In the Third Vowel Shift (VS₃), the vowel systems of different Slavic regions underwent radical change with in part quite different outcomes. The defining feature of the Third Vowel Shift is that the light (“weak”) variants of lax high vowels were lost while their heavy (“strong”) covariants were reanalysed, typically merging with other vowels or changing to schwa. Absolute dates for these changes are of necessity provisional and approximate: VS₁, in the 400s–500s, VS₂, around the 700s, VS₃, in the 900s–1100s.

The three Vowel Shifts are significantly related to the Slavic territorial expansion in the Middle Ages, when Slavic speech spread all across central Europe to what is now Northern Germany in the west, Northern Russia in the East, and the southern Balkan peninsula in the south. As it happens, Baltic place names (hydronyms) were adopted by Slavs in what is now Belarus' before VS₁ (see Toporov and Trubačev 1962, 229–250), whereas the earliest Finnish and Baltic loanwords from Slavic reflect a stage after VS₁; see Kiparsky (1967, 76). This shows that VS₁ occurred at a time when the (East) Slavic expansion was well under way. It also implies that both this change and subsequent changes that occurred across the huge expanse of the Slavic speaking territories must have developed independently in the different Slavic regions,

that is, they must be understood as parallel rather than shared developments. This undoubtedly correlates with somewhat different absolute chronologies in different parts of the Slavic world as well as some differences in relative chronology.

At various points in the following exposition it will be necessary to refer to stages in the LCS period. In the notation for the final stage of LCS, the lax high vowels (*jers*) are written *ĭ* and *ŭ*; the remaining vowels will be written as in the traditional “Proto-Slavic” notation, and quantity will not be marked. In representations of earlier stages between the Second and the Third Vowel Shift, the lax high vowels will be written *i* and *u*, and vowel quantity will be noted where relevant. Two kinds of pitch accent will be notated in LCS wordforms, a high tone (written ¹) and a dissyllabic accent with an ictic rising tone on the first syllable (marked with a grave if short, an acute if long) and a high tone on the second. Ictus will be marked with underlining where relevant. Accentless wordforms (enclimena) will be indicated with an initial ₁.

3. The Slavic *i*-Verbs

The Present-tense formations of Slavic *i*-verbs have been the object of a great deal of scholarly attention. Much of the earlier scholarly dialog is no longer relevant; see Stang (1942, 22–29), Arumaa (1985, 253–257). The most recent substantial treatment, Hock (1995), summarizes and evaluates points of view that still appeared to merit discussion then; apart from the handbooks, among them Gołąb (1968), Jasanoff (1978), Klingenschmitt (1982). Like others before him, Hock posits a change PIE *-ej-e/o-* > LCS *-i-*; see also Hock (2005). Unfortunately, Hock (1995) assumes that the Slavic development was part of an ancient “Baltoslavic” complex of vowel contractions, which he concedes is poorly understood. After much deliberation he concludes that a full understanding of the Slavic *-eje-* > *-i-* change must await a definitive explanation of Baltic /*ej*/ reflexes (84).

The *i*-verbs are interesting not only for the segmental history of their suffix, or suffixes, but for the development of accentual paradigms (APs) in verbal morphology in LCS and the post-LCS period; cf. Stang (1957, 44). Dybo (2000) offers some data on the geographical distribution of *i*-verb APs and thereby draws attention to the need for closer scrutiny of the relations among APs in this verb class. Here, additionally, we will consider their relation to the APs of other verb classes.

In the following pages, I will first present my own account (sections 3.1–3.2) and then review some of the ideas that have been discussed in recent literature.

3.1. CS -eje- > LCS -i-

I assume that the CS -eje- > LCS -i- change was one of the first manifestations of the Common Slavic VCon drift, and that consequently a coherent account of the i-Presents can be constructed in a Slavic perspective. Specifically, the series of changes in this verb suffix (Glide Loss, Assimilation, Monosyllabication) began soon after the Second CS Vowel Shift. I return to the question of chronology below (sections 3.3, 6.3).

The i-verbs, Leskien's Class IV, are of two kinds, A and B. Class IV.B are the verbs of the LCS *mĭn-ě-ti*, *mĭn-i-*, Li. *mině-ti*, *min-i-* type. Originally formed from PIE statives, their Presents appear to have had a suffix -ei- ~ -i-, of which Slavic generalized the full grade CS -ei- (> -ī- > LCS -i-), and Baltic, the zero grade -i-; see Beekes (1995, 229; 2011, 255).

Our topic is the Class IV.A verbs. Since the 1800s (Brugmann [1916] 1967, 76, 244; van Wijk 1929, 247; Meillet 1934, 236, Vaillant 1964, 435) linguists have identified the Class IV.A Present formation of Slavic iteratives as a reflex of the PIE -ěj-e/o- suffix forming causatives in the classical languages, e.g., Skt. *mān-āya-ti* 'honors', Gk. *dokeō* 'think, opine', Lat. *moneō* 'admonish'. The Slavist's problem is how to reconcile a PIE, CS -eje-, normally LCS -ĭje, with a LCS -i-.

The first step is to recognize VCon as a sequence of phonetically motivated changes. The initial phase is a lenition that leads to Glide Loss: An intervocalic /j/ is weakened (opened) to a non-syllabic vocoid that becomes minimally different from the preceding vowel, e.g., /ije/ comes to be pronounced [i¹e]; see (2.a). Once the intervocalic glide has been thus reduced, it may be reanalysed as a mere transition between vowels, that is, as a phonemic nothing: [i¹e] ⇒ /ie/ (2.b). Modern examples of glide loss that illustrate such a progression are well attested in Slavic, in Macedonian dialects, for instance, /j/, /v/, and /h/; e.g., dial. *begaja*||*begaa*||*begā* 'runs', *glava*||*glaa*||*glā* 'head', *snaha*||*snaa*||*snā* 'daughter-in-law'; see Koneski (1966, 46, 62–66); Vidoeski ([1994] 2005). Glide Loss opens the way for Assimilation of the two contiguous vowels (2.c) and then Monosyllabication (2.d), in this instance, their Coalescence into a single (initially, long) vowel; see section 3.3.

- (2) CS nas-¹eje-ti >
 LCS nos-¹ije-ti → [nos¹ijeti] > (a) [nos¹i¹eti]
 ⇒ (b) /nos¹i¹eti/ → [nos¹i¹eti] > (c) [nos¹i¹i¹ti]
 ⇒ (d) LCS /nòs-ī-tī /

For the moment, we leave aside the *prs.1sg* form. It can be assumed that all of the remaining personal forms had *-eje-* after the CS Umlaut change (a > e /j_) in 1pl, 3pl. In CS the sequence /eje/ changes to /ije/; e.g., CS *tr-ej-es gast-ej-es.nom.pl* > LCS *tr-ij-e gost-ij-e* ‘three guests’. Note that these are wordforms with /j/ in alternating environments, cf. LCS *gost-ij-ŭ.gen.pl*, *gost-i.acc.pl*, *gost-ī-xŭ.loc.pl*. In the uniform environment of the Present suffix (*-eje-* >) *-ije-*, the glide is lost, and *-ie-* assimilates to *-ii-*, which coalesces into CS *-ī-*, as shown in (2). If the suffix is accented CS ¹*eje-* (> LCS ¹*ije-* > ¹*ie-* > ¹*ii-*), the ictus is retracted to the preceding syllable, producing a neoacute accent on the preceding vowel, e.g., [nos¹i¹eti] ⇒ /nòsieti/ (2.d); cf. Stang (1957, 108). We return to the phonological details of this change in section 3.2.1. Thus, in the iteratives, e.g., CS *nas-ī-tei.inf*, *nas-¹eje-ti.3sg* ‘carry, carries’, yield LCS *nos-¹i-ti*, *nòs-ī-tī*, R *nosít’*, *nósit*, dial. *nòs’it*, Ča. *nosīt*, *nòs-ī*, Što. *nòsiti*, *nòs-ī*, Sn. *nosíti*, *nósi*, Cz. *nositi*, *nosí*; CS *kaup-¹i-tei*, *kaup-¹eje-ti* ‘buy, buys’, LCS *kup-¹i-ti*, *kúp-i-tī*, correspondingly R *kupít’*, *kúpit*, Ča. *kūpīt*, *kūpī*, Što. *kúpiti*, *kūpī*, Sn. *kupíti*, *kúpi*, Cz. *koupiti* (OCz. *kupiti*), *koupí*. Accent on the second syllable of the CS suffix (in Slavic causatives and denominatives, PIE *-e-jé/ó-*) results in a “secondary acute”: (*-e¹e-* >) LCS *-ij¹e-* > *i¹e-* > *-i¹i-*, *-¹ī-*), e.g., CS *zwan-¹i-tei.inf*, *zwan-¹eje-ti* ‘ring, rings’, LCS *zvon-¹i-ti*, *zvon-¹i-tī*; see further section 3.2.2.

The series of changes posited here for the (CS *-eje-* >) *-ije-* sequence in uniform environments is repeated later in alternating environments in some Slavic dialects, e.g., Glide Loss, Assimilation, and Coalescence in LCS *zel-ij-e* ‘cabbage’, OCz. *zel-ie*, Cz. *zel-í* and hundreds of Cz. lexemes like it, LCS *tr-ij-e* ‘three’ > OCz. *tříe* > Cz. *tří*, LCS *gost-ij-e* ‘guests’ > OCz. *hostie* (Glide Loss; later desinence replacement, Cz. *hosté*).

The development of (CS *-ejām.1sg* >) LCS *-ijō* is different. After Glide Loss (3.a–b), /iō/ undergoes Monosyllabication through an “Intensity Shift”: The ending-initial /i/ loses its syllabicity to the following, more sonorous vowel; if the /i/ is accented, i.e. carries a high-tone, the high-tone

passes to the more sonorous vowel: $-i^1q > -j^1q$ (3.c). Thus CS $nas-^1ej\bar{a}m$ yields LCS $nos-j-^1q$ (3.d), and after Dental Palatalization and Deiotation, $noš^1q$ (3.e). The Intensity Shift in $-i^1q > -j^1q$ occurs prior to the Ictus Retraction in the other Present forms; hence *prs.1sg* does not give rise to a neoacute but remains end-accented.

- (3) CS $nas-^1ej\bar{a}m >$
 LCS $nos-^1ijq \rightarrow [nos^1ijq] >$ (a) $[nos^1i^1q]$
 \Rightarrow (b) $/nos^1i^1q/ \rightarrow [nos^1i^1q] >$ (c) $[nosj^1q]$
 \Rightarrow (d) $/nosj^1q/ \rightarrow [nošj^1q] \Rightarrow$ (e) $/noš^1q/$

Intensity Shift (3.c) is illustrated in Andersen (1973, 24, also *passim*) with the English change in *new, few*, etc. $[niu], [fiu] > [nju:], [fju:]$; the former pronunciation is still current in New England and in Eastern England; see Kurath (1964, 78). Danish and Swedish illustrate the contrast between Coalescence and Intensity Shift in such regular reflexes of earlier /iu/ as *Da. byde* : Sw. *bjuda* 'bid', *dyb* : *djup* 'deep', *dyr* : *djur* 'animal', *lys* : *ljus* 'light', *myg* : *mjuk* 'soft', *nyde* : *njuta* 'enjoy', *syv* : *sju* 'seven', *tyv* : *tjuv* 'thief'. The modern reflexes of Old English and Old Danish breaking show the same contrast, e.g., *bear* : *björn*, *earth* : *jord*, *even* : *jævn*, *feather* : *fjer*, *help* : *hjælp*, *heart* : *hjerte*, *mead* : *mjød*. More Slavic examples of Intensity Shift will be seen in section 5.3 below.

Dental Palatalization and Deiotation (3.d), which are easily captured in a set of ordered rules, have to be understood not simply as events that occur one after another, but as synchronic constraints that are codified at a certain time in CS and remain productive until the Third CS Vowel Shift (section 2.3). During this period they first affect inherited sequences of /Cj/ and subsequently any new /Cj/ sequences, such as those in (3.e). Only the syncope of weak jers (light lax high vowels) in VS_3 gives rise to new (post-LCS) sequences of /Cj/ that are not subject to the CS phonetic constraints.

After the Intensity Shift in *prs.1sg* (3.c) the Present suffix of Class IV.A verbs has two allomorphs, LCS $-j-$ before vowel (in *1sg*) and $-i-$ before consonant. This alternation also develops in Class IV.B verbs, e.g., CS $w^1id-^1ej\bar{a}m.1sg$, 'see' $>$ LCS $w^1id-ij-q > w^1id-i-q > w^1id-j-q$, cf. OCS *viždq*, CS $w^1id-ei-ti.3sg >$ LCS $w^1id-i-ti$, cf. OCS *viditŭ*.

3.2. ECS -eje- > LCS -i-. Some Perspectives

The account of early VCon in the Class IV.A Present that has been offered in section 3.1 has important implications, phonological (section 3.2.1), and morphophonemic (sections 3.2.2–3).

3.2.1. Phonological Perspectives

When the diachronic correspondence ECS -eje- > LCS -i- is resolved into the series of phonological innovations that brought it about, as in section 3.1, the standard account of the origin of the neoacute in *i*-verbs, Stang's (1957, 108) hypothetical "ictus retraction from an inner circumflex", appears in a different light: It is not at all certain that the ictus was retracted from a circumflex LCS \hat{i} , as Stang surmised, or even that there ever was a circumflex \hat{i} in such forms. The ictus more likely was retracted from a lax (short) /i/ before the Monosyllabication, as in LCS ^{-1}ije -, ^{-1}ie -, or ^{-1}ii -. It was then part of the regular Ictus Retraction from lax (short) high vowels, final (e.g., LCS *kònjī* 'horse', *bòbŭ* 'bean') or word-internal (*bòljīše* 'bigger', *mògŭše* 'having been able'). In other words, the *i*-verb retraction can be subsumed under a more general change that is not only suprasegmental but, more importantly, metrical. The Ictus Retraction reduced the weight of any ictic lax (short) high vowel and increased the weight of the preceding syllable, in each case creating a trochaic foot. This was the key step in creating the regular alternation of heavy and light syllables that was central to the Jer Shift, VS₃; see Bethin (1998a; 1998b, 95–111).

In the case of the *i*-verbs, however, the subsequent Coalescence in the Present suffix produced a post-ictic long vowel and hence a different (perhaps earlier) phonologization of the neoacute accent than in syllables preceding a lax (short) high vowel. This outcome had interesting consequences; see section 3.2.3.

3.2.2. Class IV.A Accent Paradigms

The Ictus Retraction in iterative *i*-verbs and the lack of retraction in *prs.1sg* resulted in a new mobile accent paradigm. This had consequences for verbal accentuation in general, but first and foremost for the *i*-verbs.

