

“Silence is golden”

The syntax of ellipsis

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Yesterday's class

- Ellipsis is subject to two restrictions:
 - ① recoverability
 - ② syntactic licensing
- Recoverability can be syntactic or semantic.
 - Syntactic: Fiengo & May (1994)
 - Semantic: + proform → Hardt (1993)
 - + syntactic structure → Merchant (2001)
- Syntactic licensing:
 - Lobeck (1995): Strong agreement
 - Merchant (2001): [E]-feature
 - Gengel (2007)/Gallego (2009): Phases and ellipsis



Overview

Class 1: “If you do not understand my silence, how will you understand my words?”

→ What is ellipsis and why study it?

Class 2: “Silence best speaks the mind.”

→ Analyses for ellipsis

Class 3: “It’s a great thing to know the season for speech and the season for silence.”

→ Conditions on ellipsis

Class 4: “You have the right to remain silent.”

→ The syntactic licensing of ellipsis

Class 5: “Nobody understands the silence of things.”

→ VP ellipsis and other elliptical mysteries



“You have the right to remain silent.”

The Miranda warning, U.S. Constitution

EGG 2010

Class 4



You have the right to remain silent

1. Deletion or proform? A puzzle.
2. Basic data
3. Licensing ellipsis
4. Back to the puzzle
5. Extending the analysis



1. Deletion or proform? A puzzle (1)

Remember class 2?

Analyses of ellipsis:

- No syntactic structure in the ellipsis site
→ proform approach (or WYSIWYG)
- Ellipsis site = a full syntactic structure
→ deletion approach



1. Deletion or proform? A puzzle (2)

In the literature it has been claimed that language uses both strategies to elide redundant material (Depiante 2000; van Craenenbroeck 2005, 2010)

→ test: extraction out of the ellipsis site



1. Deletion or proform? A puzzle (3)

Extraction is possible.

→ **deletion analysis**

The moved constituent can only be connected to its base position if there is internal structure in the ellipsis site.

Extraction is impossible.

→ **proform analysis**

When there is no internal structure, there is nothing to move or to move out from.

1. Deletion or proform? A puzzle (4)

Extraction is possible

VP Ellipsis:

- (1) I know which cocktail Ryan made, but I don't remember which cocktail Jasmin did [~~make~~ $t_{\text{which cocktail}}$].

→ **Deletion**

(Merchant 2001, 2007, 2008; Johnson 2001; Lasnik 1995)



1. Deletion or proform? A puzzle (5)

Extraction is impossible

Null Complement Anaphora (NCA):

(2) *I know which cocktail Ryan made, but I don't remember which (cocktail) he refused *pro*.



→ **Proform analysis**

(Depiante 2000)



1. Deletion or proform? A puzzle (6)

Modal complement ellipsis (MCE)

- (3) Ik wil wel naar het feestje komen, maar ik
I want prt to the party come but I
mag niet.
am.allowed not
'I want to come to the party, but I'm not allowed to.'

→ The modal selects an infinitival complement that is not phonetically realized.

→ **ellipsis**



1. Deletion or proform? A puzzle (7)

Deletion analysis or proform?

→ Test: extraction out of the ellipsis site.

! MCE provides a puzzle:

- Subjects can move out of the ellipsis site
- Objects cannot move out of the ellipsis site



1. Deletion or proform? A puzzle (8)

Subject extraction: grammatical

- (4) Hij mag naar het strand gaan.
he is.allowed to the beach go
'He's allowed to go to the beach.'

(Dutch) modals are raising verbs:

→ The subject is base-generated in the infinitival clause

(4') ...[hij naar het strand gaan].

And moves to the surface subject position.

(4'') mag [_{hij} naar het strand gaan].



1. Deletion or proform? A puzzle (9)

Modal complement ellipsis:

- (5) Hij wil naar het strand gaan, maar hij
he wants to the beach go but he
mag niet.
is.allowed not
'He wants to go to the beach, but he isn't
allowed to.'

→ Subject raises from inside the infinitival clause

- (5') ..., maar hij mag niet [~~t_{hij} naar het strand~~
~~gaan~~].

→ Extraction: Deletion analysis?



1. Deletion or proform? A puzzle (10)

Object extraction: ungrammatical

- (6) *Ik weet wie Thomas MOET uitnodigen, maar
I know who Thomas must invite but
ik weet niet **wie** hij niet MAG.
I know not who he not is.allowed
'I know who Thomas has to invite, but I don't
know who he isn't allowed to.'



1. Deletion or proform? A puzzle (11)

→ Ok in non-ellipsis:

(6') Ik weet wie Thomas MOET uitnodigen, maar
I know who Thomas must invite but
ik weet niet wie hij niet MAG uitnodigen.
I know not who he not is.allowed invite
'I know who Thomas has to invite, but I don't
know who he isn't allowed to.'

→ No extraction: Proform analysis?



You have the right to remain silent

1. Deletion or proform? A puzzle.
2. Basic data
3. Licensing ellipsis
4. Back to the puzzle
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2. Basic data: Dutch MCE (1)

Modal complement ellipsis is only possible with modal verbs.

- (7) a. Peter wil niet werken, maar hij **moet**.
Peter wants not work but he has.to
- b. Peter komt straks, maar Kim **mag** niet.
Peter comes later but Kim is.allowed not
- c. Peter wil wel helpen, maar hij **kan** niet.
Peter wants PRT help but he can not
- d. Peter komt niet helpen, maar Kim **wil** wel.
Peter comes not help but Kim wants PRT



2. Basic data: Dutch MCE (2)

→ Not allowed with temporal or passive auxiliaries:

- (8) a.* Peter heeft gewerkt, maar Kim heeft niet.
Peter has worked but Kim has not
- b.* Peter is aan het werken, maar Kim is niet.
Peter is working but Kim is not
- c.* Peter zal werken, en Kim zal ook.
Peter will work and Kim will too
- d.* Die broek is gewassen, maar die rok is niet.
those pants is washed but that skirt is not



2. Basic data: Dutch MCE (3)

- ① Modals are raising verbs
- ② The status of modals and their verbal complements in Dutch
- ③ The properties of modal complement ellipsis



2. Basic data: Dutch MCE (4)

① Modals are raising verbs

What is a raising verb?

(9) Addie **seemed** to laugh.

Raising verbs are contrasted with control verbs

(10) Addie **tried** to laugh.

→ superficially similar, but different underlying structure



2. Basic data: Dutch MCE (5)

Empirical differences between the two

- Control verbs cannot occur with expletives:

- (11) a. *It tried that Addie laughed.
b. It seemed that Addie laughed.
c. *It tried to rain.
d. It seemed to rain.

- Control verbs cannot occur with idiom subjects:

- (12) a. *The shit tried to hit the fan.
b. The shit seemed to hit the fan.



2. Basic data: Dutch MCE (6)

- Passivization of the complement of control verbs causes a shift in meaning:

- (13) a. The doctor tried to examine Jeff.
b. Jeff tried to be examined by the doctor.

Passivization of the complement of raising verbs doesn't cause a shift in meaning:

- (14) a. The doctor seems to examine Jeff.
b. Jeff seems to be examined by the doctor.



2. Basic data: Dutch MCE (7)

- Control verbs cannot occur in impersonal passives in Dutch:

(15) a. *Er probeert gedanst te worden.
there tries danced to become
b. Er lijkt gedanst te worden.
there seems danced to become
'There seems to be dancing going on.'



2. Basic data: Dutch MCE (8)

Analysis

Control verbs assign an Agent role to the subject and a Theme role to the infinitival complement.

The infinitival assigns its (Agent) role to PRO coindexed with the subject (in this case).

(16) Addie_i tried [_{inf} PRO_i to laugh].



The diagram consists of three rectangular boxes arranged horizontally. From each box, an arrow points vertically upwards to the word 'Addie_i', 'PRO_i', and 'to laugh' respectively. The boxes are positioned below the corresponding words in the sentence above.



2. Basic data: Dutch MCE (9)

Raising verbs only assign a Theme role to the infinitival.

The subject gets an Agent role from the infinitive and raises up to the subject position

(17) Addie_i seemed [_{inf} t_i to laugh].





2. Basic data: Dutch MCE (10)

How does this analysis account for the empirical facts?

Impersonal passives:

Expletive *er* 'there' cannot take an Agent role.

- A raising verb does not assign an Agent role to its subject.
- A control verb does.

2. Basic data: Dutch MCE (11)

(18) a. * Er_i probeert [_{inf} PRO_i gedanst te worden].
there tries danced to become



b. Er_i lijkt [_{inf} t_i gedanst te worden].
there seems danced to become





2. Basic data: Dutch MCE (12)

What about modals?

All modals, except for *willen* 'want', are raising verbs.

- Impersonal passive:

- (19)
- Er mag gedanst worden vanavond.
there is.allowed danced become tonight
 - Er moet gedanst worden vanavond.
there must danced become tonight
 - Er kan gedanst worden vanavond.
there can danced become tonight
 - Er hoeft niet gedanst te worden.
there needs not danced to become
 - e.* Er wil gedanst worden.
there wants danced become



2. Basic data: Dutch MCE (13)

- Modal verbs can occur with expletives:

(20) a. Het kan dat ik eens langskom.

it can that I once pass.by

'It's possible that I'll pass by.'

b. Het mag niet regenen.

it is.allowed not rain

'It can't rain.'

- Modal verbs can occur with idiom subjects:

(21) De aap moet nog uit de mouw komen.

the monkey has.to still out the sleeve come

'The truth still has to become clear.'



2. Basic data: Dutch MCE (14)

- Passivization of the complement of modal verbs doesn't cause a shift in meaning:

- (22) a. De dokter moet Lola nog onderzoeken.
the doctor has.to Lola still examine
- b. Lola moet nog onderzocht worden door
Lola has.to still examined become by
de dokter.
the doctor



2. Basic data: Dutch MCE (15)

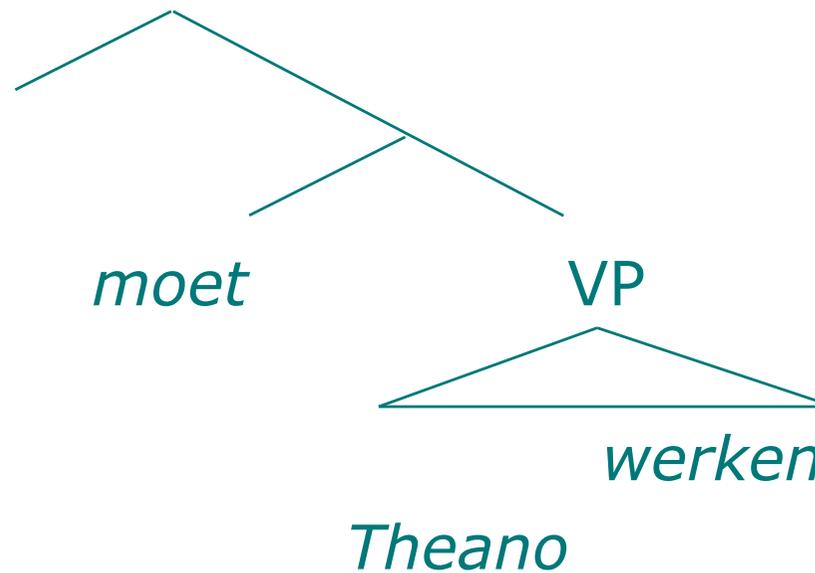
Modals are raising verbs (except for *willen*).

- They do not assign Agent roles.
- The subject is base-generated inside the infinitival complement and raises up to the surface subject position.

2. Basic data: Dutch MCE (16)

(23) a. Theano moet werken.
Theano must work

b.





2. Basic data: Dutch MCE (17)

- ① Modals are raising verbs
- ② The status of modals and their verbal complements in Dutch
- ③ The properties of modal complement ellipsis



2. Basic data: Dutch MCE (18)

- ② The status of modals and their verbal complements in Dutch

Claim: The infinitival complement of a Dutch modal is a TP.

→ Discussion on status of infinitival clauses and the differences between languages: see Wurmbrand (2003) and references.



2. Basic data: Dutch MCE (19)

→ It contains all the aspectual and Voice layers:

- (24) a. Senne moet zijn kamer opgeruimd hebben.
Senne has.to his room cleaned have
- b. Jesse moet zijn huiswerk aan het maken
Jesse has.to his home.work on the make
zijn.
be
- c. Dat artikel moet gepubliceerd worden.
that paper has.to published become



2. Basic data: Dutch MCE (20)

→ It contains Tense:

(25) Gisteren moest ik volgende week een lezing
yesterday had.to I next week a lecture
geven, en nu zijn de plannen alweer
give and now are the plans again
veranderd.
changed

'Yesterday I had to give a lecture next week
and now the plans have changed again.'



2. Basic data: Dutch MCE (21)

→ *Yesterday* is modifying the modal (matrix T)
Next week is modifying the embedded clause

→ The embedded clause has its own time specification.

➔ The complement of a Dutch modal is a TP.



2. Basic data: Dutch MCE (22)

What is the categorial status of Dutch modals?

- Inflectional heads (parallel to English)
- Aspectual or temporal auxiliaries
- (Semi-)lexical verbs (V/Mod)

→ Claim: they are semi-lexical heads (V/Mod)



2. Basic data: Dutch MCE (23)

Dutch modals are no inflectional heads.

