

# Lexical items merged in functional heads

## The grammaticalization path of ECM-verbs in Dutch dialects

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### 1 Introduction

- **main topic:** identifying the different steps in the grammaticalization of verbs into discourse markers
- **central data:** imperatives of ECM-verbs in Dutch dialects

(1) *Kijk die koeien es gek doen.*  
look those cows PRT crazy do  
'Look at those cows go crazy!'

(2) *Kijk-e die koeien es gek doen.*  
look-PL those cows PRT crazy do  
'Look at those cows go crazy.'

(3) *Kijk, die koeien doen gek.*  
look those cows do crazy  
'Look, those cows are going crazy.'

- **main gist of the analysis:** the examples in (1)-(3) illustrate three main stages of grammaticalization:
  1. lexical verbs that are inserted in their lexical position (cf. (1))
  2. lexical verbs merged in a functional position (cf. (2))
  3. functional elements merged in a functional position (cf. (3))

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### 2 Background: grammaticalization

**Benjamin (2010); Waltereit and Detges (2007):** discourse markers are typically derived from imperatives

**Roberts and Roussou (1999):** grammaticalization is a change from a lexical to a functional category

**characteristics** of functional items vs. lexical ones (see Abney (1987); Hopper and Traugott (1993)):

1. functional items can be phonologically reduced
2. functional items have a semantically bleached meaning

3. functional items permit only one complement, which is generally not an argument
4. functional items form a closed class
5. functional items can be morphologically defective

### 3 Properties of ECM-verbs in dialect Dutch

#### 3.1 Introduction

→ in (dialects of) Dutch, there are two types of ECM-verbs, i.e. perception verbs and causative verbs

- (4) *Kijk hem daar es staan!*  
look him there PRT stand  
'Look at him standing there.'
- (5) *Hoor hem es lachen!*  
hear hem PRT laugh  
'Listen to him laugh!'
- (6) *Laat hem maar komen!*  
let him PRT come  
'Let him come!'

→ ECM-verbs in Dutch dialects can show up in three imperative(-like) contexts:

#### regular imperatives:

- (7) *Hoor die meeuwen es een kabaal maken!*  
hear those seagulls PRT a racket make  
'Listen to those seagulls make noise!'

#### inflected imperatives:

- (8) *Hoor-e die meeuwen es een kabaal maken.*  
hear-PL those seagulls PRT a racket make  
'Listen to those seagulls make noise.'

- (9) *Hoor(\*-e) die meeuw es een kabaal maken.*  
hear-PL that seagull PRT a racket make  
'Listen to that seagull make noise.'

#### imperatives as discourse markers:

- (10) *Die meeuwen maken een kabaal, hoor.*  
those seagulls make a racket hear  
'Those seagulls sure make a lot of noise!'

#### 3.2 Phonological reduction

→ neither regular imperatives nor inflected imperatives are phonologically reduced >< some imperatives used as discourse markers are phonologically reduced

#### regular imperatives:

- (11) ***Kijk** die koeien es gek doen!*  
look those cows PRT crazy do  
'Look at those cows go crazy!'
- (12) *Ik **kijk** naar televisie.*  
I loot to television  
'I watch television.'

#### inflected imperatives:

- (13) ***Kijk-e** die koeien es gek doen.*  
look-PL those cows PRT crazy do  
'Look at those cows go crazy.'

#### imperatives as discourse markers:

- (14) *Zie-j t neu, zè?!  
see.you it now see<sub>reduced</sub>  
'Do you see now?!'*

(Lapscheure Dutch, Haegeman (2010))

### 3.3 Bleached meaning

→ regular imperatives and inflected imperatives retain the basic lexical meaning of the verb >< in imperatives used as discourse markers, the lexical meaning is lost

#### regular imperatives:

- (15) #*Kijk die koeien es gek doen zonder te kijken!*  
look those cows PRT crazy do without to look  
'Look at those cows go crazy without looking!'
- (16) #*Kijk die studenten op Ibiza es gek doen!*  
look those students on Ibiza PRT crazy do  
'Look at those students on Ibiza go crazy!'  
[context: speaker is not able to see the students in Ibiza]

#### inflected imperatives:

- (17) #*Kijk-e die koeien es gek doen zonder te kijken.*  
look-PL those cows PRT crazy do without to look  
'Look at those cows go crazy without looking.'
- (18) #*Kijk-e die studenten op Ibiza es gek doen.*  
look-PL those students on Ibiza PRT crazy do  
'Look at those students on Ibiza go crazy.'  
[context: speaker is not able to see the students in Ibiza]

**however:** inflected imperatives cannot be modified by adjuncts related to the ECM-verb:

- (19) *Kijk / # Kijk-e die koeien door de verrkeijker es gek*  
look / look-PL those cows through the binocular PRT crazy  
*doen.*  
do  
'Look through the binoculars at those cows go crazy.'

