

# Syntax

Pavel Caha

1 Nov 2021

## Recap

Noun phrase

Does the mirror principle describe differences among languages?

Head movement

Choosing between head-movement and affix hopping

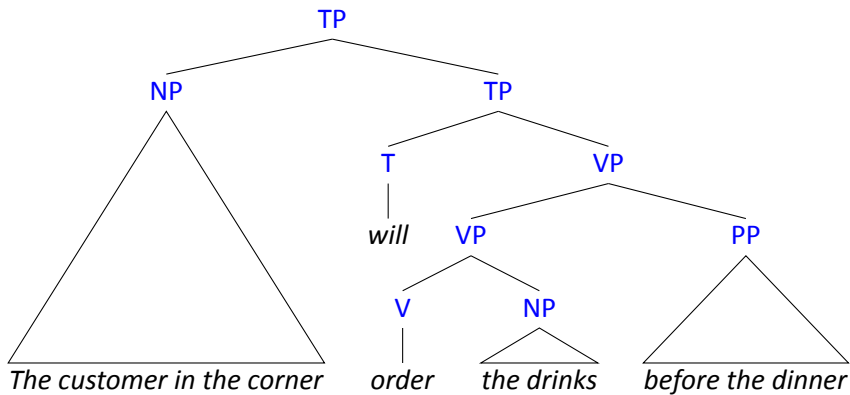
Back to Czech

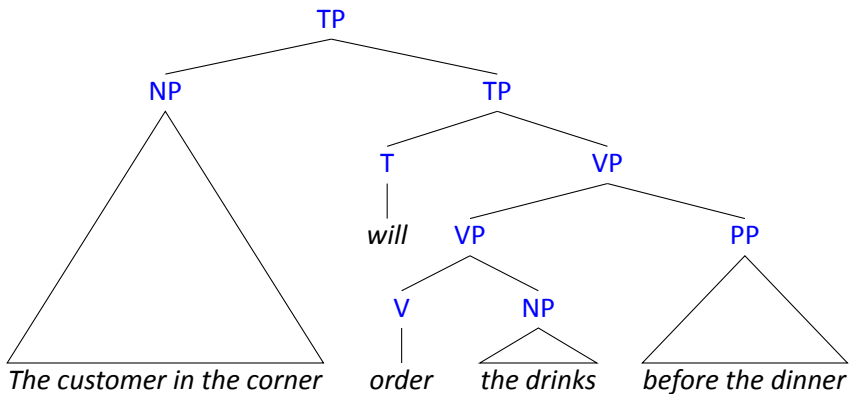
# Constituency tests

- (1) Constituents can be
  - a. replaced by a pronoun
  - b. moved around
  - c. provided as an answer to a question
  - d. co-ordinated
  - e. elided

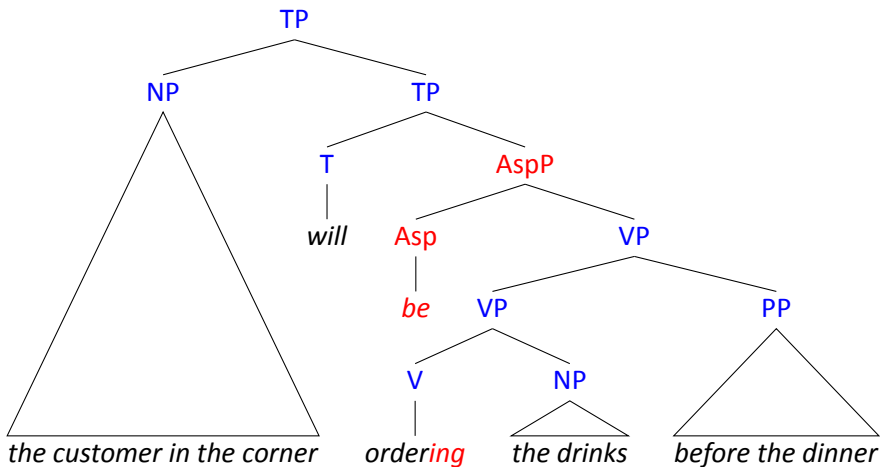
# Constituency tests

- (1) Constituents can be
  - a. replaced by a pronoun
  - b. moved around
  - c. provided as an answer to a question
  - d. co-ordinated
  - e. elided
  
- (2) The head
  - a. determines the type of meaning
  - b. determines the distribution of the whole
  - c. determines the form of the sister node

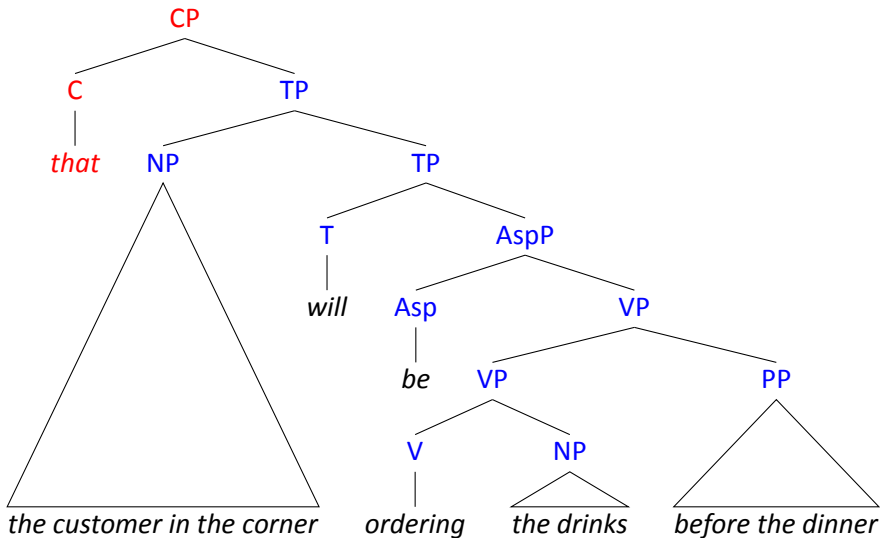




- (3) a. VP → describe an event  
 b. TP → anchor it in time with respect to the speech time



- (4)
- VP → describe an event
  - AspP → perspective: event seen from inside/outside
  - TP → anchor it in time with respect to the speech time



- (5)
- VP → describe an event
  - AspP → perspective: event as a whole/part of the event
  - TP → anchor it in time with respect to the speech time
  - CP → the anchored event is a fact/wish/query/condition



# Czech

- (6) a. **objedn -at**  
order -INF  
'to order'

# Czech

- (6) a. **objedn** -**at**  
order -INF  
'to order'
- b. **objedn** -**áv** -**at**  
order -PROG -INF  
'to be ordering'