↔ English modals:

- English modals cannot be inflected

(26) a. *Jeff musted get up early.

b. *Jeff has never could/canned that.

c. *Jeff will not can come.

d. *Jeff musts get up.

→ English modals are T heads.



2. Basic data: Dutch MCE (24)

- Dutch modals can be inflected

(27) a. Kim moest vroeg opstaan.

Kim had.to early get.up

b. Kim heeft dat nooit gekund.

Kim has that never been.able

c. Kim zal niet kunnen komen.

Kim will not be.able come

d. We moeten/*moet nog eten.

*we have.to/*has.to still eat*

→ Dutch modals are not inflectional heads.



2. Basic data: Dutch MCE (25)

Dutch modals are not auxiliaries

- Modals can select other complements than infinitival clauses

(28) a. Anne wil dat ik meega.

Anne wants that I go.along

b. Kim moet naar de tandarts.

Kim has.to to the dentist

c. De boeken mogen weg.

the books are.allowed away



2. Basic data: Dutch MCE (26)

- Modals can assign a source theta-role.

(29) Roos mag van haar moeder niet buiten
Roos is.allowed of her mother not outside
spelen.

play

'Roos is not permitted to play outside by her
mother.'

→ Dutch modals are not auxiliaries.



2. Basic data: Dutch MCE (27)

Dutch modals are (semi-)lexical verbs (V/Mod)

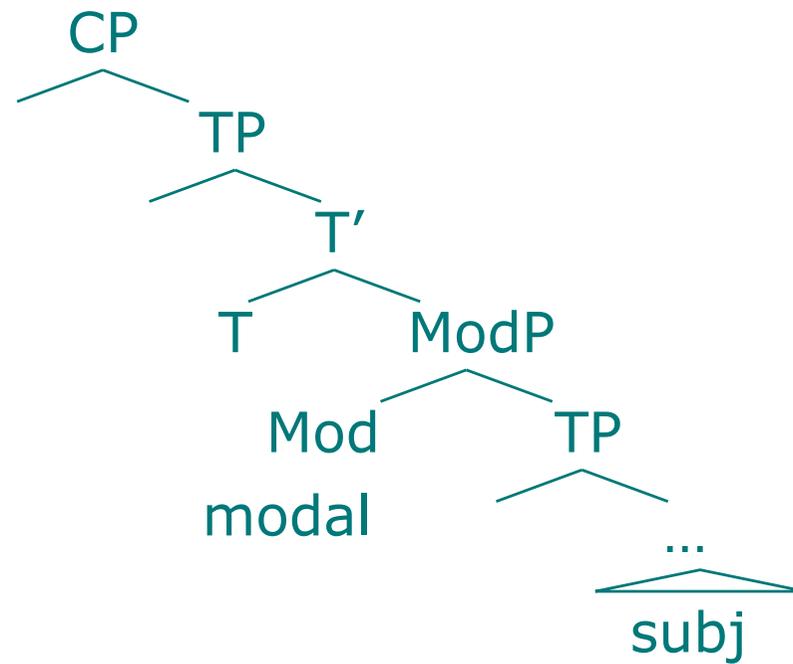
Parallel to other verbs selecting infinitival complements:

(30) Peter leert zwemmen.

Peter learns swim

2. Basic data: Dutch MCE (28)

(31)





2. Basic data: Dutch MCE (29)

- ① Modals are raising verbs
- ② The status of modals and their verbal complements in Dutch
- ③ The properties of modal complement ellipsis



2. Basic data: Dutch MCE (30)

- ③ The properties of modal complement ellipsis
 - MCE elides the complement of the embedded T.
 - Subject extraction is allowed.
 - Object extraction is not allowed.



2. Basic data: Dutch MCE (31)

MCE elides the complement of the embedded T.

→ It elides the VP and its arguments and aspectual and passive auxiliaries:

(32) Kim heeft nog steeds haar kamer niet
Kim has yet still her room not
opgeruimd. – Tegen vanavond moet ze
cleaned by tonight has.to she
wel [~~haar kamer opgeruimd hebben~~].
PRT her room cleaned have



2. Basic data: Dutch MCE (32)

- (33) Die broek is nog niet gewassen, maar hij
that pants is yet not washed, but he
mag wel al [~~gewassen worden~~].
is.allowed PRT already washed become
'Those pants aren't washed yet, but they can
be.'



2. Basic data: Dutch MCE (33)

! It doesn't elide the entire infinitival clause:

The associate of *there* is not elided.

(34) Gaat jij naar de les? - Er moet toch

Goes you to the class there has.to PRT

iemand [~~naar de les gaan~~].

someone to the class go

'Are you going to class? - Well, someone has to at least.'

→ Associate in [Spec, embedded TP] (see later)



2. Basic data: Dutch MCE (34)

The embedded time modifier is not elided.

(35) Gisteren moest ik volgende week een lezing
yesterday had.to I next week a lecture
geven, en vandaag moet ik **morgen**
give and today must I tomorrow
~~[een lezing geven]~~.
a lecture give

'Yesterday I had to give a lecture next week
and today I have to do it tomorrow.'



2. Basic data: Dutch MCE (35)

Time adverbial is adjoined to embedded TP (or possibly higher, but still in the infinitival clause).

= not elided

→ MCE does not elide the entire complement clause. The TP layer is not elided, but anything lower is.

→ MCE targets the complement of T.



2. Basic data: Dutch MCE (36)

- Subject extraction is allowed.

→ Modals are raising verbs: subject raises out of the infinitival clause.

(36) Ik wil wel helpen, maar **ik** kan niet [helpen].
I want PRT help but I can not help
'I want to help, but I can't.'



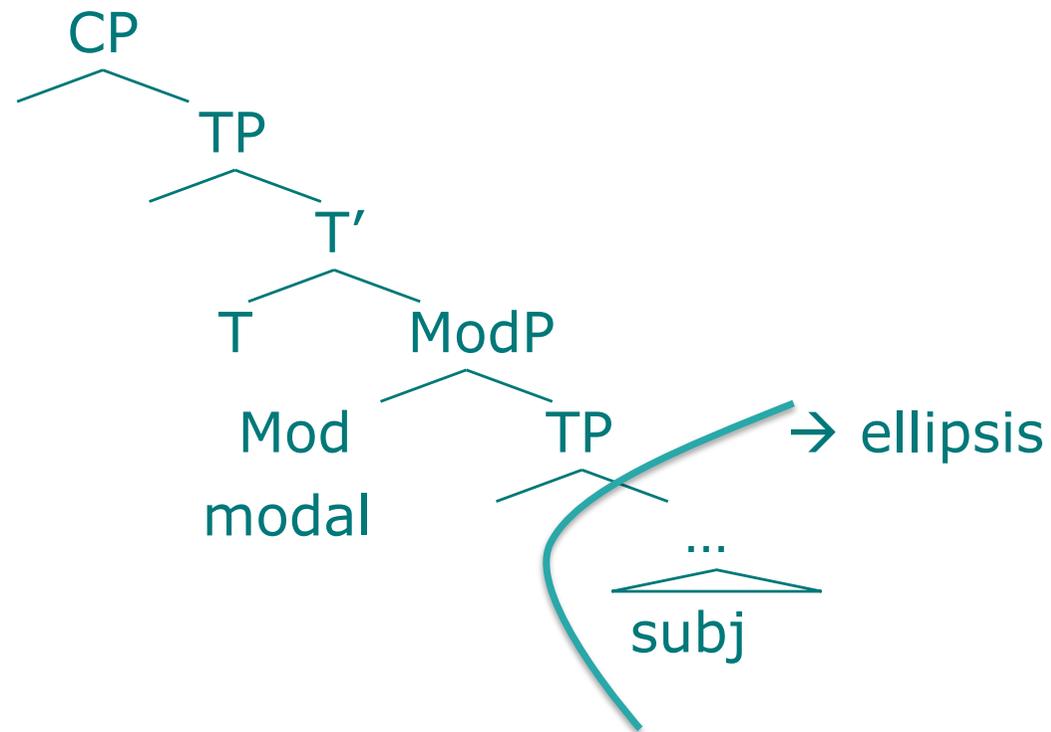
2. Basic data: Dutch MCE (37)

→ Even derived subjects
= extraction from complement position

- (37) a. Erik is al langsgesproken, maar **Nana**
Erik is already pass.by but Nana
moet nog [~~langskomen~~ t_{Nana}].
has.to still pass.by
- b. Die broek is nog niet gewassen, maar **hij**
that pants is yet not washed, but he
mag wel [~~gewassen worden~~ t_{hij}].
is.allowed PRT washed become

2. Basic data: Dutch MCE (38)

(38)





2. Basic data: Dutch MCE (39)

- Object extraction is not allowed.

(39) *Ik weet wie Thomas MOET uitnodigen, maar ik
I know who Thomas must invite but I
weet niet **wie** hij niet MAG [~~t_{wie} uitnodigen~~].
know not who he not is.allowed invite
'I know who Thomas has to invite, but I don't
know who he isn't allowed to.'

→ No *wh* object extraction



2. Basic data: Dutch MCE (40)

(40)*Ik wil je wel helpen, maar ik kan **je** niet
I want you PRT help but I can you not
[t_{je} helpen].
help
'I want to help you, but I can't.'

→ No object scrambling



2. Basic data: Dutch MCE (41)

(41)*Ik kan Kim wel helpen, maar ik kan Peter niet

I can Kim PRT help but I can Peter not

[t_{Peter} helpen].

help

'I can help Kim, but I can't Peter.'

→ No Pseudogapping



2. Basic data: Dutch MCE (42)

Claim:

Dutch modal complement ellipsis involves **deletion** of a syntactic infinitival clause.

The ban on object movement is due to the **timing of ellipsis**.



You have the right to remain silent

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3. Licensing ellipsis (1)

Licensing ellipsis:

- ① Ellipsis is licensed via an Agree relation between an [E]-feature and the ellipsis licensing head.
- ② Ellipsis occurs in the course of the derivation, as soon as the licensing head is merged. At this point the ellipsis site becomes inaccessible for any further syntactic operations, and vocabulary insertion at PF is blocked.



3. Licensing ellipsis (2)

- ① Ellipsis licensing via Agree
 - 1. The ellipsis licensing head
 - 2. Material between licensor and ellipsis site
 - 3. A complex ellipsis feature

- ② Derivational ellipsis
 - 1. The timing of ellipsis
 - 2. Consequences for extraction



3.1 Ellipsis licensing via Agree (1)

The ellipsis licensing head

Ellipsis requires the presence of a certain head, the licensor.

(Zagona 1982, 1988a, 1988b; Lobeck 1993, 1995;
Johnson 2001; Merchant 2001, 2004; Gergel 2006)



3.1 Ellipsis licensing via Agree (2)

e.g. English VP ellipsis occurs with finite aux

- (42)a. Jeff is sleeping and Jane is, too.
b. *Jeff likes sleeping and Jane likes, too.
c. *Jeff having been working and Jane not having been was a surprise to everyone.

→ VP ellipsis is licensed by (filled) T

(Zagona 1982, 1988a, 1988b; Lobeck 1993, 1995; Martin 1992, 1996; Johnson 2001)



3.1 Ellipsis licensing via Agree (3)

e.g. MCE is only allowed with modals, not with temporal or passive auxiliaries

- (43)a. Peter moet werken, maar hij wil niet.
Peter has.to work but he wants not
'Peter has to work, but he doesn't want to.'
- b.*Peter heeft gewerkt, maar Kim heeft niet.
Peter has worked but Kim has not

→ MCE is licensed by the modal verb.



3.1 Ellipsis licensing via Agree (4)

- ① Ellipsis licensing via Agree
 - 1. The ellipsis licensing head
 - 2. Material between licensor and ellipsis site
 - 3. A complex ellipsis feature

- ② Derivational ellipsis
 - 1. The timing of ellipsis
 - 2. Consequences for extraction



3.1 Ellipsis licensing via Agree (5)

Material between licensor and ellipsis site

Remember [E]? (Merchant 2001)

- (44)a. The syntax of [E]_S: $E_{[uwh^*, uQ^*]}$
b. The phonology of [E]: $\varphi_{IP} \rightarrow \emptyset / E_$
c. The semantics of [E]: $\llbracket E \rrbracket = \lambda p: e\text{-GIVEN}(p)[p]$

→ [E] sits on the licensing head and elides the complement.

→ Consequence: the licensor and the ellipsis site are necessarily adjacent.



3.1 Ellipsis licensing via Agree (6)

! There can be material between the licensor and the ellipsis site

VP ellipsis:

(45)A: I hadn't been thinking about that.

B: Well, you should have been.

(45')You should **have been** [~~thinking about that~~].

= licensor

= ellipsis site



3.1 Ellipsis licensing via Agree (7)

MCE:

- (46) Gisteren wou hij volgende week pas
yesterday wanted he next week only
verhuizen, en vandaag wil hij plots
move and today wants he suddenly
dit weekend al [~~verhuizen~~].
this weekend already move

'Yesterday he only wanted to move next week
and now he suddenly wants to move this
weekend already.'



3.1 Ellipsis licensing via Agree (8)

→ Ellipsis does not elide the entire complement of the modal

infinitival clause: [dit weekend al verhuizen]
this weekend already move

ellipsis site: [verhuizen]
move

→ *dit weekend al* intervenes between the licensor and the ellipsis site



3.1 Ellipsis licensing via Agree (9)

Consequence:

Merchant's ellipsis feature cannot identify both the licensor and the ellipsis site if they are not adjacent.

