

Featuring the Subject in Dutch Imperatives

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1. Introductionⁱ

In this article I will address an issue that, as far as I know, has not been discussed in the theoretical literature, although most of the data can be found in descriptive grammars (cf. Haeseryn et al. 1997). It concerns the presence of a subject in imperative clauses in Dutch. Although there are some indications that dialectal variation may provide interesting information (cf. de Schutter 1997), I will confine myself to standard Dutch here, due to the lack of systematic data on variation within the Dutch speaking area in this respect. Another restriction is that I will deal with 'simple imperatives' only, thus excluding other clause types that can have imperative force. Specifically, I will not discuss main clauses with an imperative intonation as in (1), infinitival imperatives as in (2) (cf. Den Dikken 1992) or participial imperatives, discussed elsewhere in this volume (Rooryck and Postma), as in (3).

- (1) a. Jij gaat nu maar eens naar huis!
you go now PRTs to home
'You should go home now!'
- b. Het moet nu maar eens afgelopen zijn!
it must now PRTs finished be
'This should really be the end of it!'
- (2) a. Ophoepelen jij/jullie!
away-go[INF] you [±plu]
'You go away!'
- b. Neerleggen die bal!
down-put[INF] that ball
'Put down that ball!'
- (3) a. Opgehoepeld jij/jullie!
away-gone[PART] you [±plu]
'You go away!'
- b. Opgepast!
on-taken-care[PART]
'Be careful!'

What I call 'simple imperatives' are those imperatives that have a more or less specialized verb form which shows up in the position that is normally restricted to finite verbs, i.e. the landing site for finite verb movement in root clauses. These imperative verbs are generally considered to be verbs that are inflected for second person. Standard Dutch has different realizations of the imperative inflection: the usual form corresponds to the stem of the verb, but in special cases we find an inflected form in which *-t* or *-en* is added to the stem. Examples are given in (4).

- (4)
- a. Loop (jij) eens door!
walk you[-plu] PRT on
'(You) walk on!'
 - b. Loop eens door jij!
walk PRT on you[-plu]
 - c. Gaat U nu maar weg!
go-*t* you[+polite] now PRT away
'You go away now!'
 - d. Wezen jullie nu eens rustig!
be-*en* you[+plu] now PRT quiet
'You be quiet!'

In this article I will address questions concerning the presence or absence of subjects in the imperatives in (4), in relation to the minimalist theory of features and agreement (see Chomsky 1995, 1999 and related work). More specifically, we will be concerned with the following questions:

- under what conditions can the subject in imperatives remain empty?
- under what conditions can the subject in regular subject position be lexical?
- under what conditions can the subject appear in right peripheral position?

2. Imperatives and person

Given that imperative verbs appear to be inflected for second person, we will first discuss the general morphosyntactic properties of finite verbs inflected for second person. Second person (non-past) verbs in standard Dutch show up with all three inflectional forms that are available in the (non-past) verbal paradigm: *-t*, *-en* and uninflected (or \emptyset -inflection).ⁱⁱ The inflectional morphology of these verbs is dependent on two syntactic positions and two morphosyntactic oppositions. The positional difference is determined by the position of the subject with respect to the finite verb. In the case of a singular subject, subject initial main clauses and subordinated clauses have a *t*-inflection (5a,b); non-subject-initial main clauses show up without inflection (5c,d).ⁱⁱⁱ

- (5)
- a. Jij kijk-*t* naar de maan.
you[-plu] look at the moon
'You look at the moon.'
 - b. Ik hoop dat jij naar de maan kijk-*t*.
I hope that you[-plu] at the moon look
'I hope that you will look at the moon.'
 - c. Kijk(- \emptyset) jij naar de maan?
look you[-plu] at the moon
'Do you look at the moon?'
 - d. In mijn dromen kijk(- \emptyset) jij naar de maan.
in my dreams look you[-plu] at the moon
'In my dreams you look at the moon.'

If the subject is plural, the verb shows up with the standard plural inflection *-en*, both in subject-initial and in non-subject-initial clauses, as in (6).

- (6) a. Jullie kijk-*en* naar de maan.
you[+plu] look at the moon
'You look at the moon.'
- b. Ik hoop dat jullie naar de maan kijk-*en*.
I hope that you[+plu] at the moon look
'I hope that you will look at the moon.'
- c. Kijk-*en* jullie naar de maan?
look you[+plu] at the moon
'Do you look at the moon?'