# Czech

- (6)
- a. **objedn** -**at**  
order -INF  
'to order'
  - b. **objedn** -**áv** -**at**  
order -PROG -INF  
'to be ordering'
  - c. **objedn** -**áv** -**á** -**š**  
order -PROG -PRES -2.SG  
'you are ordering'

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'you are ordering'
  - d. **objedn** -áv -á -m  
order -PROG -PRES -1.SG  
'I am ordering'

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order -PROG -PRES -2.SG  
'you are ordering'
  - d. **objedn -áv -á -m**  
order -PROG -PRES -1.SG  
'I am ordering'
  - e. **objedn -áv -á -š -li**  
order -PROG -PRES -2.SG -COND  
'if you are ordering'

# Czech

(7) **objedn -áv -á -š -li**  
order -PROG -PRES -2.SG -COND  
'if you are ordering'

(8) Czech order  
**event** > **asp** > *tense* > **subject** > **mood**

# Czech

(7) objedn -áv -á -š -li  
order -PROG -PRES -2.SG -COND  
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(8) Czech order  
event > asp > tense > subject > mood

(9) English order:  
that you will be ordering the drinks  
mood > subject > tense > aspect > event

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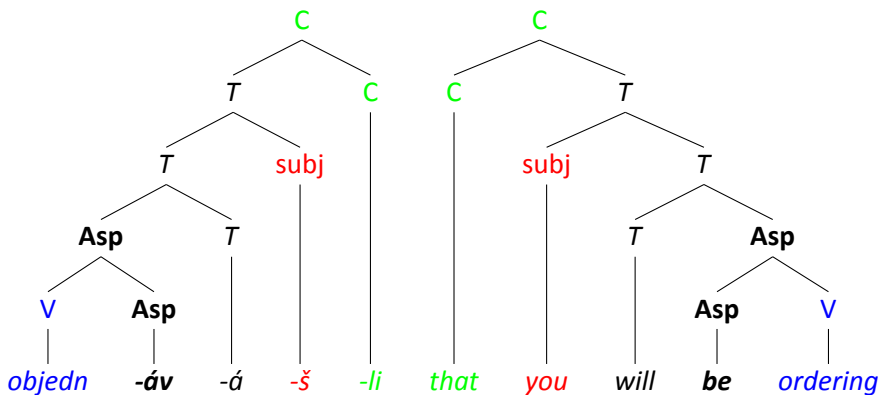
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event > asp > tense > subject > mood

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that you will be ordering the drinks  
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► The English order is the mirror image of the Czech one





(10) The Mirror Principle

- a. The order of morphemes inside words is the mirror image of the order of words in syntax

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- a. The order of morphemes inside words is the mirror image of the order of words in syntax
- b. The order of morphemes mirrors the syntactic derivation

Recap

## Noun phrase

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Head movement

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Back to Czech

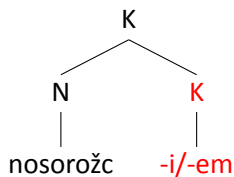
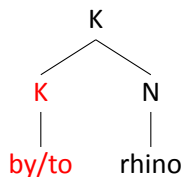
- (11) a. nosorožec  
rhino

# Czech

- (11) a. nosorožec  
rhino
- b. nosorožc -em  
rhino INS  
'by (the) rhino'

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rhino
  - b. nosorožc **-em**  
rhino      INS  
**'by** (the) rhino'
  - c. nosorožc **-i**  
rhino      DAT  
**'to** (the) rhino'

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(12) youngsters

a. nosoržc      -em  
rhino          -INS

(12) youngsters

a. nosoržc -em

rhino -INS

b. nosoržč -et -em

rhino -BABY -INS

'by (the) baby

rhino'

(12) youngsters

a. nosoržc -em

rhino -INS

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c. nosoržc -i

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c. nosoržc -i

rhino -DAT

d. nosoržč -et -i

rhino -BABY -DAT

'to (the) baby rhino'

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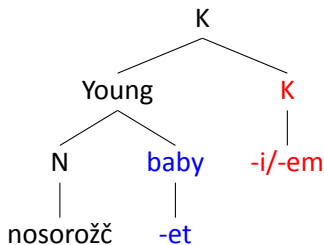
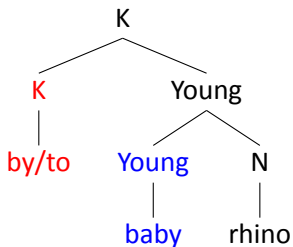
c. nosoržc -i

rhino -DAT

d. nosoržč -et -i

rhino -BABY -DAT

'to (the) baby rhino'



(13) youngsters

- a. nosoržč -et -em  
rhino -BABY -INS  
'by (the) baby rhino'

(13) youngsters

a. nosoržč -et -em

rhino -BABY -INS

'by (the) baby rhino'

b. nosoržč -át -k -em

rhino -BABY -SMALL -INS

'by (the) small baby rhino'

(13) youngsters

a. nosoržč -et -em

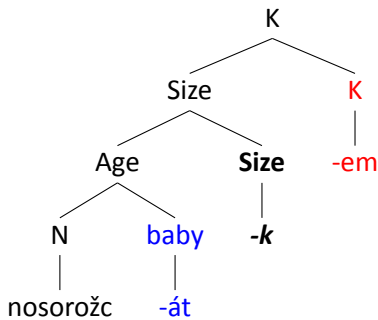
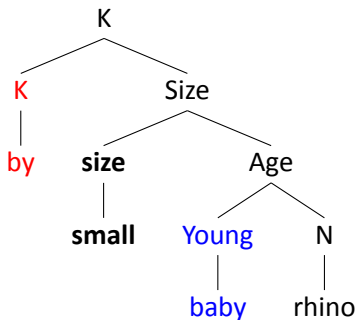
rhino -BABY -INS

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## The construction of the noun phrase

(14) (you can open the lock) with these two old keys

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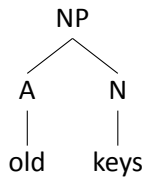
- ▶ describe the thing by listing its properties (*old keys*)
- ▶ say how many they are (*two*)
- ▶ 'anchor' the object in space (*these/those*)
- ▶ say what role this object has in the event (*with* = instrument)

# The construction of the noun phrase

(15) (you can open the lock) with these two old keys

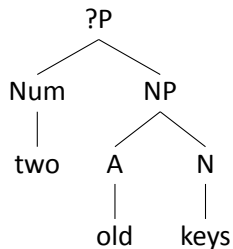
# The construction of the noun phrase

(15) (you can open the lock) with these two old keys



# The construction of the noun phrase

(16) (you can open the lock) with these two old keys





(17) He wants to sell (one thousand) apples

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(18) a. Chce prodat (\*tisíc) jabka  
he.wants to.sell one.thousand apples

