Comparative adverbs in Czech

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Outline

Introduction

Standard Czech: the data

The proposal

Standard Czech: the analysis

Conclusions

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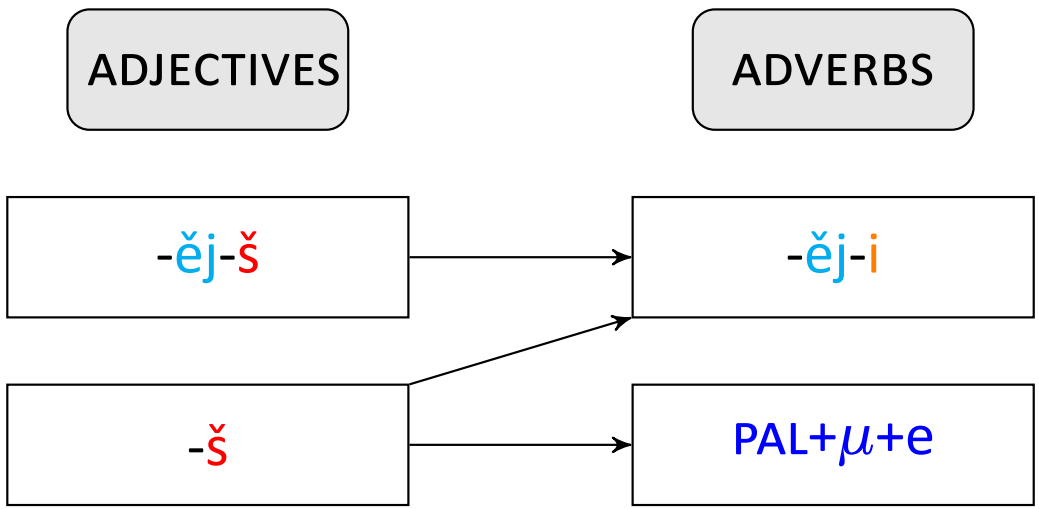
Introduction

Czech has

- two allomorphs of the adjectival comparative
- two allomorphs of the adverbial comparative
- a complex pairing between adjectives and adverbs



Adjective-adverb pairs in Standard Czech

Introduction

- Our goal is to capture, within a nanosyntactic framework
  - the allomorphy
  - the pairing
- The proposal also extends to dialectal data (appendix)

Introduction

- To capture the adjectival allomorphy, we adopt the split comparative hypothesis:

(1) The Split Comparative Hypothesis (Caha et al. 2019):
comparative = [[[positive] C1] C2]

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(2) The Split Adverb Hypothesis:
comparative = [[[adjective] LoAdv] HiAdv]

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- To capture the adverbial allomorphy, we propose that adverbs also require two features:

(2) The Split Adverb Hypothesis:
comparative = [[[adjective] LoAdv] HiAdv]

- The interaction of these two proposals accounts for the pairing between adjectives and adverbs.

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Comparative adjectives

Two allomorphs of the comparative

	POS ADJ		CMPR ADJ			GLOSS
a.	chab	-ý	chab	-ějš	-í	‘weak’
b.	slab	-ý	slab	-š	-í	‘weak’
	root-	AGR	root	-CMPR	-AGR	

Comparative adjectives

The allomorphy is not driven by phonology

	POS	CMPR	GLOSS	POS	CMPR	GLOSS
a.	star-ý	star-š-í	‘old’	čir-ý	čiř-ejš-í	‘pure’
b.	bohat-ý	bohat-š-í	‘rich’	svat-ý	svat-ějš-í	‘saint’
c.	tvrd-ý	tvrd-š-í	‘hard’	hrd-ý	hrd-ějš-í	‘proud’
d.	drah-ý	draž-š-í	‘expensive’	uboh-ý	ubož-ejš-í	‘poor’

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- the suffix *-ějš* splits into *-ěj* and *-š*

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- the suffix *-ějš* splits into *-ěj* and *-š*

Comparative adjectives

- corroborated by adverbial forms

Comparative adjectives

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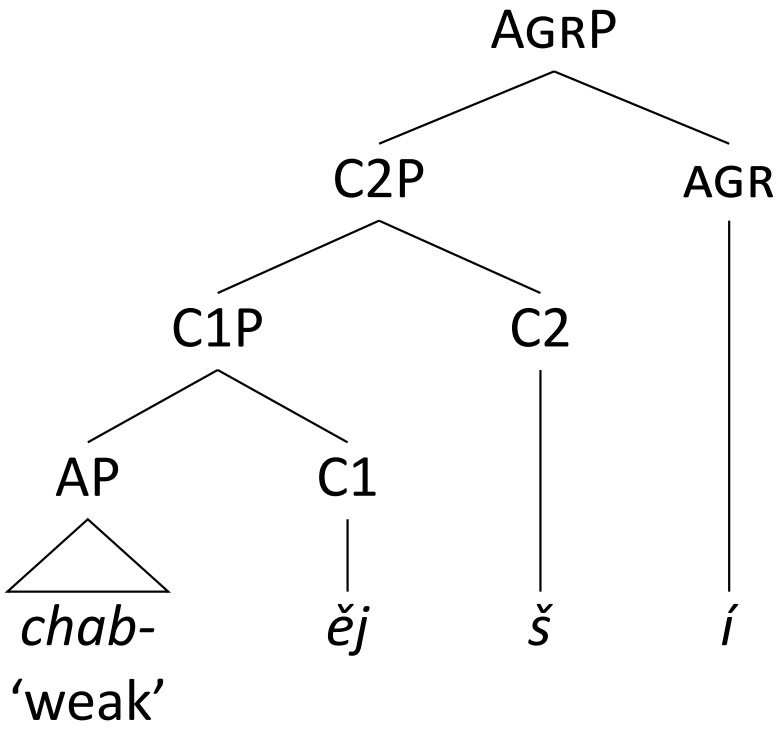
(3) Adverbs in Standard Czech

CMPR ADJ	CMPR ADV	GLOSS
chab-ěj-š-í	chab-ěj-i	‘weak’
rychl-ej-š-í	rychl-ej-i	‘fast’
červen-ěj-š-í	červen-ěj-i	‘red’
hloup-ěj-š-í	hloup-ěj-i	‘stupid’

Split comparative hypothesis



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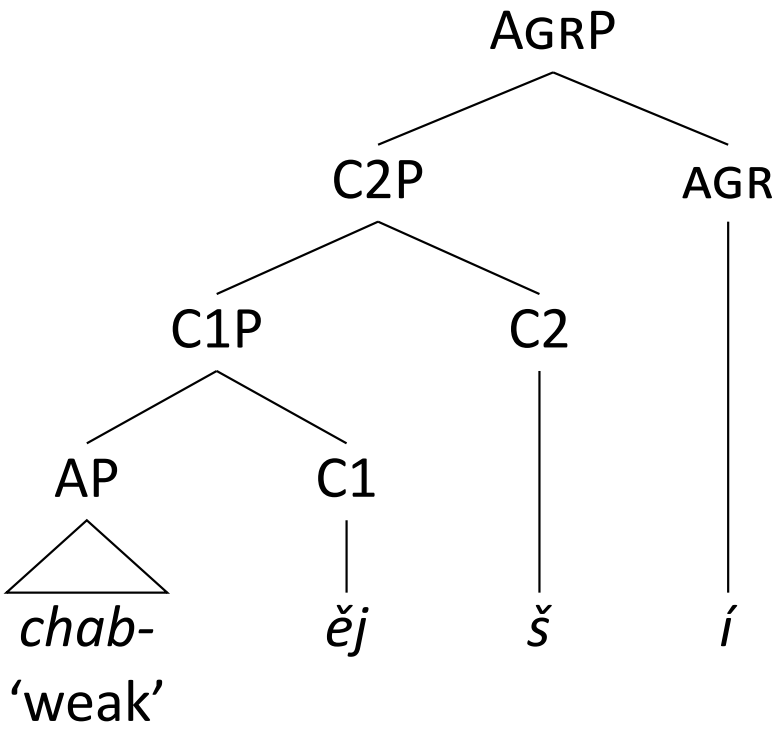
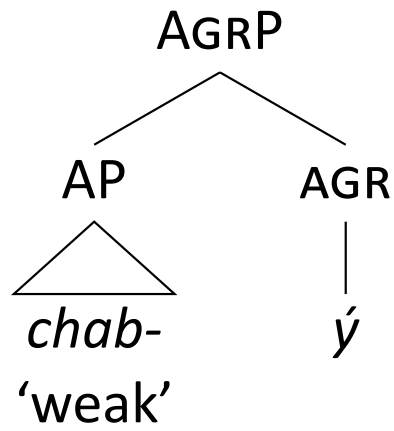
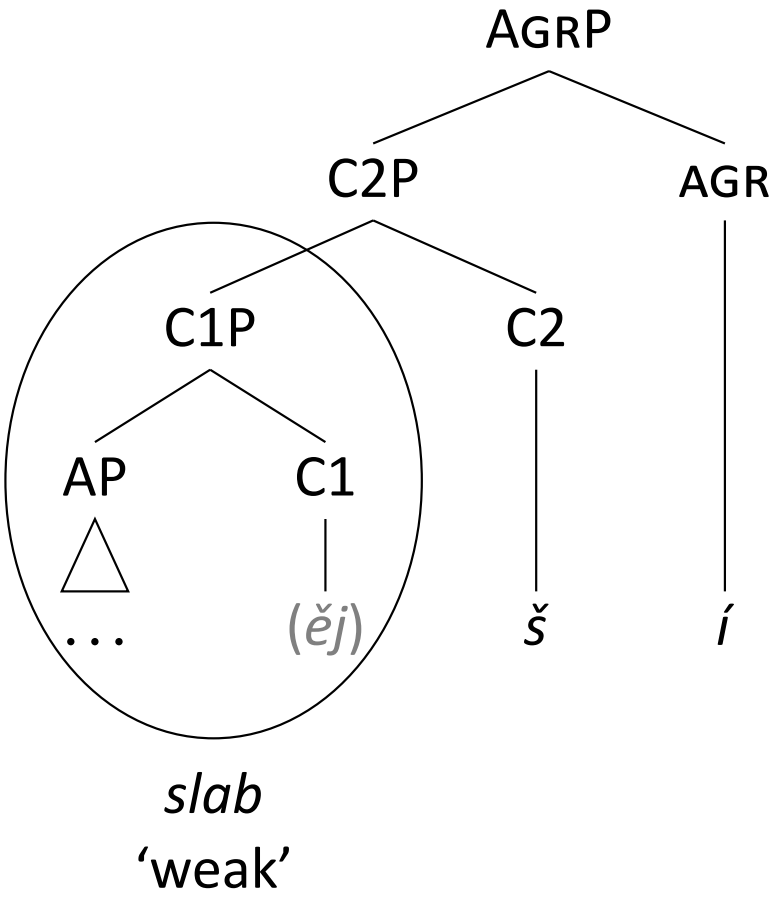




