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EARLY DIALECTAL DIVERSITY IN SOUTH SLAVIC II

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Twenty years ago I discussed the oldest isoglosses in the South Slavic linguistic area (1982). Subscribing to Van Wijk's view that the bundle of isoglosses which separates Bulgarian from Serbo-Croatian was the result of an early split in South Slavic and that the transitional dialects originated from a later mixture of Serbian and Bulgarian dialects when the contact between the two languages had been restored (1927), I argued that the shared innovations of Bulgarian and Serbo-Croatian must be dated to a period when the dialects were still spoken in the original Trans-Carpathian homeland of the Slavs. I concluded that there is no evidence for common innovations of South Slavic which were posterior to the end of what I have called the Late Middle Slavic period, which I dated to the 4th through 6th centuries AD. At that time, the major dialect divisions of Slavic were already established.

In the following I intend to discuss the oldest isoglosses in the western part of the South Slavic linguistic area, with special reference to Slovene. In order to provide the necessary background, I here reproduce the relevant part of the detailed chronology of Slavic developments which I have presented elsewhere (1989). The stages A9-25, B6-15 and C1-12 refer to my earlier account of the accentual (1975a), vocalic (1979) and consonantal (1982) developments and their interrelations. For readability's sake I shall omit the asterisks in the sequel. Any form which is not identified as belonging to an attested language should be read with an asterisk.

1. Proto-Indo-European.
2. Dialectal Indo-European.
3. Early Balto-Slavic. During this period, the characteristic lateral mobility of Balto-Slavic accent patterns came into existence.
4. Late Balto-Slavic. During this period the Balto-Slavic accent patterns obtained their final shape.
5. Early Slavic. During this period Slavic developed along similar lines as its West and East Baltic sister languages.

These developments yielded the following phonological system:

p	b			m					
t	d	s	z	n	l	r			
k	g	x							
H					j	w			
		i	ī	iN			u	ū	uN
		e	ē	eN					oN
					a	ā			

6. **Early Middle Slavic**. The developments of this period form part of the trend toward rising sonority and synharmonism within the syllable.

6.1. (B6) Umlaut. The back vowels *a*, *ā*, *oN*, *u*, *ū*, *uN* had fronted variants *ä*, *ā̈*, *öN*, *ü*, *ṻ*, *üN* after a preceding *j*. Now *e* and *ē* merged with *ä* and *ā̈*, respectively. The nasal vowels *eN* and *öN* remained distinct, cf. OCS. *znajǫ* 'I know', where the rounding was preserved. The other rounded front vowels also remained phonetically conditioned variants of the corresponding back vowels, e.g. *jüga* 'yoke'.

6.2. (B7 = C1) First palatalization of velars: *k* > *č*, *g* > *ǯ*, *x* > *š* before *e*, *ē*, *i*, *ī*, *j*. The velar obstruents had fronted variants before front vowels. When *e*, *ē* merged with the fronted variants of *a*, *ā* after *j* (6.1), the sequences *ke*, *kē*, *ge*, *gē*, *xe*, *xē* were rephonemicized as *čä*, *čā̈*, *ǯä*, *ǯā̈*, *šä*, *šā̈*, where *ä*, *ā̈* are the archiphonemes of *e*, *ē* and *a*, *ā* after palatals.

6.3. (C2) Spirantization of the voiced affricate *ǯ* > *ž*. This development was determined by the absence of a voiced counterpart to *š* in the earlier system. It was blocked by a preceding *z*.

6.4. (C3) Palatalization of the dental fricatives: *s* > *š*, *z* > *ž* before *j*, *č*, *ǯ*. This development was probably posterior to 6.3 because it introduced *ž* from another source and thereby eliminated the motivation for the spirantization of *ǯ*.

6.5. (B8) Monophthongization of diphthongs: *ai* > *ē*, *ei* > *ę̄*, *ui* > *ṻ*, *au* > *ō*. After palatal consonants the diphtongs *äi*, *üi*, *äu* changed into *ę̄*, *ṻ*, *ȫ*, the latter of which is the phonetically conditioned variant of *ō*. The rise of nasal vowels before a tautosyllabic stop can be dated to the same stage. It yielded a new nasal vowel *aN* in the participial ending PIE. *-onts*, e.g. ORu. *nesa* 'carrying', cf. *nesu* < *-oN* 'I carry'. The surviving laryngeals had developed into glottal stops by this time: I shall write *i*ˀ, *ę*ˀ, *e*ˀ, *a*ˀ, *o*ˀ, *u*ˀ. These sequences had the timbre of the corresponding long vowels. The monophthongization of diphthongs was posterior to 6.1 because *jai* yielded *ję̄*, not *jā̈*, e.g. in the locative endings of the *jo*-stems, OCS. *-i*, *-ixъ*. It was posterior to 6.2 because *ē* from *ai* did not cause palatalization in spite of the fact that it tended to be more fronted than *ē* from earlier *ē*, as will be clear from the next paragraph.

6.6. (B9 = C4) Second palatalization of velars: *k* > *ć*, *g* > *ǵ*, *x* > *ś* before the new front vowels *ē* and *ǖ* which had arisen from the monophthongization of *ai*, *ui* (6.5), and after the high front vowels *i*, *ī*, *iN* unless followed by a consonant or by one of the high back vowels *u*, *ū*, *uN*. The clusters *sk* and *zg* became *ść* and *ź́ǵ* before the new front vowels. The sequences *ika*, *iga*, *ixa* were rephonemicized as *ićä*, *iǵä*, *iśä*, etc. The development restored the opposition between *ē* and *ā* after palatals, e.g. OCS. *vьsь* 'all', f.sg./n.pl. *vьsa*, gen.loc.pl. *vьsěxъ*. Thus, the long vowel *ā̃* lost the status of an archiphoneme and came to be the fronted variant of *ā* after a palatal consonant. It goes without saying that the second palatalization was posterior to the monophthongization of diphthongs (6.5). It was also posterior to the palatalization of dental fricatives (6.4) because *š* and *ś* did not merge.

6.7. (C5) Rise of geminated affricates: *tj* > *tć*, *dj* > *dǵ*, also *stj* > *śtć*, *zdj* > *źdǵ*. This development has a modern parallel in Ukrainian, e.g. *žyttjá* 'life'. It was probably posterior to 6.6 because otherwise the gemination would hardly have been preserved. The cluster *kt* yielded *tć* before high front vowels, e.g. OCS. *noštь* 'night', Ru. *noč'*, SCr. *nȏć*.

6.8. (B10) Loss of final *h* from *s*. I date its ultimate loss toward the end of the Early Middle Slavic period because most probably it was only slightly anterior to the rise of prothetic glides (7.1).

6.9. (A9) Illič-Svityč's law. Accentual mobility was generalized in the masc. *o*-stems which did not have an acute root vowel, e.g. SCr. *zûb* 'tooth', cf. Gr. *γόμφος* 'bolt'. The original accentuation seems to have been retained in the Čakavian dialects of Susak and Istria. Illič-Svityč's law, which apparently provides the oldest isogloss within the Slavic territory, did not affect nouns with an acute root vowel.