→ We need a more complex [E]-feature



3.1 Ellipsis licensing via Agree (10)

- ① Ellipsis licensing via Agree
 1. The ellipsis licensing head
 2. Material between licensor and ellipsis site
 3. A complex ellipsis feature

- ② Derivational ellipsis
 1. The timing of ellipsis
 2. Consequences for extraction



3.1 Ellipsis licensing via Agree (11)

A complex [E]-feature

Suppose: Each head is a feature bundle with the following feature structure (Merchant)

(47) $\left[\begin{array}{l} \text{CAT} \quad [\dots] \\ \text{INFL} \quad [\dots] \\ \text{SEL} \quad [\dots] \end{array} \right]$



3.1 Ellipsis licensing via Agree (12)

CAT [...]: specifies categorial features (N [sg], V,...)

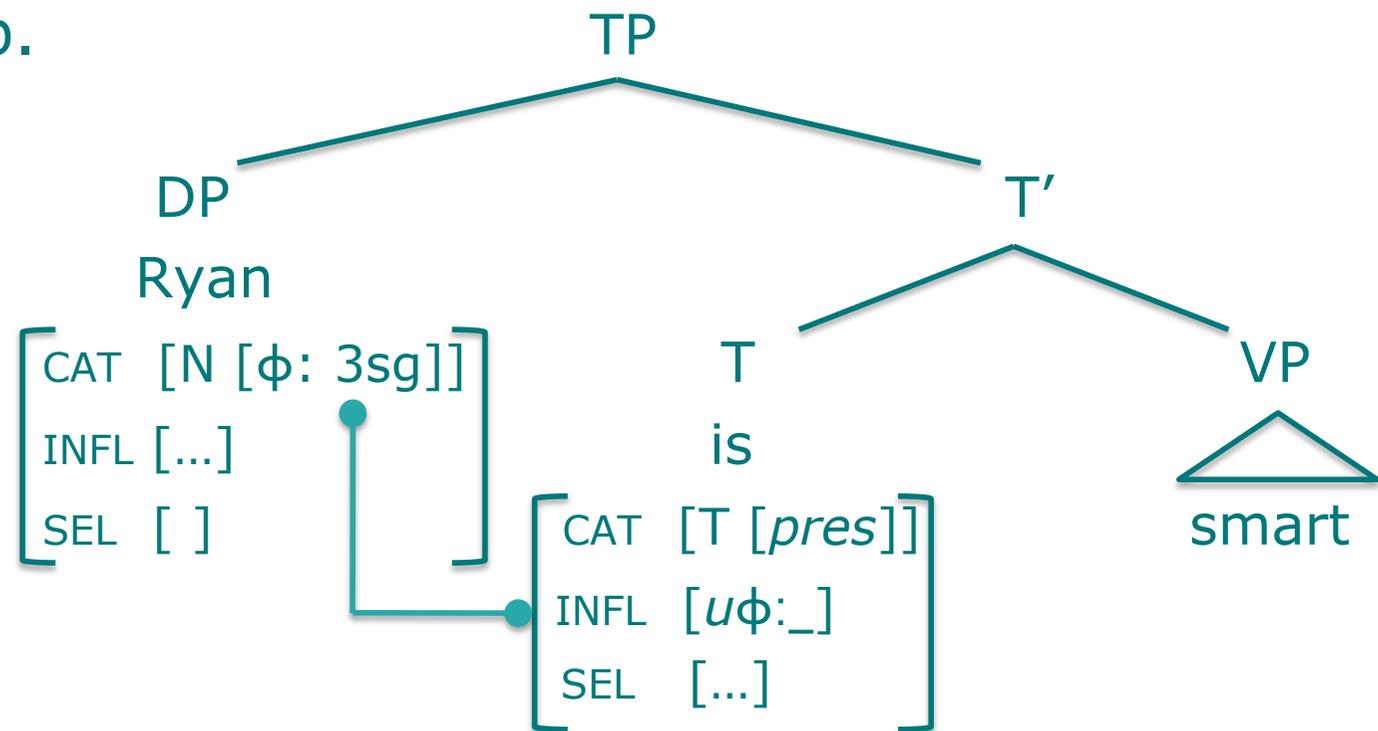
INFL [...]: specifies inflectional features, which can be checked against the category features of another head if they are uninterpretable.

SEL [...]: specifies selectional features (DP object,...)

3.1 Ellipsis licensing via Agree (13)

(48)a. Ryan is smart.

b.





3.1 Ellipsis licensing via Agree (14)

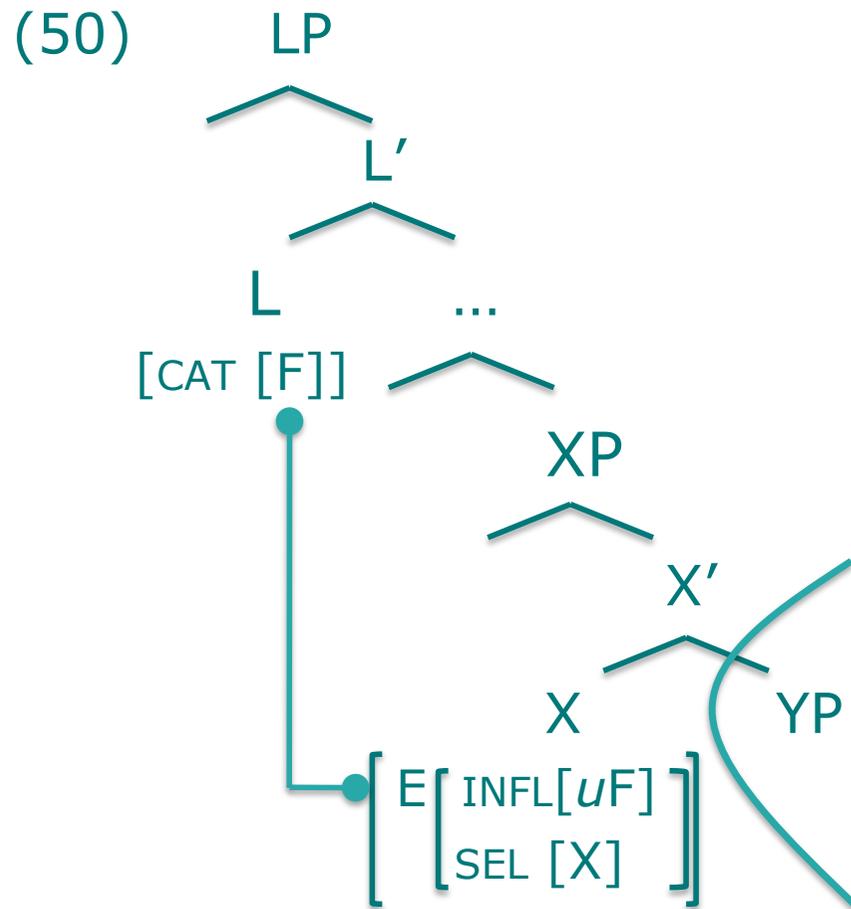
The [E]-feature:

Occurs optionally on certain heads: SEL

Requires a licenser: uninterpretable INFL is checked against the licenser via Agree

(49) $\left[\begin{array}{ll} \text{CAT} & [\text{X}/\text{E}] \\ \text{INFL} & [\text{uF}] \\ \text{SEL} & [\text{X}] \end{array} \right]$

3.1 Ellipsis licensing via Agree (15)





3.1 Ellipsis licensing via Agree (16)

[E]-feature

(51)a. The syntax of [E]:

$$\begin{bmatrix} \text{CAT} & [X/E] \\ \text{INFL} & [uF] \\ \text{SEL} & [X] \end{bmatrix}$$

b. The phonology of [E]: $\varphi \rightarrow \emptyset / E_$

c. The semantics of [E]: $\llbracket [E] \rrbracket = \lambda p: e\text{-GIVEN}(p)[p]$



3.1 Ellipsis licensing via Agree (17)

- Phonology: same as Merchant's
non-spell-out of its complement
 - Semantics: same as Merchant's
e-GIVENNESS
 - Syntax:
Identifies ellipsis site with SEL
Identifies licenser with uninterpretable INFL
- ➔ Licenser and ellipsis site do not have to be adjacent.
- ➔ Ellipsis is licensed via Agree.



3. Licensing ellipsis (3)

- ① Ellipsis licensing via Agree
 - 1. The ellipsis licensing head
 - 2. Material between licensor and ellipsis site
 - 3. A complex ellipsis feature

- ② Derivational ellipsis
 - 1. The timing of ellipsis
 - 2. Consequences for extraction



3.2 Derivational ellipsis (1)

When does ellipsis occur?

Three options:

- ❶ When the ellipsis site is completed
→ [E] is not yet in the structure.
- ❷ When the whole sentence is finished
→ [uF] has been checked and the derivation is finished.
- ❸ When the licenser enters the derivation
→ [uF] is checked.

3.2 Derivational ellipsis (2)

- ① When the ellipsis site is completed

(52) Ryan made a cocktail and Jasmin did [~~make a cocktail~~], too.

(53)

	VP			VP		
	/ \			/ \		
V		DP	→	V		DP
make		a cocktail		make		a cocktail



3.2 Derivational ellipsis (3)

Problems:

Prediction: if the ellipsis site is deleted immediately, nothing can move out of it anymore.

This prediction is not borne out:

The object can move out of the ellipsis site in VP Ellipsis.

(54) I know which cocktail Ryan made, but I don't remember which cocktail Jasmin did [~~make~~ $t_{\text{which cocktail}}$].



3.2 Derivational ellipsis (4)

[E]-feature has not been introduced into the structure yet when the ellipsis site is finished:

[E] occurs on the head selecting the ellipsis site.

➔ Ellipsis does not happen immediately after the ellipsis site is completed.

3.2 Derivational ellipsis (5)

② When the whole sentence is finished





3.2 Derivational ellipsis (6)

Prediction:

If the ellipsis site is deleted when the whole sentence is finished, no difference in movement is expected between ellipsis and non-ellipsis.

This prediction is not borne out:

The object cannot move out of the ellipsis site in MCE, while this is allowed in non-ellipsis.



3.2 Derivational ellipsis (7)

- (56) a.* Ik weet wie Thomas MOET uitnodigen,
I know who Thomas has.to invite
maar ik weet niet **wie** hij niet MAG.
but I know not who he not is.allowed
- b. Ik weet wie Thomas MOET uitnodigen,
I know who Thomas has.to invite
maar ik weet niet **wie** hij niet MAG [_{twie}
but I know not who he not is.allowed
uitnodigen].
invite
'I know who Thomas has to invite, but I
don't know who he isn't allowed to (invite).'

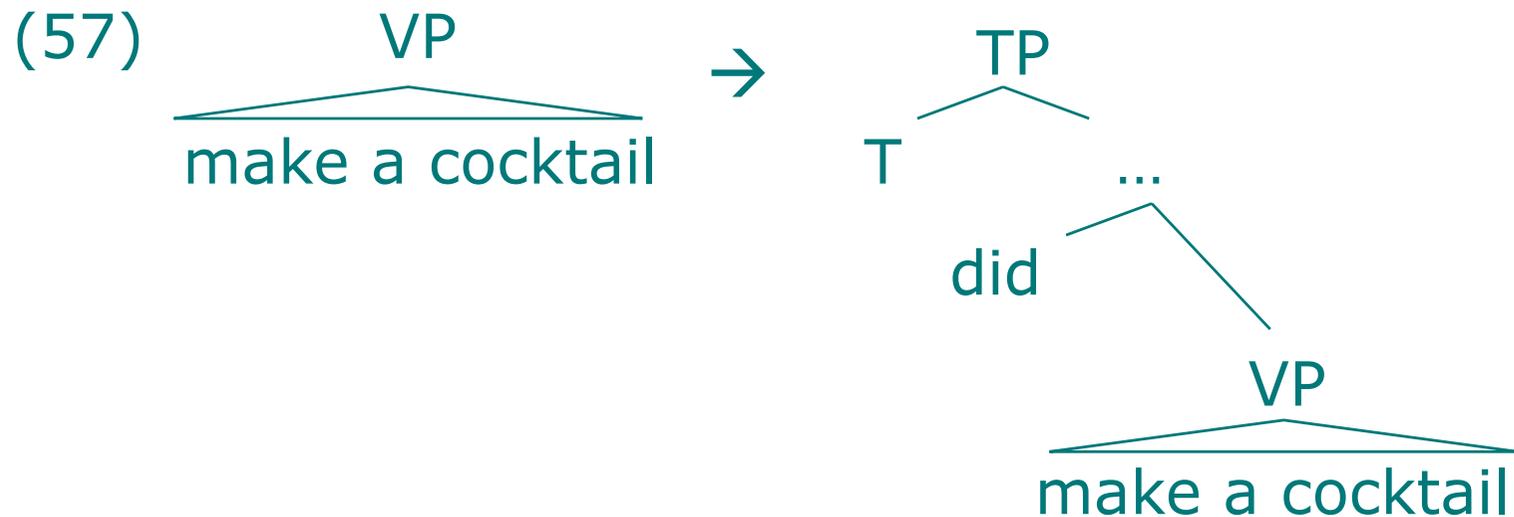


3.2 Derivational ellipsis (8)

➔ Ellipsis does not happen when the whole sentence is finished.

