

## How to be Positive

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GLOW

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# Outline

Introduction

Comparatives: data

An informal analysis

The spellout algorithm Starke (2018)

How to be POS

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Comparatives: data

An informal analysis

The spellout algorithm Starke (2018)

How to be POS

# Comparative formation in Slovak

## (1) Comparatives in Slovak

POSITIVE	COMPARATIVE	gloss
<i>star-ý</i>		'old'
<i>múdr-y</i>		'wise'

# Comparative formation in Slovak

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POSITIVE	COMPARATIVE	gloss
star-ý	star	'old'
múdr-y	múdr	'wise'

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star-ý	star	š-í	'old'
múdr-y	múdr	ejš-í	'wise'

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POSITIVE	COMPARATIVE		gloss	
star-ý	star	š-í	'old'	
múdr-y	múdr	ejš-í	'wise'	
sliz-k-ý			'slim-y'	AUGMENT

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sliz-k-ý	sliz-k	ejš-í	'slim-y'
ťaž-k-ý			'heav-y'

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ťaž-k-ý	ťaž-k		'heav-y'

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ťaž-k-ý	ťaž	š-í	'heav-y'

# Comparative formation in Slovak

## (1) Comparatives in Slovak

POSITIVE	COMPARATIVE		gloss	
star-ý	star	š-í	'old'	CONTAINMENT
múdr-y	múdr	ejš-í	'wise'	
sliz-k-ý	sliz-k	ejš-í	'slim-y'	
ťaž-k-ý	ťaž	š-í	'heav-y'	TRUNCATION

# Comparative formation in Slovak

## (1) Comparatives in Slovak

POSITIVE	COMPARATIVE		gloss	
star-ý	star	š-í	'old'	CONTAINMENT
múdr-y	múdr	ejš-í	'wise'	
sliz-k-ý	sliz-k	ejš-í	'slim-y'	
ťaž-k-ý	ťaž	š-í	'heav-y'	TRUNCATION

## (2) *Candidate Universal* (Grano & Davis 2018)

Universally, the comparative form of a gradable adjective is derived from or identical to its positive form.



# If English was like Slovak...

(3)

POSITIVE	COMPARATIVE	class
old		
slim-y		
heav-y		

## If English was like Slovak...

(3)

POSITIVE	COMPARATIVE	class
old	er	
slim-y	er	
heav-y	er	

# If English was like Slovak...

(3)

POSITIVE	COMPARATIVE	class
old	old	er
slim-y	slim-y	er
heav-y		er

## If English was like Slovak...

(3)

POSITIVE	COMPARATIVE		class
old	old	er	containment
slim-y	slim-y	er	containment
heav-y		er	

## If English was like Slovak...

(3)

POSITIVE	COMPARATIVE		class
old	old	er	containment
slim-y	slim-y	er	containment
heav-y	heav	er	

## If English was like Slovak...

(3)

POSITIVE	COMPARATIVE		class
old	old	er	containment
slim-y	slim-y	er	containment
heav-y	heav	er	truncation

(4)

root	POS	CMPR
old	—	—
heav-y	AUG	—
slim-y	AUG	AUG

# Implications for the structure of the comparative

(5) a. POSITIVE



sliz-k

slim-y



# Implications for the structure of the comparative

(5) a. POSITIVE

△  
sliz-k  
slim-y

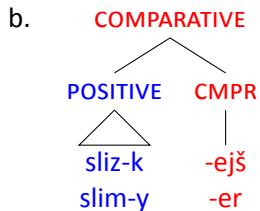
b. COMPARATIVE

△ POSITIVE CMPR  
sliz-k -ejš  
slim-y -er

# Implications for the structure of the comparative

(5) a. POSITIVE

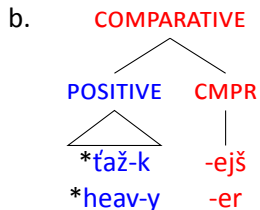
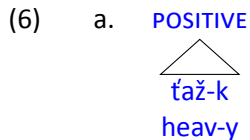
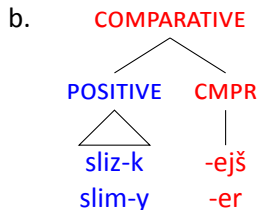
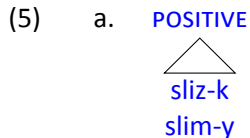
△  
sliz-k  
slim-y



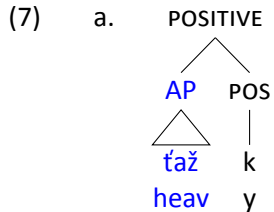
(6) a. POSITIVE

△  
těž-k  
heav-y

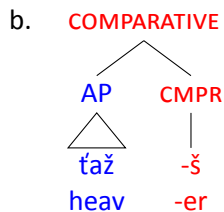
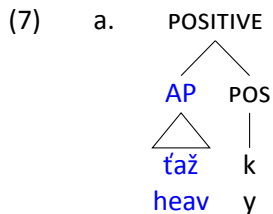
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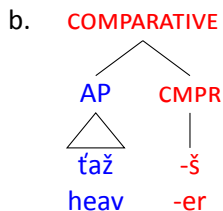
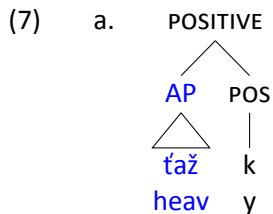
# Our proposal: symmetric structures



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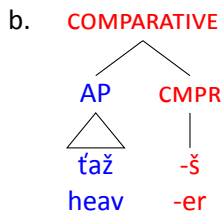
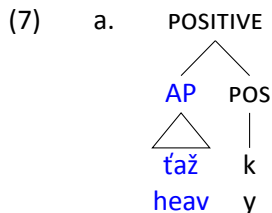


## Our proposal: symmetric structures



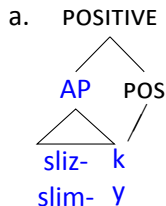
- To handle containment, we need phrasal spellout in addition.

## Our proposal: symmetric structures

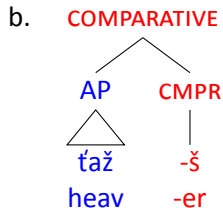
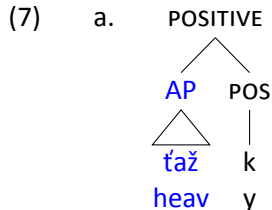


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## (8) Containment pattern

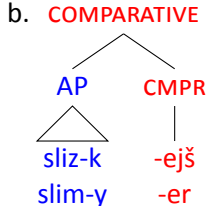
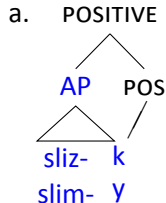


# Our proposal: symmetric structures



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## (8) Containment pattern





Introduction

**Comparatives: data**

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The spellout algorithm Starke (2018)

How to be POS

## Truncation of Slovak -k in CMPR

POSITIVE			DIMINUTIVE				COMPARATIVE			gloss
root	AUG	AGR	root	DIM	AUG	AGR	root	CMPR	AGR	
blíz	k	y	bliz	un	k	ý	bliž	š	í	'close'
úz	k	y	uz	un	k	ý	už	š	í	'narrow'
níz	k	y	niz	un	k	ý	niž	š	í	'low'
krát	k	y	krat	un	k	ý	krat	š	í	'short'
l'ah	k	ý	l'ah	un	k	ý	l'ah	š	í	'easy'
mäk	k	ý	mäk	un	k	ý	mäk	š	í	'soft'
ten	k	ý	ten	un	k	ý	ten	š	í	'thin'
hlad	k	ý	hlad	un	k	ý	hlad	š	í	'smooth'
slad	k	ý	slad	un	k	ý	slad	š	í	'sweet'
vlh	k	ý	vlh	un	k	ý	vlh	š	í	'wet'
ried	k	ý					red	š	í	'thin' (soup)
krot	k	ý					krot	š	í	'tame'
prud	k	ý					prud	š	í	'steep'
t'až	k	ý					t'až	š	í	'heavy'

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blíz	k	y	bliz	un	k	ý	bliž	š	í	'close'
úz	k	y	uz	un	k	ý	už	š	í	'narrow'
níz	k	y	niz	un	k	ý	niž	š	í	'low'
krát	k	y	krat	un	k	ý	krat	š	í	'short'
l'ah	k	ý	l'ah	un	k	ý	l'ah	š	í	'easy'
mäk	k	ý	mäk	un	k	ý	mäk	š	í	'soft'
ten	k	ý	ten	un	k	ý	ten	š	í	'thin'
hlad	k	ý	hlad	un	k	ý	hlad	š	í	'smooth'
slad	k	ý	slad	un	k	ý	slad	š	í	'sweet'
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krát	k	y	krat	un	k	ý	krat	š	í	'short'
l'ah	k	ý	l'ah	un	k	ý	l'ah	š	í	'easy'
mäk	k	ý	mäk	un	k	ý	mäk	š	í	'soft'
ten	k	ý	ten	un	k	ý	ten	š	í	'thin'
hlad	k	ý	hlad	un	k	ý	hlad	š	í	'smooth'
slad	k	ý	slad	un	k	ý	slad	š	í	'sweet'
vlh	k	ý	vlh	un	k	ý	vlh	š	í	'wet'
ried	k	ý					red	š	í	'thin' (soup)
krot	k	ý					krot	š	í	'tame'
prud	k	ý					prud	š	í	'steep'
t'až	k	ý					t'až	š	í	'heavy'

# Containment of Slovak -k in CMPR

POSITIVE			DIMINUTIVE				COMPARATIVE				gloss
root	AUG	AGR	root	DIM	AUG	AGR	root	AUG	CMPR	AGR	
heb	k	ý	heb	un	k	ý	heb	k	ejš	í	'smooth'
sliz	k	ý	sliz	un	k	ý	sliz	k	ejš	í	'slimy'
kreh	k	ý	kreh	un	k	ý	kreh	k	ejš	í	'fragile'
brit	k	ý					brit	k	ejš	í	'sharp' (humor)
hor	k	ý					hor	k	ejš	í	'bitter'
hyb	k	ý					hyb	k	ejš	í	'nimble'
krep	k	ý					krep	k	ejš	í	'energetic'
mrz	k	ý					mrz	k	ejš	í	'ugly'
trp	k	ý					trp	k	ejš	í	'bitter'
syp	k	ý					syp	k	ejš	í	'loose' (sand)
váz	k	ý					váz	k	ejš	í	'sticky'
vrt	k	ý					vrt	k	ejš	í	'nimble'
vlh	k	ý					vlh	k	ejš	í	'wet'

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kreh	k	ý	kreh	un	k	ý	kreh	k	ejš	í	'fragile'
brit	k	ý					brit	k	ejš	í	'sharp' (humor)
hor	k	ý					hor	k	ejš	í	'bitter'
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sliz	k	ý	sliz	un	k	ý	sliz	k	ejš	í	‘slimy’
kreh	k	ý	kreh	un	k	ý	kreh	k	ejš	í	‘fragile’
brit	k	ý					brit	k	ejš	í	‘sharp’ (humor)
hor	k	ý					hor	k	ejš	í	‘bitter’
hyb	k	ý					hyb	k	ejš	í	‘nimble’
krep	k	ý					krep	k	ejš	í	‘energetic’
mrz	k	ý					mrz	k	ejš	í	‘ugly’
trp	k	ý					trp	k	ejš	í	‘bitter’
syp	k	ý					syp	k	ejš	í	‘loose’ (sand)
váz	k	ý					váz	k	ejš	í	‘sticky’
vrt	k	ý					vrt	k	ejš	í	‘nimble’
vlh	k	ý					vlh	k	ejš	í	‘wet’

# Distribution of κ: phonology?

## (9) Slovak minimal pairs

POSITIVE			DIMINUTIVE				COMPARATIVE				gloss
root	AUG	AGR	root	DIM	AUG	AGR	root	AUG	CMPR	AGR	
l'ah	k	ý	l'ah	un	k	ý	l'ah		š	í	'easy'
kreh	k	ý	kreh	un	k	ý	kreh	k	ejš	í	'fragile'



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POSITIVE			DIMINUTIVE				COMPARATIVE				gloss
root	AUG	AGR	root	DIM	AUG	AGR	root	AUG	CMPR	AGR	
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kreh	k	ý	kreh	un	k	ý	kreh	k	ejš	í	'fragile'
krot	k	ý					krot		š	í	'tame'
brit	k	ý					brit	k	ejš	í	'sharp' (humor)

## Distribution of $\kappa$ : semantics?

- (10) There is a regularity connecting adjectives with  $-k$ :
- a.  $-k \Rightarrow$  scalar A  
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- a.  $-k \Rightarrow$  scalar A  
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  - b. scalar A  $\not\Rightarrow -k$

## Distribution of κ: semantics?

- (10) There is a regularity connecting adjectives with *-k*:
- k* ⇒ scalar A  
(context-dependent, gradable, have antonyms)
  - scalar A  $\nRightarrow$  *-k*

POSITIVE	gloss	antonym	gloss	
ťaž k ý	'heavy'	ľah-k-ý	'light'	truncation

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ťaž k ý	'heavy'	ľah-k-ý	'light'	truncation
krát k y	'short'	dlh-ý	'long'	
mäk k ý	'soft'	tvrd-ý	'hard'	

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POSITIVE		gloss	antonym	gloss	
těž k ý		'heavy'	leh-k-ý	'light'	truncation
krát k ý		'short'	dlh-ý	'long'	
mäk k ý		'soft'	tvrd-ý	'hard'	
vlh k ý		'wet'	such-ý	'dry'	

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vlh k ý		'wet'	such-ý	'dry'	
slad k ý		'sweet'	—		

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slad k ý	'sweet'	—		
krehk ý	'fragile'	pev-n-ý	'firm'	containment



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krehk ý	'fragile'	pev-n-ý	'firm'	containment
brit k ý	'sharp'	tup-ý	'blunt'	
heb k ý	'smooth'	hrub-ý	'rough'	

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sliz k ý	'slimy'	—		

## Distribution of κ: semantics?

- (10) There is a regularity connecting adjectives with *-k*:
- k* ⇒ scalar A  
(context-dependent, gradable, have antonyms)
  - scalar A ⇏ *-k*

POSITIVE		gloss	antonym	gloss	
ťaž k ý		'heavy'	ľah-k-ý	'light'	truncation
krát k ý		'short'	dlh-ý	'long'	
mäk k ý		'soft'	tvrd-ý	'hard'	
vlh k ý		'wet'	such-ý	'dry'	
slad k ý		'sweet'	—		
krehk ý		'fragile'	pev-n-ý	'firm'	containment
brit k ý		'sharp'	tup-ý	'blunt'	
heb k ý		'smooth'	hrub-ý	'rough'	
sliz k ý		'slimy'	—		
hor k ý		'bitter'	—		

# What do we learn?

- ▶ Slovak has complex adjectives in the positive

(11) root-K-AGR

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(11) root-K-AGR

- ▶ The adjectives with AUG are scalar, but not all scalar As have AUG.
- ▶ In the comparative, AUG is either preserved or dropped, depending on the root.