In Class IV.A verbs, there were now four accentual paradigms, two of them columnar (AP *a*, AP *b*₂) and two mobile (AP *b*₁, AP *c*); see LCS *st¹avj^o* 'put', *noš¹q* 'carry', *zvonj¹q* 'ring', *koš^oq* 'mow' in Table 1. While iteratives reflected

PIE *-éje-* with the new, mobile AP b_1 , apparently causatives (PIE *-éje-*) and denominatives (PIE *-e-jé-* >) had merged accentually in CS *-ej¹e-ti* > LCS *-¹i-tī*, yielding a fixed columnar AP b_2 ; see Table 2 below.

Table 1. Accent Paradigms in LCS *i*-Verbs

	AP a	AP b_1	AP b_2	AP c
Prs.1sg	st ¹ avjɔ	noš ¹ ɔ	zvɔnj ¹ ɔ	košɔ
Prs.3sg	st ¹ avitī	nòsitī	zvɔn ¹ itī	kositī
Prs.2pl	st ¹ avite	nòsite	zvɔn ¹ ite	kosit ¹ e

The iteratives' AP b_1 remained stable across the Slavic dialects. But in several Slavic regions, the reflexes of the two AP b classes show complete or partial lexical merger. Nikolaev and Dybo (Dybo 2000, 463–480) identify four regional outcomes of AP reflexes of causatives and denominatives. Note that Dybo designates their divergent accentual reflexes as b_2 . In the present account AP b_2 refers exclusively to the columnar accent; see (4):

- (4) Type 1. Consistent “retraction” in AP b_2 verbs (LCS *lòžitī* ‘lays’, *chválitī* ‘praises’): In northern Slovenian, Kajkavian and north Čakavian, central and east Bulgarian.
- Type 2. “Retraction” in AP b_2 verbs to [CS] short root vowel, but not to long (LCS *lòžitī*, *chválitī*): In west Bulgarian, in west, northwest and north Russian, north and northeast Belorussian, west Ukrainian except Hucul and Bukovina dialects, and Štokavian dialects.
- Type 3. “Retraction” in AP b_2 verbs to [CS] long root vowel, but not to short (LCS *ložítī*, *xválitī*): In 17th-century Croatian (Juraj Križanić), some south Čakavian, south Slovenian and Kajkavian dialects, Russian dialects of the northern Nižnij-Novgorod and Kostroma groups, central and southern Belorussian, right-bank Ukrainian Polissja dialects, and Slovincian–Kashubian.
- Type 4. No “retraction” (LCS *ložítī*, *chválitī*): In east and southeast Russian (including st. Russian).

It is difficult to say anything definitive about these four areal types. Dybo speaks vaguely of their disparate areas resulting from medieval migrations.

This is easy enough to imagine, but he offers no evidence that would connect the accent changes with other evidence, say, shared lexical heritage or documented population movements. To account for the two variants of AP *b*, he characterizes the Present suffix -i- in one as “dominant”, in the other as “recessive”. This labeling is a way of acknowledging the result of change, but it does not explain anything. In particular, it provides no explanation for the alleged “retractions” in causatives and denominatives.

Whatever population movements there may or may not have been, the crazy-quilt geography of these four types looks like the outcome of several independent changes, partly divergent, partly parallel in different areas. The changes cannot have been “accent retractions” in the sense in which this expression is normally used, somewhat loosely, about an ictus retraction and the subsequent phonologization of a neoacute or rising accent. They can only have been changes in the accentual specifications of the verbs in question. Here it is essential to note that the two LCS variants of AP *b* in Table 1 had identical prs.1sg accent. Hence the changes that produced Dybo’s Types 1–3 may not have been different in kind from the well-known AP levelings in the recent history of Russian, for instance, the drift from mobile stress to end stress exemplified by dial. *kup’it’*–*kup’it* ‘buy’, *chod’it’*–*chod’it* ‘walk’, etc. or the opposite change as in dial. *zvon’it’*–*zvon’it* ‘ring’, *plat’it’*–*plót’it* ‘pay’, *dar’it’*–*dór’it* ‘give as present’; see Avanesov and Orlova (1965, 157–158). Such changes show that one of two APs can be valued as primary (unmarked) and another as secondary (marked). Simplifying innovations, which tend to move lexical items from one AP class to the other, may accordingly occur, as marked accent forms are replaced by unmarked ones. Such innovations are quite naturally supported by similarities in root vocalism or consonant alternation, as appears to have been the case in Dybo’s Types 2 and 3. In view of the fact that the difference between the mobile AP *b*₁ and the columnar *b*₂ was established perhaps some 1500 years ago (and some 1000 years before the writings of Križanić), there has been ample time for such levelings to occur.

Only Type 1 may have a different and much earlier origin: It may of course imply a wholesale extension of AP *b*₁ to all AP *b*₂ verbs after the phonologization of the neoacute, as Dybo hypothesizes. But it may also go back to an earlier, CS accentual merger of denominative verbs with the deverbal causatives and iteratives. Note that in the standard CS reconstruction (yielding Type 4), causatives have merged accentually with denominatives. The Type 1 areas may reflect the reverse accentual merger of denominatives with causatives

and iteratives; see Table 2. Dybo's description implies a sequence of these two AP extensions, first the denominatives' CS -*éjé-* accent is extended to causatives, then the iterative -*éje-* accent is extended to causatives and denominatives.

Table 2. Common Slavic AP Extensions

	Iteratives	Causatives	Denominatives
LCS	PIE - <i>éje-</i>	PIE - <i>éje-</i>	PIE - <i>ejé-</i>
Type 4	- <i>éje-</i>	- <i>éjé-</i>	
Type 1	- <i>éje-</i>		

But the mixed Types 2 and 3 appear to be results of post-LCS AP simplifications, most likely actualized after the territorial expansion. They may have developed as compromises between Types 1 and 4, perhaps in the processes of local and regional norm formation that followed the sedentarization of the Slavs. Or perhaps they developed more recently. For the time being only such speculative interpretations seem possible.

3.2.3. AP *b* in Other Verb Classes

Since Ictus Retraction can have occurred at any time during the LCS -*lje-* > -*ie-* > -*ii-* development and, if it did, was part of a well-established, more general sound change (section 3.2.1) one cannot help wondering about the general validity of Stang's (1957, 44) theory of "retraction from an inner circumflex".

In addition, once Dybo's changes of verbal lexemes from AP *b*₂ to AP *b*₁ are understood as analogical changes, it is difficult to close one's eyes to the parallel changes in the other verb classes where an inherited, columnar AP *b*₂ has been replaced with the iterative *i*-verbs' mobile AP *b*₁. Such a replacement is seen in Leskien's Class I: R dial. *mogú-môžet*, Cz. *mohu-může*, SBC *mògu-môže*, *íci/íci-ídēm* or *īdēm*; in Class II: R dial. *tonú-tônet*, SBC *tònuti-tðnēm*; in Class III.1: (i) R. dial. *kol'ú-kôlet*, SBC *klãti-kõljēm*; (ii) R *pišú-pišet*, SBC *písati-pišēm*; and in Class III.2: SBC *pítati-pītām*.

It seemed to Stang (1957, 44) that the spread of the neoacute-mobile AP *b*₁ to other verb classes was analogical in nature. As he put it, "Here the influence of the *i*-stems must have operated in one form or another." We can be more precise: This is not an analogical change in the traditional sense;

but across these verb classes inherited columnar, marked-accented (AP b_2) wordforms have been replaced with unmarked-accented (AP b_1) ones. Furthermore, as can be seen in the SBC examples, it is not only the neoacute–mobile AP b_1 that has been extended, but also the iterative i-verbs' characteristic sequence of neoacute stem-vowel followed by post-tonic long ending-vowel.

3.3. The i-Verbs. Conclusion

To conclude this chapter, a few words on the chronology of Early VCon, on the two types of VCon exemplified here, and on the phonetic aspect of the “neoacute retraction”.

1. Chronology. Whereas the time frames of the levelings of accent paradigms identified by Nikolaev and Dybo (section 3.2.2) are quite uncertain, the development of the neoacute can be dated with some confidence. The distinct modern reflexes of CS / \bar{a} /, /a/ under accent (acute or neoacute) vs. in accentless wordforms (enclitomena) presuppose the quantity-to-quality change of the Second CS Vowel Shift; contrast SC *prāvī* ‘drives’, *nōsī* ‘carries’, *bōb* ‘beans’ vs. *glāvu* ‘head’, *vōdu* ‘water’, *bōk* ‘side’. In other words, the VCon in the Present of i-verbs occurred after VS₂, though perhaps while lax and tense vowels were still (redundantly) short and long, respectively.

Recognizing the distinction between uniform and alternating environments makes it possible to posit an early phase of Glide Loss in the LCS Present suffix -ije- that preceded Glide Loss in formations with /j/ in alternating environments, in inflected forms, collectives, and deverbal nouns.

2. Vowel Contraction. The two instances of VCon examined here exemplify the principal types of Monosyllabication. (i) In prs.1sg, Intensity Shift: The less sonorous vowel becomes nonsyllabic (Glide Formation) as its prosodic feature(s) are transferred to the more sonorous vowel; this is common where the contiguous vowels differ in rounding or differ substantially in height. (ii) In the other personal forms, Coalescence: After Glide Loss and Assimilation the two syllables come to be realized with one syllable pulse and are then reanalysed as a single long syllabic; see section 5.3.

3. Neoacute Retraction. Since Stang (1957), it has been standard doctrine that the neoacute accent in i-verb Presents came about through an ictus retraction from a noninitial circumflex vowel. The account that has been offered here makes it possible to understand this change in different terms.

First, the ictus was not retracted from an inner circumflex, but from the accented lax (short) /i/ in -^lije-, -^lie-, or -^lii-. This means that this Ictus Retraction was motivated by the same phonetic constraint that motivated Ictus Retraction from all accented lax (short) high vowels.

Secondly, with this more general understanding of the Ictus Retraction, the extensions of the neoacute to the Present of other *i*-verbs (Dybo's Types 2 and 3) and to verbs of other classes (Stang 1957, 44) emerge more clearly as morphophonemic simplifications, extensions of the unmarked AP b_1 to replace its marked counterpart, AP b_2 .

Thirdly, also Dybo's Type 1 appears in a new light. It may not have been produced by a post-LCS analogical change at all; more likely it was part of a CS bifurcation that in some CS dialects separated the iteratives (APs a and b_1) from causatives and denominatives (APs a and b_2), but in other dialects established a single accentuation for all derived *i*-verbs (APs a and b_1). While the latter simplification appears to require no special motivation, the former does: In effect it established iteratives as an accentual category different from the other derived verbs, both causatives and denominatives. One can wonder if there is a possible connection between this specialization of AP b_1 for iteratives and the formation of a morphological category of iteratives in the early development of the category of aspect.

4. The Imperfect

In Common Slavic, the aorist and imperfect that were inherited from Indo-European merged into a general preterite. This tense combined morphological elements of both of these former tense–aspect categories, notably in heteroclitic paradigms with one stem or accent in prt.2–3sg and another in the remaining personal forms. Some time toward the end of the prehistorical period, a new preterite tense was grammatized, the CS Imperfect. Remarkable by its transparent, agglutinative structure, it was apparently introduced to characterize a past event as on-going or repeated. By contrast, the existing general preterite, with its mixture of ancient aorist and imperfect forms, was reduced to the unmarked preterite we call Aorist, which served mainly to characterize past events as singular or bounded. These are the Imperfect and Aorist that are attested in OCS, Old Russian, Old Czech, and medieval Church Slavonic texts. Among the modern languages they are reflected in the

tense systems of modern Bulgarian, Macedonian, and Serbian as well as in the inflection of the Preterite of the Sorbian languages.

Here the focus will be on the Imperfect suffix, which undergoes VCon in the LCS period. This is a relatively minor matter compared to other issues relating to the history of the Imperfect, which have been the topic of a large literature; see Arumaa (1985, 283–294), Hock (2005, 23–24). I will mention some of these issues very briefly in section 4.3. But first we will look at the structure of the LCS Imperfect (section 4.1) and the outcomes of VCon in the Imperfect (section 4.2).

4.1. The Structure of the CS Imperfect

The earliest attestation of the LCS Imperfect is in OCS. The handbooks record extensive, irregular variation in its spelling forms across the OCS texts; see van Wijk (1931, 84–87, 225–228), Diels (1932, 112–115, 234–238); examples in (5); LCS correspondents in (7).

(5) Imperfect. OCS examples

- a. LCS *-ěja-* ~ *-aja-*. Class I.A: OCS *veděachŭ, veděchŭ* ‘led’; *možaachŭ, možachŭ* ‘could’; *mrěachŭ, mrěchŭ, mřěachŭ, mřěchŭ* ‘lay dying’. Class II: *sŭchněachŭ, sŭchněchŭ* ‘dried’. Class III.1: *bijaachŭ, bijachŭ* ‘beat’; *pojaachŭ, pojachŭ* ‘sang’. Class III.2: *věrujaachŭ, věrujachŭ* ‘believed’. Class IV.A: *voždaachŭ, voždachŭ* ‘led’; *nošaachŭ, nošachŭ* ‘carried’; *postavljaachŭ, postavljachŭ* ‘instructed’. Class IV.B: *sěděachŭ, sěděchŭ* ‘sat’; *chotěachŭ, chotěchŭ* ‘wanted’. Class V: *běše, běaše* ‘was’; *daděachŭ, daděchŭ* ‘gave’.
- b. LCS *-aja-*: Class I.B: *bīraachŭ, bīrachŭ* ‘gathered’. Class III.1: *znaachŭ, znachŭ* ‘knew’. Class III.2: *dělaachŭ, dělachŭ* ‘made’; *věrovaachŭ, věrovachŭ* ‘believed’.

Besides these typical spelling forms rare instances of *-ěja-* (*sŭpějaše* ‘advanced’, *sŭmějaše* ‘dared’, written with «ja») and *-ěě-* (*věděěchŭ* ‘knew’) are found; they are considered artificial (Diels 1932, 82, 237), but may be dialectal (Vaillant 1966, 243).

It is rather obvious that the attested spelling variation corresponds to the last two steps in the progression of VCon, Assimilation and Monosyllabication. It implies that Glide Loss had already occurred in earlier, LCS Imperfect

-ěja- and -aja- sequences, perhaps not long before the first translations were made for the Christian mission to the Slavs (AD 863).

Since one or the other of these sequences was an invariable element in every Imperfect form, it would not be surprising if glide loss had begun earlier in these uniform environments than, say, in the definite adjectives; cf. section 2.1.

