

# A markedness paradox in the Russian declension

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Intro

Assumptions

Demonstratives

The paradox

Conclusions

(1) Declensions I and IV

	factory I (MASC)	place IV (NEUT)
NOM	zavod-∅	mest-o
ACC	zavod-∅	mest-o
GEN	zavod-a	mest-a
LOC	zavod-e	mest-e
DAT	zavod-u	mest-u
INS	zavod-om	mest-om

## (1) Declensions I and IV

	factory I (MASC)	place IV (NEUT)
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ACC	zavod-∅	mest-o
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Neutralisation of distinctions in marked cases

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Neutralisation of distinctions in marked cases

- ▶ Croft (2003:97): “If the marked value has a certain number of formal distinctions in an inflectional paradigm, then the unmarked value will have at least as many formal distinctions in the same paradigm.”

(1) Declensions I and IV

	factory I (MASC)	place IV (NEUT)
NOM	zavod-Ø	mest-o
ACC	zavod-Ø	mest-o
GEN	zavod-a	mest-a
LOC	zavod-e	mest-e
DAT	zavod-u	mest-u
INS	zavod-om	mest-om

Neutralisation of distinctions in marked cases

- ▶ Croft (2003:97): "If the marked value has a certain number of formal distinctions in an inflectional paradigm, then the unmarked value will have at least as many formal distinctions in the same paradigm."

(2) Impoverishment rule: MASC → Ø / \_ OBL

a. [CLASS, MASC, OBL] → [CLASS, OBL]

- (3) Impoverishment rule: MASC →  $\emptyset$  /  $_$  OBL
- a. [CLASS, MASC, OBL] → [CLASS, OBL]

(4) Demonstrative declension

	this (MASC)	this (NEUT)
NOM	etot-∅	et-o
ACC	etot-∅	et-o
GEN	et-o-go	et-o-go
LOC	et-o-m	et-o-m
DAT	et-o-mu	et-o-mu
INS	et-im	et-im

# A paradox

(5) Neuter

	this (NEUT)	place (NEUT)
NOM	et-o	mest-o
ACC	et-o	mest-o
GEN	et-o-go	mest-a
LOC	et-o-m	mest-e
DAT	et-o-mu	mest-u
INS	et-im	mest-om

# A paradox

(6) Masculine

	this (NEUT)	factory (MASC)
NOM	etot-Ø	zavod-Ø
ACC	etot-Ø	zavod-Ø
GEN	et-o-go	zavod-a
LOC	et-o-m	zavod-e
DAT	et-o-mu	zavod-u
INS	et-im	zavod-om

# A paradox

(6) Masculine

	this (NEUT)	factory (MASC)
NOM	etot-Ø	zavod-Ø
ACC	etot-Ø	zavod-Ø
GEN	et-o-go	zavod-a
LOC	et-o-m	zavod-e
DAT	et-o-mu	zavod-u
INS	et-im	zavod-om

(7) a. turok

# A paradox

(6) Masculine

	this (NEUT)	factory (MASC)
NOM	etot-Ø	zavod-Ø
ACC	etot-Ø	zavod-Ø
GEN	et-o-go	zavod-a
LOC	et-o-m	zavod-e
DAT	et-o-mu	zavod-u
INS	et-im	zavod-om

- (7) a. turok  
b. turØk-a

# A paradox

(6) Masculine

	this (NEUT)	factory (MASC)
NOM	etot-Ø	zavod-Ø
ACC	etot-Ø	zavod-Ø
GEN	et-o-go	zavod-a
LOC	et-o-m	zavod-e
DAT	et-o-mu	zavod-u
INS	et-im	zavod-om

(7)

- a. turok
- b. turØk-a
- c. etØ-ot

# A paradox

(8) Feminine

	this (FEM)	wife (MASC)
NOM	et-a	žen-a
ACC	et-u	žen-u
GEN	et-o-j	žen-y
LOC	et-o-j	žen-e
DAT	et-o-j	žen-e
INS	et-o-j(u)	žen-o-j(u)

How can we model this?

- ▶ Unification via backtracking interacting with root size (nouns)
- ▶ Unification via backtracking interacting with gaps (demonstratives)
- ▶ Diversification by root shape interacting with the subextracting algorithm

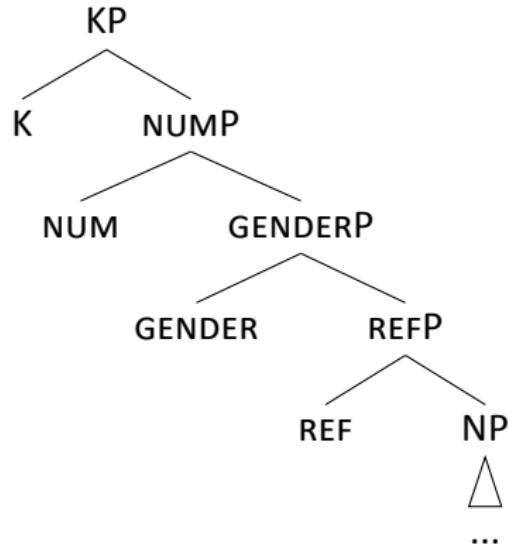
Intro

## Assumptions

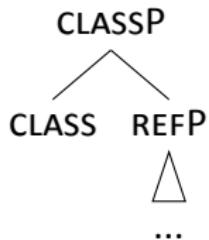
Demonstratives

The paradox

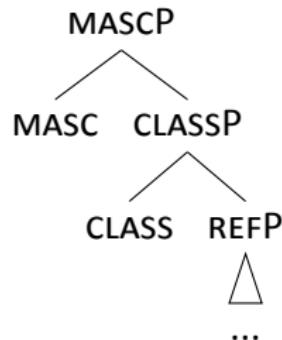
Conclusions



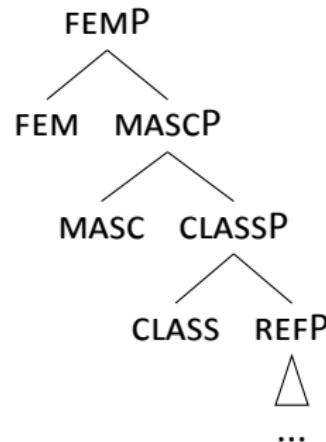
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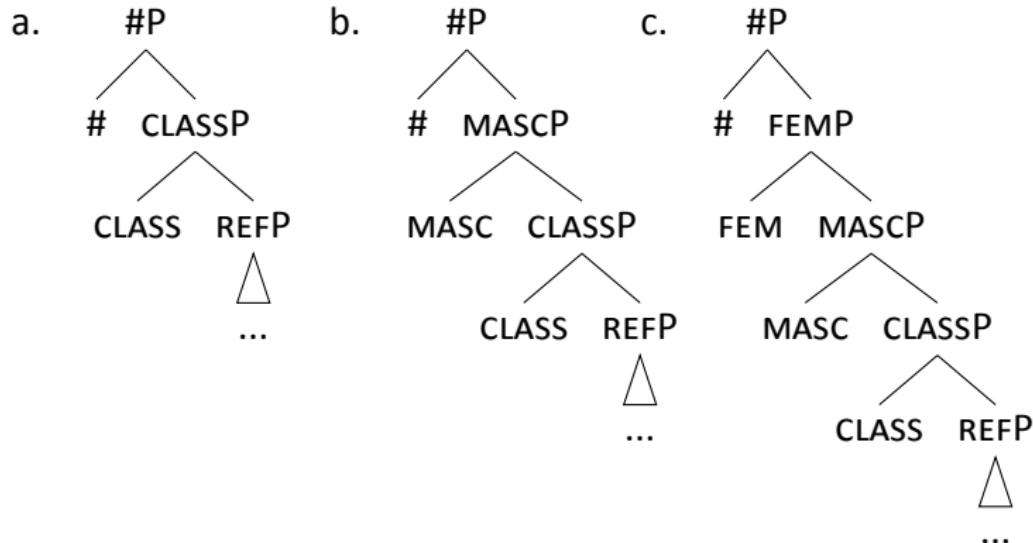


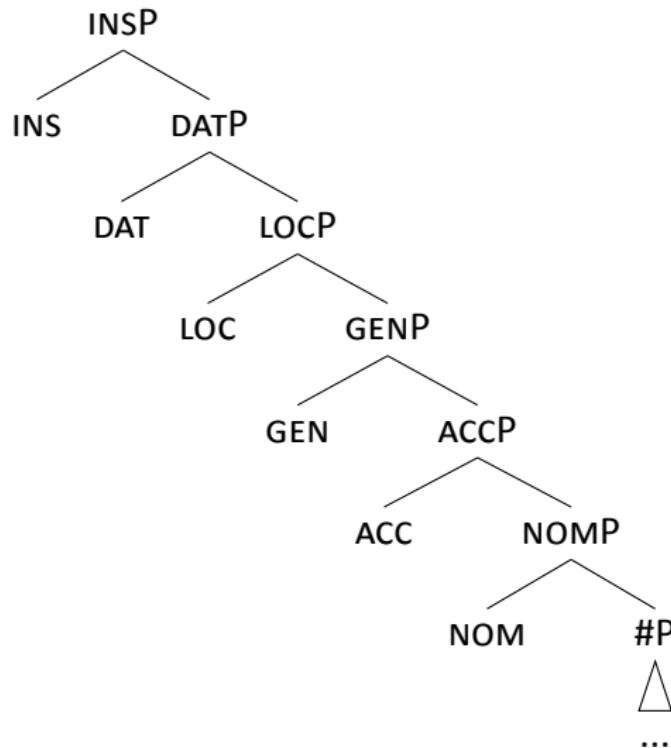
b. MASCULINE

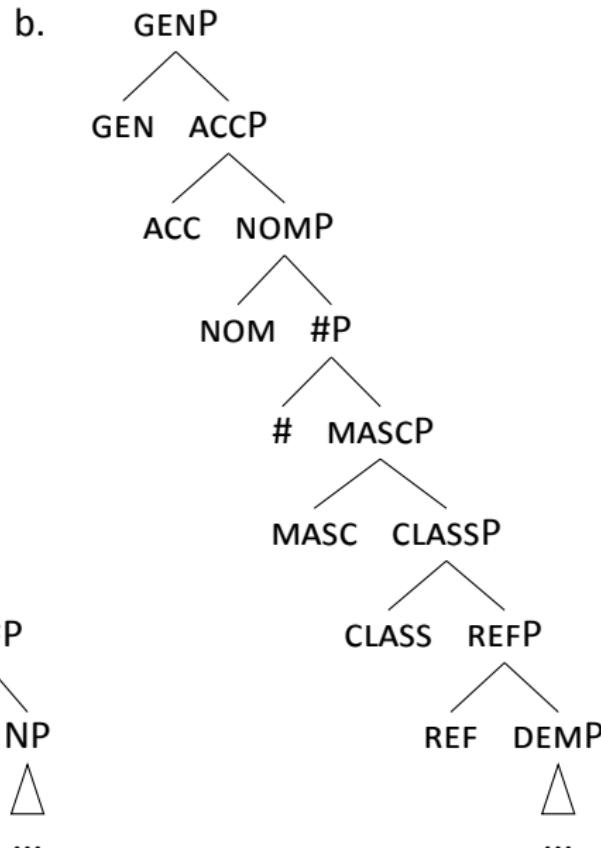
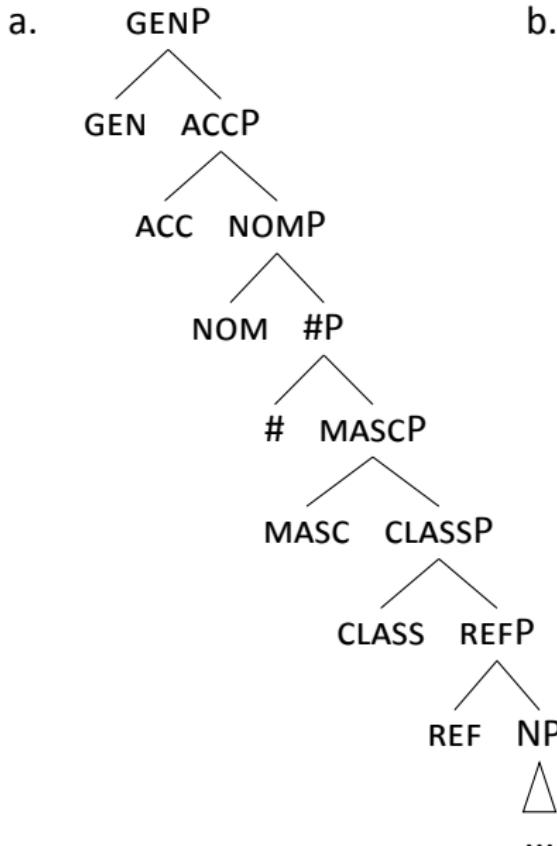


c. FEMININE









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- ▶ Unification via backtracking interacting with gaps

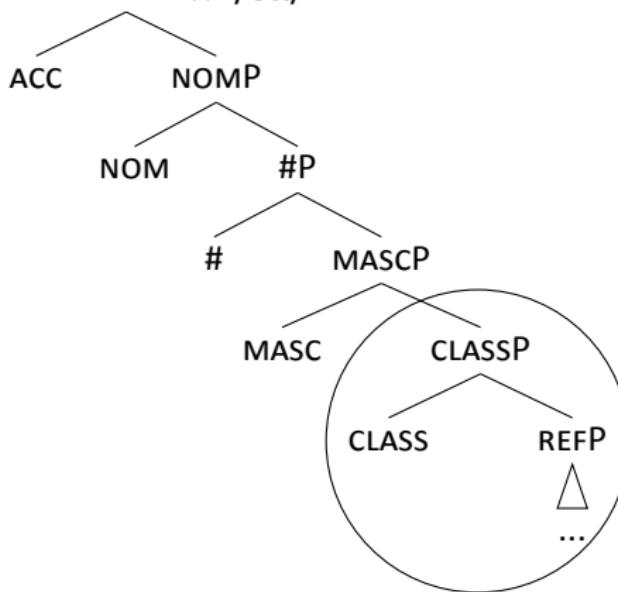
(9) Demonstrative declension

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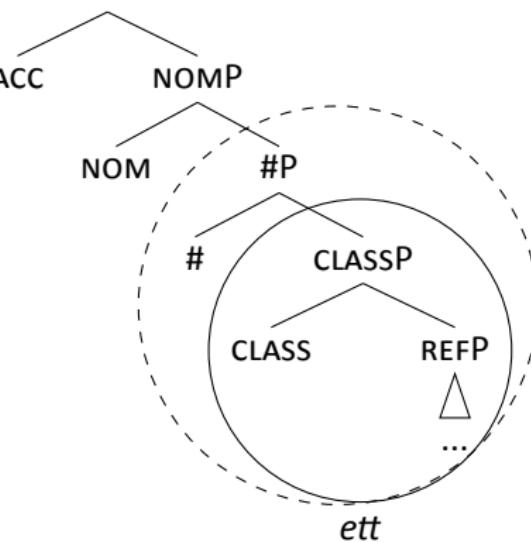
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ACC				etot			

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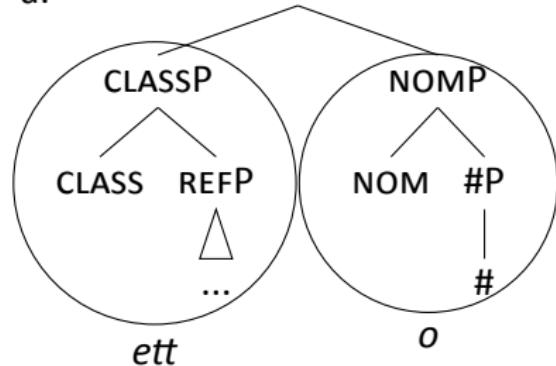
a. ACCP  $\Leftrightarrow$  /étt/



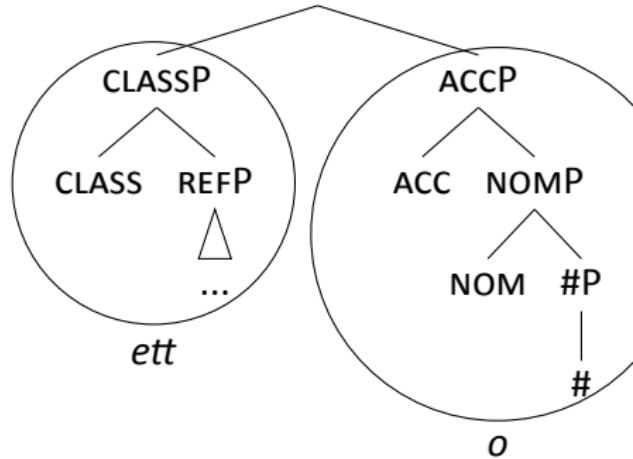
b. ACCP



a.