(12) a. root-K-CMPR (containment)  
b. root -CMPR (truncation)

Introduction

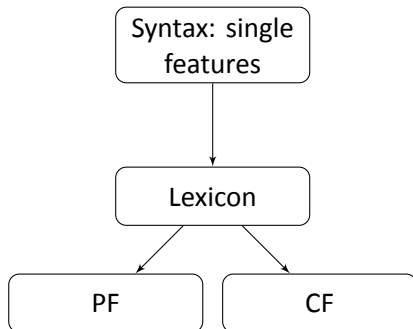
Comparatives: data

**An informal analysis**

The spellout algorithm Starke (2018)

How to be POS

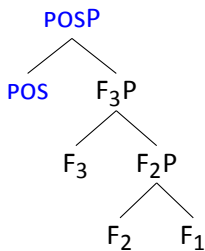
# Nanosyntax



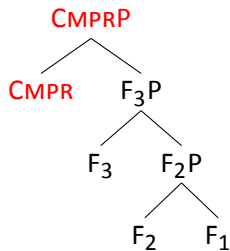


# The structures

(13)

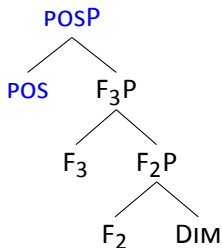


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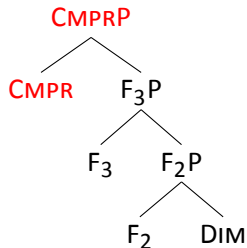


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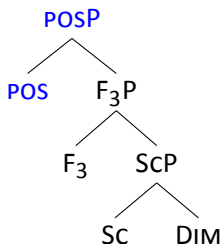
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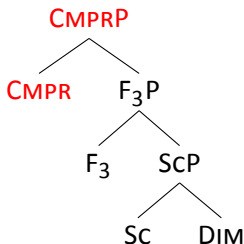
- ▶ DIMENSION: *size, velocity, ... (color, material)*

# The structures

(13)



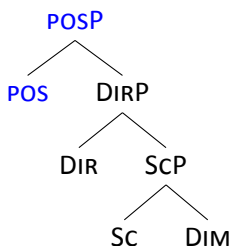
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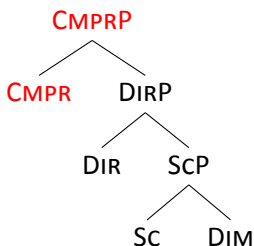
- ▶ DIMENSION: *size, velocity, ... (color, material)*
- ▶ SCALE: some dimensions are associated to a scale, a sequence of degrees (size yes, material (prototypically) not)

# The structures

(13)

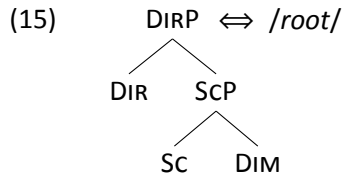


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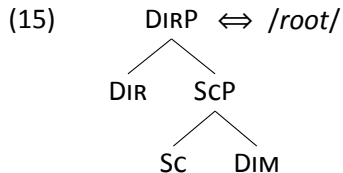


- ▶ DIMENSION: *size, velocity, ... (color, material)*
- ▶ SCALE: some dimensions are associated to a scale, a sequence of degrees (size yes, material (prototypically) not)
- ▶ DIRECTION: Positive vs. negative (*fast/slow, tall/short, ...*)

# Phrasal spellout

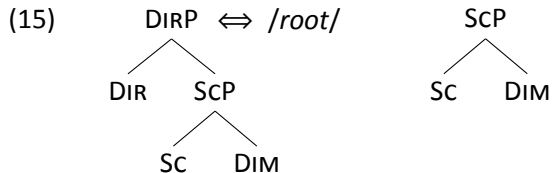


# Phrasal spellout



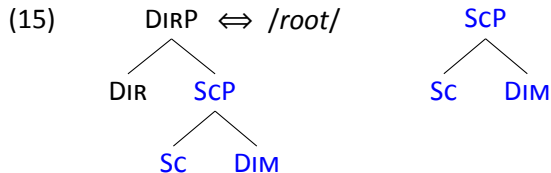
- (16) *The Superset Principle* (Starke 2009)  
A lexically stored tree L matches a syntactic node S iff L contains the syntactic tree dominated by S as a subtree

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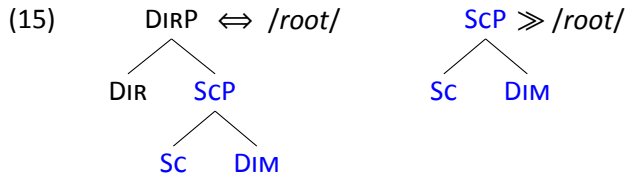
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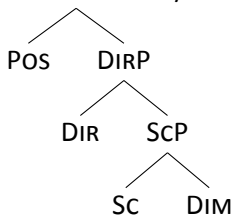
# Phrasal spellout



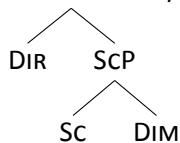
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## Root size

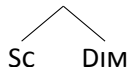
(17) POSP  $\Leftrightarrow$  /XL-root/



(18) DIRP  $\Leftrightarrow$  /L-root/

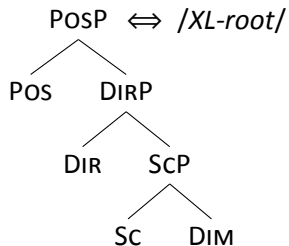


(19) SCP  $\Leftrightarrow$  /S-root/

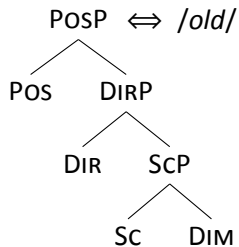


- (20) *Root size* (Caha, De Clercq & Vanden Wyngaerd 2019)  
Roots come in different sizes. Their size determines the class they belong to.

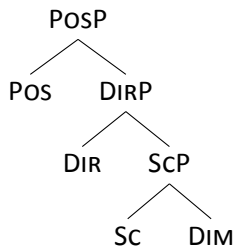
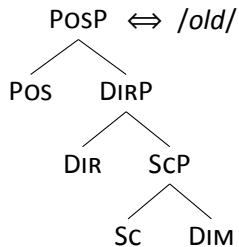
## XL-roots in the positive (*old*)



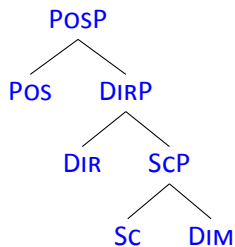
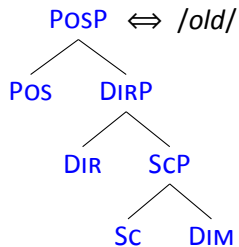
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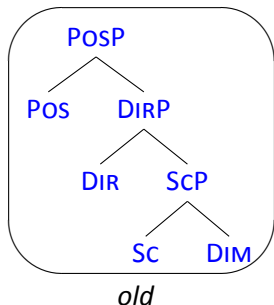
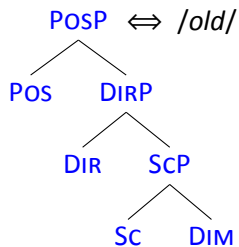
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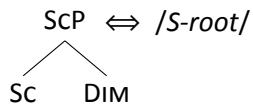
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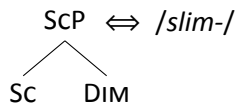


## S-roots in the positive (*slim-y*)

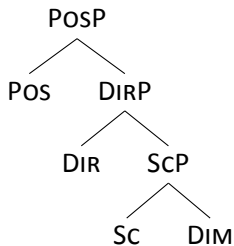
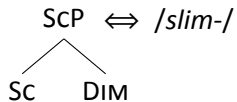




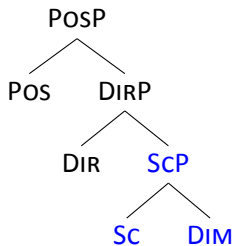
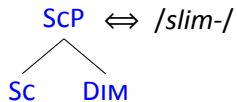
## S-roots in the positive (*slim-y*)



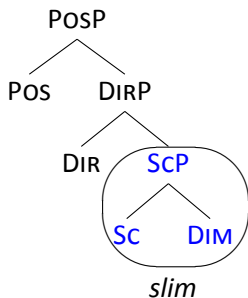
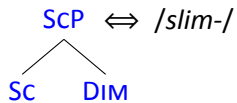
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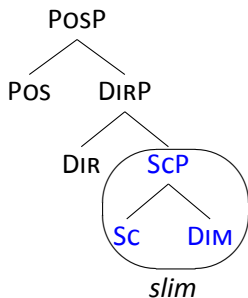
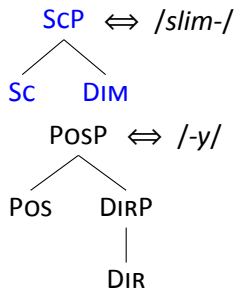
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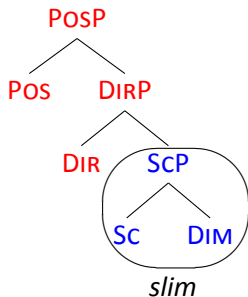
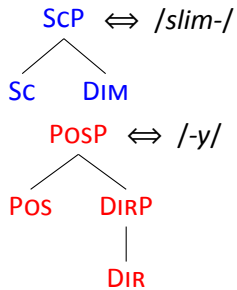
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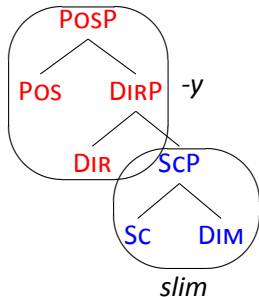
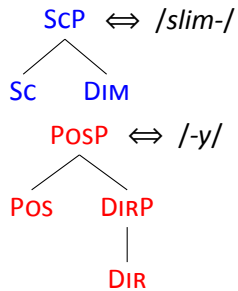
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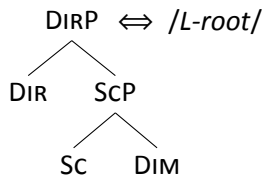
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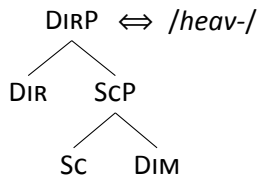


## L-roots in the positive (*heav-y*)

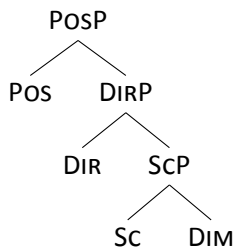
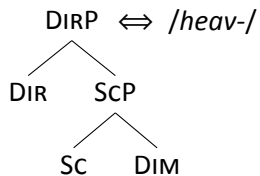




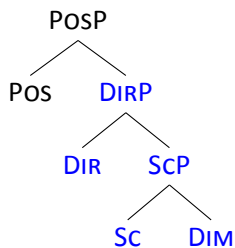
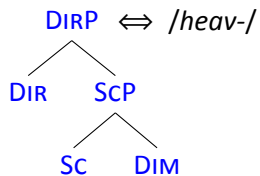
## L-roots in the positive (*heav-y*)



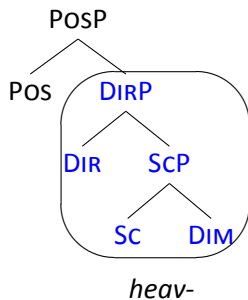
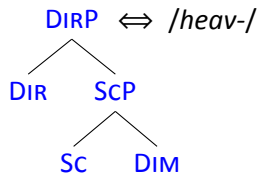
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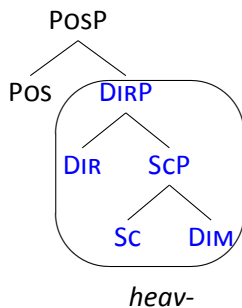
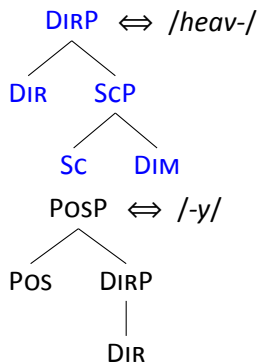
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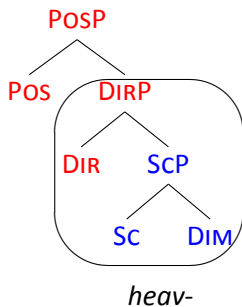
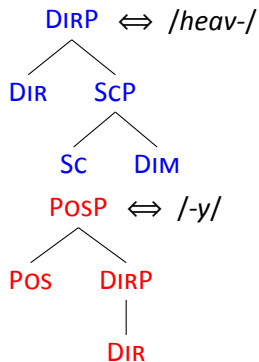
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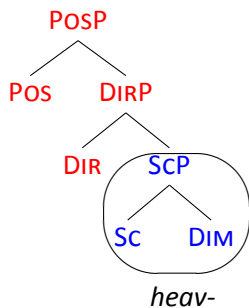
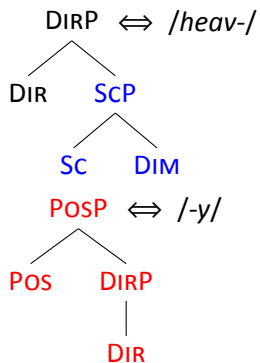
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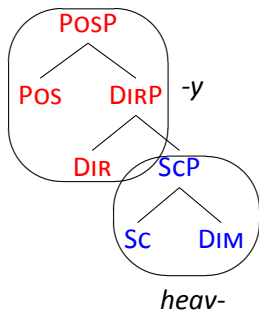
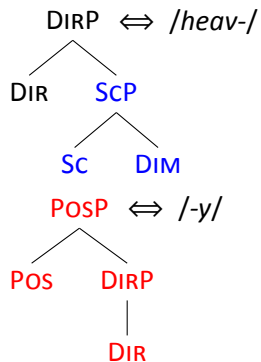
## L-roots in the positive (*heav-y*)



