Syncretism of prepositions and prefixes in Czech

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Contents

The data

(1)

a. **pod** zemí
under ground
‘under the ground’

b. **pod**-zemí
under-ground
‘the underground’

The data

(1)

a. **pod** zemí
under ground
'under the ground'

b. **pod**-zemí
under-ground
'the underground'

c. **pod**-letět
under-fly
'to fly under'

d. **pod**-let
under-flight
'the flight under'

Verbal vs. nominal complement

NOMINAL	a.	**pod**	zemí	b.	**pod**-zemí
		under	ground		under-ground
		‘under the ground’			‘the underground’
VERBAL	c.	**pod**-letět		d.	**pod**-let
		under-fly			under-flight
		‘to fly under’			‘the flight under’

(2) The nature of the complement

a. nominal (object-denoting) roots

b. verbal (event-denoting) roots

Free vs. bound

	FREE	BOUND
NOMINAL	a. **pod** zemí under ground 'under the ground'	b. **pod**-zemí under-ground 'the underground'
VERBAL	c. **pod**-letět under-fly 'to fly under'	d. **pod**-let under-flight 'the flight under'

(3) The boundary between the P and its complement

a. 'free' morphemes with a low degree of integration (A+C)

b. 'bound' morphemes with a higher degree of integration (B+D)

Free vs. bound

	FREE	BOUND
NOMINAL	a. **za** (j)méno after name 'after one's name'	b. **zá**-jmeno after-name 'a pronoun'
VERBAL	c. **na**-(j)menovat on-name 'nominate'	d. — —

Free vs. bound

	FREE	BOUND
NOMINAL	a. **za** # (j)méno after name 'after one's name'	b. **zá**-jmeno after-name 'a pronoun'
VERBAL	c. **na**-(j)menovat on-name 'nominate'	d. — —

Free vs. bound

	FREE	BOUND
NOMINAL	a. **za** # (j)méno after name 'after one's name'	b. **zá**+jmeno after-name 'a pronoun'
VERBAL	c. **na**-(j)menovat on-name 'nominate'	d. — —

Free vs. bound

	FREE	BOUND
NOMINAL	a. **za** # (**j**)méno after name 'after one's name'	b. **zá**+**j**meno after-name 'a pronoun'
VERBAL	c. **na**#(**j**)menovat on-name 'nominate'	d. — —

The structure of the talk

- Introduce the data that motivate the distinctions

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- Characterise the four different environments in terms of morphosyntactic features

The structure of the talk

- Introduce the data that motivate the distinctions
- Characterise the four different environments in terms of morphosyntactic features
- Explain the patterns of syncretism among these four different functions

Contents

Nominal vs. verbal (over, across)

		FREE	BOUND
NOMINAL	a.	**přes** hranice across boarder 'across the boarder'	b. **přes**-hraničí across-boarder 'a transboarder region'
VERBAL	c.	**pře**-letět over-fly 'to fly over'	d. **pře**-let over-flight 'an overflight'

Nominal vs. verbal (over, across)

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VERBAL	c. **pře**-letět over-fly 'to fly over'	d. **pře**-let over-flight 'an overflight'

- It's not phonology:

(4) s-letět
down-fly
'fly down'

Nominal vs. verbal (over, across)

	FREE	BOUND
NOMINAL	a. **přes** hranice across boarder 'across the boarder'	b. **přes**-hraničí across-boarder 'a transboarder region'
VERBAL	c. **pře**-letět over-fly 'to fly over'	d. **pře**-let over-flight 'an overflight'

- It's not phonology:

(4) s-letět
down-fly
'fly down'

(5) pře-hrát
over-play
'to reproduce' (music)

Nominal vs. verbal (outside of)

	FREE	BOUND
NOMINAL	a. **mimo** Zemi outside Earth 'outside of the Earth'	b. **mimo**-zemšťan extra-terrestrial 'an extraterrestrial'
VERBAL	c. — —	d. — —

Nominal vs. verbal (outside of)

	FREE	BOUND
NOMINAL	a. **mimo** Zemi outside Earth 'outside of the Earth'	b. **mimo**-zemšťan extra-terrestrial 'an extraterrestrial'
VERBAL	c. — —	d. — —

- It's not semantics:

(6) střelit mimo
shoot outside (of the target)
'to miss'

(7) střela mimo
shot outside
'a miss'

Nominal vs. verbal (up)

	FREE	BOUND
NOMINAL	a. — —	b. — —
VERBAL	c. **vz**-letět up-fly ‘to fly up’	d. **vz**-let up-flight ‘a flying start’

Free vs. bound (CV)

	FREE	BOUND
NOMINAL	a. **CV**	b. **CVV**
VERBAL	c. **CV**	d. **CVV**

Free vs. bound (at)

	FREE	BOUND
NOMINAL	a. **při** zemi at ground 'by the ground'	b. **pří**-zemí at-ground 'ground floor'
VERBAL	c. **při**-letět at-fly 'to fly to'	d. **pří**-let at-flight 'arrival by flying'

Free vs. bound (on)

	FREE	BOUND
NOMINAL	a. **na** břehu on bank 'on the bank'	b. **ná**-břeží on-bank 'waterfront'
VERBAL	c. **na**-letět on-fly 'to fly on'	d. **ná**-let on-flight 'raid'

Free vs. bound (together with)

	FREE		BOUND
NOMINAL	a. **s** together with ‘with a star’	hvězdou star	b. **sou**-hvězdí together-star ‘constellation’
VERBAL	c. **s**-ladit together-tune ‘to harmonize’		d. **sou**-lad together-tune ‘harmony’

3/4 pattern (in)

	FREE		BOUND
NOMINAL	a. **v** Brně in Brno 'in Brno'		b. —
VERBAL	c. **v**-stoupit in-step 'to step in'		d. **v**-stup in-step 'entrance'

3/4 pattern (away from)

	FREE	BOUND
NOMINAL	a. **od** Brna from around Brno 'from around Brno'	b. —
VERBAL	c. **od**-letět away-fly 'to fly away'	d. **od**-let away-flight 'flight departure'

3/4 pattern (to)

	FREE	BOUND
NOMINAL	a. **do** Brna to Brno 'to Brno'	b. —
VERBAL	c. **do**-letět to-fly 'to fly to'	d. **do**-let to-flight 'flight reach'

Each cell can be different (from)

	FREE	BOUND
NOMINAL	a. **z** Berlína from Berlin ‘from Berlin’	b. —
VERBAL	c. **vy**-letět out-fly ‘to fly out’	d. **vý**-let out-flight ‘a trip’

Summary: attested pastterns

'under'	FREE	BOUND
NOMINAL	**A**	**A**
VERBAL	**A**	**A**

Summary: attested pastterns

'under'	FREE	BOUND
NOMINAL	A	A
VERBAL	A	A

'over'	FREE	BOUND
NOMINAL	A	A
VERBAL	B	B

Summary: attested pastterns

'under'	FREE	BOUND
NOMINAL	A	A
VERBAL	A	A

'over'	FREE	BOUND
NOMINAL	A	A
VERBAL	B	B

'on'	FREE	BOUND
NOMINAL	A	B
VERBAL	A	B

Summary: attested pastterns

'under'	FREE	BOUND
NOMINAL	A	A
VERBAL	A	A

'over'	FREE	BOUND
NOMINAL	A	A
VERBAL	B	B

'on'	FREE	BOUND
NOMINAL	A	B
VERBAL	A	B

'in'	FREE	BOUND
NOMINAL	A	—
VERBAL	A	A

Summary: attested pastterns

'under'	FREE	BOUND
NOMINAL	A	A
VERBAL	A	A

'over'	FREE	BOUND
NOMINAL	A	A
VERBAL	B	B

'on'	FREE	BOUND
NOMINAL	A	B
VERBAL	A	B

'in'	FREE	BOUND
NOMINAL	A	—
VERBAL	A	A

'from'	FREE	BOUND
NOMINAL	A	—
VERBAL	B	C

The cross pattern: unattested

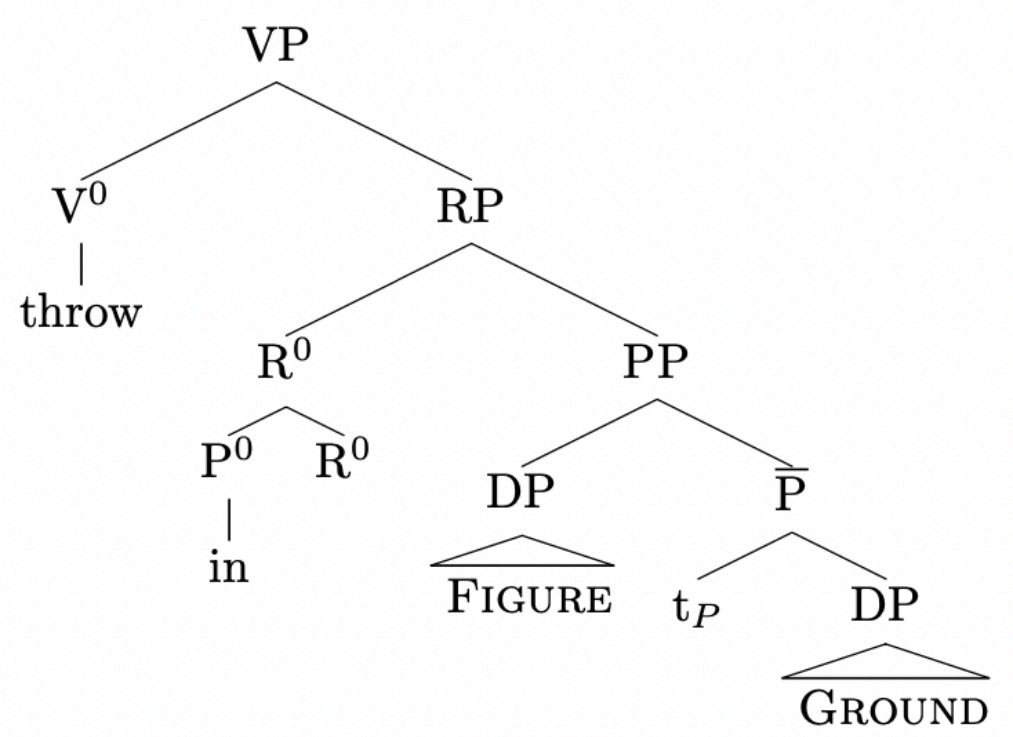
	FREE	BOUND
NOMINAL	A	B
VERBAL	B	A

Contents

	FREE	BOUND
NOMINAL	**P**	**P**
VERBAL	**P**	**P**

	FREE	BOUND
NOMINAL	P	P
VERBAL	P+Res	P+Res

Ramchand and Svenonius (2002)



	FREE	BOUND
NOMINAL	P	P
VERBAL	P+Res	P+Res

Free vs. bound (CV)

	FREE	BOUND
NOMINAL	CV	CVV
VERBAL	CV	CVV

Free vs. bound (CV)

	FREE	BOUND
NOMINAL	**CV**	**CVV**
VERBAL	**CV**	**CVV**

	FREE	BOUND
NOMINAL	**P**	**P+L(ength)**
VERBAL	**P+Res**	**P+Res+L(ength)**

The decomposition

	FREE	BOUND
NOMINAL	**P**	**P+L**
VERBAL	**P+Res**	**P+Res+L**

The decomposition

	FREE	BOUND
NOMINAL	P	P+L
VERBAL	P+Res	P+Res+L

	FREE	BOUND
NOMINAL	A	A
VERBAL	A	A

The decomposition

	FREE	BOUND
NOMINAL	**P**	**P+L**
VERBAL	**P+Res**	**P+Res+L**

	FREE	BOUND
NOMINAL	**A**	**A**
VERBAL	**A**	**A**

(8) **A** $\Leftrightarrow$ [**P**]

over (přes-pře)

	FREE	BOUND
NOMINAL	P	P+L
VERBAL	P+Res	P+Res+L

	FREE	BOUND
NOMINAL	A	A
VERBAL	B	B

over (přes-pře)

	FREE	BOUND
NOMINAL	**P**	**P+L**
VERBAL	**P+Res**	**P+Res+L**

	FREE	BOUND
NOMINAL	**A**	**A**
VERBAL	**B**	**B**

(9) a. **A** $\Leftrightarrow$ [**P**]

b. **B** $\Leftrightarrow$ [**P+Res**]

together (s – sou), on (na – ná)

	FREE	BOUND
NOMINAL	P	P+L
VERBAL	P+Res	P+Res+L

	FREE	BOUND
NOMINAL	A	B
VERBAL	A	B

together (s – sou), on (na – ná)

	FREE	BOUND
NOMINAL	**P**	**P+L**
VERBAL	**P+Res**	**P+Res+L**

	FREE	BOUND
NOMINAL	**A**	**B**
VERBAL	**A**	**B**

(10) a. **A** $\Leftrightarrow$ [**P**]

b. **B** $\Leftrightarrow$ [**P+L**]

together (s – sou), on (na – ná)

	FREE	BOUND
NOMINAL	**P**	**P+L**
VERBAL	**P+Res**	**P+Res+L**

	FREE	BOUND
NOMINAL	**A**	**B**
VERBAL	**A**	**B**

(10) a. **A** ⟺ [**P**]
b. **B** ⟺ [**P+L**]

(11) a. **A** ⟺ [**P**]
b. **Length** ⟺ [**L**]

The cross pattern

	FREE	BOUND
NOMINAL	**P**	**P+L**
VERBAL	**P+Res**	**P+Res+L**

The cross pattern

	FREE	BOUND
NOMINAL	P	P+L
VERBAL	P+Res	P+Res+L

	FREE	BOUND
NOMINAL	A	B
VERBAL	B	A

The cross pattern

	FREE	BOUND
NOMINAL	P	P+L
VERBAL	P+Res	P+Res+L

	FREE	BOUND
NOMINAL	A	B
VERBAL	B	A

- There is no natural class that groups together either the As or the Bs

Some issues: Defective paradigms (mimo 'outside')

	FREE	BOUND
NOMINAL	P	P+L
VERBAL	P+Res	P+Res+L

	FREE	BOUND
NOMINAL	A	A
VERBAL	—	—

Some issues: Defective paradigms (mimo 'outside')

	FREE	BOUND
NOMINAL	**P**	**P+L**
VERBAL	**P+Res**	**P+Res+L**

	FREE	BOUND
NOMINAL	**A**	**A**
VERBAL	—	—

(12) **A** $\Leftrightarrow$ [**P**]

The 3/4 paradigm is also an issue (v 'in')