6.10. (A10) Pedersen's law and rise of distinctive tone. The stress was retracted from inner syllables in accentually mobile paradigms, e.g. Ru. *ná vodu* 'onto the water', *né byl* 'was not', *pródal* 'sold', *póvod* 'rein'. The stress was also retracted within the initial syllable of barytone forms in paradigms with mobile stress, yielding a falling tone. All other stressed vowels became rising by opposition. This development was posterior to Illič-Svityč's law (6.9) because it eliminated the identity of the two accentual paradigms in the barytone case forms on which the generalization of accentual mobility was based.

These developments yielded the following phonological system:

p	b			m				
t	d	s	z	n	l	r		
ć	ź	ś						
č		š	ž					
k	g	x						
ʔ					j	w		
		i	ī	iN	ǐ̄	u	ū	uN
			ę̄				ō	oN
		e	ē	eN		a	ā	aN

and rising vs. falling tone

7. **Late Middle Slavic**. This was the time when the trend toward simplification of the syllable structure reached its culmination and the major dialect divisions established themselves.

7.1. (B11) Prothesis. The hiatus between a word-final and a word-initial vowel was filled with a glide, which was *j* if at least one of the vowels was front and *w* if the preceding vowel was back and the following vowel was rounded. As a consequence of this development, which was apparently posterior to 6.8, initial *j* lost the status of a phoneme before unrounded vowels. Initial *jä-* and *jā̆-* were rephonemicized as *e-* and *ē-*, e.g. *eʔxaʔtę̄* < *jaʔxaʔtę̄* ‘to ride’, Lith. *jóti*, now with the same initial as *eʔstę̄* ‘to eat’, Lith. *ė́sti*. The twofold glide before a rounded vowel gave rise to doublets, e.g. OCS. *utro* and *jutro* ‘morning’, *ajce* and *jajce* ‘egg’.

7.2. (A11) Dolobko’s law. Barytone forms of accentually mobile paradigms lost the stress to an enclitic particle, e.g. Slovene *lahkî* ‘light’, gen.sg. *lahkegà*, dat.sg. *lahkemù*. This development was probably posterior to the rise of distinctive tone (6.10).

7.3. (C6) First simplification of palatals: *ć* > *c*, *ź* > *ʒ*, in South and East Slavic also *ś* > *s*, *ść* > *sc*, *źź* > *zʒ*. The resulting dentals continued to be palatalized for some time. This development was motivated by the abundance of palatals which had been created in the Early Middle Slavic period. It was apparently posterior to 6.7 because the geminated affricates were preserved.

7.4. The clusters *ḱw*, *ǵw*, *x́w* which had arisen before front vowels as a result of the second palatalization (6.6) shared the development of 7.3 in South and East Slavic, but were depalatalized in West Slavic. The clusters *ḱn* and *ǵn* preserved the palatalization in the nasal (cf. Trubetzkoj 1930: 392).

7.5. Loss of *t* and *d* before *l* in South and East Slavic. As in the case of *ść* (7.3) and *kw* (7.4), West Slavic preserved the original cluster. The three developments can therefore be dated to approximately the same stage.

7.6. (C7) Simplification of geminated affricates: *tć* > *ść*, *dź* > *źź*, also *śtć* > *ść*, *źdź* > *źź*. This development was limited to Bulgarian. It was posterior to 7.3 because the new *ść* and *źź* did not merge with the earlier *ść* and *źź*. For the other languages I assume that length shifted from the first, occlusive element of the geminate to its second, fricative element: *tć* > *ćś*, *dź* > *ʑʑ*. This development can be identified with the general assimilation of *j* to a preceding consonant: *čj* > *čš*, *šj* > *šš*, *žj* > *žž*, *nj* > *ņņ*, *lj* > *ļļ*, also *pj* > *pļ*, *bj* > *bļ*, *mj* > *mļ*. The assimilation did not change the phonemic make-up of the clusters because their second components can be regarded as the realizations of the phoneme /j/ in the respective environments.

7.7. (C8) Spirantization of the ungeminated voiced affricate *ʒ* > *z*. This development did not reach Lekhitic and a part of the Bulgarian dialects. It was probably posterior to 7.6 because we would otherwise expect the degemination of the voiced affricate *dź* rather than its parallelism with *tć*. It was certainly posterior to 7.3 because the final outcome of the second palatalization of *g* in Czecho-Slovak is *z*, not *ž*. The spirantization of the velar stop *g* in the central dialects of Slavic was probably not much later than this development, and perhaps even earlier.

7.8. (B12) Delabialization of *u*, *ū*, *uN*, *ü*, *ǖ*, *üN*. This development yielded *y*, *ȳ*, *yN*, *i*, *ī*, *iN*, e.g. *wyˀdraˀ* ‘otter’, *lyNˀka* ‘bast’, *iga* ‘yoke’, 2 sg. imp. *nesī* ‘carry’, acc.pl. *arbyN* ‘slaves’, *kaŋŋiN* ‘horses’. As a result of the delabialization, the prothetic *w* before *y*, *ȳ* received the status of a phoneme. The new *iN* from *üN* did not merge with earlier *iN*, which had apparently merged with *eN* at this stage, e.g. *xwāleN* ‘praising’. The delabialization was posterior to the rise of prothetic *w* (7.1) because the latter could hardly develop before unrounded *y*, *ȳ*.

7.9. (B13) Raising of *ę̄* and *ō*. The empty hole which the delabialization had left was filled by raising the remaining rounded vowel *ō* to *ū*. The corresponding front vowel *ę̄* < PIE. *ei* was raised to merge with *ī*. The phonetically complex unrounded nasal back vowel *yN* lost its nasal feature, e.g. *lyˀka* ‘bast’, *syta* ‘hundred’. The corresponding nasal front vowel *iN* was lowered to *ęN* while *eN* was lowered to *äN*. The raising of *ō* was posterior to the delabialization of *ū* (7.8) because the two did not merge. The loss of *yN* was posterior to the delabialization which gave rise to its complex articulation.

7.10. Retraction of initial *e*, *ǖ* to *a*, *ū* in East Slavic, e.g. Ru. *ózero* ‘lake’, *útro* ‘morning’, cf. SCr. *jȅzero*, *jȕtro*. This development was apparently posterior to the delabialization (7.8) because it did not affect earlier *ü*, e.g. Ru. *igo* ‘yoke’.

7.11. Dissimilation of /j/ in the word for ‘foreign’ in South Slavic, e.g. SCr. *tûđ*, Ru. *čužój*. Though this development can hardly be dated with accuracy, it undoubtedly belongs to the Late Middle Slavic period.

7.12. (A12) Metathesis of liquids in South Slavic and Czecho-Slovak. The metathesis was often accompanied by lengthening. The timbre of the vowel shows that the metathesis was anterior to the rise of the new timbre distinctions (7.13) in

Czecho-Slovak and South Slavic, but posterior to that development in Lekhitic and Sorbian. The metathesis did not reach East Slavic except in word-initial position, where it was early in the entire Slavic area, e.g. Ru. *rálo* 'plough', Cz. *rádlo* < *ar*ˀ*dla*. It was apparently posterior to 7.5, cf. SCr. *dlijèto* 'chisel'.