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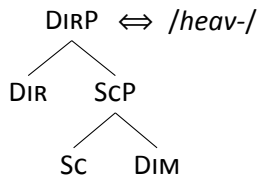


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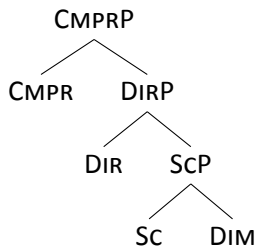
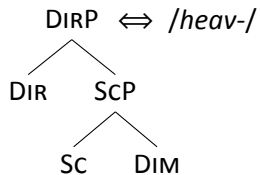




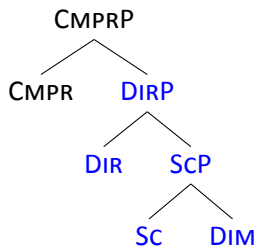
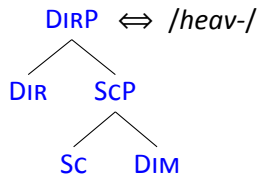
## L-roots in the comparative (*heav-y* — *heav-er*)



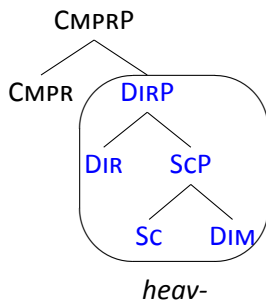
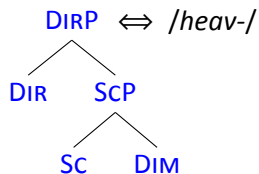
## L-roots in the comparative (*heav-y — heav-er*)



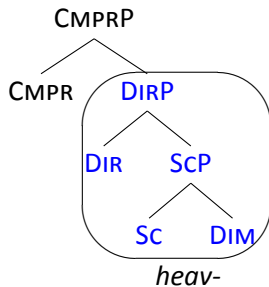
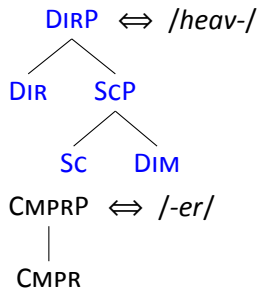
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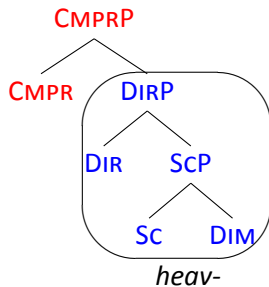
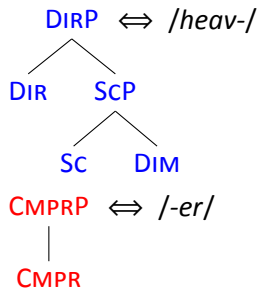
## L-roots in the comparative (*heav-y — heav-er*)



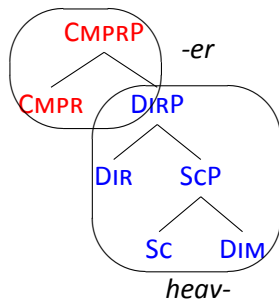
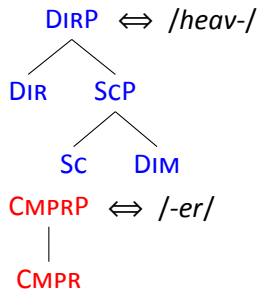
## L-roots in the comparative (*heav-y — heav-er*)



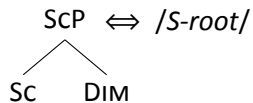
# L-roots in the comparative (*heav-y — heav-er*)



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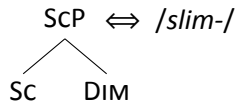


## S-roots in the comparative (*slim-y* — *slim-y-er*)

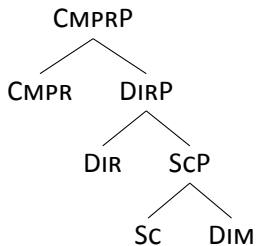
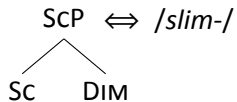




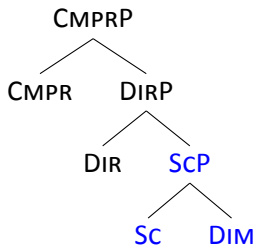
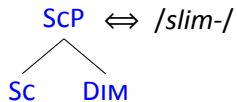
## S-roots in the comparative (*slim-y* — *slim-y-er*)



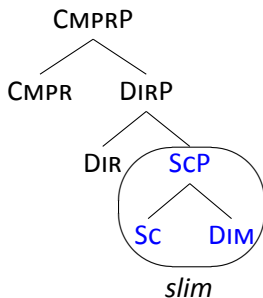
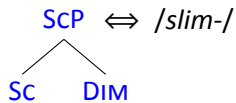
## S-roots in the comparative (*slim-y* — *slim-y-er*)



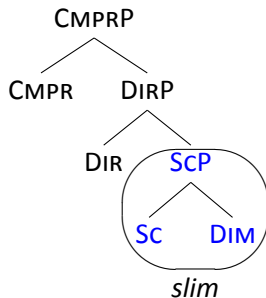
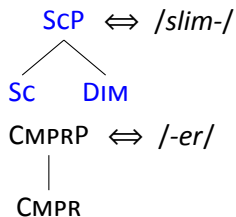
## S-roots in the comparative (*slim-y* — *slim-y-er*)



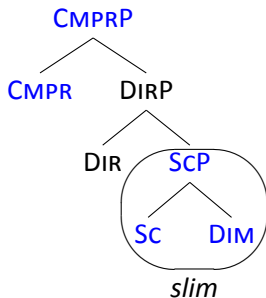
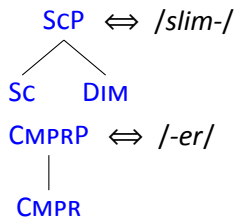
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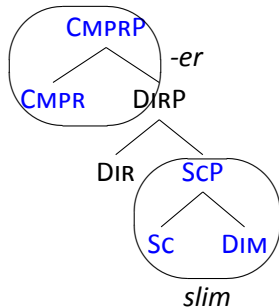
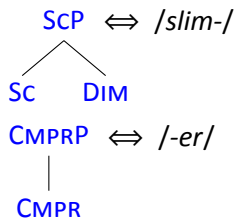
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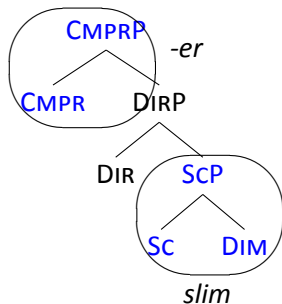
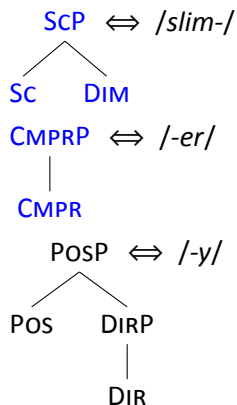
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## S-roots in the comparative (*slim-y* — *slim-y-er*)

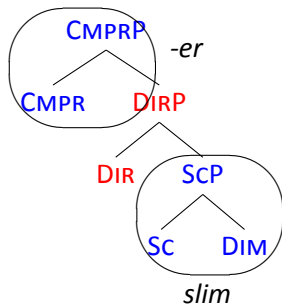
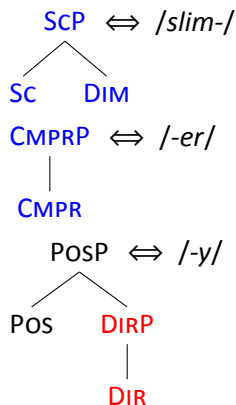


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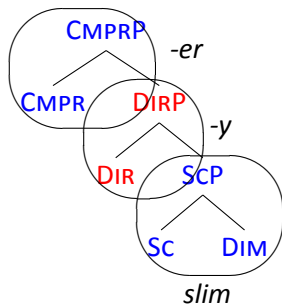
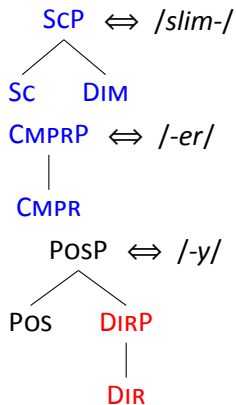




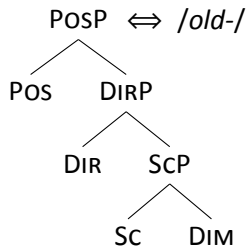
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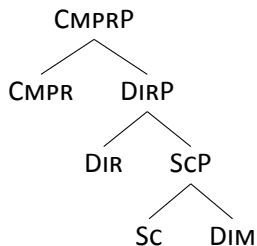
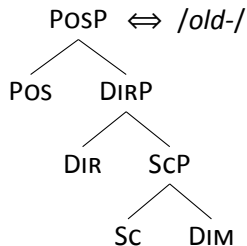
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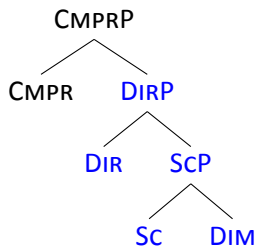
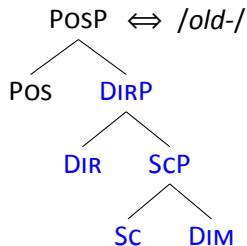
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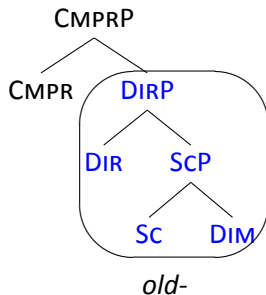
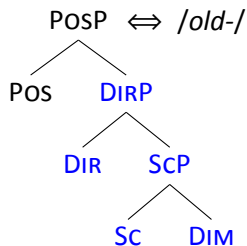
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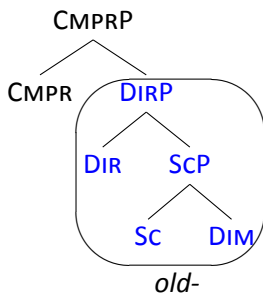
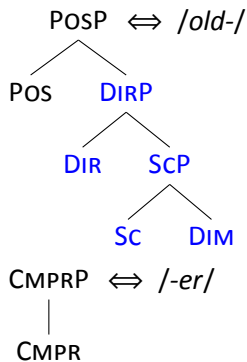
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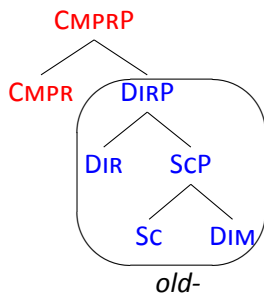
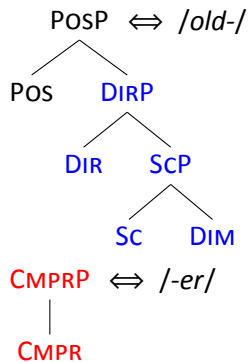
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## XL-roots in the comparative (*old* — *old-er*)

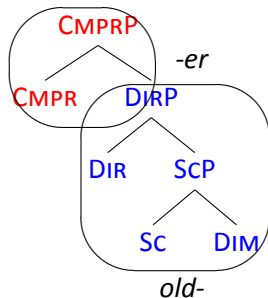
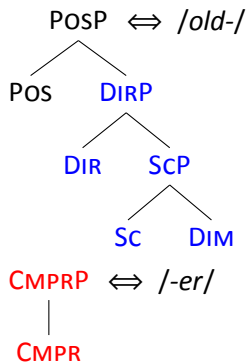


## XL-roots in the comparative (*old* — *old-er*)





## XL-roots in the comparative (*old* — *old-er*)



Introduction

Comparatives: data

An informal analysis

**The spellout algorithm Starke (2018)**

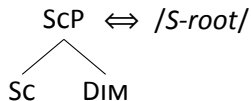
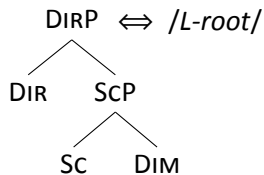
How to be POS

# Root competition

- (21) *Free choice of the root:* When several roots match, the choice among them is free.

