Syntax

Pavel Caha

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Recap

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
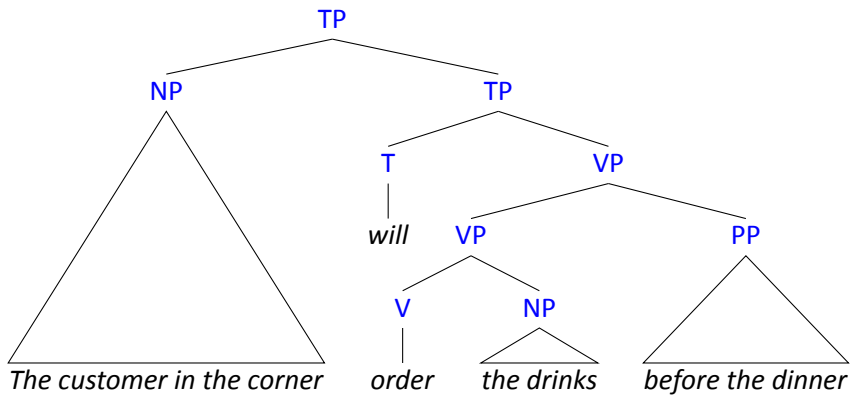
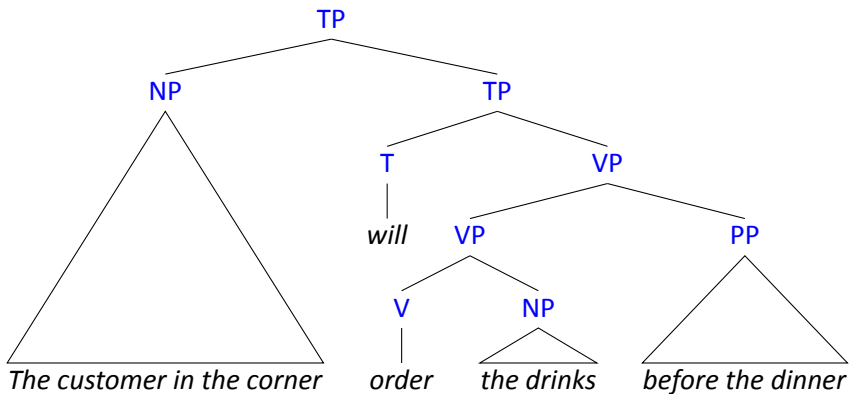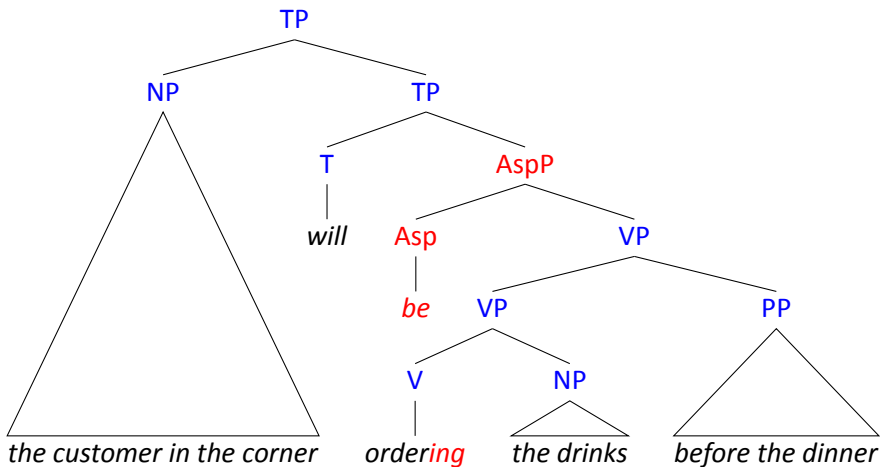# Constituency tests

(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
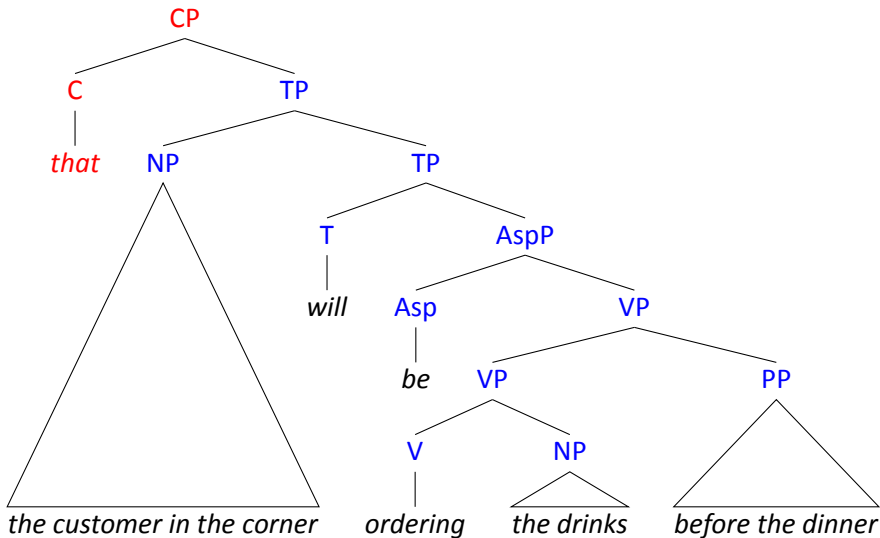   c. determines the form of the sister node

(3)   a.   VP → describe an event

        b.   TP → anchor it in time with respect to the speech time

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

(5) a. VP → describe an event

b. AspP → perspective: event as a whole/part of the event

c. TP → anchor it in time with respect to the speech time

d. 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'

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'

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

  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
     'if you are ordering'

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

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

Czech

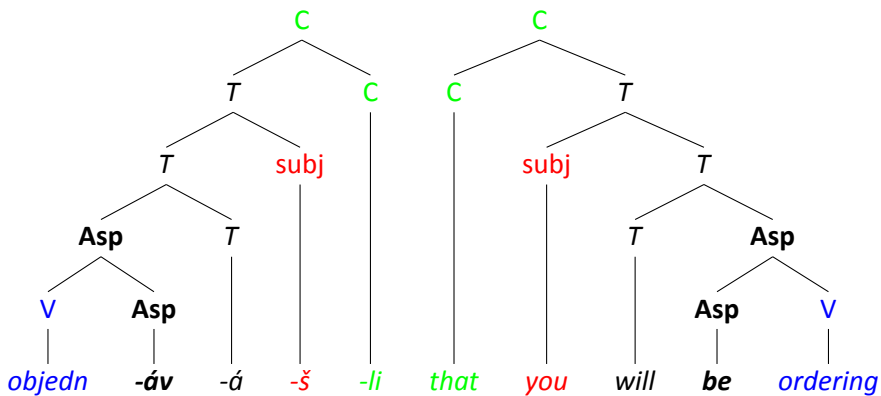(7) objedn -**áv** -*á* -š -li
     order -PROG -PRES -2.SG -COND
     'if you are ordering'

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

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

▶ 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

(10)   The Mirror Principle
      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

Czech

    (11)   a.   nosorožec
                        rhino

Czech

    (11)   a.   nosorožec
                    rhino

            b.   nosorožc -e
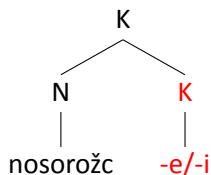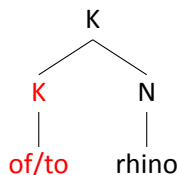   rhino   GEN
                    'of (the) rhino'

Czech

(11)   a.   nosorožec
             rhino

       b.   nosorožc -e
             rhino   GEN
             'of (the) rhino'

       c.   nosorožc -i
             rhino   DAT
             'to (the) rhino'