-š-í adjectives realise C1P



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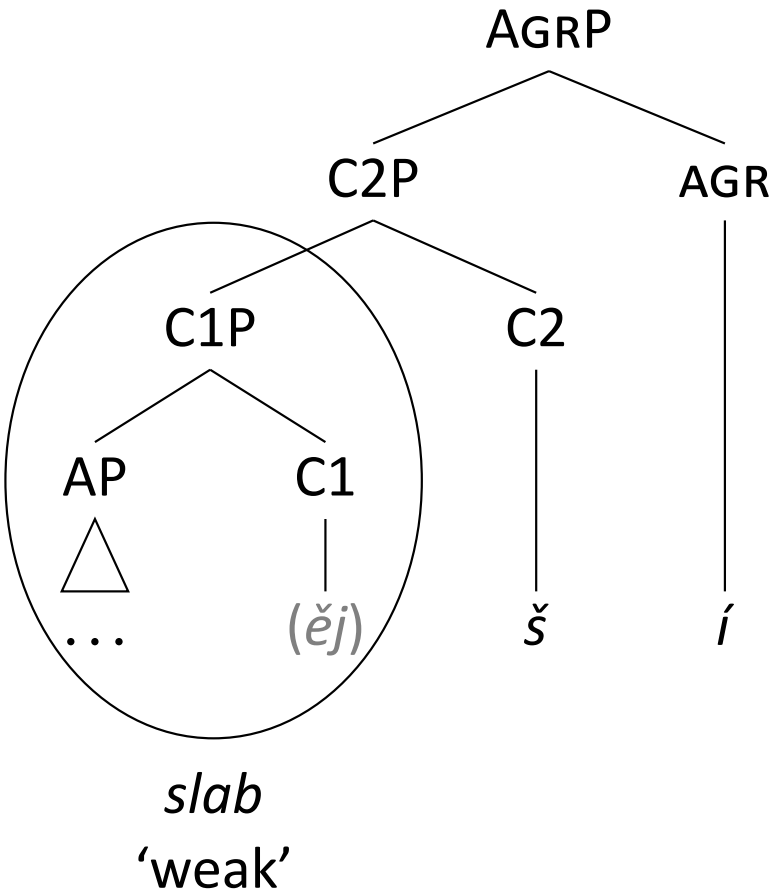

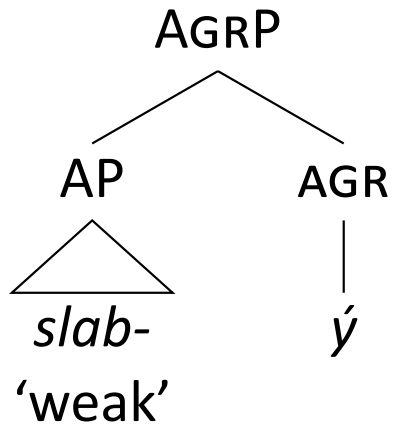

Comparative adjectives

	AP	C1	C2	GLOSS
POS	chab			‘weak’
CMPR	chab	-ěj	-š	‘weak’

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- The analysis of *-š-í* comparatives provides an interesting way of approaching suppletion

Comparative adjectives

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- The analysis of *-š-í* comparatives provides an interesting way of approaching suppletion

	AP	C1	C2	GLOSS
POS	dobr			‘good’
CMPR	lep		-š	‘better’

Suppletive adjectives

(4)

POS	CMPR	GLOSS
dobr-ý	lep-š-í	‘good’
špatn-ý	hor-š-í	‘bad’
mal-ý	men-š-í	‘little, small’
velk-ý	vět-š-í	‘big’

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Comparative adverbs

(5) Two allomorphs of the comparative

	POS ADJ	CMPR ADV	GLOSS
a.	chab-ý	chab-ěj-í	‘weak’
b.	drah-ý	dráž-e	‘expensive’

Comparative adverbs

- The ěj-i allomorph

CMPR ADJ	CMPR ADV	GLOSS
chab-ěj-š-í	chab-ěj-i	‘weak’
rychl-ej-š-í	rychl-ej-i	‘fast’
červen-ěj-š-í	červen-ěj-i	‘red’
hloup-ěj-š-í	hloup-ěj-i	‘stupid’
slab-š-í	slab-ěj-i	‘weak’
tiš-š-í	tiš-ěj-i	‘silent’
tvrd-š-í	tvrd-ěj-i	‘hard’

Comparative adverbs

- The -e allomorph
  - palatalises root-final consonants
  - lengthens the root
- This -e is different from the positive-adverb -e: they trigger different palatalisations.

POS ADJ	POS ADV	CMPR ADJ	CMPR ADV	GLOSS
drah-ý	draz-e	draž-š-í	dráž-e	‘expensive’
dobr-ý	dobř-e	lep-š-í	lép-e	‘good’
dlouh-ý	dlouz-e	del-š-í	dél-e	‘long’
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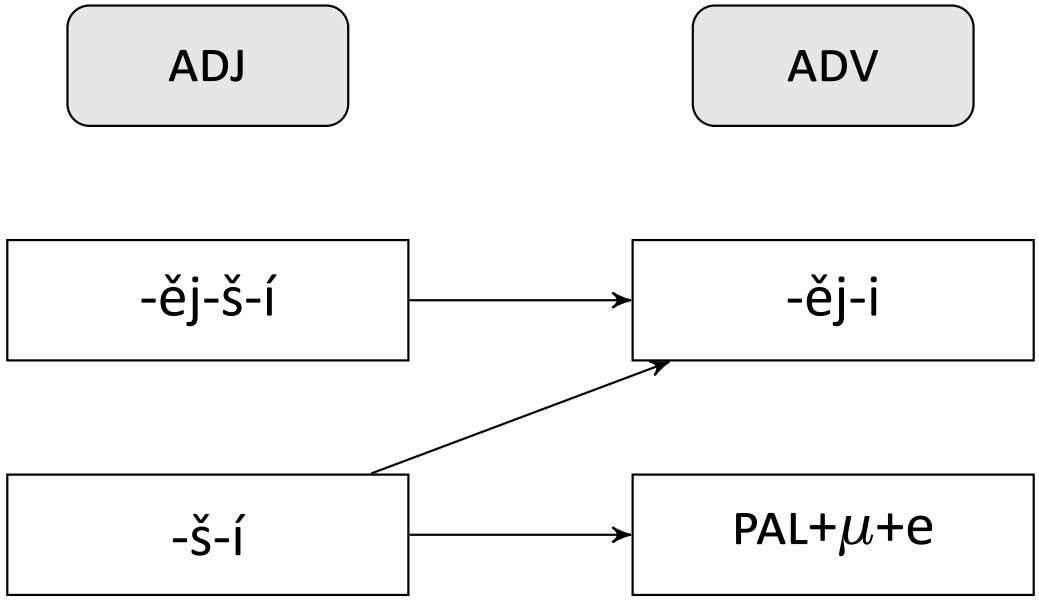
- we write this allomorph as PAL+μ+e

The pairing: three classes



Adjective-adverb pairs in Standard Czech

The pairing: three classes

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- Why is C2 marker -š missing in the adverbs?

CMPR ADJ	CMPR ADV	GLOSS
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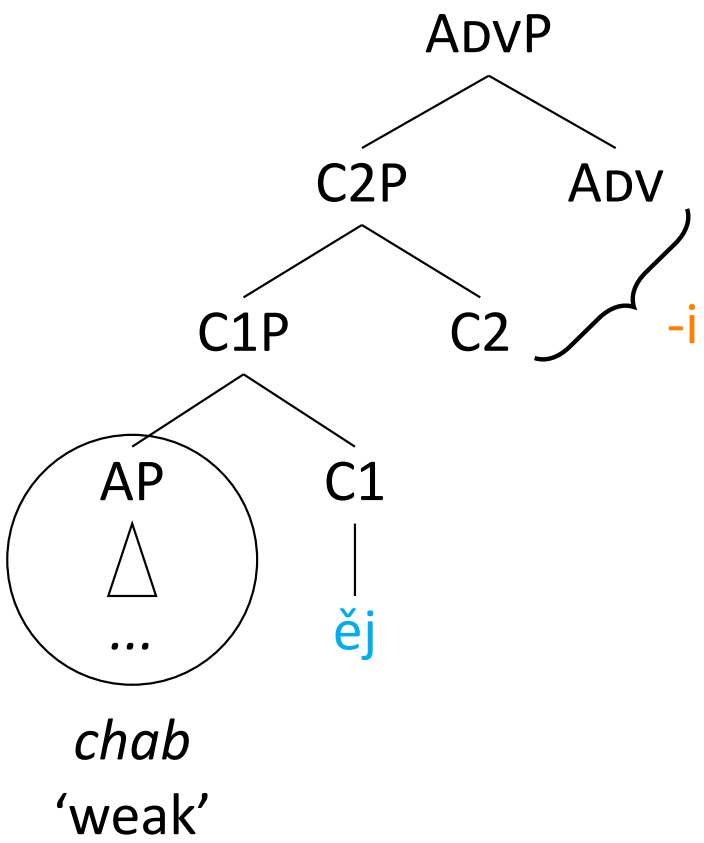
- It is spelled out as a part of the adverb marker (Caha et al. 2019)

(6)



- Analysing *-i* as C2+Adv is supported by the fact that positive-degree adverbs have a different ending (*-ě*).

CMPR ADJ	CMPR ADV	POS ADV	POS ADJ	GLOSS
chab-ěj-š-í	chab-ěj-i	chab-ě	chab-ý	‘weak’
rychl-ej-š-í	rychl-ej-i	rychl-e	rychl-ý	‘fast’
ubož-ej-š-í	ubož-ej-i	uboz-ě	uboh-ý	‘miserable’
hloup-ěj-š-í	hloup-ěj-i	hloup-ě	hloup-ý	‘stupid’

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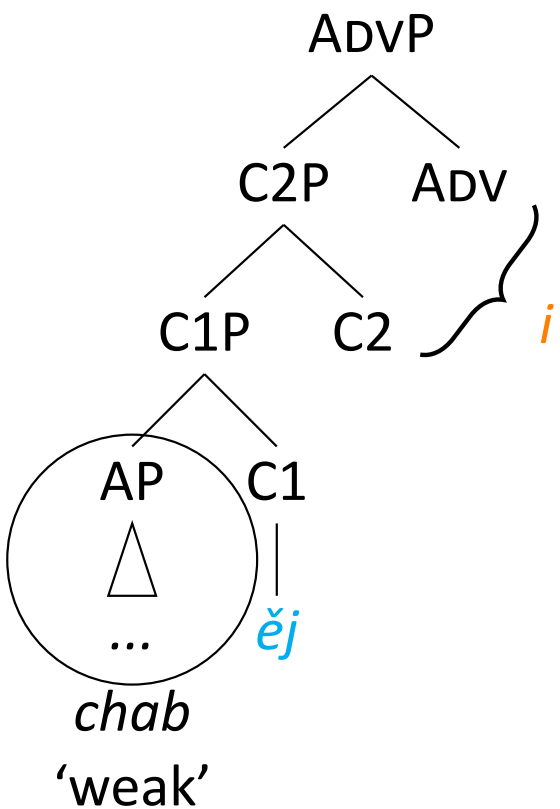
(7)