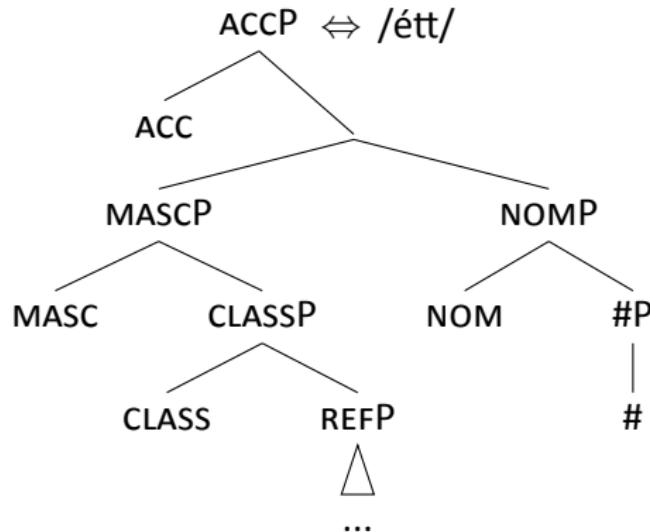
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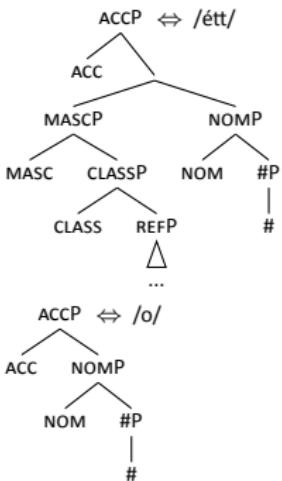
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ACC							o				
GEN						o	go				
LOC						o	m				
DAT						o	mu				
INS								im			

	Dem	REF	CLASS	MASC	#	NOM	ACC	GEN	LOC	DAT	INS
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ACC							etot				
GEN						o	go				
LOC						o	m				
DAT						o	mu				
INS								im			

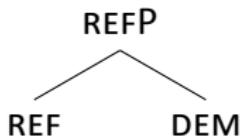
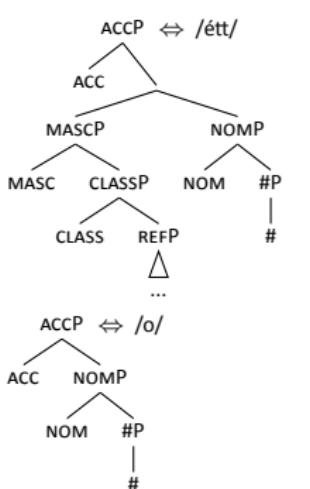
- ▶ The syncretism is a matter of the root, the endings lexicalise the same features
  - i Why does *ett* not lexicalise # in the masculine?
  - ii What about *-im*



