

Making sense of Comparative Allomorphy in Slavic

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SinFonIJA 16
Brno, 21-23 September 2023

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Comparative suffixes in Slavic

| PROTO-SLAVIC | *-ej̊s | *-j̊s |
|---------------------|--------|-------|
| OLD CHURCH SLAVONIC | -ěj̊š | -j̊š |
| POLISH | -ejsz | -sz |
| CZECH | -ějš | -š |
| SLOVAK | -ejš | -š |
| UKRAINIAN | -iš | -š |
| RUSSIAN | -ee | -e |

Comparative suffixes in Slavic

| PROTO-SLAVIC | *-eⱃs | *-j̃s |
|---------------------|--------|-------|
| OLD CHURCH SLAVONIC | -ěj̃š | -j̃š |
| POLISH | -ej̃sz | -sz |
| CZECH | -ěj̃š | -š |
| SLOVAK | -ej̃š | -š |
| UKRAINIAN | -iš | -š |
| RUSSIAN | -ee | -e |

Comparative suffixes in Slavic

| PROTO-SLAVIC | *-e- j̆s | *- j̆s |
|---------------------|-----------------|---------------|
| OLD CHURCH SLAVONIC | -ě- j̆š | - j̆š |
| POLISH | -ej- sz | - sz |
| CZECH | -ěj- š | - š |
| SLOVAK | -ej- š | - š |
| UKRAINIAN | -i- š | - š |
| RUSSIAN | -e- e | - e |

Comparative suffixes in Slavic

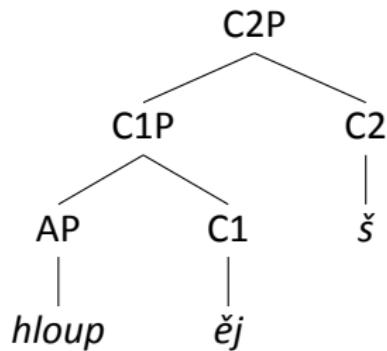
CZECH -ěj-š -š Caha et al. (2019)

SLOVAK -ej-š -š Vanden Wyngaerd et al. (2020)

UKRAINIAN -i-š -š Vyshnevska (2022)

The split CMPR hypothesis

(1)



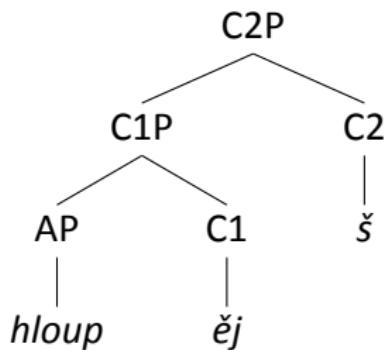
Root size determines allomorphy selection

(2)

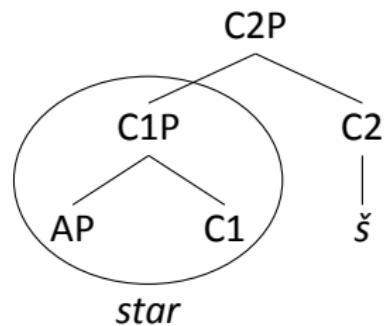
| | AP | C1 | C2 | AGR | gloss |
|-------|-----|----|----|----------|-------|
| hloup | -ěj | -š | -í | 'stupid' | |
| star | | -š | -í | 'old' | |

Root size determines allomorphy selection

(3) a.



b.



Aim of this paper

- ▶ we look at Czech, Ukrainian, Russian
- ▶ we show that the C1 and C2 exponents show internal phonological complexity
- ▶ this complexity reveals itself in palatalisation effects on preceding segments
- ▶ two different processes of palatalisation are at work, which we represent as two different floating segments:
 - ▶ PAL₁
 - ▶ PAL₃

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Czech

| | affects | example | today |
|--------------------|---|---------|------------------|
| PAL _{VAL} | velars/glottals alveolars labials | -ěj | PAL ₁ |
| PAL _{VA} | velars/glottals alveolars | -í | PAL ₂ |
| PAL _V | velars/glottals | -ř, -št | PAL ₃ |

(Caha et al. 2019)

Czech

| POS | | CMPR | | | | | |
|-----|---------|-------|----------------------|-----------------------|--------------|-----------|-------|
| | AP AGR | AP | C1 | C2 | AGR | IPA | gloss |
| G | stroh ý | stroh | PAL ₁ +ej | PAL ₃ +š í | [stroʒɛjʃi:] | 'austere' | |
| A | bujar ý | bujar | PAL ₁ +ej | PAL ₃ +š í | [bujaʒɛjʃi:] | 'merry' | |
| L | chab ý | chab | PAL ₁ +ej | PAL ₃ +š í | [xabʒɛjʃi:] | 'weak' | |
| G | drah ý | drah | | PAL ₃ +š í | [draʒʃi:] | 'rich' | |
| A | star ý | star | | PAL ₃ +š í | [starʃi:] | 'old' | |
| L | slab ý | slab | | PAL ₃ +š í | [slabʃi:] | 'weak' | |

Czech

| | CMPR | | | | | |
|------|-------------------|------------------|----|-------------------------------------|-------|-----------|
| | AP | C1 | C2 | AGR | gloss | |
| G MS | stroh | PAL ₁ | ej | PAL ₃ Š PAL ₂ | í | 'austere' |
| IPA | stro ₃ | ← | εj | ʃ ← | i: | |

Czech

| | | CMPR | | | | |
|------|-------|------------------|------------------|------------------|--------------------|-------|
| | AP | C1 | C2 | AGR | | gloss |
| G MS | stroh | PAL ₁ | ej | PAL ₃ | š PAL ₂ | í |
| IPA | stroʒ | ← εj | | | ʃ | ← i: |
| MS | drah | | PAL ₃ | š | PAL ₂ | í |
| IPA | draʒ | | ← | ʃ | ← | i: |