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(18) a. Chce     prodat (\*tisíc)     jabka  
          he.wants to.sell one.thousand apples

b. Chce     prodat tisíc     jablek  
          he.wants to.sell one.thousand apples

(17) He wants to sell (one thousand) apples

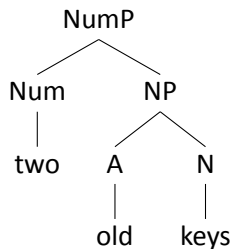
(18) a. Chce      prodat (\*tisíc)      jabka  
         he.wants to.sell one.thousand apples

b. Chce      prodat tisíc      jablek  
         he.wants to.sell one.thousand apples

c. ??Chce      prodat      jablek  
         he.wants to.sell      apples

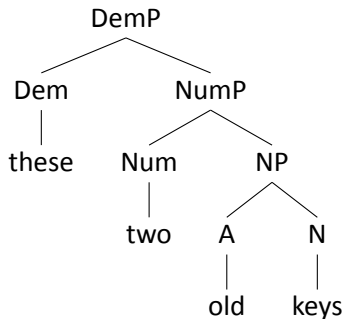
# The construction of the noun phrase

(19) (you can open the lock) with these two old keys



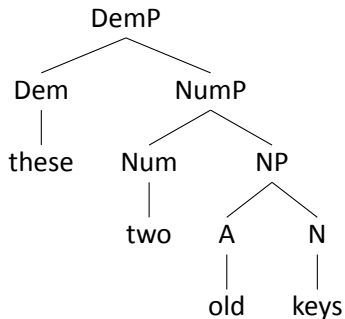
## The construction of the noun phrase

(20) (you can open the lock) with these two old keys



## The construction of the noun phrase

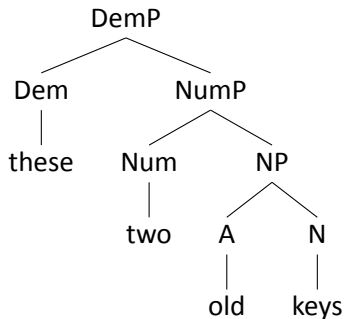
(20) (you can open the lock) with these two old keys



(21) a. \*He found key

## The construction of the noun phrase

(20) (you can open the lock) with these two old keys

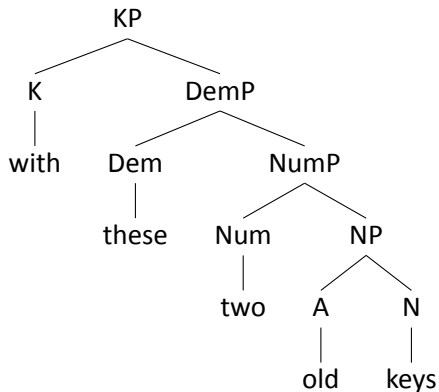


- (21) a. \*He found key  
b. He found { the / this } key



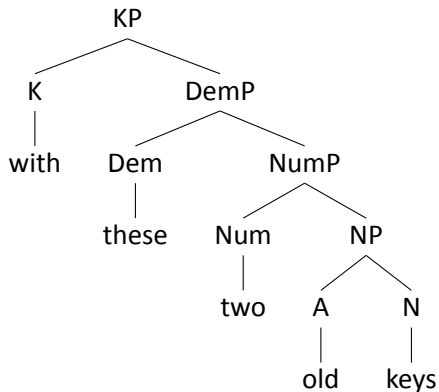
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## The construction of the noun phrase

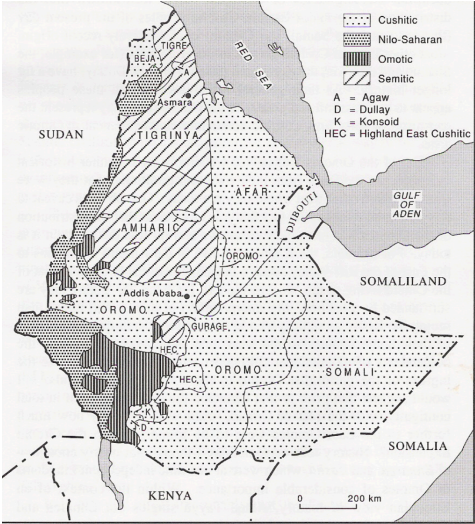
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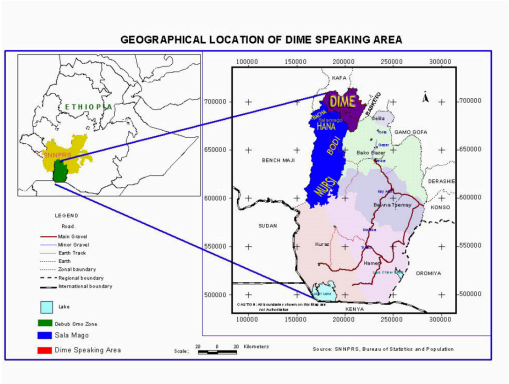
# Dime (Omotic)

## Major language families in Ethiopia

Source: Hayward (1995:7)



# Dime (Omotic)



The definite marker **-is** may optionally be changed to **-iz** when following voiced consonants. Examples:

11. [ʔéh-**is**] 'the house'  
[gáʃʃ-**is**] 'the road'
- [ʔámz-**iz**] 'the woman'  
[zúúb-**iz**] 'the red one'

Generally, definiteness is marked at the end of the noun. With the exception of the accusative marker **-im**, other grammatical morphemes precede it.

- 12a. ʔéh-**áf-is** 'the houses'  
dər-**áf-is** 'the goats'
- 12b. ʔaté guur-af-is-**im** deis-i-t  
1S.SUBJ crocodile-**PL-DEF-ACC** kill-PF-1  
'I killed the crocodiles'

# Dime (Omotic)

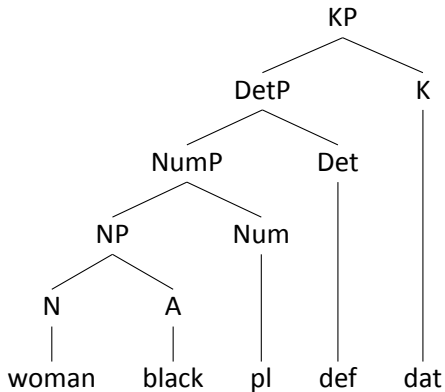
## 13.2.4 Text 4: The selection of a chief in Dime

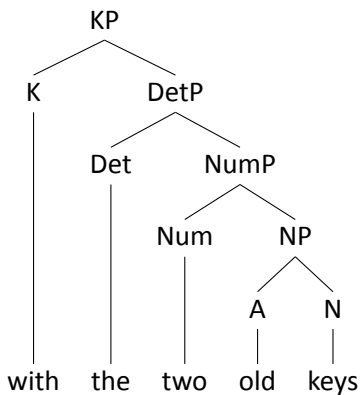
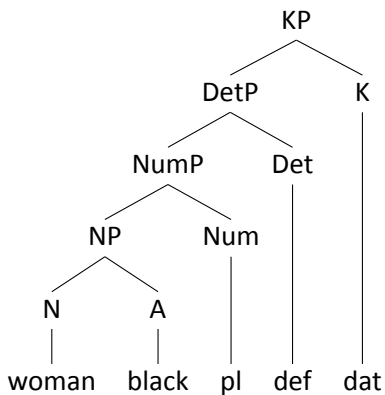
This story was told by Miakro Gizachew Keto on December 26, 2003, Ethiopia.