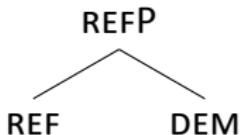
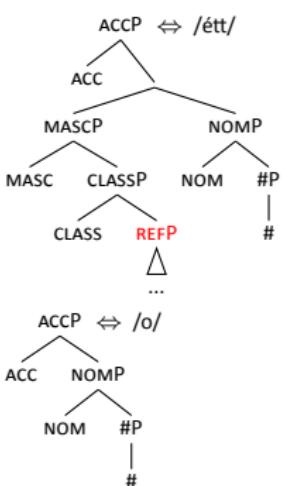
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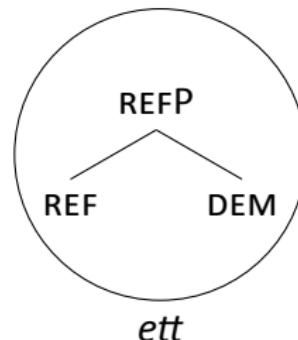
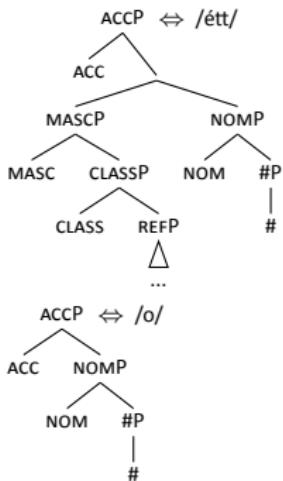
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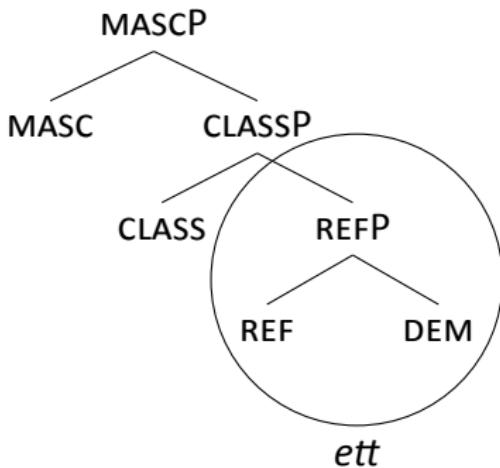
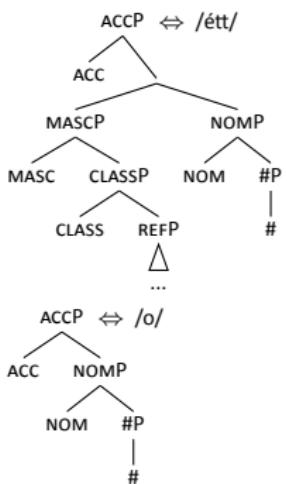
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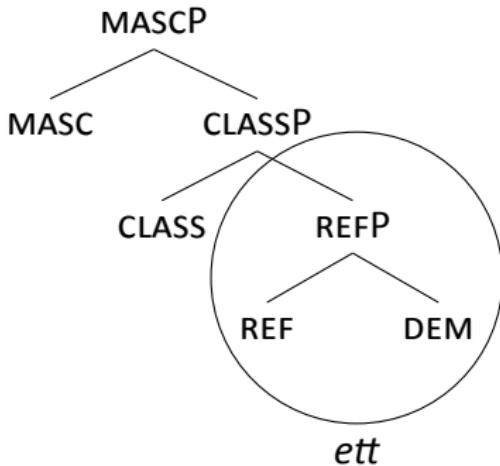
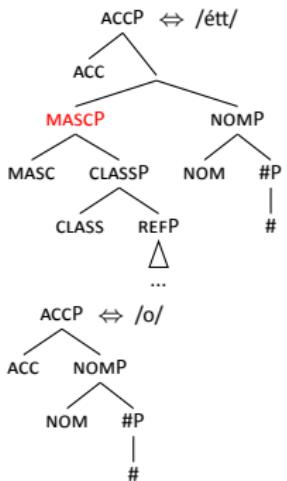
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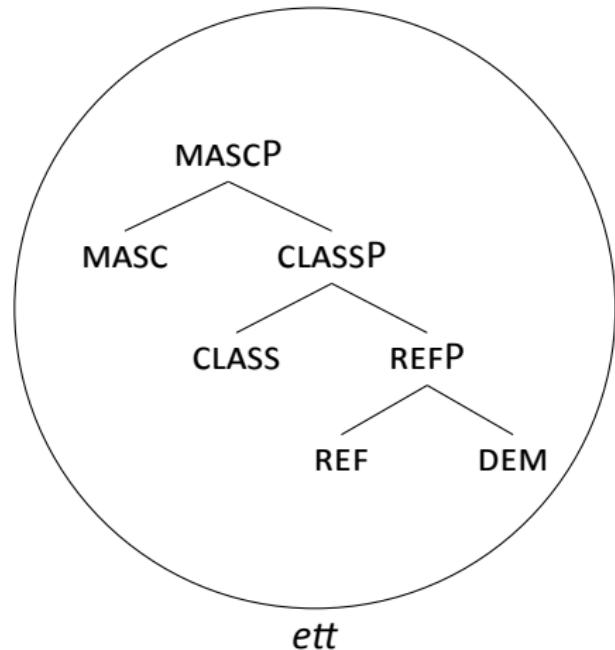
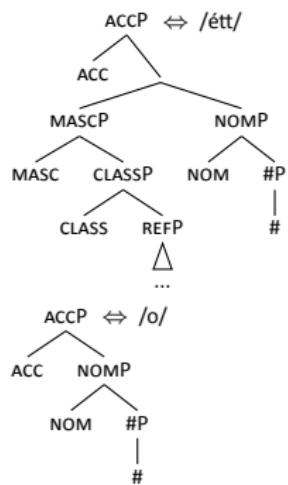
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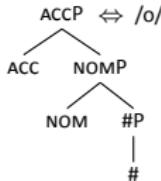
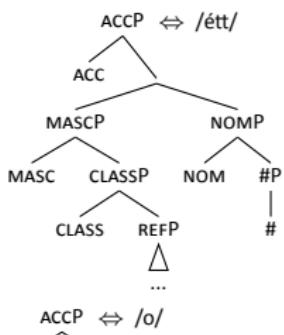
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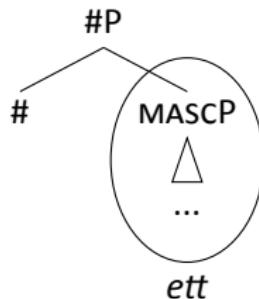
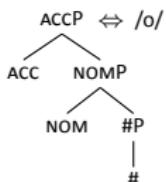
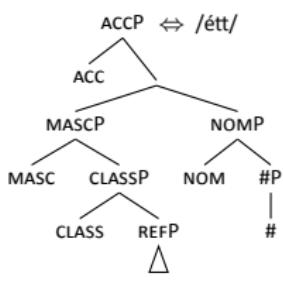
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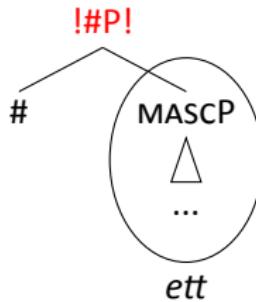
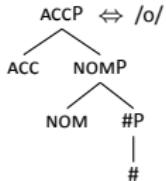
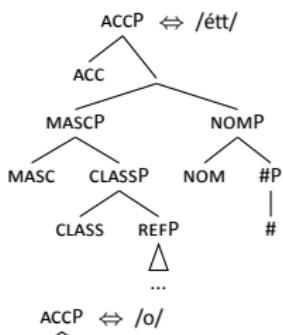
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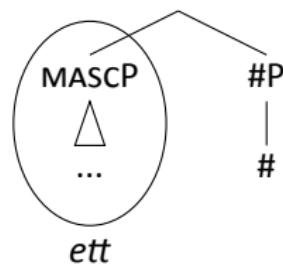
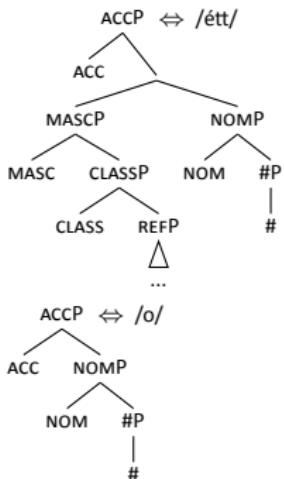
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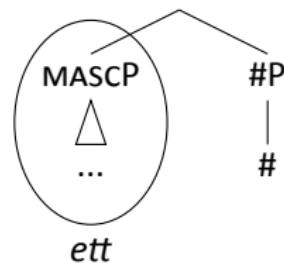
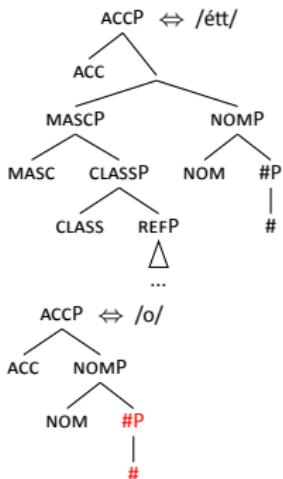
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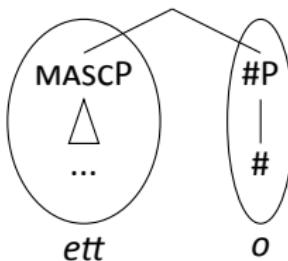
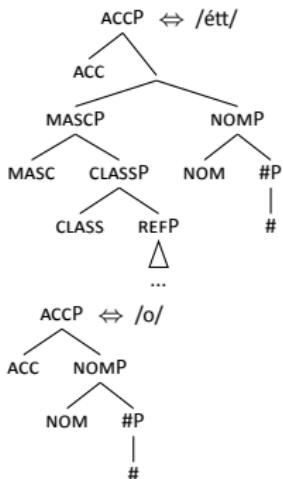
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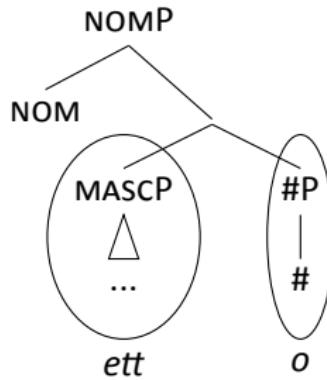
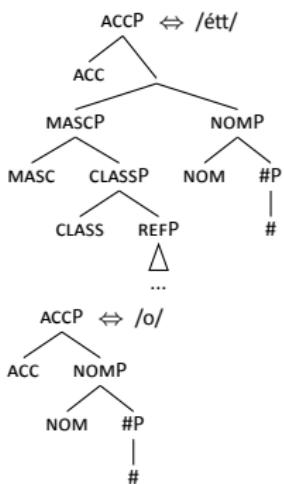
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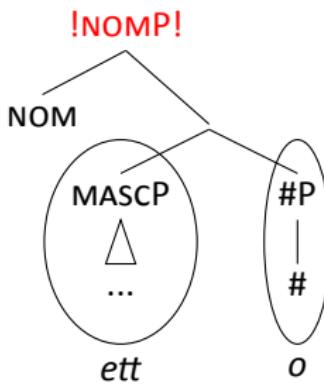
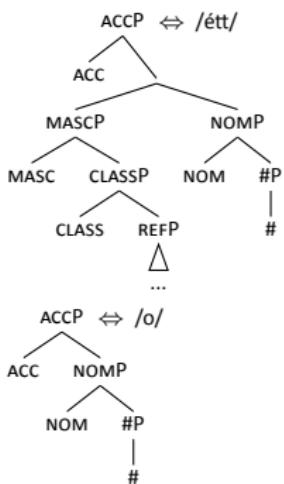
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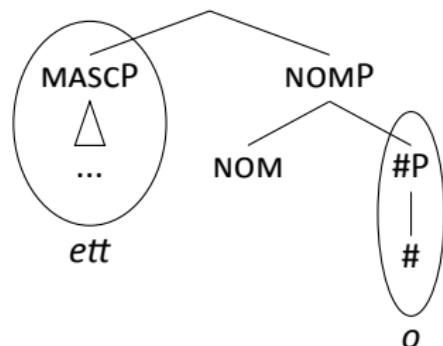
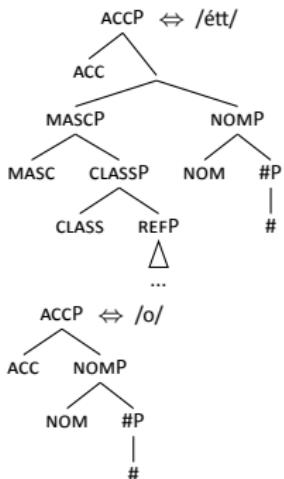
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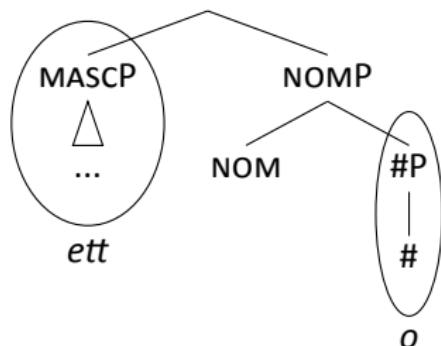
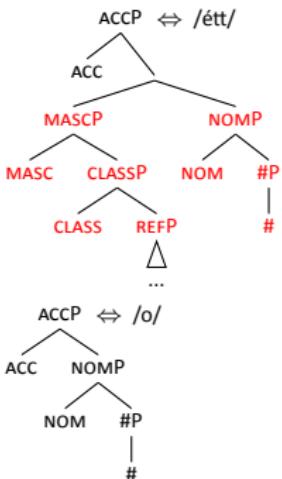
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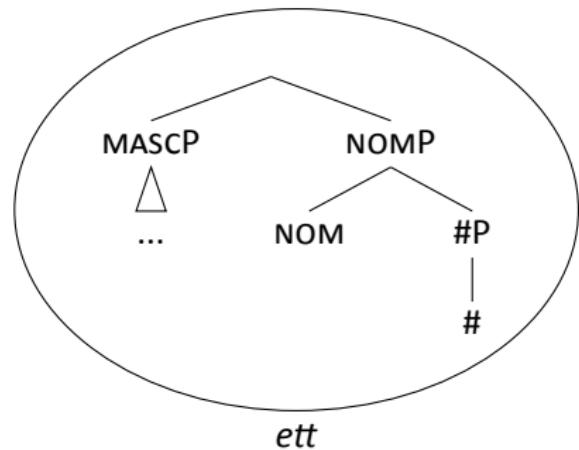
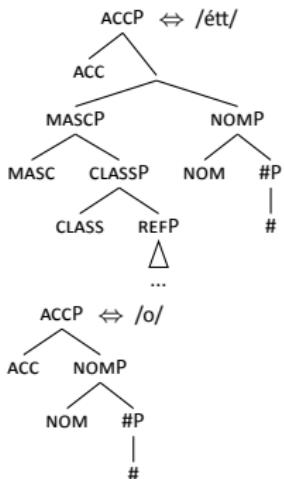
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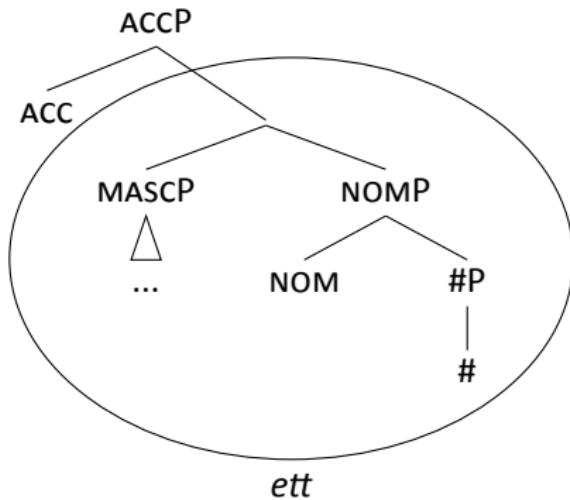
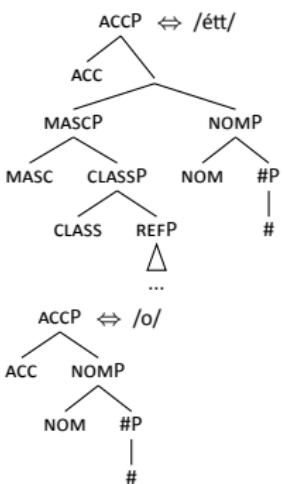
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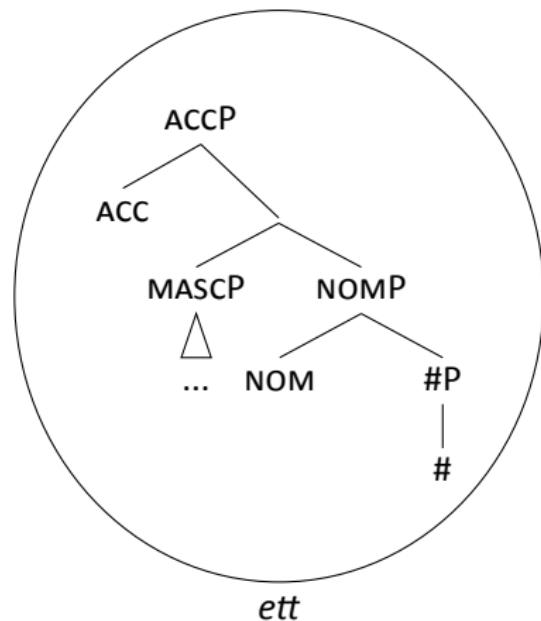
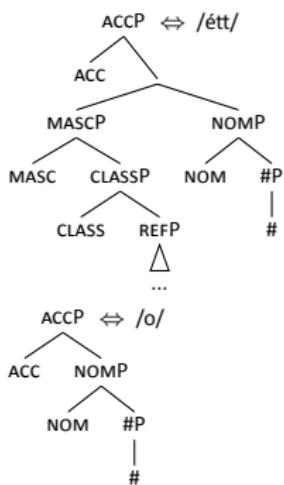
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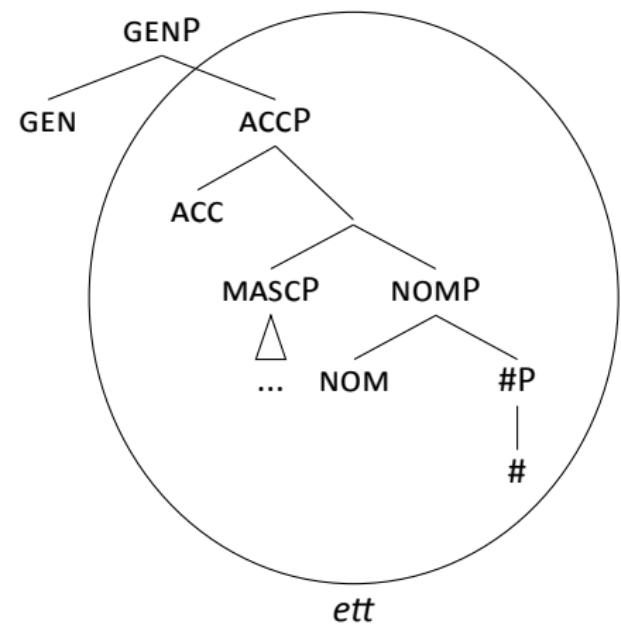
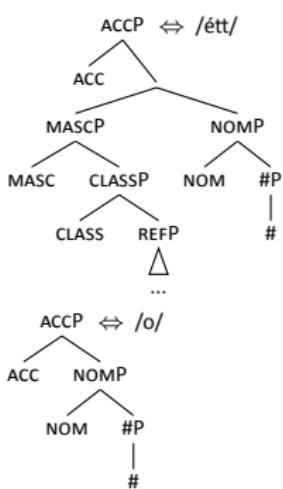
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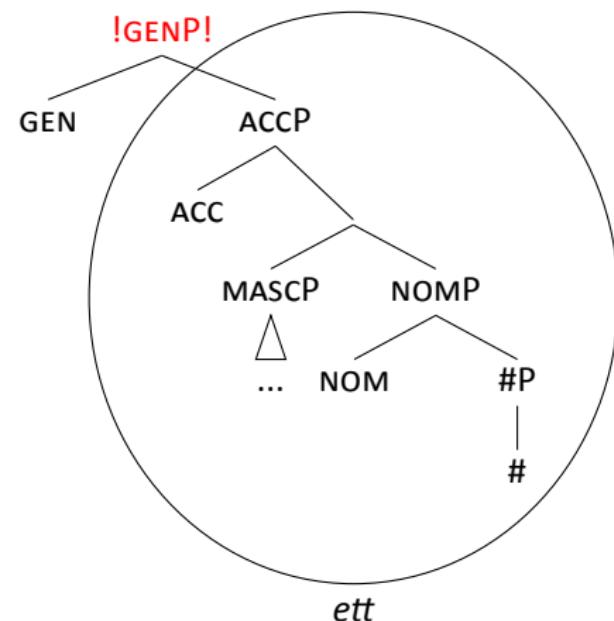
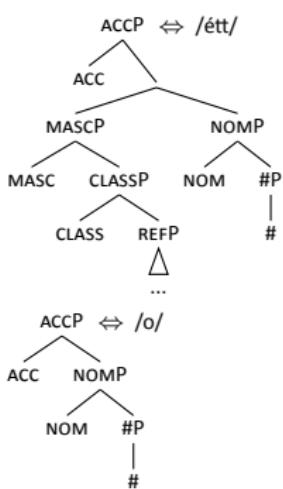
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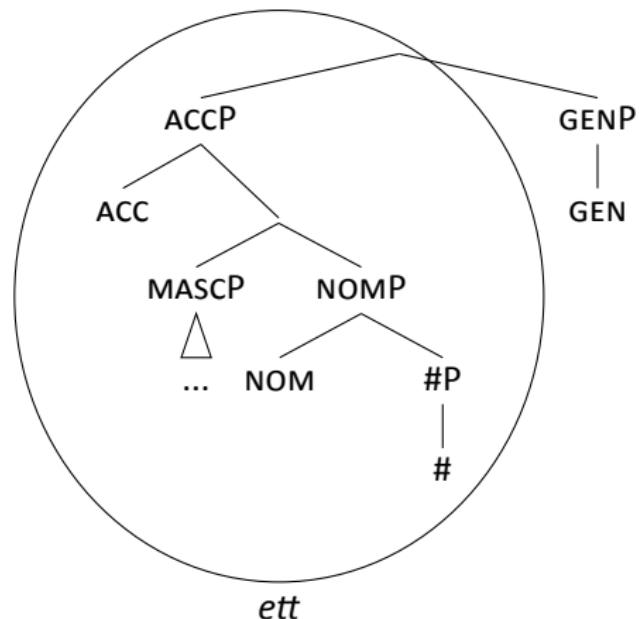
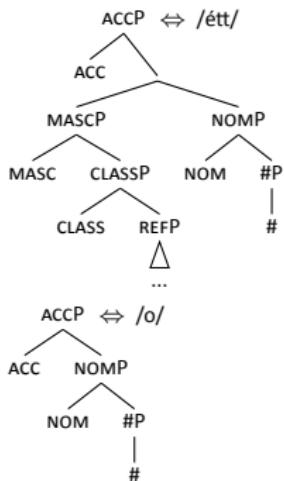
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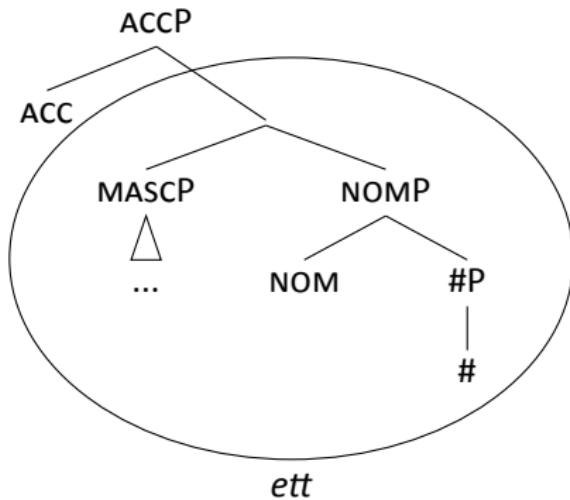
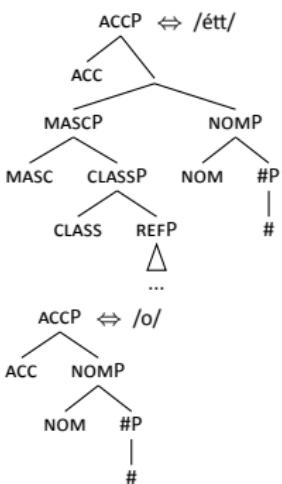
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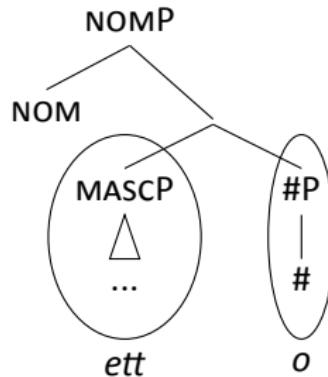
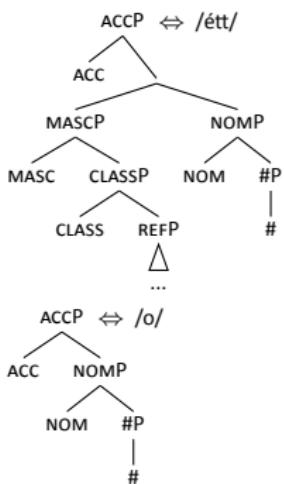
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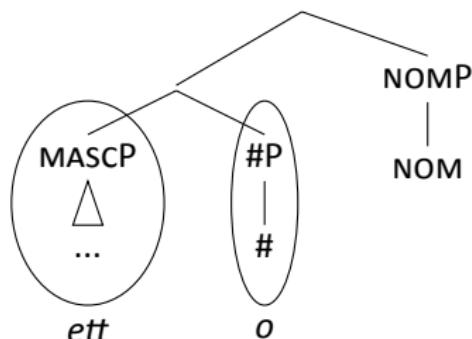
