## Dutch modal complement ellipsis: deletion in narrow syntax

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## OUTLINE OF THE TALK

1 Dutch modal complement ellipsis: deletion or proform?
2 Analysis: narrow syntax deletion
3 Dutch modal complement ellipsis compared to English VPE
$4 \quad$ Other elliptical constructions and further research
5 Conclusions

Main claims:
Ellipsis of modal complements in Dutch involves deletion of a fully-fledged VoiceP.
(2) Deletion takes place in narrow syntax, by checking of an uninterpretable ellipsis feature $[u \mathrm{E}]$ on the licensing head.
(3) Ellipsis licensing is subject to syntactic locality, not to adjacency.
(4) The projections inbetween the elided constituent and the licensing head play a crucial role in determining the extraction possibilities out of the ellipsis site.

## 1 DUTCH MODAL COMPLEMENT ELLIPSIS: DELETION OR PROFORM?

Dutch allows the infinitival complement of deontic modals to be deleted
(1) Ik wil je wel helpen, maar ik kan niet.
I want you PRT help but I can not
'I want to help you, but I can't,'
'I want to help you, but I can't.'
$\rightarrow$ Two possible analyses:
(1) The modal selects a null proform (e.g. Lobeck 1995, Depiante 2000).
(2) Deletion of a fully specified syntactic structure (parallel to English VP ellipsis, e.g. Merchant 2001, Johnson 1996, 2001)

Argument for deciding between the analyses $=(\mathrm{im})$ possibility of extraction:
extraction out of the ellipsis site is illicit $\rightarrow$ proform, no structure to host a trace今
extraction out of the ellipsis site is allowed $\rightarrow$ deletion of syntactic structure
A paradox: Dutch modal complement ellipsis (MCE)
objects cannot extract out of the ellipsis site今
subjects can extract out of the ellipsis site
1.1 Objects cannot extract out of the ellipsis site

- Dutch MCE does not allow wh-extraction of an object out of the ellipsis site:
(2) A: Wat gaat Katrien Bert geven?
what goes Katrien Bert give
'What is Katrien going to give Bert?'
B: Dat weet ik niet. Wat moet ze *( Bert geven)? that know I not what should she Bert give intended reading: ‘I don't know. What should she give Bert?’
- Dutch MCE disallows object scrambling out of the ellipsis site:
(3) Ik wil je helpen, maar ik kan (* je) niet. I want you help but I can you not 'I want to help you, but I can't.'

This contrasts with the non-elliptical variant, where the definite object scrambles obligatorily:
(4) Ik wil je helpen, maar ik kan (je) niet (*je) helpen. I want you help but I can you not you help 'I want to help you, but I can't help you.'

- Pseudogapping is not allowed in Dutch MCE.

Pseudogapping = movement of the remnant out of the ellipsis site prior to ellipsis (see Jayaseelan 1990; Johnson 1996; Lasnik 1999a, 1999b, 2001)
(5) Mina can roll up a newspaper and Tom can a magazine [rell up $t_{\text {amagazine }}$ ]. No pseudogapping in Dutch MCE:
(6) Katrien kan brood kopen en Bert kan melk *( kopen). Katrien can bread buy and Bert can milk buy intended reading: ‘...and Bert can buy milk.’
1.2 Subjects can extract out of the ellipsis site