Czech

(11)   a.   nosorožec
             rhino

        b.   nosorožc -e
             rhino   GEN
             'of (the) rhino'

        c.   nosorožc -i
             rhino   DAT
             'to (the) rhino'

(12) youngsters
    a. nosorožc   -e
       rhino   -GEN

(12) youngsters
- a. nosorožc   -e
  rhino   -GEN
- b. nosorožč -et   -e
  rhino   -BABY -INS
  'of (the) baby rhino'

(12) youngsters

    a.   nosorožc   -e
            rhino   -**GEN**

    b.   nosorožč -et   -e
            rhino   -**BABY** -**INS**
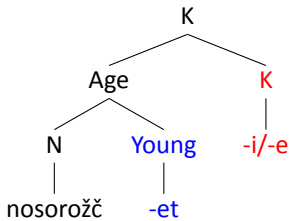   'of (the) baby rhino'

c.   nosorožc   -i
        rhino   -**DAT**

(12)   youngsters

    a.   nosorožc   -e
           rhino   -**GEN**
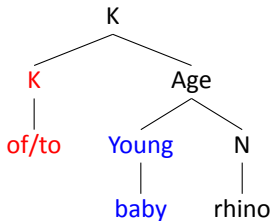
    b.   nosorožč -et   -e
           rhino   -**BABY** -**INS**
           'of (the) baby rhino'

    c.   nosorožc   -i
           rhino   -**DAT**

    d.   nosorožč -et   -i
           rhino   -**BABY** -**DAT**
           'to (the) baby rhino'

(12) youngsters

    a.   nosorožc   -e
           rhino   -GEN

    b.   nosorožč -et   -e
           rhino   -BABY -INS
           'of (the) baby rhino'

    c.   nosorožc   -i
           rhino   -DAT

    d.   nosorožč -et   -i
           rhino   -BABY -DAT
           'to (the) baby rhino'

(13)   youngsters

     a.   nosorožč -et   -em
          rhino   -BABY   -INS
          'with (the) baby rhino'

(13) youngsters

    a.   nosorožč -et   -em
           rhino   -BABY   -INS
           'with (the) baby rhino'

    b.   nosorožč -át   -**k**   -em
           rhino   -BABY -SMALL -INS
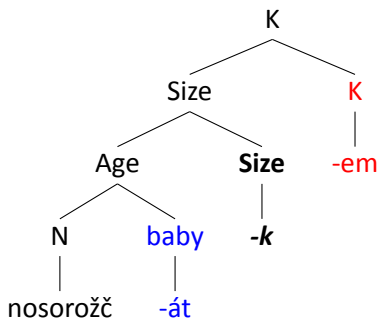   'with (the) **small** baby rhino'

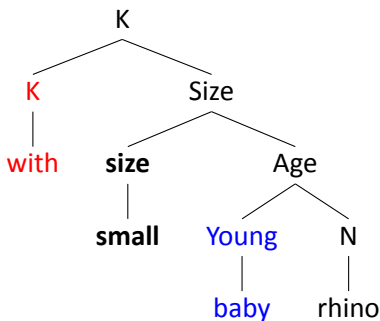(13) youngsters

    a.   nosorožč -et   -em
            rhino   -BABY   -INS
            'with (the) baby rhino'

    b.   nosorožč -át   -**k**   -em
            rhino   -BABY -SMALL -INS
            'with (the) **small** baby rhino'

The construction of the noun phrase

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

The construction of the noun phrase

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

▶ describe the thing by listing its properties (*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*)

The construction of the noun phrase
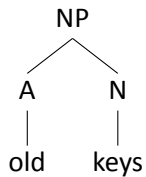
(14)   (you can open the lock) with these two old keys

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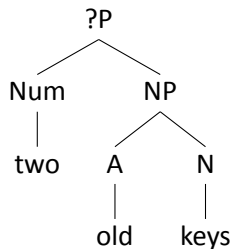
(15)   (you can open the lock) with these two old keys

The construction of the noun phrase

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

```
        NP
       /  \
      A    N
      |    |
     old  keys
```

The construction of the noun phrase

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

```
            ?P
           /  \
        Num    NP
         |    /  \
        two  A    N
             |    |
            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

(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

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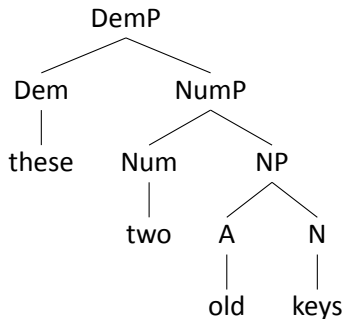   c. ??Chce   prodat   jablek
            he.wants to.sell   apples

The construction of the noun phrase
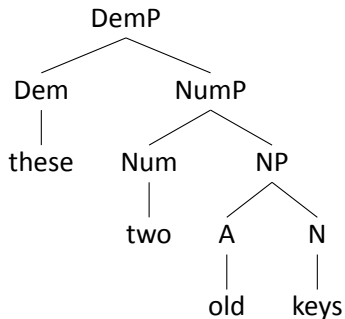
(19)   (you can open the lock) with these two old keys
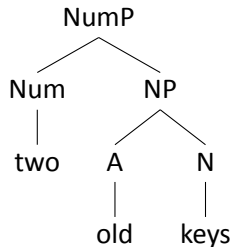
```
          NumP
         /    \
      Num      NP
       |      /   \
      two    A     N
             |     |
            old   keys
```

The construction of the noun phrase

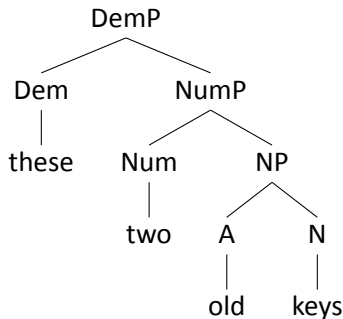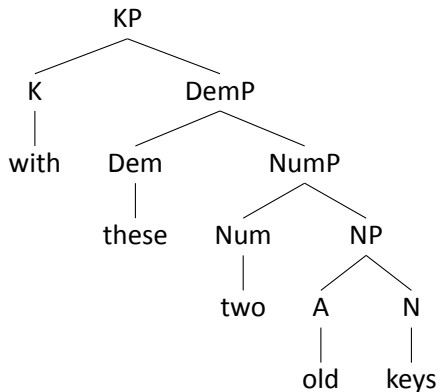(20)   (you can open the lock) with these two old keys

```
              DemP
             /    \
          Dem      NumP
           |       /   \
        these    Num    NP
                  |     /  \
                 two   A    N
                       |    |
                      old  keys
```

The construction of the noun phrase

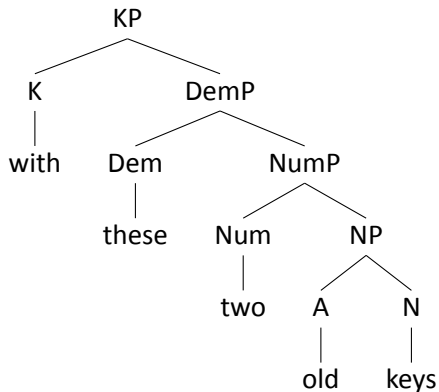(20)   (you can open the lock) with these two old keys

```
              DemP
            /      \
         Dem        NumP
          |        /     \
        these    Num      NP
                  |       /  \
                 two     A    N
                         |    |
                        old  keys
```

(21)   a.   *He found key

The construction of the noun phrase

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

```
                    DemP
              ┌──────┴──────┐
            Dem            NumP
             │         ┌─────┴─────┐
           these      Num          NP
                       │       ┌────┴────┐
                      two      A         N
                               │         │
                              old       keys
```

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

The construction of the noun phrase

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