#### imperatives as discourse markers:

- (20) *Kijk, je mag niet kijken.*  
look you may not look  
'Look, you can't look.'
- (21) *Kijk, die studenten op Ibiza doen gek.*  
look those students on Ibiza do crazy  
'Look, those students on Ibiza are going crazy.'  
[context: speaker is not able to see the students in Ibiza]

→ regular imperatives carry true imperative force >< neither inflected imperatives nor imperatives used as discourse markers have imperative force

#### regular imperatives:

- (22) *Ik beveel je: laat deze mensen naar binnen gaan!*  
I order you let these people to inside go  
'I order you: let these people go inside!'
- (23) *Laat die kinderen ophouden en stop ze in hun bed!*  
let those children stop and put them in their bed  
'Make those children stop and put them to bed.'

#### inflected imperatives:

- (24) #*Ik beveel je: laat-e deze mensen naar binnen gaan!*  
I order you let-PL these people to inside go
- (25) #*Laat-e die kinderen ophouden en stop ze in hun bed!*  
let-PL those children stop and put them in their bed

#### imperatives as discourse markers:

- (26) #*Ik beveel je: kijk, die jongens gaan naar binnen.*  
I order you look those boys go to inside
- (27) #*Kijk, die kinderen doen raar en stop ze in hun bed.*  
look those children do weird and put them in their bed

### 3.4 Lack of argument structure

→ regular imperatives have a (*pro*-)subject >< neither inflected imperatives nor imperatives used as discourse markers have a subject

#### regular imperatives:

- (28) *Kijk*  $pro_i$  *jezelf<sub>i</sub>* *es gek doen!*  
 look yourself PRT crazy do  
 ‘Look at yourself going crazy!’
- (29) *Laat*  $pro_i$  *die kinderen es ophouden door*  $PRO_i$  *ze te slaan!*  
 let those children PRT stop by them to hit  
 ‘Make those children stop by hitting them!’
- (30) *Laat jij die kinderen es ophouden!*  
 let you those children PRT stop  
 ‘You make those children stop!’

#### inflected imperatives:

- (31) \**Kijk-e jezelf es gek doen!*  
 look-PL yourself PRT crazy do
- (32) \**Laat-e die kinderen es ophouden door ze te slaan!*  
 let-PL those children PRT stop by them to hit
- (33) \**Laat-e jullie die kinderen es ophouden!*  
 let-PL you those children PRT stop

**however:** inflected imperatives do impose a thematic restriction on the ECM-subject: it has to be agentive

- (34) *Kijk-e {die mensen / # die tafels} es in de weg staan.*  
 look-PL those people / those tables PRT in the way stand  
 ‘Look at those {people/#tables} standing in the way.’

- (35) #*Kijk-e die koeien es paars zijn.*  
 look-PL those cows PRT purple be  
 INTENDED: ‘Look at those cows be purple.’

#### imperatives as discourse markers:

- (36) \**Kijk, hij ziet jezelf.*  
 look he sees yourself
- (37) \**Kijk, die kinderen stoppen niet door PRO ze te slaan.*  
 look those children stop not by them to hit  
 (only ✓ under a  $PRO_{arb}$ -reading)
- (38) \**Kijk jij, die koeien doen gek.*  
 look you those cows do crazy

### 3.5 Closed class

→ regular imperatives are part of an open class >< inflected imperatives and imperatives as discourse markers are part of a closed class

#### regular imperatives:

- (39) {*Hoor / Kijk / Laat / Voel / Zie / Doe*} *die meeuwen es een kabaal maken.*  
 hear / look / let / feel / see / do those seagulls PRT a racket make  
 ‘Listen to/look at/let/feel/see/let those seagulls mak(e/ing) noise.’