In addition to the position and the number specification of the subject, the third factor that plays a role in determining 2nd person inflectional marking is the opposition between [+polite] and [-polite], indicating a difference in formality in the relation between speaker and addressee.^{iv} The polite pronoun *U* cooccurs with an inflectional *-t* on the verb. As we saw above, the non-polite pronoun *jij* cooccurs with absence of inflection in non-subject initial main clauses, as in (5c) and (5d). However, replacing the non-polite pronoun *jij* by the polite pronoun *U* forces the *t*-inflection to show up in all contexts. This is demonstrated in (7).

- (7) a. Kijk-*t* U naar de maan? (cf.5c)
look you[+polite] at the moon
'Do you look at the moon?'
- b. In mijn dromen kijk-*t* U naar de maan. (cf. 5d)
in my dreams look you[+polite] at the moon
'In my dreams you look at the moon.'

In the case of polite pronouns the feature for plurality cannot be morphologically realised. Whether or not the pronoun *U* refers to one or more addressees is morphosyntactically irrelevant, both on the pronoun and on the verbal inflection. The sentences in (7) are semantically ambiguous in having one or more addressees. The fact that *U* may be interpreted as plural can be demonstrated by adding the plural anaphor *elkaar* 'each other' as in (8a); this contrasts with (8b), where the addition of the quantifier *alone* 'alone' forces a singular interpretation of *U*.

- (8) a. Lees-*t* U elkaars boeken?
read you[+polite] each others[+plu] books
'Do you read each others books.'
- b. Straks blijf-*t* U helemaal alleen achter.
soon stay you[+polite] all alone[-plu] behind
'Soon you will stay behind all alone.'

The second person paradigm is by far the most complex paradigm in the verbal inflectional system of standard Dutch. In the first and third person paradigm only plurality plays a distinguishing role, but in the second person paradigm other features are also relevant. The table

in (9) gives a schematic representation of the patterns of second person inflection and the corresponding second person pronouns.

(9) verbal inflection (I) / subject pronouns (II) for second person

[polite]	+		—	
[plural]			+	
Subj ... Vfin			+	
I :	<i>-t</i>	<i>-en</i>	<i>-t</i>	<i>-∅</i>
II :	<i>U</i>	<i>jullie</i>	<i>jij</i>	<i>jij</i>

If simple imperative verbs are inflected for second person, we expect to find the same array of possibilities as in the table in (9). This is indeed the case. As was illustrated in (4), we find uninflected verbs (4a/b), and (somewhat marked) *t*-inflected (4c) and *en*-inflected imperatives (4d). More examples are given in (10) and (11). These sentences also demonstrate that pronominal subjects in imperatives show up as second person pronouns.^v

- (10) a. Hoepel(-∅) nu maar op jij!
 go now PRT away you[-plu]
 'You, go away!'
 b. Loop(-∅) naar de maan jullie!
 walk to the moon you[+plu]
 'You, go away!'
 c. Wees(-∅) (jij) maar niet bang!
 be (you[-plu]) PRT not afraid
 'Don't be afraid!'
 (11) a. Kom-*t* allen tezamen!
 come all together
 'Come together'
 b. Wees-*t* U maar niet bang!
 be you[+polite] PRT not afraid
 'Don't be afraid!'
 c. Wez-*en* jullie maar niet bang!
 be you[+plu] PRT not afraid
 'Don't be afraid!'

In line with the traditional view, we will thus consider imperative verbs to be marked for second person.

3. The structural position of the imperative verb

The distribution of the inflectional markings of second person singular verbs has been argued to support the view that the finite verb in Dutch main clauses does not uniformly occupy the same structural position. We saw above in (5a/b) vs (5c/d) that second person verbs have a *t*-inflection if the subject precedes the finite verb and a *∅*-inflection if the subject follows. In the literature

(cf. Travis 1984, Zwart 1993) it is argued that the rule of Verb Second targets the C-position in subject-non-initial main clauses and a lower functional projection (e.g. AgrS) in subject-initial main clauses. This allows us to relate different inflectional affixes to different structural positions. Given additional evidence from dialectal variation and from the behaviour of weak pronouns it seems indeed to be the case that the uniform analysis of Verb Second as $V_{\text{fin}}\text{-to-C}$ should be abandoned.