```
                    KP
              ┌──────┴──────┐
              K            DemP
              │      ┌──────┴──────┐
            with    Dem          NumP
              │      │      ┌──────┴──────┐
           these   Num            NP
                    │      ┌──────┴──────┐
                   two     A            N
                           │            │
                          old         keys
```

The construction of the noun phrase

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

```
                    KP
               /         \
              K          DemP
              |        /      \
            with     Dem      NumP
                      |      /      \
                    these  Num      NP
                            |      /    \
                          two    A      N
                                 |      |
                                old    keys
```

Dime (Omotic)

Major language families in Ethiopia
Source: Hayward (1995:7)
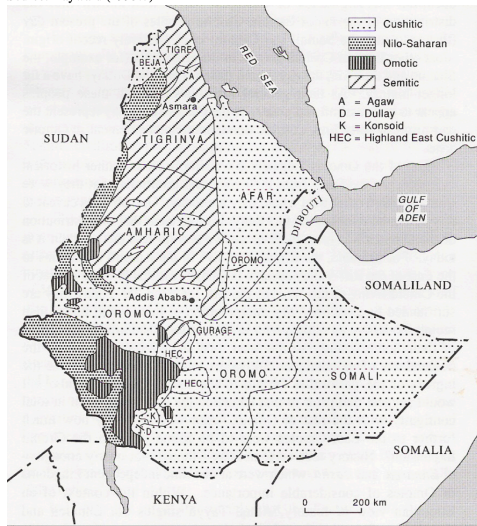
Dime (Omotic)

GEOGRAPHICAL LOCATION OF DIME SPEAKING AREA

Dime (Omotic)
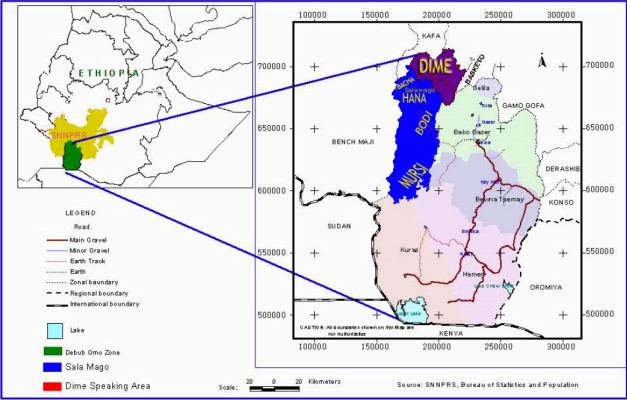
The definite marker **–is** may optionally be changed to **–iz** when following voiced consonants. Examples:

11.   [**ʔéh-îs]**   'the house
        [**gášš-ìs]**   'the road'

        [**ʔámz-ìz]**   'the woman'
        [**zúùb-ìz]**   '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   corocodile-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 wondéébis wutódéé tussiné gaškà**
zimé   won-déé-b-is   wutó-déé tussiné   gaš-ká
chief be-IPF-M.RELT-DEF   beg-IPF   heriditary road-INST

zimé wókkilub laʁt'inká nîtsafisódé wókkilim
zimé   wókkil-ub   laʁt'-inká nîts-af-is-ó-dé   wókkil-im
chief one-REL(M)   die–REAS   child-PL-DEF-LOC-ABL   one-ACC

wuddéén nîtsafisóde wutunub nîtsis
wud-déé-n   nîts-af-is-ó-de   wutun-ub   nîts-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. Normaly 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** **mɛh-im** **ʔim-i-n**
    3MS.SUBJ woman-PL black-PL-DEF-DAT money-ACC give-PF-3
    'He gave money to the black women.'