#### inflected imperatives:

- (40) {*Hoor-e / Kijk-e / Laat-e / \*Voel-e / \*Zie(n)-e / \*Doe(n)-e*}  
 hear-PL / look-PL / let-PL / feel-PL / see-PL / do-PL  
*die meeuwen een kabaal maken.*  
 those seagulls a racket make  
 ‘Listen to/look at/let/feel/see/let those seagulls mak(e/ing) noise.’

**imperatives as discourse markers:**

- (41) *Kijk, die meeuwen maken een kabaal, {hoor / zè / \*laat / \*voel / \*doe}.*  
 look those seagulls make a racket hear / see / let / feel  
 / do  
 ‘Look, those seagulls sure make a lot of noise, you know.’

**3.6 Morphological defectiveness**

→ regular imperatives have a corresponding indicative form >< neither inflected imperatives nor imperatives used as discourse markers can be used indicatively

**regular imperatives:**

- (42) *Ik hoor de mannen roepen.*  
 I hear the men shout  
 ‘I hear the men shout.’

**inflected imperatives:**

- (43) *\*Ik hoor-e de mannen roepen.*  
 I hear-PL the men shout

**imperatives as discourse markers:**

- (44) *\*De mannen roepen, ik hoor.*  
 the men shout I hear

**3.7 Data summary**

	regular imperative	inflected imperative	imperative as discourse marker
phonological reduction	-	-	+
bleached meaning	-	+/-	+
lack of argument structure	-	+/-	+
closed class	-	+	+
morphological defectiveness	-	+	+

**4 The core analysis: three different merge positions****4.1 Cardinaletti and Giusti (2001)****motion verb with a regular infinitival complement**

- (45) *Vaju a pigghiari u pani.*  
 go-1S to fetch-INF the bread  
 ‘I go to fetch the bread.’ (Marsalese)

**motion verb with an inflected complement**

- (46) *Vaju a pigghiu u pani.*  
 go-1S to fetch-1SG the bread  
 ‘I go to fetch bread.’ (Marsalese)

→ motion verbs with inflected complements (in Marsalese, English and Swedish) are lexical categories merged as functional heads

**4.1.1 Properties of inflected infinitives**

- **Phonological reduction:** motion verbs with an inflected complement are not phonologically reduced compared to their regular use, compare (46) with (45)
- **Bleached meaning:** motion verbs retain their basic semantic content (Cardinaletti and Giusti (2001, 23))

**on the other hand**, motion verbs with an inflected complement cannot be modified by motion-related adjuncts:

(47) \**Peppe va a mangia c'a machina.*  
Peppe go-3SG to eat-3SG by car

(48) *Peppe va a mangiari c'a machina.*  
Peppe go-3SG to eat-INF by car  
'Peppe goes to eat by car.'

- **Lack of argument structure:** motion verbs with inflected complements cannot select their own arguments:

(49) *va (\*agghiri a casa) a mangia*  
go-3SG (\*towards to home) to eat-3SG

(50) *va (agghiri a casa) a mangiari*  
go-3SG (towards to home) to eat-INF  
'He goes towards home to eat.'

**however**, motion verbs with inflected complements do impose a thematic restriction on their subject in some languages, like English: it has to be agentive.

(51) The smoke fumes (\*go) inebriate the people upstairs.

- **closed class:** motion verbs with inflected complements form a closed class

(52) a. *iri* 'to go', *viniri* 'to come', *passari* 'to come by', *mannari* 'to send'  
b. \**acchianari* 'go up', \**scinniri* 'go down', \**trasiri* 'go into', \**curriri* 'run', ...

- **morphological defectiveness:** motion verbs with inflected complements are morphologically defective

(53) *Vaju a pigghiu u pani.*  
go-1S to fetch-1SG the bread  
'I go to fetch bread.'