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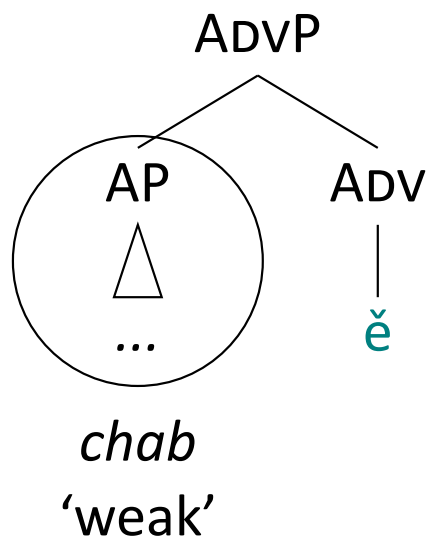
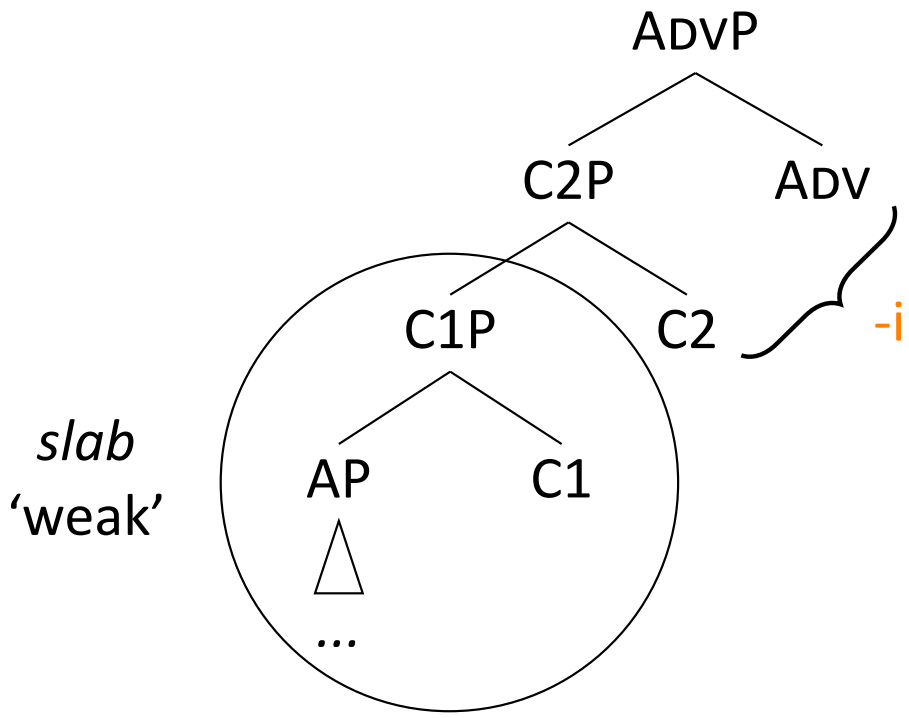


Problems

- we don't explain the *-i/-e* allomorphy in the comparative adverb
- we don't explain the three adjective-adverb pairings in the comparative
- *-š-í* comparatives are (incorrectly) predicted to have a comparative adverb with -i

-š-í comparatives

(9)



(10)

Cmpr Adj		Cmpr Adv		gloss
slab	-š-í	slab-ěj-i	*slab-i	'weak'
tiš	-š-í	tiš-ej-i	*tiš-i	'silent'
tvrd	-š-í	tvrd-ěj-i	*tvrd-i	'hard'

The pairing: three classes

CMPR ADJ	CMPR ADV	GLOSS
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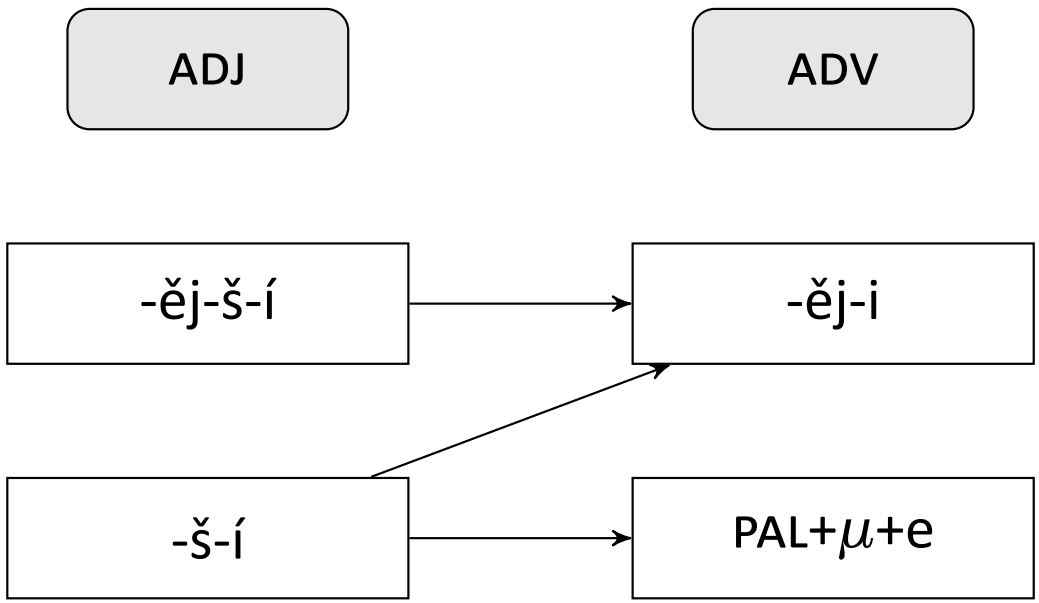
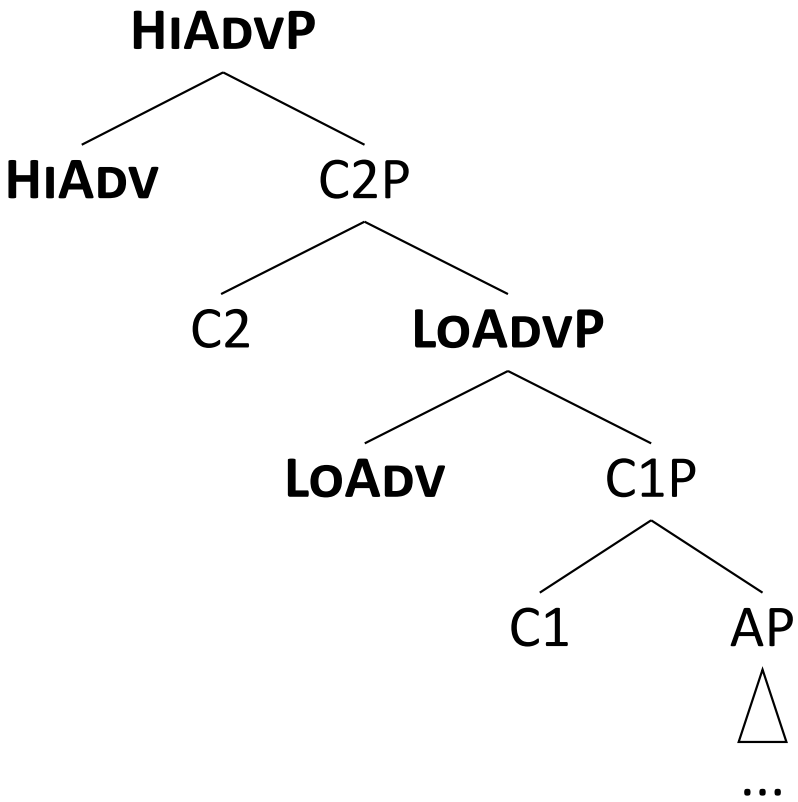


The proposal

- Standard Czech can be explained if there are two adverb heads:



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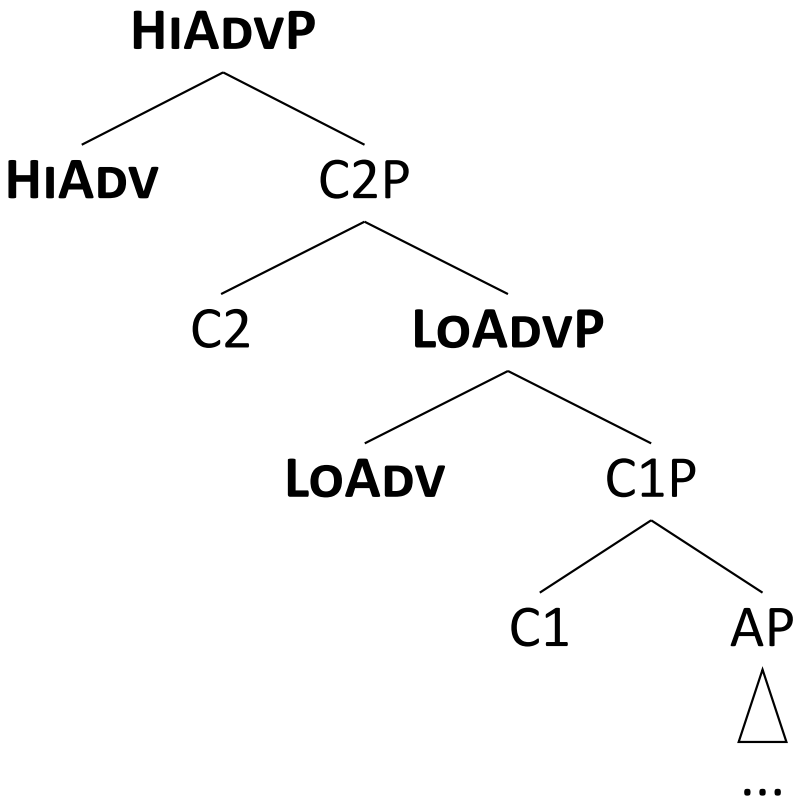

- In the remainder of this section, we provide independent motivation

The proposal

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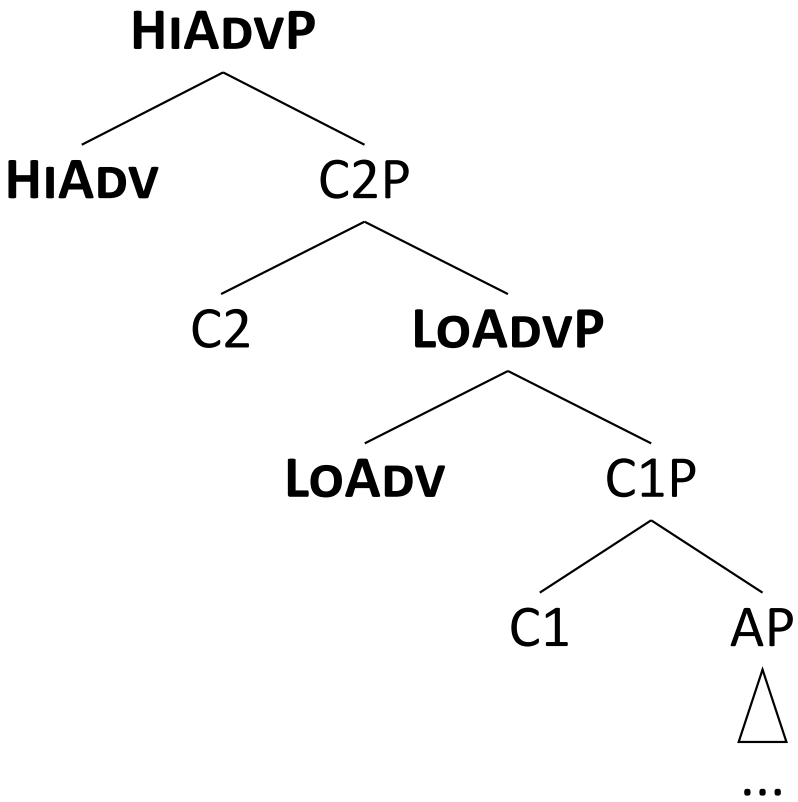