	FREE	BOUND
NOMINAL	P	P+L
VERBAL	P+Res	P+Res+L

	FREE	BOUND
NOMINAL	A	—
VERBAL	A	A

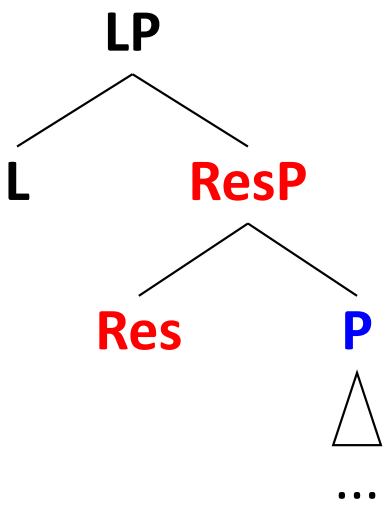
The 3/4 paradigm is also an issue (v 'in')

	FREE	BOUND
NOMINAL	**P**	**P+L**
VERBAL	**P+Res**	**P+Res+L**

	FREE	BOUND
NOMINAL	**A**	—
VERBAL	**A**	**A**

(13) **A** $\Leftrightarrow$ [**P**]

Contents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L
ResP
Res
P
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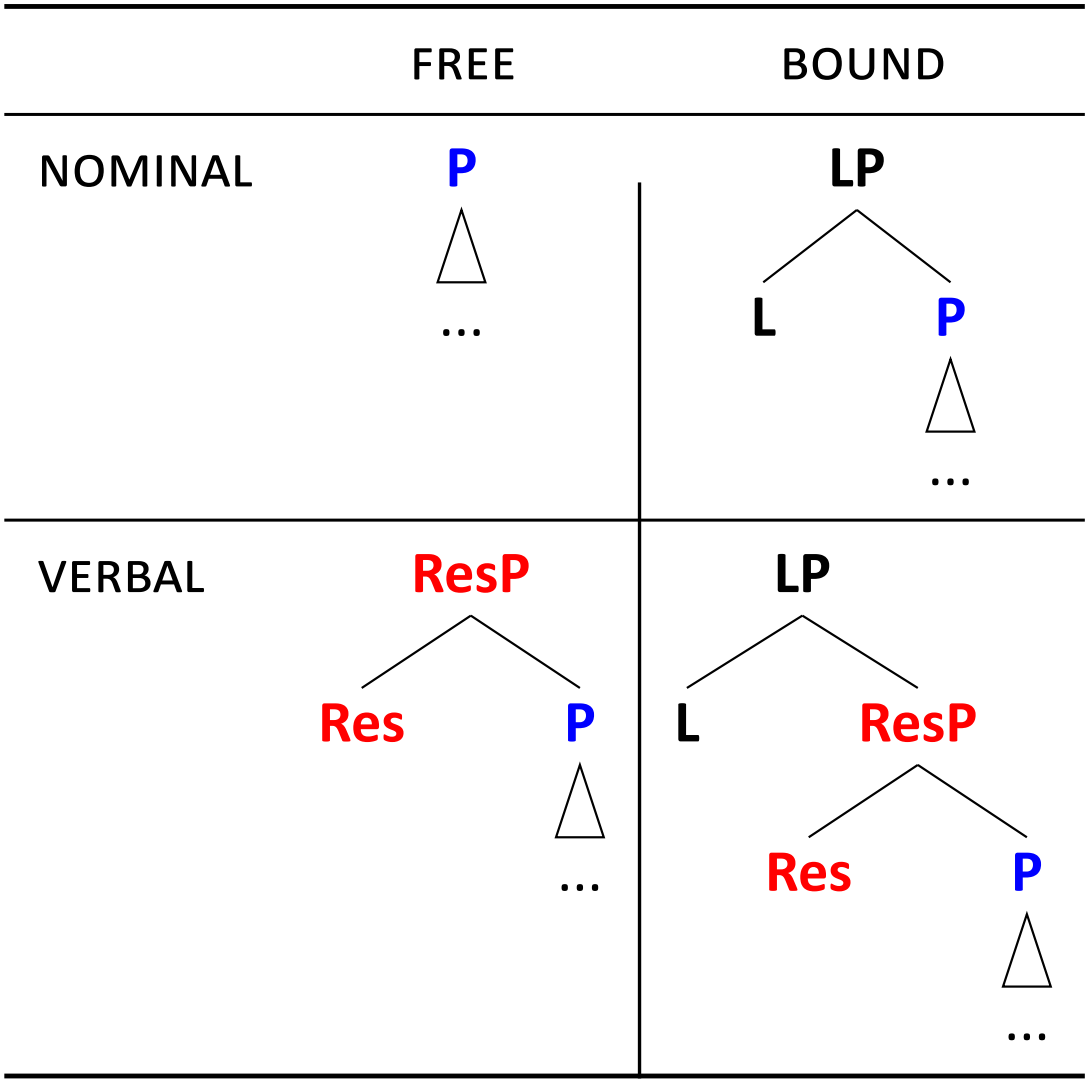
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NOMINAL
P
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VERBAL
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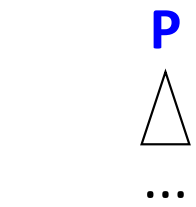
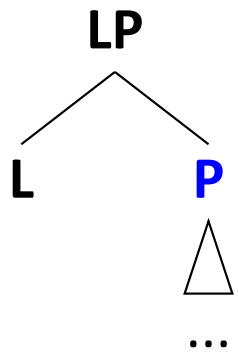
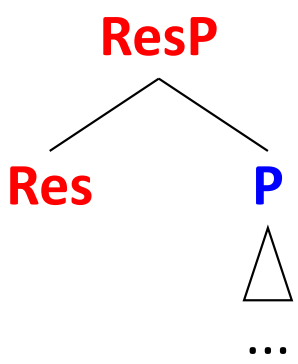
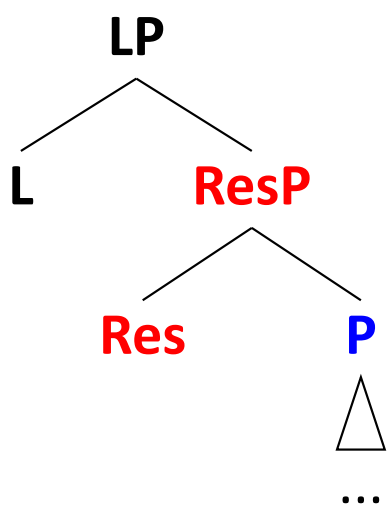
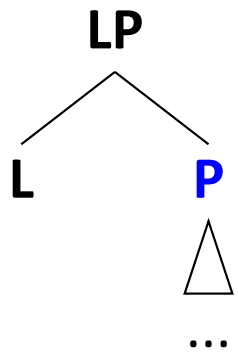
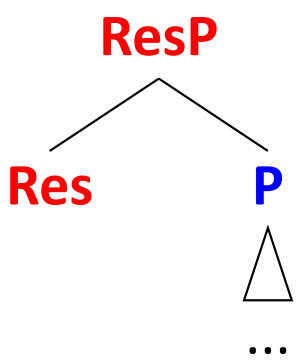
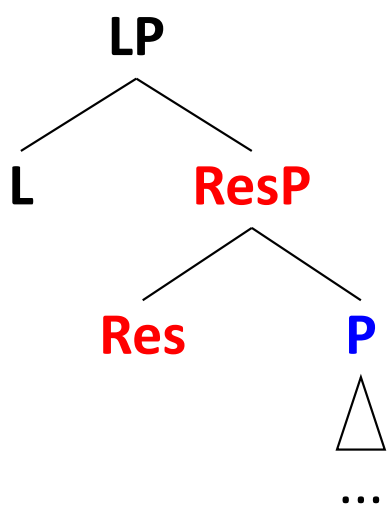
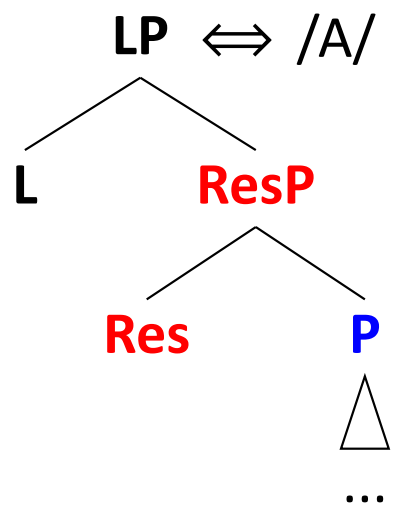
	FREE	BOUND
NOMINAL		
VERBAL		

	FREE	BOUND
NOM	A	—
VERB	A	A

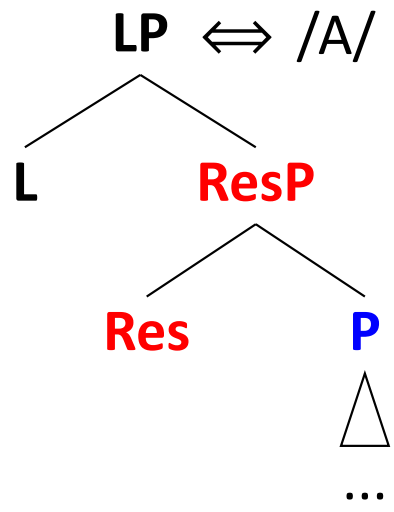
	FREE	BOUND
NOMINAL		
VERBAL		

	FREE	BOUND
NOM	A	—
VERB	A	A



	FREE	BOUND
NOMINAL	P …	LP L P …
VERBAL	ResP Res P …	LP L ResP Res P …

	FREE	BOUND
NOM	A	—
VERB	A	A



(14) The Superset Principle
A lexically stored tree L matches a syntactic node S iff L contains the syntactic tree dominated by S as a subtree.

	FREE	BOUND
NOM	P …	LP L P …
VER	ResP Res P …	LP L ResP Res P …

A

	FREE	BOUND
NOM	A	—
VERB	A	A

LP ⇔ /A/

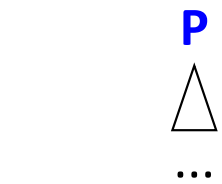
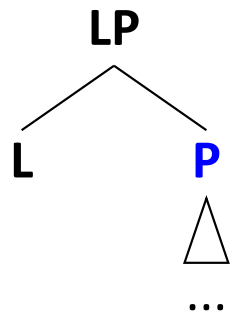
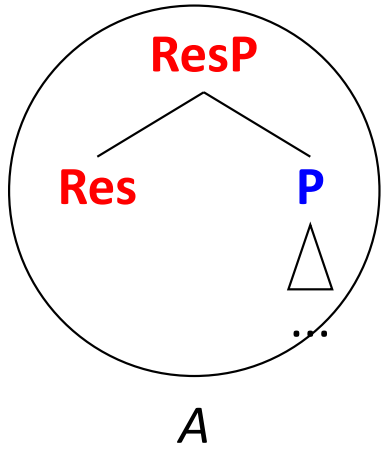
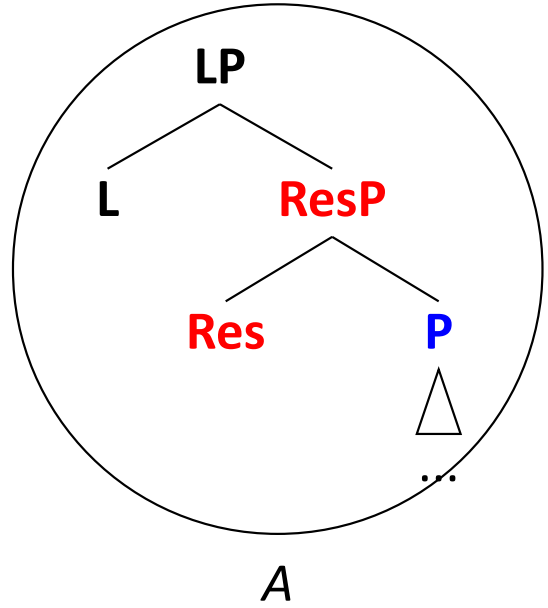
L ResP

Res P

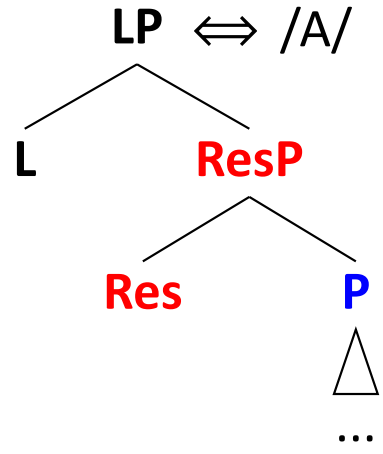
…

(15) The Superset Principle

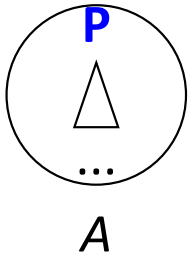
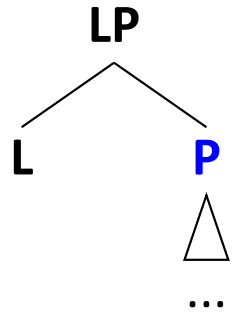
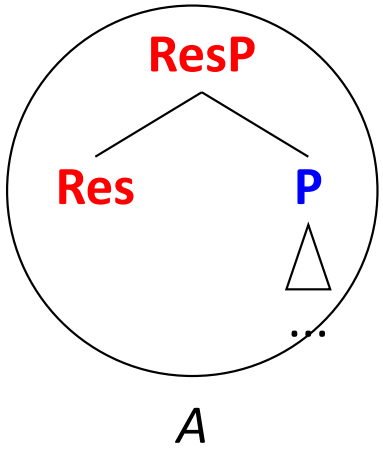
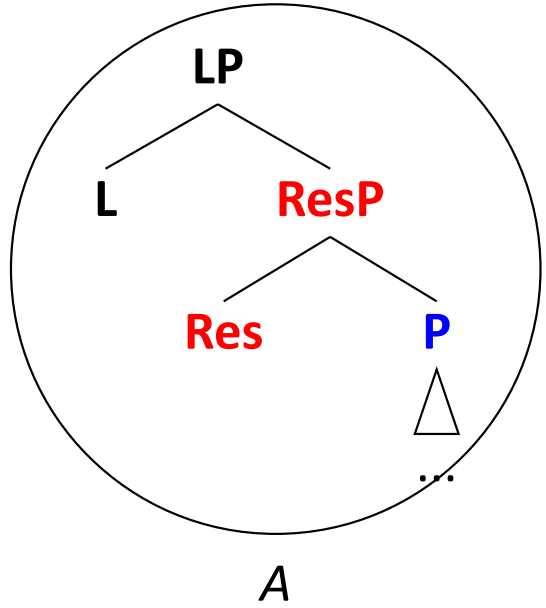
A lexically stored tree L matches a syntactic node S iff L contains the syntactic tree dominated by S as a subtree.