(54) \**Iti a pigghiati u pani.*  
go-2PL to fetch-2PL the bread

- **Summary**

	inflected imperative	motion verbs with inflected complement
phonological reduction	-	-
bleached meaning	+/-	+/-
lack of argument structure	+/-	+/-
closed class	+	+
morphological defectiveness	+	+

#### 4.1.2 Analysis of Marsalese motion verbs with inflected infinitives:

**Cardinaletti and Giusti (2001):** motion verbs with inflected infinitives are merged in a left-peripheral functional head in the extended domain of the lexical verb

**supporting evidence:** motion verbs with inflected infinitives display monoclausal properties:

- unique person/tense/mood
- single event interpretation
- clitic climbing in Marsalese
- floating quantifiers and sentential adverbs in Marsalese

## 4.2 Multiple merge positions

**proposal:** the three imperative(-like) contexts in which ECM-verbs appear in Dutch dialects reflect three possible merge positions for these verbs:

- the regular imperative is merged in  $V^0$  and raises to  $C^0$
- the inflected imperative is merged directly in  $C^0$
- the imperative used as a discourse marker is merged in a functional head higher than  $C^0$  (see also Haegeman (2010))

**this derives:**

- the fully lexical properties of the regular imperative (full argument structure, full morphological paradigm, open class, ...)
- the fully functional properties of the imperative used as discourse marker (no argument structure, no morphological paradigm, closed class, no lexical meaning, ...)
- the intermediate status of inflected imperatives: on the hand, they involve the lexical ECM-verb (secondary theta-role, basic lexical semantics), on the other, they are merged directly in a functional head (morphological deficiency, closed class, no argument structure)

**note:** this means that in regular and inflected imperatives (cf. (55) and (56)) a different lexical item is used than when an imperative shows up as a discourse marker (as in (57)) → this is corroborated by the fact that the two morphemes sometimes differ phonologically (cf. section 3.2)

(55) *Kijk die koeien es gek doen!*  
look those cows PRT crazy do  
'Look at those cows go crazy!'

(56) *Kijk-e die koeien es gek doen.*  
look-PL those cows PRT crazy do  
'Look at those cows go crazy.'

(57) *Kijk, die koeien doen gek.*  
look those cows do crazy  
'Look, those cows are going crazy.'

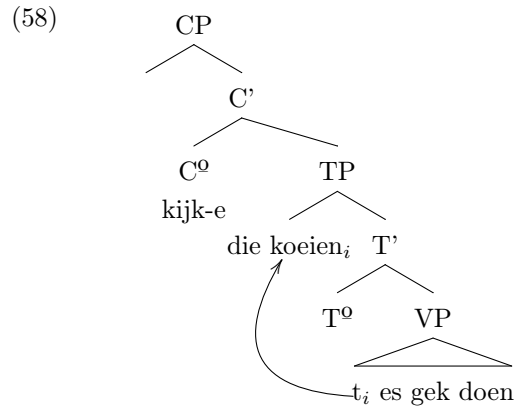
## 5 Inflected imperatives: raising and agreement

**note:** analyzing inflected imperatives as lexical verbs that are merged in  $C^0$  doesn't yet answer the following questions:

1. If there is no *pro*-subject in inflected imperatives, how does the EPP get satisfied? (section 5.1)
2. If there is no external theta-role, there is no case for the embedded ECM-subject (Burzio's generalization), so how does that DP get case-licensed? (section 5.1)
3. Where does the agreement ending on the verb come from? (section 5.2)
4. Why can only ECM-verbs occur as inflected imperatives? (section 5.3)

### 5.1 Proposal and corroborating evidence

**proposal:** in inflected imperatives the ECM-subject raises to specTP, thus satisfying the EPP. Moreover, it receives nominative case in this position.



### corroborating evidence:

- **correlation between overt subjects and agreement:** if an overt subject is present in Dutch imperatives (i.e. if specTP is overtly filled), the agreeing form of the imperative must be used (cf. Bennis (2006)):

- (59)
- Kom\*(-en) jullie eens hier!*  
come-AGR you<sub>pl</sub> PRT here
  - Kom\*(-t) u eens hier!*  
come-AGR you<sub>polite</sub> PRT here
  - Kom\*(-t) gij eens hier!*  
come-AGR you<sub>regional</sub> PRT here (Standard Dutch)

→ the presence of overt agreement on agreeing ECM-imperatives follows from the correlation illustrated in (59): the raised ECM-subject overtly fills specTP and as a consequence, the imperative verb has to display agreement with this raised subject.

- **case:** if the post-verbal DP in inflected ECM-imperatives is in specTP, it should bear nominative case → this prediction is borne out:

- (60)
- Kijk-e wij es gek doen.*  
look-PL we PRT crazy do  
'Look at us go crazy.'
  - \*Kijk-e ons es gek doen.*  
look-PL us PRT crazy do  
'Look at us go crazy.'