7.13. (A13 = B14) Rise of the new timbre distinctions. In posttonic syllables the glottal stop was lost without compensatory lengthening, whereas in stressed syllables it became a feature of the preceding vowel, comparable to the Latvian broken tone. As a result, the timbre distinctions between the short vowels and the acute "long" vowels became phonemically relevant, e.g. *wy̏dra* 'otter', *sъ̏to* 'hundred'. This development was posterior to the raising of *ę̄* and *ō* (7.9) because these vowels are reflected as *i* and *u* in the historical languages. It was also posterior to the loss of *yN* because the latter yielded two reflexes, *ъ* and *y*, the timbre difference between which cannot be explained if we assume that *yN* was preserved up to a later stage. It was probably posterior to the East Slavic retraction (7.10) of initial *e* to *a*, which now became *o*. It was evidently posterior to the metathesis of liquids in South Slavic and Czecho-Slovak (7.12).

As a result of the rise of the new timbre distinctions, the quantitative oppositions in pretonic syllables were rephonemicized as timbre differences. All pretonic vowels of this stage are reflected as short vowels in the historical languages, e.g. Czech *ruka* 'hand' < *roNkå*, SCr. *màlina* 'raspberry' < *malìna*. The length in SCr. *rúka* was introduced from the barytone forms such as acc.sg. *rȗku*, while the original short vowel was preserved in the oblique plural form *rùkama*. Long vowels in posttonic syllables were not shortened, e.g. *òsnowā* 'base', inst.pl. *žènamī* 'women', where the long final vowel is reflected by the neo-circumflex tone of Slovene *osnȏva*, *žênâmi* (see 10.9 below). The alternation between short pretonic and long posttonic vowels in paradigms with mobile stress was removed by the generalization of the long vowel in Serbo-Croatian and the short vowel in Czech and Polish, e.g. SCr. *gȍlūb* 'pigeon', *žȅlūd* 'acorn', *lȁbūd* 'swan', *ȍblāst* 'region', Cz. *holub*, *žalud*, *labuť*, *oblast*. The long vowel was retained everywhere if it did not alternate with a short vowel, e.g. SCr. *mjȅsēc* 'month', *pȅnēz* 'coin', *jȁstrēb* 'hawk', *pȁūk* 'spider', Cz. *měsíc*, *peníz*, *jestřáb*, *pavouk*. These words had fixed stress on the laryngealized vowel of the first syllable. Both Czech and Serbo-Croatian have a short vowel in a suffix which contained a laryngeal, e.g. SCr. *bògat* 'rich', *srȁdit* 'angry'.

7.14. Raising of the low nasal vowels *aN*, *äN* to *yN*, *eN* in South Slavic, e.g. OCS. *nesy*$_{(ъ)}$ 'carrying', *xvalę* 'praising', ORu. *nesa*, *xvalja*. This development was evidently posterior to the loss of earlier *yN* (7.9). It can hardly have been anterior to the rise of the new timbre distinctions (7.13).

7.15. (A14 = B15 = C9) Van Wijk's law and loss of /j/. Long consonants (see 7.6 above) were shortened with compensatory lengthening of the following vowel, e.g. SCr. *pȉšē* 'writes' < *pīšše* < *pę̄šjä* < *peisje*. This development was pos-

terior to 7.7 because the spirantization did not affect the geminated voiced affricate in Slovak and Serbo-Croatian. It was evidently posterior to 7.11 and 7.13, cf. *wòl̨ā* < *wòl̨ļa* < *wàlja*^{ʔ} ‘will’. New *ē* did not merge with earlier *ē*, which had become *ě* at stage 7.13.

After the loss of the glottal stop in posttonic syllables and the rise of new long vowels as a result of Van Wijk’s law, case endings could have three different quantities. For example, the nom.sg. ending of the *a*-stems was short in *žèna* ‘woman’, long in *wòl̨ā* ‘will’ and *òsnowā* ‘base’, and indifferent with respect to length in *gorȁ* ‘mountain’. The same distribution holds for the neuter nom.acc.pl. ending. At this stage several levelings took place. Endings which did not occur under the stress were shortened in the whole Slavic territory. Length was generalized in the unstressed nom.acc.pl. ending in Slovene *lę̑ta* ‘years’, but not under the stress, cf. *drvà* ‘firewood’. Conversely, the distinction between a short unstressed nasal vowel and a long nasal vowel under the stress was preserved in Slovene gen.sg. *lípe* ‘lime-tree’, *gorę́* ‘mountain’, and in SCr. nom.acc.pl. *glâve* ‘heads’, gen.sg. *glávē*. This difference became phonemic as a result of Dybo’s law (see 8.7 below), which reintroduced long unstressed nasal vowels and short nasal vowels under the stress.

These developments yielded the following phonological system:

p	b			m	w					
t	d									
c	ʒ	s	z	n	l	r				
ć	ʒ́	ś		n̨	l̨	r̨				
č		š	ž							
k	g	x								
i	ī		ü	ǖ		y	ȳ		u	ū
e	ē	ęN		ь	öN	ъ			o	oN
ä	ǟ	äN				a	ā	aN		

and acute vs. rising vs. falling tone

8. **Young Proto-Slavic**. The redundancies which the trend toward rising sonority had created evoked a reaction, which eventually led to the disintegration of the prosodic system and to the rise of new closed syllables.

8.1. (A15) Contractions in posttonic syllables, e.g. Čak. (Novi) *pítā* ‘asks’, Bulg. *píta*, cf. Čak. *kopâ* < *kopȁ(j)e* ‘digs’, Bulg. *kopáe*, Old Polish *kopaje*. This development was posterior to the rise of the new timbre distinctions (7.13) because new *ē* did not merge with earlier *ē*, which became *ě*, cf. Czech gen.sg. *nového* ‘new’. It was evidently posterior to the loss of intervocalic *j*.

8.2. (A16) Retraction of the stress from final jers, e.g. Slovene gen.pl. *gọ́r* < *gorъ̀* 'mountains'. Pretonic jers in inner syllables could not receive the stress, e.g. Slovene gen.pl. *ọ́vɔ̑c* < *owьcь̀* 'sheep', Ru. dat.pl. *détjam* < *dětьmъ̀* 'children' (with *-jam* for ORu. *-em*). This development gave rise to new long vowels, which subsequently spread to the gen.pl. forms of other accent types. It was evidently posterior to the rise of the new timbre distinctions (7.13).

8.3. Raising of *ě* from *ä* to *ie* in Slovene, Sorbian, Czecho-Slovak, and East Slavic. This development can be dated to approximately the same stage as the retraction of the stress from final jers (8.2) because *ě* became the counterpart of *ō* in these languages. It also affected Serbo-Croatian, though perhaps slightly later and not to the same extent, cf. Čak. (Rab) *gnjāzdȍ* 'nest'.

8.4. (C10) Merger of palatal fricatives: *ś* > *š*, also *ść* > *šć*, *źʒ́* > *žʒ́*. As a result of this development, the West Slavic reflexes of the first and the second palatalization of *x* are identical. The merger was apparently posterior to the elimination of long consonants (7.15) because *ćś* and *čš* did not merge.

8.5. (C11) Merger of palatal clusters: *šč* > *šć*, *žǰ* > *žʒ́*. As a result of this development, the reflexes of the first palatalization of *sk* and *zg* merged with the reflexes of the second palatalization in West Slavic, with the reflexes of *tj* and *dj* in Bulgarian, and with the reflexes of *stj* and *zdj* in the whole Slavic territory. The merger was provoked by the merger of the fricatives (8.4).

