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# Phonology

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## Summary

Prosody; Vowels; De-nasalisation; Development of the Semi-Vowels; The Yat';  
Consonants; Palatalizations; Reductions; Metatheses

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## Homework

All four homework assignments with [the following lexical list](#). You will use [this](#) and [this](#) Indo-European databases. as well as [Vasmer's dictionary](#). HW #4 (due end of week 4): Establish PIE sources for all vowels on the list; HW #5 (due end of week 5): Find as many present-day Slavic equivalents of the lexemes from the list and explain the development of all vowels; HW #6 (due end of week 6): Establish PIE sources for all consonants on the list; HW #7 (due end of week 7): Explain the consonantal and distribution changes from CSL to the present-day Slavic languages.

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## Quiz - in class

Multiple choice on phonological development (first half hour of week 8)

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## PIE Vocalism

### a) Full monophthongs

	<i>Front</i>		<i>Back</i>	
High	ī		ū	< reduced diphthongs
Medium	ē		ō	primary vowels
Low		ā		primary vowel

	<i>Front</i>		<i>Back</i>	
<i>High</i>	ī		ū	< reduced diphthongs
<i>Medium</i>	ē		ō	primary vowels
<i>Low</i>		ā		primary vowels

### b) Semivowels (schwas)

ə<sub>1</sub> – schwa primum/schwa Indo-Germanicum < reduced long primary vowels

ə<sub>2</sub> – schwa secundum < reduced short primary vowels

### c) Diphtongs

#### c1) Vocalic

	<i>Front 2<sup>nd</sup> part</i>	<i>Back 2<sup>nd</sup> Part</i>
<i>Long 1<sup>st</sup> part</i>	ē <sub>i</sub> , ō <sub>i</sub> , ā <sub>i</sub>	ē <sub>ʊ</sub> , ō <sub>ʊ</sub> , ā <sub>ʊ</sub>
<i>Short 1<sup>st</sup> part</i>	ě <sub>i</sub> , ō <sub>i</sub> , ǎ <sub>i</sub>	ě <sub>ʊ</sub> , ō <sub>ʊ</sub> , ǎ <sub>ʊ</sub>

#### c2) Mixed

	<i>Nasal 2<sup>nd</sup> Part</i>	<i>Liquid 2<sup>nd</sup> Part</i>
<i>Long 1<sup>st</sup> part</i>	ēm, ōm, ām, ē <sup>n</sup> , ō <sup>n</sup> , ā <sup>n</sup>	ēr, ōr, ār, ē <sup>l</sup> , ō <sup>l</sup> , ā <sup>l</sup>
<i>Short 1<sup>st</sup> part</i>	ěm, ǎm, ǎ <sup>n</sup> , ǎ <sup>n</sup>	ěr, ǎr, ǎ <sup>l</sup> , ǎ <sup>l</sup>

d) Vocalic Resonants (only in non-vocalic environments)

	<i>Short</i>	<i>Long</i>	
Nasal	ṁ̥, ṁ̥̄	ṁ̄, ṁ̄̄	< reduced mixed diphthongs
Liquid	ṛ̥, ṝ̥	ṝ, ṝ̄	< reduced diphthongs

*27 inherent units*

*54 with suprasegmental features*

PIE Consonantism

	<i>lab</i>	<i>den</i>	<i>vel</i>	<i>pal</i>	<i>lab- vel</i>	<i>nas- lab</i>	<i>nas- lin</i>	<i>liq- lat</i>	<i>liq- vibr</i>	<i>gli- lab</i>	<i>gli- lin</i>
voiceless stops	p	t	k	ć	kʷ	m	n	l	r	ɸ	ǰ
voiced stops	b	d	g	ǵ	gʷ						

voiceless aspirated stops	ph	th	kh	ǰh	kʰh						
voiced aspirated stops	bh	dh	gh	ǰh	gʰh						
voiceless fricative		s									
voiced fricative		(z)									

28 units

27/28 vowel/consonant ratio = .96

### Common Slavic Vocalism

a) Full Vowels

		<i>Front</i>		<i>Back</i>	
<i>High</i>	<i>+nas</i>	i	y	u	<i>+nas</i>

<i>Mid</i>	ɛ	e		o	ɔ
<i>Low</i>			a		

e,o – short, all others long

b) Semivowels

<i>Front</i>	<i>Back</i>
ɥ	ɰ

c) The jat'