3.2 Derivational ellipsis (9)

③ When the licenser enters the derivation





3.2 Derivational ellipsis (10)

- When the licenser enters the derivation, it establishes an Agree relation with [E] and checks its uninterpretable inflectional feature.
- The ellipsis site is sent off to PF, marked for ellipsis, i.e. vocabulary insertion is blocked.



3.2 Derivational ellipsis (11)

Prediction:

An element can only move out of the ellipsis site before the licenser enters the structure; otherwise it is deleted.



This can account for the contrast between subjects and objects in MCE.



3. Licensing ellipsis (4)

- ① Ellipsis licensing via Agree
 - 1. The ellipsis licensing head
 - 2. Material between licensor and ellipsis site
 - 3. A complex ellipsis feature

- ② Derivational ellipsis
 - 1. The timing of ellipsis
 - 2. Consequences for extraction



3.2 Derivational ellipsis (12)

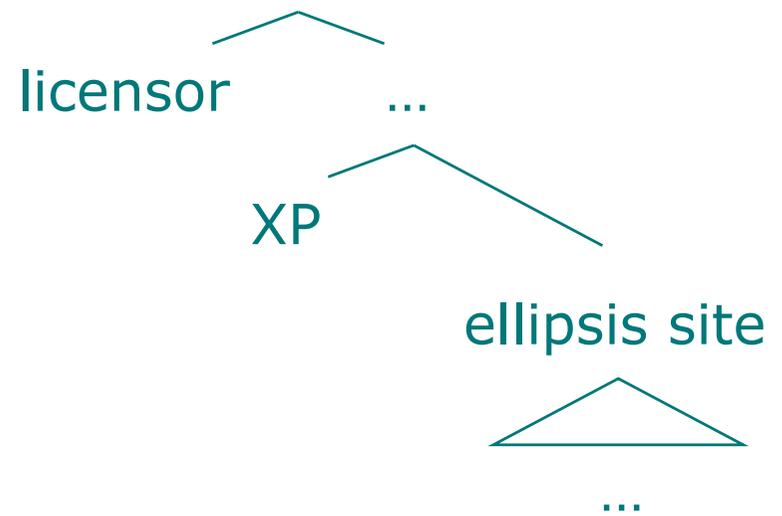
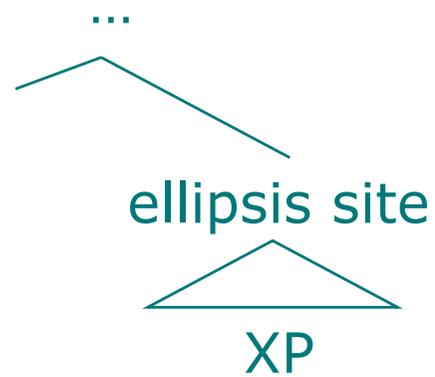
Extraction data

Claim: The ellipsis site is deleted when the licensing head enters the structure.

Consequence: An element can move out of the ellipsis site if it moves to a position between licensor and ellipsis site.

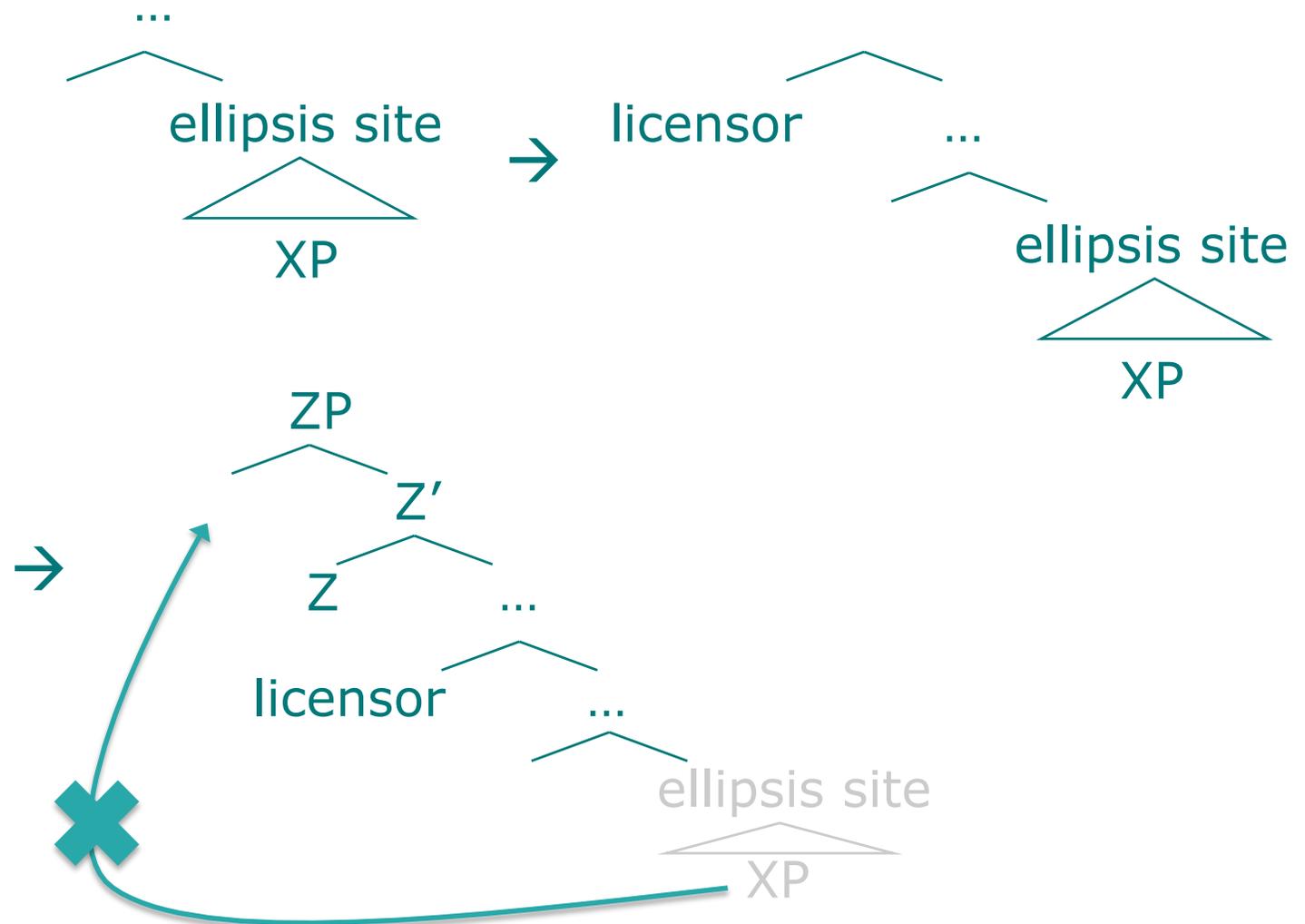
3.2 Derivational ellipsis (13)

(58)



3.2 Derivational ellipsis (14)

(59)





3.2 Derivational ellipsis (15)

Interaction with phases

Phase Impenetrability Condition (PIC, Chomsky 2000: 108)

In phase α with head H, the domain of H is not accessible to operations outside α , only H and its edge are accessible to such operations.

→ If a phrase XP needs to move out of the phase, it has to move to the edge of the phase first, i.e. move to the specifier of the phase head.



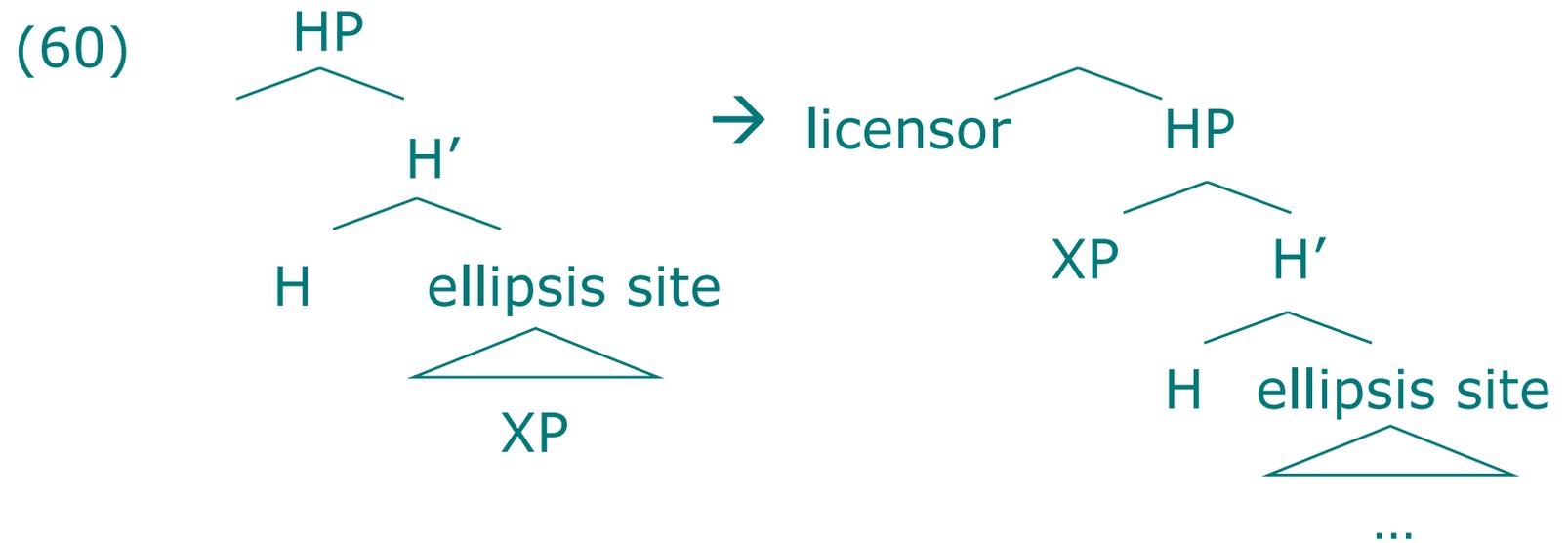
3.2 Derivational ellipsis (16)

Consequence for ellipsis:

If there is a phase head H between the ellipsis site and the licensor, all XPs that need to undergo further movement will have moved to the phase edge, outside the ellipsis site.

→ All movement operations that are possible in non-ellipsis will be possible in ellipsis in this case.

3.2 Derivational ellipsis (17)





You have the right to remain silent

1. Deletion or proform? A puzzle.
2. Basic data
3. Ellipsis licensing as Agree
4. Back to the puzzle
5. Extending the analysis



4. Back to the puzzle (1)

Licensing ellipsis:

- ① Ellipsis is licensed via an Agree relation between an [E]-feature and the ellipsis licensing head.
- ② Ellipsis occurs in the course of the derivation, as soon as the licensing head is merged. At this point the ellipsis site becomes inaccessible for any further syntactic operations, and vocabulary insertion at PF is blocked.



4. Back to the puzzle (2)

Movement puzzle with MCE:

→ Subjects can move out of the ellipsis site:

- (61) Ik wil wel naar het feestje komen, maar
I want PRT to the party come but
ik kan niet [~~t_{ik} naar het feestje komen~~].
I can not to the party come
'I want to come to the party, but I can't.'



4. Back to the puzzle (3)

Objects cannot move out of the ellipsis site:

(62) * Ik weet wie Thomas MOET uitnodigen,
I know who Thomas has.to invite
maar ik weet niet wie hij niet MAG
but I know not who he not is.allowed
[~~t_{hij} uitnodigen t_{wie}].~~
invite

'I know who Thomas has to invite, but I don't know who he isn't allowed.'



4. Back to the puzzle (4)

Analysis of MCE

Ellipsis site = the complement of the embedded T

→ [E] sits on the T head ([SEL [T]]).

Licenser = modal verb

→ [E] needs to check a [INFL [*u*Mod]] feature.