The morphosyntactic structure of the Imperfect endings on the eve of the OCS attestation was a string of affixes, in CS terms: (a) an interfix - ē- alternating with zero, followed by the suffixes (b) -jā- ‘progressive’ and (c) -ch- (~-š-) ‘preterite’, (d) an interfix -a- (~-e-, the thematic vowel) followed by (e) a person and number desinence; see (6).

- (6) Ø + ‘progressive’ + ‘preterite’ + Ø + ‘person/number’
 -ē -jā -ch/š -a/e -m.1sg

Each of these elements calls for some comment.

First, the initial interfix LCS -ě- (7.a), like the verb class markers LCS -a-, -i-, -ě-, has no apparent meaning (hence the term “interfix”); but it differs from them by occurring only in the Imperfect and by being phonologically conditioned: It is absent after the LCS root-final or suffixal -a- (7.a–d) or -ě- (7.c–d), but it is added directly to any unsuffixed consonantal root (Class I.A) (where it conditions palatal alternants of root-final velars) and to the Class II suffix -n-; in OCz. and OR it replaces the Class IV.A marker -i- (7.d), but in OCS it is added to the Class IV.A Present-stem alternant in -j-; cf. section 3.1 and see below; after /č, š, ž, j/ it appears as LCS -a- (7.a). Old Slavic texts document a tendency to form the Imperfect from Present-tense stems of several verb types; see the alternate forms in (7.a–e), especially (7.d).

It is interesting, but unimportant here, that the -ē-interfix, despite its phonological conditioning, may be a former (ECS imperfect >) CS preterite suffix with Baltic congeners; see Arumaa (1985, 249, 261), Rasmussen (1993), Hock (2005, 23). Its original lexical distribution in Slavic cannot be determined, although there are a few lexical correspondences with Baltic; cf. LCS nes-ti : nes-ě-ja-ch-ŭ ‘carry’ (cf. 7.a) and Li. *něš-ti.inf* : *něš-ě.prt* ‘carry’, LCS gon-i-ti ‘drive’ : gon-ě-ja-ch-ŭ (cf. 7.d) and Li. *gan-ý-ti.inf* ‘herd’ : *gān-ě.prt*.

- (7) Common Slavic Imperfect suffixes
 a. Class I.A: LCS nes-ti.inf, nes-ŏ.prs.1sg ‘carry’: nes-ěja-chŭ;
 motji, mogŏ ‘be able’: mož-aja-chŭ; dial. merti, mīrŏ ‘die’:

- dial. *mrě-ja-chŭ* ~ *mĭr-ěja-chŭ*. Class I.B: *bĭrati*, *berq* ‘gather’: *bĭra-ja-chŭ* ~ *ber-ěja-chŭ*; *stonati*, *stonq* ‘groan’: *stona-ja-chŭ* ~ *ston-ěja-chŭ*.
- b. Class II: *sŭchnqti*, *sŭchnq* ‘dry’: *sŭchn-ěja-chŭ*; *stati*, *stanq* ‘arise’: *sta-ja-chŭ* ~ *stan-ěja-chŭ*.
- c. Class III.1.a: *znati*, *znajq* ‘know’: *zna-ja-chŭ*; *sŭmĕti*, *sŭmĕjŭ* ‘dare’: *sŭmĕ-ja-chŭ*; *pĕti*, *pojŭ* ‘sing’: *poj-aja-chŭ*; Class III.1.b: *pĭsati*, *pišŭ* ‘write’: *pĭsa-ja-chŭ*. Class III.2: *dĕlati*, *dĕlajŭ* ‘make’: *dĕla-ja-chŭ*; *dajati*, *dajŭ* ‘give’: *daja-ja-chŭ*; *bijati*, *bijajŭ* ‘beat’: *bija-ja-chŭ*; *vĕrovati*, *vĕrujŭ* ‘buy’: *vĕr-ova-ja-chŭ* ~ *vĕr-uj-aja-chŭ*.
- d. Class IV.A: *voditi*, *vodj-q* ‘lead’: *vod-ěja-chŭ* || *vod-j-aja-chŭ*; *nositi*, *nošŭ* ‘carry’: *nos-ěja-chŭ* || *noš-aja-chŭ*; *staviti*, *stavjŭ* ‘put, stand’: *stav-ěja-chŭ* || *stav-j-aja-chŭ*; see section 3.1). Class IV.B: *sĕdĕti*, *sĕdjŭ* ‘sit’: *sĕdĕ-ja-chŭ*; *chotĕti*, *chotjŭ* ‘want’: *chotĕ-ja-chŭ*.
- e. Class V: *byti*, *esmĭ*, *bŭdq* ‘be, become’: *b-ěja-chŭ.imf*, *bŭd-ěja-chŭ*. *prosp.imf*; *dati*, *damĭ* ‘give’: *dad-ěja-chŭ*.

Secondly, the progressive (durative, iterative) suffix CS *-jā-* (6.b) is indistinguishable from the derivational suffix *-jā-* used to derive atelic (imperfective) verbs; e.g., LCS *da-ti.pv*, *da-ja-ti.ipv*. It may well be related to the Baltic suffix *-jā-* ‘iterative’ of Li. (*bĕg-ti* ‘run’) *bĕg-io-ti* ‘run around’.

Thirdly, the preterite suffix *-ch-* (6.c) has an alternant *-š-* before front vowels. It is in origin an aorist suffix, PIE *-(h₁)s-*, modified by the *ruki*-change and widely extended in the CS preterite.

Fourthly, the thematic vowel (PIE *-e/o-*, 6.d) is CS *-a-* before sonorant, otherwise *-e-*.

Finally, the person and number desinences (6.e) are the same as in the “thematic” (PIE aorist > CS preterite >) Aorist; thus CS sg. *-ch-a-m*, *-š-e-s*, *-š-e-t*, pl. *-ch-a-mas*, *-š-e-te*, *-ch-a-nt*; LCS *-ch-ŭ.1sg*, *-š-e.2–3sg*, *-ch-o-mŭ*, *-š-e-te*, *-ch-q*.

4.2. Ending-Internal VCon in the Imperfect

The reflexes of the Imperfect suffix differ among the Slavic regions. There is some evidence for a gradual progression across the Slavic languages of Glide Loss, which in a few dialects appears not to have been completed. And where

VCon has been carried through, there are regional differences in the outcomes of Coalescence.

These are apparently due exclusively to the early tendency to form the Imperfect from Present stems. This tendency is manifested in Class IV.A verbs in OCS and other south Balkan dialects; see (7.d) and the corresponding examples in (5) and in Serbian (13.d–e). It can perhaps also be identified in a few Old Polish examples; see below. In these formations, the Imperfect suffix begins with a vowel (the interfix); hence it is added to the i-Present suffix allomorph *-j-*; see section 3.1 and (7.d). By contrast, Old Russian, Old Czech, and Old Sorbian document Coalescence of LCS *-ěja-* > LCS dial. *-ä-* in Classes I and II as well as in Classes IV.A and B. The same outcome seems to be in evidence in Old Slovenian (12).

In East Slavic, the VCon outcomes are (*-aja-* >) OR *-a-* and (*-ěja-* >) OR *-ä-*; /ä/ is the front vowel opposed to the back vowel /a/; it is identical to the regular, denasalized reflex of LCS /ɛ/, but the /ä/ : /a/ distinction is neutralized after /č, š, ž/. (Traditionally, OR ...Cä... is transliterated “Cä”; but VCon precedes the development of phonemic palatalization probably by a century or more.) It is notable that OR /ä/ reflects LCS *-ěja-* not only in Imperfect forms with the LCS interfix *-ě-*, but also where the /ě/ of the sequence is part of a verbal root (in Class III.2) or the class marker (in Class IV.B); contrast *sŭmächu* ‘dared’, *sědächu* ‘sat’, *chotäše* ‘wanted’ in (8) with the corresponding LCS forms in (7). These examples show that root-final /ě/ and the class marker /ě/ were identified with the initial /ě/ of the Imperfect suffix; in a synchronic description one might say that they were truncated before the Imperfect *-ěja-*. Some OR Imperfects are built on the Present stem, e.g., *umräše* ‘lay dying’, *stonäše* ‘groaned’, *usnäše* ‘fell asleep’, *stanäše* ‘would stand up’, *dadächu* ‘would give’, *budäše* ‘was going to (+ inf)’ in (8); contrast the forms in (7). The attested forms cited in (8) and later examples are *-chŭ.1sg*, *-še.3sg*, and *-chu.3pl*.

- (8) Imperfect. OR correspondents to CS examples in (7).
- a. LCS *-ěja-*. Class I.A: *nesächu.3pl* *možachu*, *umräše.3sg*. Class I.B: *stonäše*. Class II: (*usnuti* ‘fall asleep’) *usnäše*, *stanäše*. Class III.1.a: *sŭmächŭ.1sg*, *otpojachu*. Class IV.A: *vodächŭ*, *nosächu*, *postavächu*. Class IV.B: *sědächu*, *chotäše*. Class V: *bächu*, *budäše*, *dadächu*.

- b. LCS -aja-. Class I.B: *brachŭ*. Class III.1.a: *znachu*. Class III.1.b: *přsachŭ*. Class III.2: *dělachu, ubivachu, dajachuti*.3pl. See Kuznecov (1959, 196–201).

In Old Czech, the outcomes are (LCS -aja- >) OCz. -a- and (-ěja- >) OCz. -ie-; see the examples in (9). The prehistorical result of VCon here was /ä/, as in East Slavic; but a later, partial merger with /a/ and subsequent conditioned vowel raising (Cz. *přehláska*) in the 1100s produced an /a/ ~ /ě/ alternation, leveled in favor of /ě/ by our earliest attestations; see Komárek (1969, 62–66). Seemingly uncontracted forms are interpretable as formed from Present stems; e.g., *dělajiech* is *dělaj-ie-ch* (as if from LCS dial. *dělaj-ěja-chŭ*), similarly, *umiej-ie-ch, hřěj-ie-ch*; see (9). Spellings of Class IV.A verbs of the type *nošiech, choziech* with stem-final consonant gradation occur, but they are late analogical formations (for earlier, amply attested *nosiech, chodiech*, etc.); see Gebauer (1958, 124.)

- (9) Imperfect. Old Czech correspondents to CS examples in (8).
- a. LCS -ěja-. Class I.A: *nesiech*.1sg, *možiechu*.3pl *mrieše*.3sg. Class II: *schnieše, stanieše*; Class III.1.a: *smiech ~ smiejiech, piejiechu*. Class IV.A: *vodiech, prosiechu, stawiechu*. Class IV.B: *sediechu, chtieše*. Class V: (*byti* 'be') *biechu, budieše, dadiechu*;
- b. LCS -aja-. Class I.B. *zwách ~ zowiech, brách ~ beřiech*. Class II: *stách*. Class III.1.a: *znách*. Class III.1.b *pisách*. Class III.2: *-bijiechu, kupowách ~ kupujiech*. See Gebauer (1958, s.vv.)

Upper Sorbian shows VCon (LCS -aja- >) -a- and (LCS -ěja- >) -ä- in the Imperfect like Old Russian and Old Czech. Here, as in prehistorical Czech, a subsequent merger of /ä/ with /a/ and conditioned vowel raising resulted in /a/ ~ /e/ alternations; these have been leveled with some exceptions (e.g., *možach–možeše*) in the modern Upper Sorbian Imperfective Preterite, which by and large continues the LCS Imperfect; see (10). In Upper Sorbian, Imperfective Preterites are regularly formed from Present stems.

- (10) Imperfect. Upper Sorbian correspondents to CS examples in (7).
- a. LCS -ěja-. Class I.A: *njesech, možach–možeše*. Class I.B: *bjerjech–bjerješe*. Class II: *schnjech–schnješe*. Class III.1.a: (*pić* 'drink') *pijach–piješe*. Class III.1.b: *pišech–pišeše*. Class IV.A: *wodžach–*

wodžeše, nošach–nošeše. Class IV.B: (*ćerpjec* ‘endure’) *ćerpjach–ćerpješe, chcych–chcyše*. Class V: *běch–běše, jědzach–jědžeše*.

- b. LCS -aja-. Class III.1.a: *znach*. Class III.2.a: (*běhać* ‘run’) *běhach, zabiwach, dawach*. Class III.2.b: *lubowach*. See Mucke (1891, 508–510; 518–520), Ermakova (1973, 250–252).

The Old Polish corpus contains only a few unequivocal Imperfect forms, all of them Class IV.A, e.g., *blogosłowiachą* (LCS dial. *bolgoslow-j-ėja-chō*), *mołwiach* (*mūlw-j-ėja-chū*), *mołwiasze* (*mūlw-j-ėja-še*), *wychodzasze* (*wy-chod-j-ėja-še*) (Klemensiewicz et al. 1964, 369). They show contraction to /a/, but it is actually uncertain whether the *-wi-* of *mołwiach* represents /v’/ or /vj/, or the *-dz-* of *wychodzasze* represents /dź/ or /dz/. If the former, they are reflexes of LCS *mūlw-ėja-še, chod-ėja-še*, if the latter, LCS *mūlw-j-aja-še, chod-j-aja-še* with the same derivation from the Present-stem alternant in -j- as in South Slavic; cf. (7.d).

There is a similar number of Imperfect forms attested in Polabian (ca. AD 1700); see (11).

- (11) Polabian. Attested Imperfect forms.
- LCS -ėja-. Class I: *rítzach* ‘said’ (LCS *reč-aja-chū*). Class: IV.B. *mēs* ‘shall, should’ (*jimě-ja-še*), *tech* ‘would’ (*chütě-ja-chū*), *techung* ‘would’ (*chütě-ja-chō*).
 - LCS -aja-. Class IV.A: *aipoistas* ‘let fall’ (*u-pust-j-aja-še*). See Olesch (1983–1984, s.vv.)

Returning to the South Slavic languages, there is a dozen or so Imperfects in the Old Slovenian Freising Fragments (ca. AD 980). Two of them show Glide Loss, but neither Assimilation nor Coalescence: *odeachu* ‘dressed’ (LCS *o-dě-ja-chō*), *zigreachu* ‘warmed’ (*sū-grě-ja-chō*). Contracted forms with LCS -ėja- have -e- (3x) or -a- (1x); see (12.a). These are also the usual reflexes of LCS /ɛ/, which suggests they may be reflexes of a LCS dial. -ä-, parallel to the Old Russian, Old Czech, and Upper Sorbian reflexes.