001. **zimé wondéebis wutódée tussiné gašká**  
zimé won-dée-b-is wutó-dée tussiné gaš-ká  
chief be-IPF-M.RELT-DEF beg-IPF hereditary road-INST
- zimé wókkilub laŕt'inká nítsafisóde wókkilim**  
zimé wókkil-ub laŕt'-inká nits-af-is-ó-dé wókkil-im  
chief one-REL(M) die-REAS child-PL-DEF-LOC-ABL one-ACC
- wuddéen nítsafisóde wutunub nítsis**  
wud-dée-n nits-af-is-ó-de wutun-ub níts-is  
assign-IPF-3 child-PL-DEF-LOC-ABL begin-M.RELT child-DEF
- zimín**  
zim-in  
chief-DAT

‘A chief is selected according to his degree of kinship with the previous chief. When a chief dies, one of his sons will be assigned to succeed him as the next chief. Normally the eldest son of a chief is assigned to inherit his father’s role as a chief’.

25. nú ʔámz-af s'án-id-is-in meh-im ʔím-i-n  
 3MS.SUBJ woman-PL black-PL-DEF-DAT money-ACC give-PF-3  
 'He gave money to the black women.'







Recap

Noun phrase

Does the mirror principle describe differences among languages?

Head movement

Choosing between head-movement and affix hopping

Back to Czech

- (23) a. jeden velký starý stůl  
one big old table  
'number > size > age > thing'

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one big old table  
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- b. nosorožč -át -k -a  
rhino -BABY -SMALL -PL / -SG  
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- ▶ It is not only something that differentiates languages
- ▶ It is also about word/affix difference within a single language

- ▶ It is not a difference between languages
- ▶ It is about word/affix difference

(24) a. jestli Petr bude běhat, ...  
if Petr will run  
'mood > subject > tense > event'

- ▶ It is not a difference between languages
- ▶ It is about word/affix difference

- (24)
- a. jestli Petr bude běhat, ...  
if Petr will run  
'mood > subject > tense > event'
- b. běh -á -te -li, ...  
run -PRES -YOU.PL -IF  
'mood < subject < tense < event'

Recap

Noun phrase

Does the mirror principle describe differences among languages?

**Head movement**

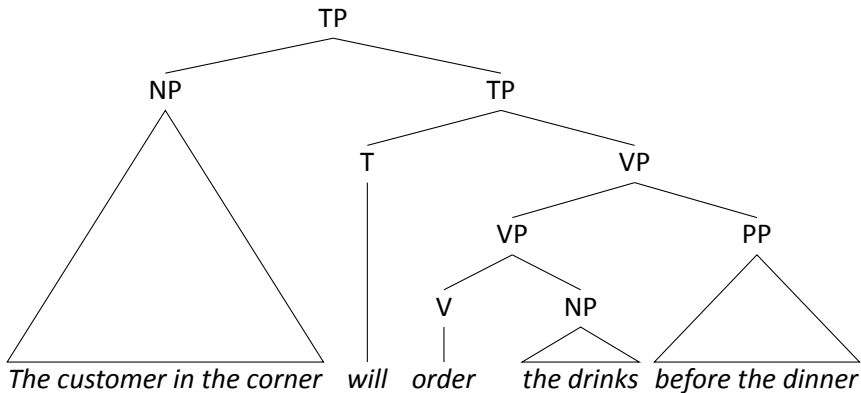
Choosing between head-movement and affix hopping

Back to Czech

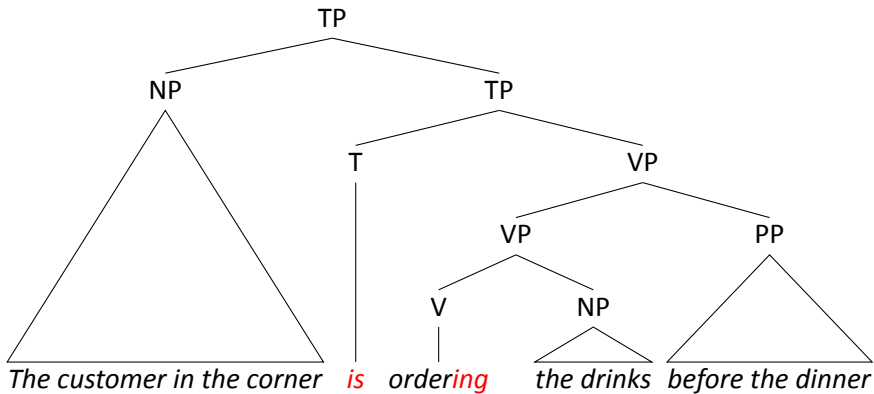


(25) The customer in the corner is ordering the drinks.

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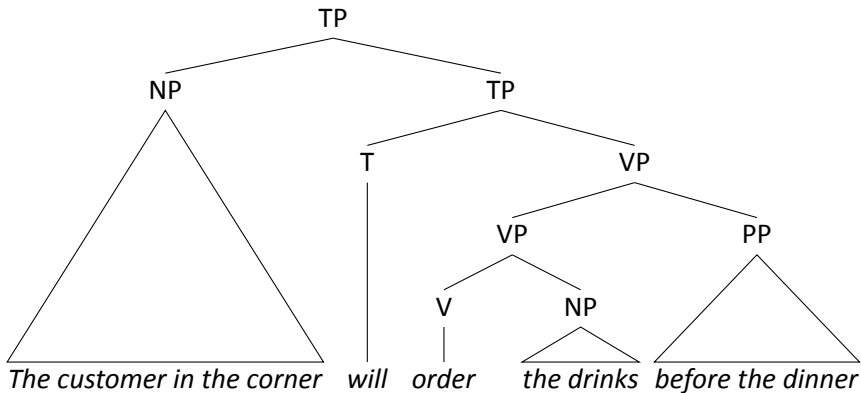