8.6. (C12) Second simplification of palatals: *ć* > *c*, *ʒ́* > *ʒ* in West Slavic, and subsequently *ʒ* > *z* in Czech and Sorbian; *ć* > *č*, *ʒ́* > *ǰ* > *ž* in East Slavic. The clusters *šć* and *žʒ́* were reduced to *št* and *žd* in Bulgarian and the eastern dialects of Serbo-Croatian, and later in Czecho-Slovak. Similarly, the clusters *sc* and *zʒ* became *st* and *zd* in a part of the Bulgarian dialects. The reduction of palatal series was probably posterior to the merger of the clusters (8.5) because the two types of cluster were treated alike in all Slavic languages.

8.7. (A17) Dybo's law: rising vowels lost the stress to the following syllable, if there was one, e.g. *ženà* 'woman', *osnòwā* 'base'. Newly stressed long vowels received a falling tone, e.g. *woļâ* 'will'. Final jers had lost their stressability (8.2) and therefore could not receive the stress, e.g. Slovene *kònj* < *kòŋь* 'horse'. Acute (broken, glottalized) vowels did not lose the stress, e.g. *wy̋dra* 'otter', *dy̋mъ* 'smoke', which kept fixed stress throughout the paradigm. Dybo's law restored distinctive vowel length in pretonic syllables, e.g. *nāròdъ* 'people', *ōNtròbā* 'liver'. It was obviously posterior to the rise of the new timbre distinctions (7.13), Van Wijk's law (7.15), the contractions in posttonic syllables (8.1), and the retraction of the stress from final jers (8.2).

8.8. (A18) Lengthening of short falling vowels in monosyllables, e.g. SCr. *bȏg* 'god', *kȏst* 'bone', *dȃn* 'day'. This development, which was apparently Common Slavic, eliminated the pitch opposition on short vowels, which had become confined to monosyllables (not counting final jers) as a result of Dybo's law (8.7).

8.9. The inst.sg. ending *-ъmь* of the *u*-stems was generalized in the paradigm of the *o*-stems in North Slavic. It replaced *-a*, which has been preserved in OCS. *vьčera* 'yesterday' and can be identified with Lith. *-ù* < *-oH*. The development was motivated by the merger with the gen.sg. ending *-ā* in soft stems as a result of Van Wijk's law (7.15) and can therefore be dated to the Young Proto-Slavic period. The rise of the South Slavic ending *-otь* requires the continued existence of the nom.sg. ending *-os* and must therefore be dated to an earlier stage. The ending probably originated in polysyllabic nouns with initial stress, where the gen. and inst. endings had merged in Early Slavic already (5.3), and was subsequently generalized. The dialectal differentiation points to a higher frequency of prefixed nouns in the South Slavic area, which was closer to Byzantium.

These developments yielded the following phonological system:

p	b			m	w				
t	d								
c	ʒ	s	z	n	l	r			
(ć)	(ʒ́)			ṇ	ļ	ŗ			
č		š	ž						
k	g	x							
		i		ü		y		u	
		e	eN	ь	öN	ъ	(yN)	o	oN
		(ä)	(äN)			a	(aN)		

and either acute
or long vs. short and rising vs. falling tone

9. **Late Proto-Slavic**. This is the last period of common innovations.

9.1. (A20) Pleophony in East Slavic, e.g. Ru. *ogoród* 'kitchen-garden', *pozolóta* 'gilding'. The development was evidently posterior to Dybo's law (8.7), according to which the prefix lost the stress to the root in these words.

9.2. (A19) Loss of the acute (broken, glottalic) tone, which yielded a short rising contour, e.g. *dȳmъ* 'smoke', *gorà* 'mountain'. This development was evidently posterior to Dybo's law (8.7). It was also posterior to the lengthening of short falling vowels in monosyllables (8.8) because it reintroduced a pitch opposition on short vowels in polysyllables and thereby eliminated the motivation for the latter development. It was posterior to the East Slavic pleophony (9.1) because the distinction between the acute and the earlier rising tone was preserved in Ukrainian, e.g. *moróz* < *-orò-* 'frost', gen.pl. *holív* < *-oló-* 'heads'.

9.3. (A22) Stang's law: the stress was retracted from long falling vowels in final syllables, e.g. *w^{u}òļa* 'will', Ru. dial. *vôlja*, Cz. *vůle*, Slovak *vôľa*, Slovene *vọ́lja*, SCr. *vȍlja*. The long vowel was shortened, except in Lekhitic, where traces

of length remain, e.g. Old Polish *wolå*. The newly stressed vowel received a rising tone. Pretonic jers in inner syllables would not receive the stress, and final jers did not count as syllables with respect to Stang's law. The development was evidently posterior to Dybo's law (8.7) and to the East Slavic pleophony (9.1). It was also posterior to the loss of the acute tone (9.2), as is clear from SCr. gen.pl. *jȅ̑zīkā* 'tongues'. The short vowel in the first syllable of Cz. *jazyk* and SCr. *jèzik* shows that this word had fixed stress on the second syllable before Dybo's law operated: *(j)eNzy̓kъ*. The retraction in the gen.pl. form points to earlier *jeNzŷkъ* from *jeNzy̋kъ* with analogical lengthening after the loss of the acute tone. If Stang's law had been anterior to the loss of the acute tone, the lengthening would have been impossible and the retraction of the stress would not have taken place in this form. Note that the lengthening was indeed posterior to Stang's law in Čak. (Novi) gen.pl. *susêd* 'neighbors', *kolên* 'knees'.

9.4. (A21) Shortening of long falling vowels, e.g. Czech *mladost* 'youth', acc.sg. *ruku* 'hand', SCr. *mlȁdōst* 'youth', gen.sg. *prȁseta* 'sucking-pig'. The shortening did not affect monosyllables in Slovene and Serbo-Croatian and the first syllable of disyllabic word forms in the latter language, e.g. SCr. *bôg* 'god', *prâse* 'sucking-pig', acc.sg. *rûku* 'hand'. The dialect of the Kiev Leaflets sides with Serbo-Croatian in this respect (cf. Kortlandt 1980). The shortening was probably posterior to Stang's law (9.3).

9.5. Proto-Slavic *u* was fronted to *ü* in the northern dialects of Serbo-Croatian (cf. Vermeer 1979).

9.6. The rounded nasal vowels *oN*, *öN* were raised to *uN*, *üN* in Serbo-Croatian, Sorbian, Czecho-Slovak, and East Slavic. This development was apparently posterior to the fronting of *u* (9.5).

9.7. Denasalization of the nasal vowels in East Slavic, and subsequently in Czecho-Slovak. This development was posterior to the raising of *oN* and *öN* (9.6).

9.8. Rise of the palatalization correlation in Lekhitic, and subsequently in the other North Slavic languages.

9.9. Merger of the jers in Serbo-Croatian, Slovene, and Czech, and subsequently in Lekhitic.

10. **Disintegrating Slavic**. This is the period of parallel but not identical developments in the separate languages.

10.1. The denasalization spread to affect all Slavic languages. The nasal vowels are best preserved in modern Polish.

10.2. The rise of the palatalization correlation affected the languages differently. The correlation is especially characteristic of modern Russian.

10.3. The jers were lost or merged with other vowels under various conditions in the separate languages. They have been preserved as a separate phoneme in Slovene.