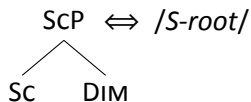
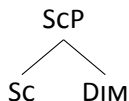
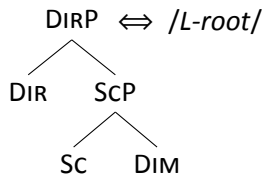
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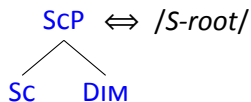
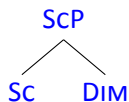
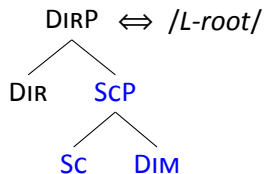
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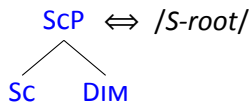
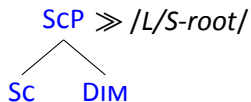
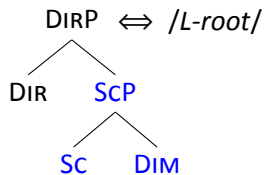
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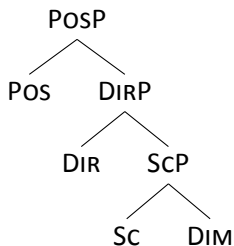
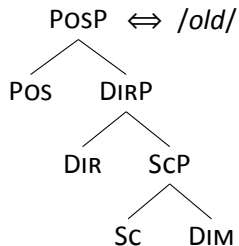


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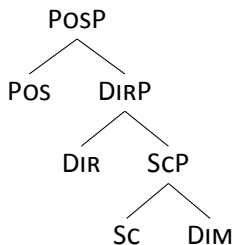
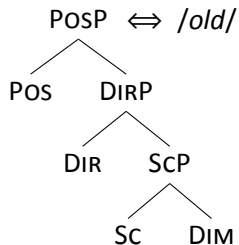


## Cyclic spellout, XL-root (*old*)



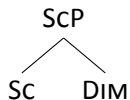
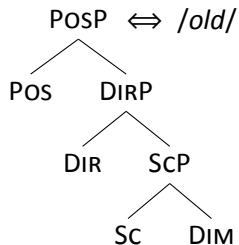


## Cyclic spellout, XL-root (*old*)



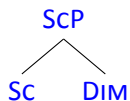
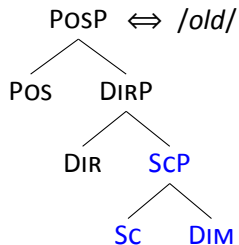
- (22) Merge F and  
a. Spell out FP

## Cyclic spellout, XL-root (*old*)



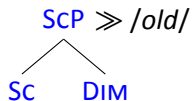
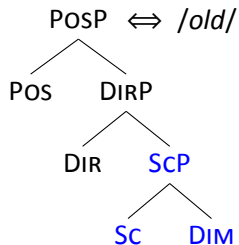
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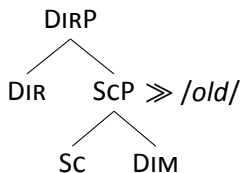
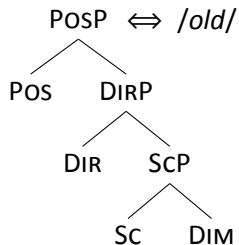
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## Cyclic spellout, XL-root (*old*)



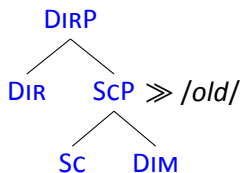
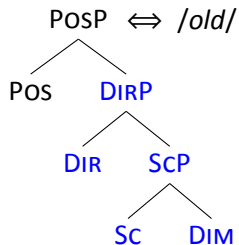
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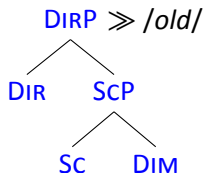
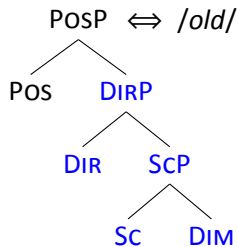
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## Cyclic spellout, XL-root (*old*)



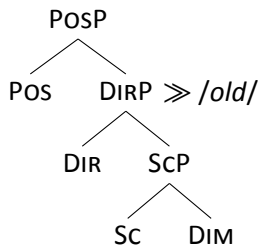
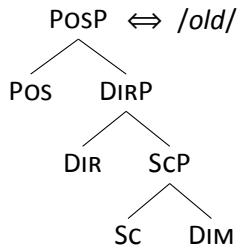
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## Cyclic spellout, XL-root (*old*)



- (22) Merge F and  
a. Spell out FP
- (23) Cyclic over-ride: lexicalisation at a node XP over-rides any previous match at a phrase contained in XP.

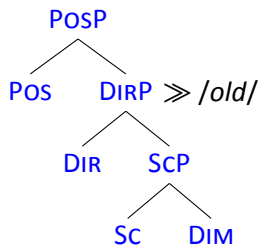
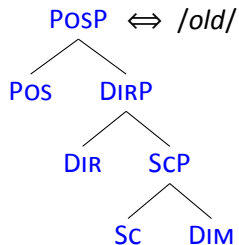
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- (22) Merge F and  
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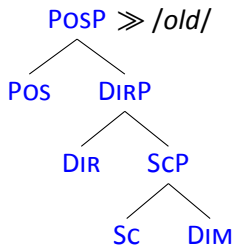
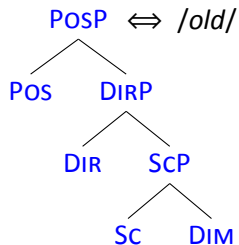


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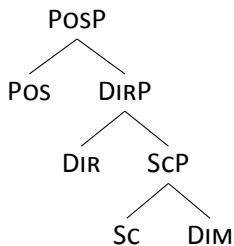
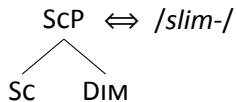
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## Cyclic spellout, XL-root (*old*)

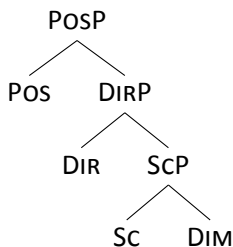
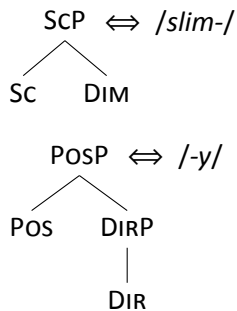


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## Spellout Driven Movement, S-root (*slim-y*)

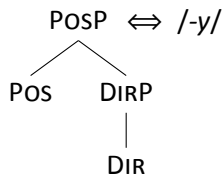
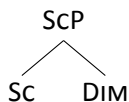
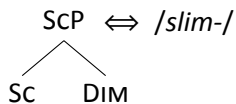


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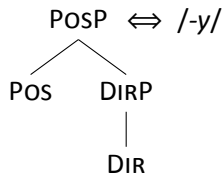
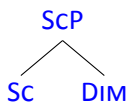
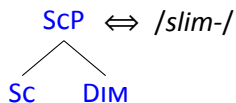
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## Spellout Driven Movement, S-root (*slim-y*)



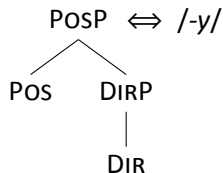
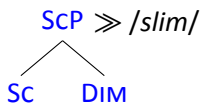
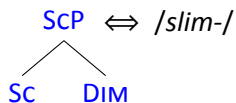
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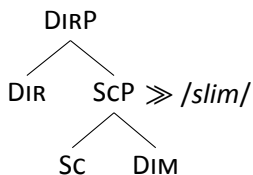
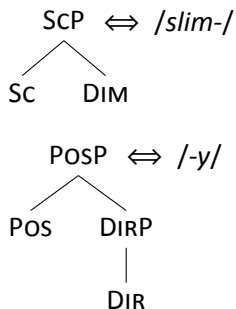
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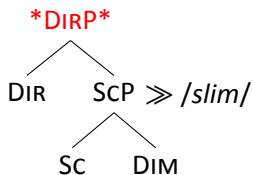
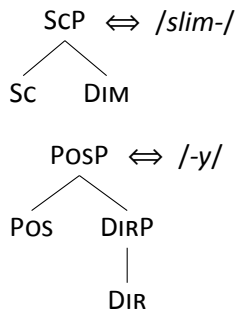
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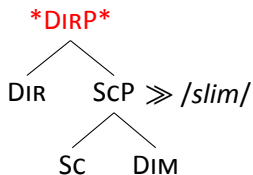
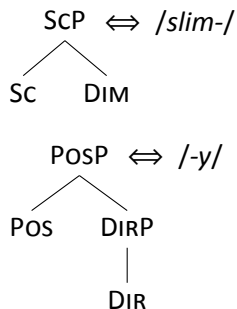


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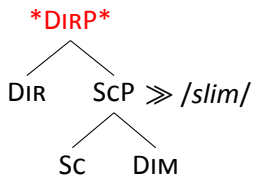
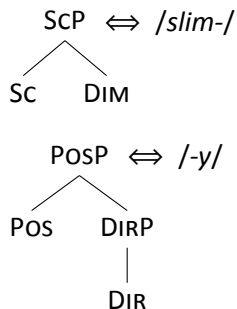
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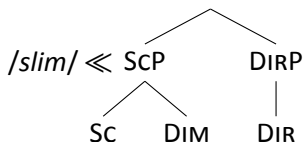
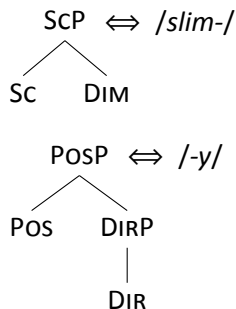
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## Spellout Driven Movement, S-root (*slim-y*)



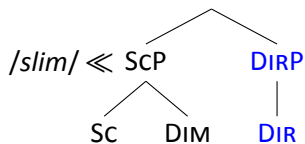
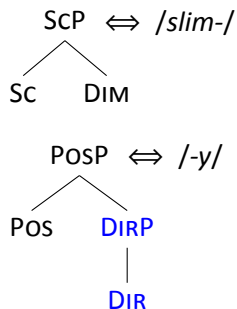
- (23) Merge F and
- Spell out FP
  - If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
  - If (b) fails, move the complement of F, and retry (a)

## Spellout Driven Movement, S-root (*slim-y*)



- (23) Merge F and
- Spell out FP
  - If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
  - If (b) fails, move the complement of F, and retry (a)**

## Spellout Driven Movement, S-root (*slim-y*)



- (23) Merge F and
- Spell out FP
  - If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
  - If (b) fails, move the complement of F, and retry (a)

## Spellout Driven Movement, S-root (*slim-y*)

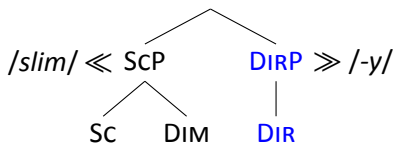
SCP  $\Leftrightarrow$  /*slim-*/

Sc DIM

POSP  $\Leftrightarrow$  /-y/

POS DIRP

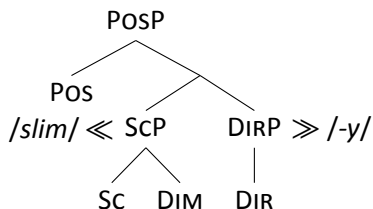
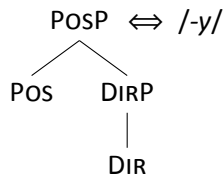
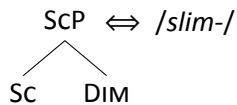
DIR



(23) Merge F and

- Spell out FP
- If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
- If (b) fails, move the complement of F, and retry (a)

## Spellout Driven Movement, S-root (*slim-y*)



- (23) **Merge F** and
- Spell out FP
  - If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
  - If (b) fails, move the complement of F, and retry (a)

## Spellout Driven Movement, S-root (*slim-y*)

SCP  $\Leftrightarrow$  /*slim-*/

Sc DIM

POSP  $\Leftrightarrow$  /-y/

POS DIRP

DIR

\*POSP\*

POS

/*slim*/  $\Leftarrow$  SCP DIRP  $\gg$  /-y/

Sc DIM DIR

- (23) Merge F and
- Spell out FP
  - If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
  - If (b) fails, move the complement of F, and retry (a)



## Spellout Driven Movement, S-root (*slim-y*)

SCP  $\Leftrightarrow$  /*slim-*/

Sc DIM

POSP  $\Leftrightarrow$  /-y/

POS DIRP

DIR

\*POSP\*

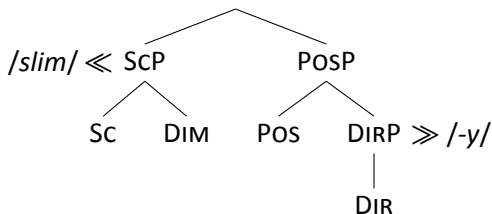
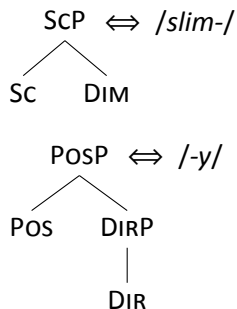
POS

/*slim*/  $\Leftarrow$  SCP  $\gg$  DIRP  $\gg$  /-y/

Sc DIM DIR

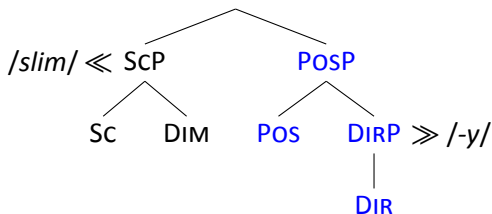
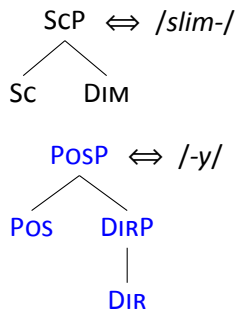
- (23) Merge F and
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## Spellout Driven Movement, S-root (*slim-y*)



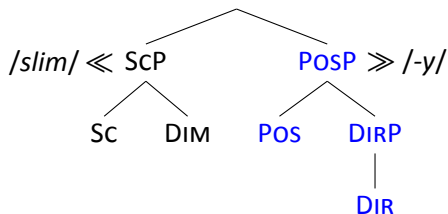
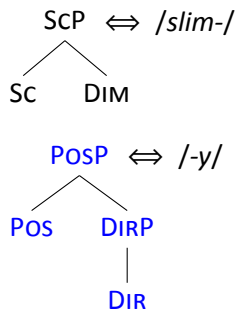
- (23) Merge F and
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  - If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
  - If (b) fails, move the complement of F, and retry (a)

## Spellout Driven Movement, S-root (*slim-y*)



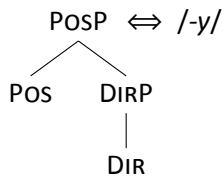
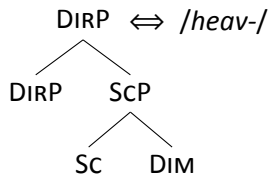
- (23) Merge F and
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## Spellout Driven Movement, S-root (*slim-y*)