	FREE	BOUND
NOM		
VER		

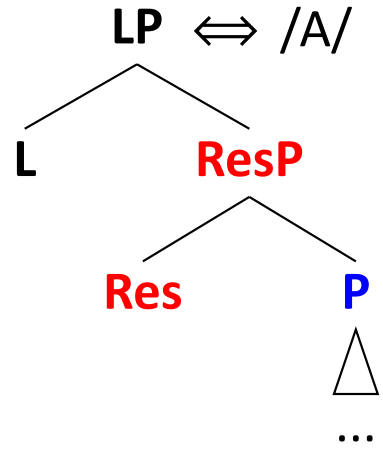
	FREE	BOUND
NOM	A	—
VERB	A	A



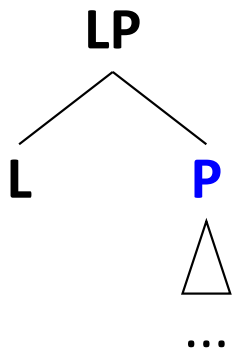
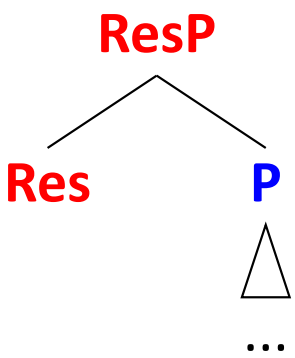
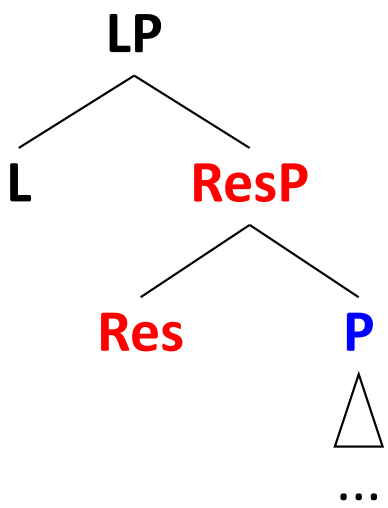
(16) The Superset Principle
A lexically stored tree L matches a syntactic node S iff L contains the syntactic tree dominated by S as a subtree.

	FREE	BOUND
NOM		
VER		

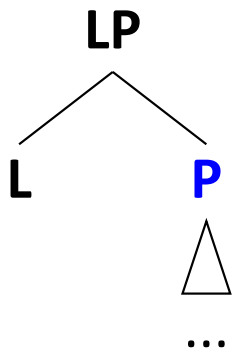
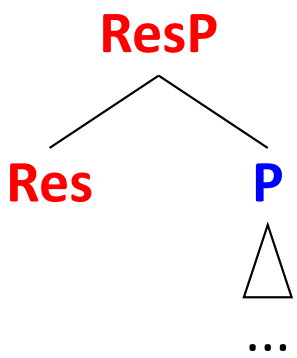
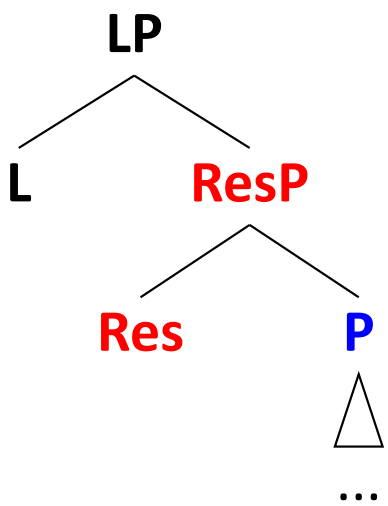
	FREE	BOUND
NOM	A	—
VERB	A	A



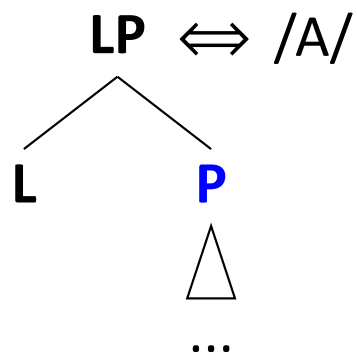
(17) The Superset Principle
A lexically stored tree L matches a syntactic node S iff L contains the syntactic tree dominated by S as a subtree.

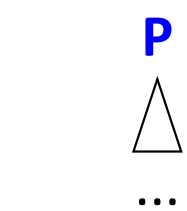
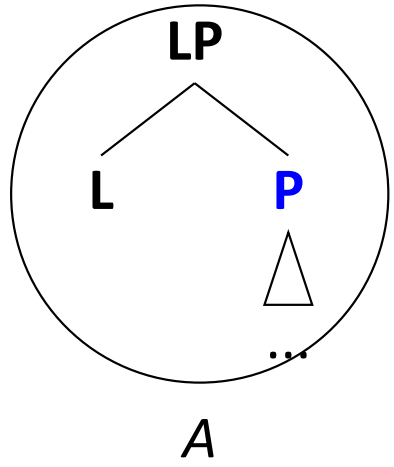
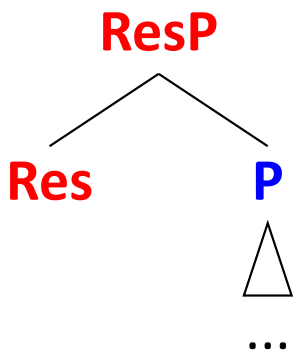
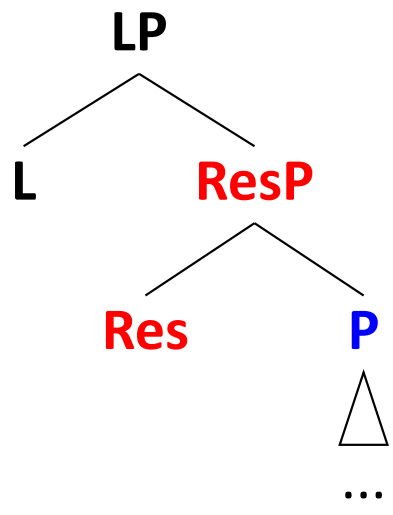
	FREE	BOUND
NOM		
VER		

	FREE	BOUND
NOM	A	A
VERB	—	—

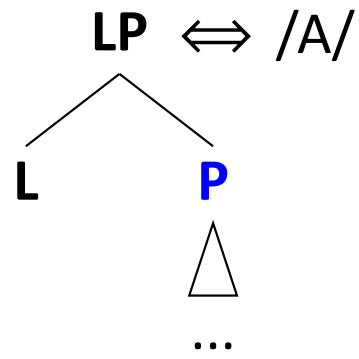
	FREE	BOUND
NOM		
VER		

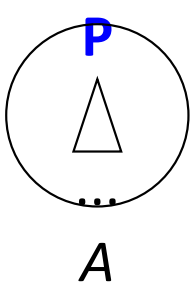
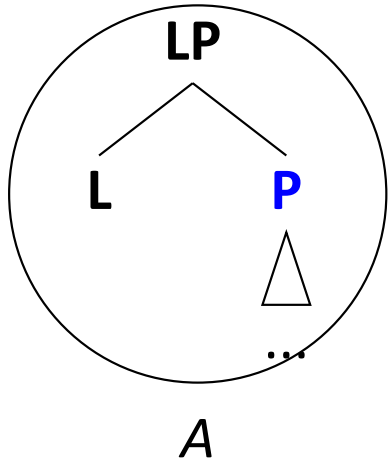
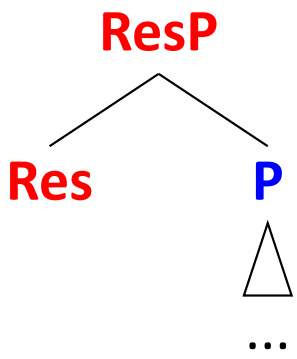
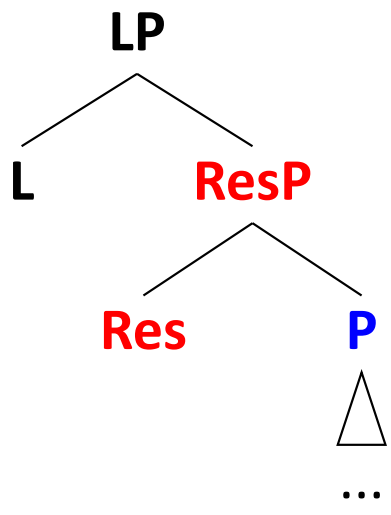
	FREE	BOUND
NOM	A	A
VERB	—	—



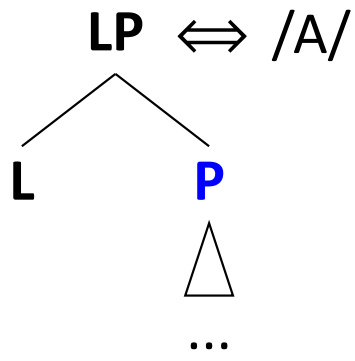
	FREE	BOUND
NOM		 *A*
VER		

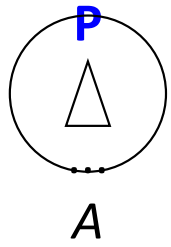
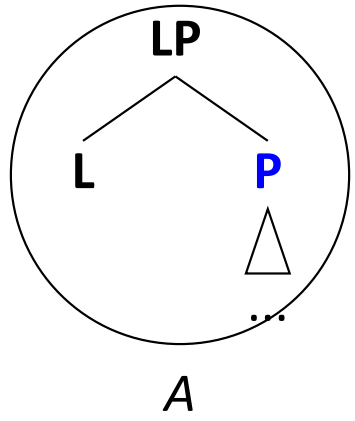
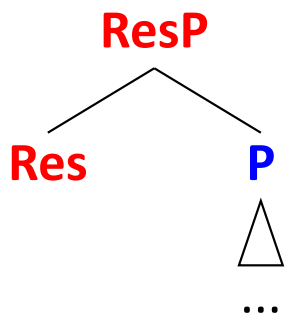
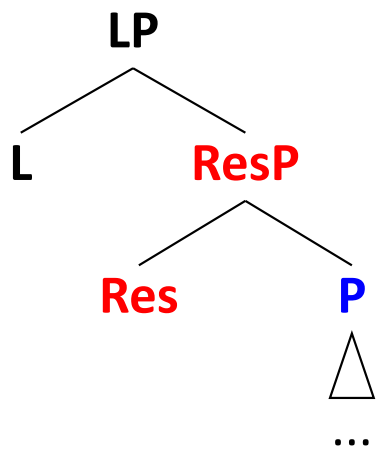
	FREE	BOUND
NOM	A	A
VERB	—	—