- In the remainder of this section, we provide independent motivation
- In the next section we show how Standard Czech is explained

Evidence for HiAdv: Karelian

- The Karelian adverb marker *-h/-in* is further away from the root than *-mpi*

(11) Karelian ‘quick’ and ‘good’ (Bobaljik 2012: 118)

	‘quick’		‘good’	
	POS	CMPR	POS	CMPR
ADJ	rutto	rutto-mpa	hyvä	pare-mpi
ADV	rutto-h	rutto-mpa-h	hyv-in	pare-mm-in

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ADJ	rutto	rutto-mpa	hyvä	pare-mpi
ADV	rutto-h	rutto-mpa-h	hyv-in	pare-mm-in

- The Karelian adverb marker *-h/-in* is the realisation of an ADV head higher than C2:

(12)

	AP	C1	C2	HIADV	GLOSS
POS	rutto				‘quick’
CMPR		rutto	-mpa		
CMPR ADV		rutto	-mpa	-h/-in	

Evidence for LoAdv: Basque

- The Basque adverb marker *-ki* is closer to the root than the comparative marker *-ago* (Bobaljik 2012: 119)

(13)

	POS	CMPR		
ADJ	berri	berri	-ago	‘new’
ADV	berri-ki	berri-ki-ago		

Evidence for LoAdv: Basque

- The Basque adverb marker *-ki* is closer to the root than the comparative marker *-ago* (Bobaljik 2012: 119)

(13)

	POS	CMPR		
ADJ	berri	berri	-ago	'new'
ADV	berri-ki	berri-ki-ago		

- The Basque adverb marker *-ki* is the realisation of an ADV head lower than C2:

(14)

	AP	C1	LoAdv	C2
POS ADJ	berri			
CMPR ADJ	berri			ago
CMPR ADV	berri		ki	ago

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slab-š-í	slab-ěj-i	‘weak’
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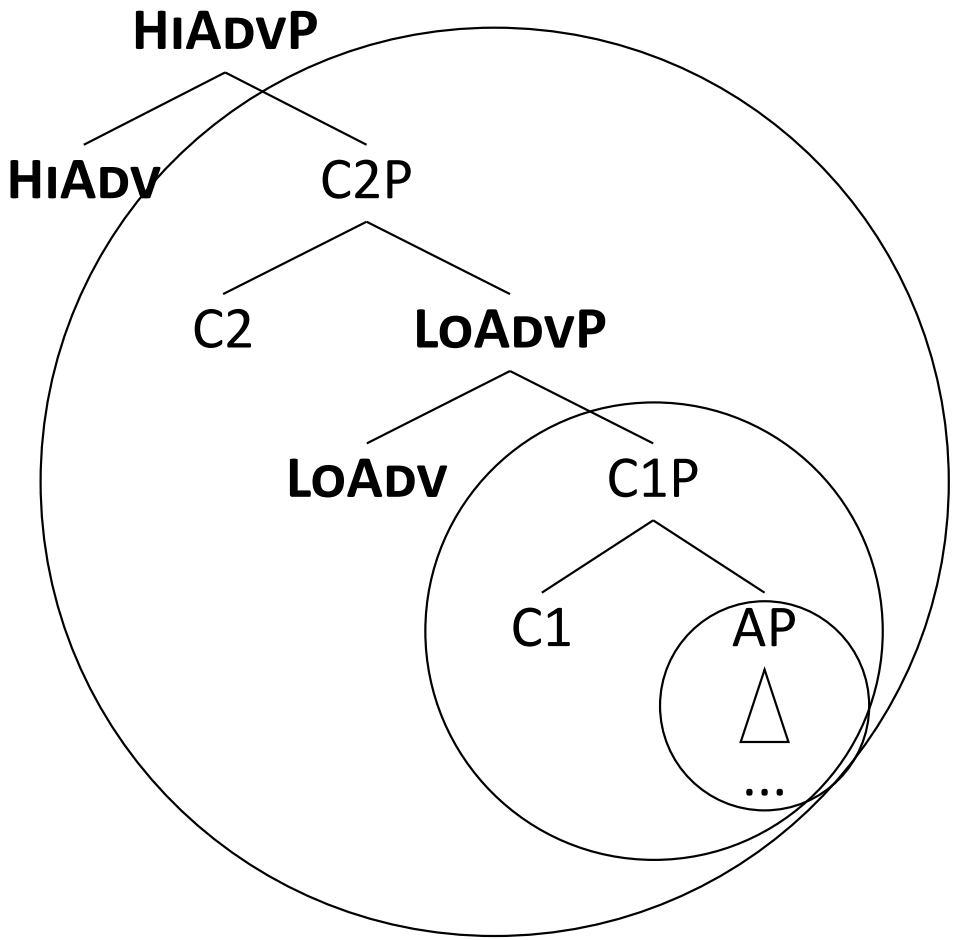
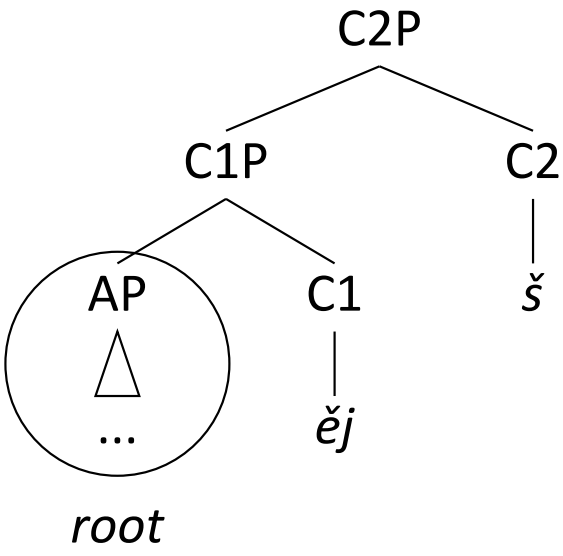
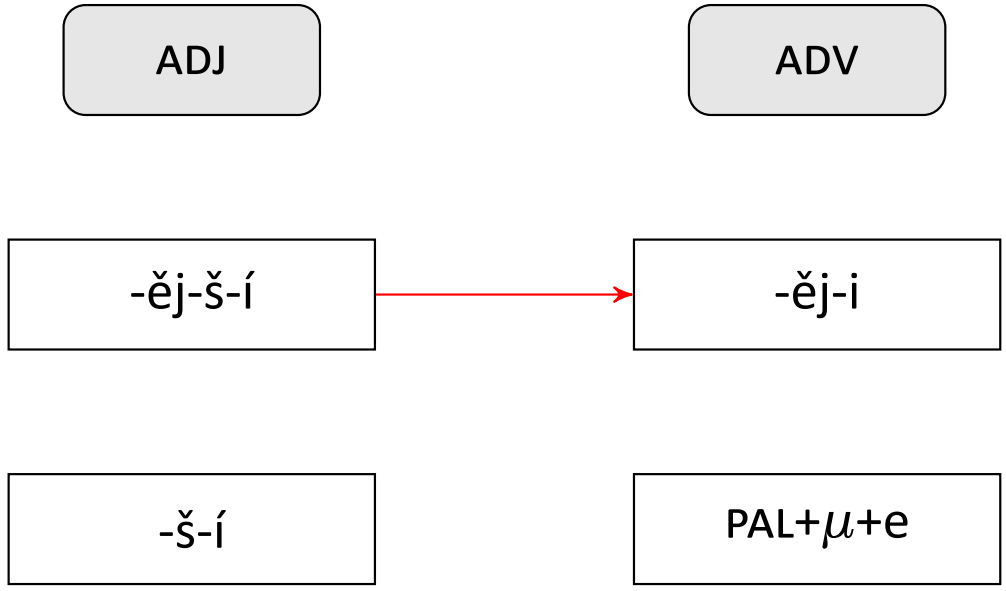
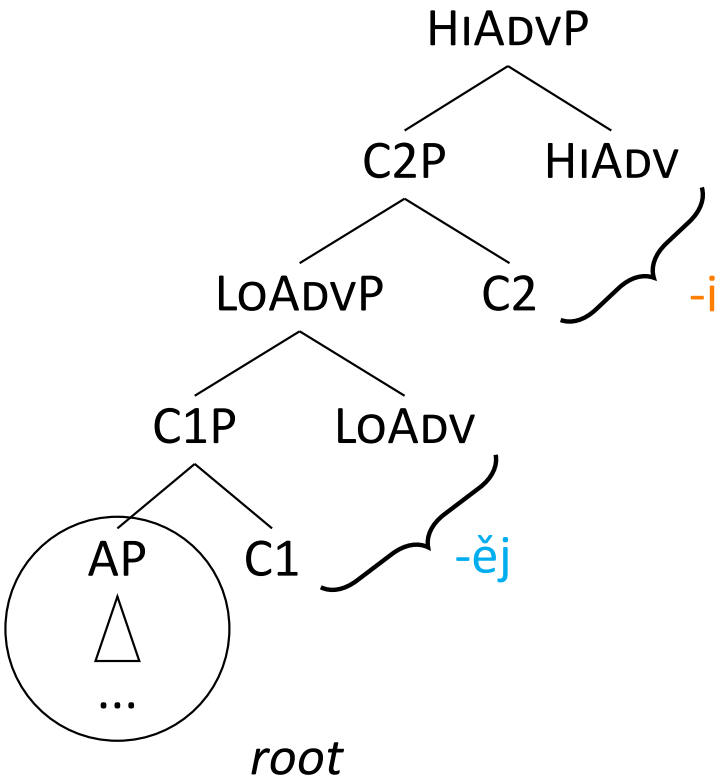
Standard Czech: the analysis

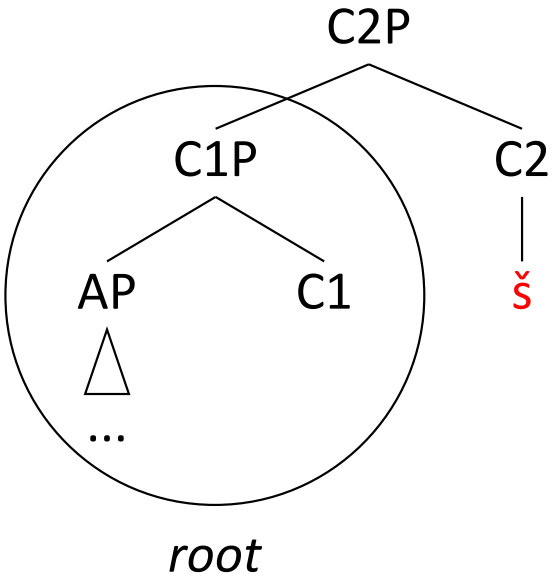
(15)