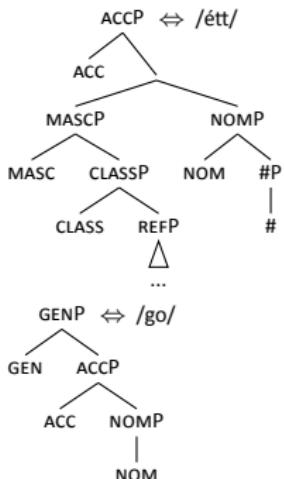
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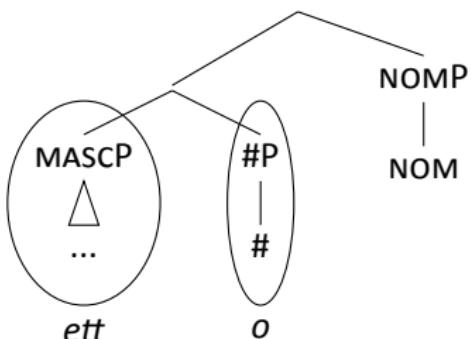
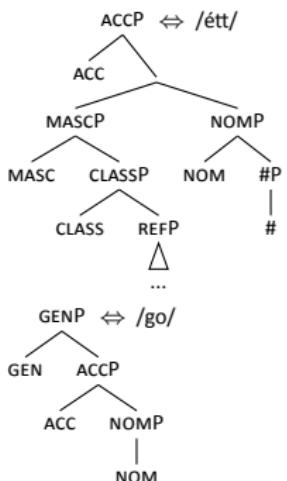
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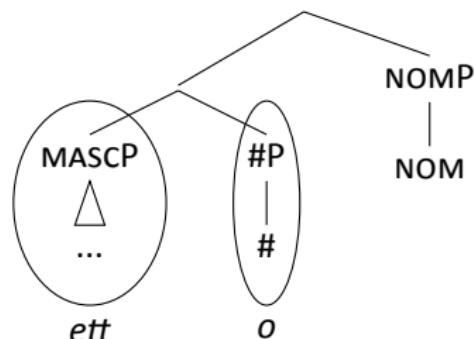
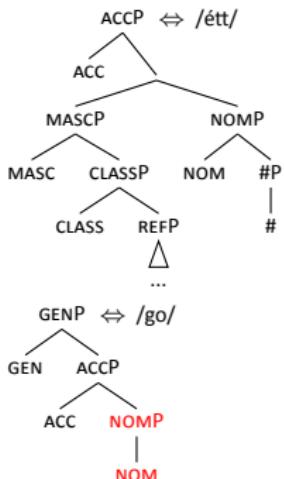
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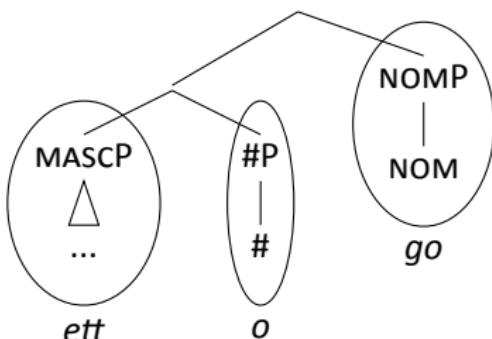
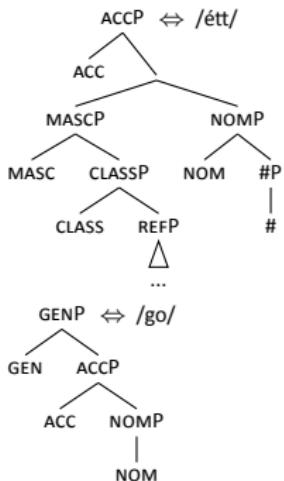
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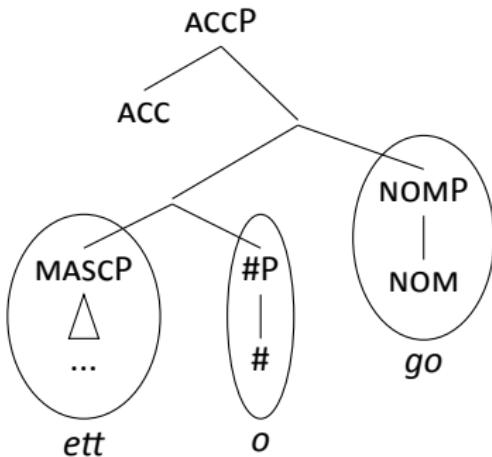
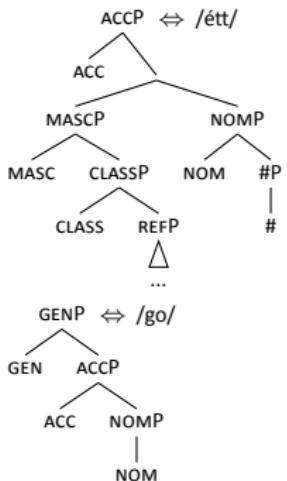
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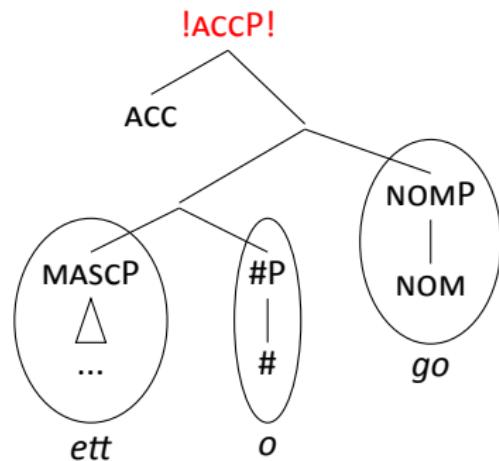
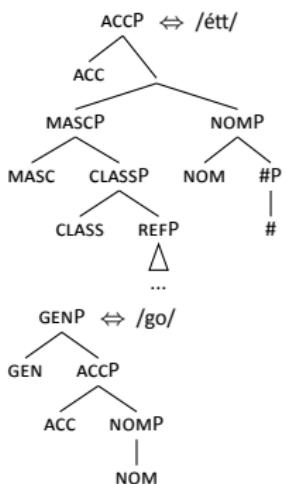
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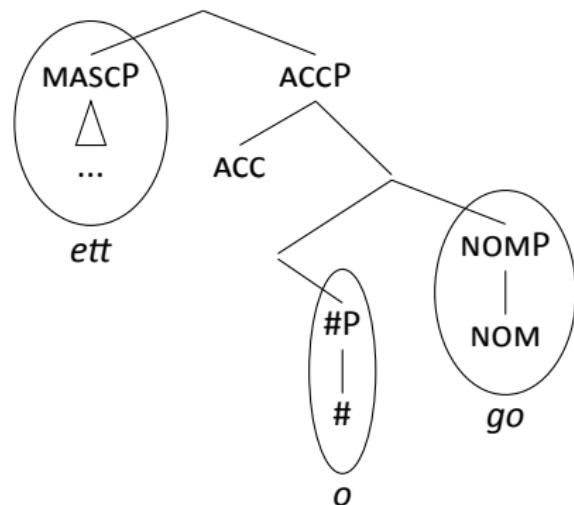
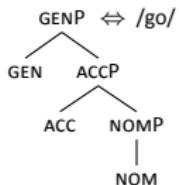
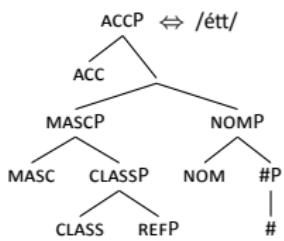
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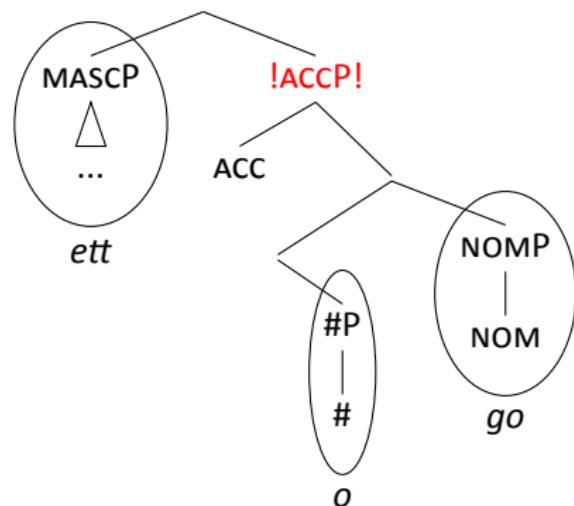
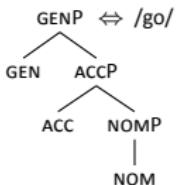
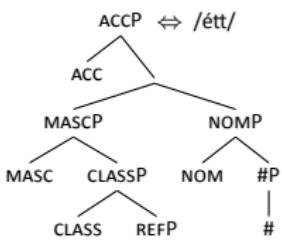
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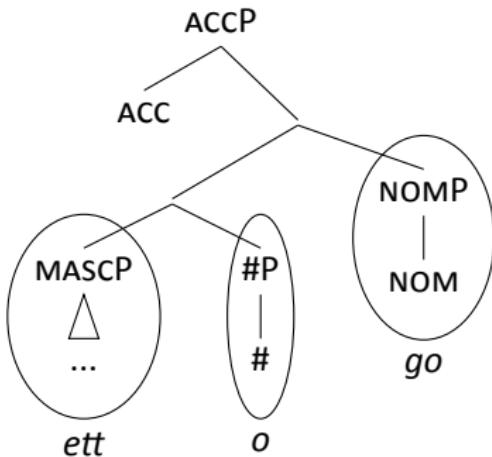
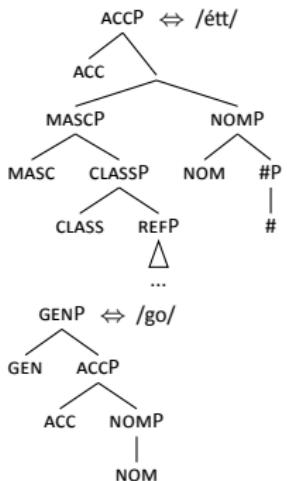
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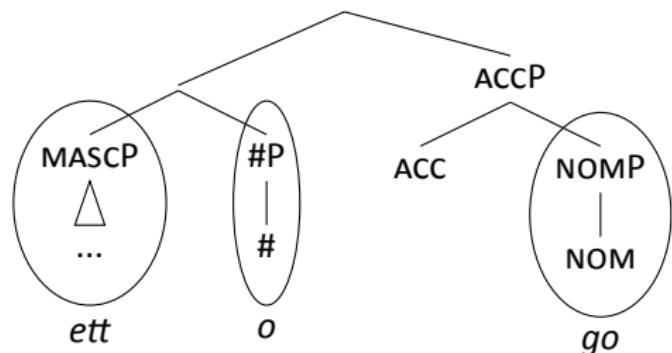
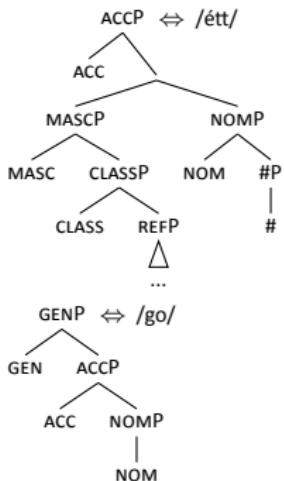
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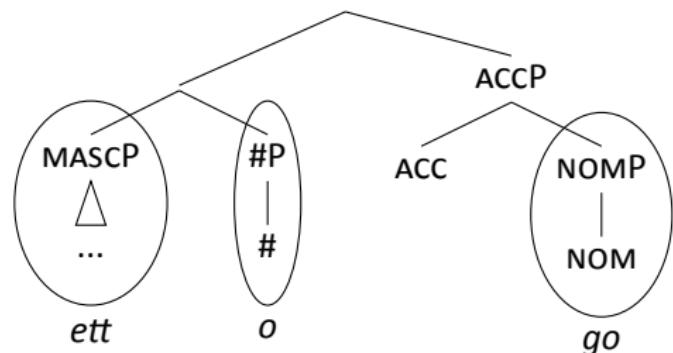
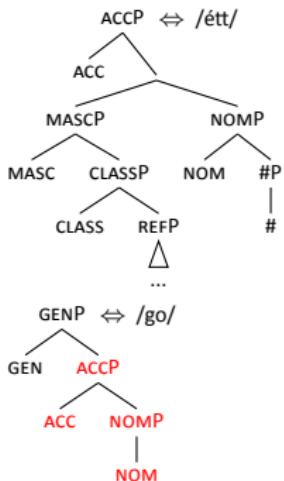
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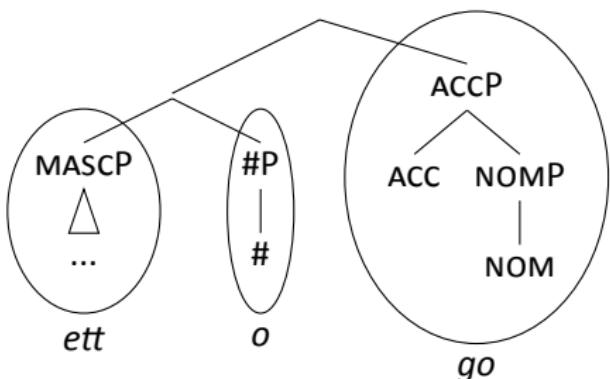
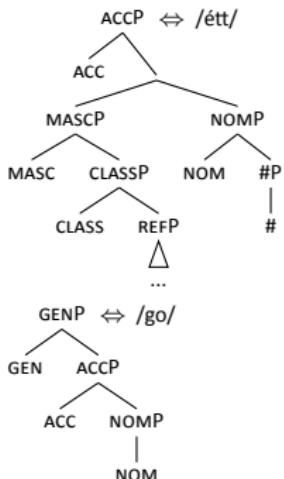
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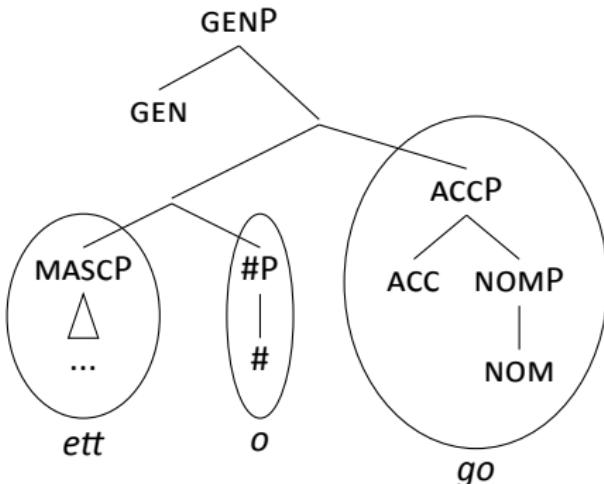
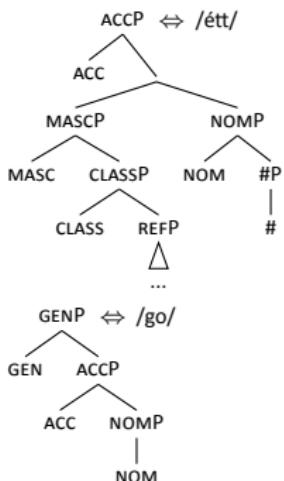
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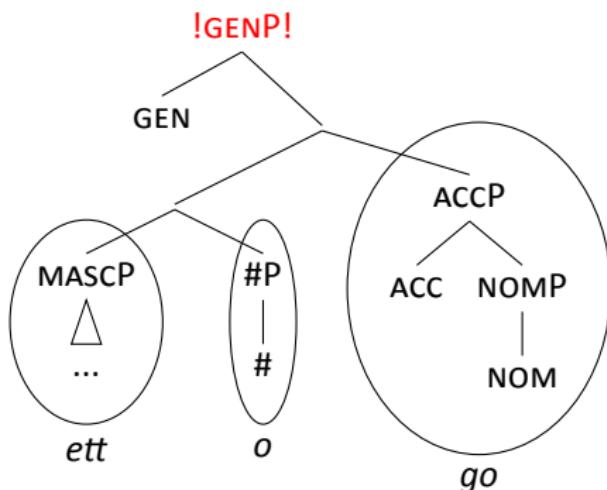
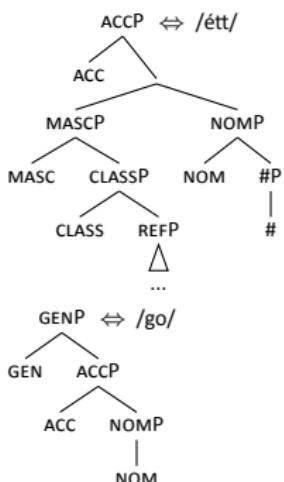
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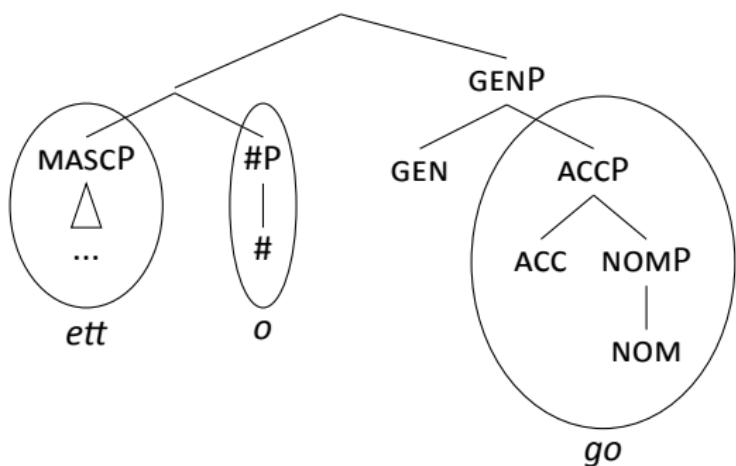
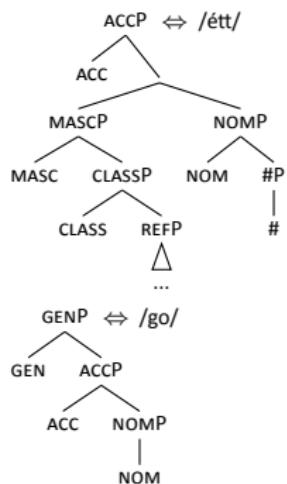
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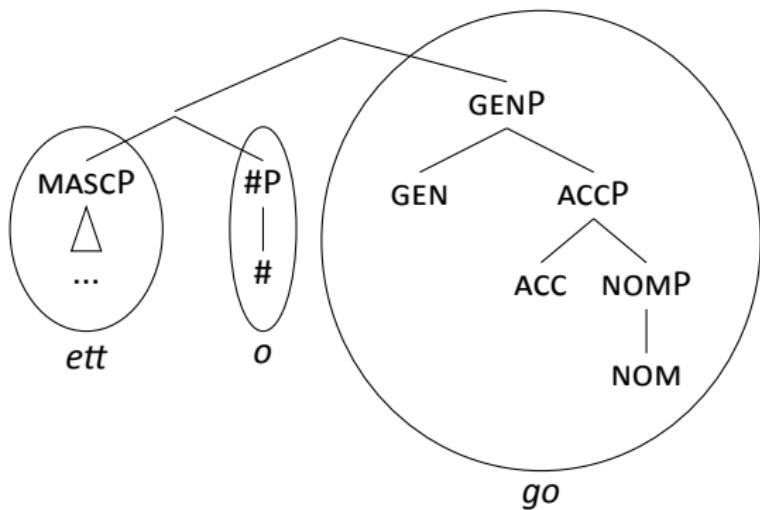
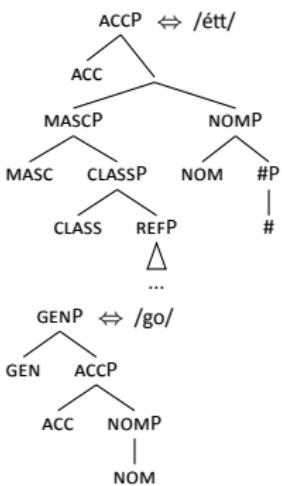
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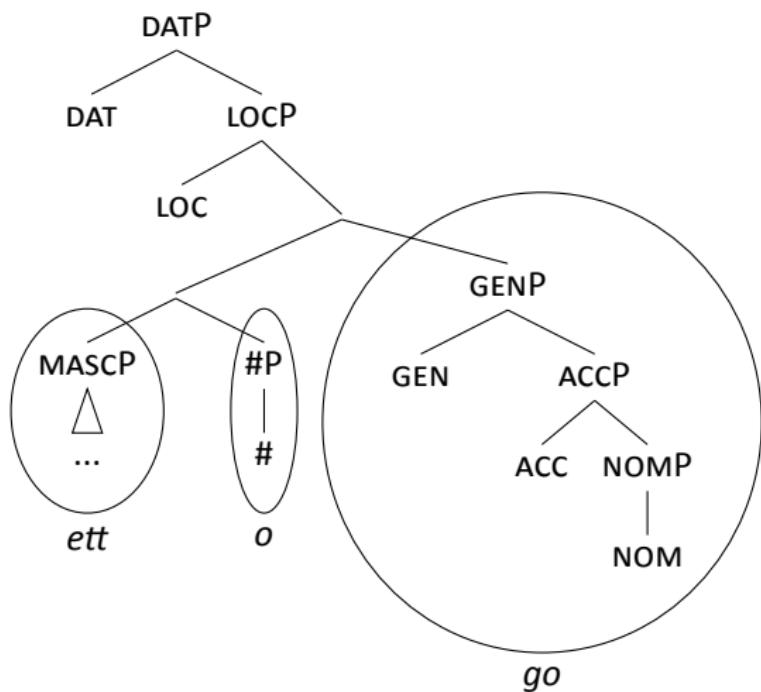
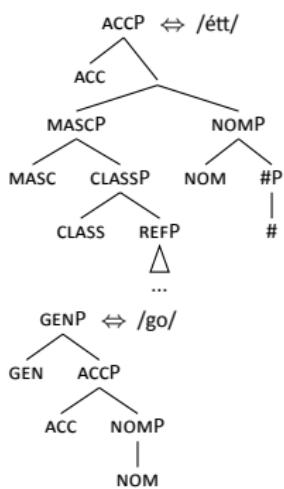
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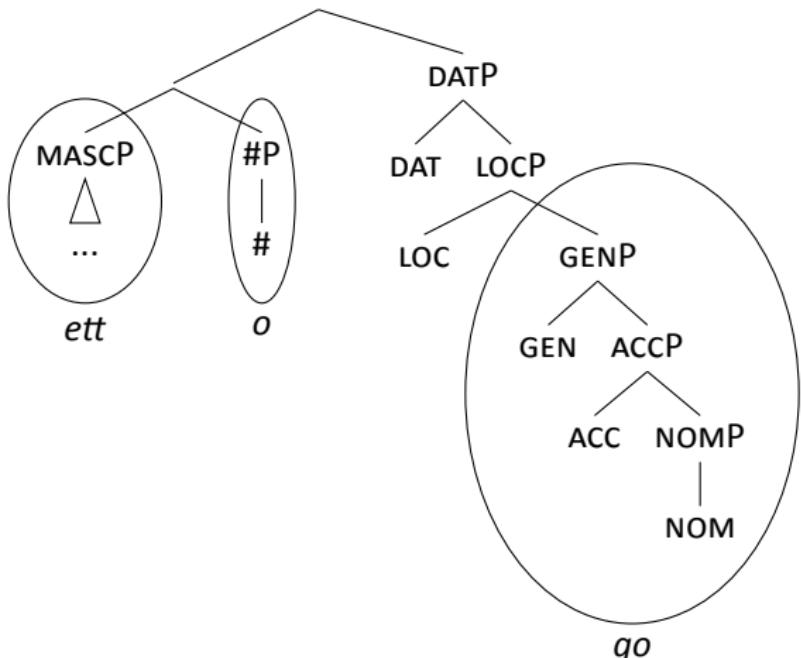
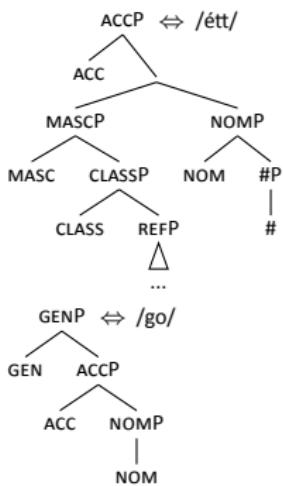
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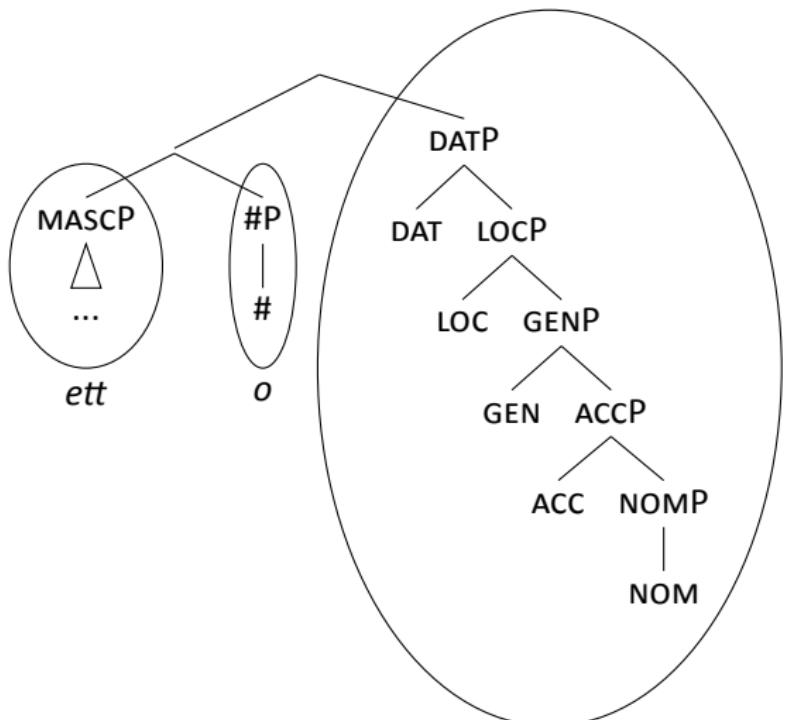
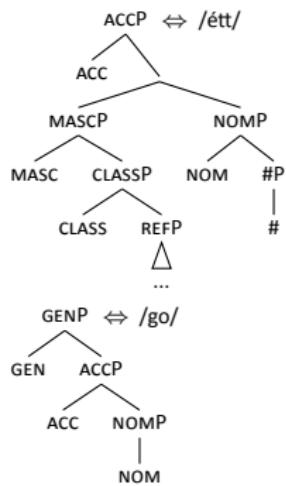
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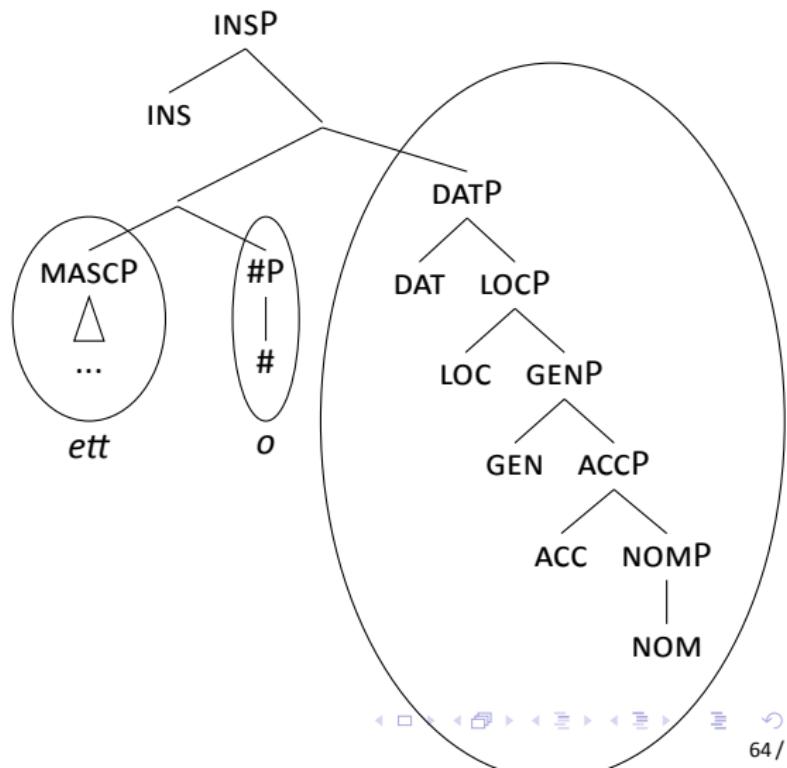
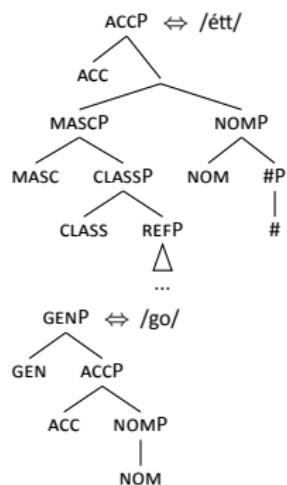
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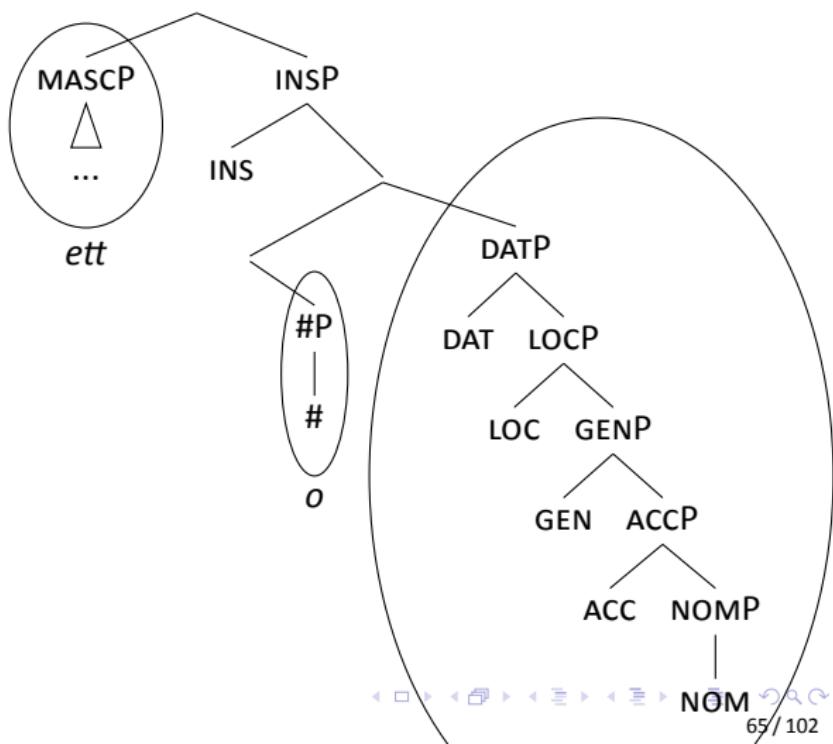
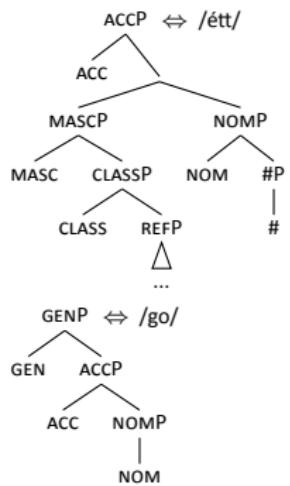
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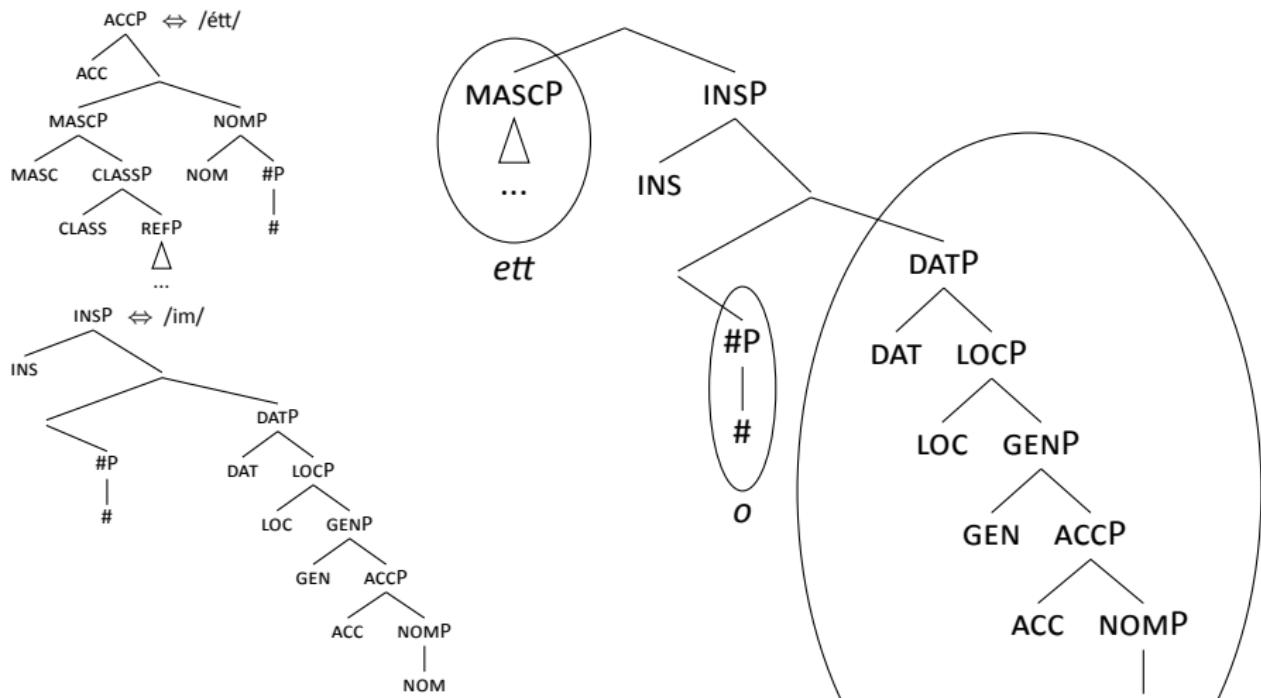
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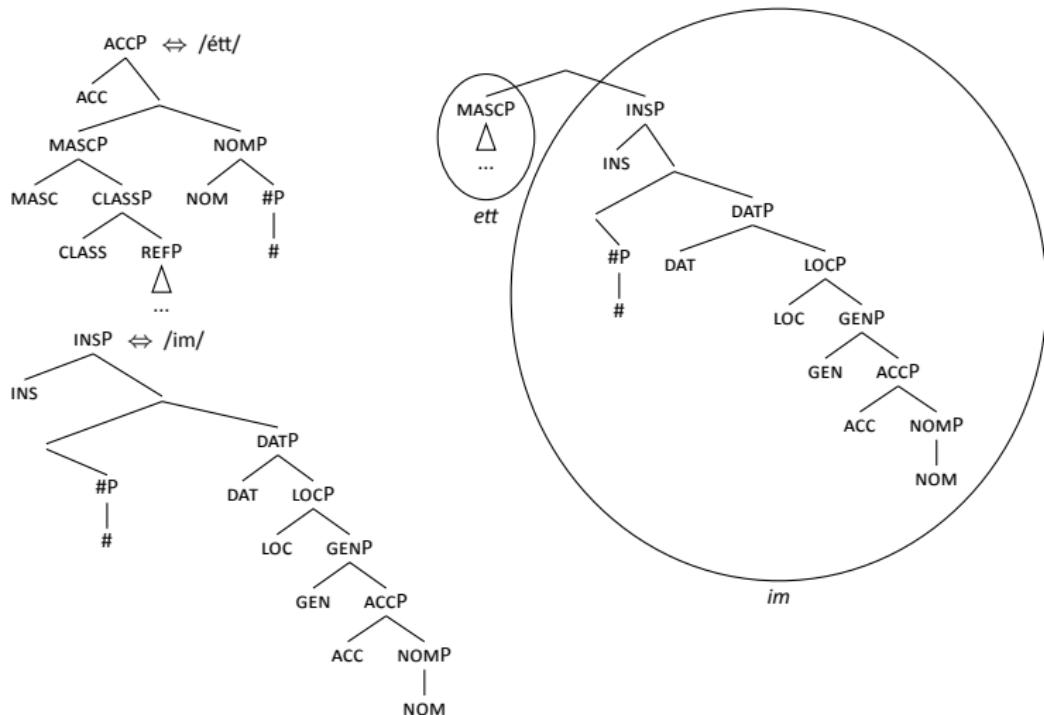
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ACC							etot				
GEN			ett			o		go			
LOC			ett			o		m			
DAT			ett			o		mu			
INS			ett					im			