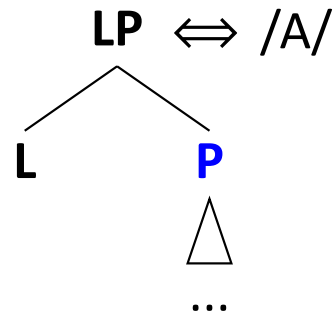
	FREE	BOUND
NOM		
VER		

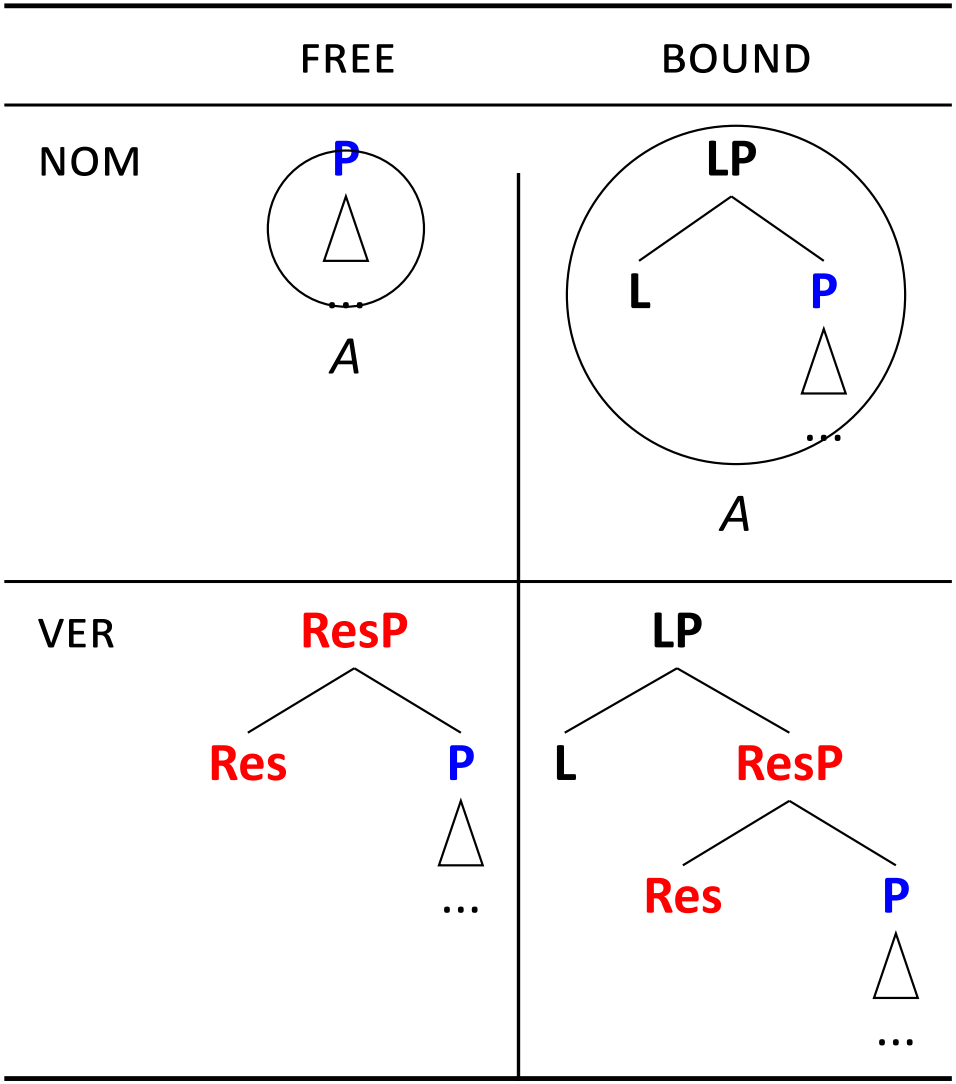
	FREE	BOUND
NOM	A	A
VERB	—	—



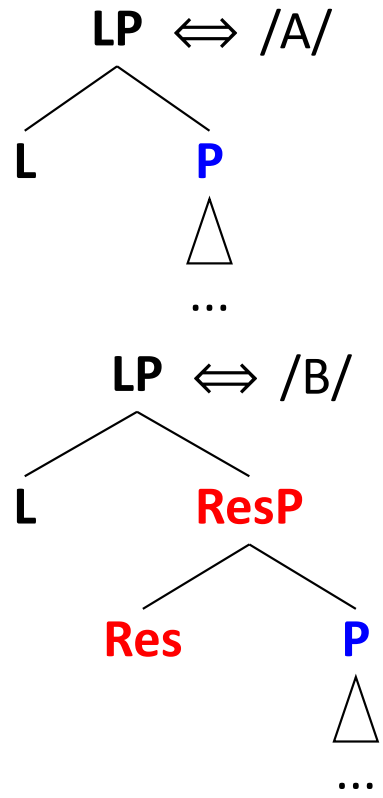
	FREE	BOUND
NOM		
VER		

	FREE	BOUND
NOM	A	A
VERB	B	B

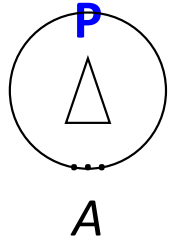
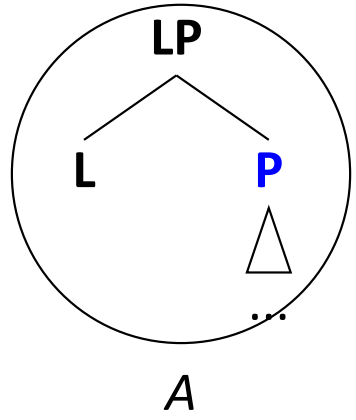
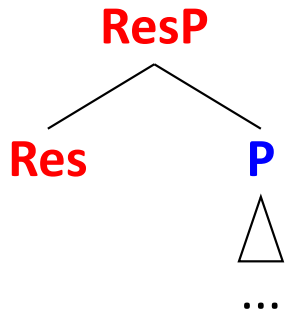
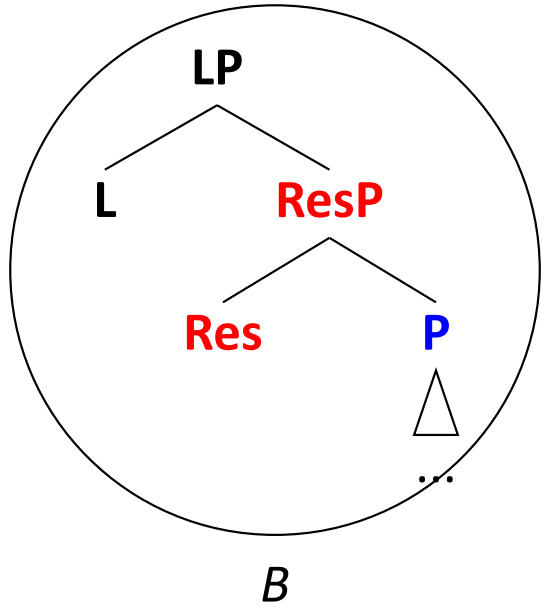




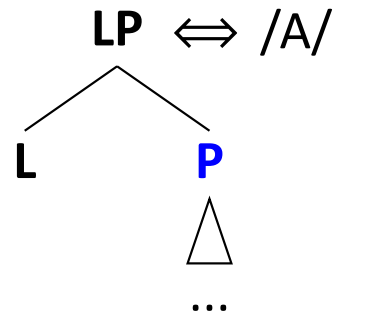
	FREE	BOUND
NOM	A	A
VERB	B	B

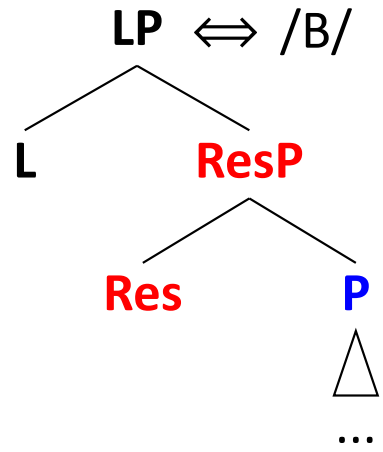


(18) The Superset Principle
A lexically stored tree L matches a syntactic node S iff L contains the syntactic tree dominated by S as a subtree.

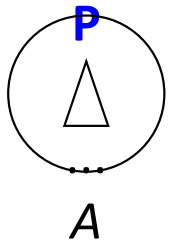
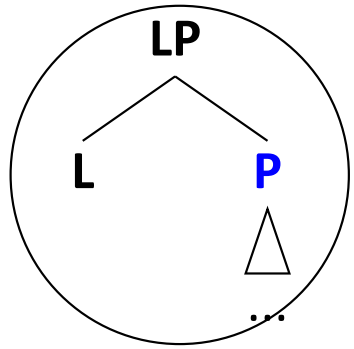
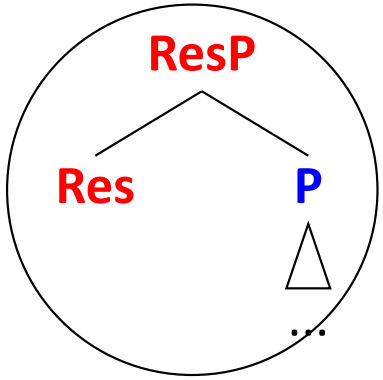
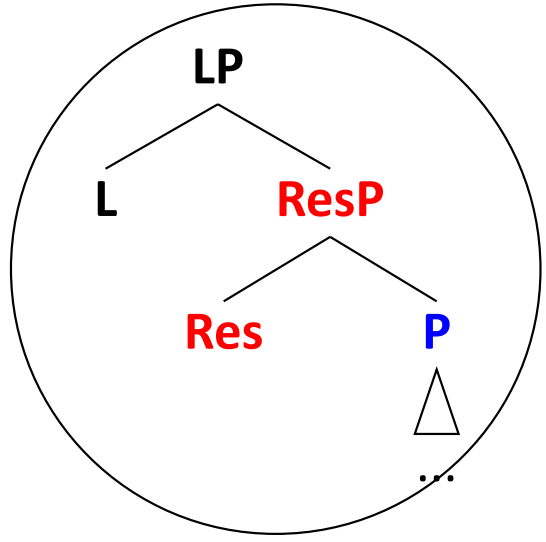
	FREE	BOUND
NOM		
VER		

	FREE	BOUND
NOM	A	A
VERB	B	B

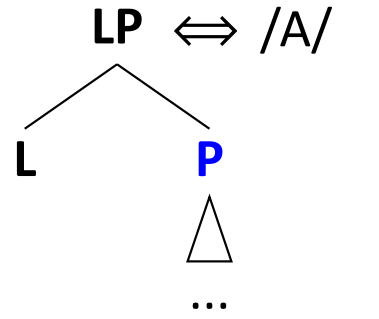


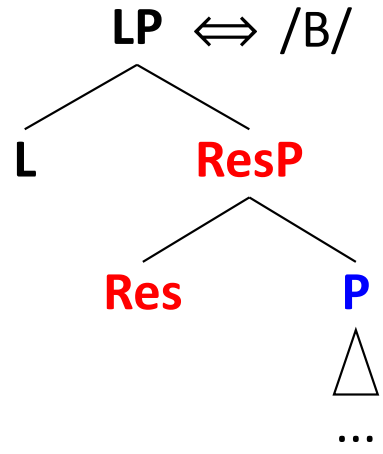


(19) The Superset Principle

	FREE	BOUND
NOM	 *A*	 *A*
VER	 *B*	 *B*

	FREE	BOUND
NOM	A	A
VERB	B	B

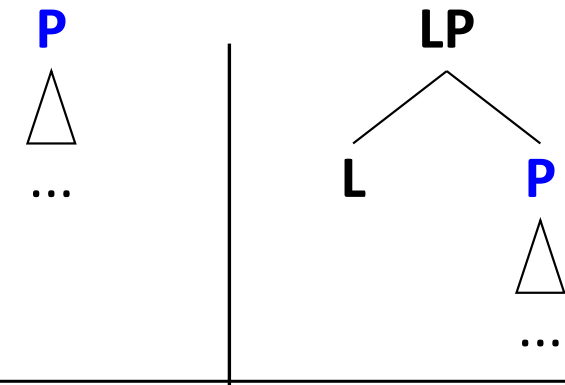
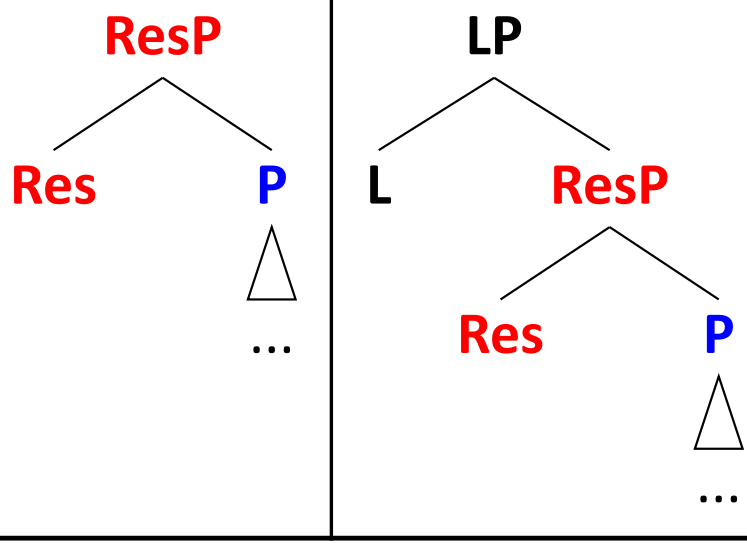