- The subject can survive the ellipsis, whether the embedded verb is transitive, unergative, unaccusative or passive:
(7) a. Ik wil je wel helpen, maar ik kan niet. [transitive] I want you PRT help but I can not 'I do want to help you, but I can't.'
b. Tom wou niet werken, maar hij moest. Tom wanted not work but he must.PAST 'Tom didn't want to work, but he had to.'
c. Mina kan komen, maar Peter kan niet. [unaccusative] Mina can come but Peter can not 'Mina can come, but Peter can't.'
d. Die broek moet niet gewassen worden, maar die rok moet wel. that pants must not washed become but that skirt must PRT 'Those pants don't need to be washed, but that skirt does.' [passive]
- Subject wh-extraction is allowed:
(8) a. Niet iedereen moet een gedicht voordragen. - Oh, wie moet not everyone must a poem recite oh who must er dan niet?
there then not
'Not everyone has to recite a poem.' - 'Oh, who doesn't have to?'
b. Ik weet dat er iemand niet mocht komen, maar wie I know that there someone not may.PAST come but who mocht er ook weer niet? may.PAST there also again not
'I know that someone wasn't allowed to come, but who wasn't again?'
Note: The examples in (7) and (8) indeed involve extraction out of the ellipsis site: deontic modals are raising verbs, not control verbs (Wurmbrand 2003, Barbiers 1995).
$\rightarrow$ The subject A-moves from a position below the modal to the surface subject position (in (9)a) and can A'-move to [Spec,CP] from there (cf. (9)b).
 I can you not help
b. [CP Wie [C' ${ }^{\prime}$ mocht $\left[{ }_{\text {Tr }} \mathrm{t}_{\text {wie }}\left[\mathrm{VvP} \mathrm{t}_{\text {mocht }}\left[\mathrm{vp}\right.\right.\right.$ komen $\left.\left.\left.\left.\left.\mathrm{t}_{\text {wie }}\right]\right]\right]\right]\right]$ who was.allowed.to
come


## Arguments:

(1) Deontic modals can have inanimate subjects when their complement is passive, just like raising verbs and unlike control verbs:
(10) a. De auto moet gewassen worden.
the car has.to washed become 'The car must be washed.'
b. De auto lijkt gewassen te worden. the car seems washed to become 'The car seems to be being washed.'
c.* De auto probeert gewassen te worden. the car tries washed to become
[deontic modal]
[raising]
[control]
(2) Deontic modals, like raising verbs and unlike control verbs, allow impersonal passives:
(11) a. Er moet gedanst worden.
[deontic modal] there has.to danced become 'Someone has to dance.'
b. Er lijkt gedanst te worden. there seems danced to become 'There seems to be dancing going on.'
c. ${ }^{*}$ Er probeert gedanst te worden.
[raising]
[control]

### 1.3 Summary

Dutch MCE: paradox
objects cannot be extracted out of the ellipsis site $\rightarrow$ proform analysis今
subjects can be extracted out of the ellipsis site $\rightarrow$ deletion account
$\rightarrow$ Claim: Dutch MCE = deletion of a fully-fledged syntactic structure.
Consequence: The restriction on object extraction must be due to something else.

Analysis: Modals are raising verbs that select a non-finite TP complement.
(12) Peter moet werken.

Peter has.to work


## 2 ANALYSIS: NARROW SYNTAX DELETION

Overview:

$$
\begin{array}{ll}
\text { 2.1 } & \text { Narrow syntax deletion } \\
2.2 & \text { Subject extraction }=\text { allowed } \\
2.3 & \text { Wh-object extraction }=\text { ungrammatical } \\
2.4 & \text { Object scrambling }=\text { ungrammatical }
\end{array}
$$

### 2.1 Narrow syntax deletion

- Core ingredients of the analysis:
(1) The head H of the constituent that will be elided bears an interpretable ellipsis feature [ $i \mathrm{E}$ ] (comparable to Merchant's 2001, 2004 [E]-feature).
(2) The ellipsis-licensing head L bears a matching uninterpretable ellipsis feature $[u \mathrm{E}]$.
(3) When L is merged, the ellipsis features are checked via an Agree relation and HP is elided. Deletion occurs in narrow syntax (see also Baltin 2007).
(4) As a result, the ellipsis site is no longer accessible for any syntactic operations.
(14)

- Consequence: The licensing head and the ellipsis site do not have to be in a headcomplement relation (contra Merchant 2001, 2004).

Importance to (English) VPE:
The licensing head of VPE has to bear prosodic stress and can therefore not be contracted:
(15) Mina is not coming, but Tom $\{\mathbf{i s} / *$ 's $\}$.