Czech

| CMPR | | | | | |
|------|-------|------------------|-------------------------------------|-------------------------------------|-------------|
| | AP | C1 | C2 | AGR | gloss |
| G MS | stroh | PAL ₁ | ej | PAL ₃ Š PAL ₂ | í 'austere' |
| IPA | stroʒ | ← εj | | ʃ ← i: | |
| MS | drah | | PAL ₃ Š PAL ₂ | í 'rich' | |
| IPA | draʒ | ← ʃ | ← i: | | |
| A MS | bujar | PAL ₁ | ej | PAL ₃ Š PAL ₂ | í 'merry' |
| IPA | bujar | ← εj | | ʃ ← i: | |

Czech

| | | CMPR | | | | |
|------|-------|------------------|------------------|------------------|--------------------|-------|
| | AP | C1 | C2 | AGR | | gloss |
| G MS | stroh | PAL ₁ | ej | PAL ₃ | š PAL ₂ | í |
| | IPA | stroʒ | ← εj | | ʃ ← i: | |
| MS | drah | | PAL ₃ | š | PAL ₂ | í |
| | IPA | draʒ | ← ʃ | ← i: | | |
| A MS | bujar | PAL ₁ | ej | PAL ₃ | š PAL ₂ | í |
| | IPA | bujar | ← εj | | ʃ ← i: | |
| MS | star | | PAL ₃ | š | PAL ₂ | í |
| | IPA | star | | ʃ | ← i: | |

Czech

| | | CMPR | | | | |
|------|-------|------------------|------------------|------------------|--------------------|-------|
| | | AP | C1 | C2 | AGR | gloss |
| G MS | stroh | PAL ₁ | ej | PAL ₃ | š PAL ₂ | í |
| | IPA | stroʒ | ← εj | ██████ | ʃ ← i: | |
| MS | drah | | PAL ₃ | š | PAL ₂ | í |
| | IPA | draʒ | ← | ʃ | ← i: | |
| A MS | bujar | PAL ₁ | ej | PAL ₃ | š PAL ₂ | í |
| | IPA | bujar̩ | ← εj | ██████ | ʃ ← i: | |
| MS | star | | PAL ₃ | š | PAL ₂ | í |
| | IPA | star | ██████ | ʃ | ← i: | |
| L MS | chab | PAL ₁ | ej | PAL ₃ | š PAL ₂ | í |
| | IPA | xab ^j | ← εj | ██████ | ʃ ← i: | |

Czech

| | | CMPR | | | | |
|------|-------|------------------|------------------|------------------|--------------------|-------|
| | | AP | C1 | C2 | AGR | gloss |
| G MS | stroh | PAL ₁ | ej | PAL ₃ | š PAL ₂ | í |
| | IPA | stroʒ | ← εj | ██████ | ʃ ← i: | |
| MS | drah | | PAL ₃ | š | PAL ₂ | í |
| | IPA | draʒ | ← | ʃ | ← i: | |
| A MS | bujar | PAL ₁ | ej | PAL ₃ | š PAL ₂ | í |
| | IPA | bujar | ← εj | ██████ | ʃ ← i: | |
| MS | star | | PAL ₃ | š | PAL ₂ | í |
| | IPA | star | ██████ | ʃ | ← i: | |
| L MS | chab | PAL ₁ | ej | PAL ₃ | š PAL ₂ | í |
| | IPA | xab ^j | ← εj | ██████ | ʃ ← i: | |
| MS | slab | | PAL ₃ | š | PAL ₂ | í |
| | IPA | slab | ██████ | ʃ | ← i: | |

The effects of PAL₁

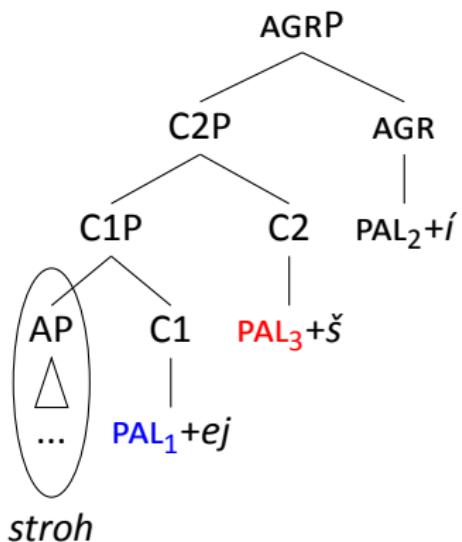
| | IPA | POS | CMPR | gloss |
|---|--------------------|----------|--------------|-----------|
| G | h → ʒ | stroh-ý | strož-ejš-í | 'austere' |
| V | k → tʃ | divok-ý | divoč-ejš-í | 'wild' |
| A | t → t ^j | kulat-ý | kulat-ějš-í | 'round' |
| | r → ř | bujar-ý | bujař-ejš-í | 'merry' |
| | n → ŋ | benign-í | benign-ějš-í | 'benign' |
| L | p → p ^j | hloup-ý | hloup-ějš-í | 'stupid' |
| | b → b ^j | blb-ý | blb-ějš-í | 'stupid' |

The effects of PAL₃

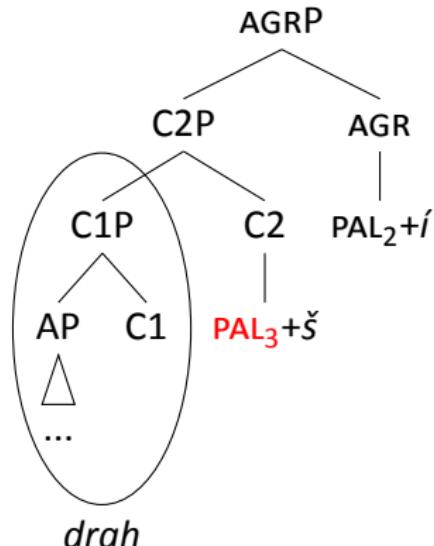
| | IPA | POS | CMPR | gloss |
|---|--------|----------|-------------|-----------|
| G | h → ʒ | drah-ý | draž-š-í | 'austere' |
| V | k → tʃ | kluz-k-ý | kluzč-(š)-í | 'wild' |
| | x → ſ | tich-ý | tiš-š-í | 'silent' |

Czech root sizes

(4) a.



b.