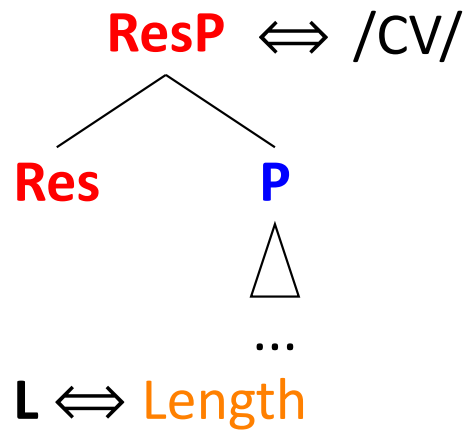
(20) The Superset Principle

	FREE	BOUND
NOM	P △ …	LP L P △ …
VER	ResP Res P △ …	LP L ResP Res P △ …

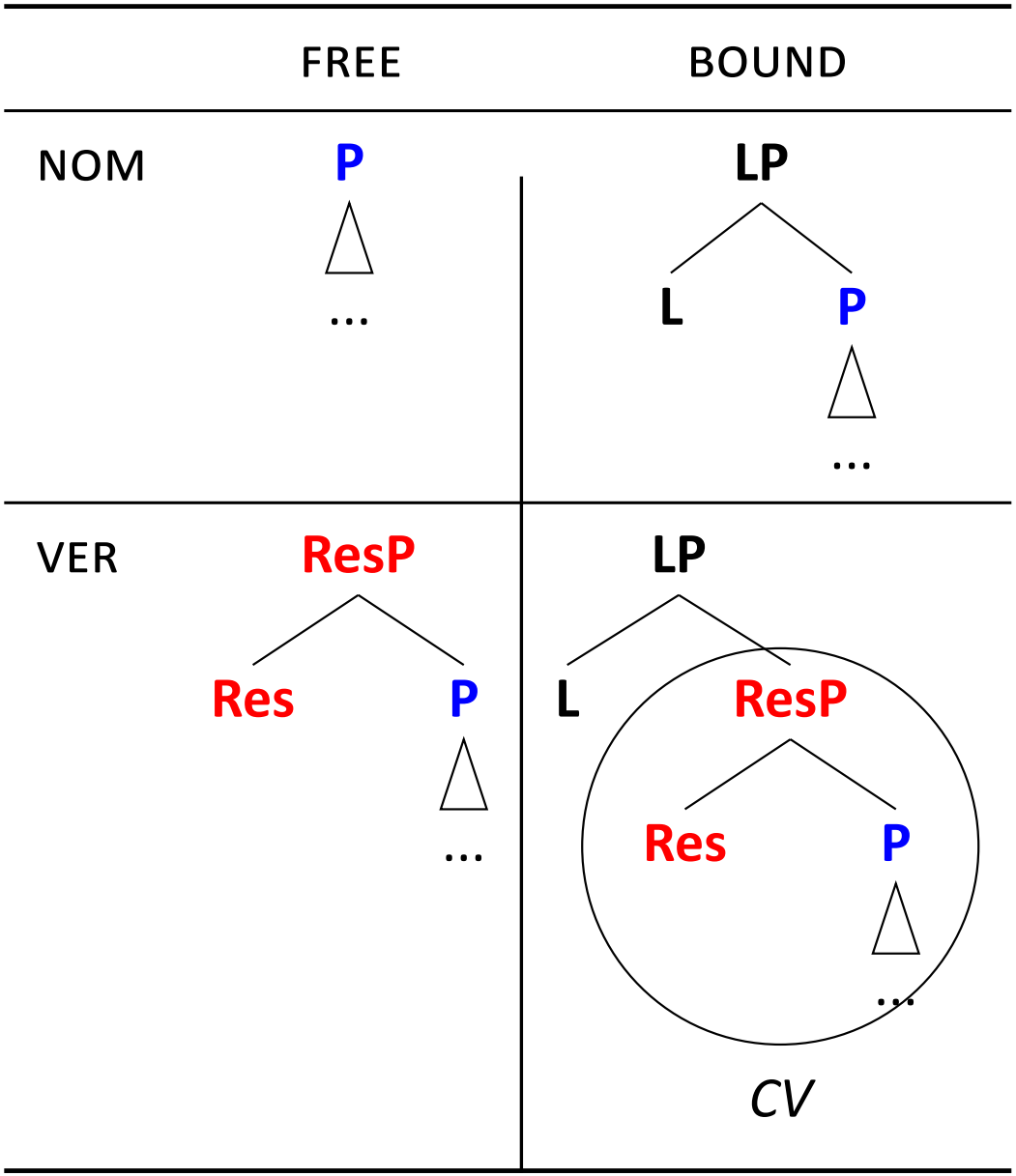
	FREE	BOUND
NOM	CV	CVV
VERB	CV	CVV

	FREE	BOUND
NOM		
VER		

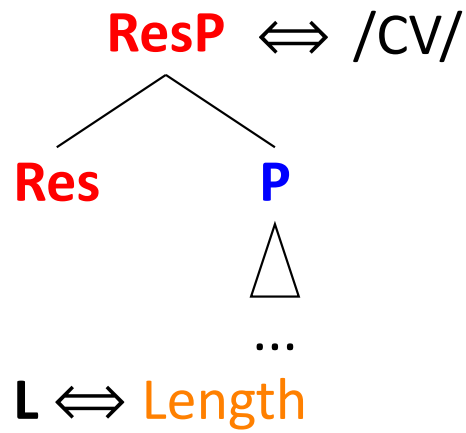
	FREE	BOUND
NOM	CV	CVV
VERB	CV	CVV



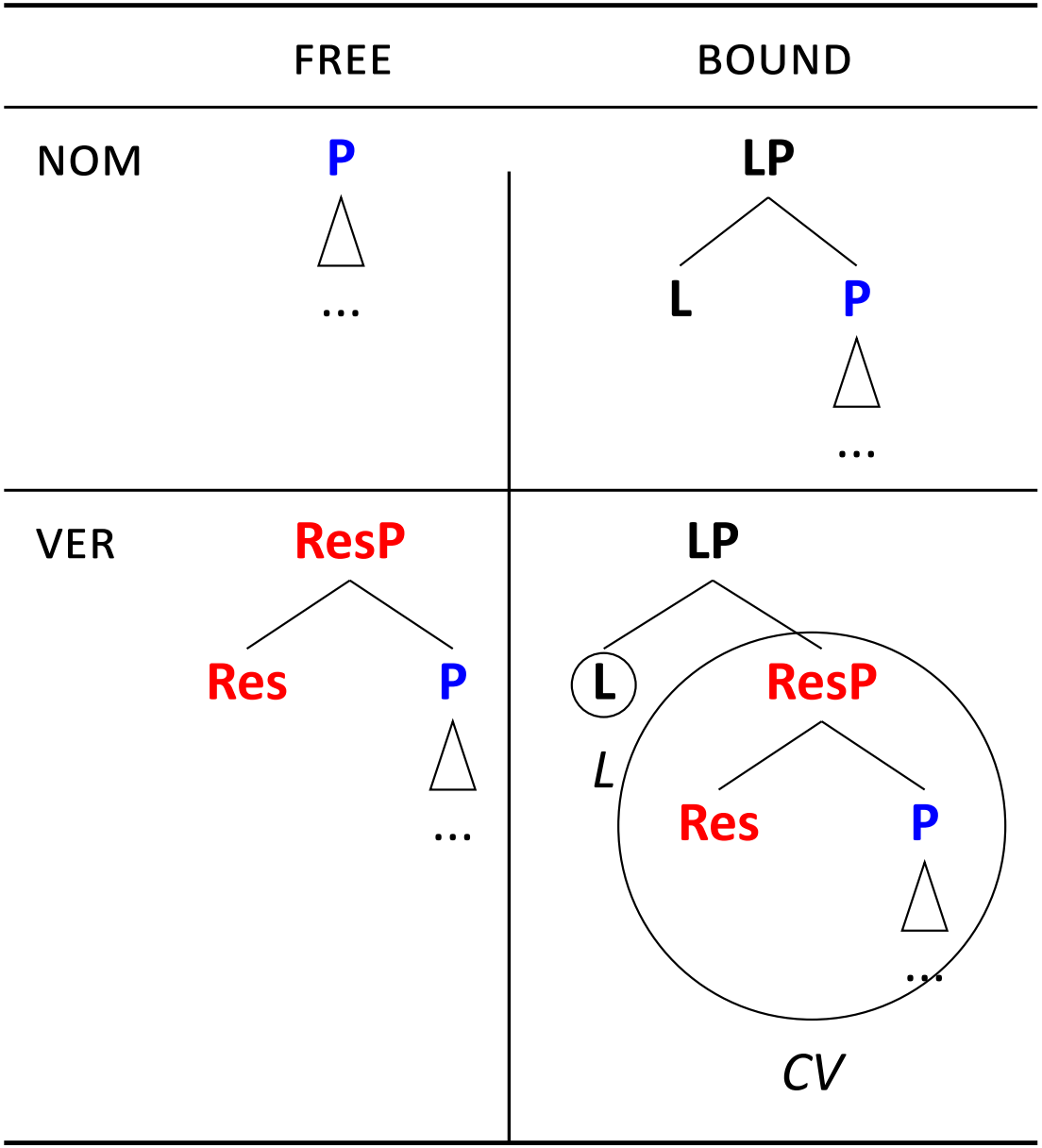
(21) The Superset Principle
A lexically stored tree L matches a syntactic node S iff L contains the syntactic tree dominated by S as a subtree.



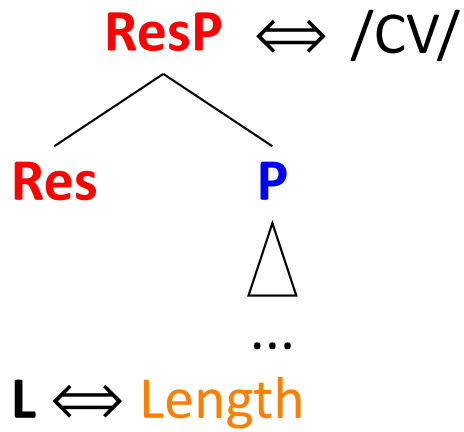
	FREE	BOUND
NOM	CV	CVV
VERB	CV	CVV



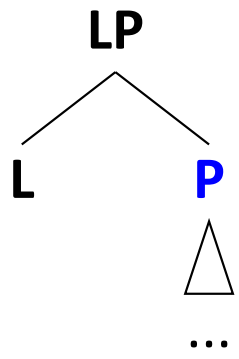
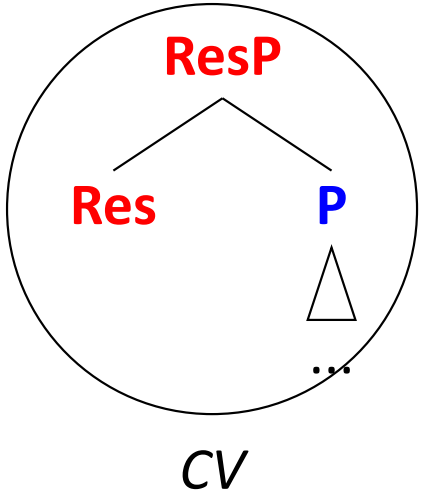
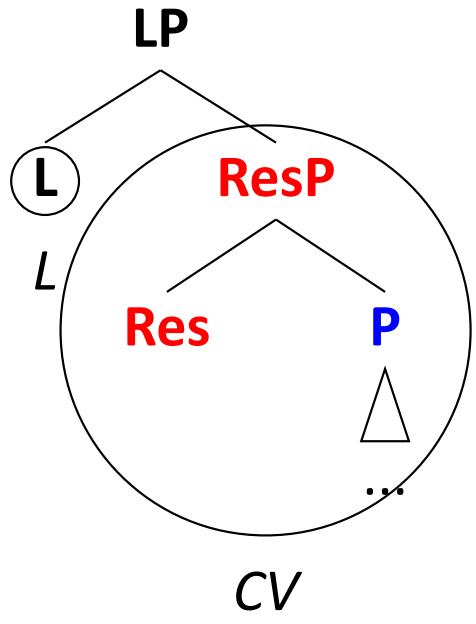
(22) The Superset Principle



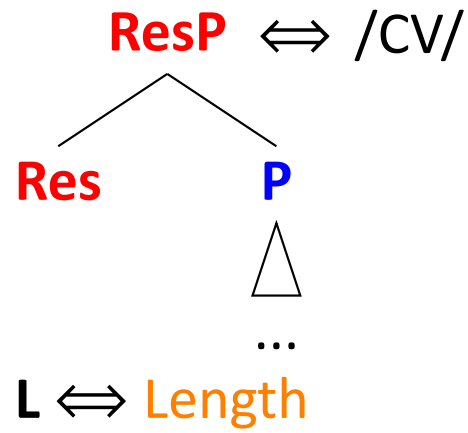
	FREE	BOUND
NOM	CV	CVV
VERB	CV	CVV



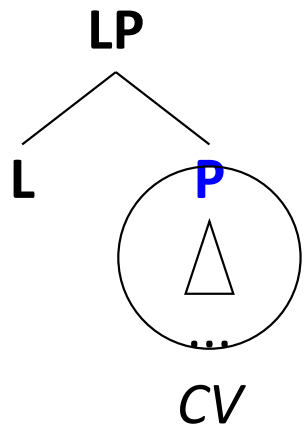
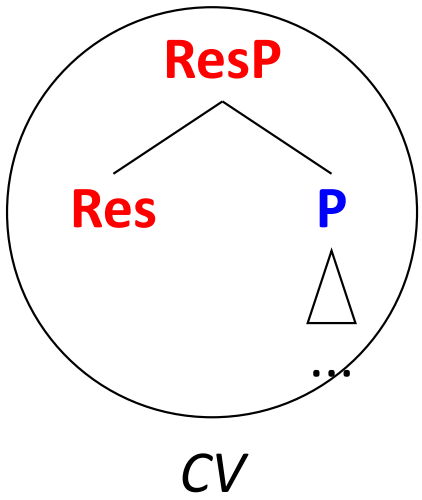
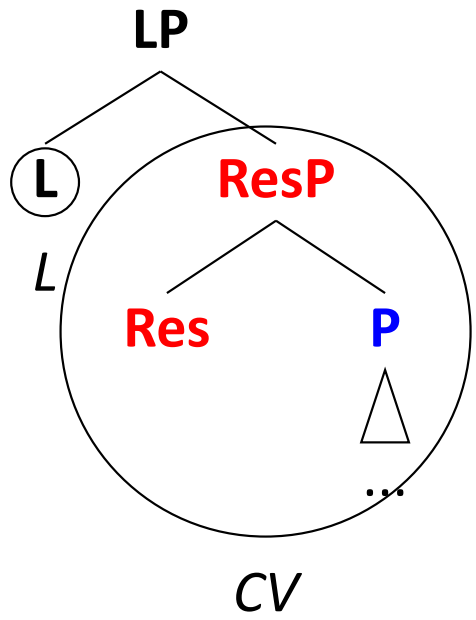
(23) The Superset Principle

	FREE	BOUND
NOM		
VER		

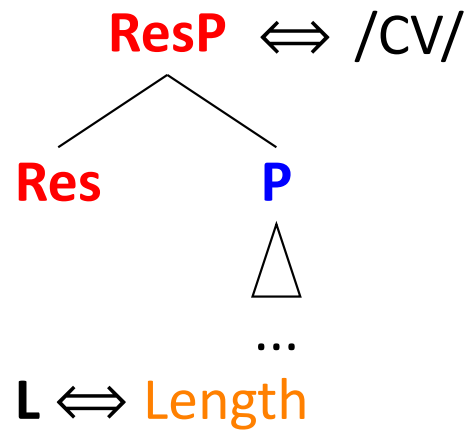
	FREE	BOUND
NOM	CV	CVV
VERB	CV	CVV

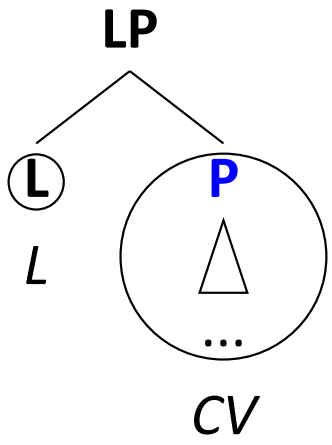
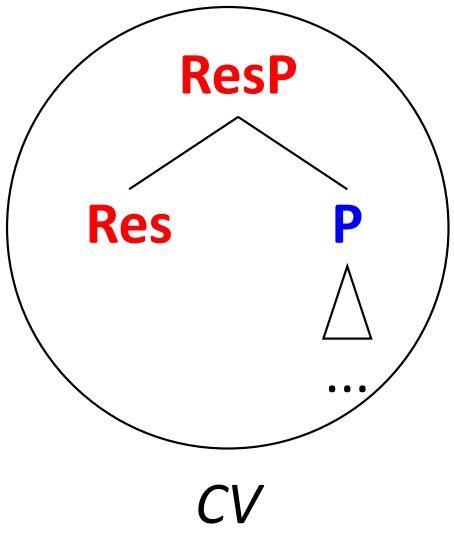
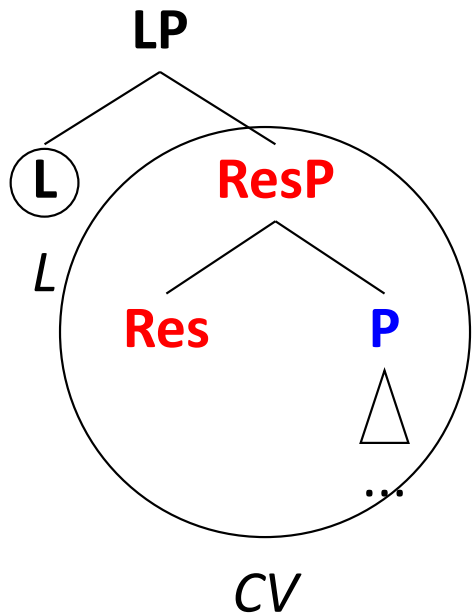


(24) The Superset Principle

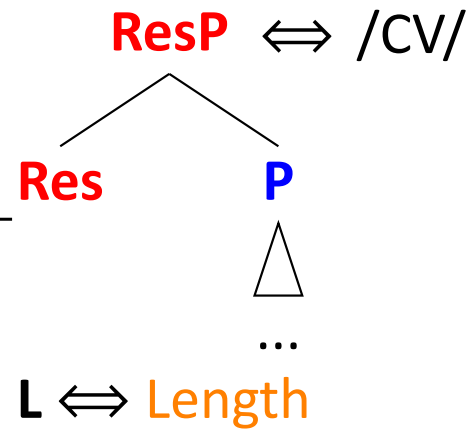
	FREE	BOUND
NOM		
VER		

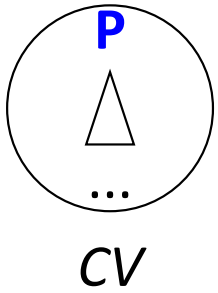
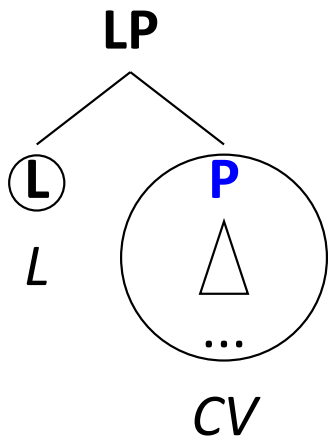
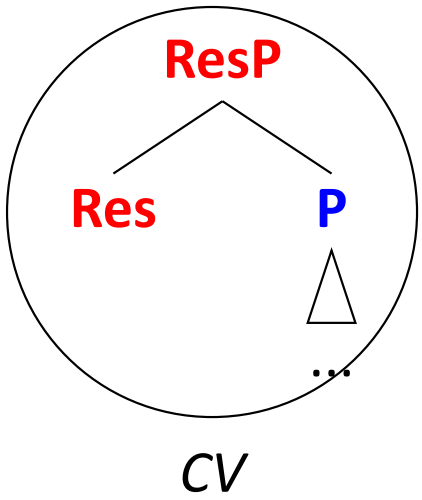
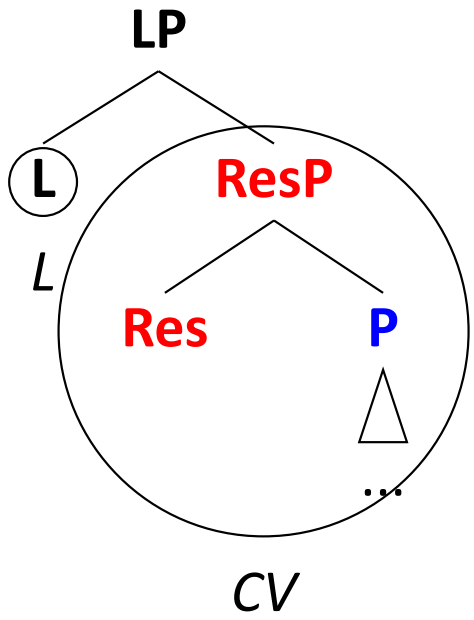
	FREE	BOUND
NOM	CV	CVV
VERB	CV	CVV