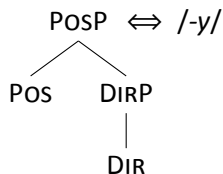
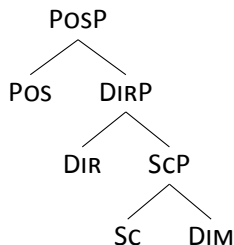
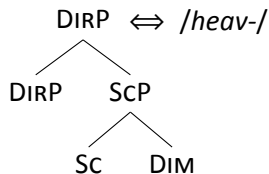


- (23) Merge F and
- Spell out FP
  - If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
  - If (b) fails, move the complement of F, and retry (a)

## Backtracking, L-root (*heav-y*)

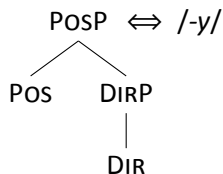
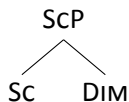
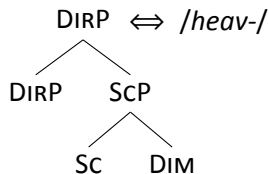


## Backtracking, L-root (*heav-y*)



- (24) Merge F and
- Spell out FP
  - If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
  - If (b) fails, move the complement of F, and retry (a)

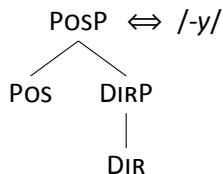
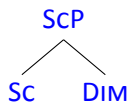
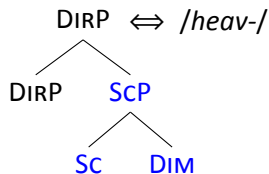
## Backtracking, L-root (*heav-y*)



(24) Merge F and

- a. Spell out FP
- b. If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
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## Backtracking, L-root (*heav-y*)

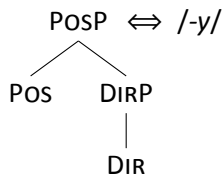
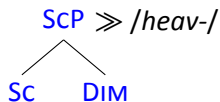
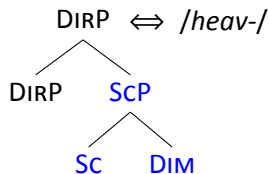


(24) Merge F and

- a. **Spell out FP**
- b. If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
- c. If (b) fails, move the complement of F, and retry (a)



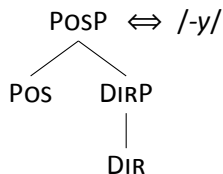
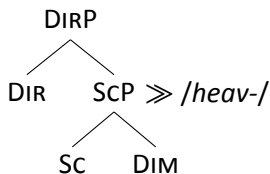
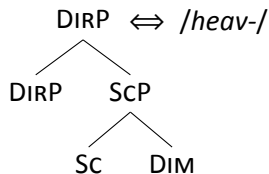
## Backtracking, L-root (*heav-y*)



(24) Merge F and

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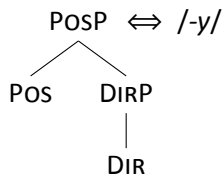
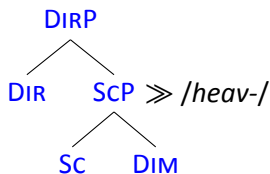
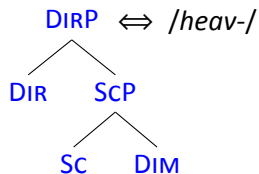
## Backtracking, L-root (*heav-y*)



(24) **Merge F** and

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- b. If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
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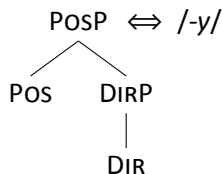
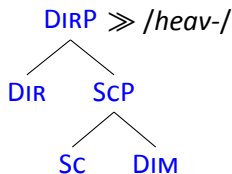
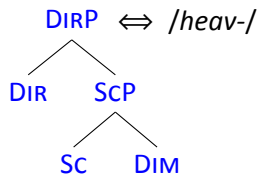
## Backtracking, L-root (*heav-y*)



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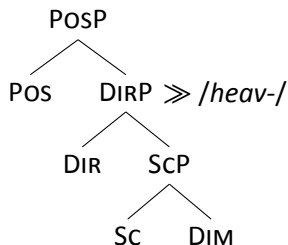
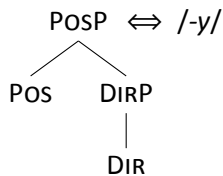
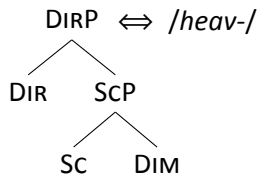
## Backtracking, L-root (*heav-y*)



(24) Merge F and

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- If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
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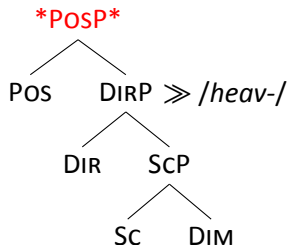
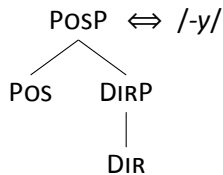
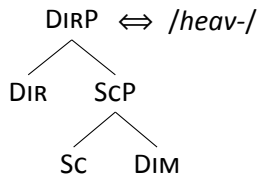
## Backtracking, L-root (*heav-y*)



(24) **Merge F** and

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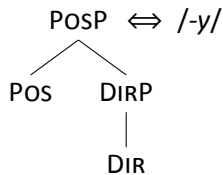
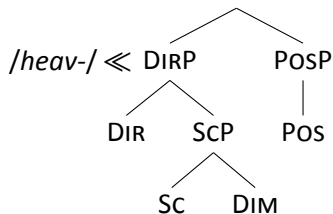
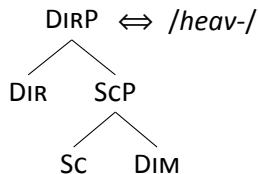
## Backtracking, L-root (*heav-y*)



(24) Merge F and

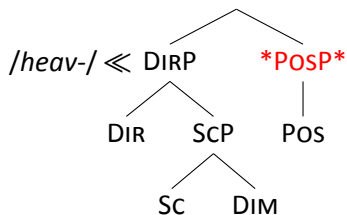
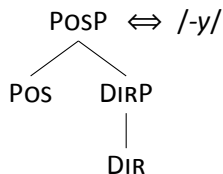
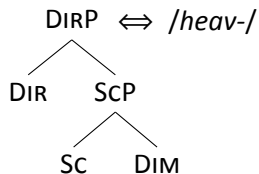
- a. Spell out FP
- b. If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
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## Backtracking, L-root (*heav-y*)



- (24) Merge F and
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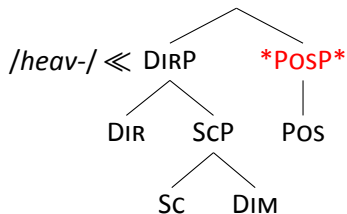
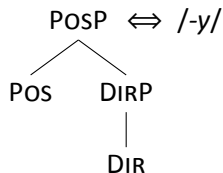
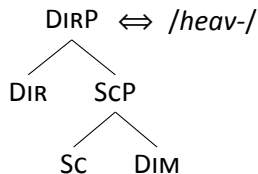
## Backtracking, L-root (*heav-y*)



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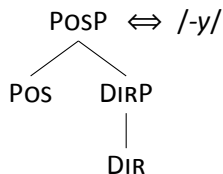
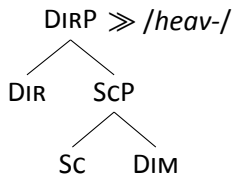
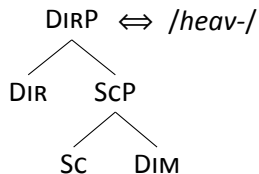
## Backtracking, L-root (*heav-y*)



*Backtracking:* When spellout fails, go back to the previous cycle, and try the next option for that cycle

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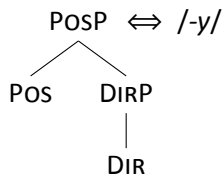
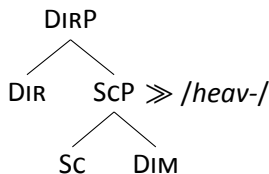
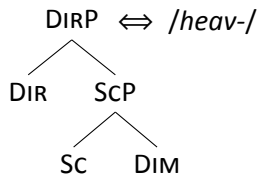
## Backtracking, L-root (*heav-y*)



*Backtracking:* When spellout fails, **go back to the previous cycle**, and try the next option for that cycle

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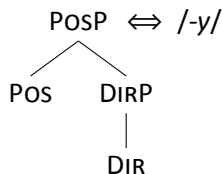
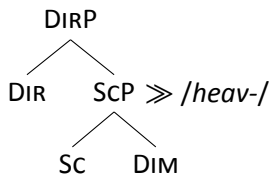
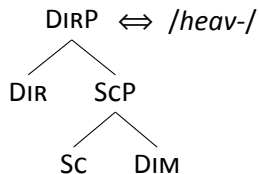
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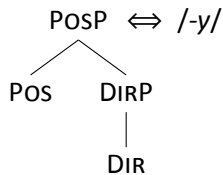
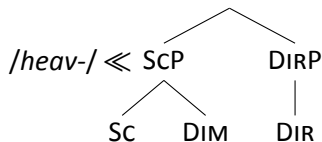
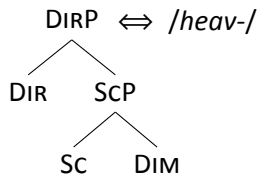
## Backtracking, L-root (*heav-y*)



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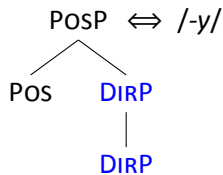
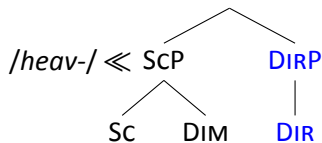
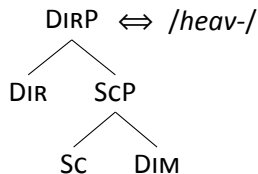
- (24) Merge F and
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## Backtracking, L-root (*heav-y*)



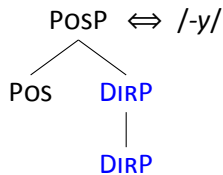
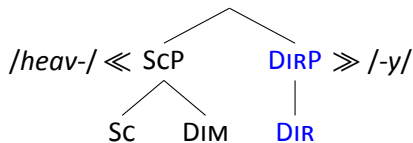
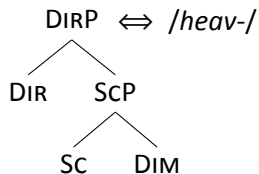
- (24) Merge F and
- Spell out FP
  - If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
  - If (b) fails, move the complement of F, and retry (a)**

## Backtracking, L-root (*heav-y*)



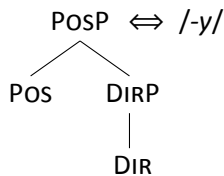
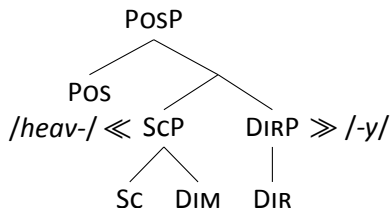
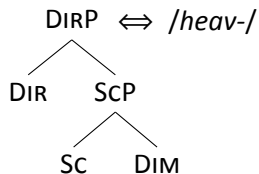
- (24) Merge F and
- Spell out FP
  - If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
  - If (b) fails, move the complement of F, and retry (a)

## Backtracking, L-root (*heav-y*)



- (24) Merge F and
- Spell out FP
  - If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
  - If (b) fails, move the complement of F, and retry (a)

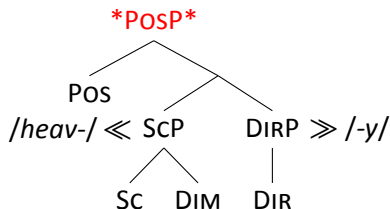
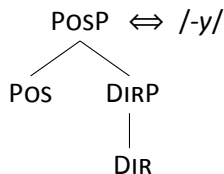
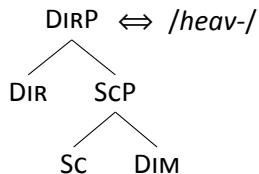
## Backtracking, L-root (*heav-y*)



- (24) **Merge F** and
- Spell out FP
  - If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
  - If (b) fails, move the complement of F, and retry (a)



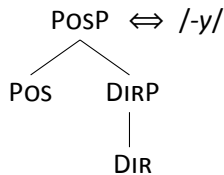
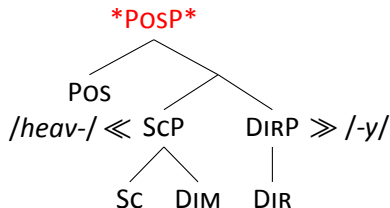
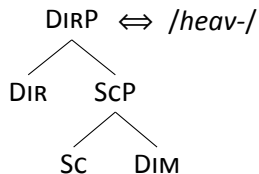
## Backtracking, L-root (*heav-y*)



(24) Merge F and

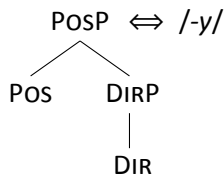
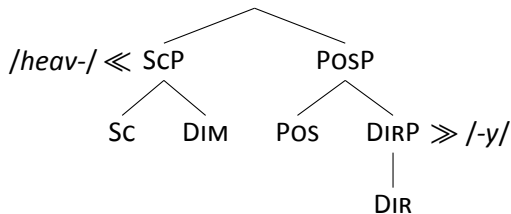
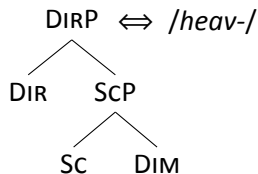
- Spell out FP
- If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
- If (b) fails, move the complement of F, and retry (a)