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Ukrainian

| POS | CMPR | | | | | | gloss |
|-------------|------|--------|--|----------------|----|---------|-------------|
| | AP | AGR | AP | C1 | C2 | AGR IPA | |
| G voloh yj | | voloh | PAL ₁ +i PAL ₃ +š yj | [vołɔ̃fijɪʃɪj] | | | 'humid' |
| A sviž yj | | svič | PAL ₁ +i PAL ₃ +š yj | [sviʒiʃɪj] | | | 'fresh' |
| L krasiv yj | | krasiv | PAL ₁ +i PAL ₃ +š yj | [krasiuʃiʃɪj] | | | 'beautiful' |
| G doroh yj | | dorož | PAL ₃ +š yj | [dorɔʃtʃɪj] | | | 'expensive' |
| A duž yj | | duž | PAL ₃ +š yj | [duʃtʃɪj] | | | 'strong' |
| L dešev yj | | dešev | PAL ₃ +š yj | [dɛʃeuʃɪj] | | | 'cheap' |

Ukrainian

| | CMPR | | | | | |
|------|---------|------------------|----|------------------|-------|---------|
| | AP | C1 | C2 | AGR | gloss | |
| G MS | voloh | PAL ₁ | i | PAL ₃ | š yj | 'humid' |
| IPA | vɔlɔh̥i | ← | i | [redacted] | ʃ ij | |

Ukrainian

| CMPR | | | | | | |
|------|---------|------------------|------------------|------------------|-------------|---------|
| | AP | C1 | C2 | AGR | gloss | |
| G MS | voloh | PAL ₁ | i | PAL ₃ | š yj | 'humid' |
| IPA | vołɔ̃fi | ← i | [] | ʃ | ij | |
| MS | doroh | | PAL ₃ | š yj | 'expensive' | |
| IPA | dorož | ← | ʃ | ij | | |

Ukrainian

| CMPR | | | | | | |
|------|-----------|------------------|------------|------------------|-------------|---------|
| | AP | C1 | C2 | AGR | gloss | |
| G MS | voloh | PAL ₁ | i | PAL ₃ | š yj | 'humid' |
| IPA | vɔlɔ̝h̝i̝ | ← i | [redacted] | ʃ | ij | |
| MS | doroh | PAL ₃ | š | yj | 'expensive' | |
| IPA | doroʃt̝ | ← | ʃ | ij | | |

Ukrainian

| CMPR | | | | | | |
|------|-------|------------------|------------------|------------------|-------|-------------|
| | AP | C1 | C2 | AGR | gloss | |
| G MS | voloh | PAL ₁ | i | PAL ₃ | š | yj |
| | IPA | vɔlɔɦ̥j | ← i | | ʃ | ij |
| MS | doroh | | PAL ₃ | š | yj | 'expensive' |
| | IPA | dɔrɔʃt̥ | ← | ʃ | ij | |
| A MS | sviž | PAL ₁ | i | PAL ₃ | š | yj |
| | IPA | sviʒ̥j | ← i | | ʃ | ij |

Ukrainian

| CMPR | | | | | | |
|------|-------|------------------|------------------|------------------|-------|-------------|
| | AP | C1 | C2 | AGR | gloss | |
| G MS | voloh | PAL ₁ | i | PAL ₃ | š | yj |
| | IPA | vɔlɔh̥j | ← i | | ʃ | ij |
| MS | doroh | | PAL ₃ | š | yj | 'expensive' |
| | IPA | dɔrɔʃt̥ | ← | ʃ | ij | |
| A MS | sviž | PAL ₁ | i | PAL ₃ | š | yj |
| | IPA | sviʒj | ← i | | ʃ | ij |
| MS | duž | | PAL ₃ | š | yj | 'strong' |
| | IPA | duʒ | | | ʃ | ij |

Ukrainian

| CMPR | | | | | | |
|------|-------|------------------|------------------|------------------|-------|-------------|
| | AP | C1 | C2 | AGR | gloss | |
| G MS | voloh | PAL ₁ | i | PAL ₃ | š | yj |
| | IPA | vɔlɔh̥j | ← i | | ʃ | ij |
| MS | doroh | | PAL ₃ | š | yj | 'expensive' |
| | IPA | dɔrɔʃt̥ | ← | ʃ | ij | |
| A MS | sviž | PAL ₁ | i | PAL ₃ | š | yj |
| | IPA | sviʒ̥j | ← i | | ʃ | ij |
| MS | duž | | PAL ₃ | š | yj | 'strong' |
| | IPA | duʃt̥ | | ʃ | ij | |