In the unmarked case, i.e. in subject initial main clauses, the C-projection is absent, and the finite verb moves to a lower functional projection. We find a C-projection in V2-main clauses only if that projection is functionally motivated by the presence of a force that indicates a marked sentence type, for example in the case of wh-questions or topicalization. The same is true for V1-clauses. There are several instances of V1-constructions, all of which are functionally marked. Below we find examples of V1 in a joke-introduction (12a), narrative V1 (12b), yes/no-questions (12c), imperatives (12d) and topic-drop (12e).

- | | | | |
|------|----|--|-------------------|
| (12) | a. | Zitten twee mannen in de kroeg.
sit two man in the pub
'There are two men in the pub.' | joke-introduction |
| | b. | Zegt die een tegen de ander:
says that one to the other
'The one says to the other:' | narrative V1 |
| | c. | Ga je met mij mee?
go you with me PRT
'Do you come with me?' | yes/no-question |
| | d. | Rot toch op jij!
go PRT away you
'You, go away!' | imperative |
| | e. | Wil ik wel doen.
want I PRT do
'That is ok with me.' | topic drop |

These varieties of V1-main clauses have different syntactic and pragmatic properties. What these clauses have in common is that the subject follows the verb and that the sentence has a particular interpretation (force) that is among other things related to the V1-property of these clauses.^{vi} We thus may take the C-position to be a clause-type operator. Absence of the C-projection gives rise to the unmarked declarative clause type. On this view it follows that in imperatives we should take CP to be the Imperative Force projection, or ImpP.^{vii} If the imperative verb is in C/Imp we predict that the \emptyset -inflection will show up, because second person verbs in C (i.e. in subject-non-initial clauses) have a \emptyset -inflection (cf. (9)).

In the second person paradigm the inflectional affix *-t* has two potential sources (cf. Table 9). It may be the result of subject-initial clauses in which the subject is [-plural] and [-polite] (the finite verb is in a lower functional projection) or it may be the realization of the feature [+polite]. Given that imperative verbs occupy the C-position, the feature [+polite] appears to be the decisive factor. This view is corroborated by the fact that the only subject that is allowed in *t*-imperatives is the polite pronoun *U* (13a), that the absence of *t*-inflection makes it impossible for the polite pronoun *U* to appear in subject position (13b), that the presence of *U*

forces the verb to carry the *t*-inflection (13a/b), and that *U* obligatorily follows the imperative verb (13c).

- (13) a. Weest U/*jij/*jullie maar niet bang!
be-*t* you PRT not afraid
'Don't be afraid!'
b. Wees *U/jij/*jullie maar niet bang!
be- \emptyset you PRT not afraid
c. *U weest niet bang!
you be-*t* not afraid

We thus conclude that imperative verbs in Dutch are in C/Imp.^{viii} Moreover, we have seen that the feature [polite] plays a distinguishing role in imperatives.

4. Imperatives and the subject

In imperative constructions the subject is generally absent. It can be added as a second person pronoun, as in (14).

- (14) a. Ga jij maar weg!
go you[-plu] PRT away
'You, go away!'
b. Gaat U maar weg!
go you[+polite] PRT away
c. Gaan jullie maar weg!
go you[+plu] PRT away

In (14) the imperative inflection agrees with the lexical subject. It is interesting to observe that the non-inflected imperative may cooccur with a singular or a plural second person subject pronoun when this pronoun occupies a right-peripheral position, as in (15a). This is not the case for *t*-inflected or *en*-inflected imperatives, as is clear from (15b/c).

- (15) a. Ga maar weg *jij, jullie!*
go PRT away you[\pm plu]
b. *Gaat maar weg *jij, jullie!*
go PRT away you[\pm plu]
c. *Gaan maar weg *jij, jullie!*
go PRT away you[\pm plu]

The distribution of non-lexical subjects, pronouns in subject position and subjects in right-peripheral position will be discussed in the following sections.

4.1 The occurrence of *pro* in imperatives

It is possible to leave out the subject in case the imperative verb is uninflected.^{ix} If the imperative verb is marked for the feature [+polite] or [+plu], the subject *U* resp. *jullie* has to be present (16b/c). In older varieties of Dutch (17a) and in regional varieties (17b) we find the *t*-inflected verb without a lexical subject, but in modern standard Dutch this is no longer acceptable.