ɣ (ǣ)

d) Vocaic r and l

	<i>Front</i>	<i>Back</i>
Vibrant	ɣ̣	ɰ̣
Lateral	ɣ̣̣	ɰ̣̣

14 units

Common Slavic Consonantism

	<i>Labial</i>			<i>Dental</i>			<i>Palatal</i>			<i>Velar</i>		
	<i>Voiceless</i>		<i>Voiced</i>	<i>Voiceless</i>		<i>Voiced</i>	<i>Voiceless</i>		<i>Voiced</i>	<i>Voiceless</i>		
o	p		b	t		d	t'		d'	k		
nt				s		z	š (s')		ž			x
ate				c		3	č (c')		(3')			
al		m			n			ń				
d				vibrant lateral	r l			r'				

26 (23) units

10/26 – vowel/cons ratio = .54

The Development of Phonology

Proto Indo-European (PIE) > Early Proto-Slavic (EPS) > Late  
Common Slavic (LCS) > Slavic languages and dialects.

Here: PIE > **LCS** > Slavic languages and dialects

### PIE, Major Characteristics:

- a) Rich and diversified vocalism (full, reduced vowels, diphthongs)
- b) Quantity independent from quality (e.g., a can be both long and short)
- c) High Vowel vs. Consonant Ratio
- d) Rich back consonants op`positions
- e) Labialization
- f) Aspiration
- g) Both closed and open syllables

**PIE > LCS, Major Lines of Development**

- a) Quantitatively and qualitatively reduced vocalism (esp. monophthogization)
- b) Quality linked with quantity
- c) Nasalization of the vowels
- d) Deaspiration
- e) Depalatalization of the velars
- f) New palatalizations and jotations
- g) Oppositions shift toward the front consonants
- h) Open syllables only (e.g., PIE *sūnūs* vs. LCS *synъ*)

#### PIE > Slavic languages, Major Lines of Development

- a) Further simplification of the vocalism (reductions of the semivowels, *jaʔ*, nasals in most languages)
- b) Mostly quantitative consonantal changes
- c) Open and closed syllables (e.g., LCS *synъ* vs. Pol. *syn*)

## Development of the Vocalism

### LCS e

1)

PIE		LCS	Example	Proof
ě	>	e	bherō > berq	Lat. fero, lit. beriù

2)

LCS		SL	Language; Condition	Example
e	>	e	All languages; Default	S-Cr berem, Rus. беру
e	>	o	Rus, Bel; _ /+stress/[hard consonant]	Rus. cěла
e	>	o	Pol; _{t,d,n,s,z,t,r}	Pol. żona, czoło
e	>	( o)	Sor; _[hard consonant]	U.Sor. čolo, L.Sor. coło

Logic of the exceptions – regressive assimilation (the first element adjusts to the second):

[soft vowel][hard consonant] > [palatalization][hard vowel][hard consonant]

LCS o

1)

PIE		LCS	Example	Proof
ǒ	>	o	okʷ > oko	Lat. okulis
ǣ	>	o	ar- > or'q	Lat. aro, Lit ariù

2)

LCS		SL	Language; Condition	Example
o	>	o	All languages; Default	S-Cr oko, Pol. oko
o	>	u	WSL; [cons]_[cons][end of	Cze. vůl, vola, Pol. gród, grodu

			syllable]	
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Logic of the exception – influence of the closed syllable

LCS a

1)

PIE		LCS	Example	Proof
ā	>	a	mātēr > mati	Lat. māter, Ltv. māte
ō	>	a	dō- > dati	Lat. dōnum

2)

LCS		SL	Language; Condition	Example
a	>	a	All languages; Default	S-Cr mati, Rus. мать

Linking quality to quantity

	short >	o	< short	
a				o
	long >	a	< long	

### LCS u

1)

PIE		LCS	Example	Proof
a <sup>u</sup> , o <sup>u</sup> [cons/end of the word]	>	u	a <sup>u</sup> s- > ucho	Lat. auris, Lit. ausis

2)

LCS		SL	Language; Condition	Example
u	>	u	All languages; Default	S-Cr oko, Pol. oko
u	>	ou	Cze;	Cze. soud