Ukrainian

| | | CMPR | | | | | |
|------|--------|------------------|------------------|------------------|-------------|-------------|--|
| | | AP | C1 | C2 | AGR | gloss | |
| G MS | voloh | PAL ₁ | i | PAL ₃ | š yj | 'humid' | |
| | IPA | volɔɦ̃j | ← i | | ʃ ij | | |
| MS | doroh | | PAL ₃ | š yj | 'expensive' | | |
| | IPA | doroʃt̃ | ← | ʃ ij | | | |
| A MS | sviž | PAL ₁ | i | PAL ₃ | š yj | 'fresh' | |
| | IPA | sviʒ̃j | ← i | | ʃ ij | | |
| MS | duž | | PAL ₃ | š yj | 'strong' | | |
| | IPA | duʃt̃ | | ʃ ij | | | |
| L MS | krasiv | PAL ₁ | i | PAL ₃ | š yj | 'beautiful' | |
| | IPA | krasiu̯j | ← i | | ʃ ij | | |

Ukrainian

| | | CMPR | | | | | |
|------|----------|------------------|------|------------------|------|-------------|--|
| | | AP | C1 | C2 | AGR | gloss | |
| G MS | voloh | PAL ₁ | i | PAL ₃ | š yj | 'humid' | |
| | volɔf̫j | ← i | | ʃ | ij | | |
| MS | doroh | PAL ₃ | š yj | | | 'expensive' | |
| | doroʃt | ← ʃ | ij | | | | |
| A MS | sviž | PAL ₁ | i | PAL ₃ | š yj | 'fresh' | |
| | sviʒj | ← i | | ʃ | ij | | |
| MS | duž | PAL ₃ | š yj | | | 'strong' | |
| | duʃt | | ʃ | ij | | | |
| L MS | krasiv | PAL ₁ | i | PAL ₃ | š yj | 'beautiful' | |
| | krasiu̯j | ← i | | ʃ | ij | | |
| MS | dešev | PAL ₃ | š yj | | | 'cheap' | |
| | dεšeu̯ | | ʃ | ij | | | |

The effects of PAL₁

| | IPA | POS | CMPR | gloss |
|---|--------------------|-----------|--------------|-------------|
| G | h → h ^j | voloh-yj | voloh-iš-yj | 'humid' |
| V | k → k ^j | brydk-yj | brydk-iš-yj | 'ugly' |
| A | ʒ → ʒ ^j | sviž-yj | sviž-iš-yj | 'fresh' |
| | t → t ^j | krut-yj | krut-iš-yj | 'steep' |
| | r → r ^j | mudr-yj | mudr-iš-yj | 'bitter' |
| | n → n ^j | hučn-yj | hučn-iš-yj | 'loud' |
| | l → l ^j | myl-yj | myl-iš-yj | 'nice' |
| L | p → p ^j | tup-yj | tup-iš-yj | 'dumb' |
| | b → b ^j | hrub-yj | hrub-iš-yj | 'rough' |
| | v → v ^j | krasyv-yj | krasyv-iš-yj | 'beautiful' |
| | m → m ^j | vidom-yj | vidom-iš-yj | 'famous' |

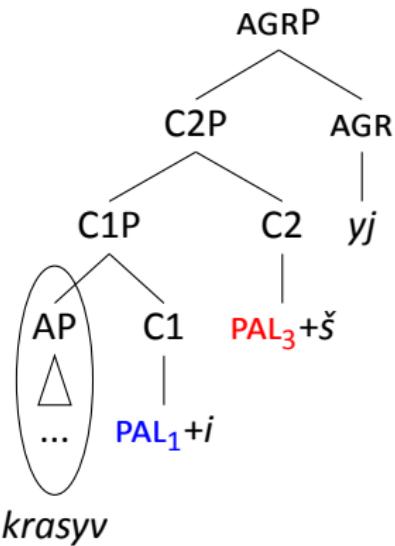
(Pompino-Marschall et al. 2017)

The effects of PAL₃

| | IPA | POS | CMPR | gloss |
|---|-------|-----------|------------|-------------|
| G | h → ʒ | doroh-yj | dorož-č-yj | 'expensive' |
| A | s → ſ | vys-ok-yj | vyš-č-yj | 'tall' |

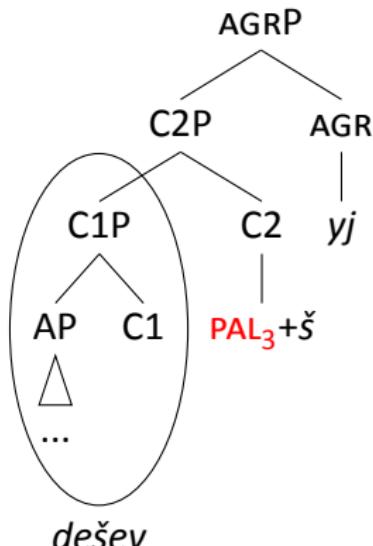
Ukrainian root sizes

(5) a.



krasiv

b.



dešev

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Russian

- ▶ Three allomorphs (Wade 2011, among others)

Russian

- ▶ Three allomorphs (Wade 2011, among others)
- ▶ ‘the Russian [suffixes] do not exhibit a clear containment pattern’ (Kukhto to appear)

Russian

- ▶ Three allomorphs (Wade 2011, among others)
- ▶ ‘the Russian [suffixes] do not exhibit a clear containment pattern’ (Kukhto to appear)
- ▶ We argue that there are two allomorphs

Russian

- ▶ Three allomorphs (Wade 2011, among others)
- ▶ ‘the Russian [suffixes] do not exhibit a clear containment pattern’ (Kukhto to appear)
- ▶ We argue that there are two allomorphs
- ▶ The two allomorphs stand in a containment relation

Russian

| POS | CMPR | |
|-----|-----------|--------------------------|
| ee | krasiv-yj | krasiv-ee ‘beautiful’ |
| e | bogat-yj | bogat-e ‘rich’ |
| še | star-yj | star-še ‘old’ |