## Backtracking, L-root (*heav-y*)



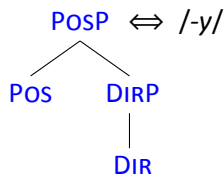
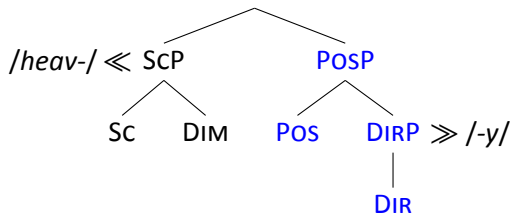
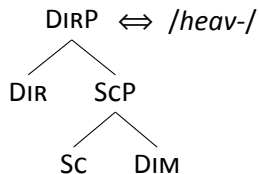
- (24) Merge F and
- Spell out FP
  - If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
  - If (b) fails, move the complement of F, and retry (a)

## Backtracking, L-root (*heav-y*)



- (24) Merge F and
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  - If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
  - If (b) fails, move the complement of F, and retry (a)

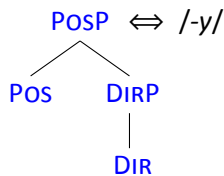
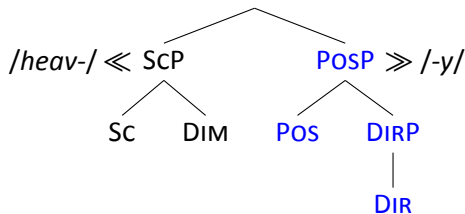
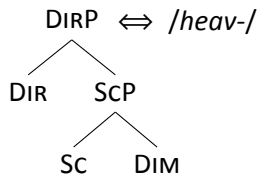
## Backtracking, L-root (*heav-y*)



(24) Merge F and

- Spell out FP
- If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
- If (b) fails, move the complement of F, and retry (a)

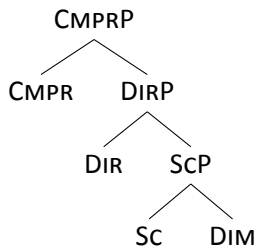
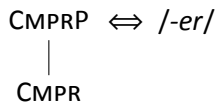
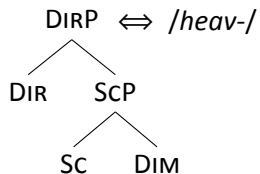
## Backtracking, L-root (*heav-y*)



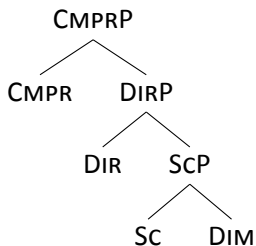
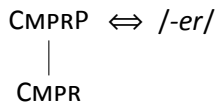
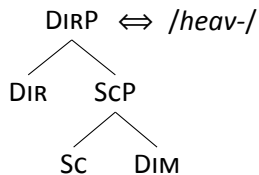
(24) Merge F and

- Spell out FP
- If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
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## The comparative of an L-root (*heav-y — heav-er*)

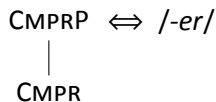
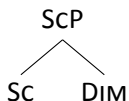
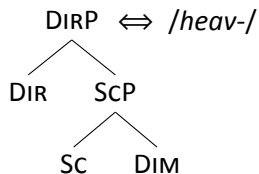


## The comparative of an L-root (*heav-y — heav-er*)



- (25) Merge F
- Spell out FP
  - If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
  - If (b) fails, move the complement of F, and retry (a)

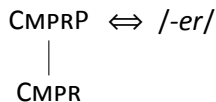
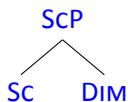
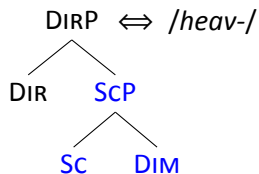
## The comparative of an L-root (*heav-y — heav-er*)



- (25) **Merge F**
- Spell out FP
  - If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
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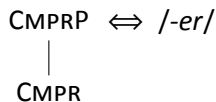
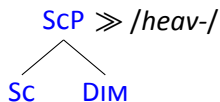
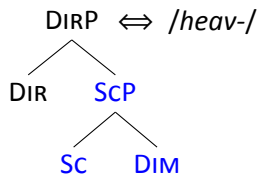
## The comparative of an L-root (*heav-y — heav-er*)



(25) Merge F

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- If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
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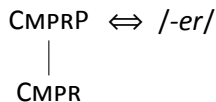
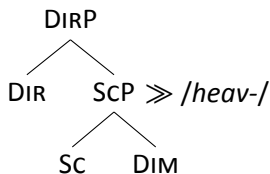
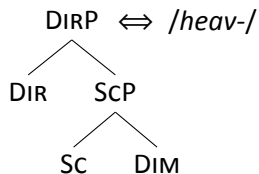
## The comparative of an L-root (*heav-y — heav-er*)



(25) Merge F

- a. **Spell out FP**
- b. If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
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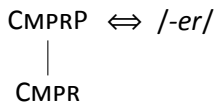
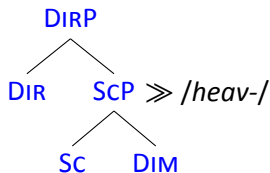
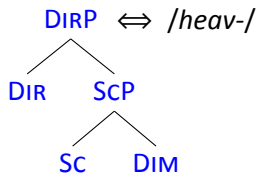
## The comparative of an L-root (*heav-y — heav-er*)



### (25) Merge F

- Spell out FP
- If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
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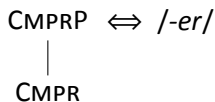
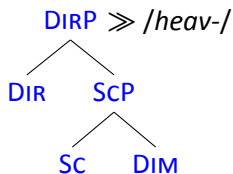
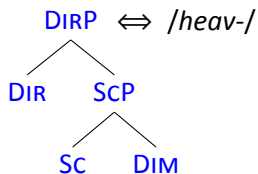
## The comparative of an L-root (*heav-y — heav-er*)



(25) Merge F

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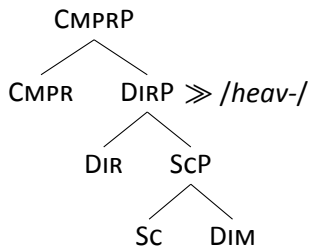
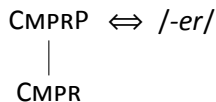
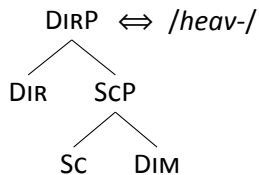
## The comparative of an L-root (*heav-y — heav-er*)



(25) Merge F

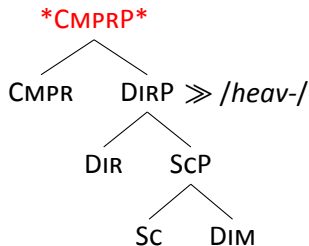
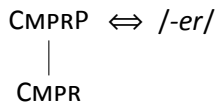
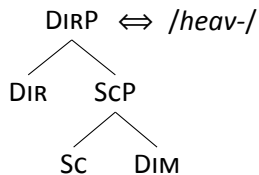
- a. **Spell out FP**
- b. If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
- c. If (b) fails, move the complement of F, and retry (a)

## The comparative of an L-root (*heav-y — heav-er*)



- (25) **Merge F**
- Spell out FP
  - If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
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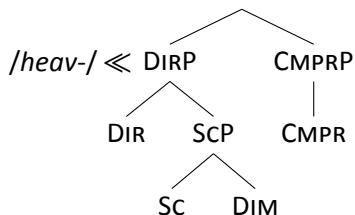
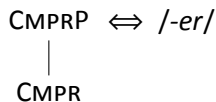
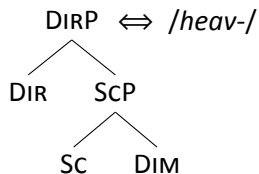
## The comparative of an L-root (*heav-y — heav-er*)



(25) Merge F

- Spell out FP
- If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
- If (b) fails, move the complement of F, and retry (a)

## The comparative of an L-root (*heav-y* — *heav-er*)



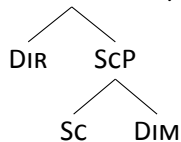
(25) Merge F

- a. Spell out FP
- b. If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
- c. **If (b) fails, move the complement of F, and retry (a)**

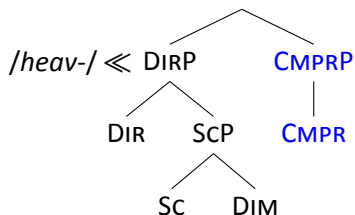


## The comparative of an L-root (*heav-y — heav-er*)

DIRP  $\Leftrightarrow$  /heav-/



CMPRP  $\Leftrightarrow$  /-er/

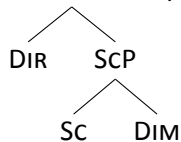


(25) Merge F

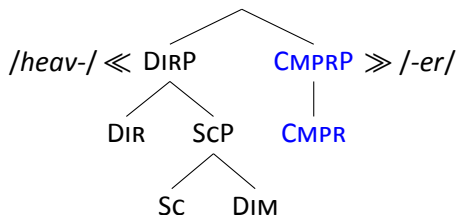
- Spell out FP
- If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
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## The comparative of an L-root (*heav-y — heav-er*)

DIRP  $\Leftrightarrow$  /heav-/



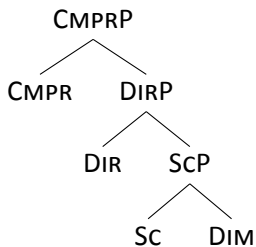
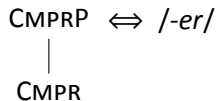
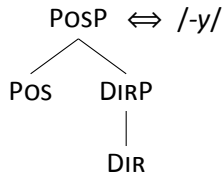
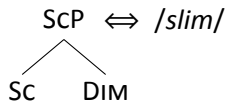
CMPRP  $\Leftrightarrow$  /-er/



(25) Merge F

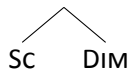
- Spell out FP
- If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
- If (b) fails, move the complement of F, and retry (a)

## The comparative of an S-root (*slim-y — slim-y-er*)

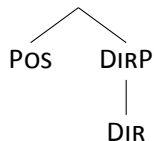


## The comparative of an S-root (*slim-y* — *slim-y-er*)

SCP  $\Leftrightarrow$  /*slim*/



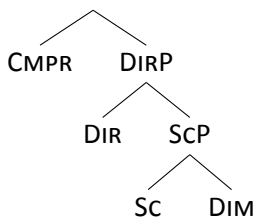
POSP  $\Leftrightarrow$  /-y/



CMPRP  $\Leftrightarrow$  /-er/



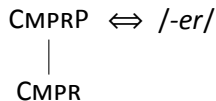
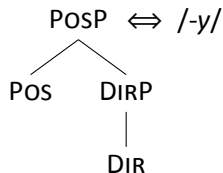
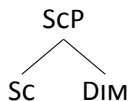
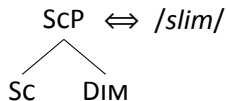
CMPRP



(26) Merge F and

- a. Spell out FP
- b. If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
- c. If (b) fails, move the complement of F, and retry (a)

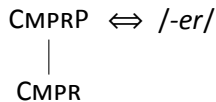
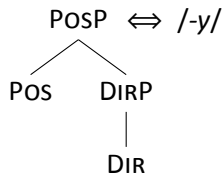
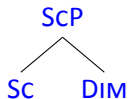
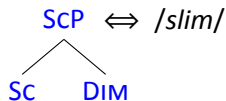
## The comparative of an S-root (*slim-y — slim-y-er*)



(26) Merge F and

- a. Spell out FP
- b. If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
- c. If (b) fails, move the complement of F, and retry (a)

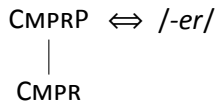
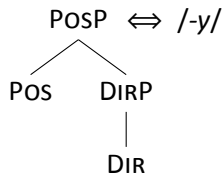
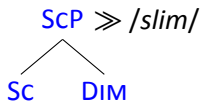
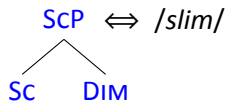
## The comparative of an S-root (*slim-y — slim-y-er*)



(26) Merge F and

- Spell out FP
- If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
- If (b) fails, move the complement of F, and retry (a)

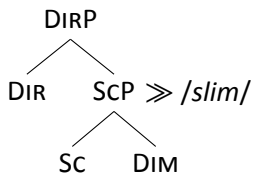
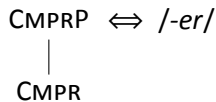
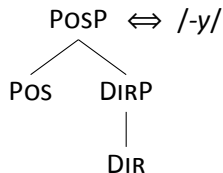
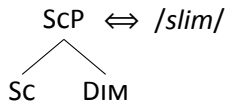
## The comparative of an S-root (*slim-y — slim-y-er*)



(26) Merge F and

- a. **Spell out FP**
- b. If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
- c. If (b) fails, move the complement of F, and retry (a)

## The comparative of an S-root (*slim-y* — *slim-y-er*)



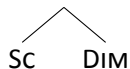
(26) **Merge F** and

- Spell out FP
- If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
- If (b) fails, move the complement of F, and retry (a)

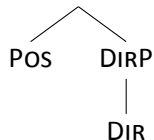


## The comparative of an S-root (*slim-y* — *slim-y-er*)

SCP  $\Leftrightarrow$  /*slim*/



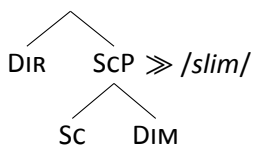
POSP  $\Leftrightarrow$  /-y/



CMPRP  $\Leftrightarrow$  /-er/



**\*DIRP\***



(26) Merge F and

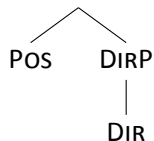
- Spell out FP
- If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
- If (b) fails, move the complement of F, and retry (a)