- (12) Old Slovenian. Attested Imperfect forms.
- ėja-. Class I: *uvedechu* ‘led in’ (*u-ved-ėja-chō*), *tepechu* ‘smote’ (*tep-ėja-chō*), *petsachv* ‘burnt’ (*peč-aja-chō*), *natrovuecho* ‘fed’ (*na-trov-ėja-chō*), *tnachu* ‘slashed’ (*tīn-ėja-chō*).

- b. -aja-. Class III: *stradacho* ‘suffered’ (*strada-ja-cho*), *raztrgachu* ‘tore asunder’ (*ras-tirga-ja-cho*), *obuiachu* ‘gave shoes’ (*ob-uja-ja-cho*), *naboiachu* ‘gave to drink’ (*na-poja-ja-cho*), *vuesachu* ‘hanged’ (*věša-ja-cho*), *bozcekachu* ‘visited’ (*po-setja-ja-cho*), *utessachu* ‘comforted’ (*u-těša-ja-cho*). See Pogačnik (1968, 56, s.vv.).

The modern Balkan Slavic languages, Bulgarian, Macedonian, and Serbian have retained the CS Imperfect as a category opposed to the Aorist. The received Imperfect has everywhere in this region undergone morphosyntactic change so that it is now regularly formed from the Present-tense stem, in addition to a variety of morphophonemic adjustments.

(13) Serbian Imperfect forms.

- a. Class I.A: (*plěsti*, *plětēm* ‘braid’) *plětijāh* ~ *plětāh*, (*pěci*, *pěčēm* ‘bake’) *pěcijāh* ~ *pěčāh*, (*mrěti*, *mrēm*, *mrěmo* ‘die’) *mrāh*–*mrāše*. Class I.B: (*brāti*, *bērēm* ‘take’) *bërijāh* ~ *bërāh* ~ *brāh*.
- b. Class II: (*sāhnuti*, *sāhnēm* ‘dry’) *sāhnjāh*, (*tōnuti*, *tōnēm* ‘drown’) *tōnjāh*.
- c. Class III.1.a: (*znāti*, *znām* ‘know’) *znāh*–*znāše*. Class III.1.b: (*pīsati*, *pīšēm* ‘write’) *pīsāh*. Class III.2: (*vrācati*, *vrācām* ‘turn’) *vrācāh*; (*večērati*, *večērām* ‘have supper’) *večērāh*, (*večērāvati*, *večērāvām* ‘idem; ipv’) *večērāvāh*, (*kazīvati*, *kazūjēm* ‘tell’) *kazīvāh*.
- d. Class IV.A: (*vōditi*, *vōdīm* ‘lead’) *vōdjāh*, (*vrātiti*, *vrātīm* ‘turn’) *vrācāh*. Class IV.B: (*žēleti*, *žēlīm* ‘desire’) *žëljāh*.
- e. Class V: (*biti*, *jēsam* ‘be’) *bějāh* (~ *běh*), (*jěsti*, *jědēm* ‘eat’) *jědjāh* ~ *jědāh*. See Belić (1962, 59–62; 101).

Standard Serbian reflects some of the most conservative dialects of the area. Its Imperfect has both uncontracted and contracted endings and provides some evidence of the accentuation of the LCS Imperfect. Note first, in (13), that the *contractum* Srb. *-ā-* (< LCS *-ěja-* and *-aja-*) has been extended from contracted to uncontracted Imperfect endings. Wherever this suffix is accented (e.g., *brāh*, *znāh*) or was accented prior to the Štokavian accent retraction (e.g., *plětāh*, *pěčāh*, *žëljāh*), it represents an Old-Štokavian fixed circumflex, the reflex of a LCS neoacute accent; more about this in section 4.3. The reflexes of neoacute accents on stem vowels in Classes II and IV (e.g., *tōnjāh*, *vōdjāh*, *vrācāh*) cannot be products of phonological change, but result from

the formation of Imperfect forms from Present stems. Note the contrast between Class IV.A *vòdīm.prs.1sg, vòdjāh.imf.1sg* and IV.B *žèlīm, žèljāh.imf.1sg*. The former has the neoacute originally produced by Ictus Retraction from (CS -^leje- >) LCS -^lije-, -^lie-, or -^lii- and then retained as the Imperfect came to be built on the Present stem; the latter's Present has a "neutral, secondary" LCS -^li- (< CS -^lei-); see section 3.2.

As for the uncontracted Srb. -*ijā*- variant in Class I Imperfects, it reflects LCS -*ě-ja*- with the Class I interfix -*ě*- and vowel raising (/æ/ > /e/, eventually > /i/ before /j/); see section 4.1. The alternation of stem-final velars has been renewed before this suffix; contrast *pècijāh* vs. older *pèčāh*. It is peculiar that the Srb. -*ijā*- suffix does not occur with verbs of Classes III.2.a or IV.B, which also had LCS -*ě-ja*-; thus for LCS *zelen-ě-ja-chü* (*zelen-ě-ti* 'turn green'), *žel-ě-ja-chü* (*žel-ě-ti* 'desire') Serbian has *zelènjāh, žèljāh*. It is difficult to understand why the totally general /æ/ > /e/ change would have occurred in Class I Imperfects, but not in Classes III.2.a or IV.B. What is clear is that the modern Imperfects in these classes have been reshaped with the productive Imperfect suffix -*ā*- added to the Present stem

One final observation: Serbian lost the *i*-Present suffix allomorphy LCS -*j- ~ -i-*, e.g., LCS *vod-j-ō.1sg, vòd-i-tī.3sg* > Srb. *vòd-ī-m, vòd-ī*; hence the stem-final palatals at one time conditioned by -*j-* in Class IV.A Imperfects (e.g., *vòdīm, vòdjāh*) were reanalysed as conditioned by the Imperfect ending. As a consequence the stem-final alternations have been extended to Class IV.B (*žèlīm, žèljāh*), Class II (*tònēm, tònjāh*), Class III.2.a (*zelèneti, zelènjāh*), and individual verbs of Class I (*ìdēm, ìdjāh*) and Class V (*jèdēm, jèdjāh ~ jèdāh*).

4.3. The Imperfect. Conclusion

As we have seen, Imperfect -*VjV-* sequences have undergone VCon in all Slavic regions. The retention of the uncontracted (LCS -*ěja- >*) -*ijā*- variants of Class I.A Imperfects in Serbian is the only exception; we return to this in section 6.2.

Upper Sorbian, Old Czech, and Old Russian show contraction of LCS -*ěja-* to a low front vowel in Classes I.A, II, and IV.A, e.g., US *wjedjech, uschniech, wodžah-wodžeše*, OCz. *wediech, usniech, wodiech*, OR *vedächü, usnächü, vodächü* 'carried'. In Classes I.A and II, OCS similarly has contraction to -*ě-*, e.g., *veděchü, usněchü*. But the innovated Class IV.A Imperfect in OCS, which is built on the Present stem in -*j-*, produces VCon of LCS -*aja- >* OCS -*a-*,

e.g., *voždachŭ, nošachŭ*. This may have been a north || south difference; thus Andersen (2013, 16). But perhaps the geographical difference was between a central Slavic area that includes Old Sorbian, Old Czech, Old Slovenian, and Old Russian, in which Imperfect contraction occurred relatively early, vs. peripheral dialects (OCS, Serbian, Polabian, Old Polish), in which the Class IV.A Imperfect came to be formed from the Present stem in -j- prior to VCon.

Be that as it may, the innovated Imperfect formation is attested in OCS and tells us that VCon in the Imperfect occurred at a time when the Slavic language territory was being differentiated into regional dialects.

By contrast, as our earliest texts show, VCon in the i-verb Present occurred earlier than in the Imperfect. Both changes occurred in uniform ending-internal environments, but the difference in chronology correlates with the difference in vowel height in the two instances of Glide Loss. Evidently, a weakened /j/ would more easily be reanalysed as a transition and lost between a high and a lower vowel (LCS -ijø, -ije-) than between low vowels, where Glide Loss would presuppose an opening of the intervocalic /j/ at least to [æ], e.g., /ĕja/ → [æ¹a] > [æ^ea] > [æ^æa] ⇒ /ææ/ > /æ/, /aja/ → [a¹a] > [a^ea] > [a^æa] ⇒ /aa/ > /a/. In Serbian dialects, apparently, this process was so protracted that the general raising of LCS /ĕ/ [æ] to [e] intervened before the Glide Loss in -ĕja-, eventually resulting in the uncontracted -ijā-suffix of Class I.A Imperfects, while -ĕja- and -aja- of the other verb classes coalesced into -ā-.

As was seen in section 3.1, VCon in the i-verb Present preserved a distinction between two APs, AP *b*₁ with neoacute root accent preceding the *contractum* (in iteratives) and AP *b*₂ with fixed acute accent on the *i*-suffix (in causatives and denominatives). By contrast, the only accent we have evidence of in the contracted Imperfect forms is a neoacute on the *contractum*; cf. section 4.2. The Serbian uncontracted Class I.A Imperfects give no information on the earlier, LCS accentuation of these forms: They have the same accent as the Present, e.g., verbs with LCS AP *c*: *plètĕm* 'braid': *plètijāh*; *pĕčĕm* 'bake': *pĕcijāh*; *strízĕm* 'cut, shear': *strízijāh*; *grízĕm* 'gnaw': *grízijāh*. The same is true of the few verbs with AP *b*, which only have contracted Imperfect forms: *mògu*.1sg *mògŭ*.3pl 'can': *mògāh*; *ìdĕm*, 'go': *ìdjāh*, with analogical neoacute-accent reflex on the root.

A final comment on the morphological analysis of the Imperfect in (6), section 4.1. Since the 1800s the origin of the Slavic Imperfect has been the topic of a standing debate in the scholarly literature; see Arumaa (1985,

283–294), Hock (2005, 23–24). One issue is its relation to the PIE imperfect. Many scholars have assumed that it developed as a replacement for that ancient tense, while others have viewed it as historically independent of the Indo-European imperfect. In section 4.0, I sided with the latter view. Another question is how the new Imperfect originated. Did it arise as a compound tense (some ancient form of the auxiliary ‘be’ fused with a lexical verb stem, or with a personal or participial verb form, or with a deverbal noun, caseless or case marked, possibly instrumental)? Or is it perhaps a morphosyntactic innovation, pieced together of existent meaningful morphemes? See further Andersen (2013). These problems are mentioned here mainly in order to emphasize that they have no bearing on the developments examined in this chapter. The VCon changes in the Imperfect evidently occurred in the LCS period.

5. The LCS *vòlja*/*súša* Nouns

Late Common Slavic is reconstructed with a number of feminine *ā*-declension nouns that appear to be derived with a *-j-* suffix and are characterized by a columnar neoacute accent, type examples being LCS *vòlja* ‘will’ and *súša* ‘dryness||drought||dry land’. There is no specific reflex of a neoacute accent in the Lechitic languages, but some Old Polish attestations and some modern Polish dialect correspondents of these lexemes have reflexes of LCS long vowels in the desinences, most consistently in nom.sg and acc.sg, and Slovincian correspondents mostly have word-final accent; see section 5.1.4. The reconstructed neoacute stem accent in the majority languages has been thought to imply ictus retraction from a following circumflex (Stang 1957, 108), but the neoacute is the only evidence of this posited accent. The length of the desinential vowels in Old Polish and E Lechitic dialects looks as if they could be results of vowel contraction, but none appears reconstructible. The word-final accents in Slovincian, the only Lechitic dialect to have retained a phonemic (free) accent, is a remarkable oddity. Despite long discussions of these prosodic peculiarities in the scholarly literature, no satisfactory explanation has been proposed.

One reason for this is that the given nouns traditionally have been examined in isolation. True, individual inadequate explanations have been refuted by confrontation with developments in other derivation types; see Vondrák (1924, 229–231), Stang (1957, 57–59), Fecht (2010, 9–13 and *passim*).

However, the positive, first step towards an understanding of these derived lexemes – examining them in the context of Slavic derivational morphology – has always been put off till later; thus also Fecht (2010, 198). An actual step in this direction will be taken below. It makes it possible to form reasonable hypotheses regarding the regular developments of the *vòlja/súša* nouns, to define the differences between them and other derivational patterns, and to interpret irregularities in the data as evidence of morphological or chronological variation in the Common Slavic period or as results of local innovations of more recent date; see section 5.2.

The fact that phonetic change is actualized earlier in some environments than other environments (section 2.2) is an essential premiss in the analysis of the relevant data. It suggests the possibility of positing original segment sequences that would be subject to early VCon; see section 5.2. A brief comparison with some other ideas that have been proposed in recent decades follows in section 5.3.

5.1. The *vòlja/súša* Nouns: Intension and Extension

The standard correspondences used to reconstruct the LCS neoacute accent in these derivatives are well established. They will be exemplified here with the regular reflexes in dissyllabic words; examples with LCS *lax* (short) and *tense* (long) vowels will be given separately. A few polysyllabic lexemes will be discussed at (25).

Previous scholarship has paid little or no attention to the meaning of these nouns. Fecht 2006 is an exception, but although the monograph's glosses contain a wealth of semantic detail, no use is made of it. It seems likely that future attention to the meanings and the semantic developments of these derivatives will be rewarded with insights into the early history and differentiation of the Slavic languages. Quite apart from this, as will be seen below, their semantic content holds an essential clue to an understanding of their origin.

The survey will be limited to the major languages although it is recognized that the correspondents in all the attested languages are necessary for an understanding of the geographical distribution of the individual lexemes, which is an important source of information about their origin and early history.

5.1.1. Bulgarian and East Slavic

Languages with phonemic stress accent regularly have fixed stem accent in these words: Bg. *vólja, súša*, U *vólja, súša*, Br. *vólja, súša*, R *vólja, súša*. In the E Slavic languages, where singular and plural APs have to be stated separately, the *vólja/súša* nouns have AP *aa*. In Russian seven-vowel dialects, the regular reflex of accented LCS short /o/ or East Slavic pleophonic /o/, is a raised-mid /ô/; thus e.g., dial. *oknô* ‘window’, *pogôda* ‘weather’, *korôva* ‘cow’, *golôv*. gen.pl ‘heads’, and similarly dial. *vólja*. Contrast the accented lowered-mid /ɔ/ in initial syllables of LCS accentless wordforms (enclitomena), e.g., LCS dial. *ɫpolje*, *ɫgolovu*, R dial. *p'ɔl'o* (AP *ab*), *g'ɔlovu* (AP *cc*); see Bulachovs'kyj ([1961] 1980), Jakobson (1963).