Russian

| POS | CMPR | |
|-----|-----------|--------------------------------|
| ee | krasiv-yj | krasiv-ee 'beautiful' |
| e | bogat-yj | boga[<u>tʃ</u>]e 'rich' |
| še | star-yj | star-še 'old' |

Russian

| POS | CMPR | |
|-----|-----------|--------------------------------|
| ee | krasiv-yj | krasiv-ee 'beautiful' |
| še | bogat-yj | boga[<u>tʃ</u>]e 'rich' |
| še | star-yj | star-še 'old' |

Russian

| POS | CMPR | |
|-----|-----------------------------|-------------|
| ee | krasiv-yj krasiv-ee | 'beautiful' |
| še | bogat-yj boga[<u>tʃ</u>]e | 'rich' |

Russian

| POS | CMPR | |
|-----|------------------------|-------------|
| ee | krasiv-yj krasiv-e[j]e | 'beautiful' |
| še | bogat-yj boga[tʃ]e | 'rich' |

Russian

| POS | CMPR | |
|-----|-----------------------------|-------------|
| eje | krasiv-yj krasiv-e[j]e | 'beautiful' |
| še | bogat-yj boga[<u>tʃ</u>]e | 'rich' |

Russian

| | AP | C1 | C2 | |
|-----|--------|-------|----|-------------|
| eje | krasiv | e j e | | 'beautiful' |
| še | bogat | š e | | 'rich' |

Russian

| | AP | C1 | C2 | |
|-----|--------|----|------------------|---|
| eje | krasiv | e | PAL ₃ | e |
| še | bogat | | PAL ₃ | e |

Russian

| | AP | C1 | C2 | |
|-----|--------|------------------|--------------------|--------------------------------|
| eje | krasiv | PAL ₁ | e | PAL ₃ e 'beautiful' |
| še | bogat | | PAL ₃ e | 'rich' |

Russian

| | POS | | CMPR | | | IPA | gloss |
|-----|-----------|--------|---------------------|---------------------|---------------------------------------|-------------|-------|
| | AP | AGR | AP | C1 | C2 | | |
| /v/ | krasiv yj | krasiv | PAL ₁ +e | PAL ₃ +e | [krasjiv ^j eje] | 'beautiful' | |
| /t/ | syt yj | syt | PAL ₁ +e | PAL ₃ +e | [sít ^j eje] | 'full' | |
| /d/ | xud oj | xud | PAL ₁ +e | PAL ₃ +e | [xud ^j eje] | 'thin' | |
| /v/ | dešëv yj | dešev | | PAL ₃ +e | [d ^j eʃevl ^j e] | 'cheap' | |
| /t/ | bogat yj | bogat | | PAL ₃ +e | [begat ^j e] | 'rich' | |
| /d/ | molod oj | molod | | PAL ₃ +e | [məloʒe] | 'young' | |

Russian

| CMPR | | | | | |
|--------|----------------------|------------------|----|------------------|-------------|
| | AP | C1 | C2 | gloss | |
| /v/ MS | krasiv | PAL ₁ | e | PAL ₃ | 'beautiful' |
| IPA | krasjiv ^j | ← | e | j | e |

Russian

| | | CMPR | | | |
|--------|--------|----------------------------------|------------------|------------------|-------------|
| | | AP | C1 | C2 | gloss |
| /v/ MS | krasiv | PAL ₁ | e | PAL ₃ | 'beautiful' |
| | IPA | krasjiv ^j | ← e | j e | |
| MS | dešev | | PAL ₃ | e | 'cheap' |
| | IPA | d ^j eʃev ^j | ← | e | |

Russian

| | | CMPR | | | |
|--------|--------|-----------------------------------|------------------|------------------|-------------|
| | AP | C1 | C2 | | gloss |
| /v/ MS | krasiv | PAL ₁ | e | PAL ₃ | 'beautiful' |
| | IPA | krasjiv ^j | ← e | j e | |
| MS | dešev | | PAL ₃ | e | 'cheap' |
| | IPA | d ⁱ eʃev ^j | ← | e | |

Russian

| | | CMPR | | | | |
|-----|-----|----------------------|------------------|------------------|------------------|-------------|
| | | AP | C1 | C2 | gloss | |
| /v/ | MS | krasiv | PAL ₁ | e | PAL ₃ | 'beautiful' |
| | IPA | krasjiv ^j | ← e | j | e | |
| | MS | dešev | | PAL ₃ | e | 'cheap' |
| | IPA | d'ejev ^j | | ← e | | |
| /t/ | MS | syt | PAL ₁ | e | PAL ₃ | 'full' |
| | IPA | sít ^j | ← e | j | e | |

Russian

| | | CMPR | | | |
|-----|-----|----------------------|------------------|--------------------|-------------|
| | | AP | C1 | C2 | gloss |
| /v/ | MS | krasiv | PAL ₁ | e PAL ₃ | 'beautiful' |
| | IPA | krasjiv ^j | ← e | j e | |
| | MS | dešev | | PAL ₃ | 'cheap' |
| | IPA | d'ejev ^j | ← | e | |
| /t/ | MS | syt | PAL ₁ | e PAL ₃ | 'full' |
| | IPA | sít ^j | ← e | j e | |
| | MS | bogat | | PAL ₃ | 'rich' |
| | IPA | begat ^j | ← | e | |

Russian

| | | CMPR | | | |
|-----|-----|----------------------|------------------|--------------------|-------------|
| | | AP | C1 | C2 | gloss |
| /v/ | MS | krasiv | PAL ₁ | e PAL ₃ | 'beautiful' |
| | IPA | krasjiv ^j | ← e | j e | |
| | MS | dešev | | PAL ₃ | 'cheap' |
| | IPA | d̥eʃev ^j | | ← e | |
| /t/ | MS | syt | PAL ₁ | e PAL ₃ | 'full' |
| | IPA | sit ^j | ← e | j e | |
| | MS | bogat | | PAL ₃ | 'rich' |
| | IPA | bəgat ^{tj} | | ← e | |
| /d/ | MS | xud | PAL ₁ | e PAL ₃ | 'thin' |
| | IPA | xud ^j | ← e | j e | |