## The comparative of an S-root (*slim-y* — *slim-y-er*)

SCP  $\Leftrightarrow$  /*slim*/



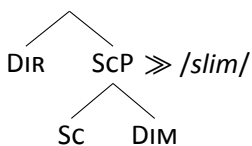
POSP  $\Leftrightarrow$  /-y/



CMPRP  $\Leftrightarrow$  /-er/



**\*DIRP\***



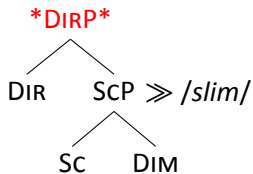
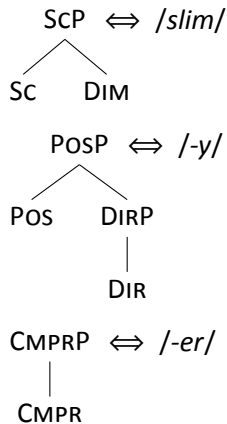
(26) Merge F and

a. Spell out FP

b. **If (a) fails, attempt movement of the spec of the complement of F, and retry (a)**

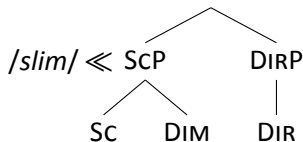
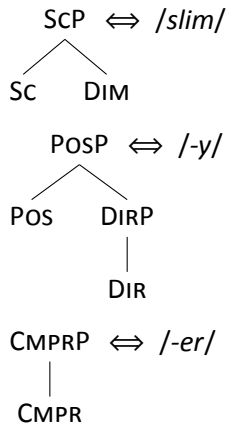
c. **If (b) fails, move the complement of F, and retry (a)**

## The comparative of an S-root (*slim-y* — *slim-y-er*)



- (26) Merge F and
- Spell out FP
  - If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
  - If (b) fails, move the complement of F, and retry (a)**

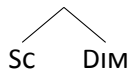
## The comparative of an S-root (*slim-y — slim-y-er*)



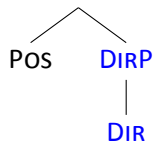
- (26) Merge F and
- Spell out FP
  - If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
  - If (b) fails, move the complement of F, and retry (a)

## The comparative of an S-root (*slim-y — slim-y-er*)

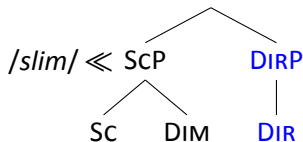
SCP  $\Leftrightarrow$  /*slim*/



POSP  $\Leftrightarrow$  /-y/



CMPRP  $\Leftrightarrow$  /-er/

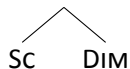


(26) Merge F and

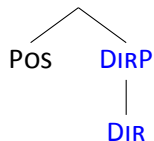
- Spell out FP
- If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
- If (b) fails, move the complement of F, and retry (a)

## The comparative of an S-root (*slim-y — slim-y-er*)

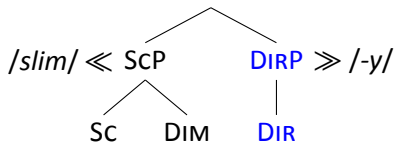
SCP  $\Leftrightarrow$  /*slim*/



POSP  $\Leftrightarrow$  /-y/



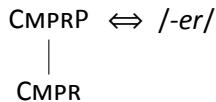
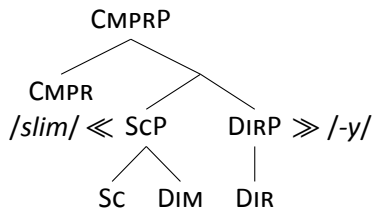
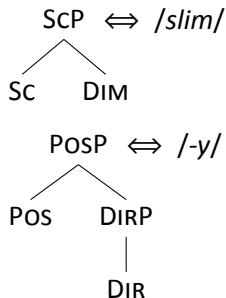
CMPRP  $\Leftrightarrow$  /-er/



(26) Merge F and

- Spell out FP
- If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
- If (b) fails, move the complement of F, and retry (a)

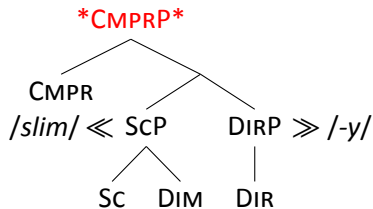
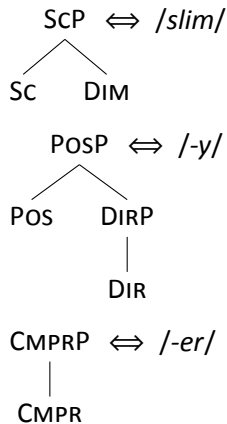
## The comparative of an S-root (*slim-y* — *slim-y-er*)



(26) Merge F and

- a. Spell out FP
- b. If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
- c. If (b) fails, move the complement of F, and retry (a)

## The comparative of an S-root (*slim-y* — *slim-y-er*)

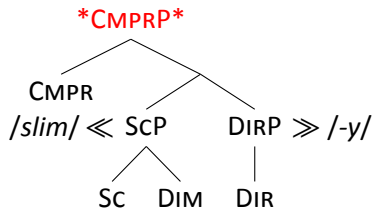
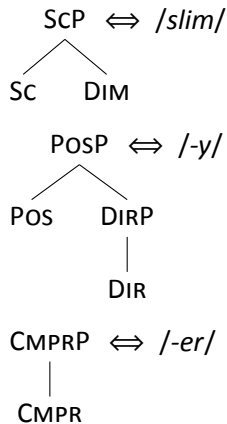


(26) Merge F and

- Spell out FP
- If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
- If (b) fails, move the complement of F, and retry (a)

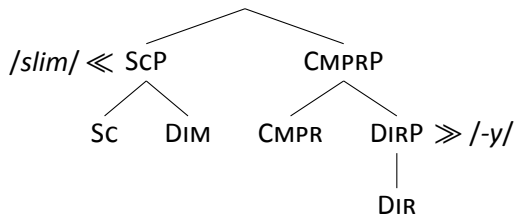
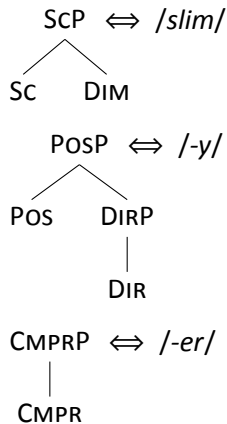


## The comparative of an S-root (*slim-y — slim-y-er*)



- (26) Merge F and
- Spell out FP
  - If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
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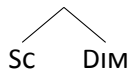
## The comparative of an S-root (*slim-y — slim-y-er*)



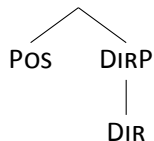
- (26) Merge F and
- Spell out FP
  - If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
  - If (b) fails, move the complement of F, and retry (a)

## The comparative of an S-root (*slim-y — slim-y-er*)

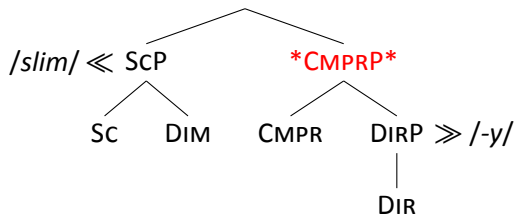
SCP  $\Leftrightarrow$  /*slim*/



POSP  $\Leftrightarrow$  /-y/



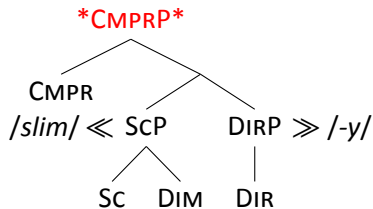
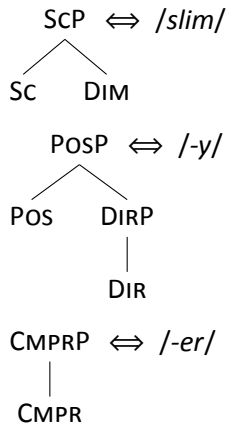
CMPRP  $\Leftrightarrow$  /-er/



(26) Merge F and

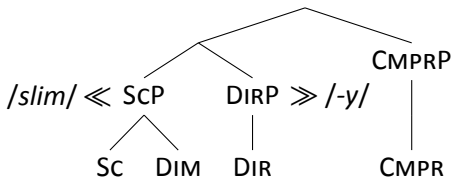
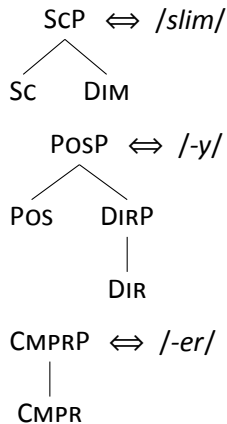
- Spell out FP
- If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
- If (b) fails, move the complement of F, and retry (a)

## The comparative of an S-root (*slim-y* — *slim-y-er*)



- (26) Merge F and
- Spell out FP
  - If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
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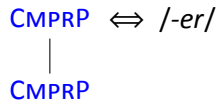
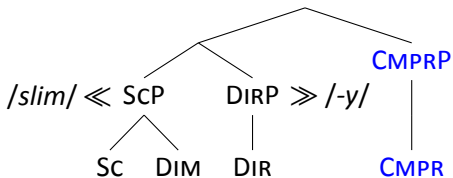
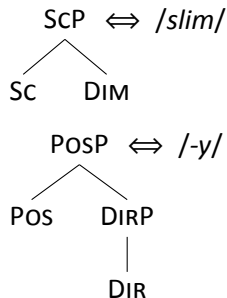
## The comparative of an S-root (*slim-y — slim-y-er*)



(26) Merge F and

- a. Spell out FP
- b. If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
- c. **If (b) fails, move the complement of F, and retry (a)**

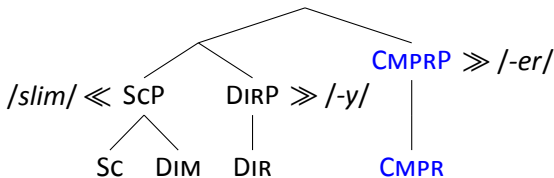
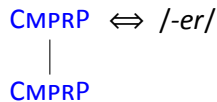
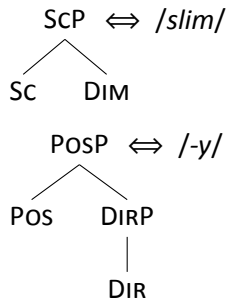
## The comparative of an S-root (*slim-y — slim-y-er*)



(26) Merge F and

- Spell out FP
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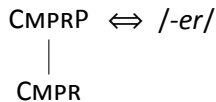
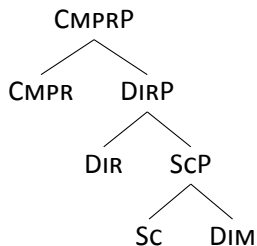
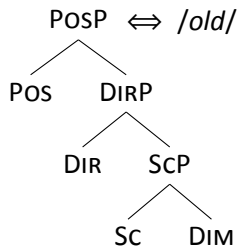
## The comparative of an S-root (*slim-y — slim-y-er*)



(26) Merge F and

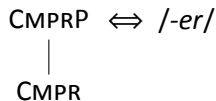
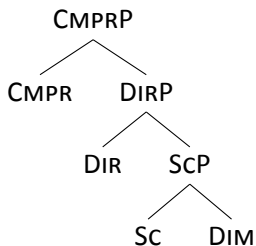
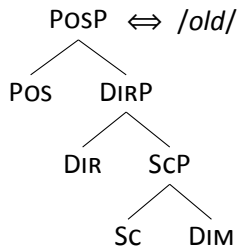
- Spell out FP
- If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
- If (b) fails, move the complement of F, and retry (a)

## The comparative of an XL-root (*old* — *old-er*)





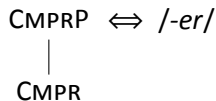
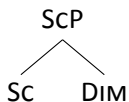
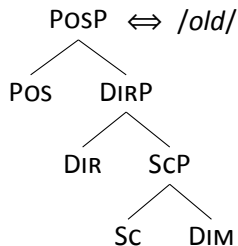
## The comparative of an XL-root (*old* — *old-er*)



(27) Merge F

- a. Spell out FP
- b. If (a) fails, attempt movement of the spec of the complement of F, and retry (a)
- c. If (b) fails, move the complement of F, and retry (a)

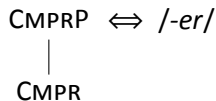
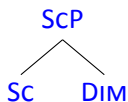
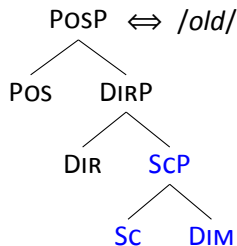
## The comparative of an XL-root (*old* — *old-er*)



### (27) Merge F

- Spell out FP
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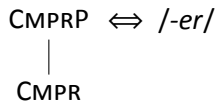
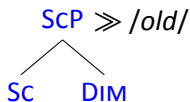
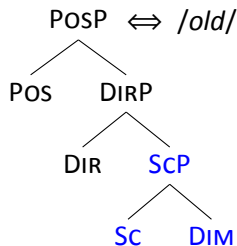
## The comparative of an XL-root (*old* — *old-er*)



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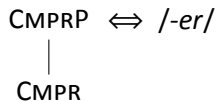
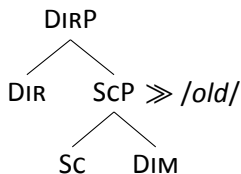
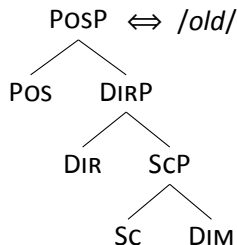
## The comparative of an XL-root (*old* — *old-er*)



(27) Merge F

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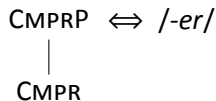
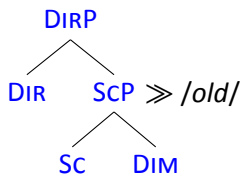
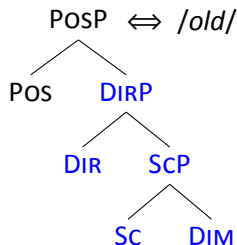
## The comparative of an XL-root (*old* — *old-er*)



