Dutch modals with a null VP proform complement

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OUTLINE OF THE TALK

1 The basic data
2 Against a deletion account
3 Against an intransitivity account
4 Null VP proform
5 Implications and further research
6 Conclusion

1 THE BASIC DATA

• Modals can have at least 2 interpretations: epistemic and deontic

(1) a. Het is acht uur. Klaas moet nu wel thuis zijn. = epistemic
   it is eight hour Klaas must now PRT home be
   ‘It’s eight o’clock. It must be the case that Klaas is at home now.’

   1  2  3  4
   IP  DP  I’  ellipsis
   Peter did V did V’
   V eat the banana

   B: Hij wil/ mag/ kan/ hoeft/ moet niet.
   he wants may can need must not
   ‘He doesn’t want to/is not allowed to/can’t/doesn’t need to/doesn’t have to.’

• There are (at least) three possible analyses for this phenomenon:

  1 Deletion of a fully specified syntactic structure, parallel to English VP ellipsis.

  2 There is no complement; the verb is simply intransitive.

  3 The verb selects a null proform.

→ main claim: null infinitival complements (NIC) involve a vP containing a null VP proform

2 AGAINST A DELETION ACCOUNT


  English VP ellipsis (VPE) = deletion of a full syntactic structure

(3) Mina didn’t eat the banana, but Peter did [VP eat the banana].

(4)
arguments: VPE allows extraction out of the elided complement and agreement with elements inside the complement (see examples below).

The properties of NIC differ from those of VPE in this respect.

Claim: the null complement of a modal does not contain a fully specified VP.

2.1 Extraction

Extraction is not allowed out of a NIC $\Rightarrow$ VPE does allow it.

Wh-phrases may extract out of an elided VP (cf. Schuyler 2002, Merchant to appear), but not out of a NIC.

(5) A: To who should Peter introduce Mina? $\Rightarrow$ VPE
   B: I don’t know. To who should Tom?

(6) A: Aan wie moet Katrien een cadeautje geven? $\Rightarrow$ NIC
to whom must Katrien give a present
B: Dat weet ik niet. *Aan wie moet Bert? that know I not to whom must Bert

$\Rightarrow$ VPE: VP must contain internal structure to be able to host the trace of the wh-phrase (cf.(7)).

(7) To who should Tom [vp-introduce Mina + magazine].

$\Rightarrow$ NIC: the wh-phrase cannot be moved out of the complement $\Rightarrow$ explanation: no internal VP structure.

VPE allows arguments or adjuncts to survive the ellipsis (= pseudogapping), NIC does not:

(8) Mina can roll up a newspaper and Peter can a magazine. $\Rightarrow$ VPE

(9) *Katrien kan brood kopen en Bert kan melk. $\Rightarrow$ NIC
    Katrien can bread buy and Bert can milk
    INTENDED READING: ‘…and Bert can buy milk.’

$\Rightarrow$ VPE: VP must contain internal structure to be able to host the trace of the object (which has moved out of the VP prior to the deletion of VP; see Jayaseelan 1990; Johnson 1996; Lasnik 1999a, 1999b, 2001 & Takahashi 1994).

(10) Mina can roll up a newspaper and Peter can a magazine [vp-roll + magazine].

$\Rightarrow$ NIC: the object cannot be moved out of the complement $\Rightarrow$ explanation: no internal VP structure.

VPE allows antecedent-contained deletion (ACD), NIC do not.

(11) Mina reads each book that Peter should. $\Rightarrow$ VPE

(12) *Joris leest elk boek dat Monika moet. $\Rightarrow$ NIC
    Joris reads each book that Monika must
    INTENDED READING: Joris reads every book that Monika must read.

$\Rightarrow$ VPE: The relative clause involves wh-movement of an empty operator (Chomsky 1977, 1981). This empty operator Op$_i$ needs to bind a trace, so the elided VP has to contain syntactic structure that can host the trace.

(13) Mina reads each book Op$_i$ that Peter should [vp-read].

$\Rightarrow$ NIC: there is no VP structure for the operator to move out from.
Object scrambling out of the null complement is disallowed:

(14)a. Ik wil [je helpen], maar ik kan je niet [tjc helpen].
I want you help but I can you not help
b. 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 cannot.’