			_/+long/	
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### LCS i

1)

PIE		LCS	Example	Proof
ī	>	i	gʷīūs > živъ	Lat. vīvus
e <sup>i</sup>	>	i	ueidos > vidъ	Lit. véidas
oi, ai [end of the word]	>	i	stoloi > stoli	Lit. stalaĩ

2)

LCS		SL	Language; Condition	Example
i	>	i	All languages; Default	S-Cr piti, Pol. pić
i	>	y	East Slavic and Lechitic; [hard consonant]_	Pol. stoły, Rus. столы

### LCS y

1)

PIE		LCS	Example	Proof
$\bar{u}$	>	y	t $\bar{u}$ - > ty	Lat. t $\bar{u}$

2)

LCS		SL	Language; Condition	Example
y	>	i	South Slavic	S-Cr biti
y	>	y	East Slavic, Lechitic, Sorbian	Pol. być, Rus. быть
y	>	/- pal/ i	Standard Czech; Slovak	Cze. syn [sin]

## LCS ъ and ь

1)

PIE		LCS	Example	Proof
ǔ	>	ъ	snǔsos -> snъxa	Lat. nurus
a, o > ə <sub>2</sub>	>	ъ	ə <sub>2</sub> ǵ- -> vъz-	Ltv. uz < az
ĩ	>	ь	mĩgla -> mьgla	Lit. miglà
e > ə <sub>2</sub>	>	ь	kʷə <sub>2</sub> tur- -> čьtyre	Lit. keturì

2)

### Strong vs. Weak Semivowels

A Semivowel is strong in the syllable preceding a weak semivowel.

In all other positions a semivowel is weak, e

	1		2	
s	ъ	н	ъ	- > Rus. сон
	3			
s	ь	н	а	- > Rus. сна

1 – strong (before 2)

2,3 – weak (all other positions, e.g., before a full vowel, end of the word, etc.)

Weak ъ,ь > 0 (cca 11<sup>th</sup> century)

Strong ъ,ь have the following lines of development:

- a. Semivowels retained or they yield full vowels (Bulgarian, Slovene)
- b. Semivowels yield full vowels, and so:
  - b1. They merge before turning into full vowels (Serbo-Croatian),
  - b2. They keep separate inherent features (East Slavic, Macedonian),
  - b3. They keep separate contextual values (West Slavic)

Examples:

- a. Bul. сън < сънь, ден < днь

b1. S-Cr. san < сънъ, dan < дьнь

b2. Rus. сон < сънъ, день < дьнь

b3. Pol. sen < сънъ, dzień < дьнь

Present-day alternations (a:0, e:0, o:0, d:dz') as a result of the development of the semivowels

	<i>Nom.</i>	<i>Gen.</i>
<i>Rus.</i>	сон, де <sup>н</sup> ь	со <sup>н</sup> а, до <sup>н</sup> я
<i>Pol.</i>	se <sup>n</sup> , dzie <sup>ń</sup>	so <sup>n</sup> a, do <sup>n</sup> ia
<i>S-Cr.</i>	sa <sup>n</sup> , da <sup>n</sup>	so <sup>n</sup> a, dana (hist. do <sup>n</sup> e)

## LCS Ъ

1)

PIE		LCS	Example	Proof
ē	>	Ъ	sēm̄nt̄ > s̄m̄ē	Lat. sēmen
ō, ā	>	Ъ	lāīyos > l̄b̄v̄	Lat. laevus

2)

Numerous isoglosses dividing both Slavic languages and their dialects

East Slavic:

Rus, Bel. Ъ > e (ë) звезда звѣзды; Not all Russian dialects follow this development

Ukr. Ъ > 'i хліб

West Slavic:

Pol. Ъ [t,d,n,s,z,ʃ,r] > 'a, Ъ [l,t,d,n,s,z,ʃ,r] > 'e biały: bielić, las:w lesie

Slov. Ъ /long/ > ie biely, Ъ /short/ > e pena

Cze. Ъ > e (default) seno, [t,d,n]Ъ > 'e tělo, [p,b,v,m] Ъ > ie běh,  
[!t,d,n,p,b,v,m] Ъ /long/ > í vím