However: The element bearing stress is not always adjacent to the ellipsis site:
(16) I wasn't thinking about that. - Well, you Should have been [thinking about that].
$\rightarrow$ This is explained if deletion occurs via Agree rather than via a head-complement relation between the licensing head and the ellipsis site.

- Narrow syntax deletion applied to Dutch MCE:
a. The modal $\mathrm{V}^{\circ}$-head is the licensing head bearing $[u \mathrm{E}]$.
b. The phase head Voice ${ }^{\circ}$ can bear an interpretable ellipsis-feature.
(17)


Note: Voice ${ }^{\circ}$ is distinguished from $v^{\circ}$ here (see Merchant 2007, to appear a; Baltin 2007).

Voice ${ }^{\circ}$ is the clause-internal phase head rather than $v^{\circ}($ see Baltin 2007).
2.2 Subject extraction $=$ allowed

- Subject raising
(18) Mina kan komen, maar Peter kan niet.


## [unaccusative]

 Mina can come but Peter can not 'Mina can come, but Peter can't.'
## Step 1: VoiceP

$\rightarrow$ The derived subject is base-generated in the complement position of main verb komen 'come'
Voice ${ }^{\circ}$ bears a $[\mathrm{E} \mathrm{E}]$-feature.


Step 2: merger of $\mathrm{T}^{\circ}$ and projection of TP
$\rightarrow$ The subject moves to [Spec,TP] because of an [EPP] feature on $\mathrm{T}^{\circ}$ (via [Spec,VoiceP])
(20)


Step 3: merger of the licensing head $V^{\circ}$
$\rightarrow$ The uninterpretable ellipsis feature on the modal is checked against that of Voice ${ }^{\circ}$ via Agree, and VoiceP is elided in narrow syntax.
(21)

- Note: From this position in [Spec,TP] the subject is free to undergo further operations $\rightarrow$ A'-extraction of the subject $=$ allowed.
2.3 Wh-object extraction $=$ ungrammatical
(22) A: Wat gaat Katrien Bert geven? what goes Katrien Bert give
B: Dat weet ik niet. Wat moet ze *( Bert geven)? that know I not what should she Bert give intended reading: ‘What should she give Bert?'


## Step 1: VoiceP

$\rightarrow$ The subject and the wh-object move to the phase edge [Spec,VoiceP]. Voice ${ }^{\circ}$ bears a $[i \mathrm{E}]$-feature.


Step 2: merger of $\mathrm{T}^{\circ}$ and projection of TP
$\rightarrow$ The subject moves to [Spec,TP].


Step 3: merger of the licensing head $\mathrm{V}^{\circ}$
$\rightarrow$ The uninterpretable ellipsis feature on the modal is checked against that of Voice ${ }^{\circ}$ via Agree, and VoiceP is elided in narrow syntax.
$\rightarrow$ The wh-object is stuck in the ellipsis site.
(25)


Step 4: merger of TP and CP
$\rightarrow$ The modal first moves to $\mathrm{T}^{\circ}$ and then to $\mathrm{C}^{\circ}$
The subject moves to the higher [Spec, TP]
$\mathrm{C}^{\circ}$ bears an uninterpretable [wh]-feature, but cannot attract the wh-object anymore to check it.
$\rightarrow$ The derivation crashes

2.4 Object scrambling $=$ ungrammatical
(27) Ik wil je helpen, maar ik zal (* je) niet kunnen. I want you help but $I$ will you not can 'I want to help you, but I will not be able to.'

- The object normally scrambles from [Spec,VoiceP] to a position in the higher clause, higher than the modal.

Argumentation in 2 steps:
(1) The object obligatorily precedes negation in non-elliptical sentences:
(28) Ik wil je helpen, maar ik zal ( je) niet (* je) kunnen helpen. I want you help but I will you not you can help 'I want to help you, but I will not be able to help you.'
(2) Negation sits in the higher clause:
(29) Ik zal je niet kunnen helpen.