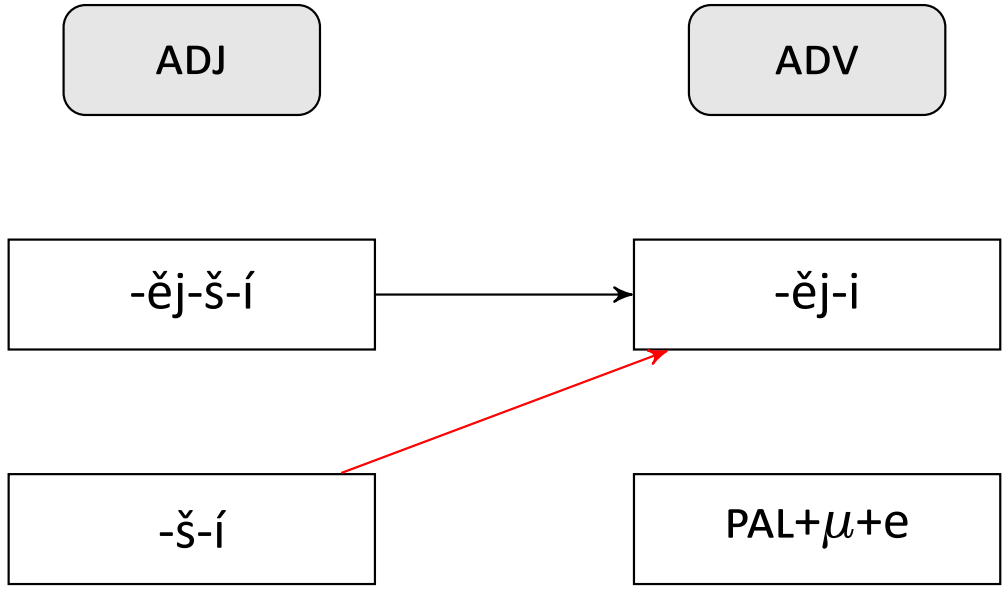



C2P
C1P
C2
AP
C1
š
...
ěj
root


ADJ
ADV
-ěj-š-í
-ěj-i
-š-í
PAL+μ+e


HIADVP
C2P
HIADV
LOADVP
C2
-i
C1P
LOADV
AP
C1
-ěj
...
root


C2P
C1P
C2
AP
C1
š
...
root


ADJ
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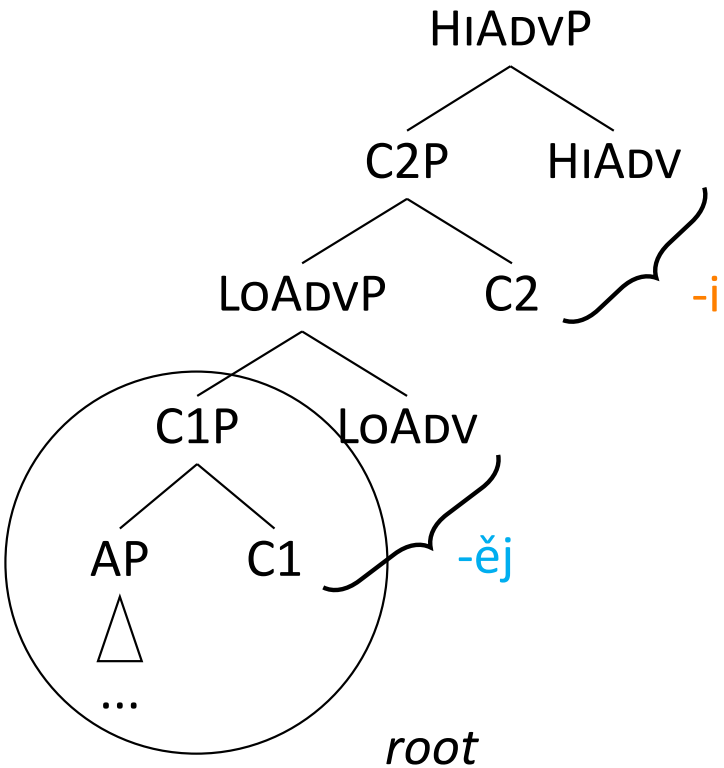
-ěj-š-í
-ěj-i
-š-í
PAL+μ+e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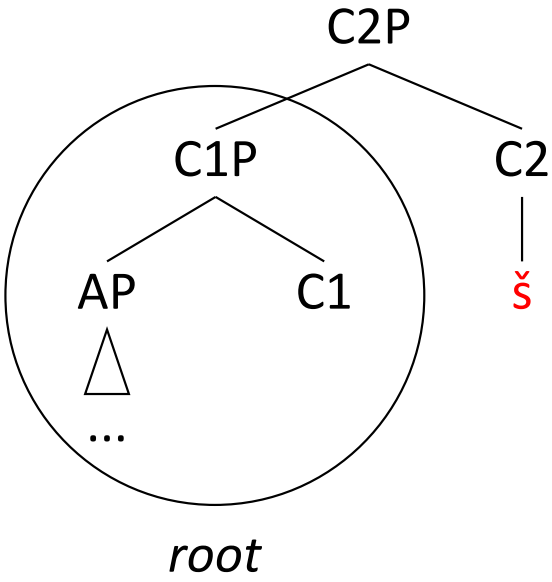
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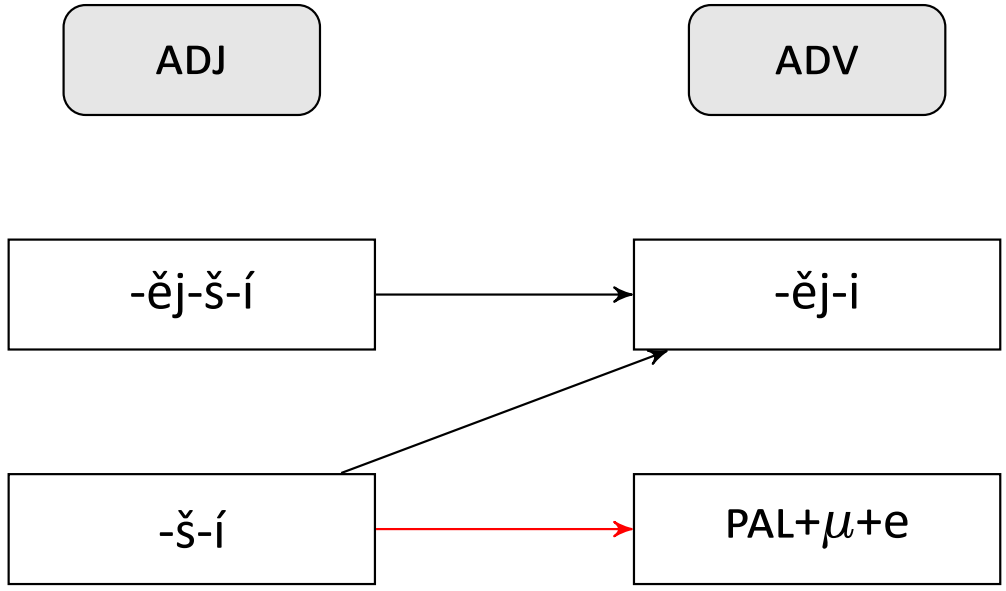
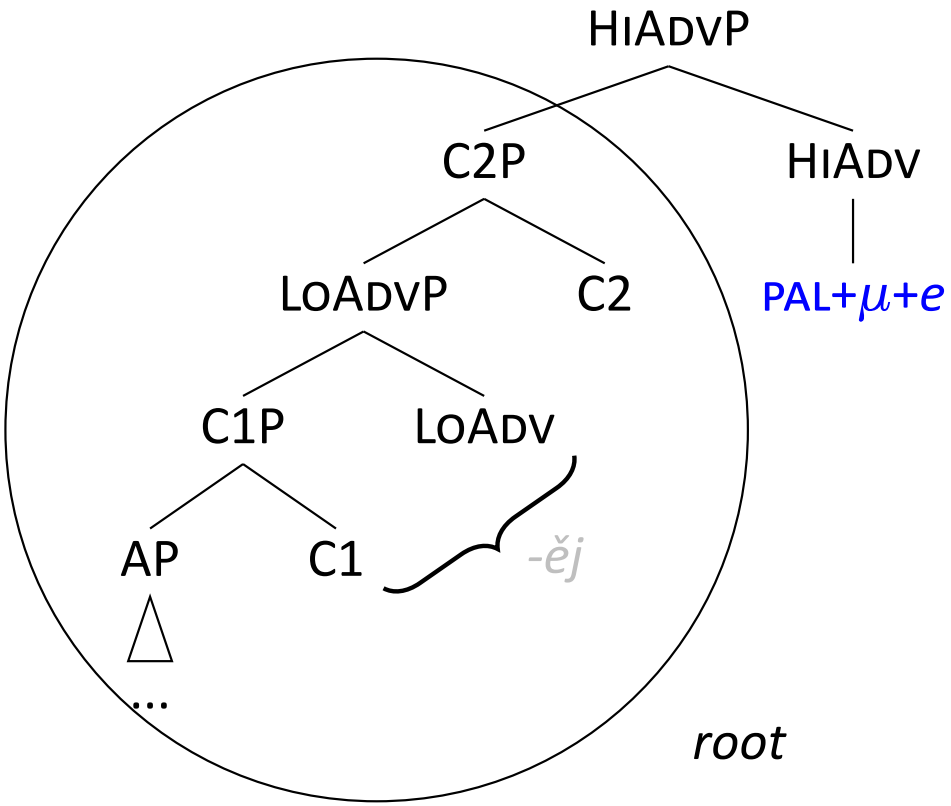
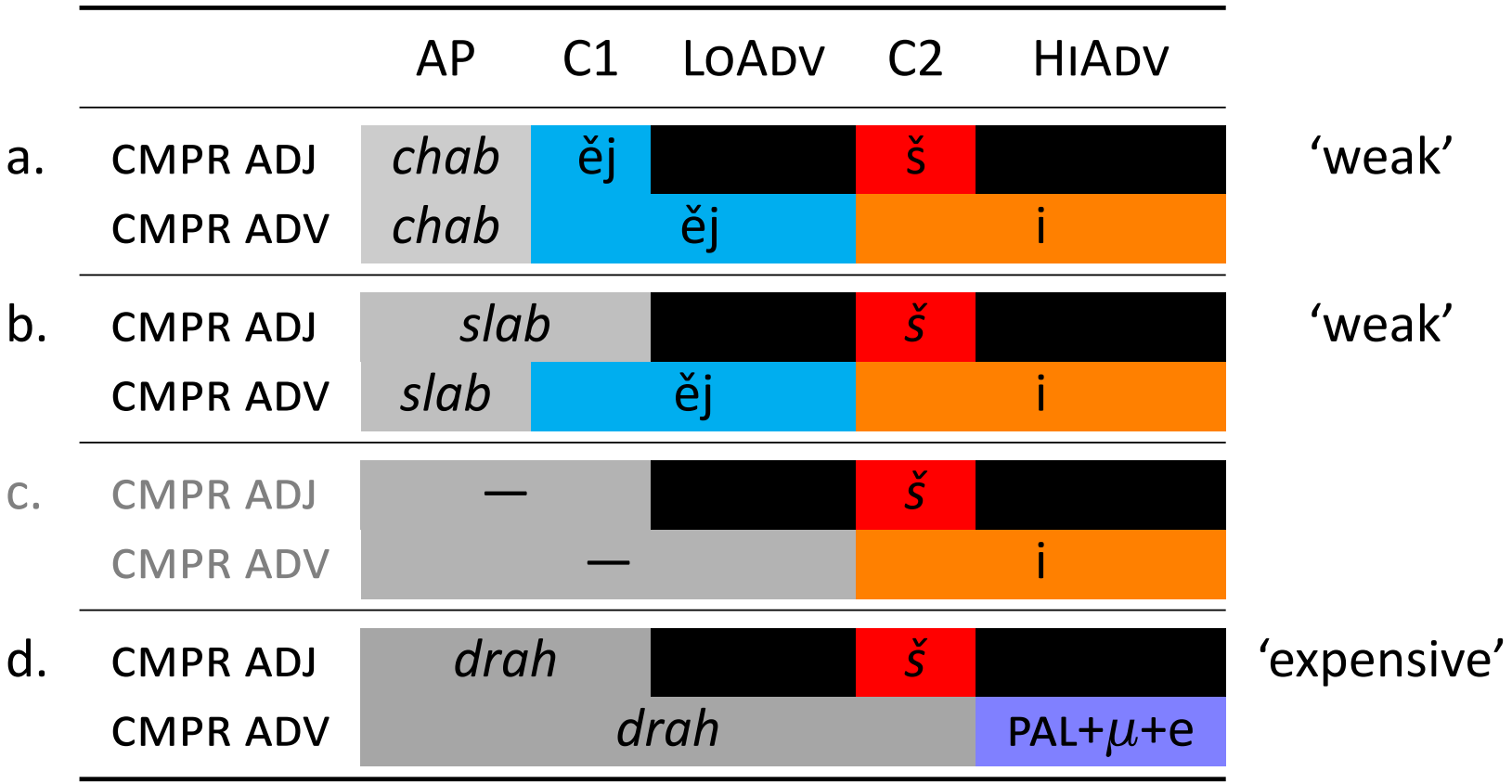
...
root