2.2 There-expletives

An elided VP can have a there-expletive as its subject (Ross 1969), NIC cannot.

(15)Mina thinks there should be balloons in the hall, but there shouldn’t. \( \rightarrow \) VPE

(16)A: Moeten er veel mensen naar de vergadering komen? \( \rightarrow \) NIC
must there a.lot.of people to the meeting come
B:*Nee, er moeten niet.
no there must not
\( \rightarrow \) VPE: the elided VP must contain an indefinite DP that licenses there and agrees with the finite verb

(17)…, but there shouldn’t \( [\text{VP: be balloons in the hall}] \)

\( \rightarrow \) NIC: er ‘there’ is not licensed \( \rightarrow \) explanation: the NIC does not contain a fully specified VP structure containing an indefinite DP.

2.3 The IPP effect

NIC do not display the IPP (Infinitivus Pro Participio) effect.

• IPP: in 3-verb clusters the non-finite auxiliary verb is an infinitive instead of the expected past participle in Dutch.

(18) a. Hij heeft dat niet gehoord. \( \rightarrow \) 2-verb cluster: past participle
he has that not heard
‘He didn’t hear that.’
b. Hij heeft dat niet horen vallen. \( \rightarrow \) 3-verb cluster: IPP
he has that not hear.INF fall.INF
‘He didn’t hear that fall.’

\( \rightarrow \) modals in 3-verb clusters: also IPP

(19) Kwam Peter niet gisteren? – Nee, hij heeft niet *gewild/ willen
came Peter not yesterday no he has not wanted want.INF
komen.
come.INF
‘Did Peter come yesterday?’ – ‘No, he didn’t want to come.’

• NIC: no IPP effect

(20) Kwam Peter niet gisteren? – Nee, hij heeft niet *gewild/*wollen.
came Peter not yesterday no he has not wanted want.INF
komen.
come.INF
‘Did Peter come yesterday?’ – ‘No, he didn’t want to.’

\( \rightarrow \) explanation: there is no VP structure containing the main infinitive that causes IPP.

Conclusion: Dutch NIC do not involve deletion of a fully specified syntactic VP.
3 AGAINST THE INTRANSITIVE ANALYSIS

- A null infinitival complement does not contain a syntactic VP structure → this leaves us with 2 options:
  - The modal is an intransitive verb without any complement at all (cf. Napoli 1985 for Italian).
  - The modal has a null VP proform in its complement.

This section: argument against an intransitive analysis

→ a detour via Dutch modal verbs

Overview:

3.1 Raising versus control
3.2 A subject position below the modal

3.1 Raising versus control

- Claim: deontic modals are raising verbs, just like epistemic modals. They do not assign an Agent Θ-role to their subject (Wurmbrand 2003).

Step 1: Diagnostic tests for the raising/control distinction.

Raising verbs allow impersonal passive, unlike control verbs:

(22) a. Er lijkt gedanst te worden. → raising
    ‘There seems to be dancing going on.’
  b.* Er probeert gedanst te worden. → control
    ‘There tries danced to become’

Step 2: Comparing deontic modals to raising and control verbs.

inanimate subjects:

(23) De auto kan/moet/mag/* wil gewassen worden.
    ‘The car can/must may wants washed become’
    ‘The car can has to/may be washed.’

impersonal passives

(24) Er kan/moet/mag/* wil gedanst worden.
    ‘There can/must may wants danced become’
    ‘There can/must/may be dancing going on.’

- However: deontic kunnen ‘can’ has both an ability and an availability reading.

    ‘Karel can swim’
    PREFERRED READING: ‘Karel has the ability to swim.’
  b. Karel kan vanavond de afwas doen.
    ‘Karel can tonight the dishes do’
    PREFERRED READING: ‘Karel is available tonight for washing the dishes.’
    # ‘Karel has the ability to do the dishes tonight.’