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NOM				etot							
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LOC				ett		o	m				
DAT				ett		o	mu				
INS				ett		im					

- ▶ The syncretism is a matter of the root, the endings lexicalise the same features
  - i Why does *ett* not lexicalise # in the masculine?
  - Because of CLB Trees
  - ii What about *-im*?
  - Subextracting algorithm helps

Intro

Assumptions

Demonstratives

The paradox

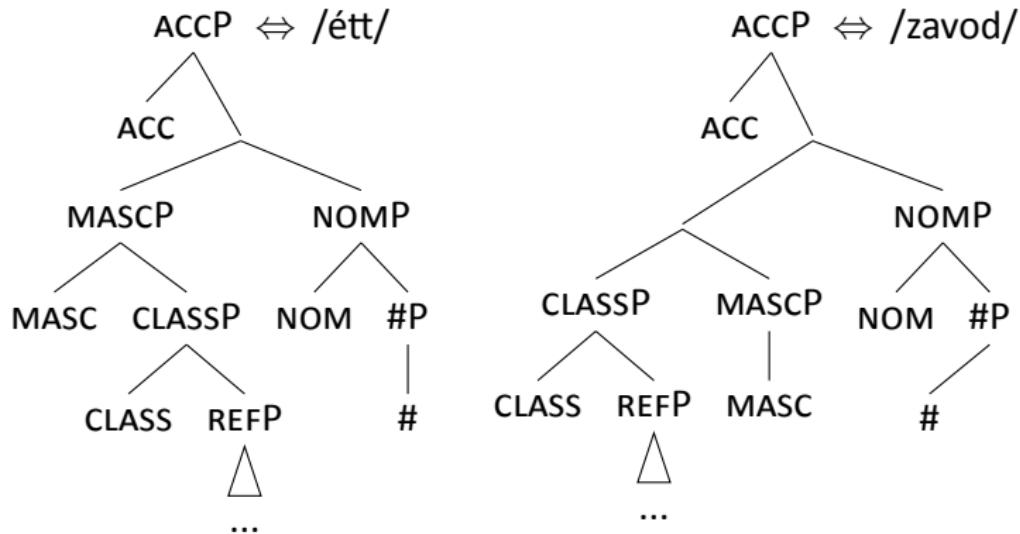
Conclusions

(10)

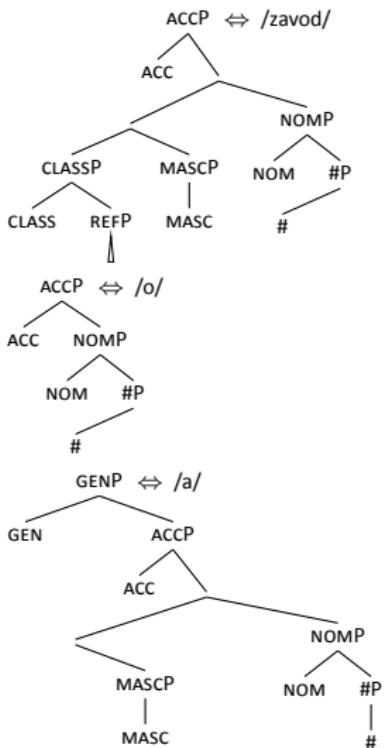
Masculine

	this (NEUT)	factory (MASC)
NOM	etot-ø	zavod-ø
ACC	etot-ø	zavod-ø
GEN	et-o-go	zavod-a
LOC	et-o-m	zavod-e
DAT	et-o-mu	zavod-u
INS	et-im	zavod-om

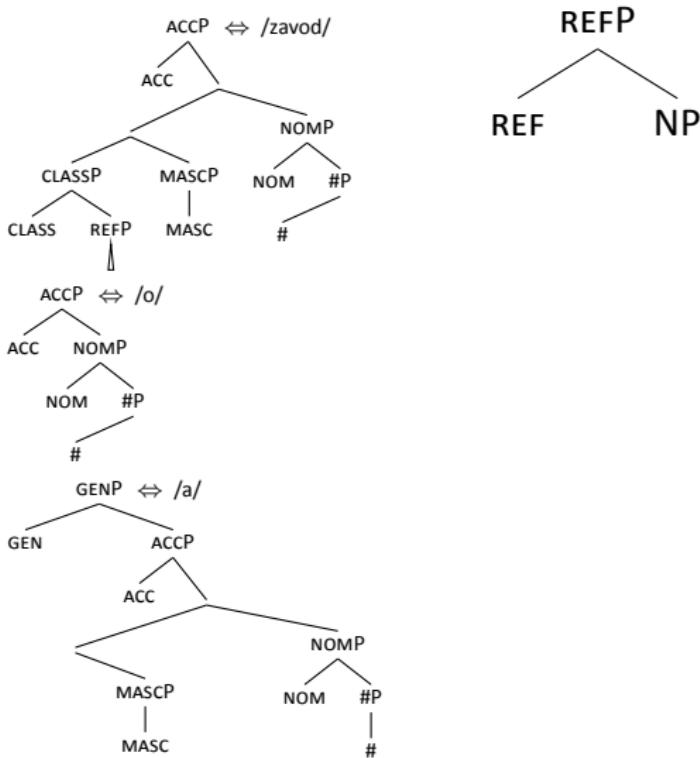
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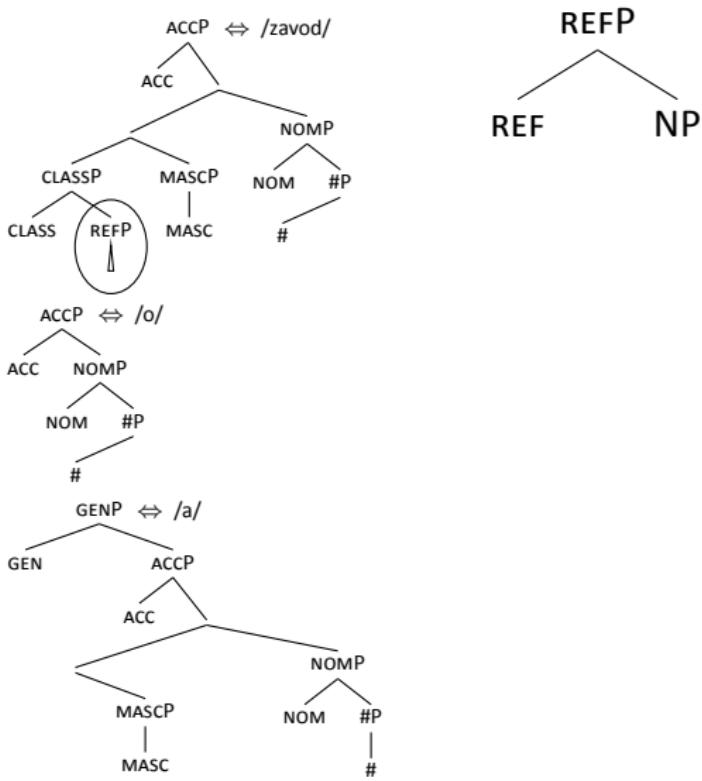
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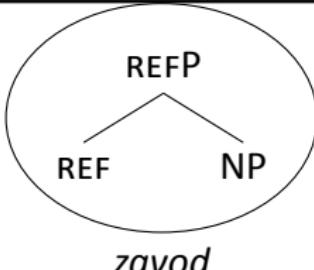
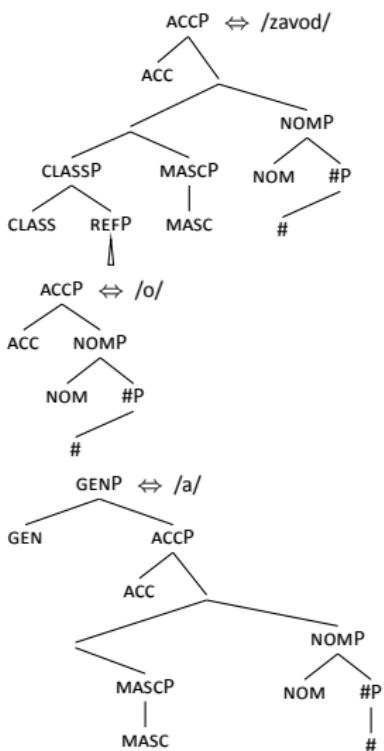
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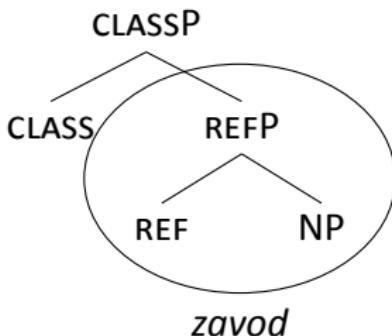
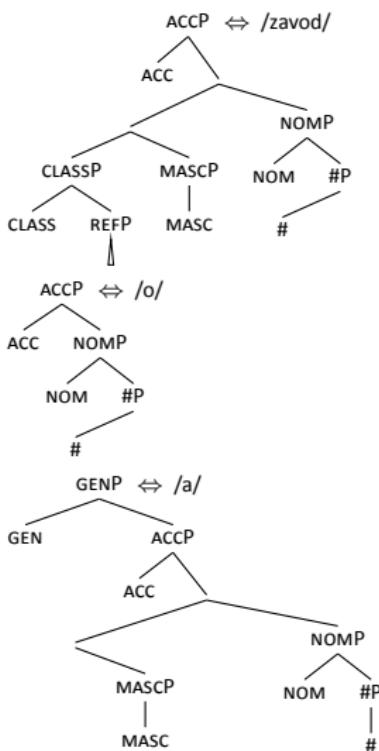
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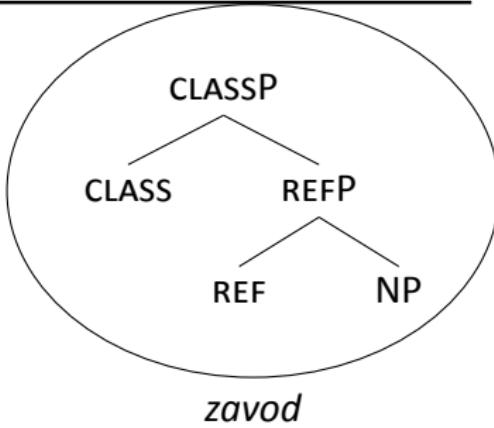
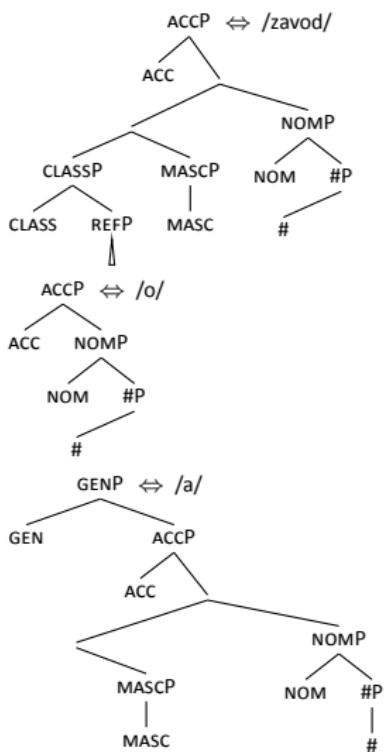
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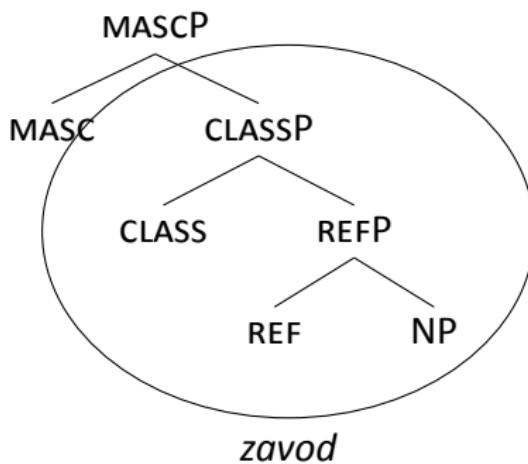
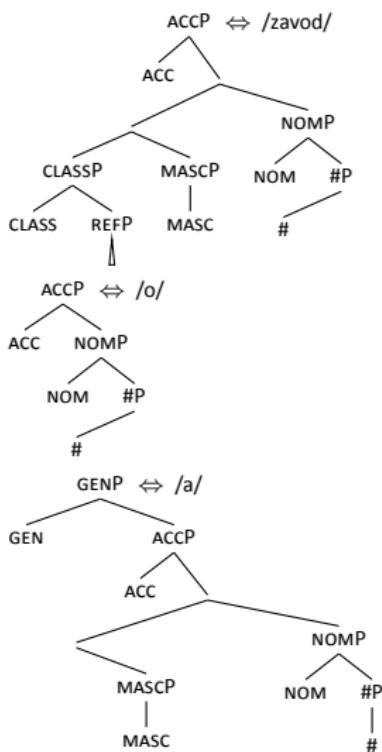
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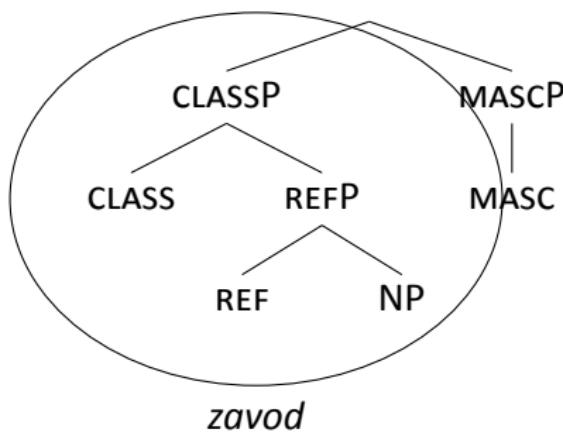
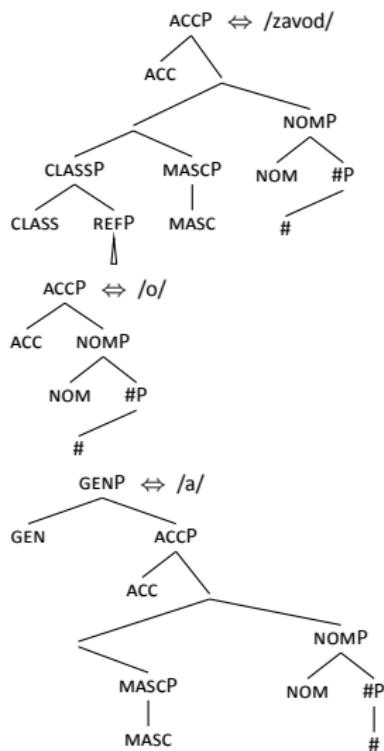