10.4. Short rising vowels were lengthened in Russian, e.g. dial. *kôn'* < *kōn̨* < *kòn̨ь* 'horse', cf. *bog* < *bȏgъ* 'god', where the vowel had been shortened (9.4). The length has been preserved in Baltic and Fennic loan words from Russian, e.g. Latvian *grāmata* 'book', Estonian *raamat* < *gràmotā*.

10.5. Short vowels were lengthened in monosyllables in Ukrainian, e.g *kin'* < *kōn̨* 'horse'. Other new long vowels originated from compensatory lengthening before a lost jer in inner syllables.

10.6. (A23) Short rising vowels in open first syllables of disyllabic words were lengthened in Czech and Upper Sorbian unless the following syllable contained a long vowel, e.g. Cz. *kráva* < *kràva* 'cow', *vůle* < *vōl̨a* < *w^{u}òl̨a* 'will', *psáti* < *pьsàti* 'to write', USo. *kruwa* < *krōwa* 'cow', Cz. gen.pl. *krav*, inst.pl. *kravami*. This development was evidently posterior to the loss of pretonic jers.

10.7. (A24) Falling vowels lost the stress to the following syllable in Slovene, e.g. *okọ̑* 'eye', *mladọ̑st* 'youth', acc.sg. *rokọ̑* 'hand'. The newly stressed vowel received a long falling tone. This development was evidently posterior to Stang's law (9.3) and anterior to the loss of the nasal vowels. Indeed, the Freising Fragments can be dated between Stang's law and the progressive accent shift (cf. Kortlandt 1975b: 411). The accent shift probably originated from the spread of the falling tone over two syllables as a result of the shortening (9.4).

10.8. (A25) Stressed short vowels were lengthened and received a falling tone before a non-final lost jer in Slovene, e.g. *bı̑tka* 'battle'. This development was evidently posterior to the progressive accent shift (10.7).

10.9. (A25) Stressed short vowels were lengthened and received a falling tone in Slovene if the following syllable contained a long vowel, which was shortened, e.g. *lẹ̑ta* 'years', *osnọ̑va* 'base', inst.pl. *žênâmi* 'women'. The development was evidently posterior to the progressive accent shift (10.7).

10.10. The stress was retracted from a final syllable to a preceding long vowel in Lekhitic, Slovene, and dialects of Serbo-Croatian, where the retraction yielded a rising tone.

10.11. Stressed short vowels in non-final syllables were lengthened and received a rising tone in Slovene, e.g. *lẹ́to* 'year', *vọ́lja* 'will'. This development, which was posterior to the rise of the neo-circumflex (10.8, 10.9) and to the retraction of the stress to a preceding long vowel (10.10), did not reach the easternmost dialects of the language.

10.12. The stress was retracted from a final short vowel in Lekhitic, the dialect of the Kiev Leaflets, dialects of Slovene and Serbo-Croatian, and Bulgarian. This retraction, which generally yielded a rising tone, was followed by others in various dialectal areas. In literary Serbo-Croatian, a rising tone points to a retraction of the stress from the following syllable because the Proto-Slavic rising tones have become falling. Czech and Slovak have fixed stress on the initial syllable, and the same can be assumed for Old Polish.

In search of the oldest isoglosses in the western South Slavic area it may be profitable to start from Marc Greenberg's recent historical phonology of Slovene (2000) and to compare his account of the data with the chronology adduced above. Greenberg has nine sections on "phonological processes at the time of Slavic settlement in the Eastern Alps" (pp. 63-86), eleven sections on "Slovene outcomes of some Late Common Slavic and general South Slavic developments" (pp. 87-104), and nine sections on "Slovene innovations" (pp. 105-127). These correspond roughly to my Late Middle Slavic, Young and Late Proto-Slavic, and Disintegrating Slavic periods, respectively. I shall here follow the order of Greenberg's presentation and refer to the relevant sections of his work as G1-G55.

The earliest Slavic vowel and consonant systems which Greenberg reconstructs (2000: 63, 69) reflect the stage immediately preceding the monophthongization of diphthongs (6.5). Greenberg does not account for the absence of nasality in OCS. acc.pl. *raby* 'slaves', *ženy* 'women', *syny* 'sons', *pǫti* 'ways' and its presence in acc.pl. *konję* 'horses', *zemlję* 'lands'. Nor does he account for the delabialization of the rounded nasal vowel in OCS. *nesy*, ORu. *nesa* 'carrying' < *-onts* as opposed to the preservation of rounding in OCS. *nesǫ*, ORu. *nesu* 'I carry'. The glottal stop which is needed for the explanation of vocalic quantity is lacking in his reconstructions.

G1. Initial vowels and prothesis. The prothesis (7.1) gave rise to doublets with and without initial *j-* before back vowels. Prothetic *w-* became phonemic as a result of the delabialization (7.8). After the rise of new timbre distinctions (7.13), the phoneme /j/ was eliminated from the system (7.15). It was restored by the loss of weak jers, which was a gradual process (8.2, 8.8, 9.3, 9.8, 10.2, 10.3). There was a second development of prothetic consonants in Slovene at a much more recent stage (G39). Unlike Greenberg, I see no evidence for an older variation between *e-* and *a-* because the attested doublets can easily be explained from the Late Middle Slavic prothesis.

G2. Rise of split *s*C > *s*C, *š*C. The rise of *šk*, which is typically found in West Slavic and western South Slavic, can easily be attributed to recent German influence. I agree with Ramovš (1924: 297-300) that the Slovene suffix *-šk-* developed from *-čьsk-*, *-šьsk-*, *-žьsk-* (G48).

G3. The second and third palatalizations of velars. After this development (6.6), the resulting palatals were simplified (7.3): *ć* > *c*, *ʒ́* > *ʒ*, in South and East Slavic also *ś* > *s*, *ść* > *sc*, *źʒ́* > *zʒ*. This created an early isogloss between South Slavic, which has *s*, and West Slavic, which had *ś*, later *š* (8.4). At the time of simplification (7.3), South Slavic included the dialect of the Kiev Leaflets. All of the Czecho-Slovak and western South Slavic dialects spirantized the voiced affricate *ʒ* > *z* (7.7).

G4. Change of C*j*V sequences. These gave rise to geminated palatals (6.7, 7.6) which were later simplified (7.15, 8.6). Original *tj*, *dj* became *ć*, *ʒ́* except in Bul-

garian and then yielded *c*, *ʒ* in West Slavic, eventually *c*, *z* in Czech and Sorbian. The Slovene development into *č*, *j* can be dated to the Disintegrating Slavic period, partly before and partly after the loss of weak jers (10.3). The dental reflexes in the dialect of the Kiev Leaflets resulted from the West Slavic simplification of palatals (8.6).

G5. Liquid metathesis. This was a common development of South Slavic and Czecho-Slovak (7.12) which evidently preceded the rise of the new timbre distinctions (7.13) and later spread to Sorbian and Lekhitic. Word-initially it affected the whole Slavic territory at its earliest stage, with lengthening in South Slavic inclusive of what later became central Slovak and the dialect of the Kiev Leaflets.