I will you not can help
$=$ 'I will not be able to help you'
$\neq$ 'I will be able not to help you.'
$\rightarrow$ Object scrambling goes to a position in the higher clause as well:
(30)


- However: Ellipsis takes place before the object can move out of the ellipsis site.
$\rightarrow$ Analysis of an elliptical sentence:
(31)


Only subjects survive Dutch MCE, because they move out of the ellipsis site to a position inbetween the ellipsis site and the ellipsis licensing head.

3 DUTCH MODAL COMPLEMENT ELLIPSIS COMPARED TO ENGLISH VPE
3.1 English VPE

- In English VPE, both objects and subjects can be extracted out of the ellipsis site (cf. Schuyler 2002, Merchant to appear b).
(1) Object extraction:
(32) a. What is Tom going to buy? - I don't know. What should he [buy $\left.\mathfrak{t}_{\text {what }}\right]$ ?
b. Mina rolled up a newspaper and Tom did a magazine [roll up- $\boldsymbol{f}_{a}$ magazine]
(2) Subject extraction:
(33) a. I know Peter can't come to my talk, but who can [eome $t_{\text {whe }}$ to my talk]?
b. Mina wasn't arrested, but she should be [arrested $\epsilon_{\text {peter }}$ ].
$\rightarrow$ Why this contrast with Dutch?
English: a. The head licensing English VPE is the modal or auxiliary in $\mathbf{T}^{\circ}$.
b. $\mathbf{v}^{\circ}$ is the head bearing the [iE]-feature (vPE rather than VoicePE, see Merchant 2007, to appear a).

Evidence for these differences from the analysis for Dutch:
a. English modals are $\mathrm{T}^{\circ}$ heads, just like temporal auxiliaries. They behave differently from Dutch modals (see Ijbema 2002, Wurmbrand 2003):

- English modals lack inflection, unlike Dutch modals.
- English modals cannot co-occur, while Dutch modals can.
- English modals cannot take DP complements, while Dutch modals can.
b. The passive auxiliary is deleted in Dutch, but not (necessarily) in English:
(34) a. Deze broek wordt best niet gewassen, maar die rok mag this pants become best not washed but that skirt may wel (* worden). PRT become
'These pants don't have to be washed, but this skirt can be washed.'
b. The trash is taken out whenever it is apparent that it should be.
- Derivation of (32)a:
(35) What is Tom going to buy? - I don't know. What should he [buy $t_{\text {whata }}$ ?

Step 1: vP:
$\rightarrow \mathrm{v}^{\circ}$ is the head bearing an interpretable [E]-feature.
(36)


Step 2: merger of the phase head Voice ${ }^{\circ}$ and projection of VoiceP
$\rightarrow$ Voice ${ }^{\circ}$ attracts the subject and the wh-object to the phase edge.
(37)


Step 3: merger of ellipsis licensing head $\mathrm{T}^{\circ}$
$\rightarrow$ The subject moves to [Spec,TP].
The $[u \mathrm{E}]$-feature on $\mathrm{T}^{\circ}$ is checked against the $[i \mathrm{E}]$ on $\mathrm{v}^{\circ}$ and vP is elided.


Step 4: merger of $\mathrm{C}^{\circ}$ and projection of CP
$\rightarrow$ The wh-object moves to [Spec,CP] to check $\mathrm{C}^{\circ}$ 's $[u \mathrm{wh}]$.
The verb moves to $\mathrm{C}^{\circ}$.
(39)

$\rightarrow$ Both subjects and objects can survive English VPE because they can move out of the ellipsis site to the clause internal phase edge [Spec,VoiceP] prior to merger of the ellipsis licensing head $\mathrm{T}^{\circ}$.

### 3.2 Summary

Core of the analysis: The projection(s) inbetween the elided constituent and the licensing head play(s) a crucial role in extraction (im)possibilities out of the ellipsis site.