Russian

| | | CMPR | | | |
|------|-----|----------------------|------------------|--------------------|-------------|
| | | AP | C1 | C2 | gloss |
| /v/ | MS | krasiv | PAL ₁ | e PAL ₃ | 'beautiful' |
| | IPA | krasjiv ^j | ← e | j e | |
| /t/ | MS | dešev | PAL ₃ | e | 'cheap' |
| | IPA | d'ejev ^j | ← e | | |
| /d/ | MS | syt | PAL ₁ | e PAL ₃ | 'full' |
| | IPA | sít ^j | ← e | j e | |
| /dʒ/ | MS | bogat | PAL ₃ | e | 'rich' |
| | IPA | begat ^{tʃ} | ← e | | |
| /dʒ/ | MS | xud | PAL ₁ | e PAL ₃ | 'thin' |
| | IPA | xud ^j | ← e | j e | |
| /dʒ/ | MS | molod | PAL ₃ | e | 'young' |
| | IPA | melo ^ʒ | ← e | | |

j vs ј

| (6) | Cyrillic | Romanised | IPA | meaning |
|------------------|----------|-----------|-------------------|------------|
| PAL ₁ | сел | s'el | s ^j el | 'sat down' |
| PAL ₃ | съел | sjel | sjel | 'ate up' |

Root mutations triggered by PAL₃

Wade (2011: 197)

| | IPA | POS | CMPR | gloss |
|--------|-----------|-----------|----------------------|-------------|
| V | k → tʃ̪ | grom-k-yj | grom[<u>tʃ̪</u>]-e | 'loud' |
| | | lēg-k-ij | leg[<u>tʃ̪</u>]-e | 'light' |
| | x → ʃ | tix-ij | ti[ʃ]-e | 'quiet' |
| | | sux-oj | su[ʃ]-e | 'dry' |
| A | d → ʒ | molod-oj | molo[ʒ]-e | 'young' |
| | | glad-k-ij | gla[ʒ]-e | 'smooth' |
| | t → tʃ̪ | bogat-yj | boga[<u>tʃ̪</u>]-e | 'expensive' |
| | | krut-oj | kru[<u>tʃ̪</u>]-e | 'steep' |
| st → ʃ | čist-yj | či[ʃ]-e | | 'clean' |
| | tolst-yj | tol[ʃ]-e | | 'thick' |
| s → ʃ | vys-ok-ij | vy[ʃ]-e | | 'high' |
| | plos-k-ij | plo[ʃ]-e | | 'flat' |
| L | v → v̪i | dešëv-yj | deše[<u>v̪i</u>]-e | 'cheap' |

Irregular cases

Wade (2011: 198)

| | IPA | POS | CMPR | gloss |
|---|---------------|------------|-----------|--------|
| V | lg → lgʃ → lʃ | dolg-ij | dol-[ʃ]e | 'long' |
| A | n → nʃ | ton-k-ij | ton-[ʃ]e | 'thin' |
| | r → rʃ | star-yj | star-[ʃ]e | 'old' |
| L | b → bʒ | glub-ok-ij | glub-[ʒ]e | 'deep' |

Irregular cases

Wade (2011: 198)

| | IPA | POS | CMPR | gloss |
|---|---------------|------------|-----------|--------|
| V | lg → lgʃ → lʃ | dolg-ij | dol-[jʃ]e | 'long' |
| A | n → nʃ | ton-k-ij | ton-[jʃ]e | 'thin' |
| | r → rʃ | star-yj | star-[ʃ]e | 'old' |
| L | b → bʒ | glub-ok-ij | glub-[ʒ]e | 'deep' |

- ▶ suppletion

Irregular cases

Wade (2011: 198)

| | IPA | POS | CMPR | gloss |
|---|---------------|------------|-----------|--------|
| V | lg → lgʃ → lʃ | dolg-ij | dol-[ʃ]e | 'long' |
| A | n → nʃ | ton-k-ij | ton-[ʃ]e | 'thin' |
| | r → rʃ | star-yj | star-[ʃ]e | 'old' |
| L | b → bʒ | glub-ok-ij | glub-[ʒ]e | 'deep' |

- ▶ suppletion
- ▶ regular segmental realisation of **PAL₃**

Irregular cases

| | IPA | POS | CMPR | gloss |
|---------|-----------------|------------|-----------------------|-------------|
| V | k → tʃ̪ | grom-k-yj | grom[<u>tʃ̪</u>]-e | 'loud' |
| | x → ʃ̪ | tix-ij | tí[ʃ̪]-e | 'quiet' |
| A | d → ʒ̪ | molod-oj | molo[<u>ʒ̪</u>]-e | 'young' |
| | t → tʃ̪ | bogat-yj | boga[<u>tʃ̪</u>]-e | 'expensive' |
| st → ʃ̪ | čist-yj | či[ʃ̪]-e | 'clean' | |
| | s → ʃ̪ | vys-ok-ij | vy[ʃ̪]-e | 'high' |
| L | v → vʃ̪̪ | dešëv-yj | deše[<u>vʃ̪̪</u>]-e | 'cheap' |
| V | lg → lgʃ̪ → lʃ̪ | dolg-oj | dol-[<u>ʃ̪</u>]e | 'long' |
| A | n → nʃ̪ | ton-k-ij | ton-[<u>ʃ̪</u>]e | 'thin' |
| | r → rʃ̪ | star-yj | star-[<u>ʃ̪</u>]e | 'old' |
| L | b → bʒ̪ | glub-ok-ij | glub-[<u>ʒ̪</u>]e | 'deep' |