```
                      KP
                  ___/  \___
                DetP        K
              __/  \__       |
           NumP      Det     |
          _/  \_      |      |
        NP     Num    |      |
       _/ \_    |     |      |
      N    A    |     |      |
      |    |    |     |      |
   woman black pl    def    dat
```

KP
  DetP
    NumP
      NP
        N — woman
        A — black
      Num — pl
    Det — def
  K — dat

KP
  K — with
  DetP
    Det — the
    NumP
      Num — two
      NP
        A — old
        N — keys

(23)   a.   dva velké staré stoly
                two big   old   tables
                'number > size > age > thing'

(23)　　a.　dva　velké staré stoly
　　　　　　　two big　old　tables
　　　　　　　'number > size > age > thing'
　　　　b.　nosorožč -át　-k　-a
　　　　　　　rhino　-BABY -SMALL -PL
　　　　　　　'number < size < age < thing'

(23)   a.   dva velké staré stoly
            two big   old   tables
            'number > size > age > thing'
       b.   nosorožč -át   -k   -a
            rhino   -BABY -SMALL -PL
            'number < size < age < thing'
       c.   nosorožč -át   -k   -o
            rhino   -BABY -SMALL -SG
            'number < size < age < thing'

(23) a. dva velké staré stoly
          two big   old   tables
          'number > size > age > thing'
      b. nosorožč -át -k   -a
          rhino   -BABY -SMALL -PL
          'number < size < age < thing'
      c. nosorožč -át -k   -o
          rhino   -BABY -SMALL -SG
          'number < size < age < thing'

- 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'

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

(25)   The customer in the corner is ordering the drinks.
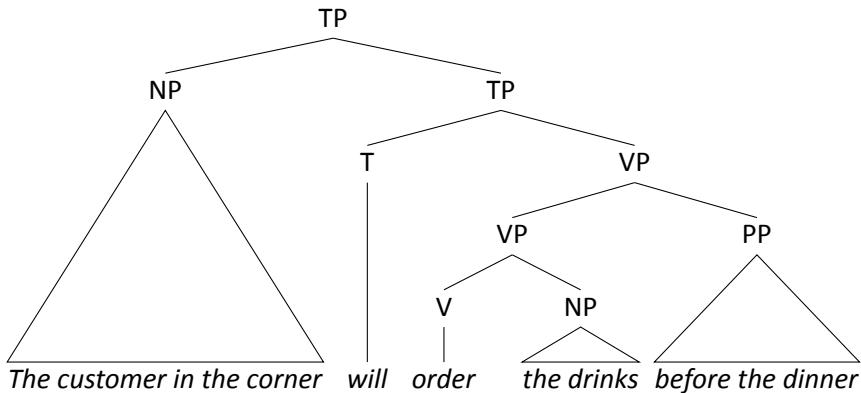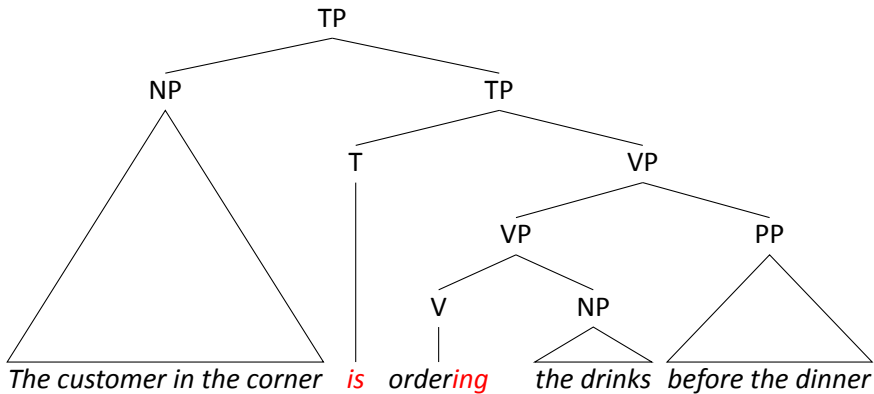
```
                              TP
                 ┌─────────────┴──────────────┐
                NP                            TP
                 △                   ┌─────────┴─────────┐
                 │                   T                   VP
                 │                   │          ┌─────────┴─────────┐
                 │                   │         VP                   PP
                 │                   │     ┌────┴────┐               △
                 │                   │     V        NP