- (16) a. Kom (jij) eens hier!
 come (you) PRT here
 'Come here!'
 b. Kom-*t* *(U) eens hier!
 c. Kom-*en* *(jullie) eens hier!
- (17) a. Kom-*t* allen tezamen!
 come-*t* all together
 'Come together!'
 b. Kom-*t* (gij) eens hier!
 come-*t* (you[regional]) PRT here

It is well-known that the absence of a lexical subject in imperatives does not imply that the subject is absent (a.o. Beukema & Coopmans 1989). First of all, the non-lexical subject in imperatives is necessarily interpreted as the addressee. It thus seems to be most efficient to relate the interpretation of the subject to the non-lexical subject position. Moreover, the non-lexical subject can generally be replaced by a lexical pronominal subject (*jij*) without substantial differences in interpretation. We thus may assume the non-lexical subject to be the weak variant of the lexical subject. Confirmation for an analysis along these lines comes from the fact that weak subject pronouns do not occur in imperatives. Whereas strong and weak subject pronouns generally show an identical distribution, in imperatives *jij* cannot be replaced by its weak counterpart *je*, as is shown in (18).

- (18) a. *Ga je maar weg!
 go you[weak] PRT away
 'Go away!'
 b. *Wees je eens niet zo stoer!
 be you[weak] PRT not so brave
 'Don't be so brave!'

In this respect the imperative subject behaves like a subject in a *pro*-drop language, such as Italian or Spanish, where the strong lexical pronoun has the empty pronoun *pro* as its weak correlate. The only difference between imperatives with a lexical subject (*jij*) and imperatives without (*pro*), is the emphatic nature of the lexical pronoun.

Another argument to claim that an empty subject has to be present in imperatives comes from the fact that the empty subject is syntactically active in binding and control. This is shown in (19).

- (19) a. Geef jij_i/*pro*_i jezelf_i nu eens wat rust! (reflexive)
 give you yourself some rest
 'Give yourself some rest!'

- b. Herinner jij_i/*pro*_i je_i dit gesprek nog maar eens! (inherent reflexive)
remember you you this conversation PRTs
'Remember this conversation!'
- (control) c. Beloof jij_i/*pro*_i mij nou maar [om PRO_i op tijd thuis te zijn]!
promise me PRTs for on time home to be
'Promise me to be home on time!'
- d. Kijk jij_i/*pro*_i niet [PRO_i zo dom]! (adjunct control)
look you not so stupid
'Don't look so stupid!'

We thus conclude that standard Dutch shows *pro*-drop phenomena in uninflected imperatives.

4.2 *The interpretation of pro in imperatives*

As is clear from the preceding sections the *pro* subject in imperative constructions can be interpreted as second person singular, not marked for the feature [+polite]. This interpretation corresponds to the interpretation of the lexical pronoun *jij*. However, *pro* can also be interpreted as a plural element corresponding to the pronoun *jullie*. We can force a plural interpretation of the empty subject by introducing a plural anaphor or quantifier that has *pro* as its antecedent. This is illustrated in the examples in (20).

- (20) a. Geef *pro*_i elkaar_i de hand!
give each other the hand
'Give each other a hand!'
- b. Herinner *pro*_i jullie_i het gesprek van vorige week!
remember yourselves the conversation of last week
'Remember last weeks' conversation!'
- c. Beloof *pro*_i mij om PRO_i het probleem samen_i op te lossen!
promise you me for the problem together to solve
'Promise me to solve this problem together!'
- d. Ga *pro*_i allemaal_i in the rij staan!
go all in the line stand
'Stand in line!'

The *pro* subjects in (20) must be plural due to the fact that the anaphor (*elkaar* or *jullie*) and the quantifier (*samen* or *allemaal*) require a plural antecedent.

Pro in uninflected imperatives can also be interpreted as the polite pronoun *U*, as is demonstrated in (21).

- (21) a. Let *pro*_i goed op Uzelf_i! (reflexive)
watch good on yourself[+polite]
'Watch yourself carefully!'
- b. Vergis *pro*_i U_i niet! (inherent reflexive)
mistake yourself[+polite] not
'Don't make mistakes!'

- c. Probeer *pro*_i [PRO_i U_i die gebeurtenis te herinneren]!
 (control+inh.refl)
 try you[+polite] that event to remember
 'Try to remember that event!'