Some Russian examples: *kóža* ‘skin, leather, rind’, *lólja* ‘trapping, fishing; o. fishing place’, *nóša* ‘burden’, *róšča* ‘copse’, *těšča* ‘mother-in-law’, *tónja* ‘fishing ground, catch’, *vólja* ‘will, desire’; *čášča* ‘dense forest’, *gúšča* ‘sediment||thicket’, *kórmija* ‘feed’, *krúča* ‘steep slope’, *kúplja* ‘purchase, buying’, *súša* ‘dry land’, *tólšča* ‘thickness’, *vérša* ‘fish trap’.

Ukrainian: *kóža* ‘skin’, *nóša* ‘apparel, garment’, *těšča* ‘mother-in-law’, *tónja* ‘fishing place; deep place in lake, river’, *tóplja* ‘warming’, *vólja* ‘will, desire’; *horóža* ‘fence’, *húšča* ‘sediment||dense forest’, *kúplja* ‘purchase’, *púšča* ‘deep, dense forest’, *storóža* ‘watch, guard’, *súša* ‘dry land’, *tóvšča* ‘dense forest’, *vérša* ‘fish trap’.

Bulgarian: *kóža, súša* ‘drought; dry land’, *vólja, vonjá* ‘stench’ (see section 5.5), *stráža, žázda* ‘thirst’.

5.1.2. Western South Slavic

Languages with phonemic pitch accent likewise have a fixed stem accent in both numbers of these lexemes.

Slovene: *vólja, súša*. In Slovene, the *ó* of the *vólja* type is a raised-mid [ɔ], distinct from the lowered-mid [ɔ] with a retracted accent (the type LCS *gor'a* ‘mountain’, Sn. *góra*). The *súša* type – lexemes with a LCS tense (long) stem vowel – regularly has a rising accent. Some Slovene examples: *gróblja* ‘gravel, stoneheap’ *hója* ‘walk, gait’, *kóža* ‘skin, rind’, *móča* ‘moisture’, *nóša* ‘garment’, *stélja* ‘litter’, *vólja* ‘will’; *góšča* ‘sediment||thicket’, *grája* ‘censure, reproach’, *pláča* ‘payment, pay’, *stráža* ‘watch, guard’, *súša* ‘dryness; drought’, *téža* ‘weight, gravity’, *tólšča* ‘fat’, *vráža* ‘superstition’, *vřša* ‘fish trap’, *žéja* ‘thirst’.

Some *vòlja/súša* nouns instead have a fixed circumflex or have a variant with a fixed circumflex, e.g., *hòja, lòvlja* ‘catch’, *tònja* ‘river pool’, *stráža*. They are interpreted variously as results of dialect contact or, less likely (cf. section 3.3) as evidence of accent retraction from a final circumflex (Stang’s law); thus Kapović (2007, 93).

Croatian–Bosnian–Serbian: Čakavian: *vòlja, sùša*; Štokavian: *vòlja, sùša*. In Čakavian the short-vowel accent of the *vòlja* type differs from the similar accent in *bòb–bobà* (AP *b*) ‘beans’ and *vodà–vòdu* (AP *c*) ‘water’ by being fixed on the stem (AP *a*). The rising accent of *sùša* differs from that of *kljūč–kljūčā* ‘key’ by being fixed and stable, that is, nonalternating. In Neo-Štokavian, the formerly rising accent of the *sùša* type (as in Ča. *sùša*) has merged with the falling accent of LCS enclitics; it differs from this by being fixed and stable. Examples: *kòža* ‘skin’, *stělja* ‘padding; sediment’, *tāšta* ‘mother-in-law’; *glādja* ‘hunger’, *grādja* ‘lumber’, *kūplja* ‘buying, trade’, *plāca* ‘pay’, *stráža* ‘watch, guard’, *sùša* ‘dryness, drought’, *těža* ‘weight, gravity’, *tvrdja* ‘fortress’, *vrša* ‘fish trap’, *žědja* ‘thirst’. The Kajkavian data are complex in several respects and may be important mainly as evidence of local developments; see Kapović (2007, 91), Fecht (2006, 123).

5.1.3. Czech and Slovak

With the exception of Slovincian, the West Slavic languages do not have a phonemic accent, but the distribution of phonemic quantity in Czech and Slovak and reflexes of quantity in Polish–Kashubian and Slovincian provide indications of LCS accent placement that regularly correspond to those of East and South Slavic languages.

Czech: *vùle, souš*. The former shows lengthening of LCS short stem vowel, the latter, retention of LCS length. Some other Czech examples: *chùze* ‘walk’, *kùže* ‘skin’, *nùše* ‘carrying-basket’, *péče* ‘worry; caring’, *tùně* ‘pool in river’, *vùle* ‘will’, *vùně* ‘fragrance, aroma’; *hloub* (o. *hlúbě*) ‘deep’, *houště, houšť* ‘thicket’, *hráže* ‘dyke’, *koupě* ‘purchase’, *níze* ‘(baric) low’, *poušť* (o. *púščě*) ‘desert’, *souš* (o. *súšě*) ‘dryness; dry land’, *stráže* ‘watch, guard’, *šíře, šíř* ‘breadth’, *tíze* ‘weight, gravity’, *vrše, vrš* ‘fish trap’, *výše, výš* ‘height’, o. *žieze* ‘thirst’.

Slovak: *vòla, súš*. Length reflexes are regular in the relevant lexemes, but there are some irregularities. Examples: *chòdza* ‘walk, gait’, *tòňa* ‘shadow, shade’, *vòla* ‘will’, *vòňa* ‘odor, fragrance’; *hrádza* ‘dam, dyke, weir’, *húšť* ‘thicket’, *kúpa* ‘purchase, redemption’, *mládza* ‘young growth’, *pláca* ‘pay’, *púšť* ‘desert’.

stráž ‘watch, guard’, *súš* ‘land, shore’, *tiaž* ‘weight, gravity’, *tíš* ‘quiet’, *tvrdza* ‘trouble’, *vrša* ‘fish trap’, *výš* ‘height’, *žiadza* ‘craving’. Kapović (2006, 91) considers the /ô/ of *chôdza*, *tôňa*, *vôňa* analogical, but there is no reason to expect a difference between Slovak and Czech neoacute reflexes. It is rather the /o/ in Sk. *koža*, *noša* and the short /r/ in *vrša* that are irregular; they are probably evidence of dialect contact (cf. the lack of quantity in E Slovak). Sk. *priadza* ‘yarn’, with its irregular length reflex, appears to have been assimilated to the *vòlja/súša* nouns.

Note that the quantity of the stem vowel in Cz. *hloub*, *houšť*, *poušť*, *souš*, *šír*, *výš* and Sk. *húšť*, *súš*, *stráž*, *tiaž*, *tíš*, *výš*, all of them i-declension nouns, shows that these are original *ā*-declension, *súša* type nouns. CS i-stem nouns derived from these AP *c* bases would have short vowels.

5.1.4. East Lechitic

Polish–Kashubian and Slovincian have reflexes of the *vòlja/súša* lexemes that are very different in character.

Polish: *wola*, *susza*. Some examples: *grobla* ‘dyke, dam’, *nosze.pl* ‘stretcher, barrow’, *piecza* ‘worry; caring’, *wodze o.* ‘reins’, *wola* ‘will; desire’, *cięża* ‘pregnancy’, *głębia* ‘depth, deep’, *gradza* or *gródz–grodzi* ‘fence, barrier; pen, stall’, *kupla o.* ‘trade, purchase’, *placa* ‘payment’, *puszcza* ‘deep forest; desert’, *susza* ‘dryness; drought’, *tluszczą* ‘the masses’, *twierdza* ‘fortress’, *wiersza* ‘fish trap’, *żądza* ‘thirst, craving, lust’.

Old and Middle Polish texts record many *vòlja/súša* nouns with reflexes of final length: *czciã* ‘mother-in-law’, *groblã*, *pieczã*, *toniã* ‘deep place in river’, *wodzã* ‘rein’, *wolã*, *woniã* ‘fragrance’, *ciężã* ‘impost, tax; atonement; torment, suffering’, *głębiã*, *gródzã* ‘fence’, *karmiã* ‘food, nourishment’, *kupiã* ‘trade; ware; price’, *puszczã*, *stróżã* ‘watch’, *suszã*, *tluszczã*, *twierdzã*, *wierszã*, *żądzã*; see Gonschior (1973, 77, 171). The lexical distribution of final *-ã* and *-a* is not entirely consistent, and there is variation in the attestation of some lexemes. But there is enough of a correlation with the modern Polish *vòlja/súša* nouns to identify the two sets of lexemes, which are separated – apart from lexical change – mainly by the loss of the phonemic distinction of /ã/ vs. /a/). Hence for purposes of reconstruction, the modern lexemes should not be separated from their earlier attestations showing final length.

The Old Polish word-final length has a parallel in Slovincian. There, additionally, the *vòlja/súša* nouns are end-accented. Fecht (2006, 136) lists the

following examples: *ceč'â* 'liquid', *cemj'â* 'darkness' (LCS *tĭmjâ* or *tĭmĭnjâ?*), *gol'â* 'baldness, nakedness', *moč'â* 'moisture', *topj'â* 'bog, swamp', *woř'â* 'plowing'; *bliž'â* 'nearness, neighborhood', *caž'â* 'burden; pregnancy', *caš'â* 'quiet', *ceň'â* 'shadow, shade', *ceš'â* 'narrow, straits', *cuz'â* 'foreign place, abroad', *dâl'â* 'distance, far-away place', *gašč'â* 'thicket', *glâš'â* 'deafness; quiet', *glâž'â* 'slippery surface, place', *glqbj'â* 'depth', *gñil'â* 'rot; lazyness', *grâbj'â* 'thickness', *kupj'â* 'trade', *mloz'â* 'youth, young people', *niž'â* 'hollow', *pušč'â* 'heath, desert', *sac'â* 'fat, fatness', *suš'â* 'drought, dryness', *šir'â* 'width, breadth'. Fecht lists three nouns with stem accent: *r'ozâ* 'morning or evening sky', *v'olâ* 'will', *ž'qzâ* 'desire'. To these one can add *v'oňâ* 'fragrance' (Lorenz 1958, s.v.). By comparison with the other *vôlja/súša* nouns, the last three appear to have replaced final accent with the unmarked stem accent; the metathesized *r'ozâ* (LCS *zora* AP c) does not seem to belong here.

Note, by the way, that the internal cluster in *ceš'â* indicates a post-LCS formation from Sc. *cesni*. Were it older, the cluster would be /šň/ (LCS dial. *těšnjâ*, from *těšnŭ*) as in Ka. *višnja* 'sour cherry', *křešnja* 'sweet cherry'; see Lorentz and Hinze (1958, s.vv.), Mańczak (2000). Also, *cuz'â* 'foreign place' and *ž'qzâ* 'desire' (LCS dial. *tjudjâ*, *žędjâ*) have the regular, lenited Sc. /z/ reflex of W Slavic /z'/; by contrast, the /z/ in Sc. *mloz'â* and *glâž'â* shows influence from Polish–Kashubian. The same is probably true of the stem accent in *v'olâ*, *ž'qzâ*, and *v'oňâ* mentioned above.

If end-accent once was characteristic of *vôlja/súša* nouns in all of E Lechitic, we expect them to have reflexes of long pretonic stem vowels in Polish as well as in Slovincian examples. This expectation is largely met in OP *ciqzâ*, *gródzâ*, *strózâ*, *žadzâ*, st. *ciqza*, *stróza*, *žadza* but not in *glębiâ*; its stem vowel may be analogical to its adjective base *glęboki*, or it may have changed inflection from the i-declension variant P *glq̄b–glębi* 'depth' (cf. the reflexes of LCS *glq̄bĭ* in Bg., Sn., R, U).

Reflexes of pretonic length are less consistent in Slovincian. They are seen in (i) *bliž'â*, *cuz'â*, *dâl'â*, *glq̄bj'â*, *gñil'â*, *kupj'â*, *niž'â*, *pušč'â*, *suš'â*, *šir'â*. But there is no length reflex in (ii) Sc. *caž'â*, *caš'â*, *gašč'â*, *glâš'â*, *grâbj'â*, *sac'â*. These two sets of reflexes do not correlate with the accent properties of the corresponding CS bases; see (18). Topolinska (1964, 30) surmises that the group-(ii) nouns are former i-declension nouns that have changed to the *â*-declension while keeping their pretonic short quantity. This would be a shift in the opposite direction from the one attested in Czech and Slovak; cf. section 5.1.3.

This is not impossible, but they can just as well have been formed directly from the respective adjective bases. In either case, they appear to have become *vòlja/súša* nouns after the sense that this pattern of derivation required pretonic (long) tense vowel alternants had been lost. If that is the case, then perhaps the (long) tense vowel reflexes in group (i) cannot be taken at face value either, and *bliž'â*, *cuz'â*, *gñil'â*, *ñiz'â*, *šir'â*, as well as *caš'â*, *cesn'â*, *glāš'â*, *grābj'â*, *sac'â*, none of which have counterparts in other Slavic languages, can be suspected of being post-LCS formations.

The relatively many lexical renewals in Slovincian demonstrate the long-lasting vitality of the pattern combining stem-final consonant alternations, (long) tense *â*-declension endings, and word-final accent. The last feature is evidently a defining feature of E Lechitic *vòlja/súša* nouns. It separates E Lechitic from the rest of Slavic, including W Lechitic: Polabian has short final vowels in *t'üzā* 'skin' (LCS *koža*), *vil'ā* 'will' (LCS *volja*), *d'ül'ā* 'heath' (LCS *golja*); see Polanski and Sehnert (1967, s.vv.), Olesch (1983–1984, s.vv.). With the last of these, contrast LCS dial. *goljā* in Sc. *gol'ā* 'baldness, nakedness' and OP *gola* 'nakedness; bare place; plain' (Reczek 1968, s.v.), borrowed into Ukrainian as Lemko dial. *holjā-holí* f. (AP *b-*) 'bare mountain top'; Hrynčenko 1907, s.v.).

The E Lechitic word-final accent and vowel length bear witness that the *vòlja/súša* nouns followed a very different path of development in this north-central Slavic region from the one that is in evidence in the majority dialects.

5.1.5. Beyond the *vòlja/súša* Nouns

Partial sets of the accentual correspondences illustrated in sections 5.1.1–5.1.4 occur in some modern lexemes that do not belong to the *vòlja/súša* pattern. These include (i) Slavic lexemes whose stem-final consonant is not a reflex of CS /Cj/; e.g., LCS (s)kora 'skin', *sosna* 'pine(tree)'; (ii) loanwords whose stem-final consonant is not a reflex of CS /Cj/; e.g., U *róža* (AP *aa*) 'rose', P *róža*, Cz. *růže*, a borrowing from German (cf. OHG *rōse*, with [-ž-]; Žirmunskij 1956, 329), which has Latin, Greek, and Semitic ancestors. Recent scholarly writings include such lexemes in their purview, but they do not and cannot contribute to an understanding of the *vòlja/súša* type.