Sor. Ъ > ie USor. běh, LSor. běg

### South Slavic

Bul. Ъ > 'a (default), Ъ[syllable with a soft vowel] > e бял:бели, голям:  
големи; Not all Bulgarian dialects follow

Mac. Ъ > e seno, mleko

Slov. Ъ > è (narrow e) mesto

S-Cr. Ъ > e hleb, lep or Ъ /long/ > ije bijeli, [l,n]Ъ /short/ > 'e ljepota,  
[!l,n]Ъ /short/ > je pjena; Not all S-Cr dialects follow

OCS. retains Ъ

### LCS ę and ɔ

PIE		LCS	Example	Proof
en,em[cons]	>	ę	penkʷtos > pęть	Lit. peñktas
en[0]	>	ę	men > mę	Pind. mām
ṃ, ṇ > im, in > ъm, ъn	>	ę	neṃto > devęть	Lit. deviñtas
on,an,om,an[cons]	>	o	ronka > roka	Lit. rankà
ōn, ān[0]	>	o	ronkān > roko	Opr. ronkān
ṃ, ṇ > um, un > ъm, ъn	>	o	dṃti > doți	Lit. dùmti

2)

East Slavic

o > u, ę > 'a Rus. рука, пять

West Slavic

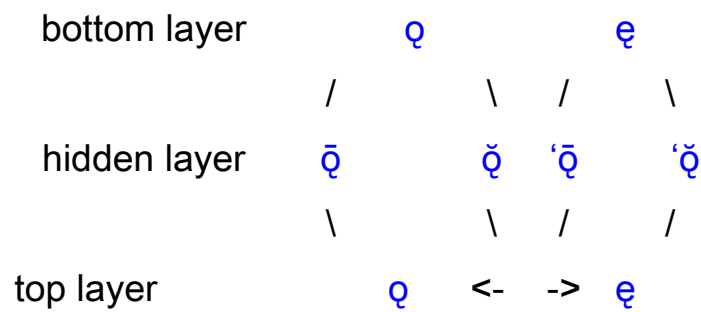
Cze, Slo:  $q > u$  (>ou in Cze) Slo, Cze ruka, Slo súd, Cze soud

Cze.  $e > e$  (default) deset,  $[t,d,n]e > 'e$  jehně,  $[p,b,v,m]e > ie$  pět,  
 $[!t,d,n,p,b,v,m] \bar{e} /long/ > a/í$  maso/vzíti

Slo.  $e > a$  (default) deset',  $[b,p,v,m]e > ä/ia$  mäso/piaty,  $[t,d,l,n] e > 'a$   
t'ah

Sor. follow the Cze/Slo pattern ( $q > u$ , varied reflexes of the  $e$ )

Pol. Retains both phonemic values but in different contexts. The  
neural network model of the change.



e.g.  $d\bar{o}bъ > d\bar{a}b$ ,  $r\bar{o}ka > r\bar{e}ka$ ,  $pa\bar{m}e\bar{t}ъ > pa\bar{m}ie\bar{c}$ ,  $m\bar{b}se\bar{c}ъ > mie\bar{s}ia\bar{c}$

### South Slavic

Slov.  $q > o$ ,  $e > e$  roka, pet (the only language with direct  
denasalization)

S-Cr.  $q > u$ ,  $e > e$  ruka, pet

Mac.  $q > a$ ,  $e > e$  рака, пет

Bul.  $q > ъ$ ,  $e > e$  рѣка, пет

LCS  $\text{ṛ}, \text{ṛ}, \text{ṛ}, \text{ṛ}$

1)

Unclear, probably from PIE  $r, l$  via BSL [front semivowel]{r,l}, [back semivowel]{r,l}

Secondary groups in South and West Slavic with the semivocalic element after the liquid

2)

East Slavic

$\text{ṛ} > er$ ,  $\text{ṛ} > or$ ,  $\text{ṛ} > ol$ ,  $\text{ṛ} > ol$  Rus. горло, смерт, волк, долгий

South Slavic

S-Cr.  $\text{ṛ} > r$ ,  $\text{ṛ} > r$ ,  $\text{ṛ} > u$ ,  $\text{ṛ} > u$  grlo, smrt, vuk, dug