### (27) Merge F

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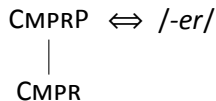
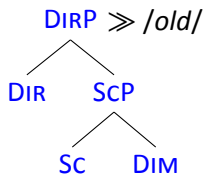
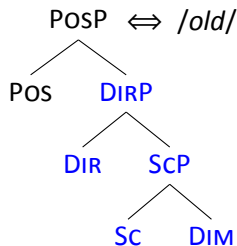
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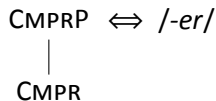
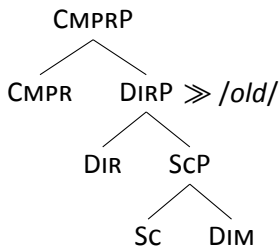
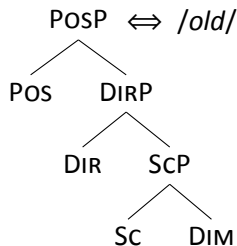
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(27) Merge F

- Spell out FP
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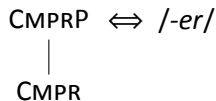
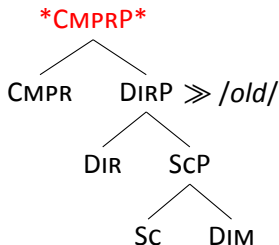
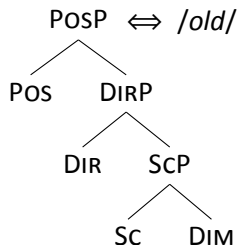


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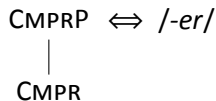
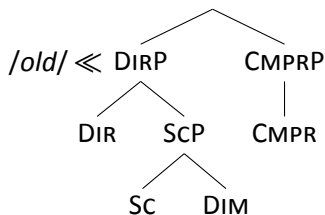
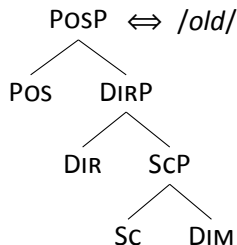
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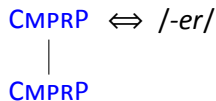
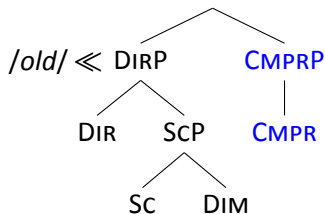
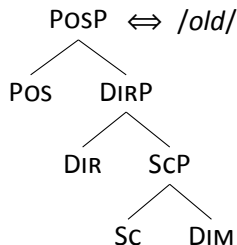
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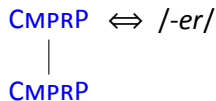
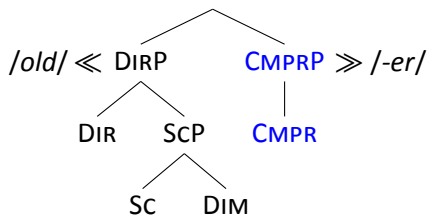
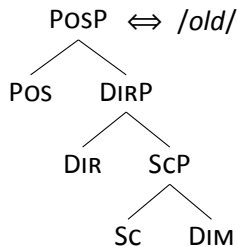
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# Summary

(28)

root	POS	CMPR
S-root	AUG	AUG

# Summary

(28)

root	POS	CMPR
S-root	AUG	AUG
L-root	AUG	—

# Summary

(28)

root	POS	CMPR
S-root	AUG	AUG
L-root	AUG	—
XL-root	—	—

Introduction

Comparatives: data

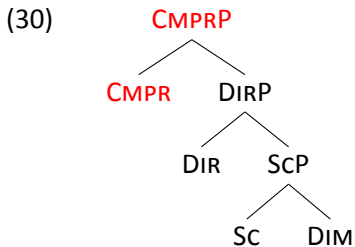
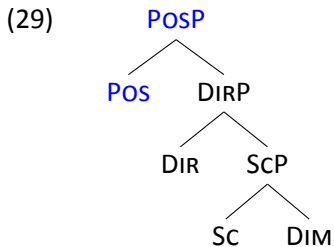
An informal analysis

The spellout algorithm Starke (2018)

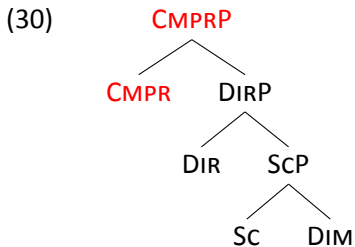
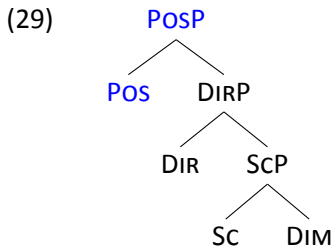
**How to be POS**



- ▶ In order to capture both containment and truncation, we need symmetric structures

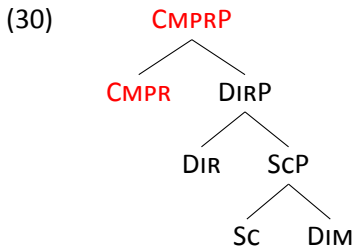
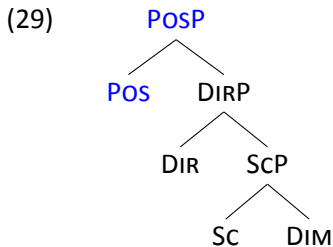


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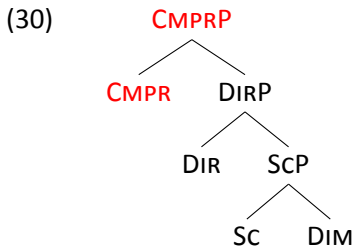
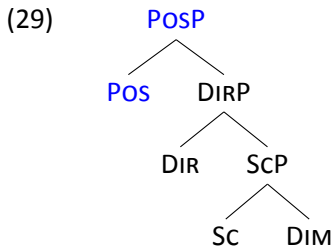
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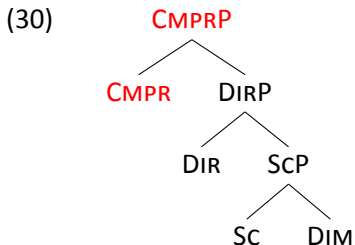
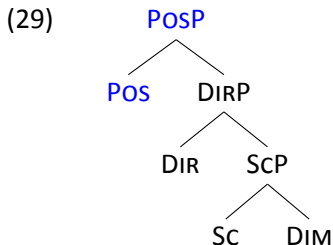
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- ▶ It is the syntactic heads that carry meaning, not the marker itself, which is ambiguous

# Comparatives in Egyptian Arabic (Grano & Davis 2018)

(31)

POS	CMPR	gloss
		'long'

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POS	CMPR	gloss
Tawiil	aTwal	'long'

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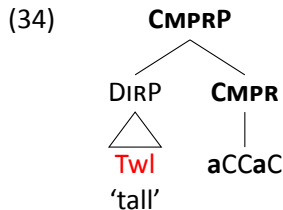
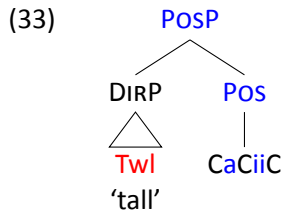
<b>CaCiC</b>	<b>aCCaC</b>	
POS	CMPR	gloss
<hr/>		
<b>TawiiL</b>	<b>aTwaL</b>	'long'

## CaCiiC as the spellout of POS

- (32) a. **CMPR** = **Twl** 'tall' + **aCCaC**  
b. **POS** = **Twl** 'tall' + **CaCiiC**

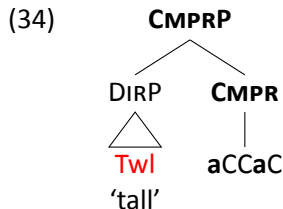
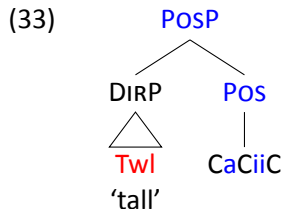
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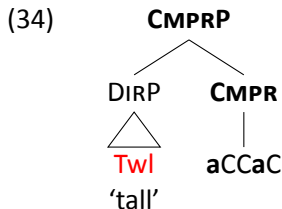
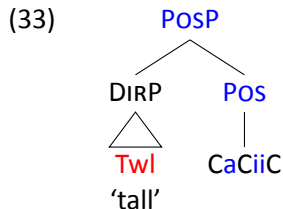
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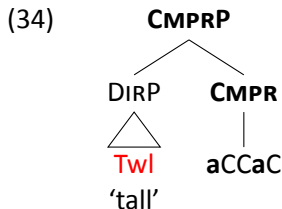
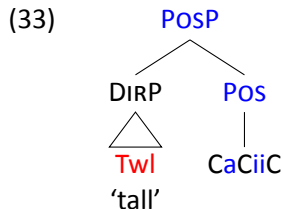


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- ▶ Grano and Davis: CaCiiC cannot mean POS
- ▶ Our conclusion: CaCiiC cannot mean *only* POS

# Conclusions

(36)

POSITIVE	COMPARATIVE		class
old	old	er	containment
slim-y	slim-y	er	containment
heav-y	heav	er	truncation



# Conclusions

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  - i Symmetric structures
  - ii Nanosyntax spellout (Starke 2018)
  - iii Differential root size (Caha et al. 2019)

Thank you!

## References

- Bobaljik, Jonathan. 2012. *Universals in comparative morphology*. Cambridge, MA: MIT Press.
- Caha, Pavel, Karen De Clercq & Guido Vanden Wyngaerd. 2019. The fine structure of the comparative. *Studia Linguistica* .
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- Starke, Michal. 2009. Nanosyntax: A short primer to a new approach to language. *Nordlyd* 36. 1–6.
- Starke, Michal. 2018. Complex left branches, spellout, and prefixes. In Lena Baunaz, Karen De Clercq, Liliane Haegeman & Eric Lander (eds.), *Exploring nanosyntax*, 239–249. Oxford: Oxford University Press.

# The inverse truncation pattern

(37)

POSITIVE	COMPARATIVE		class
old	old	er	containment
happ-y	happ	er	truncation
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cheek	cheek-y	er	inverse truncation

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(38) The lexicalisation of POSP(39)

DIM	SC	DIR	POS
<i>XL-root</i>			
<i>L-root</i>		aug	
<i>S-root</i>		aug	
<i>!Root</i>			

The lexicalisation of CMRP

DIM	SC	DIR	CMRP
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POSITIVE

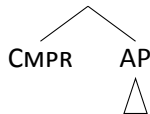
AP



...

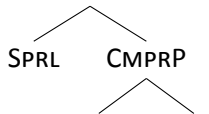
COMPARATIVE

CMPRP



SUPERLATIVE

SPRLP



# The precise content of the Containment Hypothesis

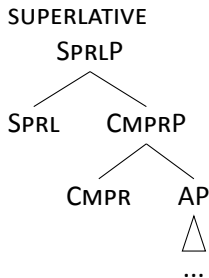
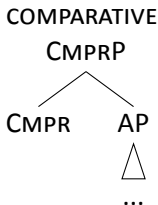
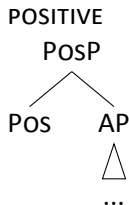
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## Suppletion in Slovak

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If an adjective has an AUG in the comparative, it does not show suppletion

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# Arbitrariness

(43) Slovak minimal pairs

POSITIVE			DIMINUTIVE			COMPARATIVE			gloss		
root	AUG	AGR	root	DIM	ADJ	AGR	root	AUG		CMPR	AGR
krot	k	ý					krot		š	í	'tame'
brit	k	ý					brit	k	ejš	í	'sharp' (humor)

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## (44) Czech minimal pairs

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root	AUG	AGR	root	DIM	AUG	AGR	root	ADJ	CMPR	AGR	
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břit	k	ý					břit		č	í	'sharp' (humor)

# Arbitrariness

## (43) Slovak minimal pairs

POSITIVE	DIMINUTIVE	COMPARATIVE	gloss
root AUG AGR	root DIM ADJ AGR	root AUG CMPR AGR	
krot k ý		krot š í	'tame'
brit k ý		brit k ejš í	'sharp' (humor)

## (44) Czech minimal pairs

POSITIVE	DIMINUTIVE	COMPARATIVE	gloss
root AUG AGR	root DIM AUG AGR	root ADJ CMPR AGR	
krot k ý		krot š í	'tame'
břit k ý		břit k š í	'sharp' (humor)
břit k ý		břit č í	'sharp' (humor)

## (45) Truncation vs. containment light

Slovak ľah-k-AGR

Czech leh-k-AGR



# Arbitrariness

## (43) Slovak minimal pairs

POSITIVE	DIMINUTIVE	COMPARATIVE	gloss
root AUG AGR	root DIM ADJ AGR	root AUG CMPR AGR	
krot k ý		krot š í	'tame'
brit k ý		brit k ejš í	'sharp' (humor)

## (44) Czech minimal pairs

POSITIVE	DIMINUTIVE	COMPARATIVE	gloss
root AUG AGR	root DIM AUG AGR	root ADJ CMPR AGR	
krot k ý		krot š í	'tame'
břit k ý		břit k š í	'sharp' (humor)
břit k ý		břit č í	'sharp' (humor)

## (45) Truncation vs. containment

	light	lighter	pattern
Slovak	lah-k-AGR	lah-š-AGR	truncation
Czech	leh-k-AGR		

# Arbitrariness

## (43) Slovak minimal pairs

POSITIVE	DIMINUTIVE	COMPARATIVE	gloss
root AUG AGR	root DIM ADJ AGR	root AUG CMPR AGR	
krot k ý		krot š í	'tame'
brit k ý		brit k ejš í	'sharp' (humor)

## (44) Czech minimal pairs

POSITIVE	DIMINUTIVE	COMPARATIVE	gloss
root AUG AGR	root DIM AUG AGR	root ADJ CMPR AGR	
krot k ý		krot š í	'tame'
břit k ý		břit k š í	'sharp' (humor)
břit k ý		břit č í	'sharp' (humor)

## (45) Truncation vs. containment

	light	lighter	pattern
Slovak	lah-k-AGR	lah-š-AGR	truncation
Czech	leh-k-AGR	leh-č-AGR	containment