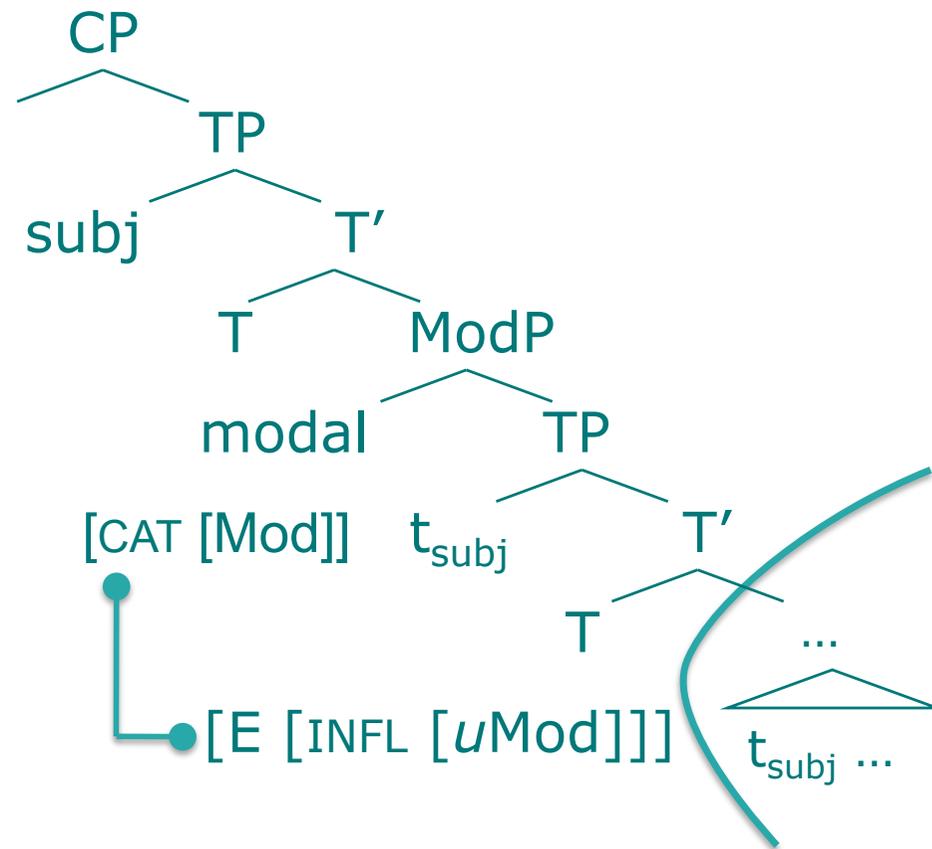
4. Back to the puzzle (5)

[E] for MCE:

(63) $\left[\begin{array}{ll} \text{CAT} & [\text{T/E}] \\ \text{INFL} & [u\text{Mod}] \\ \text{SEL} & [\text{T}] \end{array} \right]$

4. Back to the puzzle (6)

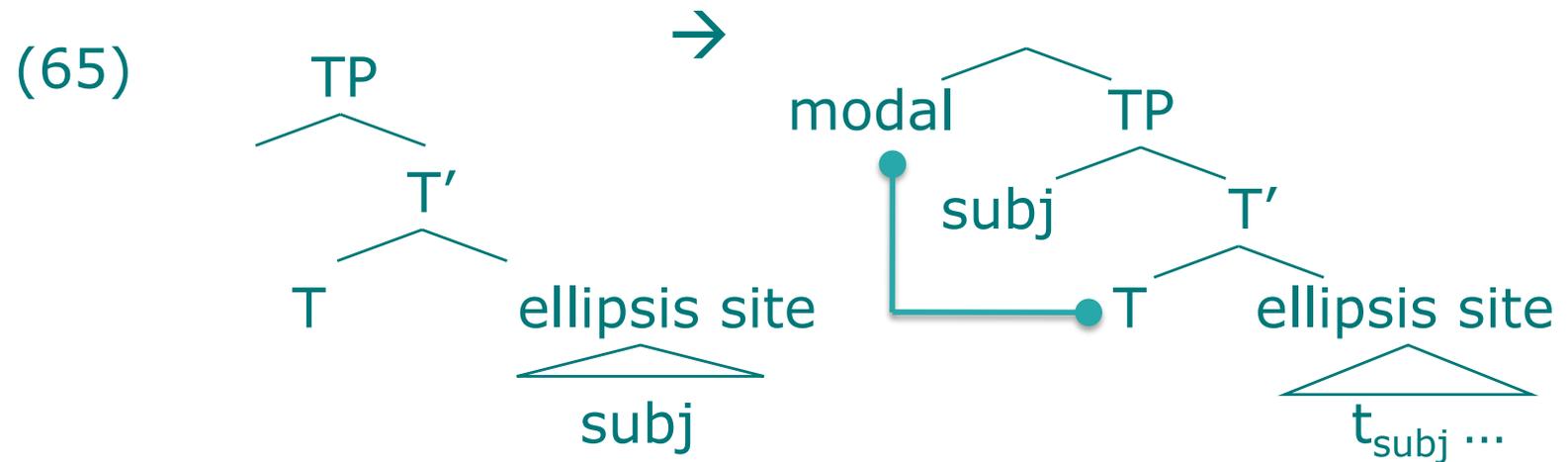
(64)



4. Back to the puzzle (7)

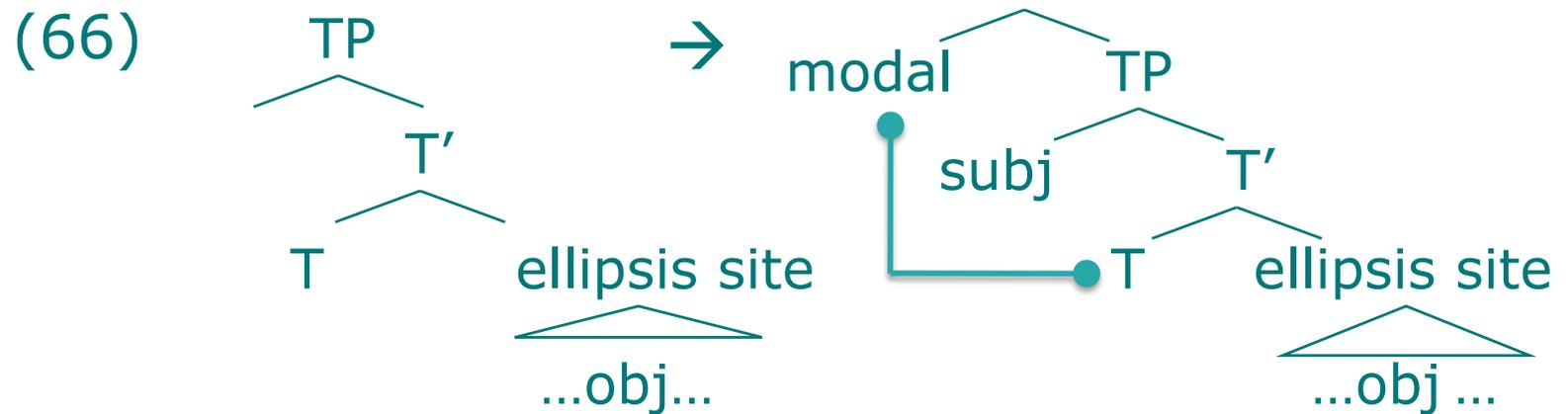
Solution to the movement puzzle:

Subjects move to a position between the licenser and the ellipsis site prior to ellipsis.



4. Back to the puzzle (8)

Objects don't have an escape hatch between the licensor and the ellipsis site.





4. Back to the puzzle (9)

Implication

Extraction out of the ellipsis site is a unidirectional test, not a bidirectional one:

If extraction is possible, this indicates the presence of unpronounced structure.

If extraction is impossible, this indicates the absence of unpronounced structure.

→ If extraction is impossible, this might indicate the absence of unpronounced structure, but it might also have another explanation (e.g. no escape hatch).



You have the right to remain silent

1. Deletion or proform? A puzzle.
2. Basic data
3. Ellipsis licensing as Agree
4. Back to the puzzle
5. Extending the analysis



5. Extending the analysis (1)

Accounting for other ellipses and their extraction possibilities:

1. Sluicing
2. VP ellipsis
3. Pseudogapping
4. British English *do*



5.1 Sluicing (1)

Sluicing:

(67) Someone was snoring, but I don't know who.

- ① The [E]-feature for sluicing
 - What is the licenser?
 - What is the ellipsis site?
- ② The extraction data



5.1 Sluicing (2)

① The [E]-feature for sluicing

Ellipsis site = IP (Merchant 2001)

Licensor

Sluicing: only allowed in *wh* questions.

- (68)a. Someone was snoring, but I don't know
who [~~t_{who} was snoring~~].
- b. The cat broke something, but it's not clear
what [~~the cat broke t_{what}~~].



5.1 Sluicing (3)

Not in relative clauses or non-*wh* clauses:

- (69)a. *Someone was singing, but I couldn't find the person who [~~was singing~~].
- b. *It was painted, but it wasn't obvious that [~~it was painted~~].
- c. *The octopus predicted that Spain would win, but no-one knew for sure yet if/whether [~~Spain would win~~].



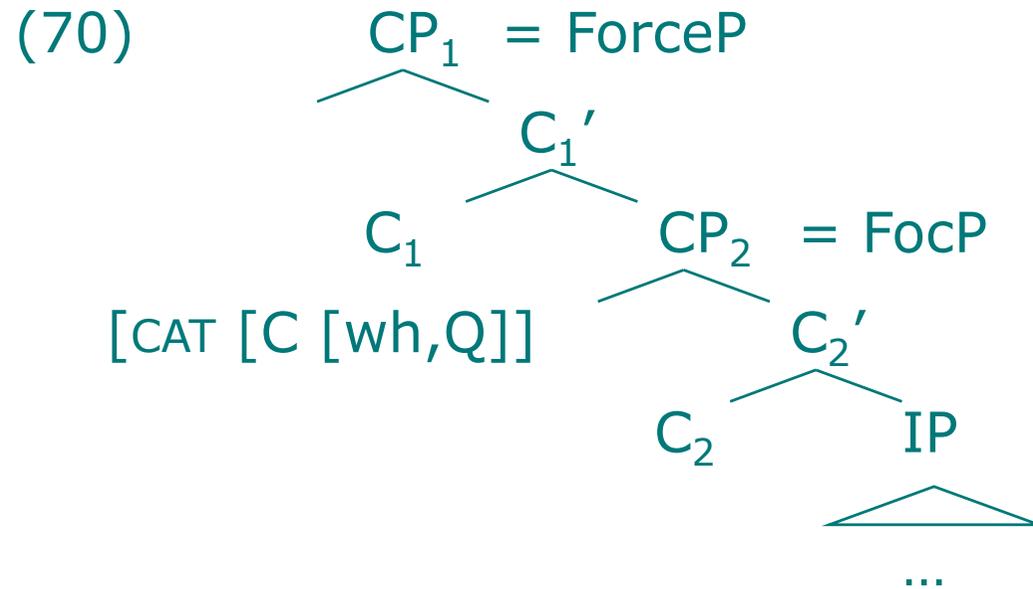
5.1 Sluicing (4)

Split CP hypothesis (Reinhart 1981)

(At least) two CP layers:

- High CP: Clause-typing head
= ForceP (Rizzi 1997)
- Low CP: Op/variable dependencies (van Craenenbroeck 2004, 2010)
= FocP (Rizzi 1997)

5.1 Sluicing (5)





5.1 Sluicing (6)

Sluicing is only allowed in *wh* questions.

→ Licensor = C [wh,Q] (Merchant 2001)

→ [E]_S has an uninterpretable [INFL [C [wh,Q]]]

Ellipsis site = IP

→ [E]_S selects the low C head (C₂ = Foc).



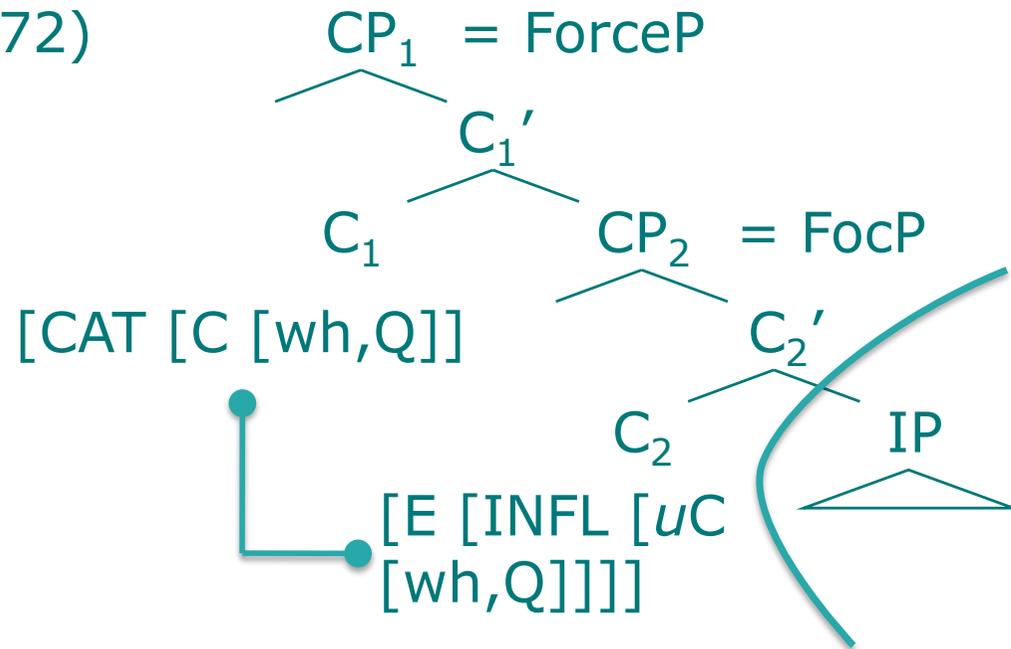
5.1 Sluicing (7)

[E] for Sluicing:

$$(71) \begin{bmatrix} \text{CAT} & [C_2/E] \\ \text{INFL} & [uC [wh, Q]] \\ \text{SEL} & [C_2] \end{bmatrix}$$

5.1 Sluicing (8)

(72)





5.1 Sluicing (9)

② The extraction data

Derivational ellipsis:

The ellipsis site is sent to PF (and frozen for syntax) as soon as the licensor checks [E].

→ Only what moves to a position between the licensor and the ellipsis site can survive.



5.1 Sluicing (10)

The positions between the licensor and the ellipsis site play a crucial role in determining the extraction possibilities.

→ A phase head between licensor and ellipsis site attracts everything that needs to undergo further operations to its edge, both in ellipsis and non-ellipsis



5.1 Sluicing (11)

Sluicing: (lower) C is a phase head between licensor and ellipsis site.

→ Extraction is possible, just like in non-ellipsis.