                 │                   │     │         △
 The customer in the corner        will  order   the drinks   before the dinner
```

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

TP
├── NP
│   └── *The customer in the corner*
└── TP
    ├── T
    │   └── *is*
    └── VP
        ├── VP
        │   ├── V — *ordering*
        │   └── NP — *the drinks*
        └── PP — *before the dinner*

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

(26)   The customer in the corner ordered the drinks.
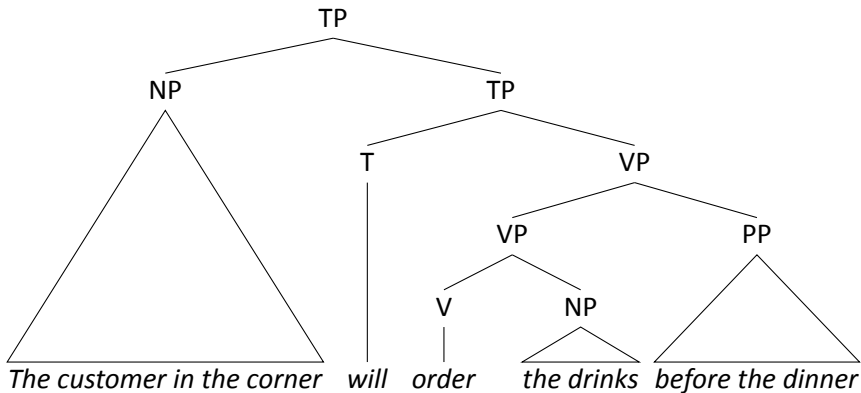
(26)   The customer in the corner ordered the drinks.
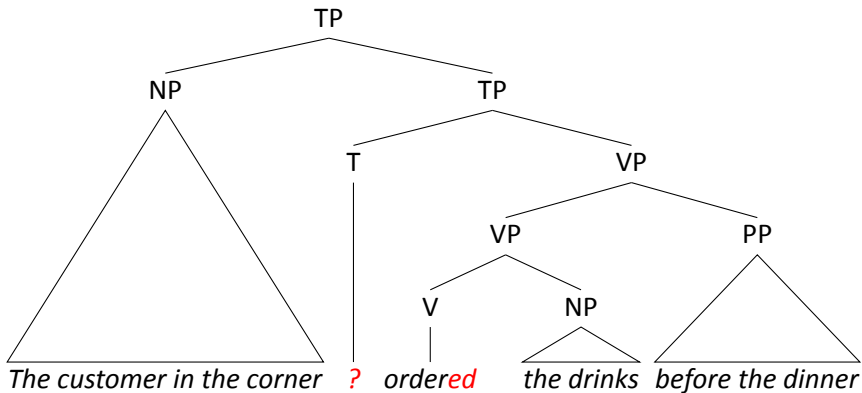
Past Tense Slavic

		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	Ø	jedla		

Past Tense Slavic

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

Past Tense Slavic

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

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

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

(27)   The customer in the corner ordered the drinks.
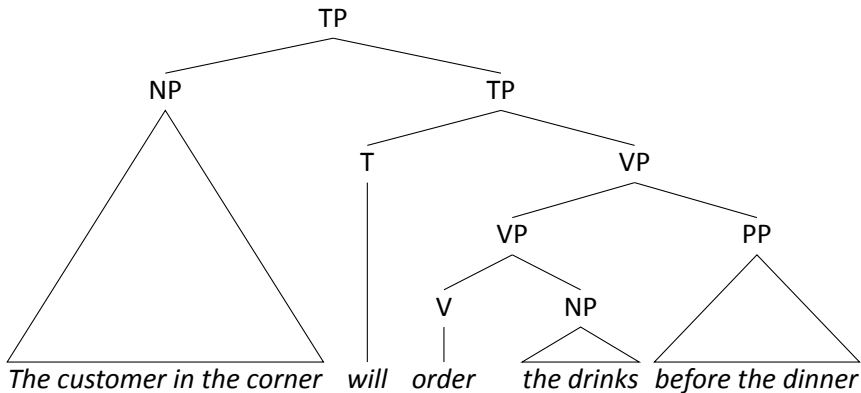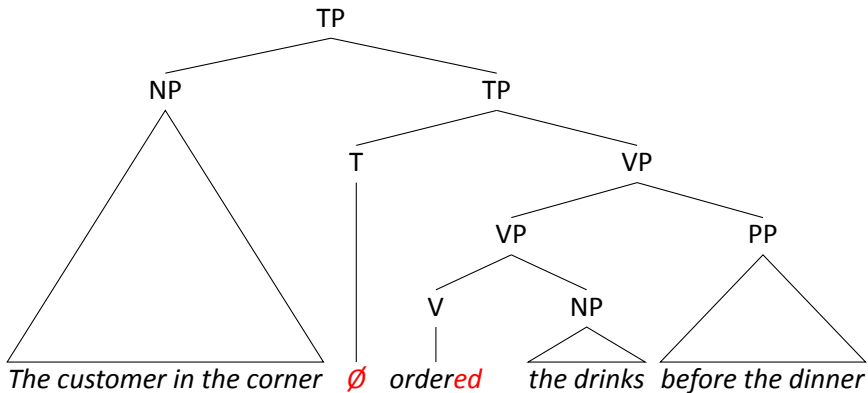
TP
├ NP
│ └ *The customer in the corner*
└ TP
   ├ T — *will*
   └ VP
      ├ VP
      │ ├ V — *order*
      │ └ NP — *the drinks*
      └ PP — *before the dinner*

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

TP
├─ NP
└─ TP
   ├─ T
   └─ VP
      ├─ VP
      │ ├─ V
      │ └─ NP
      └─ PP

The customer in the corner *Ø* *ordered*   *the drinks* *before the dinner*

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 —.

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 —.
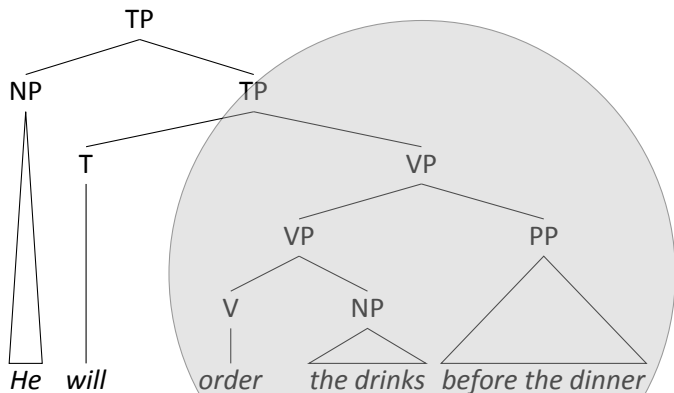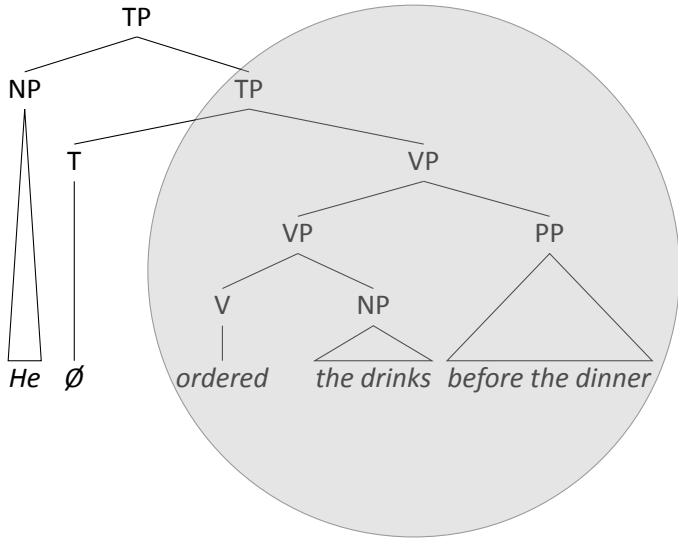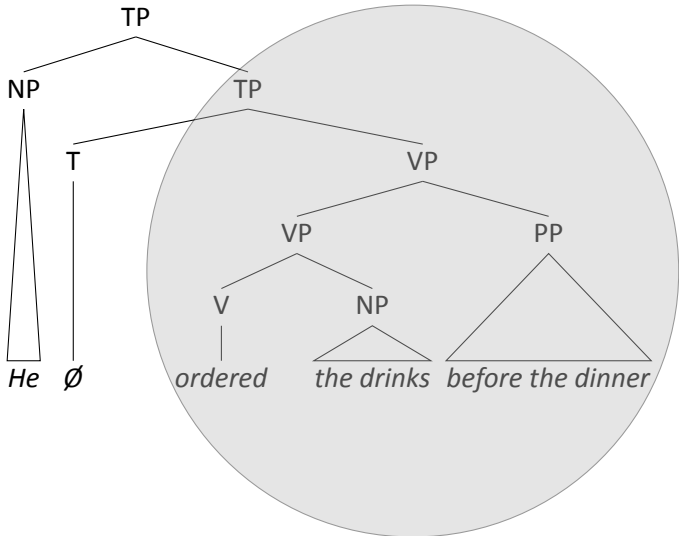
(30) A: The customer in the corner Ø order-ed the drinks.

(31) B: *Actually, I wouldn't be so sure that he Ø —.
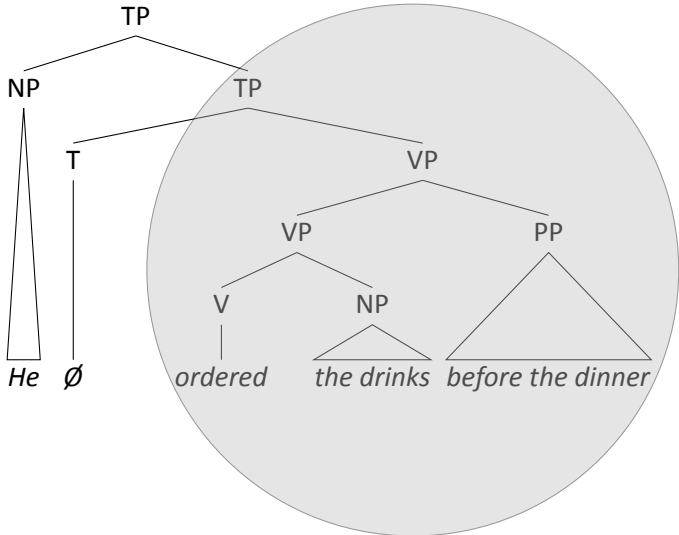
(30)   A: The customer in the corner Ø order-ed the drinks.

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

Structure 1
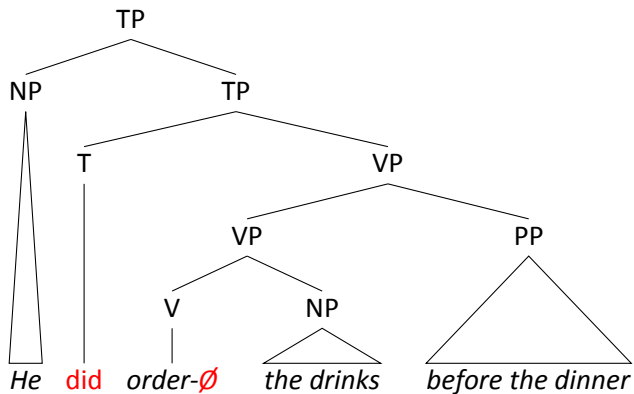
Structure 2
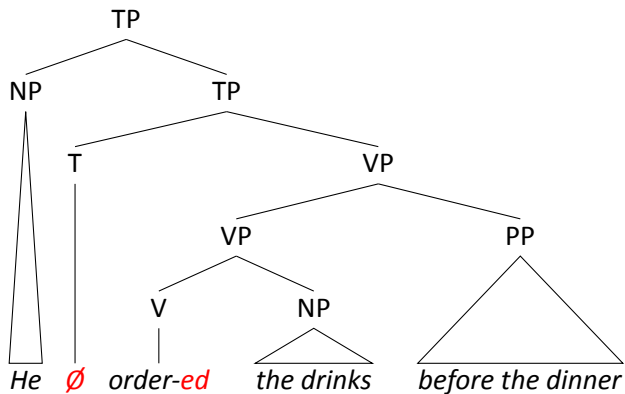
Both structures are the realization of an 'underlying' structure
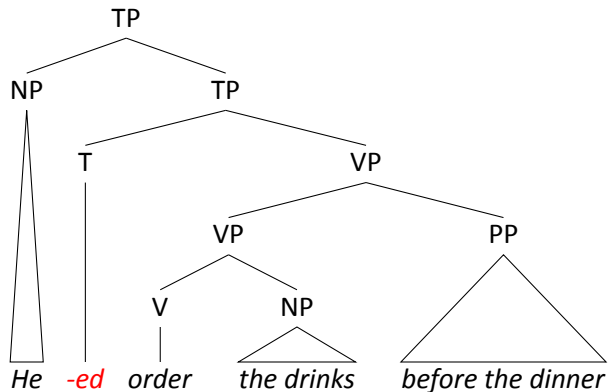
Rescue 1: Expletive insertion