→ Only in the availability reading kunnen is a raising verb:

(26) De auto kan gewassen worden.
    ‘The car can washed become’
    = ‘The car is available for washing.’
    ≠ ‘The car is able to be washed.’
(27) Er kan gezwommen worden.
there can swum become = ‘Swimming facilities are available.’
≠ ‘There is an ability to swim.’

⇒ kunnenability = control main verb, assigning an Agent Θ-role to the subject (cf.(28)a).

⇒ kunnenavailability = raising verb, assigning only a Theme Θ-role to its whole infinitival complement (cf. (28)b).

(28) a. SUBJ kunnen [ PRO VP]
b. ↑ kunnen [ tsubj VP]

⇒ Dutch modals are raising verbs, except for willen (want) and kunnenability. Willen and kunnenability are control verbs assigning an Agent role to the subject.

3.2 A subject position below the modal

• Prediction: if the NIC modal is an intransitive verb, there is an incompatibility with raising as in (28)b/(29)b, since there is no position from which raising could have taken place.

(29)a. Hij moet. (intransitive analysis)
he must
b. Hij moet [ t; XP ]. (raising analysis)

⇒ The prediction is not borne out: raising modals can have a null complement.

will Karel tonight dance he must PRT
‘Will Karel dance tonight?’ – ‘He has to!’

come you to the party tonight no I may not
‘Are you coming to the party tonight?’ – ‘No, I’m not allowed.’

Moreover: only the raising kunnenavailability allows NIC.

(31)a. Piet kan zwemmen, en Tim kan ook *(zwemmen).
Piet can swim and Tim can too swim
‘Pete can swim and Tim can swim too.’

b. Piet kan vanavond afwassen, en Tim kan ook (vanavond
Piet can tonight wash.the.dishes and Tim can too tonight
afwassen).
wash.the.dishes
‘Pete can wash the dishes tonight, and so can Tim.’

⇒ The modal is not intransitive: there is at least some structure in the complement of the modal.

⇒ NIC do not involve an intransitive modal: there is a vP complement present containing a subject position and a null VP proform.
4 NULL VP PROFORM

Overview

4.1 The analysis: a null VP-proform
4.2 Licensing the proform
4.3 Predictions made by the analysis

4.1 The analysis: a null VP proform

Dutch NIC: no syntactically specified complement, but a null VP proform

(32) Ik wil wel komen vanavond, maar ik mag niet [e].
I want come tonight but I may not
‘I want to come tonight, but I am not allowed.’

(33)
```
   ModP
     Mod'
       Mod
         mogen
           SUBJ
               v
                   proVP
```

4.2 Licensing the proform

• Not every verb can take a null VP proform complement: the proform has to be licensed.

Rizzi (1986): licensing requirements on null objects

(34) a. pro is governed by a head $X^0$ of type $y$.
b. Let $X$ be the licensing head of an occurrence of pro: then pro has the
   grammatical specification of the features on $X$ coindexed with it.
c. pro is Case-marked by $X^0_y$.

→ Current minimalist theories (Chomsky 1995):
   Identification and licensing of proforms through a local AGREE relation
   with a syntactic head.

Rizzi: licensing of DP proforms

→ NIC: licensing of a proVP: There must be a local AGREE relation between a
   licensing head (i.e. the modal) and the VP proform.

4.2.1 Licensing proVP, step 1: Mod$^0$ is a derived phase head in NIC.

• $v^0$-head = morpho-phonologically deficient → it gets morpho-phonological features
  from V through movement of V.

(35)
```
   vP
     v'
       v
         v
             proVP
```

However: in NIC, V is absent, and proVP does not have morpho-phonological
features.

• Solution: phase extension
(36) Syntactic movement of the head $H$ of a phase $\alpha$ up to the head $X$ of a node $\beta$ dominating $\alpha$ extends the phase up from $\alpha$ to $\beta$; $\alpha$ loses its phasehood in the process, and any constituent on the edge of $\alpha$ ends up in the domain of the derived phase $\beta$ as a result of Phase Extension. (Den Dikken 2006)

$\rightarrow$ NIC: $v$ moves to the head of the phrase dominating $vP$ to get morpho-phonological features there, thereby extending the phase and making $\text{Mod}^0$ a derived phase head (see (37))

4.2.2 Licensing in NIC, step 2: AGRE. 

- Feature specification: $\text{Mod}^0$ $[uV], [iF]$ (with $F$ a functional feature) $\text{pro}_{vP}$ $[iV], [uF]$

$\rightarrow$ Feature checking: an AGRE relation between Mod and $\text{pro}_{vP}$.