ADJ
ADV
-ěj-š-í
-ěj-i
-š-í
PAL+μ+e


HIADVP
C2P
HIADV
LOADVP
C2
PAL+μ+e
C1P
LOADV
AP
C1
-ěj
...
root

Standard Czech comparative adjectives and adverbs



Outline

Introduction

Standard Czech: the data

The proposal

Standard Czech: the analysis

Conclusions

Conclusions

- Fixed structure

Conclusions

- Fixed structure
  - [C2 [C1 [AP]]] (split comparative)
  - [HIADV [C2 [LOADV [C1 AP]]]] (split adverb)

Conclusions

- Fixed structure
  - [C2 [C1 [AP]]] (split comparative)
  - [HIADV [C2 [LOADV [C1 AP]]]] (split adverb)
- Classes determined by root size

Conclusions

- Fixed structure
  - [C2 [C1 [AP]]] (split comparative)
  - [HIADV [C2 [LOADV [C1 AP]]]] (split adverb)
- Classes determined by root size
- Appendix: The proposal also captures dialect data

References

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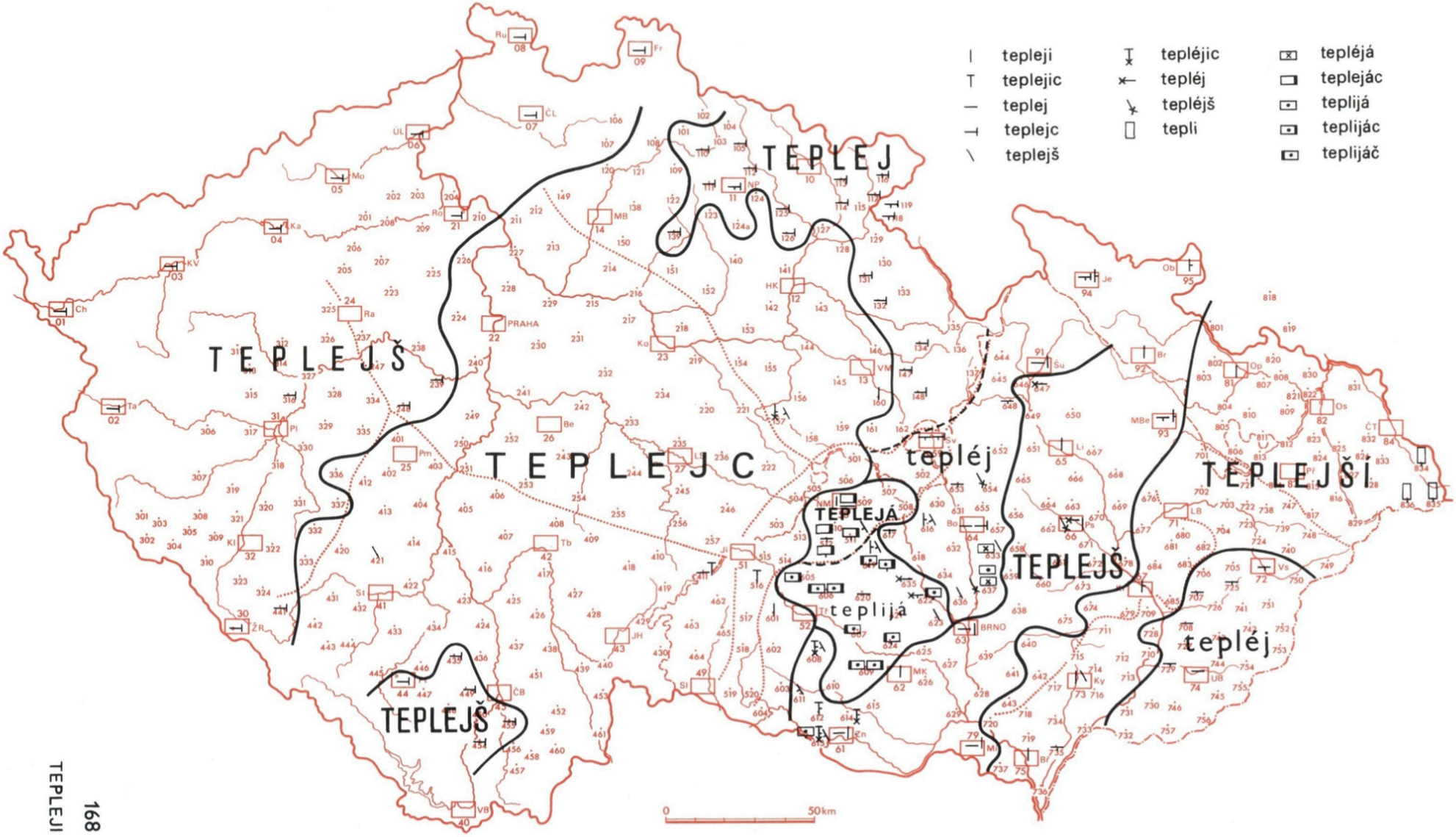
Caha, Pavel, Karen De Clercq & Guido Vanden Wyngaerd. 2019. The fine structure of the comparative. *Studia Linguistica* 73(3). 470–521. doi:https://doi.org/10.1111/stul.12107.

Hlubinková, Zuzana. 2004. Stupňování adverbií, zvláště ve východomoravských nářečích [Grading of adverbs, especially in East Moravian dialects]. *Linguistica Brunensia* 52. 109–114.

Hlubinková, Zuzana. 2005. Tvoření deadjektivních adjektiv, zvláště ve východomoravských nářečích [Formation of deadjectival adjectives, especially in East Moravian dialects]. *Linguistica Brunensia* 53. 153–162.

Outline

Appendix: Morava Czech


tepleji
teplejic
teplej
teplejc
teplejš
teplejic
tepléj
teplejš
tepli
teplejá
teplejác
teplijá
teplijác
teplijáč
TEPLEJ
TEPLEJŠ
TEPLEJC
teplej
TEPLEJÁ
TEPLEJŠI
TEPLEJŠ
teplijá
teplej
TEPLEJŠ
PRAHA
BRNO
0
50km

168 TEPLEJI

(16) Dialectal Variation in Central/East Morava

Standard Czech		Apocope Dialects	
		East Morava	Central Morava
-i	C2+HIADV	PAL+LENGTH	
PAL+μ+e	C2		PAL+LENGTH

(17) East Morava dialect group (data from Hlubinková 2004; 2005)

East Morava				Standard Czech		
CMPR ADJ		CMPR ADV	GLOSS	CMPR ADJ		CMPR ADV
tepl-ej-š-í		tepl-éj-Ø	‘warm’	tepl-ej-š-í		tepl-ej-i
ti(š)	-š-í	tiš-éj-Ø	‘silent’	tiš	-š-í	tiš-ej-i
dra(š)	-š-í	dráž -Ø	‘expensive’	draž	-š-í	dráž -e

- adverbs lack vocalic endings (see the red marking)

(17) East Morava dialect group (data from Hlubinková 2004; 2005)

East Morava				Standard Czech		
CMPR ADJ		CMPR ADV	GLOSS	CMPR ADJ		CMPR ADV
tepl-ej-š-í		tepl-éj-Ø	‘warm’	tepl-ej-š-í		tepl-ej-i
ti(š)	-š-í	tiš-éj-Ø	‘silent’	tiš	-š-í	tiš-ej-i
dra(š)	-š-í	dráž -Ø	‘expensive’	draž	-š-í	dráž -e