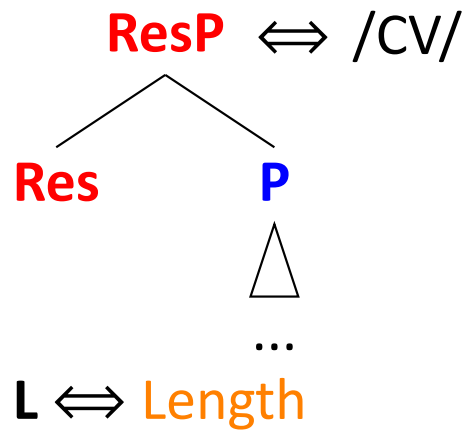
	FREE	BOUND
NOM		
VER		

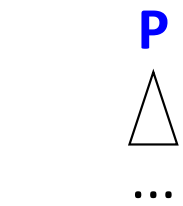
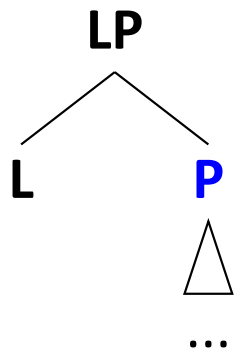
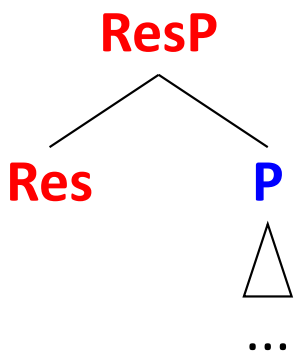
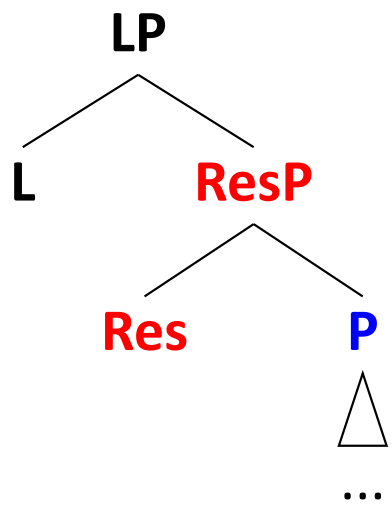
	FREE	BOUND
NOM	CV	CVV
VERB	CV	CVV



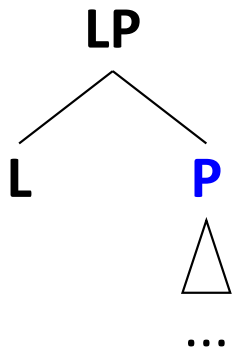
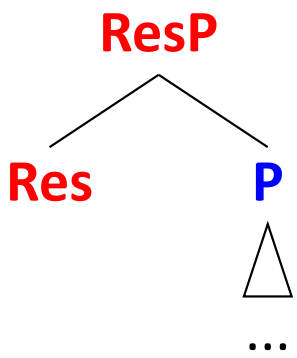
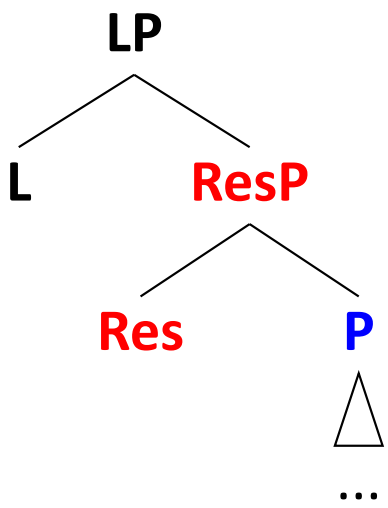
	FREE	BOUND
NOM		
VER		

	FREE	BOUND
NOM	CV	CVV
VERB	CV	CVV

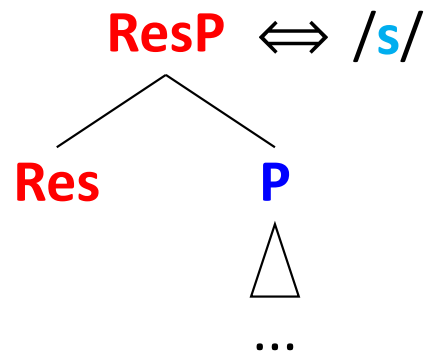


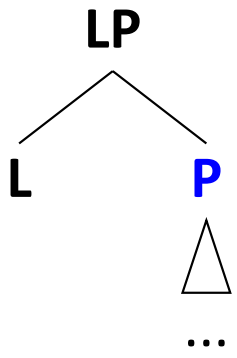
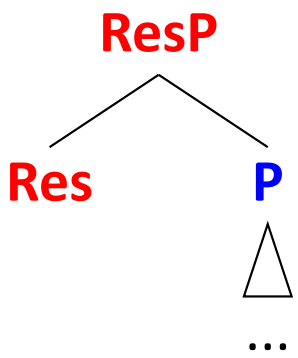
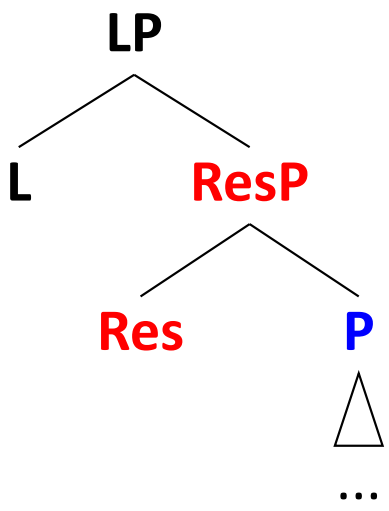
	FREE	BOUND
NOM		
VER		

	FREE	BOUND
NOM	s	sou
VERB	s	sou

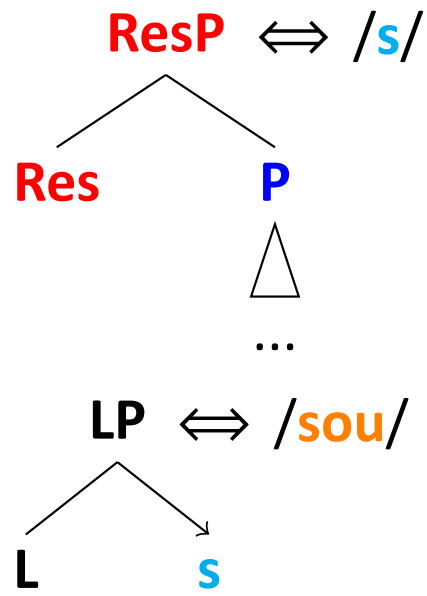
	FREE	BOUND
NOM		
VER		

	FREE	BOUND
NOM	s	sou
VERB	s	sou

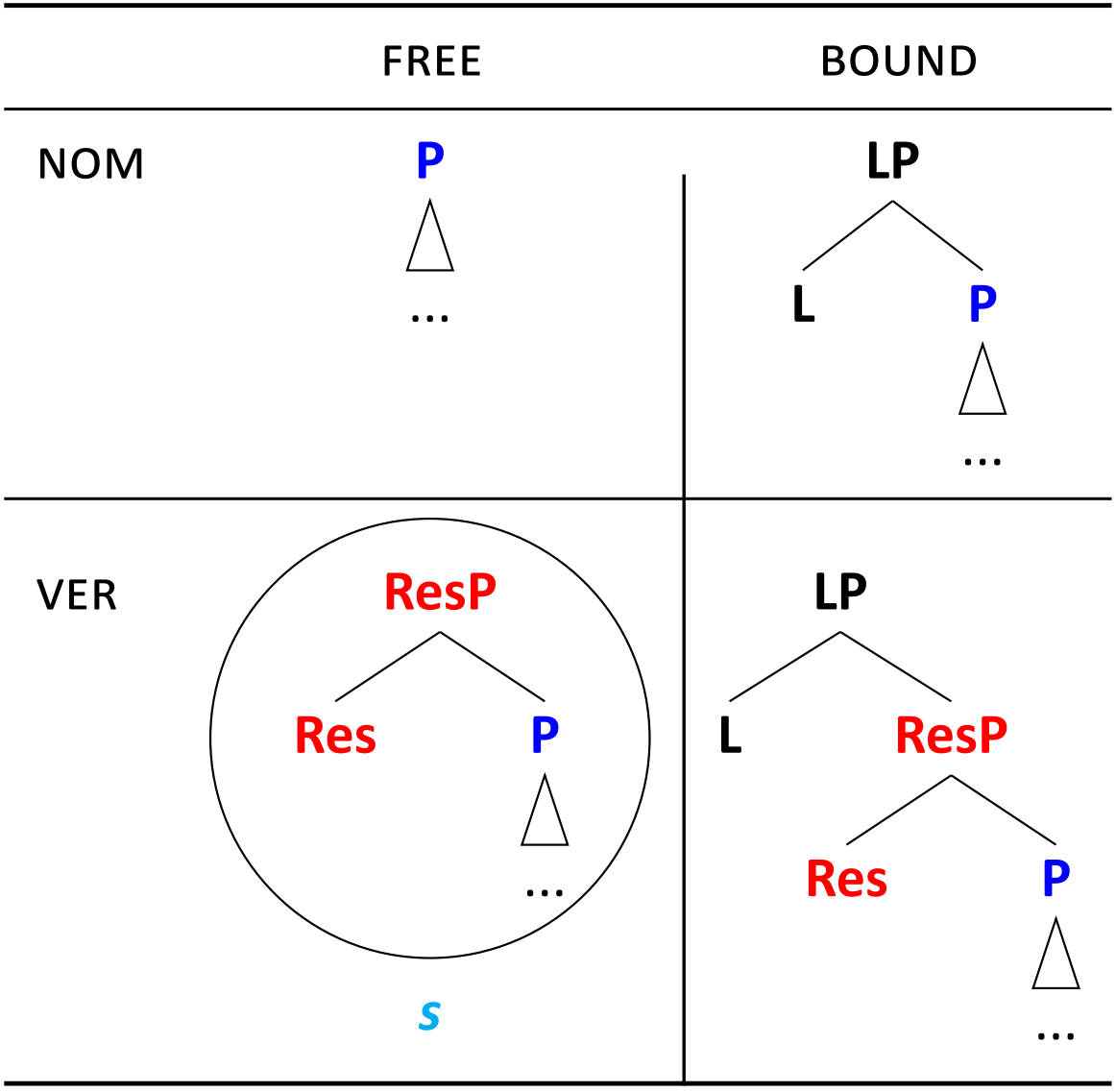


	FREE	BOUND
NOM		
VER		

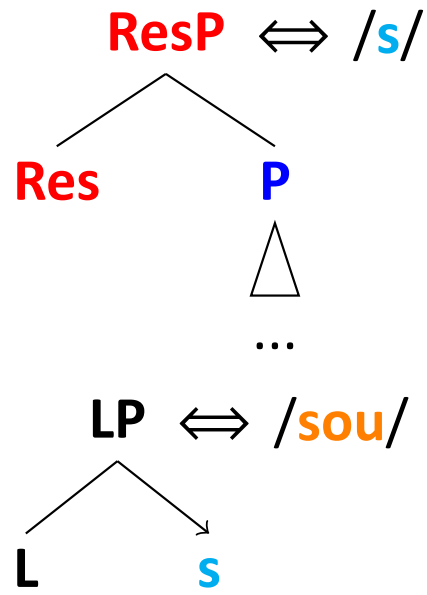
	FREE	BOUND
NOM	s	sou
VERB	s	sou



(28) The Superset Principle
A lexically stored tree L matches a syntactic node S iff L contains the syntactic tree dominated by S as a subtree.