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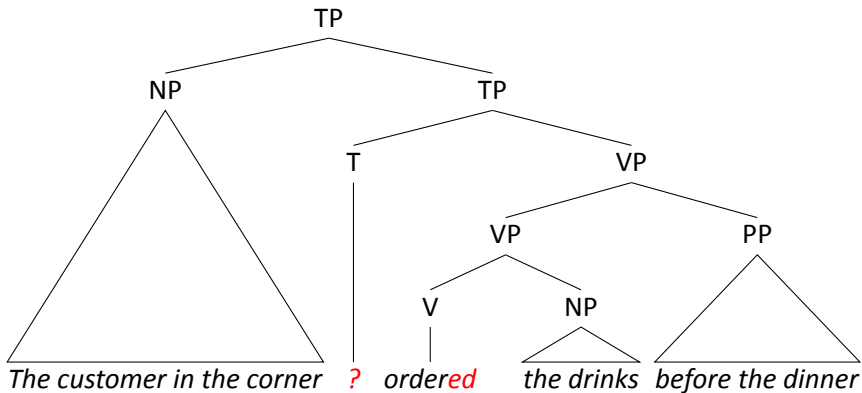


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# Past Tense Slavic

	slovene		Czech		Russian	
	AUX	participle	AUX	participle	Aux	participle
1.sg	sem	jedla				
2.sg	si	jedla				
3.sg	je	jedla				

# Past Tense Slavic

	slovene		Czech		Russian	
	AUX	participle	AUX	participle	Aux	participle
1.sg	sem	jedla	jsem	jedla		
2.sg	si	jedla	jsi	jedla		
3.sg	je	jedla	∅	jedla		



# Past Tense Slavic

	slovene		Czech		Russian	
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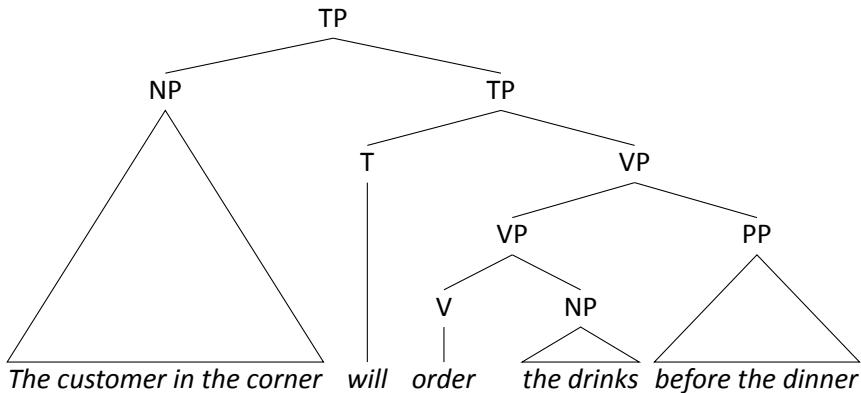
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2.sg	si	jedla	jsi	jedla	∅	jela
3.sg	je	jedla	∅	jedla	∅	jela

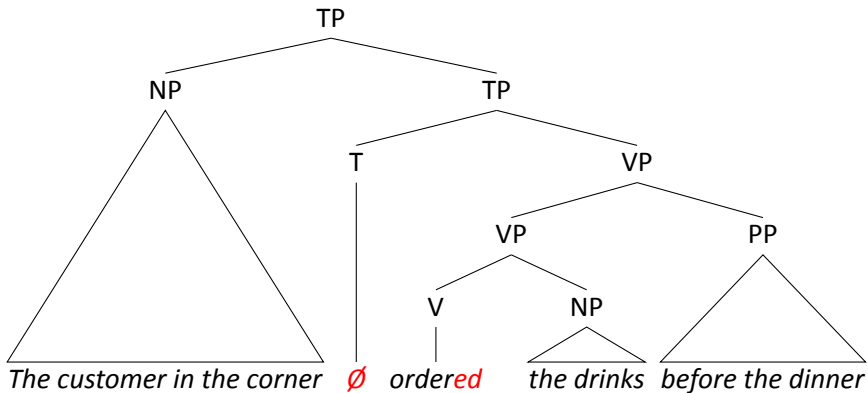
	English			
	AUX	participle	AUX	participle
1.sg	∅	slept	have	slept
2.sg	∅	slept	have	slept
3.sg	∅	slept	has	slept

(27) The customer in the corner ordered the drinks.

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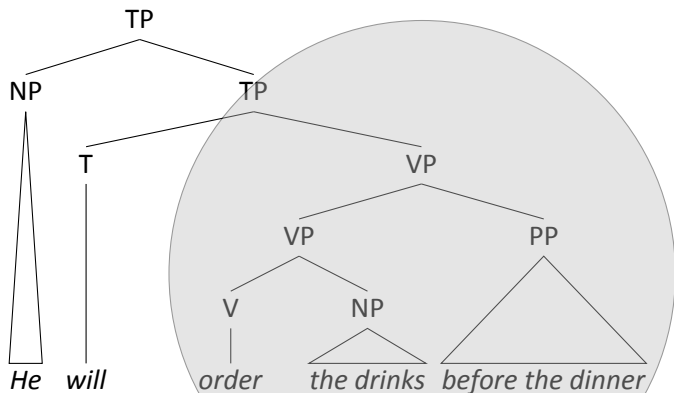


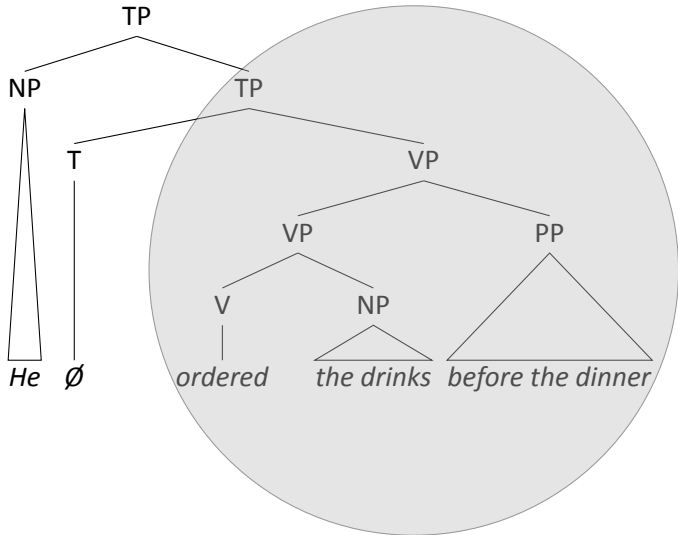
## ellipsis

- (28) A: The customer in the corner will order the drinks before the meal.
- (29) B: Actually, I wouldn't be so sure that he will —.