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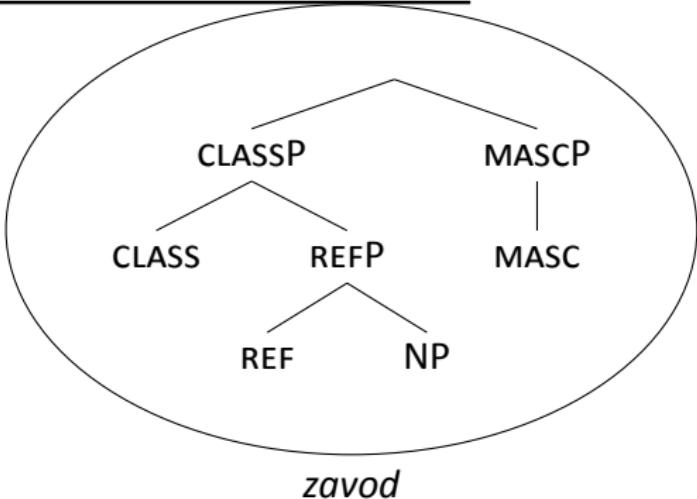
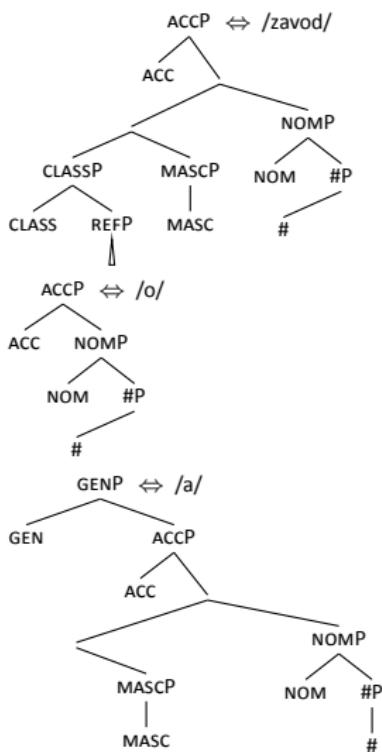


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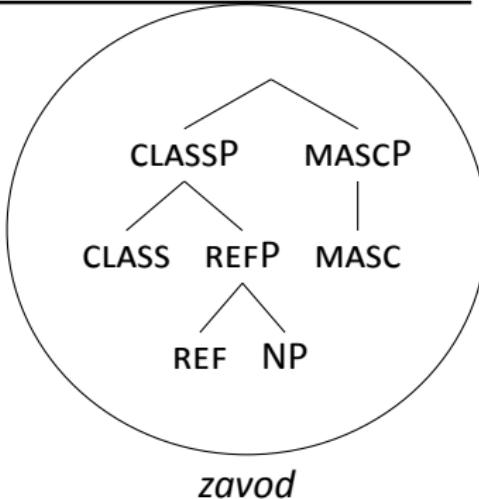
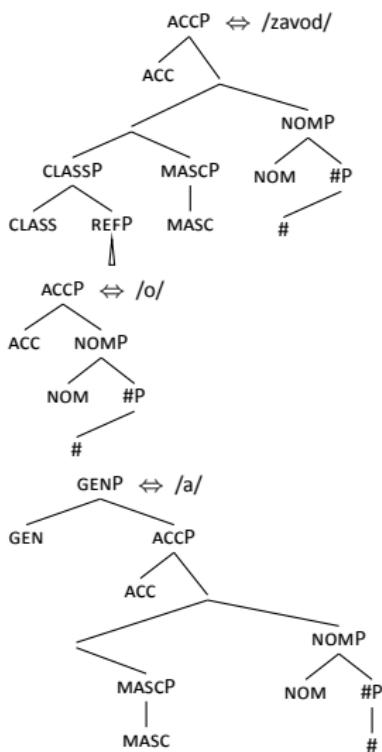




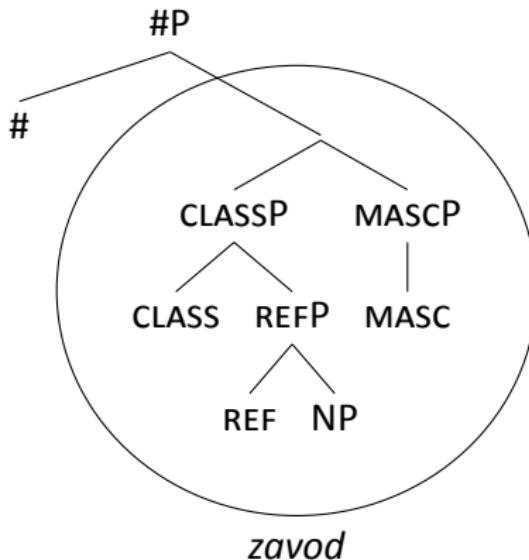
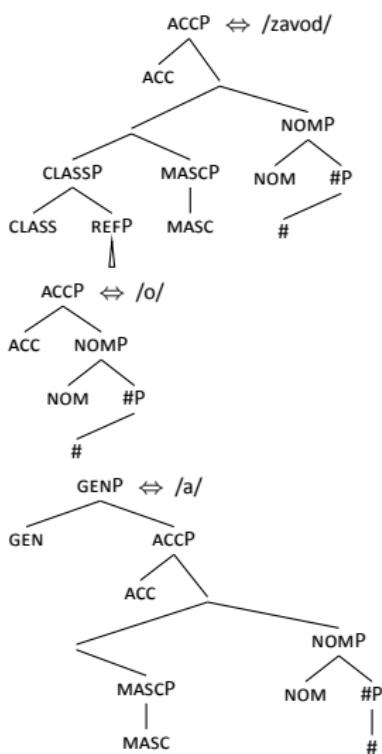
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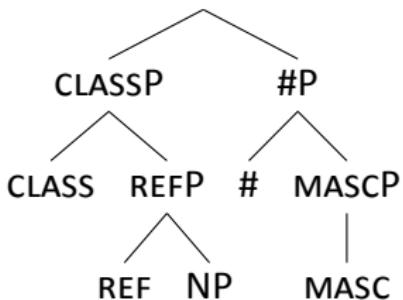
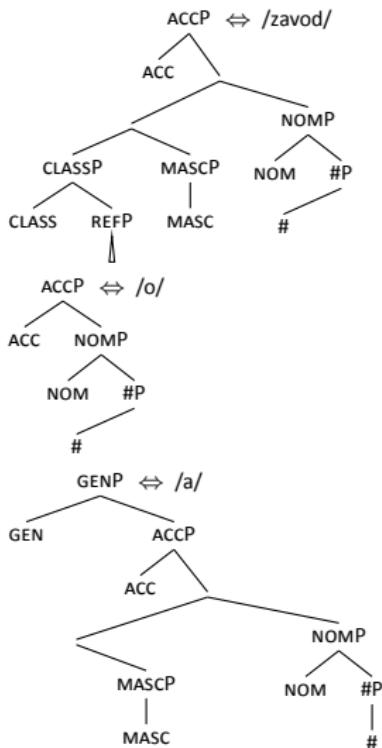
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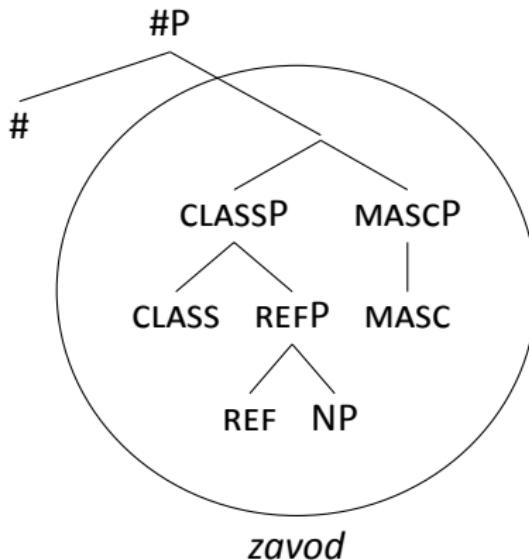
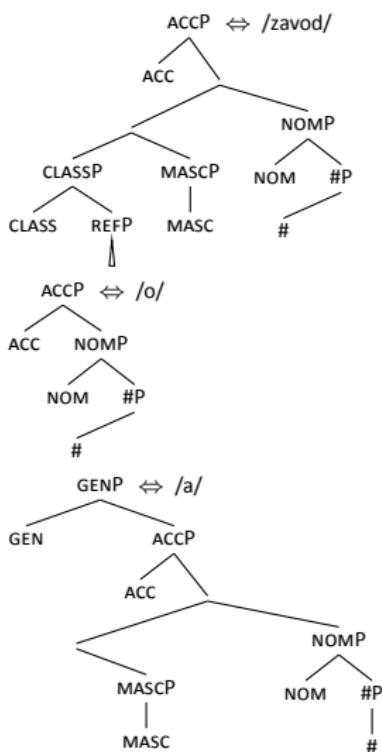
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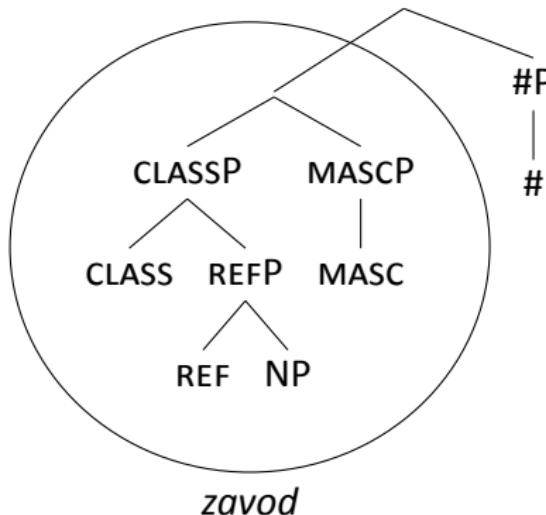
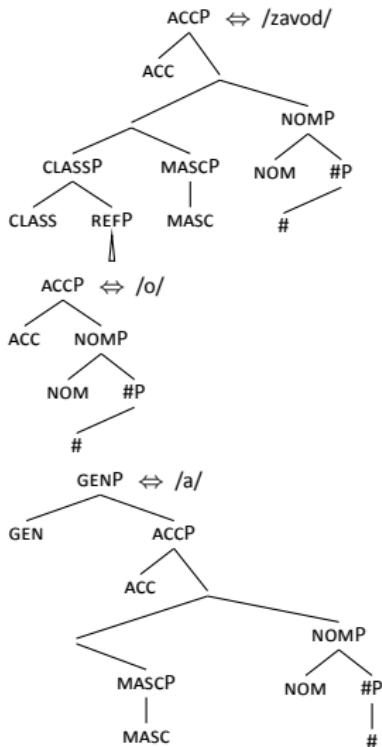
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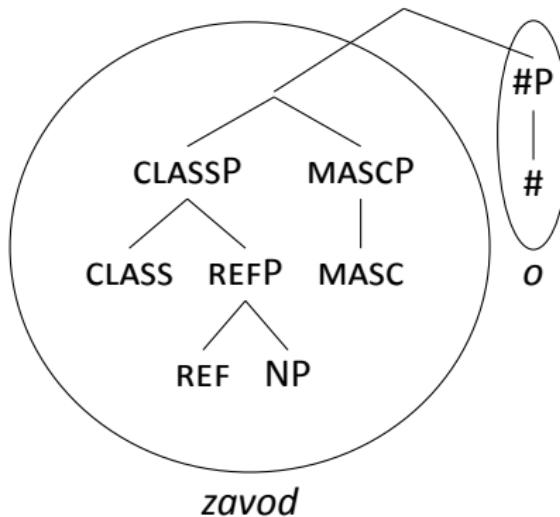
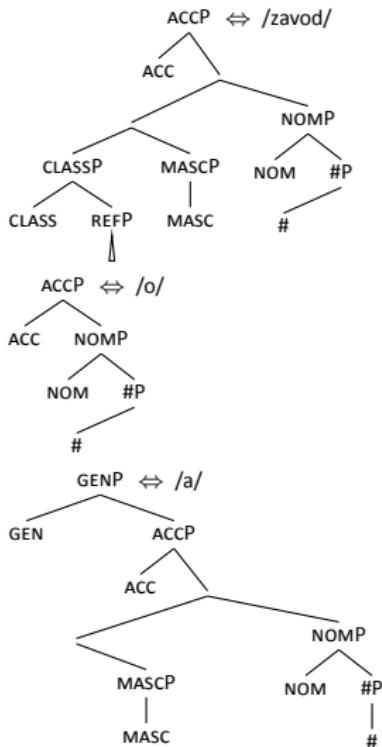
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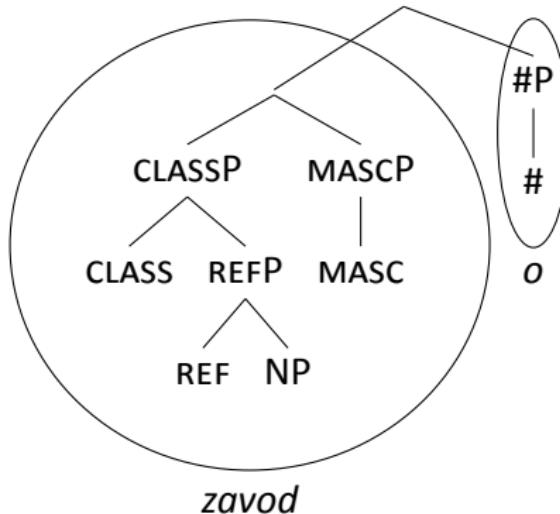
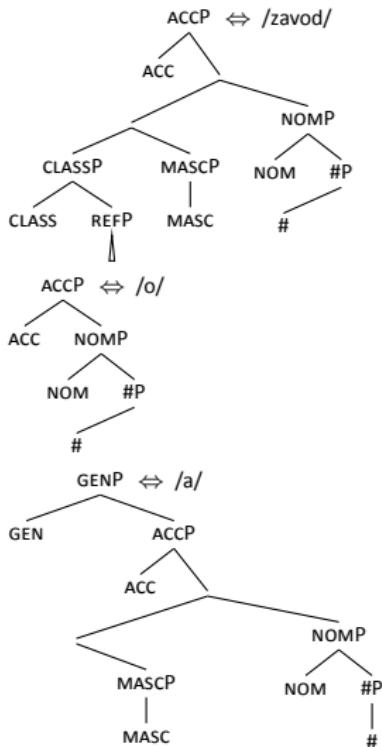
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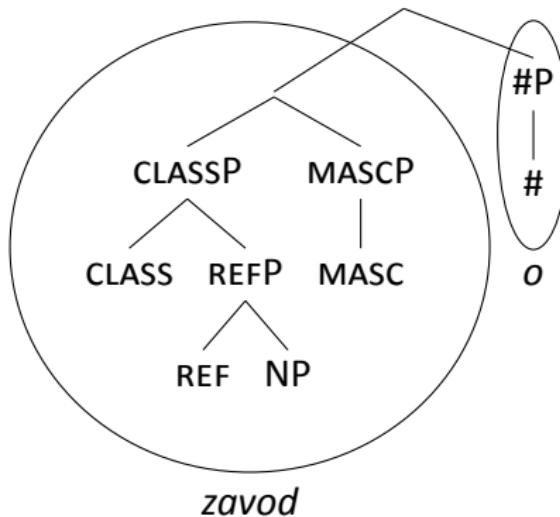
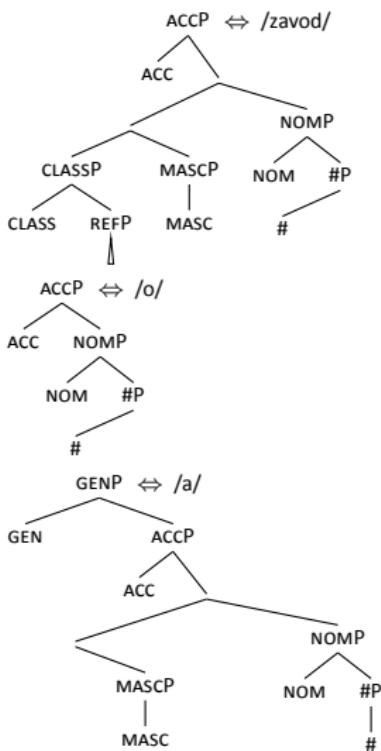