→ moreover, when the imperative does not display agreement (i.e. in a regular imperative, when a *pro*-subject fills specTP), only the (ECM-) accusative should be allowed:

- (61)
- \*Kijk wij es gek doen!*  
look we PRT crazy do  
'Look at us go crazy!'
  - Kijk ons es gek doen!*  
look us PRT crazy do  
'Look at us go crazy!'

## 5.2 Source of the agreement

**correlation:** all dialects with inflected imperatives also have so-called complementizer agreement:

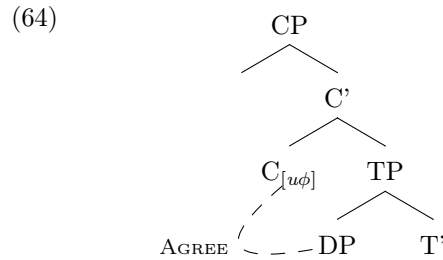
- (62) *Ik vind dat-e we toffe jongens zijn.*  
I find that-PL we fun guys are  
'I think we're fun guys.'
- (63) *Ik vind dat(\*-e) ik een toffe jongen ben.*  
I find that-PL we a fun guy am  
'I think I'm a fun guy.'

**moreover:** the comp-agreement endings are from the same morphological paradigm as the endings found on inflected imperatives

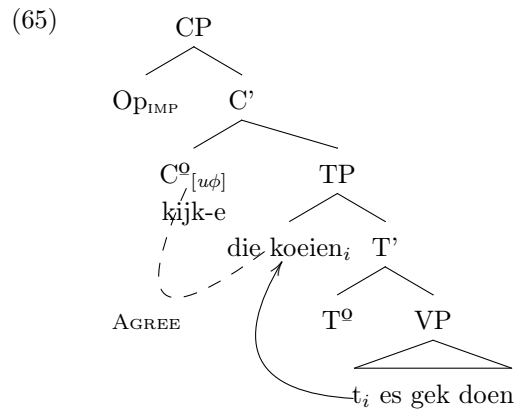
**standard analysis of comp-agreement:** there are unvalued  $\phi$ -features on C<sup>0</sup> that Agree with and are valued by the subject in specTP



(Craenenbroeck and Koppen (2008); Haegeman and Koppen (2012))



→ it is that same set of  $\phi$ -features that is spelled out as agreement on inflected ECM-imperatives:



### 5.3 Why only ECM-verbs?

**question:** why do only ECM-imperatives allow raising of something other than their own subject into specTP?

- (66) *Kijk-e die koeien es gek doen.*  
look-PL those cows PRT crazy do  
'Look at those cows go crazy.'
- (67) *Vertel(\*-e) die verhalen es.*  
tell-PL those stories PRT  
'Tell those stories.'
- (68) *Overtuig(\*-e) die jongens es om te komen.*  
convince-PL those boys PRT for to come  
'Convince those boys to come.'

**assumption:** this is related to the fact that subjects in imperatives are necessarily agentive Jensen (2003, 163):

- (69) a. Go away!  
b. \*Know French!

**consequence:** if a DP other than the subject of the imperative verb raises to specTP (as is the case in inflected ECM-imperatives), it must bear an [AGENT]-theta role ⇒ it must be the external argument of a lower predicate + this external argument must be allowed to undergo A-movement ⇒ agentive ECM-subjects are the only DPs that can partake in this construction

**note:** this also explains why the ECM-subject in inflected imperatives bears a secondary agentive theta-role

- (70) *Kijk-e {die mensen / #die tafels} es in de weg staan!*  
look-PL those people / those tables PRT in the way stand  
'Look at those {people/#tables} standing in the way!'
- (71) *#Kijk-e die koeien es gemolken worden.*  
look-PL those cows PRT milked be  
INTENDED: 'Look at those cows getting milked.'

## 6 Summary and conclusion

- we have discerned three main stages of grammaticalization in Dutch ECM-imperatives:
  1. lexical verbs merged in lexical positions (regular imperatives)
  2. lexical verbs merged in functional positions (inflected imperatives)
  3. functional elements merged in functional positions (imperatives as discourse markers)
- each of these stages has its own characteristic syntactic, morphological and lexical properties, which stage 2 occupying an intermediate position between the other two
- microvariational data from Dutch provide crucial insight into the middle stage of the development

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