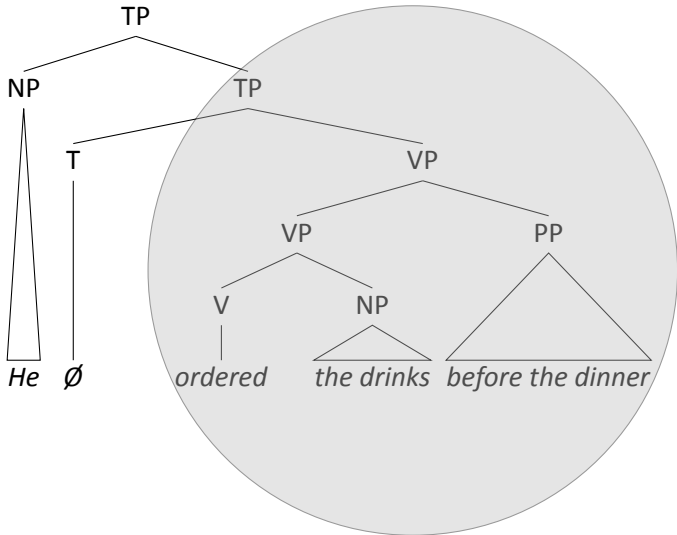
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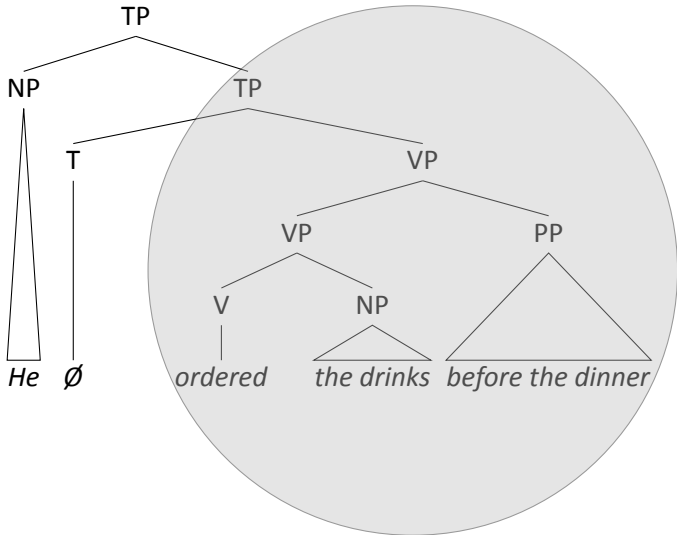






(30) A: The customer in the corner  $\emptyset$  order-ed the drinks.

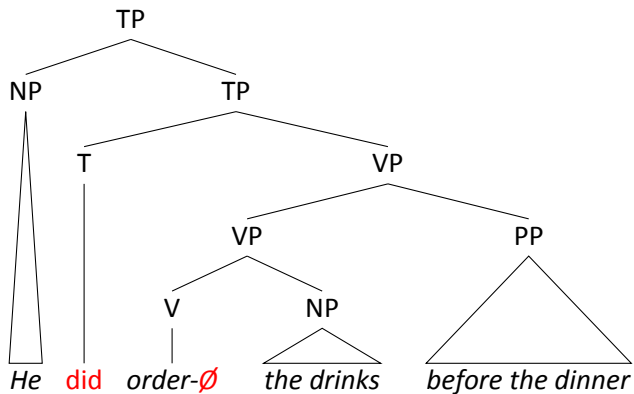
(31) B: \*Actually, I wouldn't be so sure that he  $\emptyset$  —.



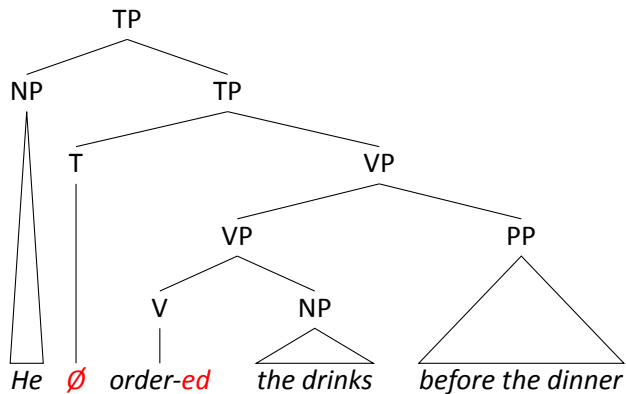
(30) A: The customer in the corner  $\emptyset$  order-ed the drinks.

(31) B: Actually, I wouldn't be so sure that he **did** —.

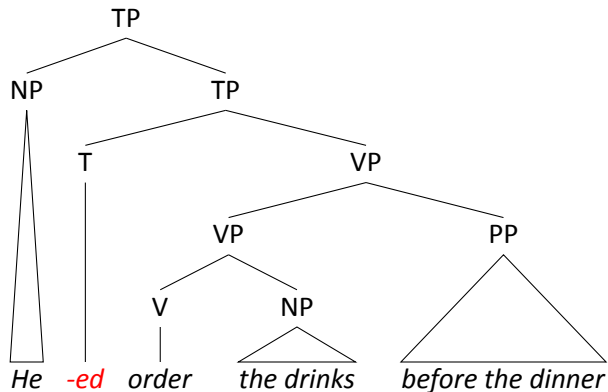
# Structure 1



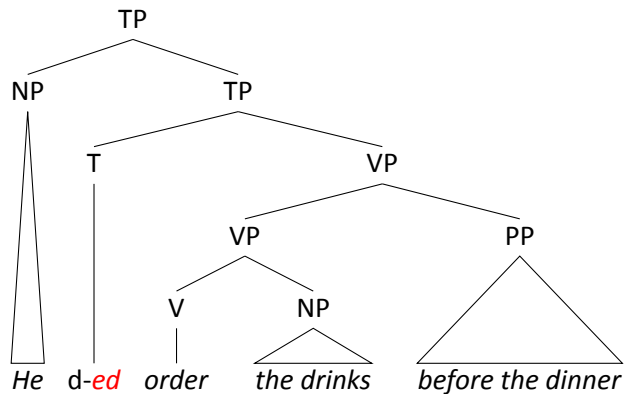
## Structure 2



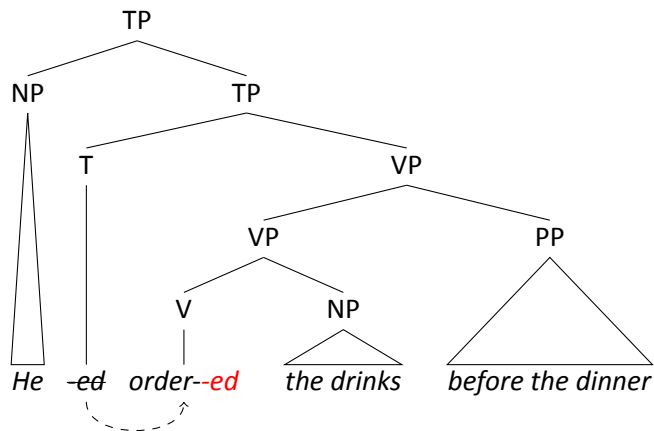
Both structures are the realization of an ‘underlying’ structure