G6. Results of Common Slavic accentual developments. Greenberg reckons with Common Slavic acute, circumflex, neo-acute and unstressed long *ā* and circumflex, neo-acute and unstressed short *o* (2000: 78). This is a misleading simplification. Immediately before the monophthongization of diphthongs (6.5), which is Greenberg's starting point, there were long and short vowels in stressed and unstressed syllables and there could be a glottal stop in the stressed and first posttonic syllables. In barytone forms of paradigms with mobile stress, glottal stops had been eliminated on the analogy of the end-stressed forms in Early Slavic (Meillet's law). Accentual mobility was now generalized in the masculine *o*-stems which did not have a glottal stop in the root (6.9). This analogical development appears not to have reached some western Čakavian and adjacent Slovene and perhaps western Czech and Sorbian (and even some East Slavic and Bulgarian) dialects. The stress was subsequently retracted from inner syllables in accentually mobile paradigms and within the initial syllable of barytone forms in such paradigms, yielding a falling tone (6.10). All other stressed vowels became rising by opposition. This development resulted in a phonemic distinction in initial syllables between a rising tone in paradigms with fixed stress and a falling tone in paradigms with mobile stress. Barytone forms of accentually mobile paradigms then lost the stress to an enclitic particle (7.2).

The loss of glottal stops in posttonic syllables without compensatory lengthening gave rise to new timbre distinctions (7.13). Glottal stops in stressed syllables became a feature of the preceding vowel, comparable to the Latvian broken tone. As a result of the rise of new timbre distinctions, the quantitative oppositions in pretonic syllables were rephonemicized as timbre differences. All pretonic vowels of this stage are reflected as short vowels in the historical languages, e.g. Czech *ruka* 'hand', SCr. *màlina* 'raspberry'. Disregarding the nasal vowels, we have now reached the stage of Greenberg's reconstruction for stressed syllables. In posttonic syllables there was a phonemic distinction between long *ā*, short *a*, and short *o* at this stage. New posttonic long vowels arose as a result of Van Wijk's law (7.15) and of contractions (8.1). Retraction of the stress from final jers (8.2) yielded new long vowels under the stress, e.g. Slovene gen.pl. *gọ́r* < *gorъ̀* 'moun-

tains', *ǫ́vѣc* < *owьcь̀* 'sheep'. Dybo's law (8.7) gave rise to new pretonic long vowels and to long falling vowels in non-initial syllables. Other new long vowels under the stress developed from the lengthening of short falling vowels in monosyllables (8.8). The loss of the acute (broken tone, glottalization) yielded a short rising tone (9.2) and Stang's law eliminated long falling vowels in non-initial syllables and gave rise to a new type of neo-acute (9.3). These developments were followed by the shortening of other long falling vowels (9.4) and by a number of lengthenings in the separate languages. While long vowels in endings which had received the stress as a result of Dybo's law (8.7) were falling and therefore lost the stress again to the preceding syllable as a result of Stang's law (9.3), e.g. in the present tense of *i*-stem verbs, the loc.pl. of *o*-stem nouns, the nom.acc.pl. in *-a* of neuter nouns, the inst.pl. in *-y* of *o*-stem nouns, and the gen.loc.du. in *-u* (Greenberg 2000: 79), the long vowels in the same endings of paradigms with original mobile stress had a rising tone and therefore did not lose the stress. The original distinction between prefixed verbs with initial stress and simplex verbs with mobile stress was largely eliminated by analogy after Stang's law.

G7. Simplification of *-tl-*, *-dl-* > *-l-*. This development was limited to South and East Slavic (7.5). It did not reach some of the northern dialects of Slovene, including the dialect of the Freising Fragments, while it affected central Slovak and the dialect of the Kiev Leaflets. This is one of the oldest isoglosses in the whole Slavic territory.

G8. Development of syllabic liquids. This was a common innovation of South Slavic and Czecho-Slovak except eastern Slovak dialects. It may be identified chronologically with the metathesis of liquids (7.12).

G9. Lenition of *g* > *ɣ*. This innovation affected western South Slavic, Czecho-Slovak, Upper Sorbian, and the larger part of East Slavic. The development was later reversed in Slovene (G38). It may be identified chronologically with the spirantization of *ʒ* > *z* in South Slavic and Czecho-Slovak (7.7) and of *ǯ* > *ž* in East Slavic (8.6).

The vowel and consonant systems which Greenberg reconstructs at this point (2000: 85) reflect the stage immediately preceding the delabialization of high rounded vowels (7.8). The glottal stop and most of the nasal vowels which are required for an explanation of later developments are absent from his reconstructions. His restatement of the vowel system at the beginning of the following chapter (2000: 87) reflects the stage immediately preceding Van Wijk's law (7.15), apart from the absence of an unrounded nasal back vowel.

G10. Contraction. This development was early in posttonic syllables (8.1). Later contractions belong to the separate languages.

G11. Shortening of the rising (old acute) tone. This broken tone (glottalization), which was phonemically distinct from earlier short and long rising tones, yielded a short rising tone in Late Proto-Slavic, e.g. *gorà* 'mountain' (9.2). Short

rising vowels were later lengthened in Russian (10.4), Czech and Upper Sorbian (10.6), and Slovene (10.8, 10.9, 10.11).

G12. Shortening of the falling tone. The shortening did not affect monosyllables in Slovene and Serbo-Croatian and the first syllable of disyllabic word forms in the latter language (9.4). The dialect of the Kiev Leaflets is in agreement with Serbo-Croatian in this respect (cf. Kortlandt 1980).

G13. Retraction of non-initial falling tone. This is Stang's law (9.3).

G14. Retraction of the stress from final (weak) jers. This development (8.2) gave rise to new long vowels which subsequently spread to the gen.pl. forms of other accent types (cf. Kortlandt 1978).

G15. Further development of rising stress on short vowels. Lengthening of such vowels yielded falling pitch (10.8, 10.9) or rising pitch (10.11) in Slovene.

G16. Decomposition of intervocalic *ŗ* > *rj*. This development must probably be dated after the loss of final jers (10.3).

G17. Rise and spread of new palatalized *ŋ̑*. The palatalization of *n* after velars before high front vowels can be dated to the Late Middle Slavic period (7.4).

G18. Mergers of *ь*, *ъ* > *ə* and *i*, *y* > *i*. It appears that the merger of the jers (9.9) had already been completed in the Freising Fragments.

G19. Loss of weak jers and vocalization of strong jers (10.3).

G20. Sonorization of medial *ž* to *r*. This development, which affected the larger part of western South Slavic, may originally have been regular between unstressed vowels.

G21. Advancement of the Common Slavic falling tone in Slovene (10.7).

G22. Development of a long falling tone replacing rising tone in syllables preceding a weak jer (10.8) or shortened long vowel (10.9).

G23. Retraction of the neo-circumflex. This development was more recent that G22 (10.9), when the neo-circumflex arose, but earlier than the loss of pretonic length.