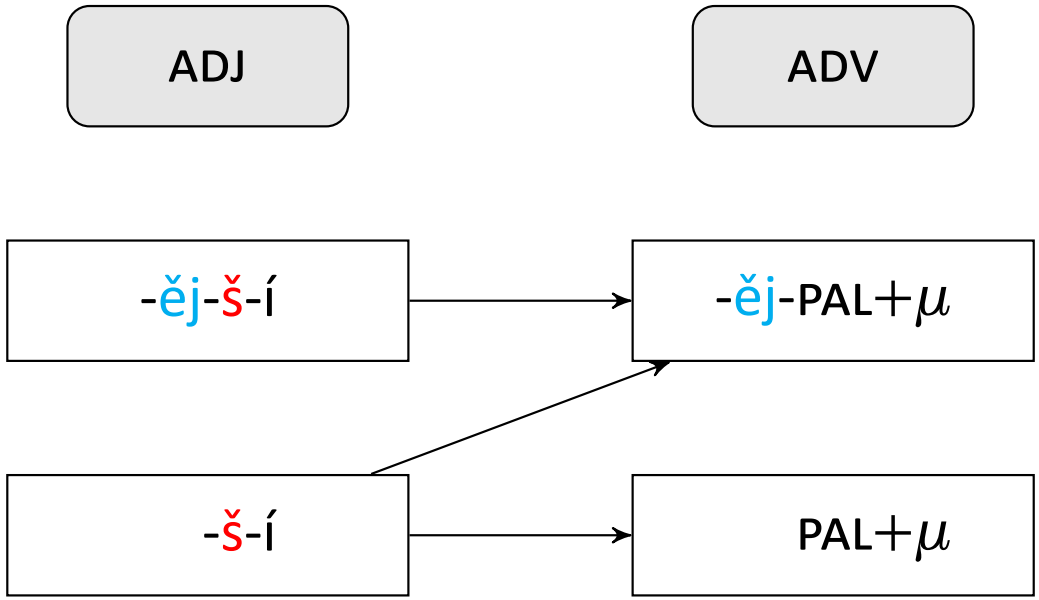
- adverbs lack vocalic endings (see the red marking)
- root vowels in the adverbs always lengthen (see blue)

(17) East Morava dialect group (data from Hlubinková 2004; 2005)

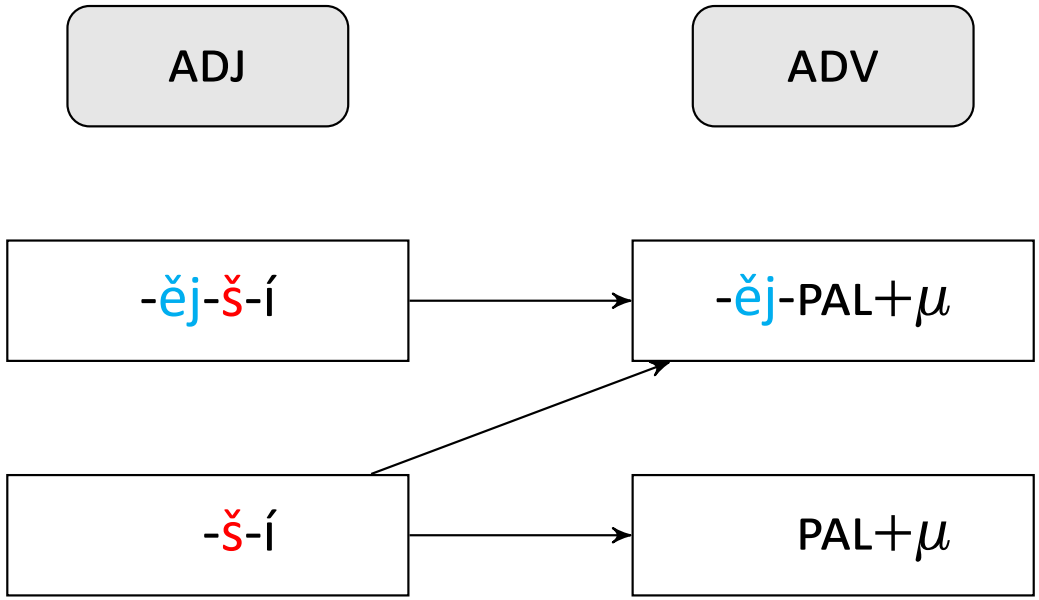
East Morava				Standard Czech		
CMPR ADJ		CMPR ADV	GLOSS	CMPR ADJ		CMPR ADV
tepl-ej-š-í		tepl-éj-Ø	‘warm’	tepl-ej-š-í		tepl-ej-i
ti(š)	-š-í	tiš-éj-Ø	‘silent’	tiš	-š-í	tiš-ej-i
dra(š)	-š-í	dráž -Ø	‘expensive’	draž	-š-í	dráž -e

- adverbs lack vocalic endings (see the red marking)
- root vowels in the adverbs always lengthen (see blue)

$\Rightarrow$ single adverb marker triggering lengthening and palatalisation (PAL+μ)



Adjective-adverb pairs in East Morava



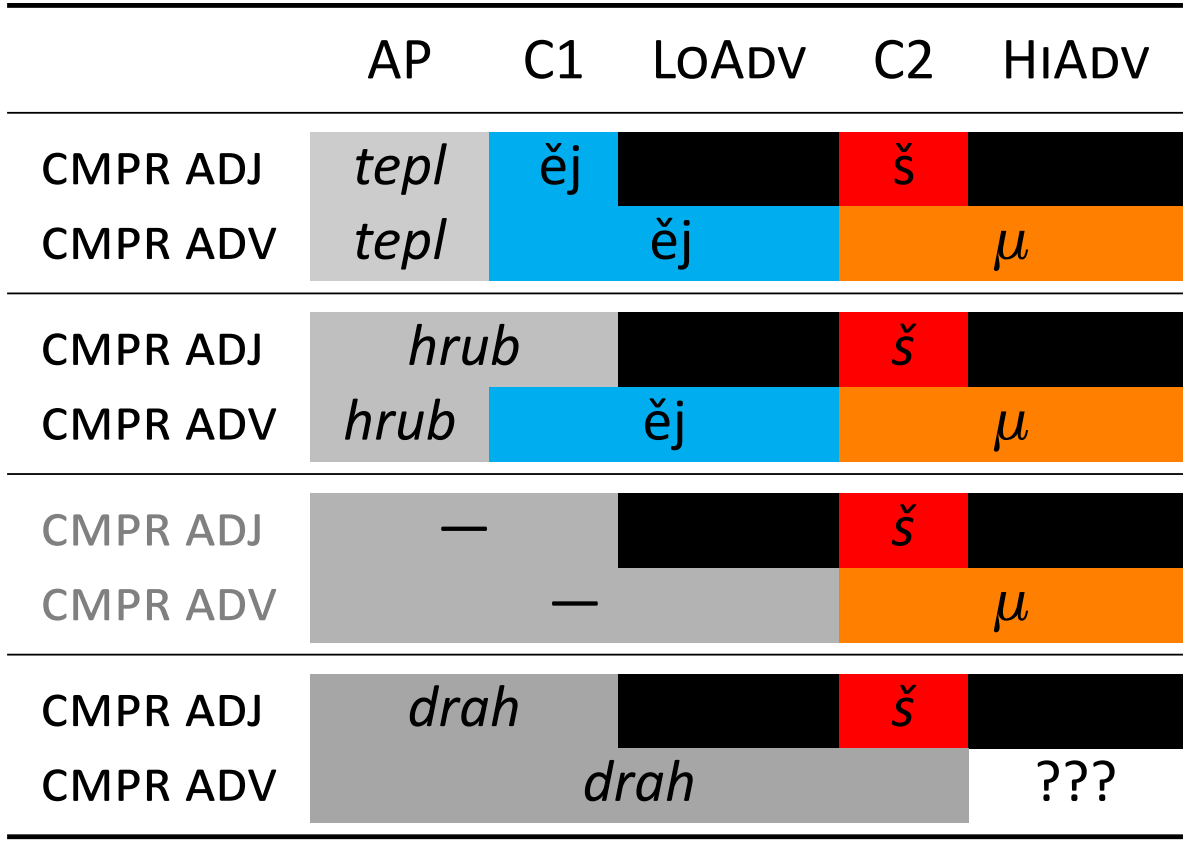
Adjective-adverb pairs in East Morava

- We can model this by proposing East Morava has a single adverb marker (PAL+μ), the counterpart of Standard *-i*

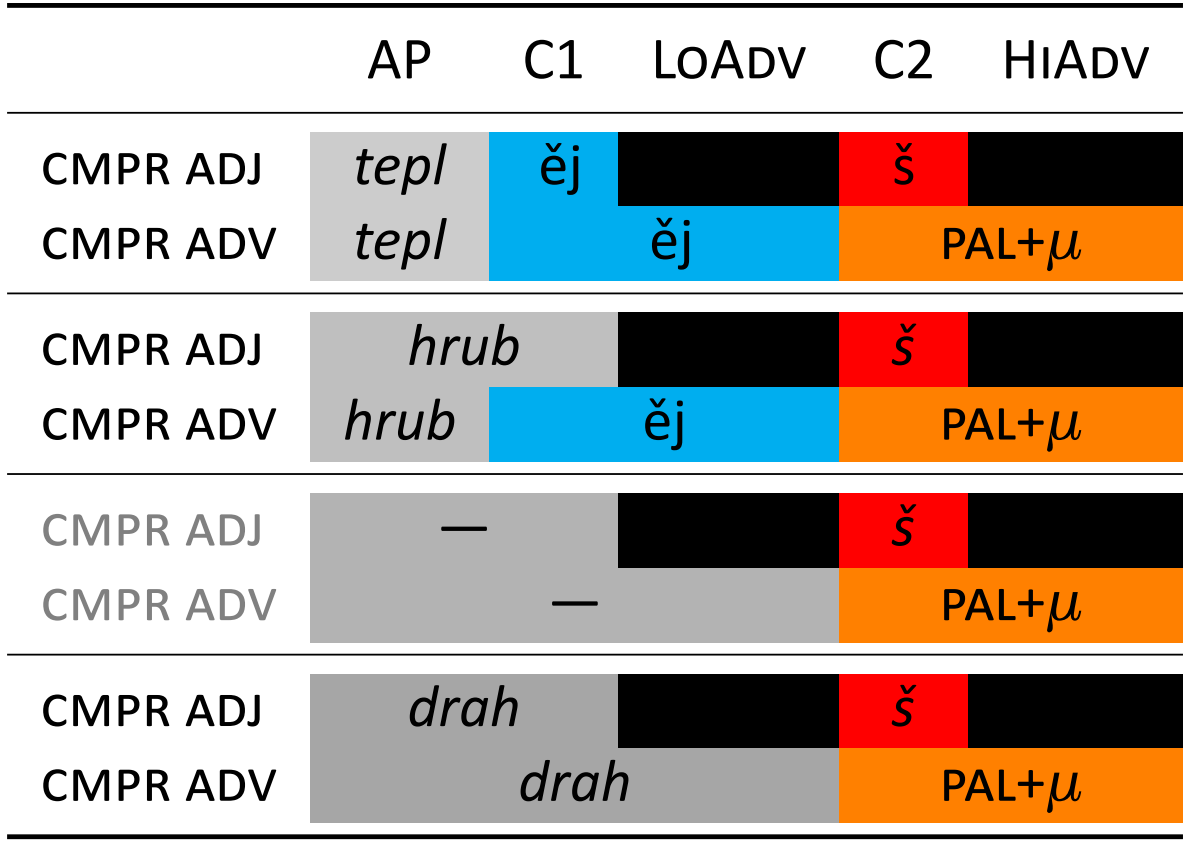
(18) Standard Czech comparative adjectives and adverbs

		AP	C1	LoAdv	C2	HiAdv	
a.	CMPR ADJ	*chab*	ěj		š		‘weak’
	CMPR ADV	*chab*	ěj		i		
b.	CMPR ADJ	*slab*			š		‘weak’
	CMPR ADV	*slab*	ěj		i		
c.	CMPR ADJ	—			š		
	CMPR ADV	—			i		
d.	CMPR ADJ	*drah*			š		‘expensive’
	CMPR ADV	*drah*			PAL+μ+e		