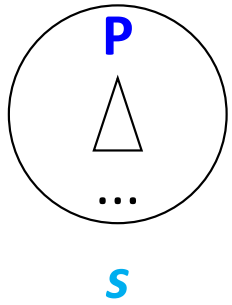
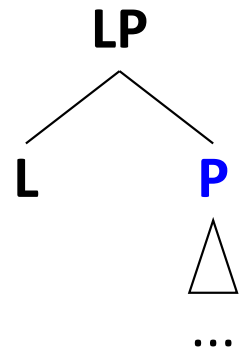
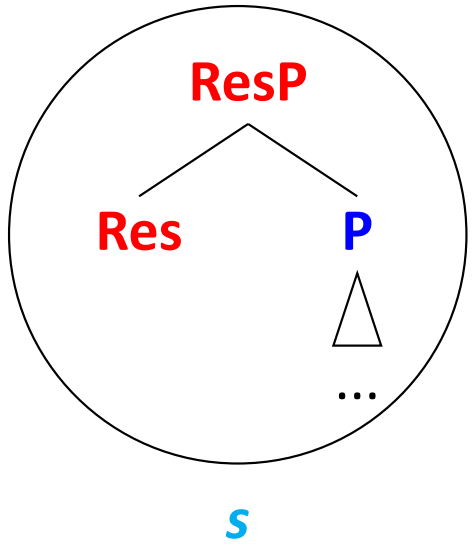
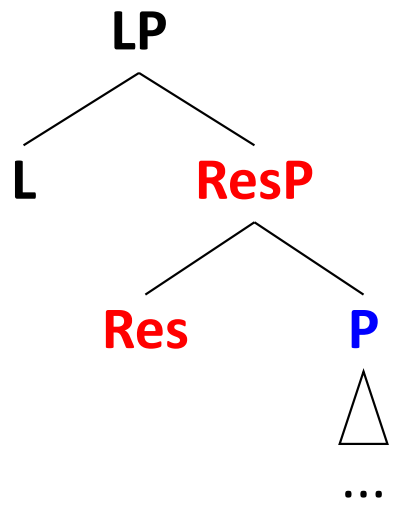


	FREE	BOUND
NOM	s	sou
VERB	s	sou

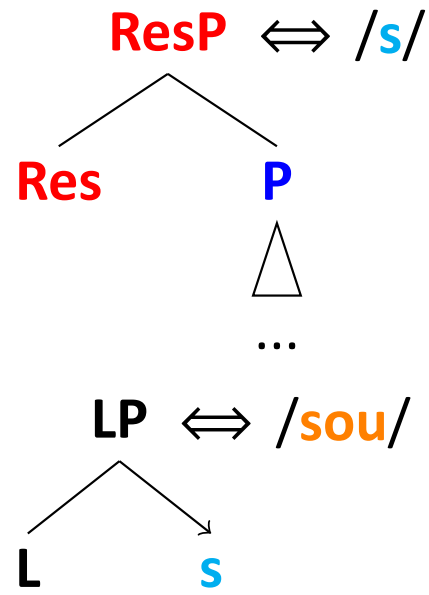


(29) The Superset Principle

A lexically stored tree L matches a syntactic node S iff L

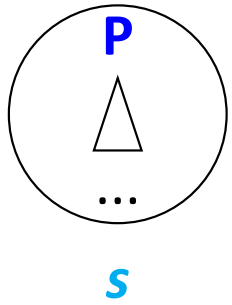
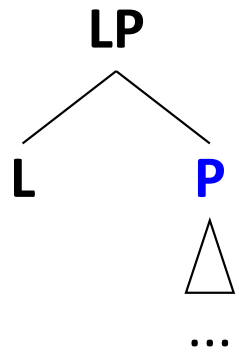
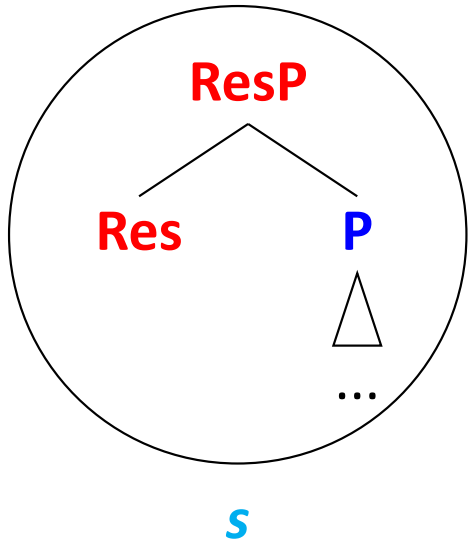
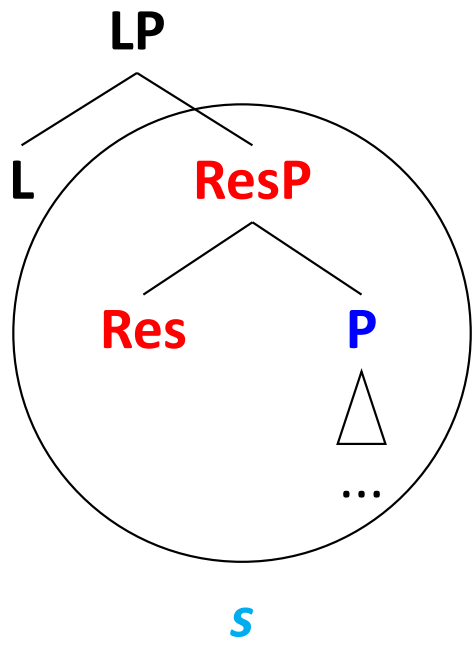
	FREE	BOUND
NOM		
VER		

	FREE	BOUND
NOM	s	sou
VERB	s	sou

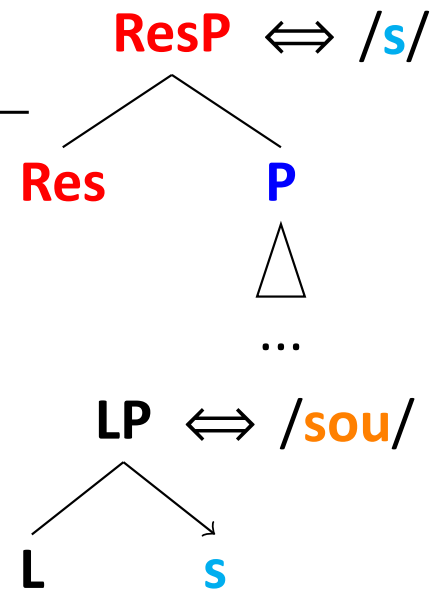


(30) The Superset Principle

A lexically stored tree L matches a syntactic node S iff L

	FREE	BOUND
NOM		
VER		

	FREE	BOUND
NOM	s	sou
VERB	s	sou



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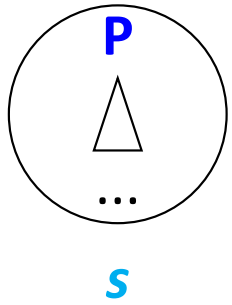
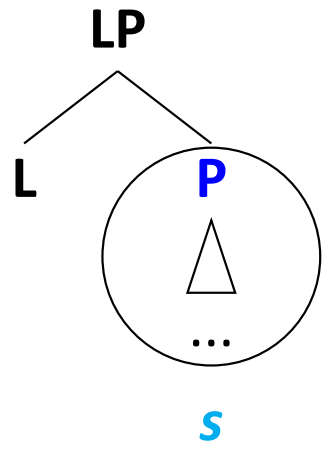
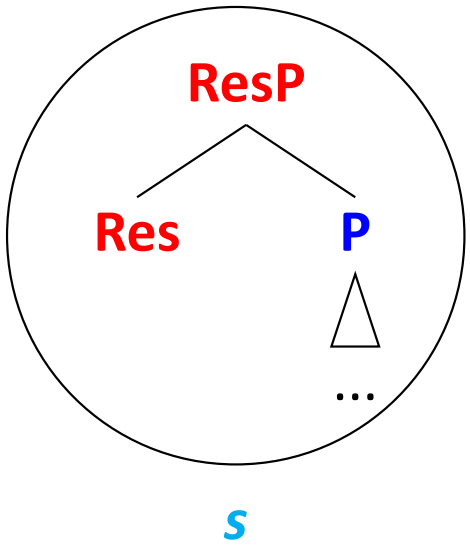
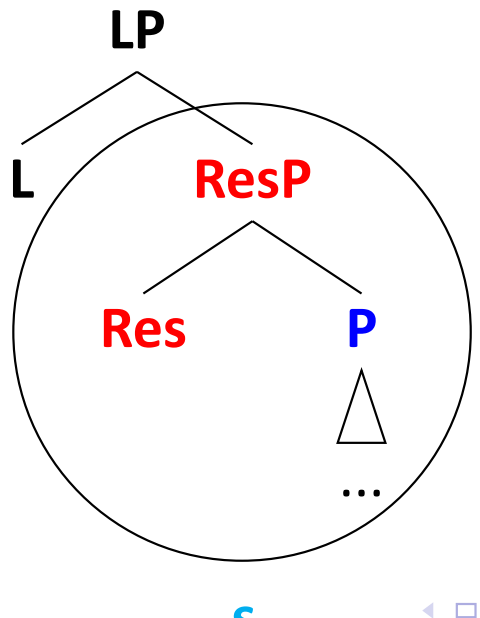
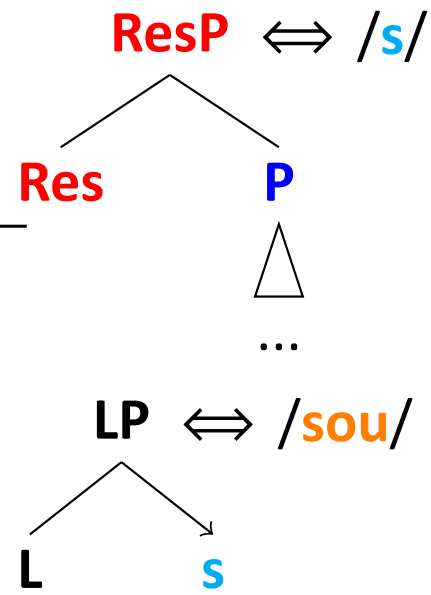
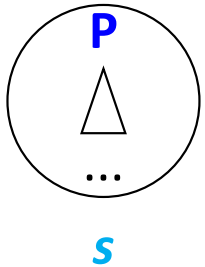
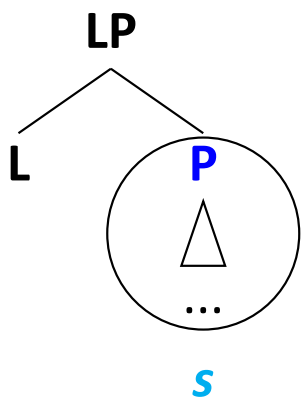
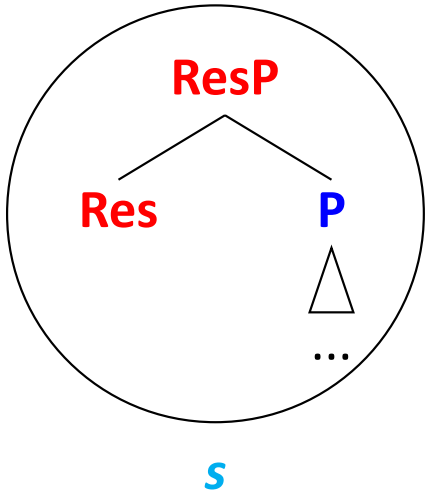
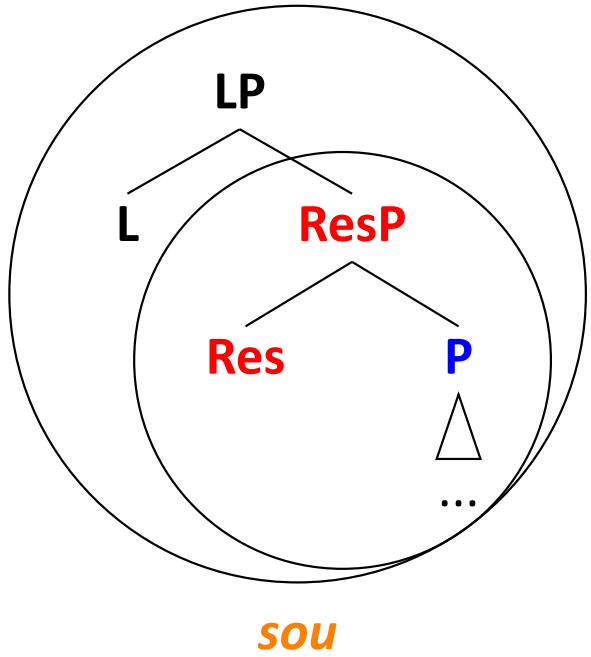
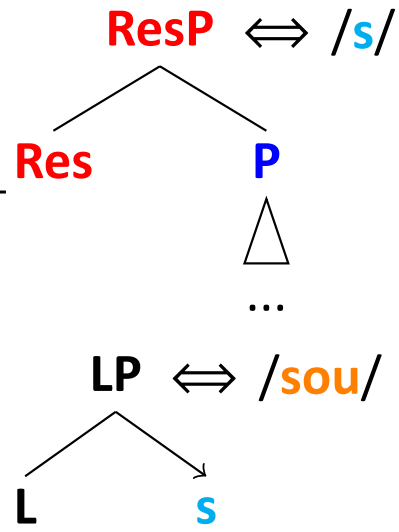
NOM		
VER		

	FREE	BOUND
NOM	s	sou
VERB	s	sou

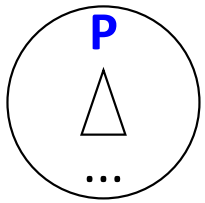
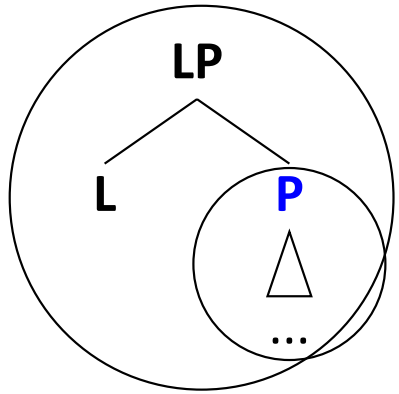
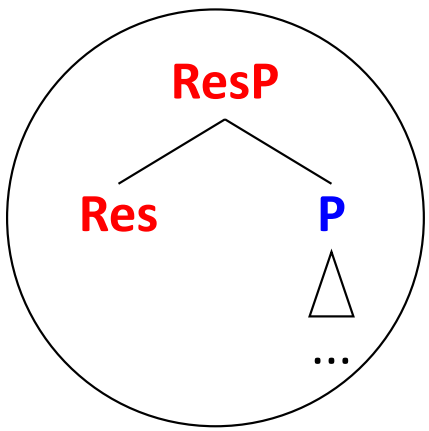
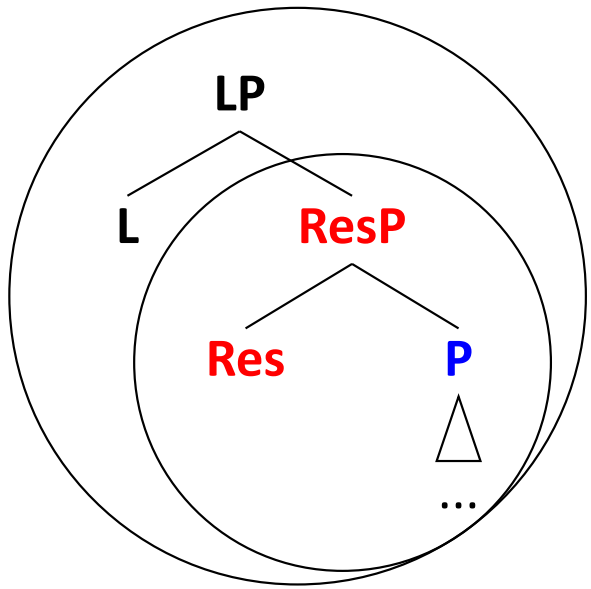