Furthermore, there are apparent *vòlja/súša* lexemes that have no Slavic etymology. Some of these may be ancient, genuinely CS lexemes, whose derivational source just happens to have been lost. Others may be old or recent

acquisitions, assimilated to the *vòlja/súša* pattern. But if a word has no known CS derivational source, there is no evidence that it is a *vòlja/súša* derivative. One such example is the oft-cited R *dólja* (AP ac), dial. *dólja*, U *dólja* (AP aa), P *dola* 'share, lot, fate'; it is thought to be a Baltism; cf. Li. *dalià* 'share, lot, fate', *dalyti* 'divide'. Another is Cz. *práce*, Sk. *práca*, US *próca*, LS *proca*, P *praca*, Sc. *praca*, U *prácja* (AP aa) 'work'; it too lacks a Slavic derivational source and may be an acquisition from another language. Such lexemes can corroborate the validity of the regular correspondences. Also, their geographical extension can reveal interesting information about cultural relations in earlier times, as these two examples probably do. But they contribute nothing to an investigation of the origin of the *vòlja/súša* type.

Finally, there are apparent *vòlja/súša* lexemes that are attested only in a single modern Slavic language. Technically such items do not participate in the set of correspondences illustrated above, and for purposes of reconstruction they may be uninteresting. Among these are (many of) the deadjectival abstract nouns specific to Slovincian, mentioned in section 5.1.4. Such lexemes demonstrate that the *vòlja/súša* type was productive in some regions in the post-LCS period. By then, it was a synchronic pattern of derivation involving accent assignment, stem-final consonant alternation, and *ā*-declension. On the other hand there are the *vòlja/súša* nouns that correspond to mainly deadjectival feminine *i*-declension nouns. They reflect historical changes of declension class, accompanied or not by changes in stem accent or stem vocalism, and hence they bear witness to dynamic relations within the systems of declension of individual language or dialect areas.

Both these kinds of lexemes invite attention to morphological developments in the historical period that await investigation. In the following pages we will be interested primarily in the prehistorical origin of the *vòlja/súša* types. For this purpose, the best way to begin is to examine these derivatives in the context of other inherited CS derivational patterns.

5.2. The *vòlja/súša* Type and Other -j- Derivatives

Traditionally the *vòlja/súša* nouns have been thought to contain a derivational suffix CS -j-. This is not surprising, given the fact that their stem-final consonants are standard reflexes of CS /Cj/ clusters. Still, before jumping to conclusions one needs to see if this is the only possibility. The most obvious place to look is the other patterns of nominal derivation that employ a *j*-suffix.

There are two suffixes forming LCS relative adjectives. Both of them derive adjectives from nouns of APs *a*, *b*, and *c*. Remarkably, they are synonymous, they both mean ‘pertaining to’, and they appear to have been in complementary distribution, that is, allomorphs, in CS.

The two allomorphs are reconstructed as CS *-ěj-* > LCS *-ij-*; see (14); and CS *-j-*; the latter conditions palatalization of any preceding velar or dental consonant (First Velar and Dental Palatalization); it is then lost after any palatal consonant but changes to palatal /lj/ (IPA [ɭ]) after any labial (Deiotation); see (15).

Monosyllabic bases take the suffix CS *-ěj-* (LCS *-ij-*), whereas polysyllabic bases take CS *-j-* (Cooper, unpublished manuscript); see (14)–(15). The latter enjoys considerable productivity in the attested period, not least due to the introduction of many polysyllabic neologisms. At the same time, there is evidence already in OCS that the complementary distribution of the two allomorphs is becoming blurred, in part because of compounding, in part as a consequence of VCon, which creates morphological interference from definite adjectives, and the Jer Shift (VS₃). Some OCS examples of this are *ovič-ij-ī* beside *ovič-ī* ‘sheep’s’, *kozil-ij-ī* and *kozilj-ī* ‘billy-goat’s’, *osil-ij-ī* and *osilj-ī* ‘ass’s’.

- (14) a. AP (*a* →) A. LCS *b¹ab-ij-ī.m*, *b¹ab-ij-a.f* ‘old woman’s’; similarly dial. *k¹orvijī* ‘cow’s’, *k¹urijī* ‘chicken’s’, *m¹yšijī* ‘mouse’s’, *r¹ačijī* ‘crayfish’s’, *r¹ybijī* ‘fish’s’, dial. *s¹orčijī* ‘magpie’s’, dial. *v¹ornijī* ‘crow’s’, *ž¹abijī* ‘toad’s’.
- b. AP (*b* →) D. *kòzijī.m*, *kòzija.f* ‘goat’s’; similarly *līvijī* ‘lion’s’, *òšijī* ‘wasp’s’, *pìsijī* ‘dog’s’, *skòtijī* ‘cattle’s’, *sòvijī* ‘owl’s’, *býčijī* ‘bull’s’.
- c. AP (*c* →) D || B. *bòzijī.m*, *bòzija.f* ~ *božij¹a.f* ‘god’s’; similarly dial. *bórvijī* ‘hog’s’, *čīrvijī* ‘worm’s’, *lísijī* ‘fox’s’, *vīlčijī* ‘wolf’s’, dial. *vóržijī* ‘enemy’s’.
- (15) a. AP (*a* →) A. LCS *agnič-ī.m*, *agnič-a.f* ‘lamb’s’; similarly *čelov¹ěčī* ‘man’s’, *děv¹ičī* ‘maiden’s’, *gov¹ědjī* ‘ox’s’, *m¹aterjī* ‘mother’s’, *pror¹očī* ‘prophet’s’, *st¹aričī* ‘monk’s’, *vīdov¹ičī* ‘widow’s’, *c¹esarjī* ‘emperor’s’, *dij¹avoljī* ‘devil’s’, (e)*p¹iskupjī* ‘bishop’s’, *ig¹umenjī* ‘abbot’s’.
- b. AP (*b* →) D. *júnīčī.m*, *júnīča.f* ‘youth’s’, *kòziljī* ‘billy-goat’s’; similarly, *lòvīčī* ‘hunter’s’, *òřlji* ‘eagle’s’, *òšlji* ‘ass’s’, *òtičī* ‘father’s’.

òvičĭ ‘sheep’s’, òvĭnjĭ ‘ram’s’, tèličĭ ‘calf’s’, tvòričĭ ‘maker’s’, učeníčĭ ‘disciple’s’, velib’òdjĭ ‘camel’s’.

c. AP (c →) B. ¹elenjĭ.m, elenj¹a.f ‘stag’s’; similarly ¹gospodjĭ ‘lord’s’, ¹kūņęži ‘prince’s’.

Dybo (2000, 116–121) reconstructs the APs in (14.a) as LCS fixed root accent (AP A), in (14.b) as LCS fixed neoacute on the root (AP D), and in (14.c) as an earlier fixed accent on the LCS -ij- suffix, which is reflected in Middle Bulgarian and some Serbian dialects (AP D), but which other Serbian–Croatian dialects and Slovenian have changed to an alternation between accented desinence and suffix accent (AP B). Dybo does not explain why AP B must be an innovation in these adjectives, but since the work of Olander (2009, 155–156 and *passim*) it has been clear that an alternation between desinence accent and word-internal accent such as AP B can only be secondary: The inherited CS mobile AP c is an alternation between end-accented wordforms and accentless wordforms; it arose when those end-accented wordforms that had a final high-toned mora lost their accent. Thus in CS, both AP b and AP c derivatives had an accented -ěj- suffix, reflected in their AP D. The change to AP B in Serbian and Slovenian is not difficult to understand: It assimilated the derivatives’ (columnar) AP to the mobile pattern of their base nouns.

The conditioning of the CS -ěj- ~ -j- allomorphs is a Slavic innovation. Meillet (1905, 377), who observed their complementarity (but had no term for this phenomenon) speculated that the original distribution “[...] was undoubtedly conditioned by the short or long quantity of the preceding vowel [...]” [my translation; HA]. This statement interprets the -j- ~ -ij- allomorphy as a reflex of Sievers’ law (now Sievers–Edgerton’s law), according to which the length or weight of the preceding syllable conditioned a phonological alternation in syllabicity, viz. /j/ → /ij/ after long or heavy syllable; see Collinge (1985, 159–174), Szemerényi (1996, 105–110). But there is no evidence in the Slavic data that would suggest, let alone explain a shift from relative syllable weight to syllable count as the conditioning factor. Note that both formations are represented evenly across the accentual paradigms in LCS; see (14.a–c) and (15.a–c).

Interestingly, OCS documents another CS derivational pattern with a parallel allomorphy. It forms feminine nominals, from monosyllabic bases

with LCS *-ij-i*, from polysyllabic bases with *-j-i*; see (16)–(17); we return to these in section 5.3.

- (16) OCS *aln-ij-i* ‘doe’, *bal-ij-i* ‘physician’, *gvozdv-ij-i* ‘nail’, *krab-ij-i* ‘basket’, *lad-ij-i* ‘boat’, *mūln-ij-i* ‘lightning’, *sōd-ij-i* ‘judge’, *vēt-ij-i* ‘orator’.
- (17) *bog-ynj-i* ‘goddess’, *gospod-ynj-i* ‘lady’, *pust-ynj-i* ‘desert’, *tysęšt-i*, *tysqšt-i* ‘thousand’, *bol-iš-i* ‘greater’ (the nom.sg.f of comparatives), *daj-qšt-i* ‘giving’; *da-vūš-i* ‘having given’ (the nom.sg.f of active participles); see Diels (1932, 177).

Of this allomorphy Vaillant (1958, 96–107) says that it reflects an inherited alternation conditioned by monosyllabic or short vs. polysyllabic or long derivational base. This is an attempt to mend Meillet’s tacit reference to Sievers’ (-Edgerton’s) law by extending it to syllable count. But in the absence of any evidence that Sievers-Edgerton’s law is relevant in the first place, it is better to interpret these alternations as apophonic, CS *-ěj-o/-ā- ~ -j-o/-ā-* in (14)–(15), CS *-ěj-ī ~ -j-ī* in (16)–(17), apparently an innovated “neo-apophony” that creates a balance between syllable count in the base (one vs. more) and suffix length (syllabic vs. nonsyllabic).

Interestingly these *-Vj- ~ -j-* alternations are not the only ones of their kind in the language; there is a similar alternation in the CS Comparative, LCS *-ěj-ī(š)- ~ -j-ī(š)-*. This is conditioned by the accentual paradigm of the base, AP *a, b* (LCS *st'ar-ěj-ī(š)-* ‘older’, *nov-ěj-ī(š)-* ‘newer’) vs. AP *c* (*jmóld-j-ī(š)-*, secondary AP *a* ‘younger’); cf. R o. *stár-ěj-e*, *nov-ěj-e* vs. *molóž-e*. It reflects the PIE distinction between root-accented (barytone) and ending-accented (oxytone) lexemes; see Dybo (2000, 209–226). By its conditioning it gives the impression of being older.

Now, the *vòlja/súša* nouns appear to have the same CS *-j-* suffix as the polysyllabic relative adjectives in (15). However, almost all the *vòlja/súša* nouns are derived from monosyllabic bases; for exceptions, see below. This suggests that, despite appearances, they should be compared first of all to the CS *-ěj-* (LCS *-ij-*) adjectives.

Importantly, the *vòlja/súša* nouns represent bases of two accent patterns, AP *b* and AP *c*, and are complemented by a group of similar derivatives from AP *a* bases; see (18.a–c). The data show a merger of AP *b* and *c* derivatives in

AP D; cf. (18.b–c). Unless otherwise specified, examples here and below are from Vaillant (1974, 513–524); Kapović (2007); Fecht (2010).

- (18) a. Bases with AP (*a* →) A. b¹urja ‘storm’ (bur– ‘turbulent’), j¹ědja ‘food’ (jěd– ‘eat’), gr¹abjě||-ę ‘hay fork’ (grab– ‘seize’), gr¹yža ‘pain||dysentery||sorrow’ (gryz– ‘gnaw’), k¹apja ‘drop’ (kap– ‘drip’), kr¹adja ‘theft’ (krad– ‘steal’), n¹iža ‘low’ (niz– ‘low’), n¹udja ‘force, need’ (nud– ‘force’), p¹aša ‘pasture’ (pas– ‘protect’), p¹itja ‘food’ (pit– ‘nourish’), p¹latja (plat– ‘pay(ment)’), pr¹ědja ‘spinning; yarn’ (prěd– ‘spin’), sū-r¹ětja ‘encounter’ (sū-rět– ‘meet’), s¹adja ‘soot’ (sěd– ‘sit’), s¹ěča ‘battle’ (sěk– ‘chop’), s¹ědja ‘sitting’ (sěd– ‘sit’), š¹irja ‘width’ (šir– ‘wide’), t¹iša ‘quiet’ (tich– ‘quiet’);
- b. Bases with AP (*b* →) D. kòža ‘skin’ (koz– ‘goat’), kúpja ‘purchase’ (kup– ‘buy’), similarly kúrmja ‘fodder’ (kúrm– ‘feed’), lùža ‘lie’ (lüg– ‘lie’), nòša ‘burden||garment’ (nos– ‘carry, bear’), stèlja ‘bed||litter||roof’ (stel– ‘spread’), tìstja ‘mother-in-law’ (tìst– ‘father-in-law’), tēja ‘weight||burden||strife’ (tęg– ‘heavy, difficult’), tònja ‘deep place in river||fishing place’ (top-nq– ‘drown’), chòdja ‘walk’ (chod– ‘walk’), vòdja ‘rein’ (vod– ‘lead’), vòlja ‘will, desire’ (vel– ‘command’), vònja ‘smell’ (on– ‘smell’), žédja ‘thirst||craving’ (žęd– ‘crave’);
- c. Bases with AP (*c* →) D. dálja ‘distance’ (dal– ‘far’), dial. górdja ‘fence||dam||lumber’ (gord– ‘enclose’), glòbja ‘depth, deep’ (glqb– ‘deep’), góstja ‘thicket||sediment’ (gqst– ‘dense’), gròbja ‘stone heap||hill||dam||ditch’ (greb– ‘dig’), lòvja ‘catch’ (lov– ‘angle’), mòča ‘moisture’ (mok– ‘wet’), móldja ‘youth||new growth’ (mold– ‘young’), pèča ‘caring, worry’ (pek– ‘roast’), pústja ‘uninhabited area||forest||desert’ (pust– ‘empty’), rùdja ‘rust’ (rüd– ‘red’), dial. stórža ‘watch, guard’ (sterg– ‘protect’), sùša ‘drought||dry land’ (such– ‘dry’), túlstja ‘dense forest’ (túlst– ‘thick’), tvírdja ‘firmness||fortress||stinginess’ (tvírd– ‘firm, hard’), vírša ‘(conical) fish trap’ (vírch– ‘top’), dial. vórža ‘magic, witchcraft’ (vorg– ‘enemy, devil’).