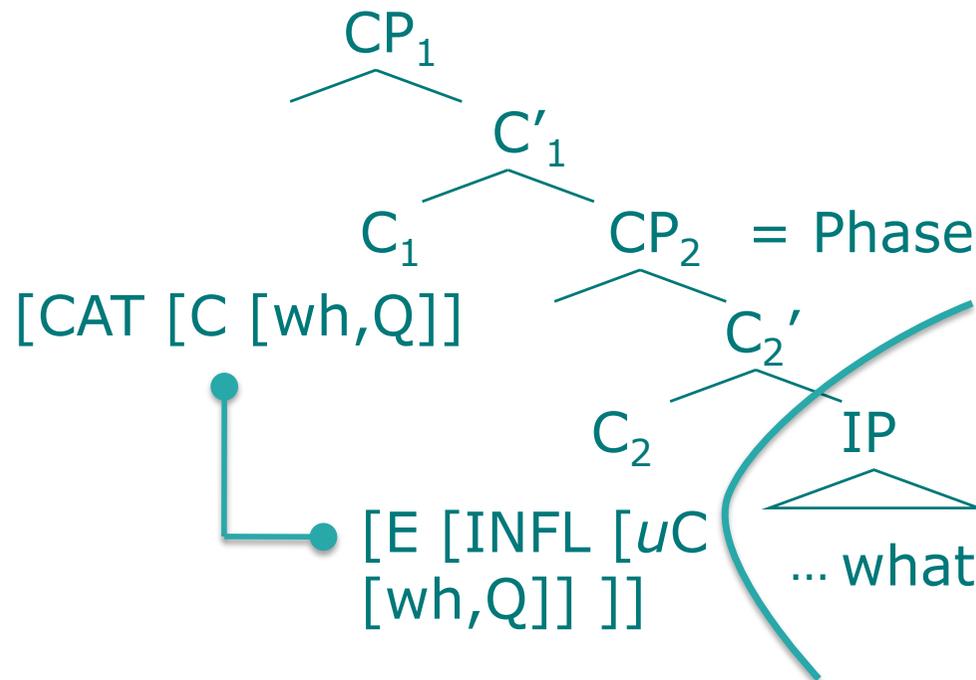


5.1 Sluicing (12)

- (73)a. The cat broke something, but I can't find what [~~the cat broke~~ t_{what}].
- b. Someone was snoring, but I don't know who [~~t_{who} was snoring~~].
- c. Jeff gave flowers to a girl, but I don't know (to) which girl [~~he gave flowers (to)~~ $t_{\text{which girl}}$].
- d. He wanted to leave, but no-one knew why [~~he wanted to leave~~ t_{why}].

5.1 Sluicing (13)

(74) ...but I can't find





5.1 Sluicing (14)

→ Sluicing can be analysed with the Agree proposal as well, and the extraction possibilities are accounted for.



5. Extending the analysis (2)

Accounting for other ellipses and their extraction possibilities:

1. Sluicing
2. VP ellipsis
3. Pseudogapping
4. British English *do*



5.2 VP ellipsis (1)

VP ellipsis:

(75) Gonzo likes carrots and Lola does too.

- ❶ The [E]-feature for VP ellipsis
 - What is the licenser?
 - What is the ellipsis site?

- ❷ The extraction data



5.2 VP ellipsis (2)

① The [E]-feature for VP ellipsis

Licenser

VP ellipsis is licensed by T.

- (76)a. I wear colors and he does [~~wear colors~~], too.
b. I visited Romania and you should [~~visit Romania~~], too.
c. She said she wasn't sleeping, but she might have been [~~sleeping~~].
d. They'd eaten already, but I hadn't [~~eaten~~].
e. You shouldn't play with rifles, because it's dangerous to [~~play with rifles~~].



5.2 VP ellipsis (3)

Not by nonfinite auxiliaries or main verbs:

(77)a. *Jeff likes sleeping and Jane likes
[~~sleeping~~], too.

b. *Jeff having been working and Jane not
having been [~~working~~] was a surprise to
everyone.

→ (a): main verbs do not raise to T, so the derivation crashes because the inflectional affixes do not have a host.

→ *do*-support: ...and Jane **did** [~~start snoring~~], too.



5.2 VP ellipsis (4)

Ellipsis site = VP/vP

(Lasnik 1995; Johnson 2004; Merchant 2007, 2008; Gengel 2007)

It doesn't delete the aspectual/passive auxiliaries:

- (78)a. He wasn't thinking about it, but he should **have been** [~~thinking about it~~].
- b. The trash is taken out whenever it's apparent that it should **be** [~~taken out~~].



5.2 VP ellipsis (5)

Argument in favor of vP ellipsis:

The associate of a *there* expletive subject is included in the ellipsis site:

(79) I thought there was someone talking to me,
but there wasn't [~~someone talking to me~~].

→ VP ellipsis elides vP.



5.2 VP ellipsis (6)

VP ellipsis is only allowed with a T head.

→ Licensor = T

→ $[E]_{VP}$ has an uninterpretable $[INFL [T]]$

Ellipsis site = vP

→ $[E]_{VP}$ selects the Voice head selecting vP
(Merchant 2007, 2008; Baltin 2007)



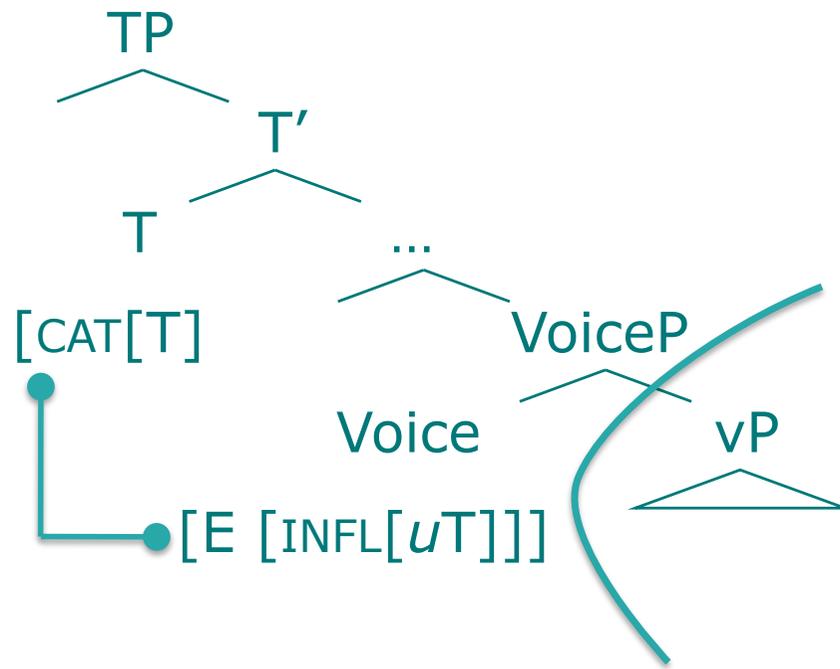
5.2 VP ellipsis (7)

[E] for VP ellipsis:

(80) $\left[\begin{array}{l} \text{CAT} \quad [\text{Voice/E}] \\ \text{INFL} \quad [uT] \\ \text{SEL} \quad [\text{Voice}] \end{array} \right]$

5.2 VP ellipsis (8)

(81)





5.2 VP ellipsis (9)

② The extraction data

Clause-internal phase head = v

! Kratzer (1994), Collins (2005), Merchant (2007, 2008), Gengel (2007): Splitting up vP in VoiceP and vP

→ Which one is the phase head?

Baltin (2007): Voice is the clause-internal phase head, not v.



5.2 VP ellipsis (10)

(Conceptual) arguments

- Both phasal domains are functional projections:
CP phase: TP phasal domain
Voice phase: vP phasal domain
- For both phasal domains the specifier is a subject position.
CP phase: [Spec, TP]
Voice phase: [Spec, vP]



5.2 VP ellipsis (11)

Derivational ellipsis:

The ellipsis site is sent to PF (and frozen for syntax) as soon as the licenser checks [E].

→ A phase head between licenser and ellipsis site attracts everything that needs to undergo further operations to its edge, both in ellipsis and non-ellipsis

VP ellipsis: Voice is a phase head between licenser and ellipsis site.

→ Extraction is possible, just like in non-ellipsis.

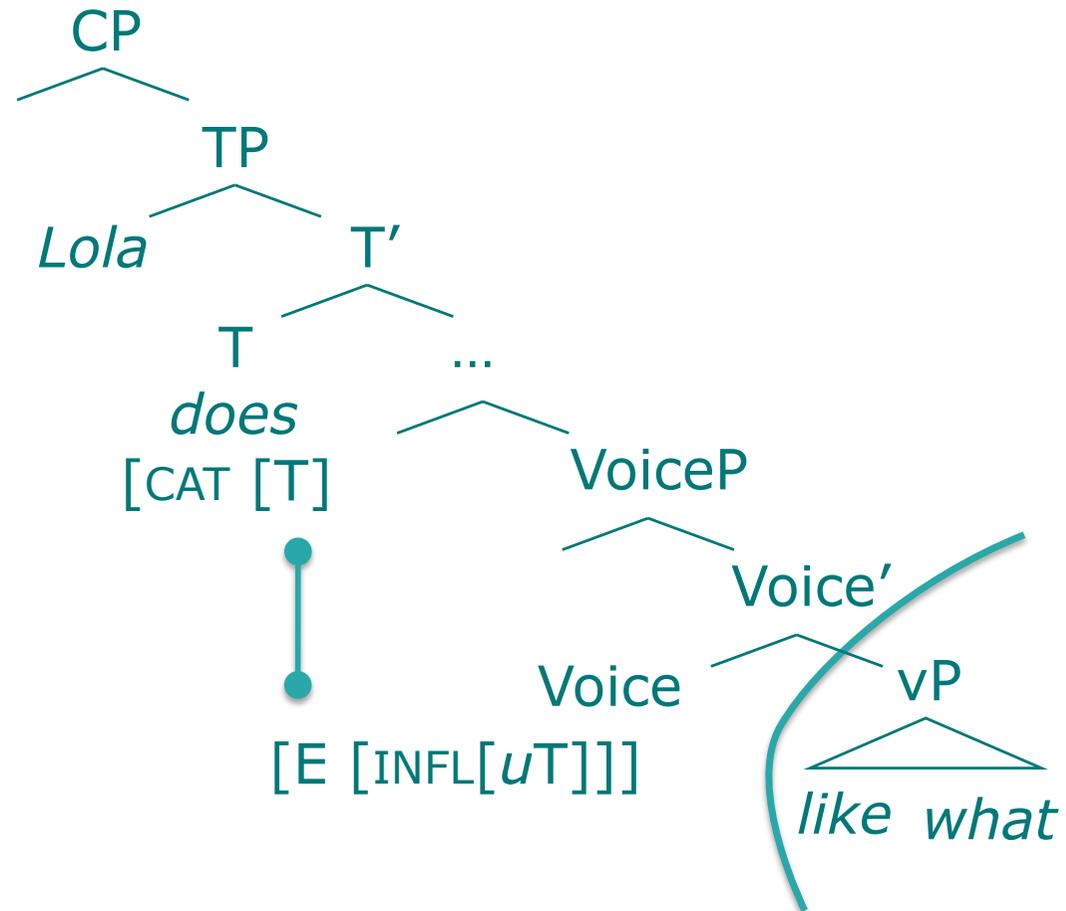


5.2 VP ellipsis (12)

- (82)a. I know what Gonzo likes, but I don't remember what Lola does [~~like~~ t_{what}].
- b. If Gonzo doesn't like carrots, then who does [~~t_{who} t_{does} like carrots~~]?
- c. I know how fast Gonzo can run, but I don't know how fast Lola can [~~run~~ $t_{\text{how fast}}$].
- d. To Gonzo he gave some carrots, but to Lola he didn't [~~give carrots~~ $t_{\text{to Lola}}$].

5.2 VP ellipsis (13)

(83) *...but I don't remember...*





5.2 VP ellipsis (14)

→ VP ellipsis can be analysed with the Agree proposal as well, and the extraction possibilities are accounted for.



5. Extending the analysis (3)

Accounting for other ellipses and their extraction possibilities:

1. Sluicing
2. VP ellipsis
3. Pseudogapping
4. British English *do*



5.3 Pseudogapping (1)

Pseudogapping:

(84) Some liked syntax and others did [~~like~~]
phonology.

- ❶ The Pseudogapping remnant
- ❷ The [E]-feature for Pseudogapping
 - What is the licenser?
 - What is the ellipsis site?
- ❸ The extraction data

5.3 Pseudogapping (2)

① The Pseudogapping remnant

Pseudogapping =

Movement of an element out of the verb phrase +
VP ellipsis.

(Jayaseelan 1990; Lasnik 1995, 1999, 2001; Gengel
2007; Merchant 2007, 2008)

(85)a. Some liked syntax and others phonology

liked $t_{\text{phonology}}$



b. Some liked syntax and others did phonology

[like $t_{\text{phonology}}$].



5.3 Pseudogapping (3)

What triggers the movement of the remnant?