Slov.  $\text{ṛ} > r$ ,  $\text{ṛ} > r$ ,  $\text{ṛ} > ou$ ,  $\text{ṛ} > ou$  grlo, smrt, volk, dolg

Mac.  $\text{ṛ} > r$ ,  $\text{ṛ} > r$ ,  $\text{ṛ} > ol$ ,  $\text{ṛ} > ol$  drvo, smrt, volna, dolg

Bul.  $\text{ṛ}, \text{ṛ} > r/ṛ$ ,  $\text{ṛ}, \text{ṛ} > r/ṛ$  връх, върба, жлъч, мълча

## West Slavic

Cze., Slo. Retain both  $r$ , and  $l$  (e.g., Cze. smrt, vlk) with some decomposing as exceptions in Czech (esp. in the case of the  $l$ , e.g.  $\check{z}$  lutý)

Pol., Sor. Decompositions and methateses depend on both inherent features and the context

Pol.

$\underline{r}$  > ar

$\underline{r}$  > 'e $\check{z}$  (default) wierzba, [t,d,n,s,z,ʃ] $\underline{r}$  > ar martwy

[!t,d,s,č,ž] $\underline{l}$  > eł pełny, [t,d,s] $\underline{l}$  > ło /short/ łu /long/ słońce, długi, [č,ž]

$\underline{l}$  > oł /short/ ół /long/ czołn, żółty,

$\underline{l}$  > il wilk

Shift from quantitative to qualitative oppositions in the vocalism

	short >	o
a		
	long >	a
	short >	o
o		
	long >	a
	short >	e
e		
	long >	ɚ
	long >	i
i		
	short >	ɚ
	long >	y
u		
	short >	ɚ

### Phonotactical changes

- **Open syllable principle:**  
Every syllable has to end in a vowel

This common Slavic principle has been retained only in OCS. This principle triggers **metatheses** (with resulting vowel at the end of the syllable) and the **monophthongization of the diphthongs** (i.e., diphthongs, which end in a non-vowel component are replaced with vocalic monophthongs, see examples above)

Metatheses of the liquids (groups ort, olt, tort, tolt, tert, telt)

Groups [0/cons]{o,e}{r,l}[cons]

<i>PIE</i>	<i>South Slavic</i>	<i>Czecho-Slovak</i>	<i>Lechitic-Sorbian</i>	<i>East Slavic</i>
or	ra	ra	ro (ar)	oro
er	rǣ	rǣ	re	ere
ol	la (al)	la	lo	olo
el	lǣ	lǣ	le (lo)	olo

Examples:

\*gord (Lit. gārdas) >

S-Cr. grad, Cze. hrad, Pol. gród, Rus. город

\*berg (Germ. Berg) >

S-Cr. br(ij)eg, Cze. břeh, Pol. brzeg, Rus. берег

\*golv (Lit. galvà)

S-Cr. glava, Cze. hlava, Pol. głowa, Rus. голова

\*melk (Lat. melca) >

S-Cr. ml(ij)eko, Cze. mléko, Pol. mleko, Rus. молоко

Patterns:

- a. pure metathesis (Lechitic and Sorbian),
- b. metathesis with lengthening (South and Czecho-Slovak)
- c. development of an additional vocalic element (East)

## Development of the Consonantism

### Principal tendencies:

- deaspiration
- delabialization
- palatalization
- shift toward the front of the mouth cavity

. See this [\[page about Grimm's law\]](#) to compare it with the situation in Germanic languages (hence in English)

### LCS p,b,d,t (continuation and simple deaspiration)

<i>PIE</i>		<i>LCS</i>	<i>Examples</i>
p, ph	>	p	pol- > polъ; sphǒ'nā > рѣна
b,bh	>	b	būk- > byкъ; bherō > берѡ
d,dh	>	d	ǵrd- > сѣрдѣсе; dhūm > дымъ
t,th	>	t	tū > ty; ponth > рѡтъ

### LCS s,z (continuation, shifted depalatalization)

<i>PIE</i>		<i>LCS</i>	<i>Examples</i>
s, ǵ, ǵh	>	s	stol- > stolъ; ǵolm- > solma;
(z), ǵ, ǵh	>	z	nizdo (zd < sd < sǵ₂d) > гнѣздо; ǵnō- > znati, ǵheim- > zima