As is expected, the *pro* subject in (21) is interpretatively not specified for number. Neither *pro* nor the lexical polite pronoun *U* (cf. (9)) is morphosyntactically marked for plurality.

As was shown above, *t*-inflected and *en*-inflected imperative verbs do not occur with a *pro* subject in modern standard Dutch; the polite pronoun *U* / *jullie* must be present. *Pro* appears in uninflected imperatives only. Interpretatively it may occur as the non-lexical counterpart to *jij*, *jullie* and *U*. This can be represented schematically as in table (22).

(22) verbal inflection (I) / subject pronouns (II) for imperatives

[polite]				—		
	+					
[plural]			+		—	
I :	<i>-t</i>	<i>-∅</i>	<i>-en</i>	<i>-∅</i>	<i>-∅</i>	<i>-∅</i>
II :	<i>U</i>	<i>pro</i>	<i>jullie</i>	<i>pro</i>	<i>jij</i>	<i>pro</i>

4.3 Lexical subjects of imperatives

It is clear that lexical subject pronouns have a limited distribution in imperatives. Uninflected imperatives allow the lexical pronoun *jij*; *t*-inflected imperatives require the presence of the polite pronoun *U*, just as the plural pronoun *jullie* may appear in subject position, i.e. directly to the right of the imperative verb, in the case of *en*-inflected imperatives. The weak pronoun *je* is not allowed in imperatives, as we have seen in (18). These facts are summarized in (23).

- (23) a. Kom **jij** / **jullie* / **U* / **je* / **pro** maar eens hier!
 come you PRTs here
 'Come here!'
 b. Komt **jij* / **jullie* / **U** / **je* / **pro* maar eens hier!
 c. Komen **jij* / **jullie** / **U* / **je* / **pro* maar eens hier!

A somewhat unexpected fact is that we find postverbal subjects in Dutch imperatives. In imperfect imperatives this can be observed in clauses in which the nominative subject follows a verbal particle (such as *weg* in (24a)). In perfect imperatives we may find the subject following the participle.^x This is demonstrated in (24b).

- (24) a. Ga maar weg *jij*!
 go PRT away you
 'You, go away!'
 b. Was maar niet weggegaan *jij*!
 was PRT not away-gone you

'You shouldn't have left!'

At first sight, these sentences constitute genuine cases of postverbal subjects since the intonational pattern is neutral and differs from clauses with a right dislocated constituent, as in (25).

- (25) a. Hij heeft dat al gedaan, die jongen.
he has that already done, that boy
'That boy already did that.'
b. Zouden ze dat niet doen, die jongens?
would they that not do, those boys
'Shouldn't these boys do that?'

If the sentences in (24) were legitimate cases of postverbal subjects, we would have a striking similarity between Dutch imperatives and Romance, since languages such as Spanish and Italian allow postverbal subjects in addition to *pro* subjects.

However, a more careful study of the data indicates that the lexical subjects in (24) should be analysed as instances of right dislocation. First of all, we find full DPs in the same position as *jij* in (24).

- (26) a. Wees maar gerust *mijn kind!*
be PRT unafraid my child
'My child, don't be afraid!'
b. Was maar niet weggelopen *sukkel!*
was PRT not away-walked fool
'Fool, you shouldn't have walked away.'

The clause-final DP cannot be the syntactic subject, given that the subject in imperatives must be second person.^{xi} Putting these DPs in the canonical subject position indeed results in strong ungrammaticality, as is demonstrated in (27).

- (27) a. *Wees mijn kind maar gerust!
b. *Was sukkel maar niet weggelopen!

On the other hand, the addition of a second person pronoun to the sentences in (26) is possible:

- (28) a. Wees *jij* maar gerust mijn kind!
b. Was *jij* maar niet weggelopen sukkel!

This shows that the postverbal DP-subject in imperatives is right-dislocated and co-indexed with *pro* (26) or the pronoun *jij* (28) in subject position. The same conclusion can be derived from the observation that the second person pronoun *jullie* can appear in clause-final position, although it does not occur in subject position, as we saw in (23).

- (29) a. Ga *pro_i* (**jij*) maar weg *jullie_i*!
go PRT away you[+plu]

- 'You, go away!'
- b. *Ga jullie maar weg!
go you[+plu] PRT away

4.4 Lexical subjects in imperatives in English and Dutch: a comparison

In her dissertation, Rupp (2000) argues that in English the verb in imperatives is always specified for 2nd person, notwithstanding the fact that English allows imperatives such as the ones in (30).