G24. Delabialization of *a* south of the Sava river. Greenberg assumes that *a* had preserved its rounding after the rise of the new timbre distinctions (7.13). This seems highly improbable to me. In fact, neither the raising of *aN* to *yN* (7.14) nor the raising of *ě* from *ä* to *ie* (8.3) makes sense if *a* had preserved its rounding. When *ō* arose from retraction of the stress from final jers (8.2) and from lengthening of short falling vowels in monosyllables (8.8), *ie* was monophthongized to *ę̄* in Slovene and adjacent dialects of Serbo-Croatian, an innovation which did not reach the western dialects and was arrested by new developments from the north (isoglosses 4a and 4b of Greenberg 2000: 117). The system became complicated by the loss of the acute (9.2), which yielded new short rising vowels, by Stang's law (9.3), which gave rise to new ^{i}*è* and ^{u}*ò*, and by the shortening of long falling vowels (9.4), which also yielded new short vowels under the stress. These complications were partly resolved in southeastern Slovene by diphthongization of *ę̄*,

ō to *ei*, *ou*, by fronting of *u* to *ü* (9.5), and by raising of *ou* to *u* (isoglosses 3, 5, 6 of Greenberg 2000: 117). The typically West Slavic merger of the jers into a front vowel (9.9) reached the Sava river from the north in Styria. This new *ä* which developed from the jers pushed *a* back to *å* in the northeastern dialects of Slovene, while in Kajkavian the jers became *e* and pushed earlier *e* down to *ä*. Thus, I think that the retraction of *a* was a consequence of the rise of a new front vowel from the jers and must therefore be dated after the fronting of the back jer and its merger with the front jer (9.9). These developments may have taken place at the time of the Magyar invasion of Pannonia. It follows that Greenberg's reconstructions of the 10th century Slovene vowel systems (2000: 113, 115) cannot be correct. At this stage, *ĕ* had been raised from *ä* to *ie* or *ę̄* already and the long jers (or *e* in Kajkavian) developed into *ä* and pushed *a* back to *å* in the northeast.

G25. Fronting of *u* > *ü*. This development affected a large part of western South Slavic and may be dated to the 9th century (9.5).

G26. Loss of nasality. The denasalization of the nasal vowels was a recent development (10.1). The South Slavic raising of the low nasal vowel *äN* to *eN* (7.14) did not reach the westernmost (Brda, Rezija) and northern (Carinthian) dialects of Slovene, where it yielded a low reflex.

G27. Rise of the phoneme /f/. This development was more recent than the loss of final jers in Slovene (10.3).

G28. Retraction of short final stress onto a long penultimate vowel (10.10).

G29. Raising of *ĕ* and *ō*. After the raising of *ĕ* from *ä* to *ie* (8.3) and the rise of *ō* from retraction of the stress from final jers (8.2) and from lengthening of short falling vowels in monosyllables (8.8), these tended to develop in a parallel fashion, apart from the latter in the North Slavic languages, where all long falling vowels were shortened (9.4). This points to an early merger of the two types of *ō* in Slovene. I think that the rise of new *ie* and *uo* from Stang's law (9.3) was instrumental in this respect and date the merger of the two types of *ō* in South Slavic to the same stage as the shortening of long falling vowels (9.4). These developments provided the impetus for the monophthongization of *ie* to *ę*, which did not reach the northern and western dialects of Slovene. Long *ę̄*, *ō* were subsequently diphthongized to *ei*, *ou* in the southeastern Slovene dialects. In Kajkavian, the *ę* from *ĕ* merged with the new front vowel which developed from the jers (9.9). This chronology differs in a fundamental way from Greenberg's account, which does not explain how *ĕ* could be raised without merging with *e* in the east (2000: 123). Meanwhile, the rise of *ē* from lengthening of short falling vowels in monosyllables (8.8) and of *ie* and *uo* from Stang's law (9.3) had further complicated the picture and yielded new *ie* and *uo* in a large (and unequal) part of the Slovene territory (G32), resulting e.g. in a distinction between *ię* and *ię* in Soča (Greenberg 2000: 171) and between new tense high-mid, earlier high-mid, and regular mid vowels in the Dreta valley. All of these distinctions must already have existed be-

fore the loss of nasal vowels (10.1). It will be clear that my reconstruction of the Slovene vowel systems in the 11th and 12th centuries is therefore much more complicated than the one proposed by Greenberg (2000: 125-127).

G30. Lengthening of short-stressed non-final syllables (10.11). This development was more recent than the rise of the neo-circumflex (10.8, 10.9) and the retraction of the stress to a preceding long vowel (10.10) and did not reach the easternmost dialects of Slovene.

G31. Development of *k* > *ʔ* in Carinthian. This innovation can be dated after the lenition of *g* > *γ* (7.7), the rise of the new timbre distinctions (7.13), the early contractions (8.1), and probably the loss of the acute tone (9.2).

G32. Rise of new diphthongs *ie*, *uo*. These arose from Stang's law (9.3), the outcome of which was shortened to *è*, *ò* or developed into regular diphthongs under various conditions in the separate languages. In Slovene, the development belongs to the separate dialects.

In search of the oldest isoglosses in western South Slavic, we have now obtained the following picture of early dialectal diversity.

D1. Illič-Svityč's law (6.9) did not reach the westernmost dialects of South and West Slavic and perhaps some East and eastern South Slavic dialects.

D2. The prothesis (7.1) gave rise to doublets with and without initial *j-* before back vowels.

D3. The simplification of palatals (7.3) which had resulted from the second palatalization of velars (6.6) created an isogloss between South Slavic, which has *s*, and West Slavic, which had *ś*, later *š*. At this time, South Slavic included the dialect of the Kiev Leaflets. The clusters *ḱw*, *ǵw*, *x́w* were depalatalized in West Slavic (7.4).

D4. The loss of *t* and *d* before *l* (7.5) created another isogloss between South Slavic, which innovated, and West Slavic, which preserved the original clusters. This development affected central Slovak (cf. Krajčovič 1975: 30) and the dialect of the Kiev Leaflets, but did not reach the northern dialects of Slovene (cf. Greenberg 2000: 37), including the dialect of the Freising Fragments.

D5. The simplification of geminated affricates (7.6) separated Bulgarian from the other Slavic languages.

D6. The spirantization of the ungeminated voiced affricate *ʒ* > *z* (7.7) which had developed from the simplification of *ʒ́* (7.3) after the second palatalization of *g* (6.6) did not reach Lekhitic (i.e. northern West Slavic).

D7. The lenition of *g* > *γ* affected western South Slavic (cf. Greenberg 2000: 140), Czecho-Slovak and Upper Sorbian, and southern East Slavic.

D8. Retraction of *e*, *ū* to *a*, *ū* in East Slavic (7.10).

D9. Dissimilation of /j/ in the word for 'foreign' in South Slavic (7.11), e.g. SCr. *tûđ*. This development affected the dialect of the Kiev Leaflets.