The nouns in (18) are all fairly transparent and can be sorted into denomina-tive, deadjectival, and deverbal derivatives; see (19). Besides these, there are

similarly formed nouns that were derivationally opaque in LCS, or for which no CS derivational source can be posited (although some have good etymologies); some examples in (20). We will leave these aside for the moment.

- (19) The LCS examples in (18.a–c) according to base AP.
- a. Denominative: (AP *a*) n¹udja; (AP *b*) gròbja, kòža, tìstja; (AP *c*) vírša, vórža;
 - b. Deadjectival: (AP *a*) b¹urja, n¹iža, š¹irja, t¹iša, (AP *b*) tēja (AP *c*) dálja, glòbja, gòstja, mòča, móldja, pústja, súša, tústja, tvírdja;
 - c. Deverbal: (AP *a*) j¹édja, gr¹abjě||-ę, gr¹yža, k¹apja, kr¹adja, p¹aša, p¹itja, pr¹édja, sū-r¹ětja, s¹adja, s¹ěča, s¹édja; (AP *b*) kúpja, kúrmja, lùža, nòša, plátja, stèlja, tònja, vòdja, vòlja, vònja, žédja; (AP *c*) górdja, lòvja, pèča, rúdjja, stórža, tēja, chòdja.
- (20) LCS č¹apja ‘crane’, č¹aša ‘cup’, d¹ynja ‘melon’, g¹ači ‘pants’, g¹unja ‘cloak’, gr¹uša||kr¹uša ‘pear’, k¹anja ‘bird of prey’, k¹aša ‘boiled cereal’, k¹otja ‘dwelling’, k¹ürpja ‘snowshoe’, dial. m¹erža ‘net, snare’, t¹oča ‘cloud’, v¹édja ‘eyelid’; see also (24).

5.3. Lexicalization in the vòlja/súša Nouns

A semantic contrast such as LCS kòža ‘skin; leather; rind’ vs. kòziji ‘goat’s’ draws our attention to a similarity and a difference between the nouns in (18) and the relative adjectives in LCS -ij- in (14): Each of the nouns in (18) can be understood as a derivative with an original meaning ‘pertaining to *X*’, just like the relative adjectives in (14). But the meaning of each of the nouns in (18) represents a metonymic shift from the literal meaning of its root, from ‘goat’ to ‘skin’, ‘turbulent’ to ‘storm’, ‘eat’ to ‘food’, from ‘grab’ to ‘hay fork’, from ‘gnaw’ to ‘pain||dysentery||sorrow’, minimally from the act of lying to the false statement, the ‘lie’, from the assertion of will to the mental state of ‘volition’, and so on; see the glosses in (18). If these metonyms were at one time wordforms of relative adjectives, as we can suppose, such a referential shift would have favored their lexicalization as nouns and would have dissociated them from their respective adjective paradigms. To put this in more explicit terms: The two constituents of any relative adjective, say, CS kaz-¹ej- (LCS koz-ij-) have retained their separate content (‘goat’ and ‘pertaining to’) and morphosyntactic function (specifier and head) to this day. By contrast, in a

lexicalized CS $kaz^1ej-\bar{a}$ 'skin', the stem's constituent structure was lost, and the original parts of the stem lost their individual content, neither of them being necessary, or even useful, in defining the lexeme's referential value of 'skin'. The lexicalization in effect created a sign with a direct connection between content 'skin' and expression $kaz^1ej-\bar{a}$.

In the relative adjectives, the variety of roots that could precede the suffix CS $-\bar{e}j-$ (> $-ij-$) ($bab-ij-$, $koz-ij-$, $bož-ij-$, etc.) preserved the suffix as a transparent recurrent partial with recurrent content. By contrast, the stem-final segments of each (lexicalized) noun in LCS $...i-$ were inseparable elements of the given stem. Since the stem-final /j/ consistently followed an /i/ it was phonologically redundant; it could easily be weakened and then reanalysed as a transition with no segmental status. The $vòlja/sùša$ nouns would likely have been the earliest (lexical) category to undergo VCon at a desinence boundary: The stem-final /j/ was weakened (21.a) and lost (21.b); at some point, ictus was retracted from the stem-final $...i-$ (21.c) (cf. section 3.1), giving rise to a neoacute root accent (21.d); the /i-/ lost its syllabicity in an Intensity Shift (21.e), and then stem-final /Cj/ clusters underwent Palatalization and Deiotation, and the desinence vowel, eventually, Final Shortening (21.e).

- (21) CS $wal^1ej\bar{a}$ >
 LCS $wol^1ij\bar{a}$ → $[wol^1ij\bar{a}]$ > (a) $[wol^1i^1\bar{a}]$
 ⇒ (b) $/wol^1i\bar{a}/$ → $[wol^1i\bar{a}]$ > (c) $[w\bar{o}l^1i\bar{a}]$
 ⇒ (d) $/w\bar{o}li\bar{a}/$ → $[w\bar{o}li\bar{a}]$ > (e) $[w\bar{o}lj\bar{a}]$
 ⇒ dial. (f) $/v\bar{o}lja/$

In E Lechitic the development was different, as shown by Polish–Kashubian and Slovincian; cf. section 5.1.4. The difference can best be understood with reference to the just mentioned Final Shortening, a LCS regional shortening of all word-final vowels. There is good reason to believe that E Lechitic was part of the central Slavic area that was at the forefront of this change, one of the changes that manifested the LCS metrical template, modifying wordforms towards a consistent trochaic foot structure; see Andersen (1978; 1998, 245), Bethin (1998a; 1998b, 124). In areas where Final Shortening had not occurred, Intensity Shift had no effect on the quantity of the final vowel: Thus $...i\bar{a}$ > $...j\bar{a}$ in (21.e), and recall the *i*-verb prs.1sg in (3). But where final vowels had been shortened, as probably in E Lechitic, Intensity Shift entailed a displacement of ictus and pitch accent as well as duration to the desinential

vowel: ...^lia > ...^lĭā, so that the two-mora duration was preserved. Compare (21) with (22), which illustrates glide weakening (22.a), Glide Loss (22.b), Final Shortening (22.c), Intensity Shift with mora preservation (22.d), and Palatalization and Deiotation (22.e). The Intensity Shift (22.d) had the effect of establishing phonemic quantity in final desinential vowels in E Lechitic.

- (22) CS wal^lejā >
 LCS wol^lijā → [wol^lijā] > (a) [wol^li[̃]ā]
 ⇒ (b) /wol^liā/ → [wol^liā] > [wol^lia]
 ⇒ (c) /wol^lia/ → [wol^lia] > (d) [wolj^lā]
 ⇒ dial. (e) /woljā/

The development that is sketched in (22) includes a type of Intensity Shift that has numerous parallels in later waves of VCon in alternating environments; see also the examples following (3). Recall the regular alternation illustrated by OCz. *apostol*, but *k ápostolóm* (mentioned in section 2.1), which presupposes LCS *kũ a...* > [k^u ā...] ⇒ k ā... Or take LCS *rŭj-an-e* ‘inhabitants of Rügen’ (> [rŭian-e] ⇒ /rŭan-e/ > [r^uān-e] ⇒ OP *rānie*; or LCS, OCz. *moje* ‘my’ (> [mo^oe] ⇒ /moe/ > [m^oē] ⇒) *mé* ~ *moje* (cf. section 2.1); or LCS *wojewoda* ‘duke’ (> [wo^oewoda] ⇒ /woewoda/ > [w^oēwoda] ⇒) OCz., Cz. *vévoda*.

In fact, the last several steps in these examples and the posited development in (22) have an exact parallel in the later E Lechitic change in the LCS -ij-a nouns that replaced the -ij-i nouns mentioned in (16). Their integration with the ā-declension was followed by VCon; see (23): (a) Glide weakening, (b) Glide Loss, (c) Intensity Shift with mora preservation ...ia > ...jā, (d) Palatalization and secondary Deiotation.

- (23) LCS dial. sōdija > (a) [sōdi^la] ⇒ (b) /sōdia/ > (c) /sōdjā/ > (d)
 OP *sędźā*

To sum up, this account of the *vōlja*/*súša* nouns posits (i) the derivational suffix ECS -ěj-ā for relative adjectives formed from monosyllabic bases, as in (14); (ii) in the CS period, lexicalization as nouns, of a feminine subset of these including the examples in (18); and (iii) in the LCS period, an early wave of VCon applying to these nouns, producing Ictus Retraction and In-

tensity Shift in the majority dialects (21), but Intensity Shift with ictus advancement and mora preservation in E Lechitic (22).

5.4. Additional Details

There are a few similar derivatives of AP *b* and *c* nouns that do not have neoacute accent; see (24). They must have been derived with the simple *-j-ā* suffix, perhaps before the complementary distribution of the *-ej-/-j-* allomorphs was established; thus Kuryłowicz (1958, 284).

At the same time they serve as a reminder that after the VCon and the changes in stem-final /Cj/ clusters, there was no synchronic difference between CS *-ěj-ā* and *-j-ā* derivatives formed from AP *a* nouns. This makes it reasonable to suspect that also some of the AP *a* nouns in (18.a) and (20) are *-j-ā* derivatives; but which ones, if any, we cannot tell. Only the *-j-ā* derivatives of nouns of APs *b* and *c* can be identified.

(24) Presumed *-j-ā* derivatives

a. AP *a*. See (20).

b. AP *b*. LCS *světj¹a* ‘candle’ (*svět-* ‘light’); *děž¹a* ‘kneading trough||milk bowl’, *medj¹a* ‘balk, border’.

c. AP *c*. *duš¹a* ‘soul’ (*duch-* ‘breath’), *zemj¹a* ‘land’ (*zem-* ‘ground’).

The syllabic suffix allomorph appears with a zero grade root in CS *zm-ěj-¹ā*, LCS *zmija* AP *b* ‘snake’ (*zem-* ‘ground’). But the simple *-j-* suffix was used for vocalic roots, e.g., LCS *staja* AP *a* ‘flock’ (CS *stā-* ‘stand’), *struja* AP *b* ‘stream, current’ (CS *strau-* ‘flow’). Contrast the last mentioned with LCS *lovja* ‘catch’ (*loviti* ‘angle’), obviously a more recent formation: Monophthongization in CS *strau-j-ā* in the First Vowel Shift vs. neoacute and Glide Formation in (CS *law-ěj-ā* >) LCS *lowijā* (> *lòvja*) after the Second Vowel Shift. Or, more likely, LCS *lòvja* was formed after the final establishment of the *vòlja/súša* derivational pattern; see immediately below.

(25) Polysyllabic bases

a. Simplex. *rogòža* ‘matting’ (*rogoz-* ‘reed mace, bull rush’), *večèrja* ‘supper’ (*večer-* ‘evening’).

b. Complex: LCS *ne-d¹ělja* ‘Sunday, week’ (*děl-* ‘activity’); *pro-d¹adja* ‘sale’ (*dad-* ‘give’), *na-dèdja* ‘hope’, *o-dèdja* ‘clothing’ (*-ded-* ‘put’), *postèlja* ‘bed’ (*stel-* ‘spread’), *sū-r¹ětja* ‘meeting’.

coincidence' (rět– 'meet'), R *potérja* 'loss' (po-ter– 'lose'), P *potwierdza* 'confirmation' (tvird– 'firm') and numerous others.

While the CS -ěj-ā suffix was conditioned by monosyllabic bases, there are a few neoacute-accented nouns derived from polysyllabic bases; see (25.a). They are widely attested and may have been formed before the complementary distribution was established. Even though they have a neoacute accent, one cannot be sure, of course, that they were formed with the CS -ěj-ā suffix. Once the early VCon and the stem-final /Cj/ changes had taken place, *vòlja/súša* nouns would appear to be derived by a combination of accent change, consonant gradation, and ā-declension. This synchronic pattern was productive for some time in some dialects, as mentioned in sections 5.1, 5.1.4. It may be responsible for the few nouns like LCS *rogòža* and *večèrja*, as well as for the greater variety of derivatives from prefixed bases exemplified in (25.b). One probably old neoacute derivative from a compound is LCS *nòzdírja* 'nostril', most likely from CS *nas-d'ir-j-ā*, Što. *nòzdr(v)a*, Sn. *nòzdr(v)a*, P *nozdrze*, Sc. *nozdr'ā* (Lorentz and Hinze 1958–1983, s.v.), U *nízdrja* (AP *aa*), Br., Bg. *nózdra*. The Russian *nozdrjá.sg–nózdri.pl* has been assimilated to the productive R AP *ba*, that is, stem stress in the singular has been changed to desinence stress, just as in some other nouns whose plural is more frequent than their singular, e.g., *zernó.sg–zërna.pl*, LCS *z'irno*.

5.5. Exclusions and Irregularities

The chronological perspective implicit in the LCS drift towards VCon makes it possible to explicate several kinds of irregular correspondences in nouns of this and similar derivation.

First of all, several types of formation with the CS -ěj- suffix were not lexicalized; they remained completely transparent, maintaining lexically alternating environments at internal suffix boundaries, and were excluded from the *vòlja/súša* development. Among these formations are inflectional wordforms (e.g., LCS *gostíje* 'guests'), derived collectives and abstracts (e.g., LCS *bratríja* 'brothers, brethren', *tùrníje* 'thorns', *veselíje* 'merry-making', *nasilíje* 'violence'), and verbal nouns (e.g., LCS *pětíje* 'singing', *zadáníje* 'task', *jiscělěnjíje* 'healing'). Also nouns of the type LCS *sòdiji* 'judge' > *sòdija*, R *sud'já*, P o. *sędziā*, st. *sędzia* are not exceptions to the LCS *vòlja/súša* development, for these -ij-i nouns were integrated with the ā-declension only in post-

LCS times (cf. section 5.2); this is documented by the OCS record; see the nominals in *-i* in (16)–(17) and the developments in (22)–(23); cf. Diels (1932, 176), Vaillant (1958, 96–107). To the nouns cited there we can add LCS dial. *pan-ŷj-i.nom.sg*, *pan-ŷj-ŷ.acc.sg* ‘lady’, P o., st. *pani*, *pania*, the only Polish noun that has preserved the nom.sg desinence *-i*; its acc.sg exemplifies the development in (23).