Irregular cases

| | POS | | | CMPR | | |
|-----|-----|------|-------|-------------------------------|-------|--|
| | AP | AGR | AP C1 | C2 | gloss | |
| /r/ | MS | star | yj | star PAL₃ e | 'old' | |

IPA

starſ ← e

Irregular cases

| | POS | CMPR | | | | | |
|-----|-----|---------|-----|-------|------------------|-------|---------|
| | | AP | AGR | AP C1 | C2 | gloss | |
| /r/ | MS | star | yj | star | PAL ₃ | e | 'old' |
| | | | | starʃ | ← | e | |
| /n/ | MS | ton-k | ij | ton | PAL ₃ | e | 'thin' |
| | | | | tonʃ | ← | e | |
| | MS | malen-k | ij | men | PAL ₃ | e | 'small' |
| | | | | menʃ | ← | e | |
| /b/ | MS | glub-ok | ij | glub | PAL ₃ | e | 'deep' |
| | | | | glubʒ | ← | e | |
| /g/ | MS | dolg | oj | dolg | PAL ₃ | e | 'long' |
| | | | | dolgʃ | ← | e | |

Two residual cases

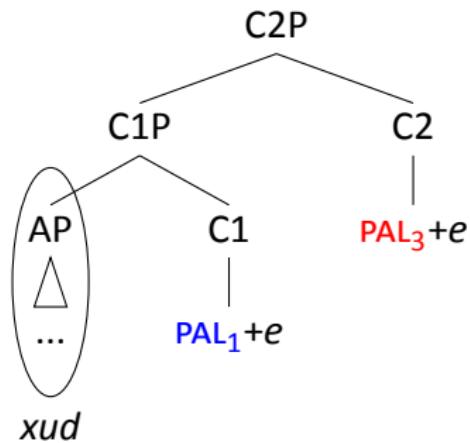
| | POS | CMPR | gloss |
|---|-----------|-----------|----------------------|
| A | /d/ → /ʒ/ | molod-oj | molo[ʒ]-e 'young' |
| | /d/ → /ʃ/ | slad-k-ij | sla[ʃ]-e 'sweet' |

Two residual cases

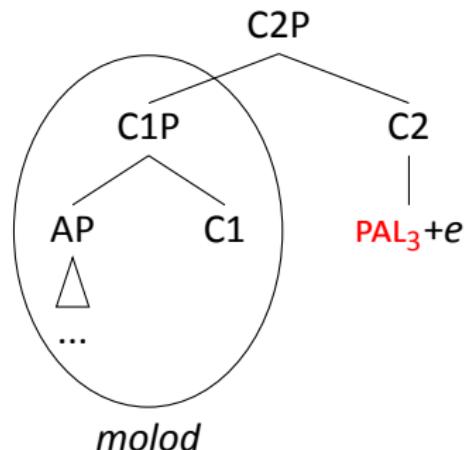
| | | POS | CMPR | gloss |
|---|------------|-----------|-----------|---------|
| A | /d/ → /ʒ/ | molod-oj | molo[ʒ]-e | 'young' |
| | /d/ → /ʃ/ | slad-k-ij | sla[ʃ]-e | 'sweet' |
| A | /r/ → /rʃ/ | star-yj | star-[ʃ]e | 'old' |
| | /r/ → /r/ | šir-ok-ij | šir-e | 'wide' |

Russian root sizes

(7) a.



b.



Outline

Introduction

Czech

Ukrainian

Russian

Conclusions

Conclusions

- ▶ Despite some important surface differences, Czech, Ukrainian, and Russian show a surprising similarity in the allomorphs of the comparative
- ▶ they provide support for the split comparative hypothesis ($\text{CMPR}=\text{C1-C2}$)
- ▶ palatalisation processes provide evidence for the presence of two different floating segments inside the exponents of C1 and C2, respectively:
 - ▶ PAL_1
 - ▶ PAL_3

References

- Caha, P., De Clercq, K. and Vanden Wyngaerd, G. (2019), 'The fine structure of the comparative', *Studia Linguistica* 73(3), 470–521.
- Kukhto, A. (to appear), On Russian comparative morphology, nanosyntax, and pointers, in 'Proceedings of WCCFL 39', Cascadilla Press.
- Pompino-Marschall, B., Steriopolo, E. and Źygis, M. (2017), 'Illustrations of the ipa: Ukrainian', *Journal of the International Phonetic Association* 47(3), 349–357.
- Vanden Wyngaerd, G., Starke, M., De Clercq, K. and Caha, P. (2020), 'How to be positive', *Glossa* 5(1), 23. 1–34.
- Vyshnevska, A. (2022), 'There is more to the morphology of -š/-iš: the comparative in Ukrainian', *Linguistics in the Netherlands* 39, 263–278.
- Wade, T. (2011), *A comprehensive Russian Grammar*, 3d edn, Wiley-Blackwell, Chichester, UK.