(19) East Morava loses -i and -ě



(20) East Morava loses -i and -ě



(21) Central Morava comparative adjectives and adverbs

	POS ADJ	CMPR ADJ	CMPR ADV	GLOSS
I.	chab-ý	chab-ěj-š-í	chab-ěj-š	‘weak’
II.	hrub-ý	hrub- š-í	hrub-ěj-š	‘rough’
III.	slab-ý	slab- š-í	sláb- š	‘weak’
IV.	drah-ý	draž- š-í	dráž	‘expensive’
	dobr-ý	lep- š-í	líp	‘good’

- FOUR classes

(21) Central Morava comparative adjectives and adverbs

	POS ADJ	CMPR ADJ	CMPR ADV	GLOSS
I.	chab-ý	chab-ěj-š-í	chab-ěj-š	‘weak’
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- FOUR classes
- no vocalic endings either

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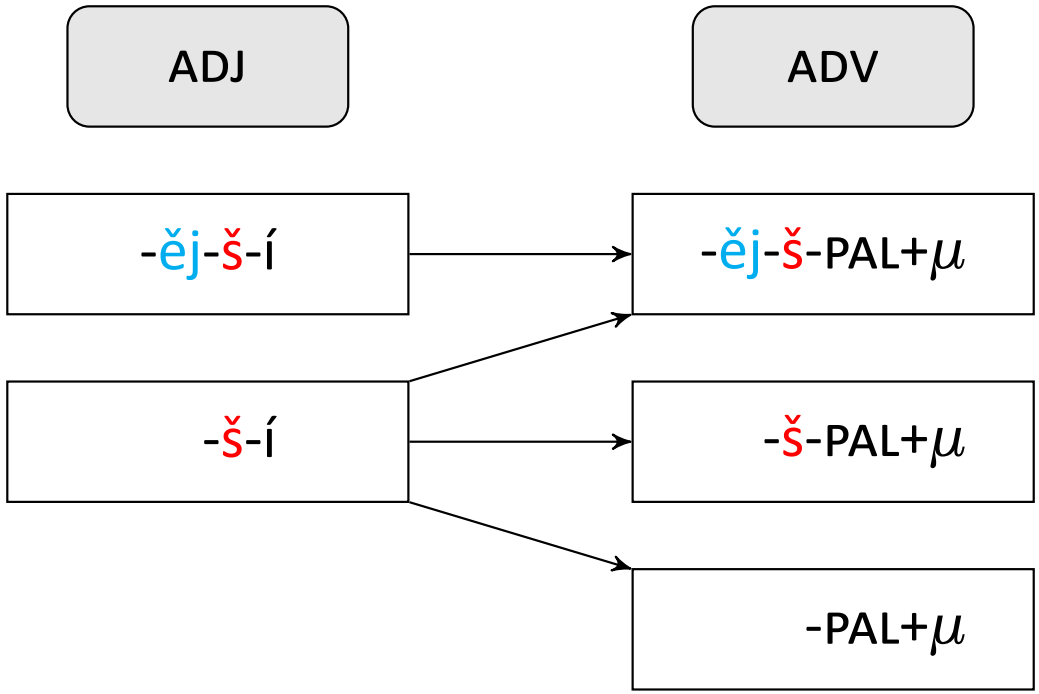
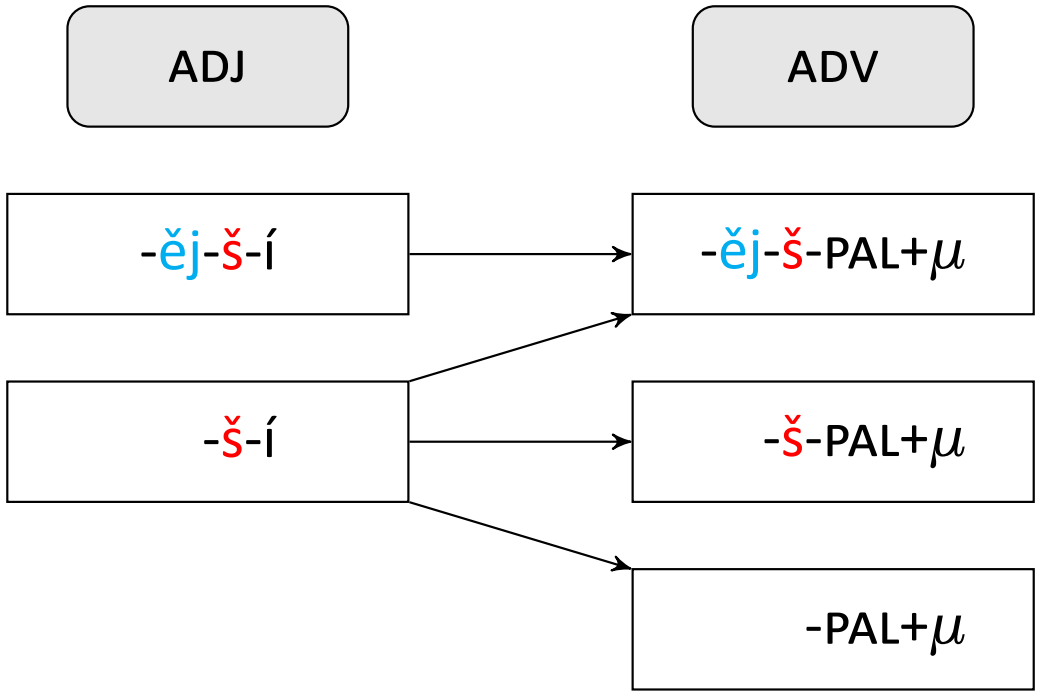
	dobr-ý	lep- š-í	líp	‘good’

- FOUR classes
- no vocalic endings either
- -š reappears (in classes I-II-III)



Adjective-adverb pairs in Central Morava



Adjective-adverb pairs in Central Morava

- This system can be modeled by proposing that Central Morava lacks *-i*

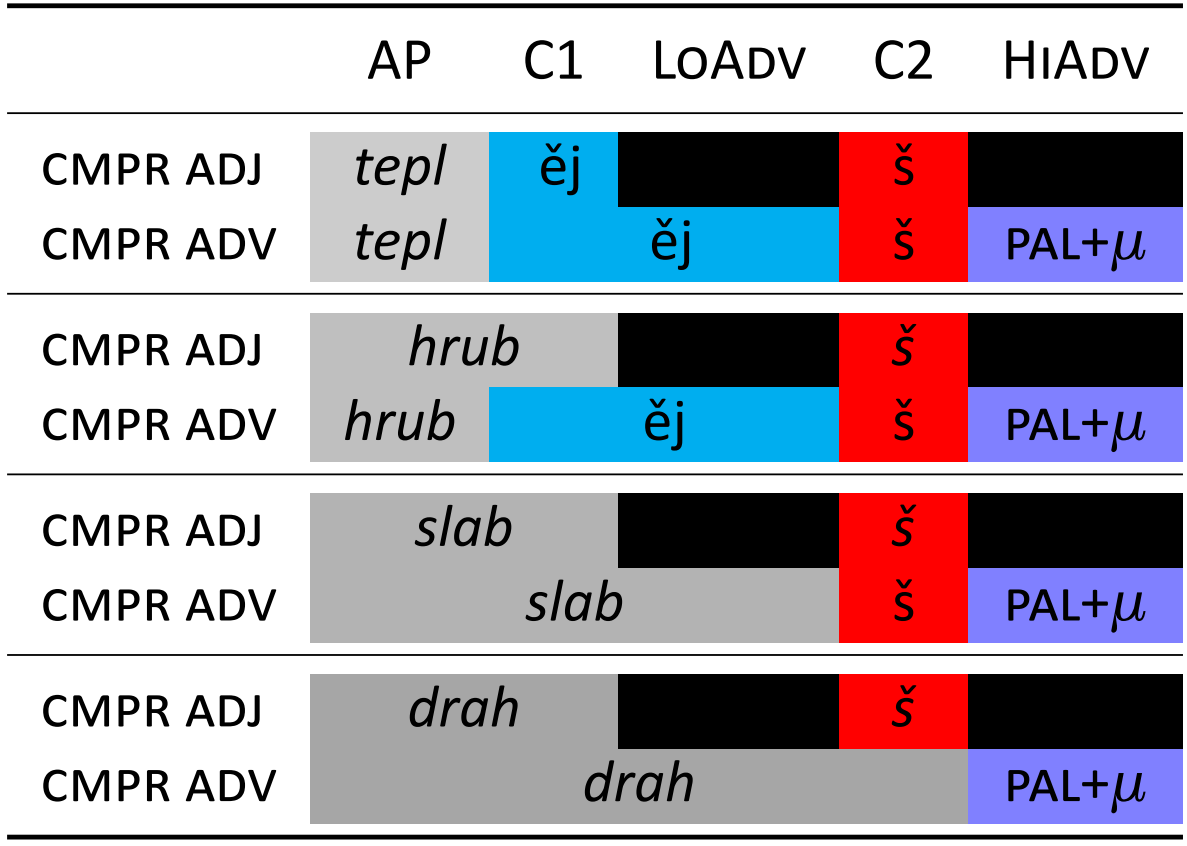
(22) Standard Czech comparative adjectives and adverbs

		AP	C1	LoAdv	C2	HiAdv	
a.	CMPR ADJ	*chab*	ěj		š		‘weak’
	CMPR ADV	*chab*	ěj		i		
b.	CMPR ADJ	*slab*			š		‘weak’
	CMPR ADV	*slab*	ěj		i		
c.	CMPR ADJ	—			š		
	CMPR ADV	—			i		
d.	CMPR ADJ	*drah*			š		‘expensive’
	CMPR ADV	*drah*			PAL+μ+e		

(23) Central Morava adds one more class

		AP	C1	LoAdv	C2	HiAdv	
a.	CMPR ADJ	*chab*	ěj		š		‘weak’
	CMPR ADV	*chab*	ěj			?	
b.	CMPR ADJ	*hrub*			š		‘rough’
	CMPR ADV	*hrub*	ěj			?	
c.	CMPR ADJ	*slab*			š		‘weak’
	CMPR ADV	*slab*				?	
d.	CMPR ADJ	*drah*			š		‘expensive’
	CMPR ADV	*drah*				PAL+μ	

(24) Central Morava lacks -i and -ě

		AP	C1	LoAdv	C2	HiAdv	
a.	CMPR ADJ	*chab*	ěj		š		‘weak’
	CMPR ADV	*chab*	ěj		?	PAL+μ	
b.	CMPR ADJ	*hrub*			š		‘rough’
	CMPR ADV	*hrub*	ěj		?	PAL+μ	
c.	CMPR ADJ	*slab*			š		‘weak’
	CMPR ADV	*slab*			?	PAL+μ	
d.	CMPR ADJ	*drah*			š		‘expensive’
	CMPR ADV	*drah*				PAL+μ	

(25) Central Morava regrows *-š*