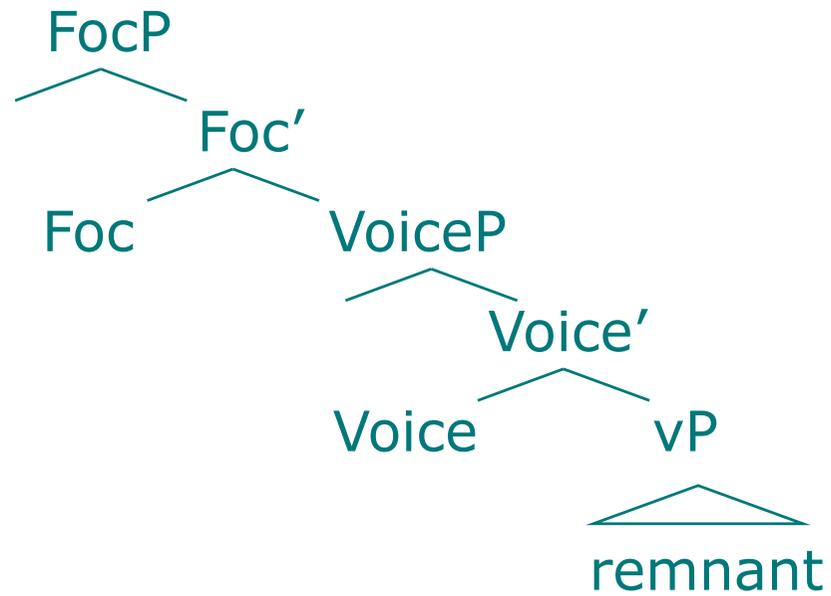
Different approaches:

- Heavy NP shift (Jayaseelan 1990)
- Object Shift (Lasnik 1995, 1999, 2001)
- Focus movement (Gengel 2007; Jayaseelan 2001)

→ Let's assume it's Focus movement.

5.3 Pseudogapping (4)

(86)





5.3 Pseudogapping (4b)

This movement only occurs in ellipsis:

(i) *Some liked syntax and others phonology liked.

→ Case of ellipsis repair: the remnant moves to Spec,FocP covertly in non-ellipsis (Bobaljik 2002). If the movement were overt, PF would receive ambiguous information about which copy to spell out (Richards 1999), and the derivation would crash.



5.3 Pseudogapping (5)

② The [E]-feature for Pseudogapping

Licensors

Pseudogapping is licensed by finite T.

- (87)a. Does that make you mad? It would me
[~~make~~ t_{me} mad].
- b. They were playing more covers than they
were new songs [~~playing~~ $t_{new\ songs}$].
- c. Tom has read more books for his son than
he has for his daughter [~~read books~~ $t_{for...}$].



5.3 Pseudogapping (6)

Not by nonfinite auxiliaries or main verbs:

(88)a. *It started bothering me more than it started her [~~bothering~~ t_{her}].

b. *Gonzo having eaten his carrots and Lola not having her peas [~~finished~~ $t_{her\ peas}$] was a surprise to their mother.

→ (a): main verbs do not raise to T, so the derivation crashes because the inflectional affixes do not have a host.

→ *do*-support: ...than it **did** her [~~start bothering~~ t_{her}].



5.3 Pseudogapping (7)

Ellipsis site = vP (same as VP ellipsis)

It doesn't delete the aspectual/passive auxiliaries:

- (89)a. I've been reading more books than you've **been** papers [~~reading~~ t_{papers}].
- b. More people should be invited by the bride than should *(**be**) by her mother [~~invited~~ $t_{\text{by her mother}}$].



5.3 Pseudogapping (8)

Pseudogapping is only allowed with a finite T.

→ Licensor = T [fin]

→ $[E]_{PG}$ has an uninterpretable [INFL [T [fin]]]

Ellipsis site = vP

→ $[E]_{PG}$ selects the Voice head selecting vP



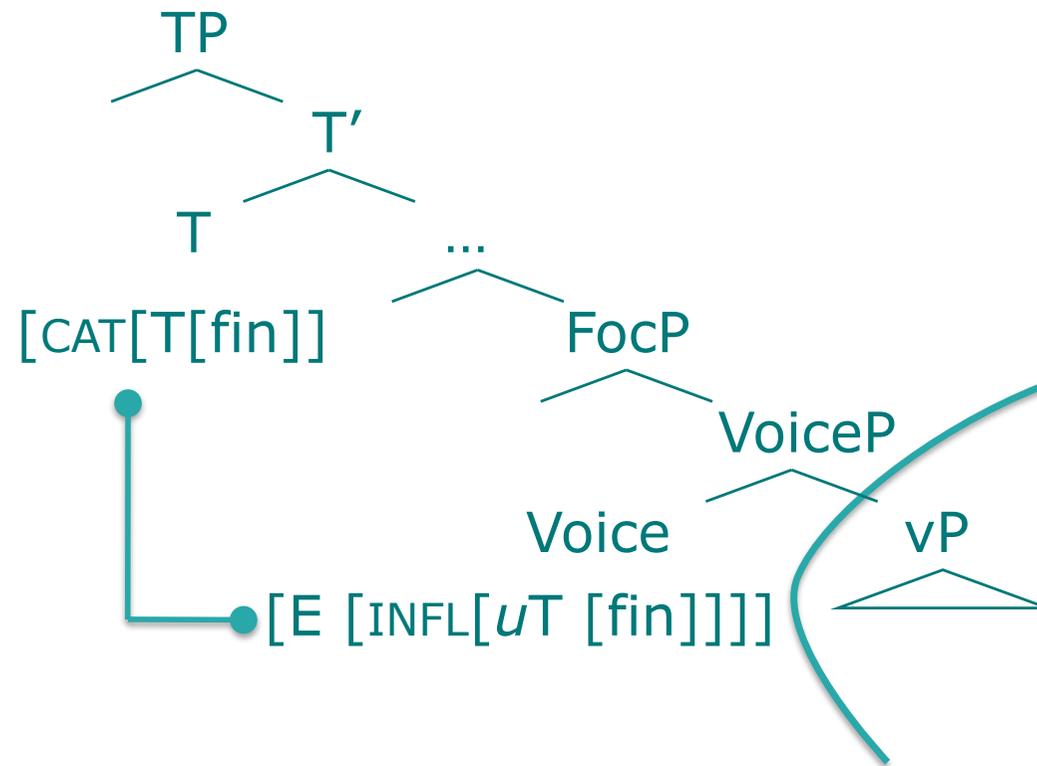
5.3 Pseudogapping (9)

[E] for Pseudogapping:

(90) $\left[\begin{array}{l} \text{CAT} \quad [\text{Voice/E}] \\ \text{INFL} \quad [uT \text{ [fin]}] \\ \text{SEL} \quad [\text{Voice}] \end{array} \right]$

5.3 Pseudogapping (10)

(91)





5.3 Pseudogapping (11)

③ The extraction data

A phase head between licensor and ellipsis site attracts everything that needs to undergo further operations to its edge, both in ellipsis and non-ellipsis

Pseudogapping: Voice is a phase head between licensor and ellipsis site.

→ Extraction is possible, just like in non-ellipsis.

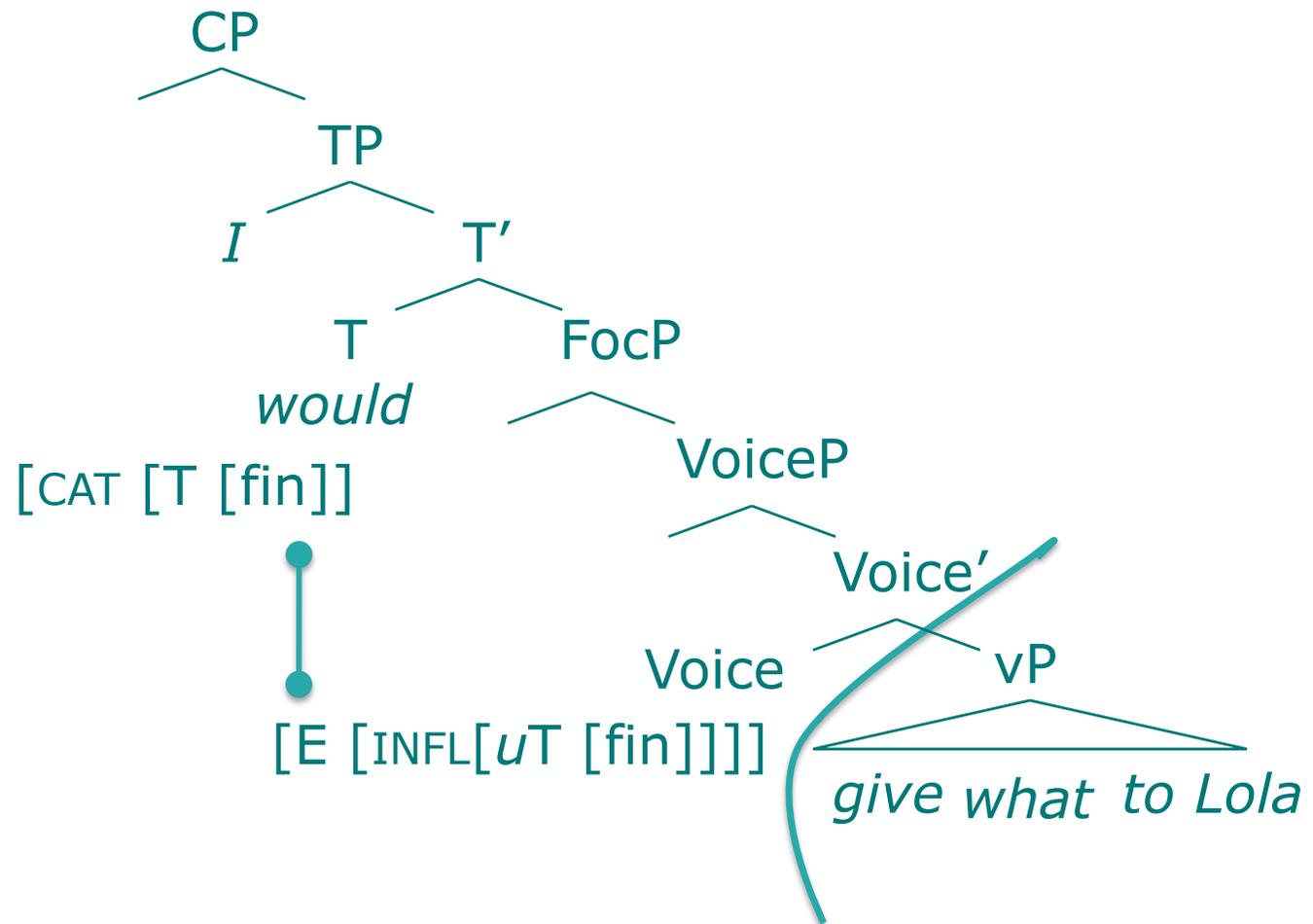


5.3 Pseudogapping (12)

- (92)a. I know what I would give to Gonzo, but I don't know what I would to Lola [~~give~~ t_{what} $t_{\text{to Lola}}$].
- b. I read books more often than *Op* you do magazines [~~t_{Op} read~~ $t_{\text{magazines}}$]?

5.3 Pseudogapping (13)

(93) *...but I don't know*





5.3 Pseudogapping (14)

→ Pseudogapping can be analysed with the Agree proposal as well, and the extraction possibilities are accounted for.



5. Extending the analysis (4)

Accounting for other ellipses and their extraction possibilities:

1. Sluicing
2. VP ellipsis
3. Pseudogapping
4. British English *do*



5.4 British English *do* (1)

British English *do*:

(94) Gonzo will eat carrots and Lola will do, too.
= VP ellipsis + *do*

- ❶ The extraction puzzle: data
- ❷ The [E]-feature for British English *do*
 - What is the licenser?
 - What is the ellipsis site?
- ❸ The extraction puzzle: solution



5.4 British English *do* (2)

① The extraction puzzle: data

Baltin (2004, 2005, 2007); Haddican (2006):

- British English *do* does not allow for object extraction out of the ellipsis site
- British English *do* does allow for (derived) subject extraction.



5.4 British English *do* (3)

British English *do* does not allow for object extraction:

- No *wh* object extraction
- No Pseudogapping

(95)a. *Although I don't know what Gonzo will cook, I know what Lola will do [~~cook~~ t_{what}].
b. *Although she won't eat carrots, she will do peas [~~eat~~ t_{peas}].



5.4 British English *do* (4)

In regular VP ellipsis these extractions are fine:

- (96)a. Although I don't know what Gonzo will cook, I know what Lola will [~~cook~~ t_{what}].
b. Although she won't eat carrots, she will peas [~~eat~~ t_{peas}].

→ British English *do* doesn't allow for object extraction.

→ Proform?



5.4 British English *do* (5)

British English *do* does allow for subject extraction:

- (97)a. Gonzo might seem to enjoy carrots and
Lola might do [~~seem to t_{Lola} enjoy carrots~~],
too.
- b. The river might freeze solid and the lake
might do [~~freeze solid t_{the lake}~~], too.

→ The derived subject can move from the complement position of the verb out of the ellipsis site.

→ Deletion?



5.4 British English *do* (6)

Remember MCE?

- Subject extraction is allowed.
 - Object extraction is disallowed.
- 'Ellipsis licensing via Agree' proposal can account for this contrast within a deletion analysis.
- Deletion analysis for British English *do*?



5.4 British English *do* (7)

② The [E]-feature for British English *do*

Licensors

British English *do* is licensed by *do* itself.

- (98)a. Gonzo will eat the carrots and Lola will do
[~~eat the carrots~~], too.
- b. Gonzo having eaten his carrots and Lola
not having done [~~eat t_{her} carrots~~] was
surprising to their mother.



5.4 British English *do* (8)

Baltin (2004, 2005, 2007); Haddican (2006):
Do is the optional lexicalization of the little *v* head.