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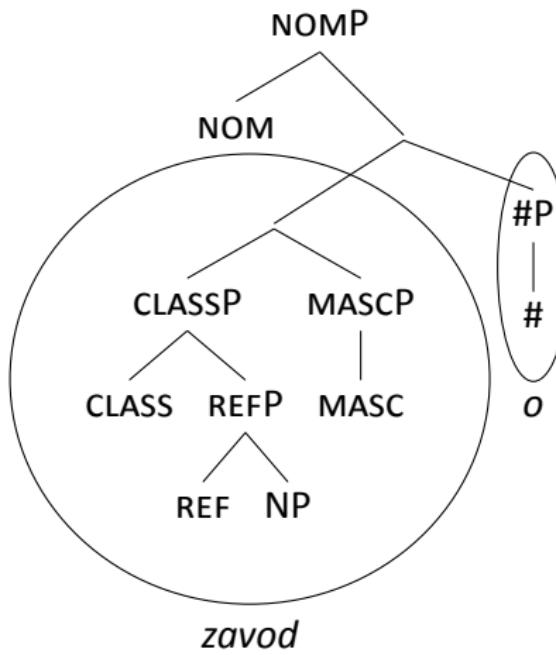
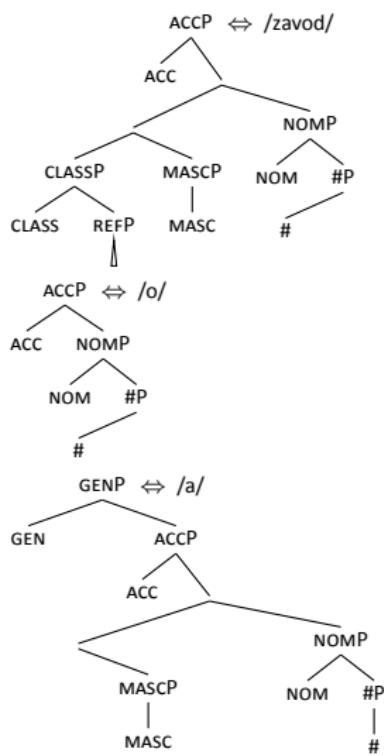


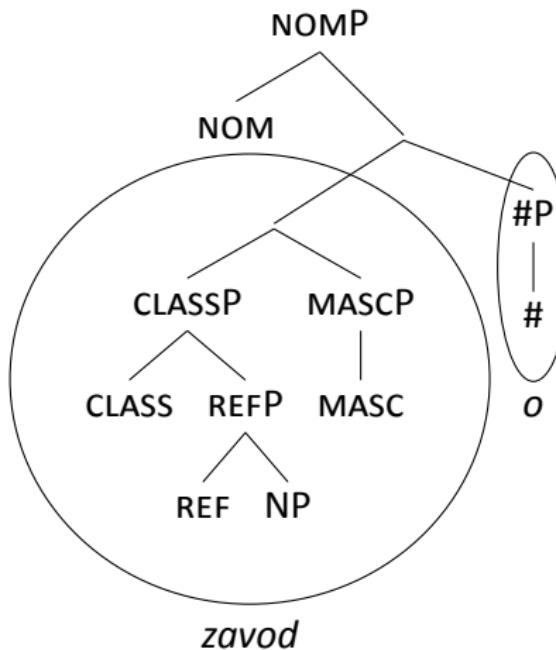
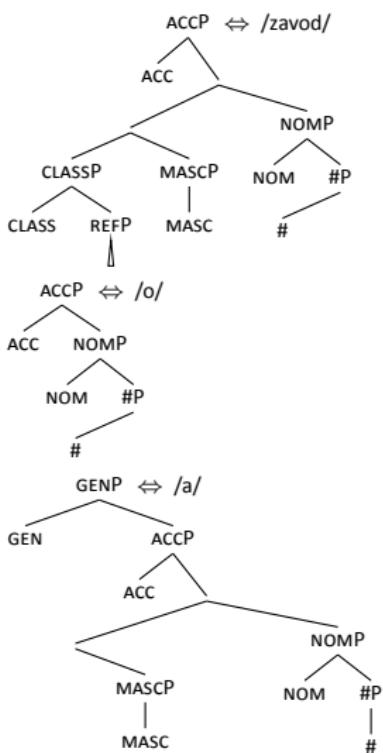
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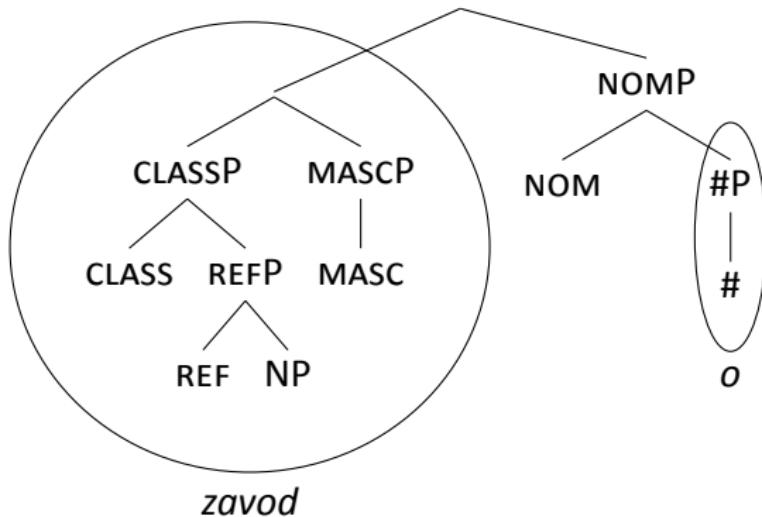
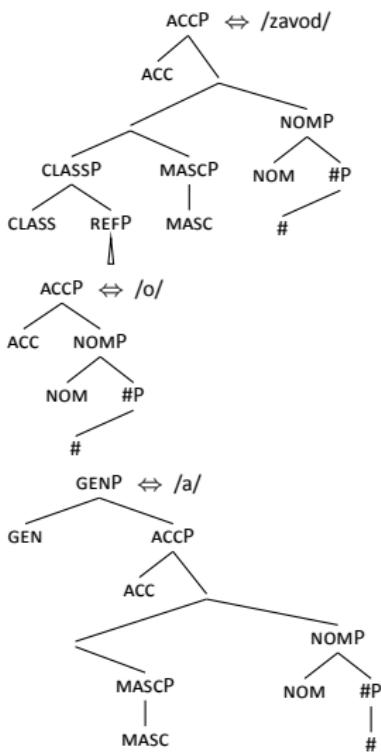


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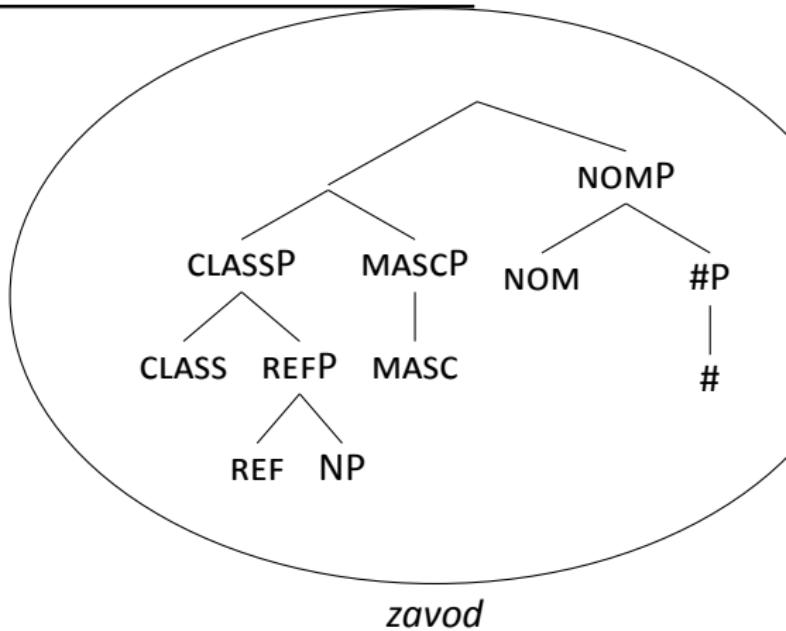
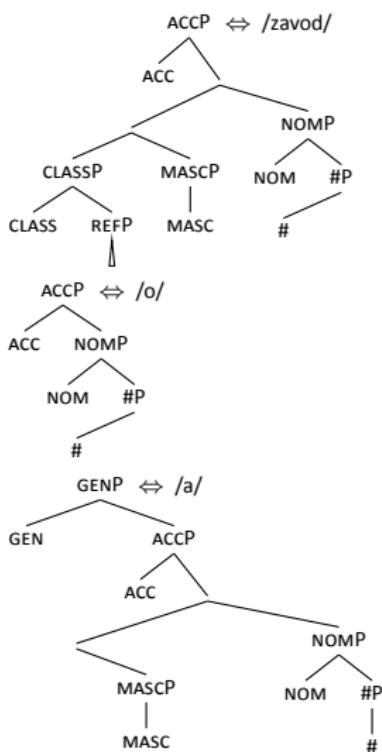