Outline

Adjectives and Adverbs

Suppletion

Russian: more effects of PAL₃

Comparative suffixes in Slavic

| | | ADJ | | ADV |
|----|---------------------|--------|-------|----------------|
| a. | PROTO-SLAVIC | *-ej̆s | *-j̆s | |
| b. | OLD CHURCH SLAVONIC | -ěj̆š | -j̆š | -ěje -ěj̆b |
| c. | POLISH | -ejsz | -sz | [redacted] -ej |
| d. | CZECH | -ějš | -š | -ěji -e |
| e. | SLOVAK | -ejš | -š | |
| f. | UKRAINIAN | -iš | -š | -iše -še |
| g. | RUSSIAN | | | -ee -e |

Adjectives and Adverbs

| | | LF ADJ | SF ADJ | ADV |
|-----|----|-------------|----------|----------|
| POS | F | krasiv-a-ja | krasiv-a | krasiv-o |
| | M | krasiv-ij | krasiv | krasiv-o |
| | N | krasiv-o-je | krasiv-o | krasiv-o |
| | PL | krasiv-y-je | krasiv-y | krasiv-o |

Adjectives and Adverbs

| | | LF ADJ | SF ADJ | ADV |
|------|----|-------------|-------------|-------------|
| POS | F | krasiv-a-ja | krasiv-a | krasiv-o |
| | M | krasiv-ij | krasiv | krasiv-o |
| | N | krasiv-o-je | krasiv-o | krasiv-o |
| | PL | krasiv-y-je | krasiv-y | krasiv-o |
| CMPR | | | krasiv-e-je | krasiv-e-je |
| | | | bliž-e | bliž-e |

Adjectives and Adverbs

| | | LF ADJ | SF ADJ | ADV |
|------|----|------------------|-----------------------|-----------------------|
| POS | F | krasiv-a-ja | krasiv-a | krasiv-o |
| | M | krasiv-ij | krasiv | krasiv-o |
| | N | krasiv-o-je | krasiv-o | krasiv-o |
| | PL | krasiv-y-je | krasiv-y | krasiv-o |
| CMPR | | | krasiv-e-je bliž-e | krasiv-e-je bliž-e |
| SPRL | F | krasiv-ej-š-a-ja | | krasiv-ej-š-e |
| | M | krasiv-ej-š-ij | | krasiv-ej-š-e |
| | N | krasiv-ej-š-ej-e | | krasiv-ej-š-e |
| | PL | krasiv-ej-š-ij-e | | krasiv-ej-š-e |

Adjectives and Adverbs

- (8) a. *krasiv- a devuška
beautiful AGR1 girl.F
- b. krasiv- a- ja devuška
beautiful AGR1 AGR2 girl.F
'a beautiful girl'
- (9) a. *krasiv- ee devuška
beautiful CMPR girl.F
- b. devuška (po-) krasiv- ee
girl.F a.bit beautiful CMPR
'a more beautiful girl'

Outline

Adjectives and Adverbs

Suppletion

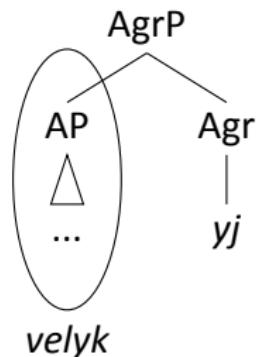
Russian: more effects of PAL₃

Suppletion

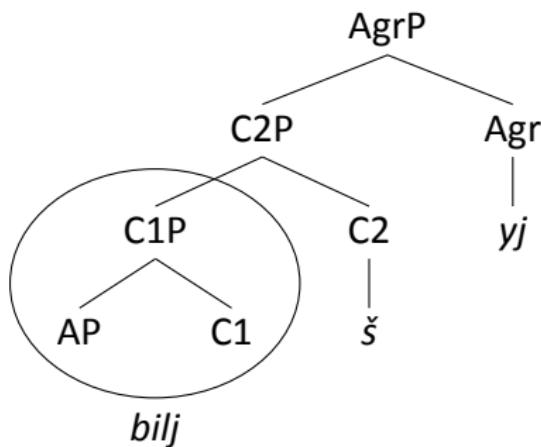
| | POS | | CMPR | | | AGR | gloss |
|-----|-----------|-----|-------|------------------|----|-----|---------|
| | AP | AGR | AP | C1 | C2 | | |
| Cz | velk ý | | vět | š | í | | |
| Ukr | velyk yj | | bilj | š | yj | | 'big' |
| Rus | velik ij | | boljš | PAL ₃ | +e | | |
| Cz | mal ý | | men | š | í | | |
| Ukr | mal yj | | men | š | yj | | 'small' |
| Rus | malenk ij | | men | PAL ₃ | +e | | |

Suppletive roots: Ukrainian

(10)



(11)



Outline

Adjectives and Adverbs

Suppletion

Russian: more effects of PAL₃

Root mutations triggered by PAL₃ (verbs)

| | INF | 1SG | translation |
|-------------|------------------------|------------------------------|-------------|
| /t/ -> /tʃ/ | þet ^j -etj | þe ^{tʃ} -j <u>u</u> | to fly |
| | šut-itj | šu ^{tʃ} -j <u>u</u> | to joke |
| /d/ -> /ʒ/ | sid ^j -etj | si ^ʒ -j <u>u</u> | to sit |
| | gþad ^j -etj | gþa ^ʒ -j <u>u</u> | to look |

/l/-epenthesis

Epenthetic /l/ in 1SG following labials (and preceding **PAL₃**):

| | INF | 1SG | 2SG | translation |
|-----|------------------------|------------------------|-------------------------|-------------------------------|
| /b/ | ljub-itj | ljub ^{l̥} -u | ljub-eš | 'to love' |
| /p/ | sp-atj | sp ^{l̥} -u | sp-iš | 'to sleep' |
| /v/ | dav-itj | dav ^{l̥} -u | dav-iš | 'to press' |
| /f/ | graf-itj | graf ^{l̥} -u | graf-iš | 'to draw into graphs/columns' |
| /m/ | šum ^{l̥} -etj | šum ^{l̥} -u | šum ^{l̥} -iš | 'to make noise' |
| | um ^{l̥} -etj | um ^{l̥} -ej-u | um ^{l̥} -eje-š | 'to be able to' |