D10. The metathesis of liquids (7.12) preceded the rise of the new timbre distinctions (7.13) in South Slavic and Czecho-Slovak. It was accompanied by lengthening in South Slavic, including central Slovak (cf. Krajčovič 1975: 30) and the dialect of the Kiev Leaflets. The lengthening also affected the rest of Czecho-Slovak except word-initially, where the metathesis was early and affected all Slavic languages. The apparent Common Slavic lengthening under the acute tone in word-initial position is a consequence of the fact that the glottal stop was still a segmental phoneme at the time of the metathesis, e.g. Ru. *rálo* 'plough', Cz. *rádlo* < *àrˀdla*, but Ukr. *rilljá* 'field', Cz. *role* < *arlèjaˀ*, with Early Slavic loss of the pretonic laryngeal evidently preceding the initial metathesis. Since the territory where *-tl-*, *-dl-* were preserved is larger than the area where we find West Slavic *ro-*, *lo-* for South Slavic *ra-*, *la-*, leaving a transitional belt from western Carinthia through central Savinja and western Slovakia to Orava and back to the south, I am inclined to date the initial metathesis with lengthening in South Slavic before the loss of *t* and *d* before *l* (7.5). On the other hand, the preservation of the initial cluster after the metathesis in SCr. *dlijèto* 'chisel' suggests the converse chronology for the metathesis in non-initial position. Thus, I tentatively reconstruct the following chain of events: (1) lengthening before tautosyllabic resonants in South Slavic, (2) word-initial metathesis, (3) lengthening before tautosyllabic resonants in Czecho-Slovak, (4) loss of *t* and *d* before *l* in South and East Slavic, (5) non-initial metathesis in South Slavic and Czecho-Slovak, (6) rise of the new timbre distinctions, (7) lengthening under the stress before tautosyllabic resonants in Polish and Sorbian, (8) non-initial metathesis in Polish and Sorbian, (9) Dybo's law (8.7), e.g. Po. *bruzda*, USo. *brózda*, Cz. Slk. SCr. *brázda* 'furrow'. All of these developments preceded the loss of the acute tone (9.2) and the more recent lengthening of short rising vowels, e.g. Cz. *kráva*, USo. *kruwa* 'cow' (10.6), cf. Slk. *krava*, Po. *krowa*. The early simplification of palatals (7.3, 7.4) can perhaps be identified chronologically with the stages (1)-(2) reconstructed here and the development of syllabic liquids with stage (5). All of the stages (1)-(8) can be dated to the Late Middle Slavic period.

D11. After the rise of the new timbre distinctions and the shortening of pretonic long vowels (7.13), the new alternation between short pretonic and long posttonic vowels in paradigms with mobile stress was removed by the generalization of the long vowel in Serbo-Croatian and the short vowel in Czecho-Slovak and Polish. The absence of neo-circumflex in Slovene *pámet* 'intellect', where accentual mobility was lost and the acute prefix was generalized, shows that this language sided with its West Slavic neighbors here.

D12. The raising of the low nasal vowels *aN*, *äN* to *yN*, *eN* in South Slavic (7.14) affected the dialect of the Kiev Leaflets and the dialect of the Freising Fragments but did not reach the northwestern dialects of Slovene.

After the rise of new long vowels as a result of Van Wijk's law (7.15), vocalic quantity in case endings was subject to a variety of levelings in the separate dialects. The rise of new long vowels from contractions in posttonic syllables (8.1) and from retraction of the stress from final jers (8.2) also evoked chains of analogical developments in various parts of the Slavic territory. The raising of *ě* from *ä* to *ie* (8.3) created an isogloss between western and eastern Serbo-Croatian. The resulting diphthong was later monophthongized to *ę* in Slovene (except its northern and western dialects) and in the adjacent (northern) dialects of Serbo-Croatian. The raising of *ě* did not reach the dialect of the Kiev Leaflets, where *ě* merged with fronted *ä* < *a* after palatalized consonants. The second simplification of palatals (8.6) yielded new isoglosses, further differentiating West Slavic from South Slavic, separating Czech and Sorbian from the other West Slavic languages, and dividing eastern from western Serbo-Croatian. At this stage, the dialect of the Kiev Leaflets sided with Czecho-Slovak. Dybo's law (8.7) gave rise to new pretonic long vowels and to analogical levelings between the accentual paradigms of simplex and compound verbs. The lengthening of short falling vowels in monosyllables (8.8) yielded a long jer which later merged with *e* in the larger part of West Slavic and with *a* in the larger part of western South Slavic. The inst.sg. ending of the *u*-stems *-ъmь* was generalized in the paradigm of the *o*-stems in North Slavic, including the dialect of the Kiev Leaflets (8.9). The rise of the South Slavic ending *-omь* must be dated to an earlier stage. Stang's law (9.3) and the following shortening of long falling vowels (9.4) evoked further sound laws and analogical developments in the separate dialects. The most recent Proto-Slavic isoglosses developed from the fronting of *u* to *ü* (9.5), the raising of the rounded nasal vowels *oN*, *öN* to *uN*, *üN* (9.6), the denasalization of the nasal vowels (9.7), the rise of the palatalization correlation (9.8), and the merger of the jers (9.9).

I conclude that the earliest dialectal diversity in western South Slavic goes back to the time before the migrations of the Slavs from their original Trans-Carpathian homeland. The oldest differences originated from analogical developments which did not reach certain peripheral areas, especially at the western fringe (D1, D2). The oldest isoglosses differentiated between South Slavic and West Slavic (D3, D4, also D9, D12) but did not coincide, giving rise to transitional dialects in northern Slovene and central Slovak. The dialect of the Kiev Leaflets was part of South Slavic at this stage. Other isoglosses separated Bulgarian (D5), Lekhitic (D6), and East Slavic (D8) from the central Slavic languages. The oldest isoglosses which differentiate Slovene and adjacent Serbo-Croatian dialects with their West Slavic neighbors from central and eastern South Slavic (D7, D11) also belong to this period. The metathesis of liquids (D10) gave rise to new isoglosses between South Slavic (including central Slovak) and (the rest of) West Slavic, and between Czecho-Slovak and its northern neighbors. After the migrations, dialectal diversity increased dramatically, especially as a result of analogical developments.

New isoglosses between western and eastern Serbo-Croatian arose from the raising of *ě* from *ä* to *ie* (8.3) and from the second simplification of palatals (8.6), which also further increased the difference between South and West Slavic. The final disintegration of Proto-Slavic can be attributed to the Magyar invasion of Pannonia.

We may now reconsider the dialectal origin of the Freising Fragments. The consistent rendering of *i*, *e* (including *ě* and *eN*), *a*, *o*, *u* as *i*, *e*, *a*, *o*, *u* (once *-o*) suggests that the dialect underwent the raising of *äN* to *eN* (7.14) and of *ä* to *ie* (8.3) and the following monophthongization of *ie* to *ę* but not the fronting of *u* to *ü* (9.5). This seems to exclude the northern, western and southeastern dialects of Slovene. The most remarkable features of the orthography are the spellings *i*, *e* for the jers and *u*, *o* for the rounded nasal vowel (cf. Kortlandt 1996: 143). These reflexes are reminiscent of West Slavic and point to a peripheral northeastern origin (between isoglosses 3 and 5 of Greenberg 2000: 117). It appears that the vowel system of the northeastern Styrian dialect of Sveti duh na Ostrem vrhu (Greenberg 2000: 178) is in fact very similar to the system of the Freising Fragments, with *ę* from the jers and *ǫ* from the rounded nasal vowel. The essential difference between the Freising Fragments and (all?) Styrian dialects is that these *ę* and *ǫ* are higher than the reflexes of short and long *e*, *ě*, *eN*, *o* in the former but not in the latter. I therefore think that the Freising Fragments represent a dialect which was spoken farther to the north, perhaps in the area around Graz in present-day Austria. This fits in nicely with the preservation of dental stops before *-l-* (D4) and the South Slavic reflex of the word-initial metathesis of liquids (D10) characteristic of the transitional belt of dialects which runs from northern Slovene to western Slovak. The dialect of the Kiev Leaflets was transitional between eastern Serbo-Croatian and central Slovak and must have been spoken farther to the east.

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