LCS k,g (continuation, simple deaspiration, simple delabialization)

PIE		LCS	Examples
k, kʰ, kh, kʰh	>	k	būk- > byкъ; ѱlkʰos > vьlkъ
g, gʰ, gh, gʰh	>	g	bhog- > bogъ; ghostis > gostъ; gʰ ōus > go-vędo; snoigʰh- > snęgъ

LCS x (qualitatively new element, context-dependentshift toward the back of the mouth cavity)

<i>PIE</i>		<i>LCS</i>	<i>Examples</i>
{i/e/r/k}s{!p/t/k}	>	{i/e/r/k}x{!p/t/k}	mus- > мъхъ; aus- > ухо;

Slavic g > h shift

Regional (Czecho-Slovak, Upper Sorbian, Ukrainian, Belorussian;  
Russian, S-Cr, Slovene dialects), e.g.

Cze: hlas, hovado, noha,

Slov. hlas, hovädo, noha

Usor. hłos, hłova, noha

Ukr. голова [h...], голос [h...], нога [..h..]

Palatalizations

## 1. First Palatalization (regressive)

After s > x, after delabialization and deaspiration, before the monophthongization

{k,g,x}[front vowel = ь, e, ъ (! <oi), i (! <oi), е, ѣ, њ] > {č, ž, š}[front vowel = ь, e, ъ (! <oi), i (! <oi), е, ѣ, њ]

kʷi- > čьto (Lat. quid)

gʰltos > žьlť (Lit. gėldas)

myxь > myšь (Lat. mūs)

Development toward hardening in modern Slavic languages

First palatalization of the groups sk, zg (major isoglosses dividing Slavic languages and dialects)

{sk,zg} [front vowel = ь, e, ъ (! <oi), i (! <oi), е, ѣ, њ] > {š č, ž dž} [front vowel = ь, e, ъ (! <oi), i (! <oi), е, ѣ, њ]

Development in Slavic languages:

East Slavic:

š č retained, ž dž > various reflexes, most commonly ž ž

Rus. пицаль, дрожжи

Lechitic

Hardening š č > šč, ž dž > ždž

Pol. pszczel, drożdże

Czecho-Slovak, Sorbian

Softening š č > šć, ž dž > žď

Cze. pišť'al, droždí

South Slavic

Major differentiation of the dialects

East South Slavic and some S-Cr dialects: št, žd

S-Cr: pištaljka, drožda

Other S-Cr dialects: šć, žj; šč, žj; št, žď

Slovene: šč, ž

Slovene dialects: šč, ždž; š,ž

## 2. Second Palatalization (regressive)

After the monophthongization

{k,g,x}{ǫ ( <oi), i (<oi)} > {ć, dž, s'}{ǫ ( <oi), i (<oi)}

člověkъ: člověk+i > člověci

bogъ: bog+i > bodzi

duxъ: dux+i > dusi

### Second palatalization of the groups sk, zg

{sk,zg}{ѣ (<oi>), i (<oi>)} > {sc', zdz'}{ѣ (<oi>), i (<oi>)}

Retained or simplified (st, zd) in South and East Slavic, e.g. S-Cr.  
daska:dasci, OCS. dręzga: dręzdѣ

Merged with the results of the first palatalization in the West and  
Belorussian (i.e., š č , ž dž)

### Second palatalization of the groups kwѣ, gwѣ

Indirect palatalization – East and South Slavic only:

	kwѣ	gwѣ
Rus.	цвет	звезда
S-Cr.	cv(ij)et	zvijezda
Pol.	kwiat	gwiazda

### 3. Third Palatalization (progressive)

{b,i,e} {k,g,x}{![cons],ъ,y} > {b,i,e} {c',dz',s'}{![cons],ъ,y}

овька > овьса

стьга > стьдза

вѣхо > vse

Alternations as results of the palatalizations:

S-Cr vojnik:vojniče:vojnici (k:č:c); lovac:lovče:lovci (c:č)

Nom. Sg.		vojni	k		
Voc. Sg.		vojni	č	e	1st
Nom. Pl.		vojni	c	i	2nd
Nom. Sg.	lov	a	c		3rd
Voc. Sg.	lov	o	č	e	1st
Nom. Pl.	lov	o	c	i	2nd

### Jotations

Differentiate Slavic from Baltic languages (where jotations are found only sporadically in Lithuanian).