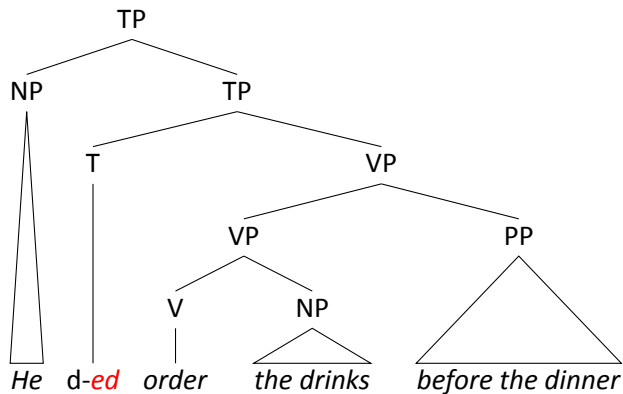
Do-support
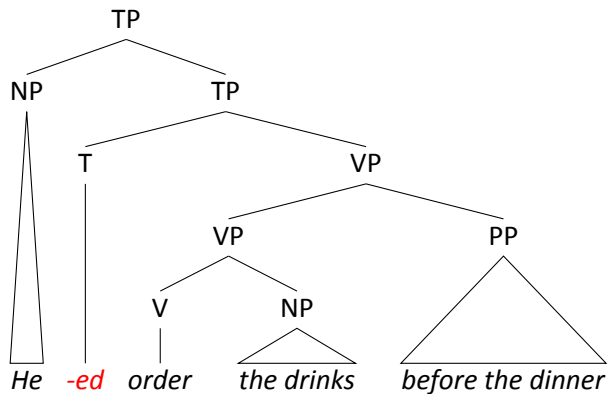
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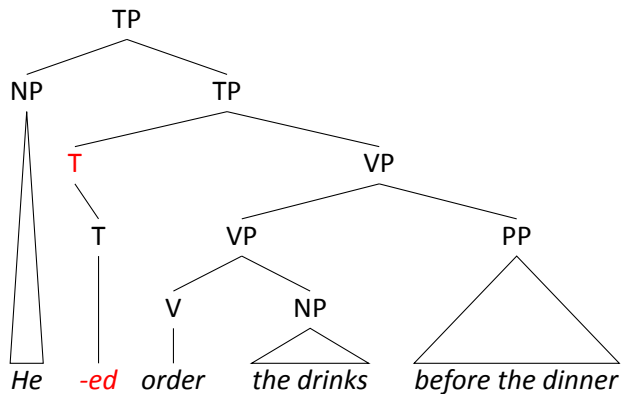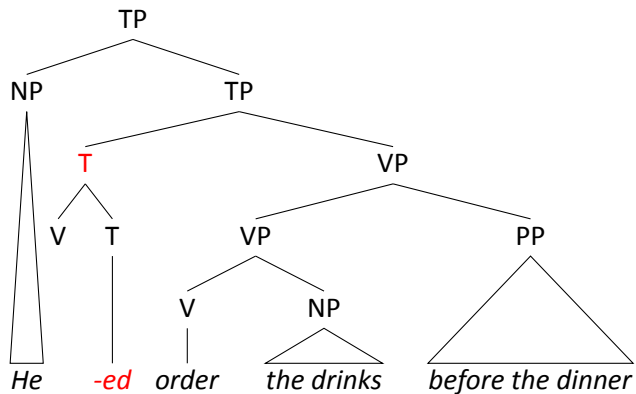
Do-support
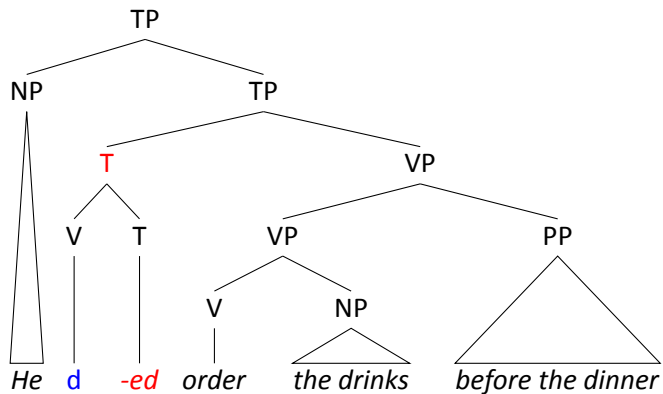
Do-support

Do-support
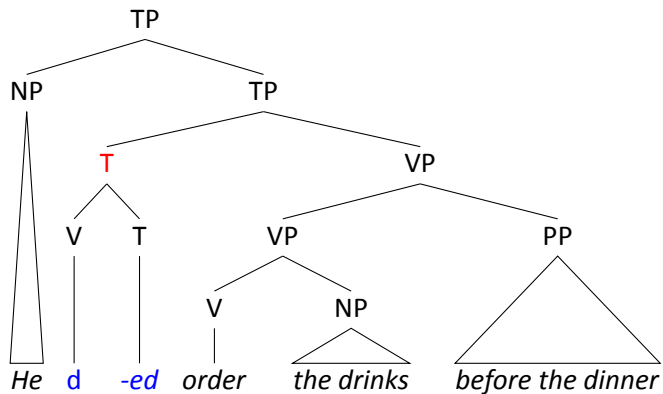
Rescue 2a: Affix Hopping
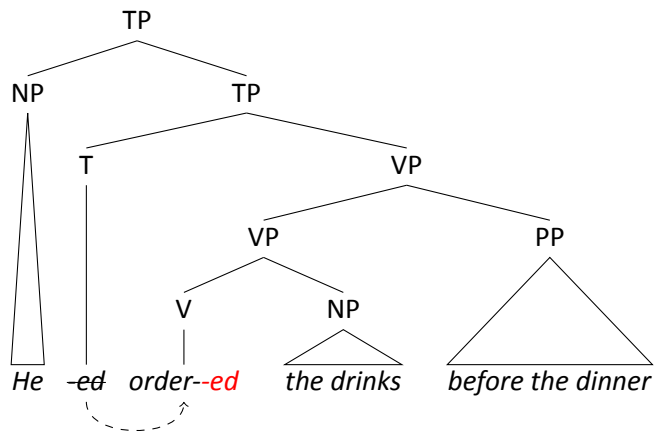
Rescue 2b: Head movement
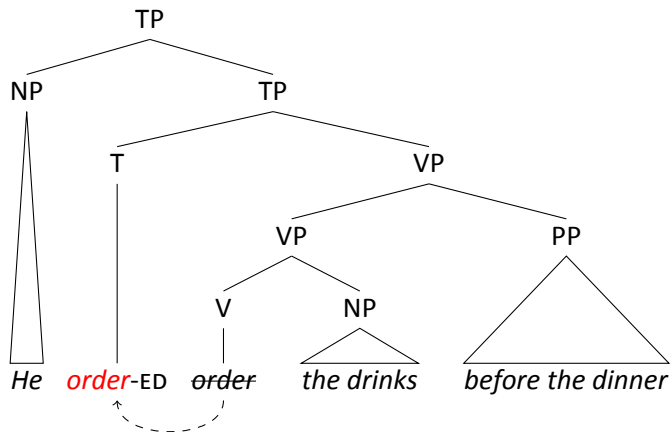
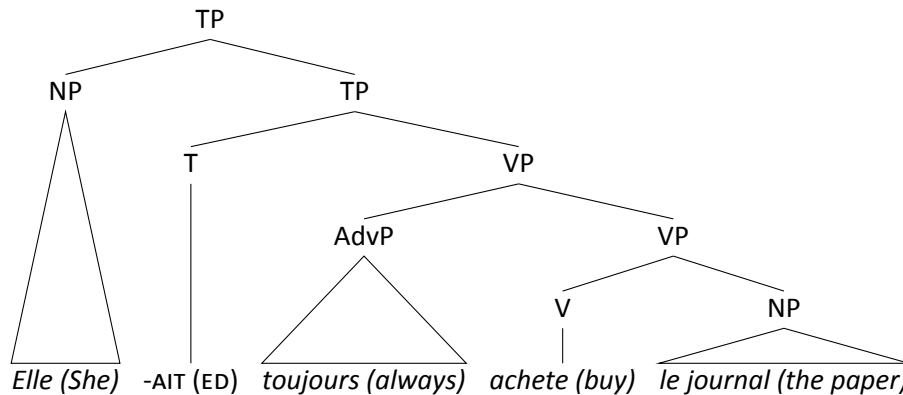# Introducing an adverb
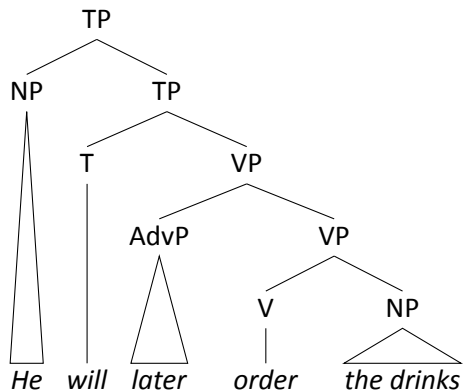
Adverb and lowering
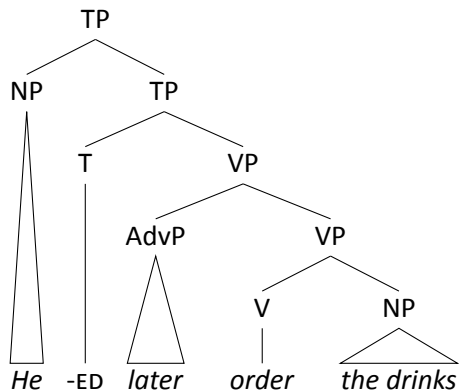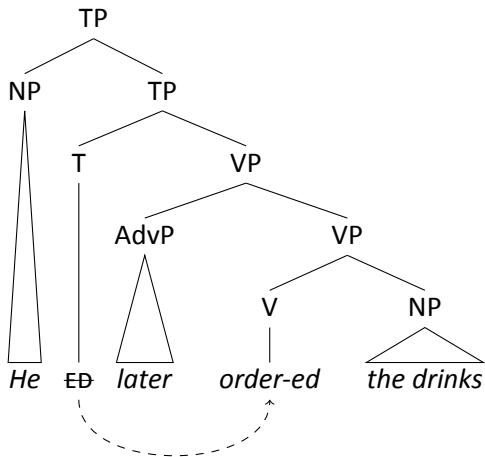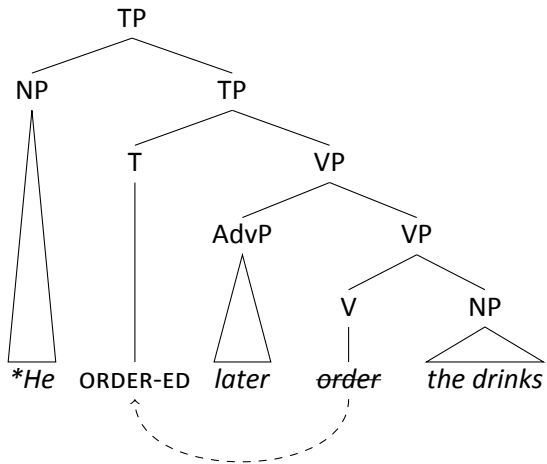
Introducing an adverb
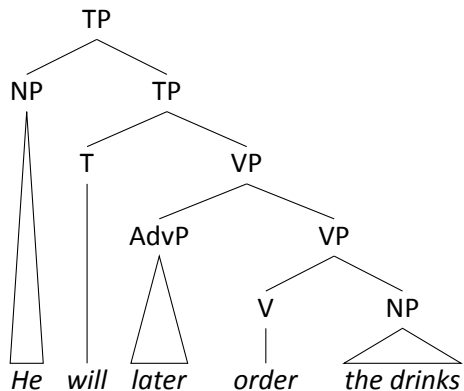
Adverb and lowering
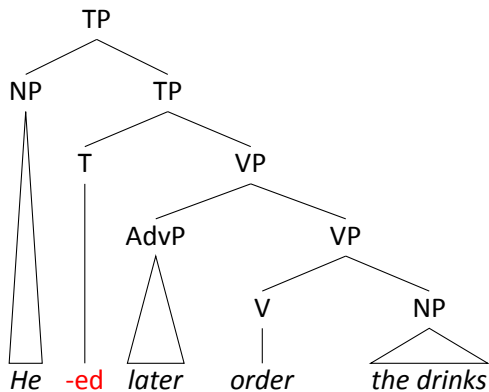
Adverb and lowering
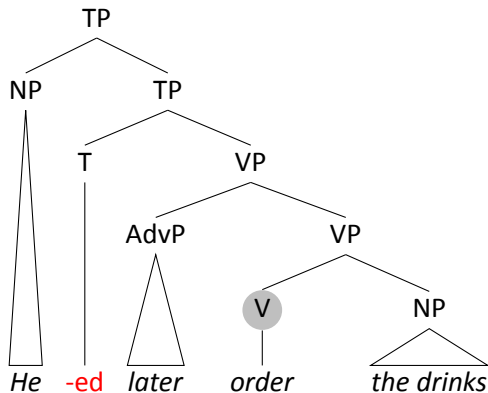
Adverb and affix hopping
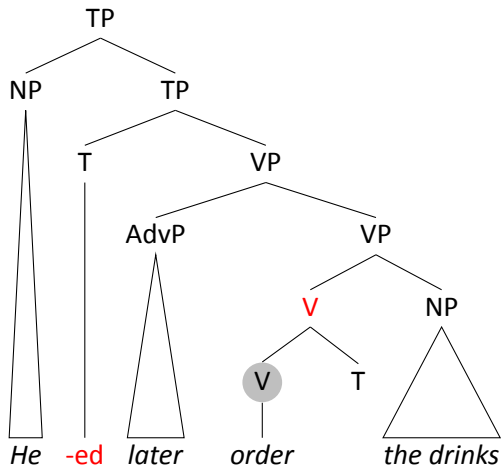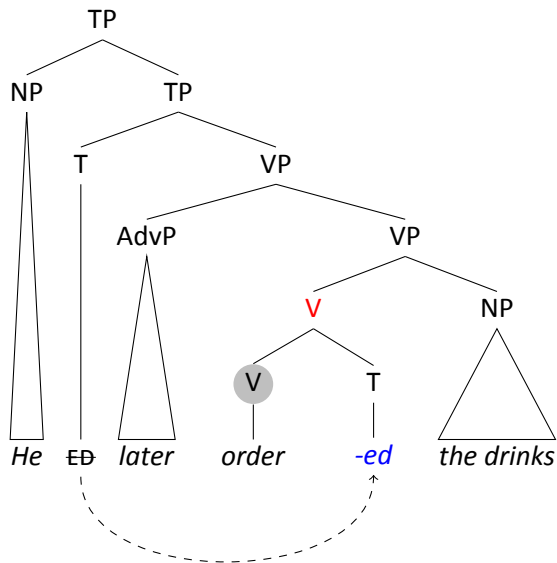
Adverb and affix hopping

Adverb and affix hopping

French
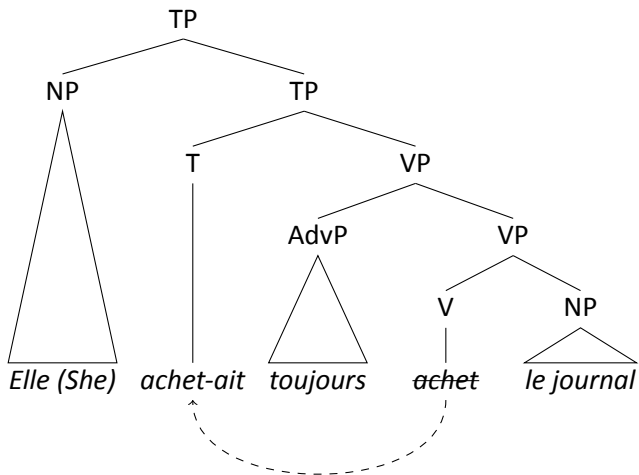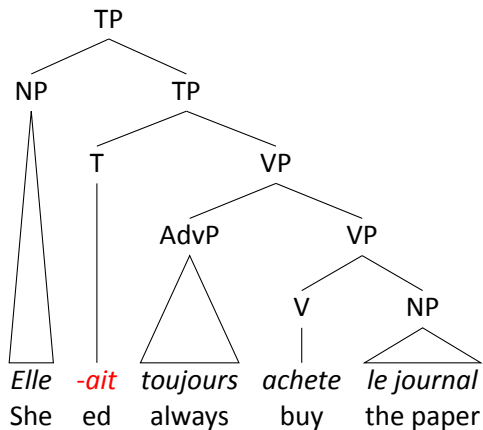
```
                          TP
                 ┌────────┴────────┐
                NP                 TP
                 │          ┌───────┴───────┐
                 △          T               VP
                 │          │        ┌───────┴───────┐
                 │          │       AdvP             VP
                 │          │        │         ┌──────┴──────┐
                 │          │        △         V            NP
                 │          │        │         │             △
              *Elle     ̶A̶I̶T̶ ̶(̶E̶D̶)̶  toujours  achet-ait  le journal
```
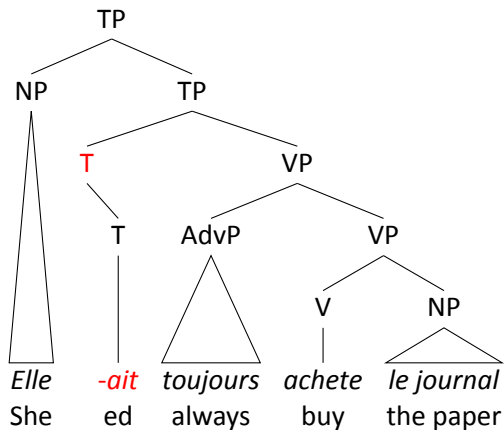
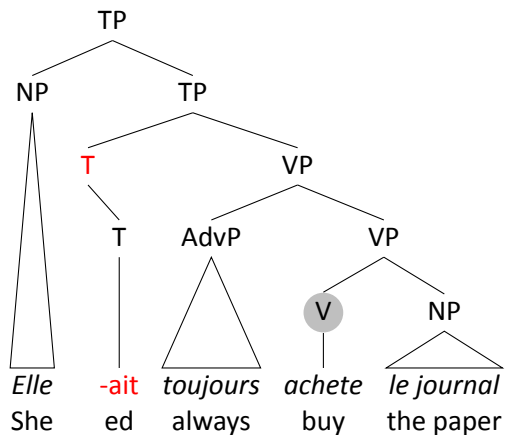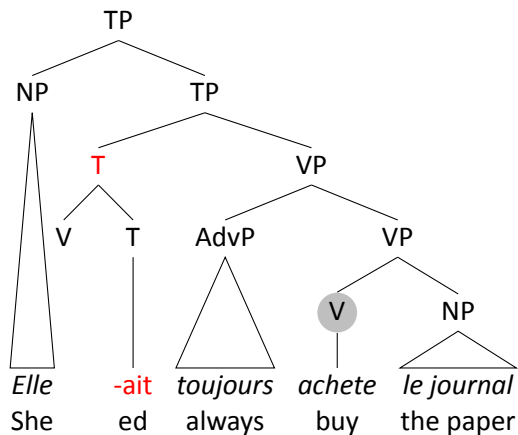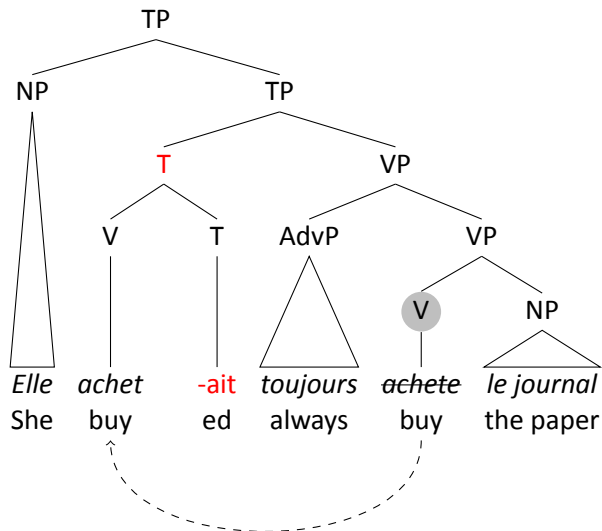# Sub-strategy II: Head movement

Sub-strategy II: Head movement

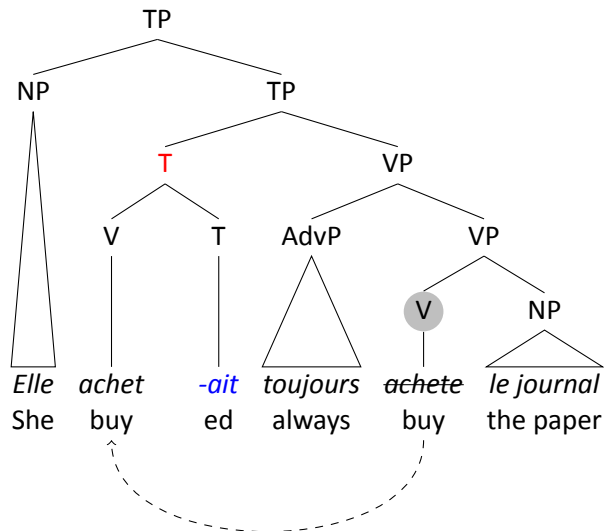# Sub-strategy II: Head movement

Sub-strategy II: Head movement

Sub-strategy II: Head movement

Sub-strategy II: Head movement

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

Future tense

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