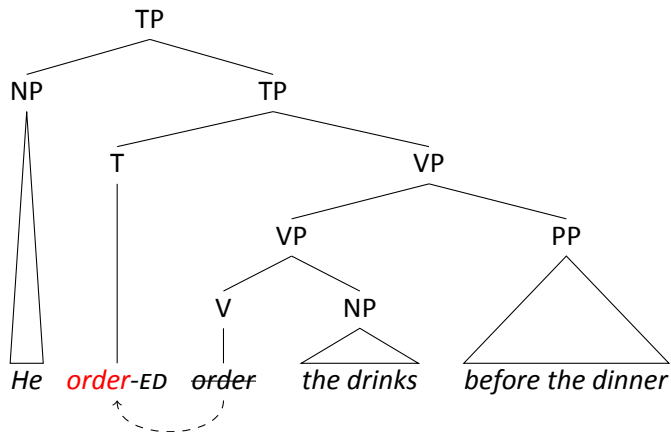
## Rescue 1: Expletive insertion



## Rescue 2a: Affix Hopping



## Rescue 2b: Head movement





Recap

Noun phrase

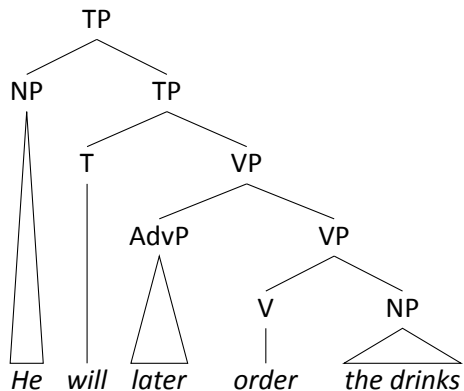
Does the mirror principle describe differences among languages?

Head movement

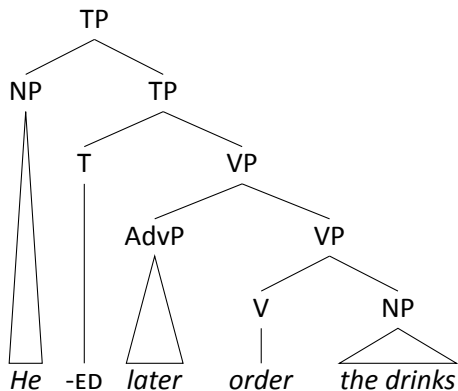
Choosing between head-movement and affix hopping