	FREE	BOUND
NOM		
VER		

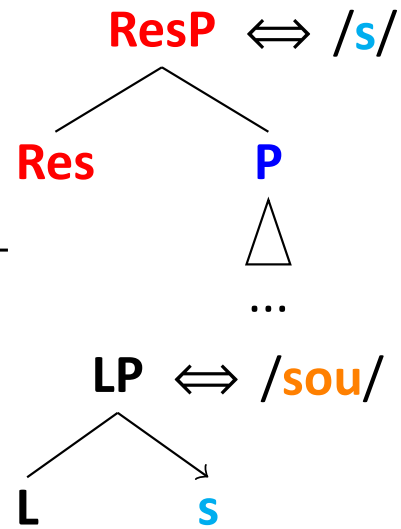
	FREE	BOUND
NOM	s	sou
VERB	s	sou

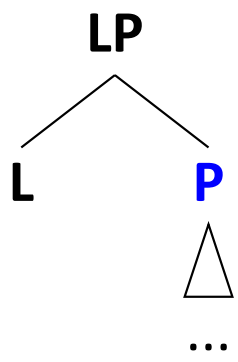
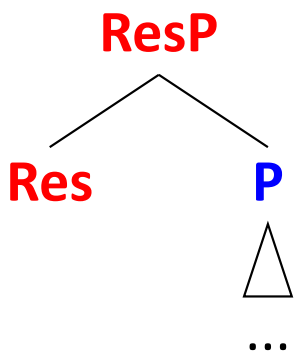
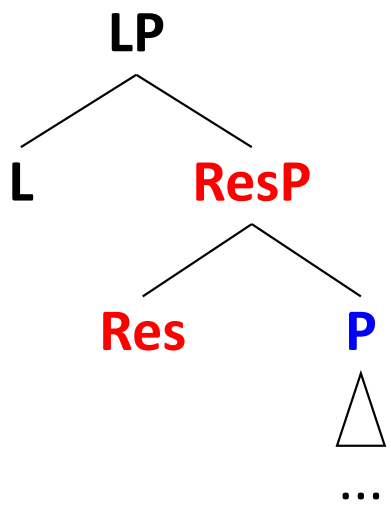


(22) The Superset Principle

	FREE	BOUND
NOM	 *s*	 *sou*
VER	 *s*	 *sou*

	FREE	BOUND
NOM	s	sou
VERB	s	sou

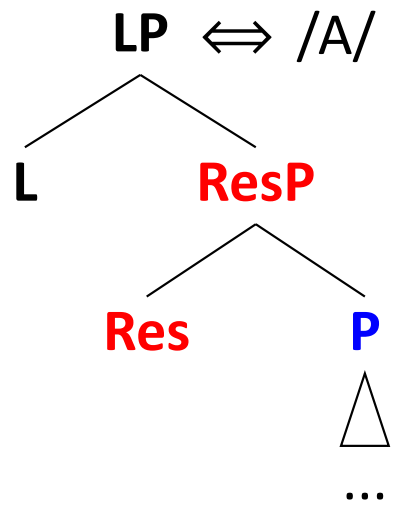


	FREE	BOUND
NOMINAL		
VERBAL		

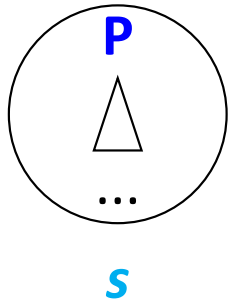
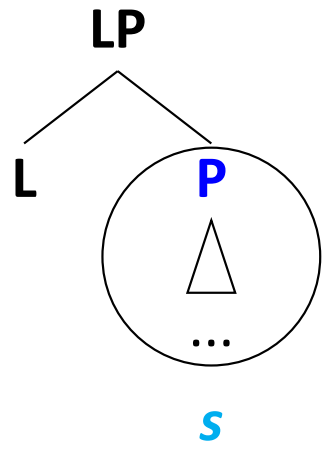
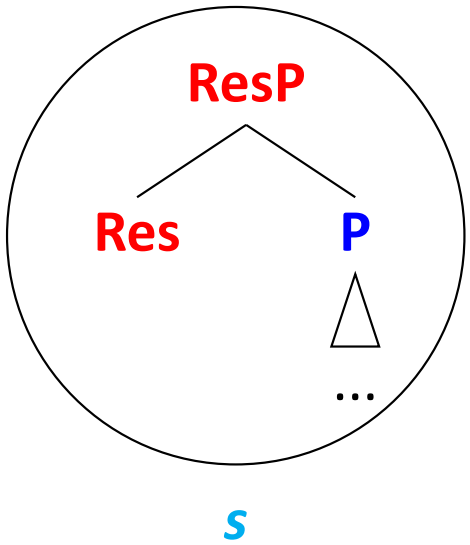
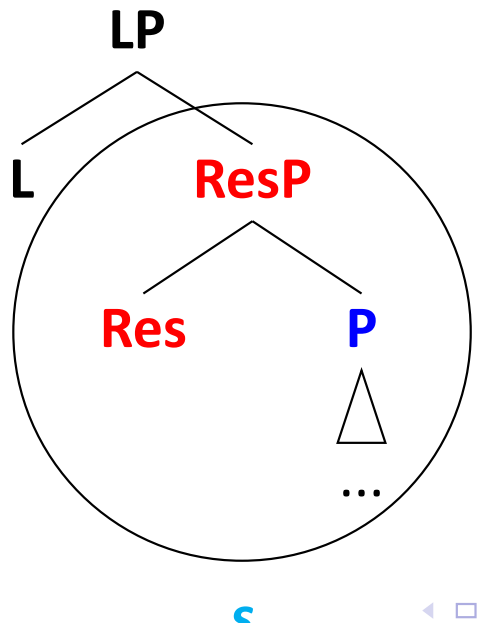
	FREE	BOUND
NOM	A	A
VERB	A	A

	FREE	BOUND
NOMINAL	P …	LP L P …
VERBAL	ResP Res P …	LP L ResP Res P …

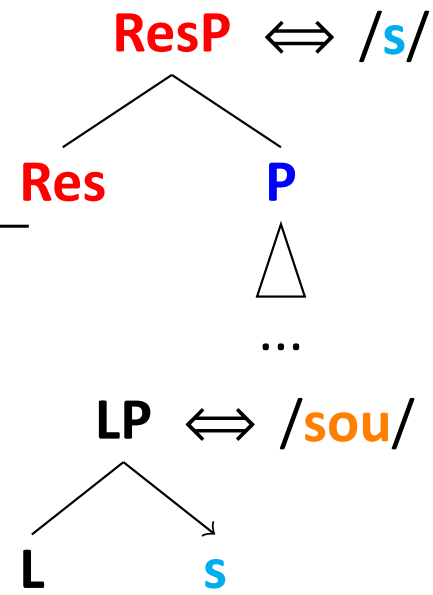
	FREE	BOUND
NOM	A	A
VERB	A	A

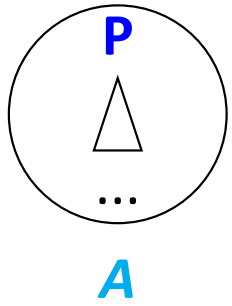
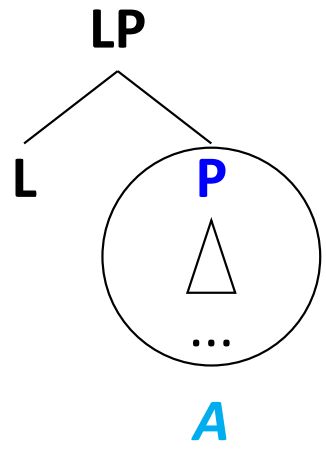
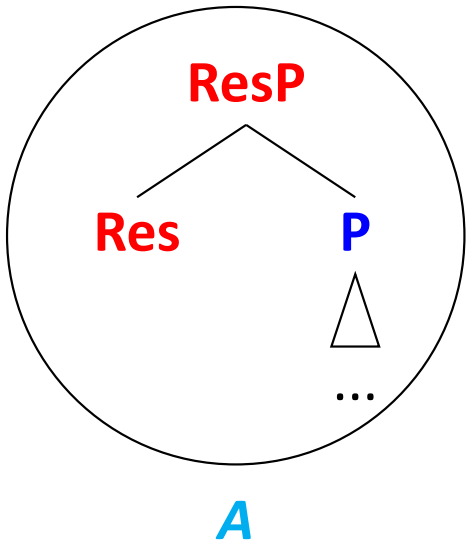
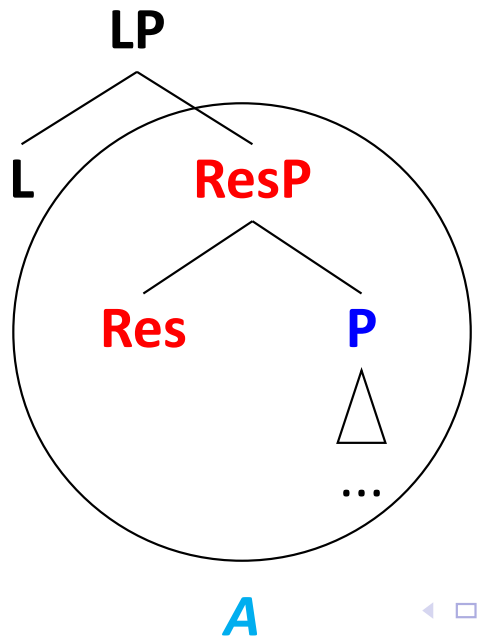


(35) The Superset Principle
A lexically stored tree L matches a syntactic node S iff L contains the syntactic tree dominated by S as a subtree.

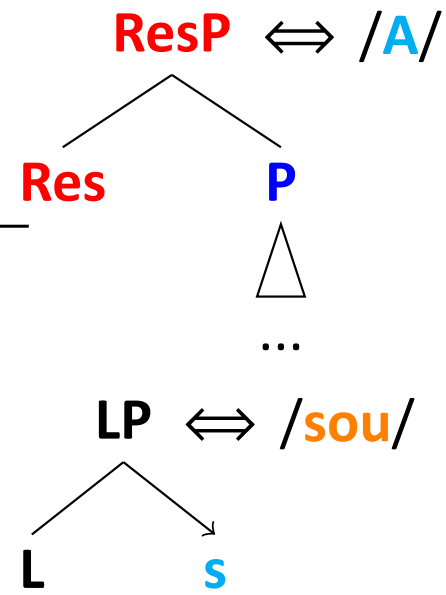
	FREE	BOUND
NOM		
VER		

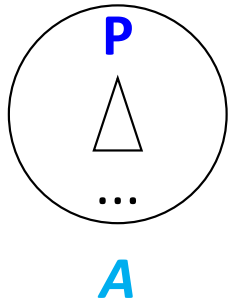
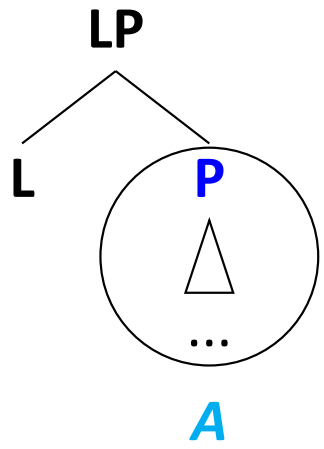
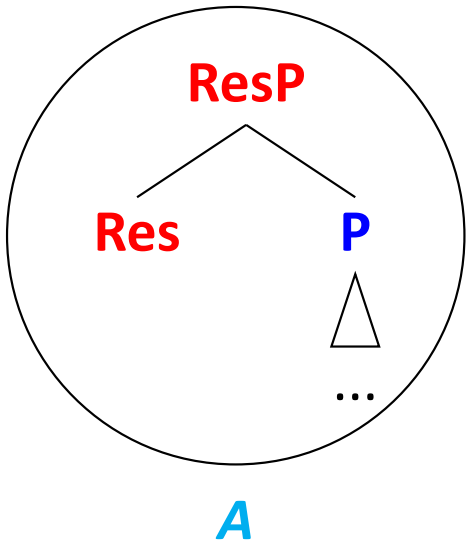
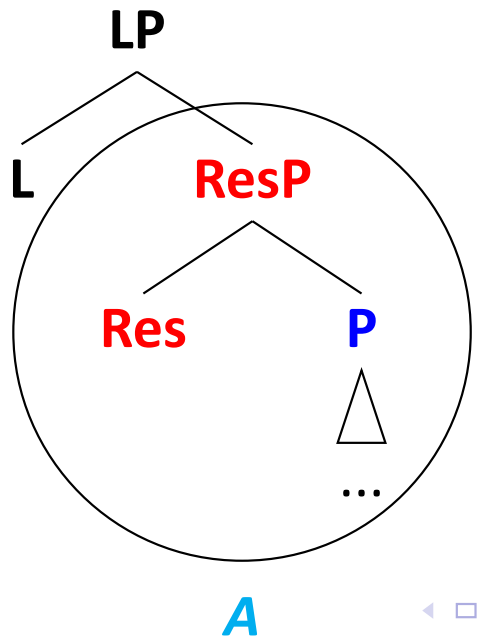
	FREE	BOUND
NOM	A	A
VERB	A	A



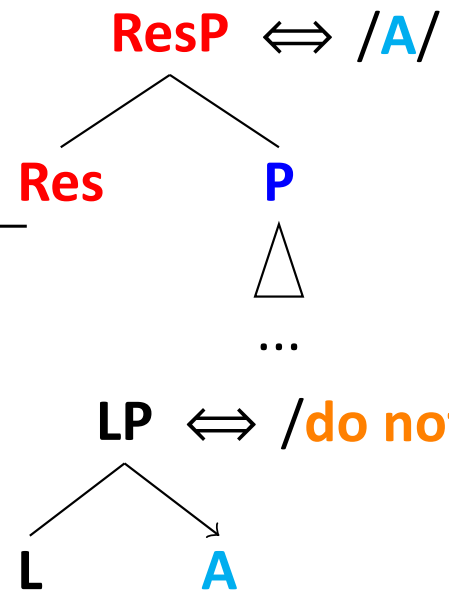
	FREE	BOUND
NOM		
VER		

	FREE	BOUND
NOM	A	A
VERB	A	A



	FREE	BOUND
NOM		
VER		

	FREE	BOUND
NOM	A	A
VERB	A	A



Contents

Conclusions

- P-like elements come in 4 flavours, differentiated by two parameters

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Conclusions

- P-like elements come in 4 flavours, differentiated by two parameters
  - What the complement is (noun, verb)
  - Bound or not
- There are quite a few patterns, including defective paradigms

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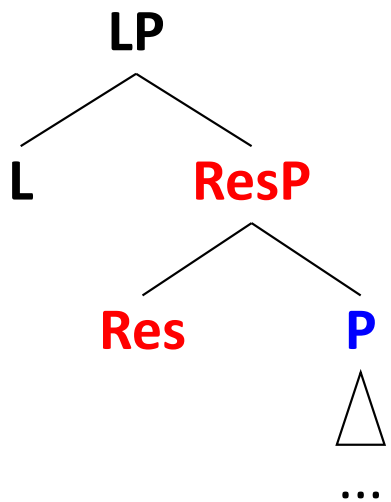

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- Implementable, but requires decomposing P (Path+Place) + Movement containing trees

Thank you!

Contents

3/4 (apart)

	FREE	BOUND
NOMINAL	a. —	b. **roz**-hraní apart-edge ‘interface’
VERBAL	c. **roz**-letět apart-fly ‘disperse by flying’	d. **roz**-let apart-flight ‘dispersal by flying’

References I