```
                TP
              /    \
            NP      TP
            /\      /  \
           /  \    T    VP
          /    \   |    /  \
         /      \  |   V    NP
        /        \ |   |    /\
      Petr     bude  číst  knihy
```
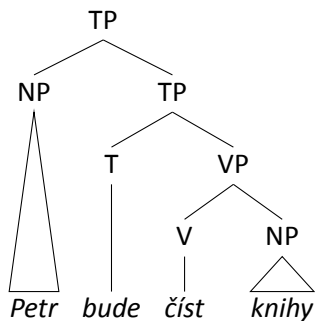
Present tense
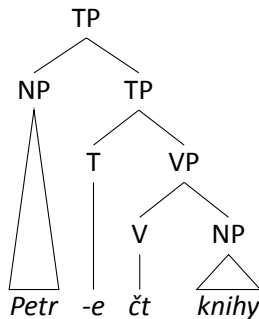
(34) a. Petr bude číst knihy.
          Petr will read books

Present tense

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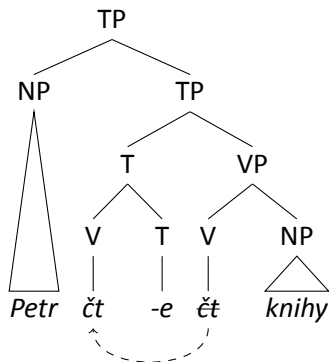   b.   Petr čt-e knihy
            Petr read -PRES books

Present tense

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