Dental Siphants

{s,z} > {š,ž}

pišq: pisati

vęžq: vęzati

Hardening in most Slavic languages and dialects

Velars

{k,g,x}j > {č, š, ž}

plačь:plakati

duša:duxъ

ľžq:ľžgati

Hardening in most Slavic languages and dialects (č > c in Lower Sorbian, remains soft in Russian and Upper Sorbian)

{sk,zg}j > {š č, ž dž}

iš čq:iskati

zviždq:zvizg-

Further development as in the case of the first palatalization described above

Alveolars

{l,n,r}j > {l', n', r'}

Further development:

ń retained: S-Cr konj, Pol. koń, Rus. конь

l' l<sup>e</sup> ł

a. Reduction to one value:

Cze. has only l

b. Reduction to two values:

S-Cr. has l' l<sup>e</sup>

Rus. has l' ł

c. Reduction and extension of the scale

Pol. and Slo. have l<sup>e</sup> u

r'

Retained in Pyc., Ukr., Sor, OCS and partially Bul, e.g. Rus. море

Hardening in Bel., Slov, S-Cr., and Mac, e.g. S-Cr more

Decomposition in Slov (before a vowel), e.g. morje

Shift in Pol. and Cze, i.e. r' > r<sup>z</sup> (Czech) > ž (Polish), e.g. Cze pekař,

Pol. piekarz

Labials

{b,p,v,m}j > {b',p',v',m'}

L epentheticum in East and South Slavic

Rus: куплю, грабли, земля, ловлю

S-Cr: kupljen, grablje, zemlja, ulovljen

Pol. kupiony, grabie, ziemia, łowię

Dental Stops

Major isoglosses differentiating Slavic languages and dialects

{t,d}j > {t',d'}

svѣt'a, med'a

East Slavic:

č, ž Rus. свеча, межа

West Slavic:

c, dz Pol. świeca, miedza

South Slavic:

Bul., OCS:

št, žd, e.g. Bul. свещ, межда

Mac.

ć, ğ e.g., sveća, mefa

Standard S-Cr

ć, đ, e.g. sv(ij)eća, međa

S-Cr ča dialect

ć, j, e.g. svića, meja

Slo and S-Cr kaj dialect

č, j, e.g. sveča, meja

{st,zd}j > {š č , ž dž }

pustjǫ > puš č ǫ

ǫzdjǫ > ǫž dž ǫ

Further development just like sk, zg above

{kt,gt,xt}i > {t'}

rekti > ret'i

mogti > mot'i

verxti > vrǫt'i

Further development as tj above

Reductions

Principle of rising sonority

Mostly regressive reductions of the sequences violating the principle

ps, bs, ts, ds > s, e.g. opsa > osa (Lat. vespa)

ks, gs > x, e.g., tēkxon > tьxъ

tsl, dsl > sl, e.g., čistlo > čislo

tsm > sm, e.g., čistmę > čismę

kst, gst > st, e.g., rēkste > rьste

pt, bt > t, e.g., grebti > greti

pn, bn, tn, dn > n, e.g., sьpnos > sьnъ

dm, tm > m, e.g., dadmi > damъ

bv > b, e.g., ob-volko > oblako

tt > st, e.g., metti > mesti

tl, dl > l (only East and South), e.g., Rus. плела, рало, Pol. plotła, radło, S-Cr plela, ralo

[cons][cons] > [cons], e.g. óksis > ossis > oсь

### Positional softness in Slavic

Retained in the East, e.g., Rus. дедушка [d'eduška]

Depalatalization in the South, e.g., S-Cr. deda [deda]

Partial preservation in the West, e.g. Pol. Pol. dziadek [ɖadek]

## Prothetic consonants in Slavic

Prothetic v and j

je > o shift in East Slavic, Rus. озеро, олень, S-Cr jezero, jelen, Pol. jezioro, jelen

## Prosody

Quality:

CSL: intensity, length, pitch =>

West Southern - retained

East, Polish and East Southern - reduced to intensity

Other Western - intensity and length Distribution:

CSL: free => East, Slo, S-Cr, Bul, - free or relatively free Other - fixed