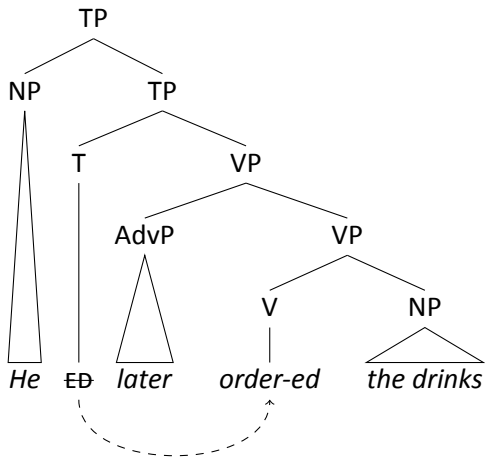
Back to Czech

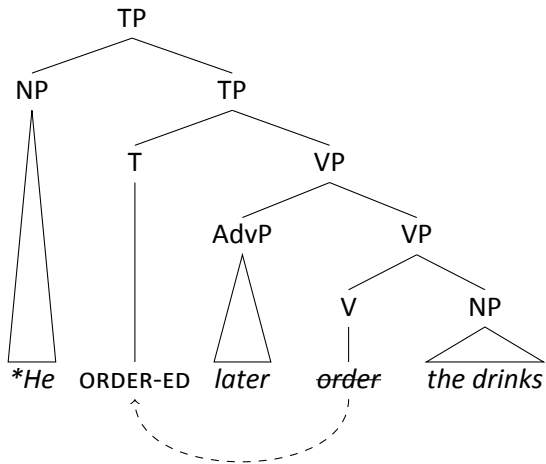
## Introducing an adverb



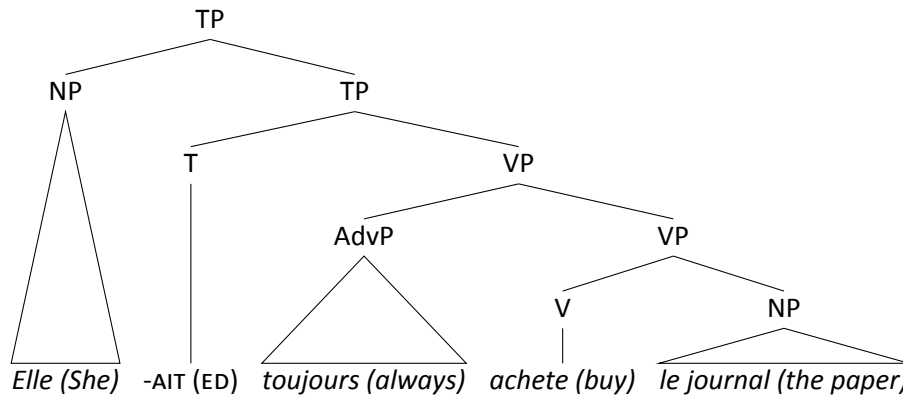
## Adverb and lowering

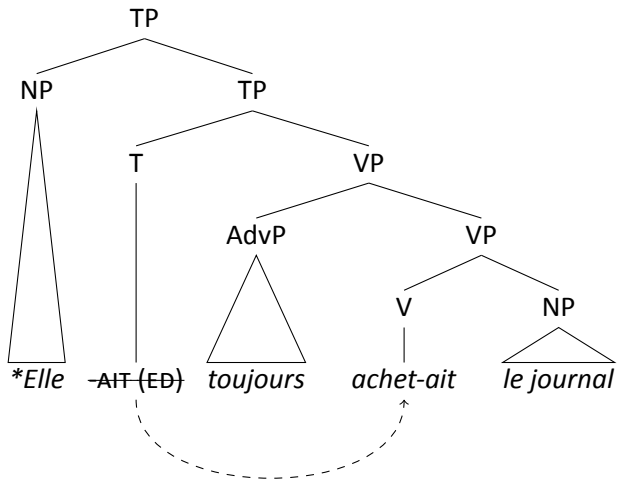


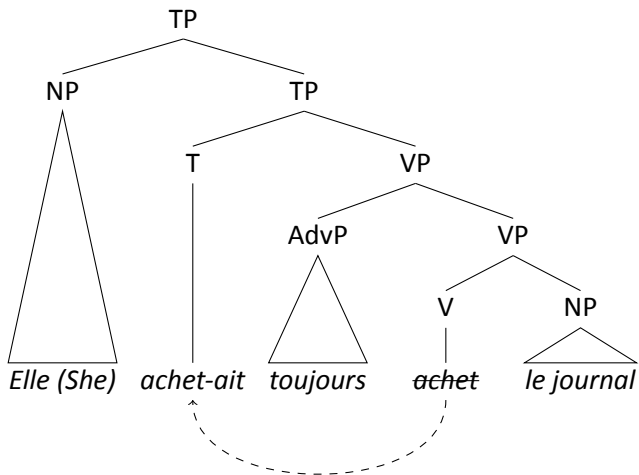




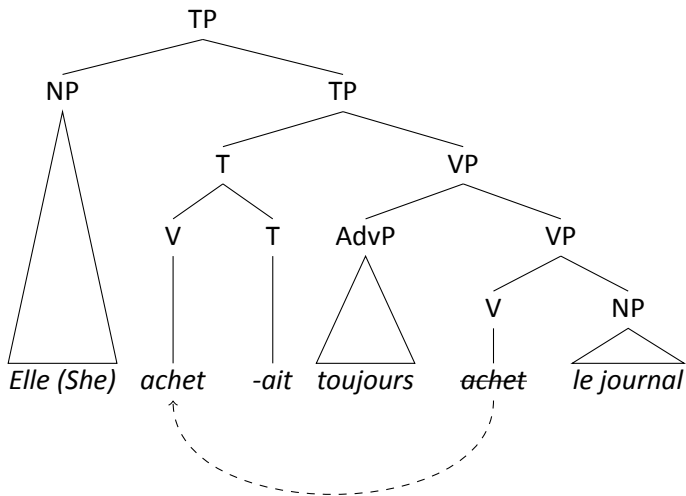
# French











# Summary

(32) When a head is an affix...

# Summary

- (32) When a head is an affix...
  - a. Rescue 1: insert an expletive

# Summary

- (32) When a head is an affix...
- a. Rescue 1: insert an expletive
  - b. Rescue 2: move something

# Summary

- (32) When a head is an affix...
- a. Rescue 1: insert an expletive
  - b. Rescue 2: move something
    - (i) move the affix = affix hopping

# Summary

- (32) When a head is an affix...
- a. Rescue 1: insert an expletive
  - b. Rescue 2: move something
    - (i) move the affix = affix hopping
    - (ii) move the host = head movement

Recap

Noun phrase

Does the mirror principle describe differences among languages?

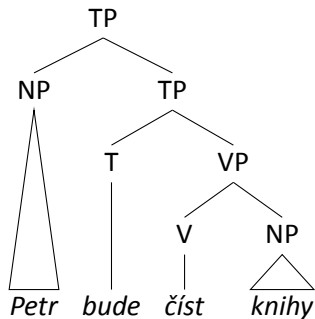
Head movement

Choosing between head-movement and affix hopping

Back to Czech

## Future tense

- (33) Petr bude číst knihy.  
Petr will read books





## Present tense

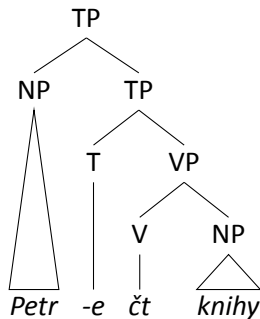
- (34) a. Petr bude číst knihy.  
Petr will read books

## Present tense

- (34) a. Petr bude číst knihy.  
Petr will read books
- b. Petr čt-e knihy  
Petr read -PRES books

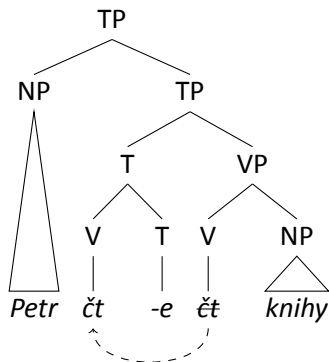
## Present tense

- (34) a. Petr bude číst knihy.  
Petr will read books
- b. Petr čt-e knihy  
Petr read -PRES books



## Present tense

- (35) a. Petr bude číst knihy.  
Petr will read books
- b. Petr čt-e knihy  
Petr read-PRES books



(36) Conditional

- a. **Čt-e**            **-li** Petr knihy, ...  
reads-PRES -IF Petr books  
'if Petr reads books, ...'

(36) Conditional

a. **Čt-e**            **-li** Petr knihy, ...  
reads-PRES -IF Petr books  
'if Petr reads books, ...'

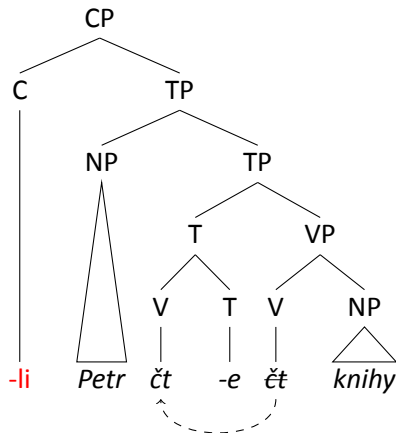
b. **Jest -li**            Petr **čt-e**            knih-y  
be -textscif Petr read-PRES books

(36) Conditional

a. **Čt-e**            **-li** Petr knihy, ...  
reads-PRES -IF Petr books  
'if Petr reads books, ...'

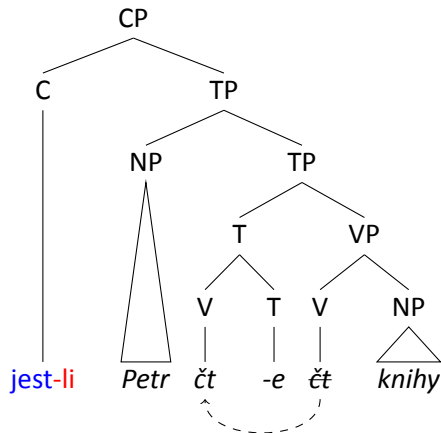
b. **Jest -li**            Petr **čt-e**            knih-y  
be -textscif Petr read-PRES books

## Semantic/underlying structure





# Expletive insertion



## Semantic/underlying structure