```
              TP
            /    \
          NP      TP
          |      /  \
         /\     T    VP
        /  \    |   /  \
       /    \   |  V    NP
      /      \  |  |    /\
   Petr      -e čt  knihy
```

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, ...
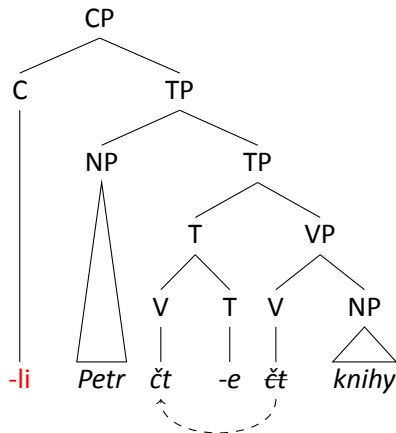   reads-PRES -IF Petr books
        'if Petr reads books, ...'

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

(36)   Conditional

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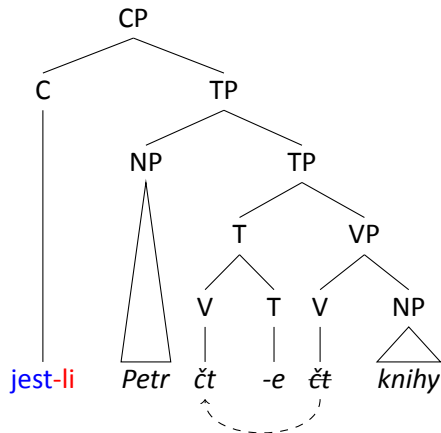   reads-PRES -IF Petr books
         'if Petr reads books, ...'

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

Semantic/underlying structure

Expletive insertion

Semantic/underlying structure