- It's not dummy *do*:
It can occur in nonfinite forms.
- (99)a. Gonzo has eaten the carrots and Lola has **done** [~~eaten the carrots~~], too.
- b. Gonzo is eating the carrots and Lola is **doing** [~~eat the carrots~~], too.



5.4 British English *do* (9)

- It's not lexical *do* (occurring in *do it*):
It can occur with stative verbs.

(100)a. Gonzo will feel bad and Lola will do [~~feel~~
~~bad~~], too.

b. *Gonzo will feel bad and Lola will do it, too.

→ (British English) *do* is the lexicalization of little *v*.

→ It licenses the ellipsis.



5.4 British English *do* (10)

Ellipsis site = VP

It deletes the verb and the objects, but leaves *do* (=little v) untouched:

(101) Gonzo will eat carrots and Lola will do [~~eat carrots~~], too.



5.4 British English *do* (11)

Licensors = v [*do*]

→ [E]_{BE*do*} has an uninterpretable [INFL [v [*do*]]]

Ellipsis site = VP

→ [E]_{BE*do*} selects the v head selecting VP



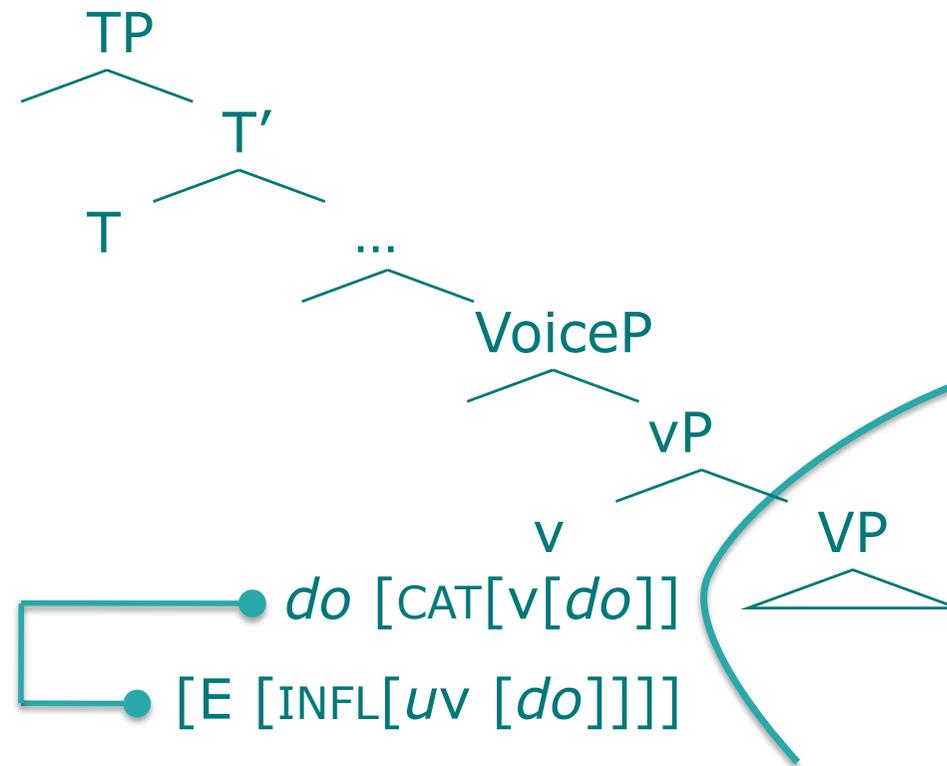
5.4 British English *do* (12)

[E] for British English *do*:

(102) $\left[\begin{array}{l} \text{CAT} \quad [v \ [do]/E] \\ \text{INFL} \quad [uv \ [do]] \\ \text{SEL} \quad [v \ [do]] \end{array} \right]$

5.4 British English *do* (13)

(103)





5.4 British English *do* (14)

Note: The licenser is in this case also the head carrying the ellipsis feature
(i.e. The licenser and the ellipsis site are in a head-complement relation here)

Implication:

The feature will always be checked, so ellipsis will always occur whenever *do* appears:

(104)*Gonzo will eat carrots and Lola will do eat carrots, too.



5.4 British English *do* (15)

③ The extraction puzzle: solution

British English *do* allows for (derived) subject extraction, but not for object extraction.

Assumption:

The derived subject first moves to [Spec, vP] before going to the surface subject position.



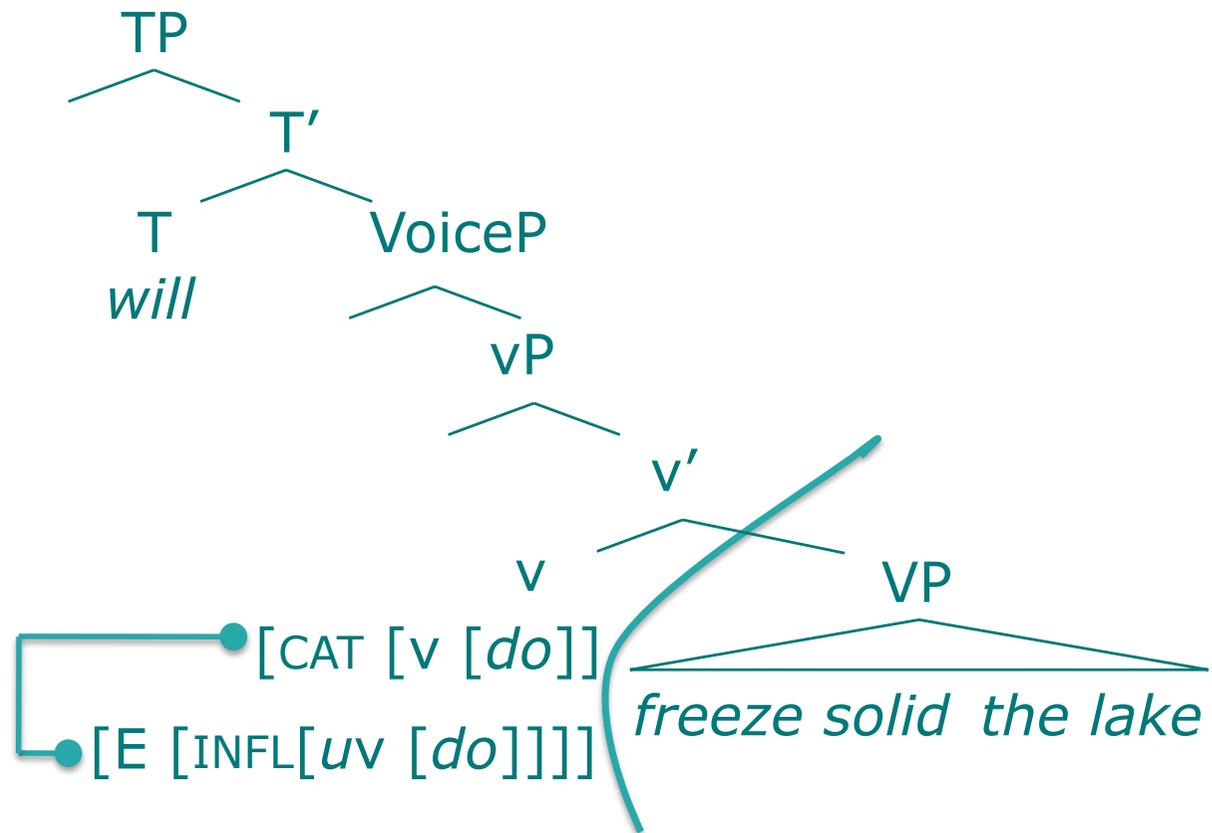
5.4 British English *do* (16)

(105) The river will freeze solid and the lake will do [~~freeze solid~~ $t_{\text{the lake}}$], too.

(106) *I know what Gonzo will cook, but I don't know what Lola will do [~~cook~~ t_{what}].

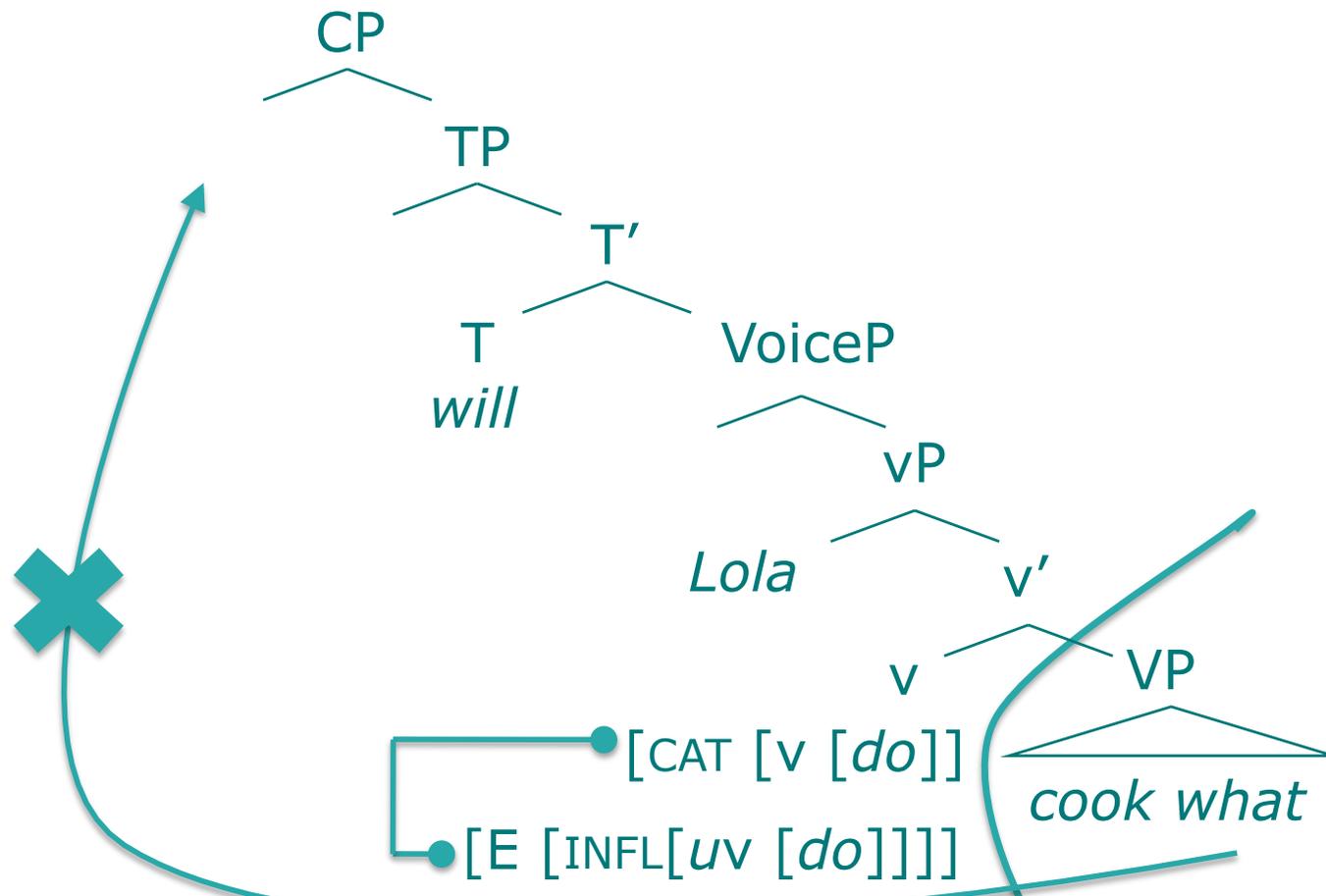
5.4 British English *do* (17)

(105) *The river will freeze solid and ...*



5.4 British English *do* (18)

(106) ...but I don't know





5.4 British English *do* (19)

No phase head between licensor and ellipsis site:
Limited extraction possibilities.

Subjects have an escape hatch, objects don't.

→ British English *do* can be analysed with the Agree proposal as well, and the extraction possibilities are accounted for.



5. Extending the analysis (5)

Licensing ellipsis via Agree:

Can be applied to Dutch MCE, sluicing, VP ellipsis, Pseudogapping and British English *do*.

Implications for extraction test:

The extraction test only works unidirectional.

If there is extraction out of the ellipsis site, this is an indication for unpronounced structure.



You have the right to remain silent: Summing up

- Ellipsis needs a licensing head and the ellipsis site is deleted when this licenser enters the structure.
- As a consequence, only what moves to a position between the licenser and the ellipsis site can escape the ellipsis site.
- This analysis can account for the extraction contrast in Dutch MCE and can also be applied to sluicing, VP ellipsis, pseudogapping and British English *do*.



Silence is golden: Summing up

- Ellipsis = a mismatch between sound and meaning in which certain selectional requirements are not met in the phonetic realization.
- Possible analyses:
 - WYSIWYG
 - Proform analysis
 - Deletion analysis
- Ellipsis is subject to two restrictions:
 - ① recoverability
 - ② syntactic licensing



Silence is golden: Summing up

- Ellipsis needs a licensing head and the ellipsis site is deleted when this licenser enters the structure.
- As a consequence, only what moves to a position between the licenser and the ellipsis site can escape the ellipsis site.
- This accounts for the extraction contrast in MCE and BE *do* and can also be applied to sluicing, VP ellipsis and Pseudogapping.



“You have the right to remain silent”

The syntactic licensing of ellipsis

Lobke Aelbrecht