4.3 Predictions made by the analysis

0 Epistemic modals, temporal auxiliaries and raising verbs such as $\text{schijnen}$ ‘seem’ do not license NIC.

These verbs are higher up in the structure (Wurmbrand 2003, Butler 2006) $\rightarrow$ not local enough to license the VP proform.

$\times$ epistemic modals:

(40) A: Zou Klaas nu op zijn bureau zijn?
Would Klaas now on his office be
B: *Hij moet wel. Hij werkt altijd op zaterdag.
he must PRT he works always on Saturday
INTENDED READING: ‘It must be the case that he is in his office.’

$\times$ temporal auxiliaries ($\text{hebben}$ ‘have’, $\text{zijn}$ ‘be’ and $\text{zullen}$ ‘will’):

(41) A: Heeft Katrien gisteren gebeld?
– B: * Ze heeft niet.
has Katrien yesterday called she has not

(42) A: Is Thomas ook naar je lezing gekomen?
– B: * Hij is niet.
is Thomas also to your talk come.PRT he is not

(43) A: Komt Thomas ook naar je lezing?
– B: * Hij zal niet.
comes Thomas also to your talk he will not
× higher raising verbs:

⇒ corollary: all verbs that can license a VP proform are low enough in the structure, immediately dominating vP.

Θ English modals can only license deletion of a VP structure, not a VP proform.

English modals behave differently from Dutch modals (see among others Wurmbrand 2003, Ijbeema 2002): lack of inflection, cannot co-occur, do not take DP complements.

⇒ English modals are higher than ModP, in T and cannot license a VP proform.

5 IMPLICATIONS AND FURTHER RESEARCH

5.1 Categorizing the verbs licensing NIC

(45) Table 1: Categorizing the NIC verbs

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Table 1: Categorizing the NIC verbs

• Examples of non-modal verbs taking infinitival complements:
beginnen:

(46)a. Het begint te regenen. → raising it begins to rain
b. Lara was aan het zingen toen ik aankwam, begon Tom ook. Lara was on the sing and when I arrived began Tom too
   ‘Lara was singing and when I entered Tom began to sing as well. → NIC

dreigen:

(48)a. Er dreigt gevochten te worden. → raising there threatens fought to become
   ‘There threatens to be fighting going on.’
b. Het is niet zeker dat de regering zal vallen, maar ze dreigt wel *(te vallen). → no NIC it is not sure that the government will fall but she threatens PRT to fall

crosscuts the familiar distinction between control and raising verbs.

5.2 Further research questions

1. Is there an overt counterpart of this proform in Dutch?
   
   Suggestion: Dutch might have a null so, on a par with the English overt VP proform so.

2. We have two strategies in language to elide a verb phrase: deletion of a syntactic structure (VPE) and null proforms (Dutch NIC).

   → How does language decide between these strategies? What determines the choice?
   → Can we unite these two strategies?

3. Cross-linguistic comparison: there are many other languages with null infinitival complements, e.g. German, Italian, French and Spanish. Can this analysis be transferred to these languages?
CONCLUSION

1 Null infinitival complements of modals are vPs containing a subject position and a null VP proform.

2 The null complements do not involve deletion of a full syntactic structure, unlike VP ellipsis in English:
   - They do not allow extraction (e.g. pseudogapping, wh-extraction, ACD, object scrambling).
   - They do not allow a there-expletive as their subject.
   - They block the IPP-effect.

3 The modal verb with a null infinitival complement is not used intransitively (contra Napoli 1985). As most of them are raising verbs, there must be a position dominated by the modal from which the subject can be raised.

4 Not all modals allow null VP proforms, only deontic modal verbs do. The boundary between verbs that can take a null infinitival complement and verbs that cannot does not coincide with the distinction between raising and control.

REFERENCES