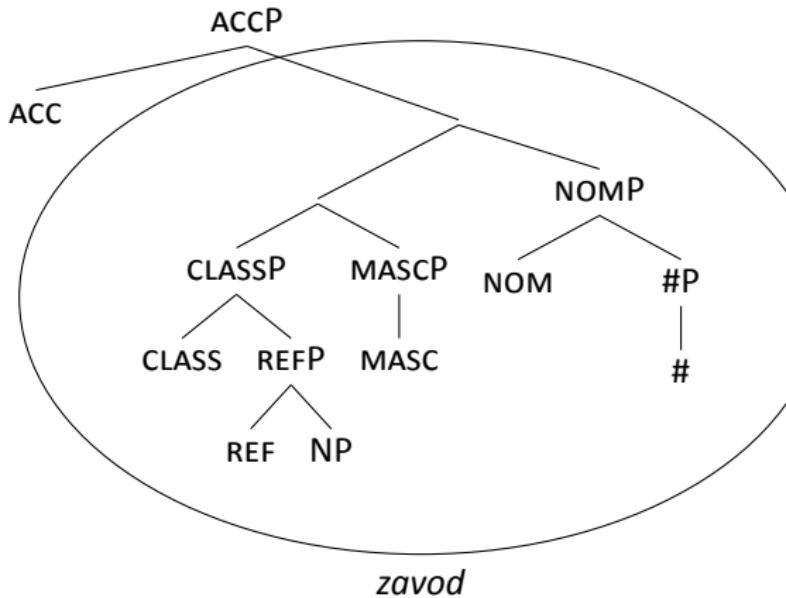
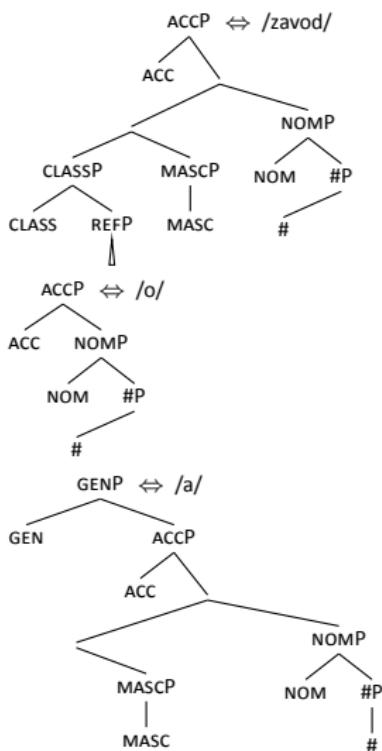
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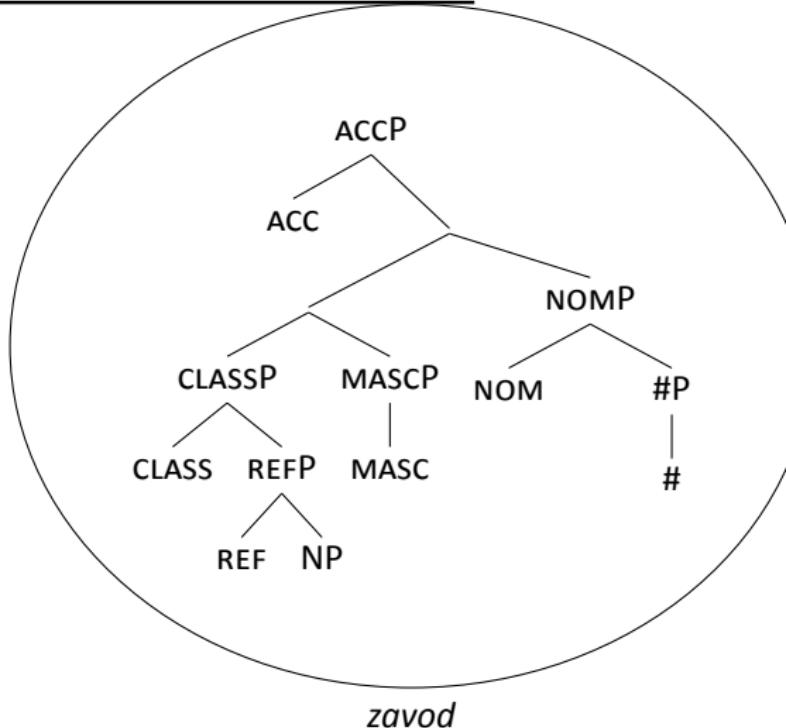
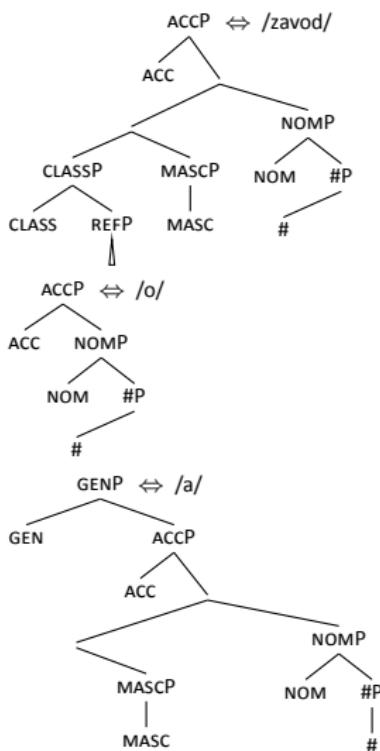
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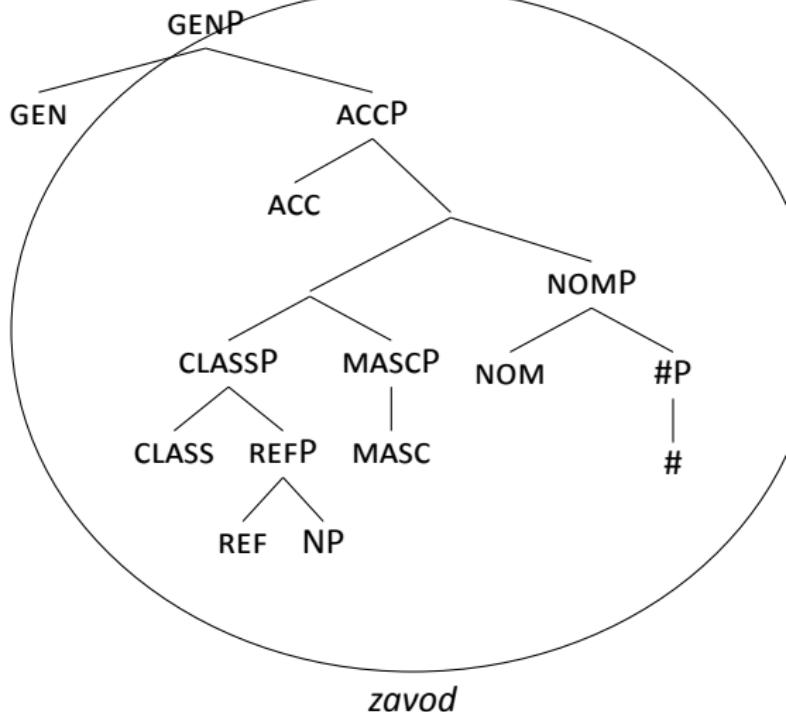
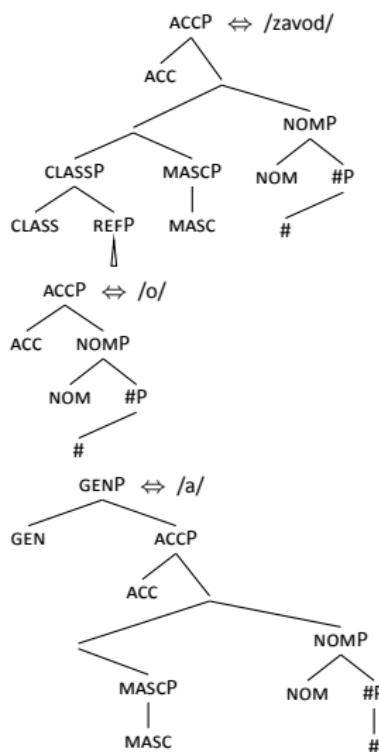
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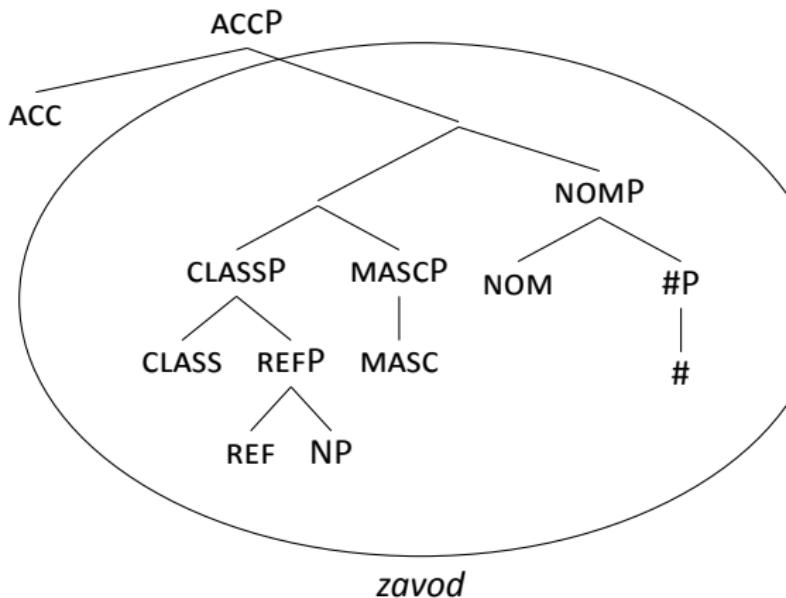
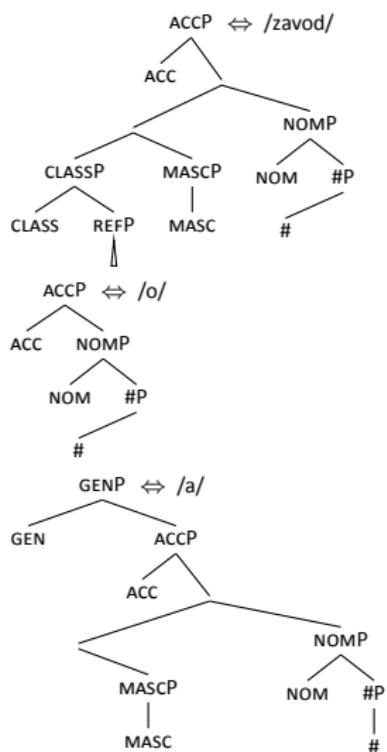
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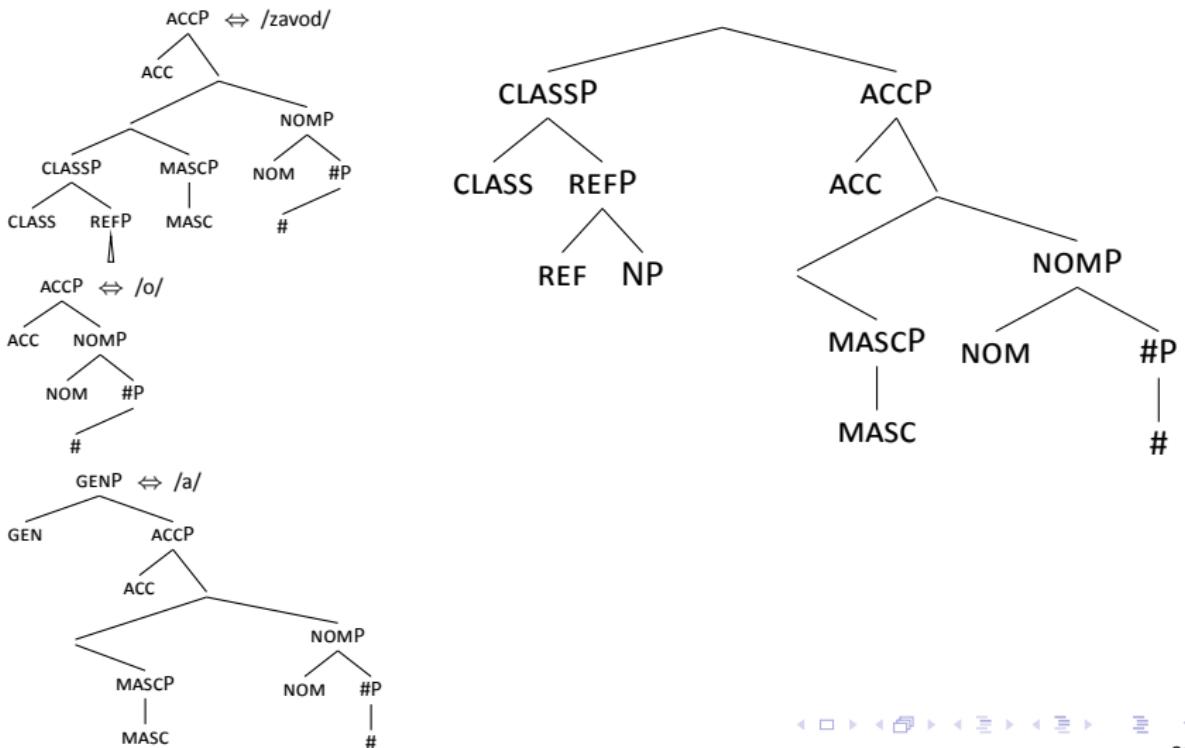
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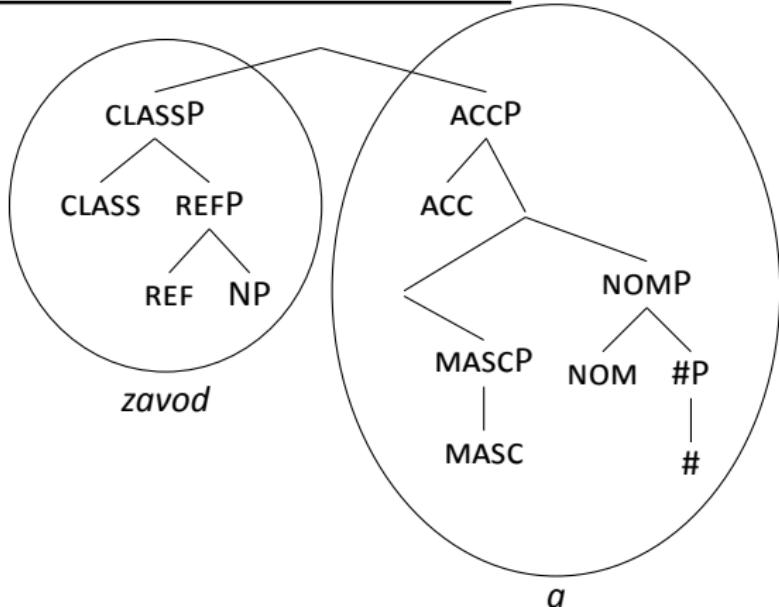
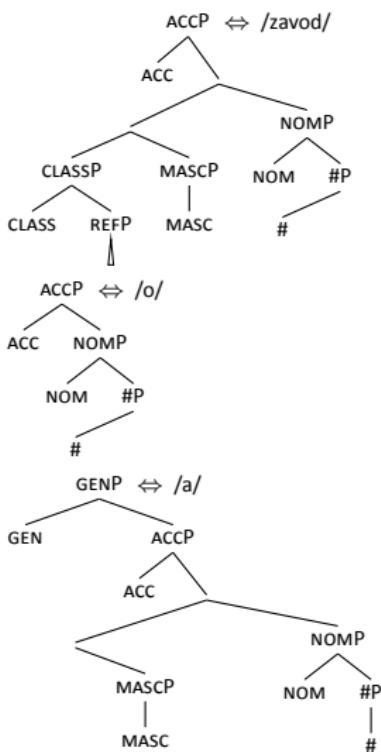
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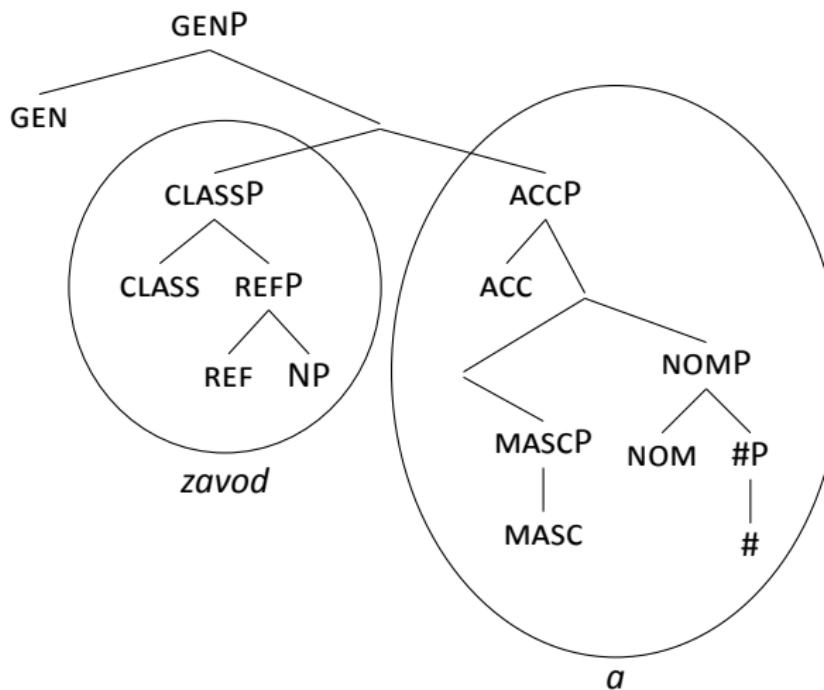
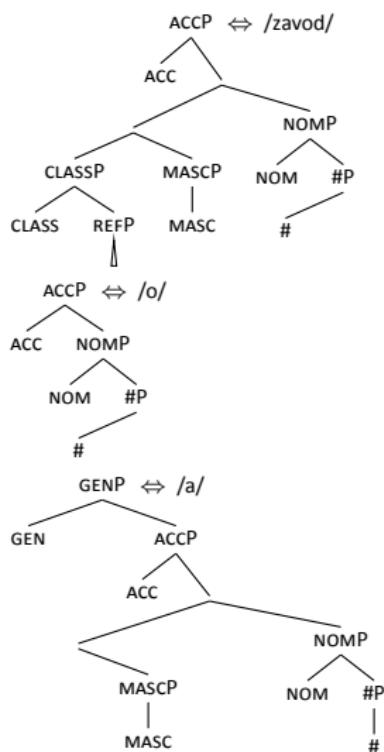
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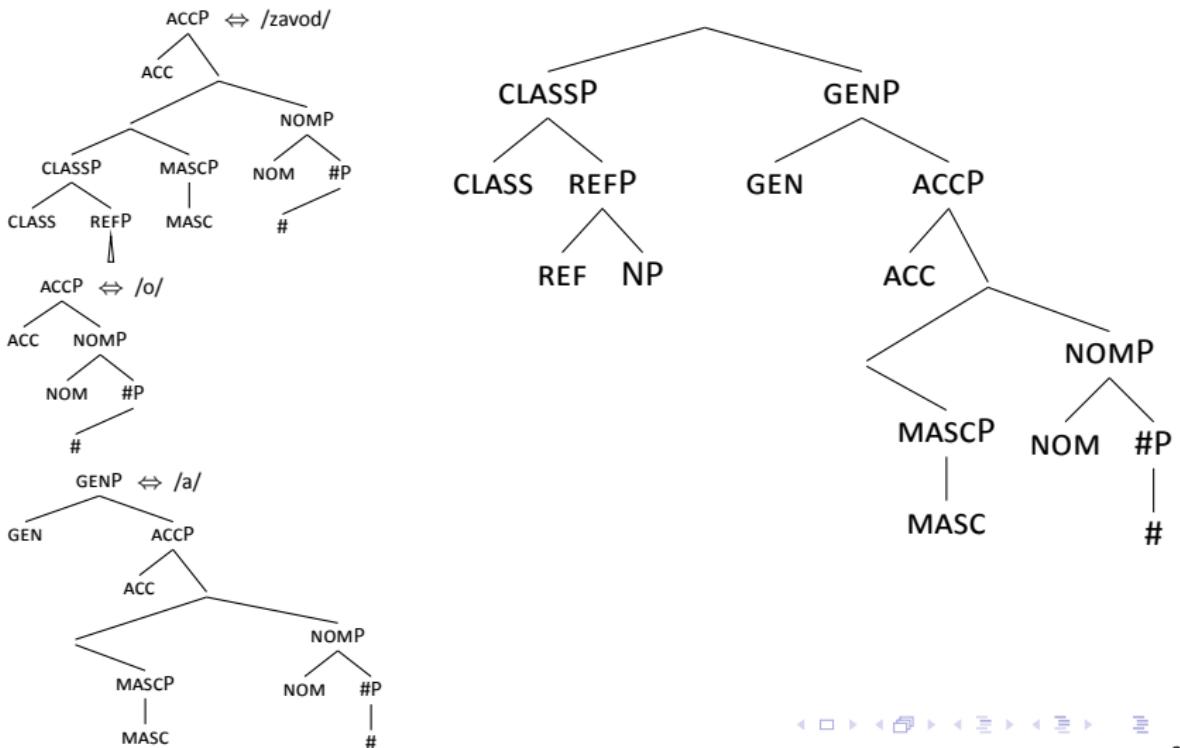
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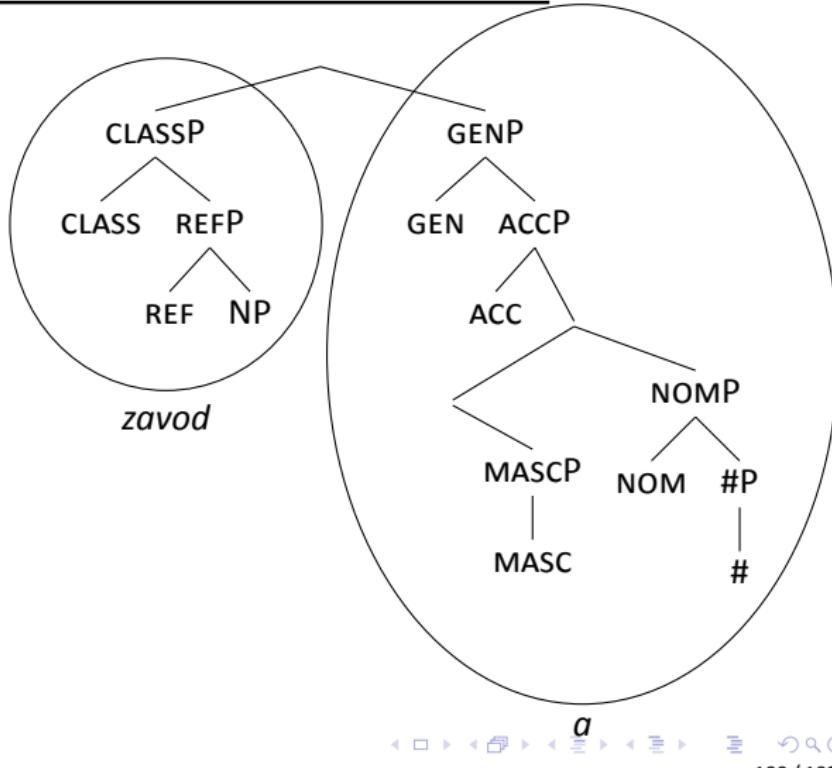
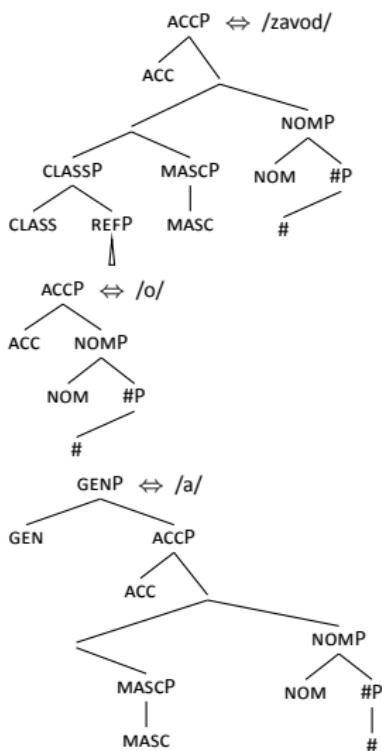
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INS			zavod				om				



	NP	REF	CLASS	MASC	#	NOM	ACC	GEN	LOC	DAT	INS
NOM						zavod					
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i Syncretism in demonstratives (NEUT-MASC)

Single root size,

i Syncretism in demonstratives (NEUT-MASC)

Single root size, interacts with gaps,

i Syncretism in demonstratives (NEUT-MASC)

Single root size, interacts with gaps, syncretism due to backtracking below the gap

i Syncretism in demonstratives (NEUT-MASC)

Single root size, interacts with gaps, syncretism due to backtracking below the gap

ii Differentiation in Oblique cases

i Syncretism in demonstratives (NEUT-MASC)

Single root size, interacts with gaps, syncretism due to backtracking below the gap

ii Differentiation in Oblique cases

Different root shape