English VPE: The intervening projection VoiceP is a phase.
$\rightarrow$ Movement to the phase edge prior to ellipsis provides an escape hatch.
Dutch MCE: The intervening projection is a TP.
$\rightarrow$ Only what moves to [Spec,TP] or adjoins to TP can extract out of the ellipsis site


4 OTHER ELLIPTICAL CONSTRUCTIONS AND FURTHER RESEARCH
4.1 TP ellipsis: sluicing, stripping, fragment answers
(1) Sluicing

- Prediction: not only constituents moving to a position inbetween the ellipsis site and the licensing head can survive ellipsis, also constituents moving to the specifier position of the licensing head can.
$\rightarrow$ Sluicing instantiates such a case.
- Sluicing allows extraction of both objects and subjects:
(40) a. I saw something, but I don't know what [fp $\frac{1}{}$ saw $\left.t_{\text {what }}\right]$
b. Someone stole my bike, but I don't know who [ ${ }^{[p} t_{\text {whe }}$-stole my bike]


## Narrow syntax deletion analysis:

- Sluicing is licensed by $\mathrm{C}^{\circ}$ bearing [ $\left.u \mathrm{wh}, i \mathrm{Q}\right]$ (see Merchant 2001).
- Sluicing deletes TP (Merchant 2001).
- $\mathrm{C}^{\circ}$ attracts the wh-element to its spec to check $[u \mathrm{wh}]$.
(41)

$\rightarrow$ Because the movement of the wh-element and the checking of the $[u \mathrm{E}]$-feature happen simultaneously, the wh-element survives the ellipsis.
(2) Stripping
(42) I gave MinA a present, but not ThOMAS [ ${ }^{2 \prime} \mp$ gave $\epsilon_{\text {Themas }}$ a present].

Narrow syntax deletion analysis:

- There is a NegP dominating CP (Merchant 2003), with Neg ${ }^{\circ}$ bearing $[u \mathrm{E}]$.
- The contrasted constituent moves to [Spec,CP] to check a [FOCUS]-feature (cf. Merchant 2003).
- TP carries the $[i \mathrm{E}]$ and gets elided
$\rightarrow$ The remnant constituent moves to a position inbetween the licensing head $\mathrm{Neg}^{\circ}$ and the ellipsis site TP and therefore survives the ellipsis.
(3) Fragment answers
(43) A: Who did you give a present? - B: Mina [ ${ }^{2} \Psi$ gave $\epsilon_{\text {mina }}$ a present].

Narrow syntax deletion analysis:
$-\mathrm{C}^{\circ}$ is the licensing head bearing $[u \mathrm{E}]$.

- The contrasted constituent moves through [Spec, CP] to check a [FOCUS]feature (arguments for movement in fragment answers, see Merchant 2004).
- TP carries the $[i \mathrm{E}]$ and gets elided
$\rightarrow$ The remnant constituent moves to the specifier of the ellipsis licensing head and therefore survives the ellipsis.


### 4.2 Further research

Can we reduce the traditional distinction between deep and surface anaphora (cf Hankamer \& Sag 1976) to the size of the deleted constituent?

- Does this analysis work for all other ellipsis cases that have been analyzed as deletion, such as pseudogapping (Merchant 2007, to appear a), gapping and NP ellipsis?
- Does this analysis work for ellipsis cases that have been analyzed as a null proform, such as clausal complement deletion (Kennedy \& Merchant 2000) and null complement anaphora (Depiante 2000)?


## $\rightarrow$ Towards a unified analysis of ellipsis?

## 5 CONCLUSIONS

(1) Dutch displays a restricted form of verb phrase ellipsis that involves the deletion of a fully-fledged VoiceP.
(2) Ellipsis is deletion in narrow syntax, which happens when the uninterpretable [E]feature on the licensing head is checked against the interpretable [E]-feature on the head of the constituent that will be elided.
(3) The only constituents that can survive ellipsis are those that move out of the ellipsis site before the licensing head is merged. This means that the projections inbetween the licensing head and the ellipsis site and the specifier of the licensing head itself are possible escape hatches.

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