Secondly, consider the difference between the pairs LCS *tistŷ* ‘husband’s father-in-law’, *tistja* ‘mother-in-law’ and LCS *gostŷ* ‘guest’, *gostŷja* ‘female guest’. LCS *tistja* (R *těšća*, Srb. *tāšta*, P o. *czćā*) reflects a CS *tist-ěj-ā* that has gone through the developments sketched in (21) and, for E Lechitic, (22); semantically an original feminine relational adjective (‘female pertaining to father-in-law’), it was lexicalized as ‘mother-in-law’ early enough to be part of the *vòlja/súša* development. LCS *gostŷja* ‘female pertaining to a guest’ was lexicalized as ‘female guest’ at a more recent time. Hence it was excluded from early VCon; cf. R *góst’ja*; OP *gošcia* ‘female stranger, guest’ reflects the development in (23). The different histories of LCS *tistja* and *gostŷja* reflect the different degrees of intimacy of the relationships they denote.

Thirdly, it cannot surprise, considering the age of the *vòlja/súša* nouns, that there are irregularities in the modern correspondences, results of a variety of language-particular and dialect-particular modifications that have occurred since the Slavic territorial expansion. Some irregularities in the neoacute correspondences were mentioned in sections 5.1.1–4. But in addition to these there are genuine lexical deviations.

In Polish, a few *vòlja* nouns are attested variously with *ó /u/* and *o /o/*; e.g., dial. *rólá* ‘field’, *wólá* ‘will’, *gódza* ‘willingness’, but st. *rola*, *wola* (Rozwadowski [1923] 1959, 117). In Slovincian a few *vòlja/súša* nouns are attested with stem accent (section 5.1.4). Some Middle Russian texts contain tokens of *vòlja/súša* nouns with accent marks on the final vowel; they are either evidence of word-final stress, which would call for an appropriate *ad hoc* explanation, or they are a direct or indirect reflection of the common medieval scribal practice of using accent marks on word-final vowels to indicate word boundaries; cf. Stensland (1990). The latter possibility seems particularly likely in texts where the root vowel of the *vòlja* type is written with the Middle Russian grapheme for */ò/*.

Some *volja/súša* nouns are attested with irregular reflexes in several Slavic regions. An illustrative example is LCS *vònja* ‘smell’, OCS *vonja*, whose derivational source is not directly attested. Its membership among the *vòlja/súša*

nouns is indicated by R *vónja*, dial. *vôn'a*, U *vónja* (AP *aa*), Cz. *vůně*, Sk. *vôňa*, P o. *woniã*, but it is counterindicated by R dial. *vonjá*, Srb. *vònj-vònja* m., *vònja* f., Bg. *vonjá*, which seem to point to LCS *vonj¹a* (AP *b* or *c*). One might consider the possibility of positing the CS -*ěj*- allomorph for the former set of correspondences and -*j*- for the latter. This would exploit the facts (i) that there was a time before the complementary distribution of the CS -*ěj*- ~ -*j*- allomorphs was established, and (ii) there was a later time, in our earliest attestation, when this distribution was beginning to be blurred. A “deviant” LCS *vonj¹a* could then represent a CS archaism (an early -*j*- formation), or it could be a more recent (LCS or later) innovation.

A full discussion of such individual examples will naturally have to take into account their segmental features as well as their geographical distribution. In this instance the prothetic LCS *v...* implies a development (CS *an-ěj-ã* >) LCS *ònja* > *wònja* (cf. OCS *vonjati* ‘smell’); note the OCS prothesis before the uniformly neoacute *ò...* in *wònja*, but not before the alternating neoacute *ò... ~ o...* in OCS *osmī* ‘eight’ or *ostrŭ* ‘sharp’ (contrast R *vónja*, *vósem'*, dial. *vóstryj*); cf. section 2.2. Clearly the prothetic *v...* and the final accent in the modern *vonjá* attestations cannot both go back to LCS. One or the other needs to be explained as a result of later innovation in the traditions of speaking in which they are found. The commonly accepted explanation assumes (correctly) that the prothesis is old and proposes that the end-accented forms are backformations from R *vonját'*, Srb. *vònjati*, Bg. *vonjá*; see Skok (1973 s.v.). This seems plausible, being that the initial *v...* and the presuffixal *...nj-* of this denominative CS *ã*-verb unmistakably reveal its derivational source as LCS *vònja*. The only thing that is missing in this explanation, as in many others of its kind, is the motivation for the innovations.

5.6. The *vòlja/súša* Type. Discussion

The account of the *vòlja/súša* nouns that has been presented here contains elements that can be found in other attempts at explaining them. Stang (1957, 57–59), for instance, posits an accented suffix -*ij-*. But he then posits an accent advancement in order to produce a circumflex desinential vowel, from which the accent can be retracted to the root. He even speaks of the shortening of final vowels as a relevant element, but he offers no explanation of the distinct E Lechitic development, nor of the different development in inflected forms, in collectives, and in verbal nouns.

Rasmussen (1993, 477) posits a Balto-Slavic accented *-ěj-ā* suffix and accent retraction to account for this neoacute type. Unfortunately he operates with diachronic correspondences rather than phonetic changes, and the series of prehistorical stages he posits does not utilize what is known about relative chronology: He lets the Jer Shift precede the CS Deiotation (“*kòzjā > *kòzjā > kòžā”).

Kapović (2007) posits that all the *vòlja/súša* nouns are *-j-* derivatives which, if AP *b* or *c*, became AP *b* “by default”; but he does not explain this “default” (which is a consequence of the accented CS *-ěj-* suffix). He recognizes that the regular Old Polish and Slovencian reflexes are evidence of ending-accented *vòlja/súša* nouns in E Lechitic. Unfortunately he adopts the hopeless theory known as (Šachmatov-)van Wijk’s law, which supposes that the final length in *vòlja/súša* nouns is a compensation for “iotation geminates” (e.g., *sja* > *šša* > *šā*), an idea Kapović rightly considers phonetically implausible, and which additionally is incompatible with the reflexes of /Cj+V/ sequences in other environments.

Fecht (2010) faithfully reports on the inadequate theories that have been proposed in the past century and cites data from many Slavic languages. But in the end he latches on to a few dozen irregularly accented wordforms of two lexemes in two Middle Russian texts and constructs an analogical story that disregards most of our data and entirely loses sight of what has to be explained, viz. a LCS accent change that occurred some 1000 years before the (re)copying of Fecht’s chosen Russian texts, and which produced derivatives with a columnar stem accent in the majority dialects.

What distinguishes the account proposed here from previous accounts is that

- (i) it integrates the *vòlja/súša* nouns with other derivational patterns involving *-ěj-/-j-* suffixes, positing the suffix CS *-ěj-* that regularly occurs with monosyllabic bases;
- (ii) it recognizes the semantic shift and the lexicalization that separated these nouns from their adjectival origins;
- (iii) it distinguishes between uniform and alternating environments;
- (iv) this makes it possible to posit an early phase of VCon that separates the *vòlja/súša* nouns from other similar LCS *-ij-* formations, inflected forms, collectives, and deverbal nouns;

- (v) thereby it integrates the phonological development of the *vòlja/súša* type with other early VCon changes that gave rise to neoacute-accented elements;
- (vi) it bases the posited developments on a realistic, phonetically detailed understanding of the segmental and suprasegmental changes;
- (vii) this, among other things, makes it possible to subsume the Ictus Retraction in *vòlja/súša* nouns under the general LCS retraction of ictus from lax (short) high vowels
- (viii) and to account for the different developments in the majority dialects and in E Lechitic as results of different relative chronology.

6. Conclusion

Each of the three studies above contains a conclusion that states the results obtained. Hence there is no need for a summary at this point. But a few remarks should be offered on the preliminary matters of section 2, the general issue of vowel contraction (section 6.1), the gradualness of change (section 6.2), and the chronological dimension of Late Common Slavic (section 6.3).

6.1. Vowel Contraction

An essential part of the preceding interpretations was a theory of VCon that views the before-and-after relations ($VjV > V$) of the philological tradition only as raw material that needs to be resolved into sequences of phonetic changes. In its belief that diachronic correspondences were satisfactory accounts of change, previous scholarship apparently assumed that all cases of VCon as a matter of course terminated in Assimilation and Coalescence. Here one other type of Monosyllabication was recognized, Intensity Shift, which typically occurs where the difference in tonality (rounding, backness) and/or sonority (height) between two contiguous vowels does not favor Assimilation.

In the LCS examples seen here, the first vowel turned into a glide and yielded its prosodic properties to the more sonorous vowel, at the same time creating the conditions for Dental Palatalization and Deiotation; see (21),

(22). In a later wave of VCon, changes of this type would play into the distinction of palatalized vs. plain (phonetically velarized) consonants. Thus LCS *sějati* ‘sow, plant’ > /sěati/ → [s^eāti] ⇒ /s’āt’i/, P dial. *šác*, st. *siać* vs. LCS *bojati* ‘fear’ > /boati/ → [b^oāti] ⇒ /bāt’i/, P dial. *báč*, st. *bać się*.

Two types of environment subject to Glide Loss, Assimilation, and Coalescence were seen here, the high-vowel sequences (LCS -ije-) of i-verbs and the low-vowel sequences of the Imperfect (LCS -ěja-, -aja-). The former gave rise to neoacute accents through Ictus Retraction before Coalescence (section 3.2.1). In the latter, Coalescence brought about long vowels, which have the reflex of a neoacute accent now (section 4.3).

6.2. Gradualness

From the premise that changes are initiated earlier in uniform than in alternating environments it follows that Glide Loss would have occurred earlier in the i-verb Present suffix and the Imperfect suffix than across the clitic boundary in the definite adjectives. This is indeed what is shown by the OCS attestation. The fact that VCon also occurred at the desinence boundary in the *vòlja/súša* nouns prior to our earliest attestation agrees with the assumed scale of morphosyntactic boundary strengths in (1).

The contrast between the pan-Slavic VCon in the i-verb Present and the dialectally diverse outcomes of VCon in the Imperfect was interpreted as a consequence of the difference in chronology, which again followed from the difference in vowel height between the respective vowel chains: /j/ was lost earlier after the high /i/ than after the low /æ/ and /a/.

Considering recent examples of Ictus Retraction, such as the Štokavian “accent shift” (Ivić 1958, 105 et passim) one can speculate that the LCS Ictus Retraction from lax (short) high vowels was actualized in a series of steps. No clear evidence of this appears to be provided by the data discussed here.

As mentioned in section 2.2, it is essential in conceptualizing the actualization of these changes to understand them not as singular, bounded events, but as manifestations of synchronic phonetic constraints that affected some environments before others and produced long-term synchronic variation. Dental Palatalization and Deiotaton resulted in identical outcomes in the i-verb prs.1sg and in the *vòlja/súša* nouns even though they were not actualized at the same time in these different environments.

6.3. Chronology

In Marvan's (1979, 164) view, VCon was actualized gradually from some time before ca. 850 until the 1200s. But Marvan did not consider the data that have been the topic of these three studies.

Here it was argued that VCon was initiated (as Glide weakening and loss) in uniform ending-internal environments at the beginning of the LCS period (i.e. after VS₂), progressing earlier in /ijV/ sequences (section 3) and later in /æjV/ and /ajV/ sequences (section 4). VCon was extended to stem-internal environments preceding a desinence boundary (/ij+V/) in the *vòlja/súša* nouns some time later (section 5) and to environments with a clitic boundary (/V=jV/ in adjectives) not long before the originals of our first texts were written. OCS texts offer several tokens of apparent vowel elision at word boundaries; see Diels (1932, 115, Anm. 9–12). Some of these may be haplographs, but perhaps some of them exemplify the logically next step in the actualization of VCon, Coalescence across word boundaries (/V_i#V_i/).

In his trenchant analysis of the issues, Rasmussen (1993, 476) confronted the end-accented LCS *prs.1sg noš'q* 'carry' with the neoacute stem-accented LCS *nòša* 'burden' and posed the question, how these segmentally parallel CS wordforms could have come to have different accent. Let us add that an answer to this question must include the E Lechitic part of the picture, the identically accented LCS dial. *noš'q* 'carry' and *noš'ã* 'burden'.

Here it was posited that in the majority dialects the *i*-verb *prs.1sg* underwent Intensity Shift before the Ictus Retraction from lax (short) high vowels. Ictus Retraction subsequently occurred in the other personal forms of the Present, prior to the Coalescence of LCS *-ije-* > *-i-*; see (2), (3). Later there was Ictus Retraction in the *vòlja/súša* wordforms, which subsequently underwent Intensity Shift; see (21).

In the E Lechitic dialects, apparently, the *i*-verb *prs.1sg* and the *vòlja/súša* nouns underwent Intensity Shift before there was any Ictus Retraction; hence the identical accent in LCS dial. *noš'q* 'carry', *noš'ã* 'burden'. Rozwadowski (1912, 104) saw neoacute reflexes in present-tense forms of some *i*-verbs, e.g., P *wróci* 'turns', *klóci* 'clashes'; superficially they correspond to the neoacutes in e.g., R *vorót'it* 'turns' *kolót'it* 'strikes'. But since there is no E Lechitic evidence of Ictus Retraction to short root vowels (contrast P *nosi.3sg*, *noszq.3pl* and R dial. *nòs'it*, *nòs'at*, SBC *nòsī*, *nòsē*), the long-vowel reflexes in P *wróci* 'turns' *klóci* 'clashes', *łączy* 'joins', *sądzi* 'judge',

etc. have to be recognized simply as vowel-length preserved in pretonic position; cf. LCS dial. wort¹iti.inf, wort¹iti.3sg, kolt¹iti– kolt¹itĩ; for the pretonic liquid diphthong reflexes, see Andersen (1993, 457), Bethin (1998, 63), Feldstein (2003, 2006). The reason there was no Ictus Retraction in the Present-tense paradigm of *i*-verbs can only be that the Present marker -ije- completed VCon prior to the Ictus Retraction from lax (short) high vowels. This fits quite well with the absence of Ictus Retraction in the *vòlja/súša* nouns.

Turning to the textual evidence, the OCS corpus shows that VCon had run to completion in the *i*-verb suffix and the *vòlja/súša* nouns, both of which contained /ijV/ sequences, before the language was reduced to writing in the 800s. In other phonetic and morphosyntactic environments the processes were much more drawn out. It is striking that whereas VCon in the Imperfect was completed in Old Russian and Old Czech before our earliest texts, the VCon development was arrested before it came to completion in Serbian, as the uncontracted Imperfect suffixes preserved there appear to indicate. This goes to show that even where the relative chronologies of VCon changes can be assumed to have been similar in different Slavic regions, the rates of development and, hence, the absolute chronologies depended on local conditions.

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