- (30) a. Don't *anyone* answer the phone!
- b. *Someone* pick up the phone, please, before it drives me mad!

She argues that the italicised DPs in (30) are morphosyntactically third person, but semantically second person, in that they refer to the addressee (Rupp, 2000:71). Apparently, semantic agreement may overrule morphosyntactic agreement in these cases. There are, however, various objections against an analysis along these lines. First of all, it does not explain why semantic agreement in second person contexts in English is found in imperatives only. Second, and for our purposes most relevantly, an analysis along these lines predicts that semantic agreement would be possible in Dutch imperatives as well. This would lead us to expect that sentences such as (31) would be acceptable, contrary to fact.

- (31) a. *Neem iemand de telefoon even op!
pick someone the telephone PRT up
- b. *Iemand neem de telefoon even op, alsjeblieft!
somebody pick the telephone PRT up, please

The difference between Dutch and English in this respect points to a slightly different account. For modern English it is the case that agreement between the subject and imperative verb is never realised morphosyntactically. The verb always appears in its base form. All arguments for the presence of phi-features in imperative verbs presented by Rupp derive from circumstantial considerations. She argues that in Old English and in other Germanic languages such as German and Icelandic, agreement morphology is present in imperatives, and that, by consequence, modern English has agreement morphology as well, although not lexically visible. She goes on to argue that the fact that nominative Case is available for the subject of imperatives shows that imperatives have an agreement node projected into the structure.

Now suppose that there is indeed an Agr-node in modern English, but that the lack of formal phi-features in these imperatives allows for the occurrence of semantic agreement. We then expect that the subject position in English imperatives is available for all nominal constituents that may denote the addressee. We have seen that morphosyntactic features (2nd person, plural, polite) play a crucial role in subject-verb agreement in imperatives in Dutch. If we assume that semantic agreement only applies in cases in which formal, morphosyntactic agreement is absent or irrelevant, we make the following predictions: (a) the lexical subject of Dutch imperatives must be a 2nd person pronoun; (b) the *pro* subject of Dutch imperatives is interpreted as a second person pronoun; (c) the actual interpretation of *pro* (*jij*, *jullie* or *U*) is determined by semantic and/or pragmatic considerations.

In order to realize subjects other than those that are specified for 2nd person, Dutch thus has to make use of the process of right dislocation, which allows for semantic agreement in general, as is shown in (32).

- (32) a. Gaat [jullie elftal]_i / Gaan [wij]_i de wedstrijd winnen, [mannen]_i?
 goes your team [-plu] / go we[1plu] the match win, men[+plu]
 'Is your team / Are we going to win the match, men?'
 b. Gisteren hebben [zij]_i weer eens gewonnen, [het eerste elftal van Ajax]_i.
 yesterday have they [+plu] again won, the first team of Ajax[-plu]
 'Yesterday they have finally won again, the first team of Ajax.'
 c. [Jij]_i hebt het nog steeds niet door hè, [makker]_i.
 you[2sing] understand it PRTs not, friend[3sing]
 'You still don't understand it, friend.'

We thus conclude that clause-final subjects in Dutch do not occur. Although imperatives may give the impression of allowing rightperipheral subjects, closer scrutiny has demonstrated that these clause-final, nominal phrases cannot be analysed as syntactic subjects. Rather, in these cases the *pro* subject is accompanied by a coindexed right-dislocated nominal phrase which is interpretatively connected to the *pro* subject through semantic agreement.

5. On the nature of agreement

In Chomsky's minimalist framework (1995, 1999) the operation Agree plays a central role in the core system ('narrow syntax'). In order to derive a well-formed LF-structure, uninterpretable features have to be deleted in the course of the derivation. Agree is the operation that establishes a relation through which uninterpretable features can be deleted under identity with interpretable features. In what follows, I take these ideas as a useful point of departure for a formal implementation of the agreement process in Dutch imperatives. I will continue to focus on subject-verb agreement; for a detailed application of minimalist ideas to the overall derivation of imperative clauses, see Platzack (this volume).

For subject-verb agreement this system implies that the uninterpretable phi-features of the finite verb must be deleted under identity with the interpretable features of the subject in an agreement relation. Movement of the finite verb to a functional head position in the verbal domain (e.g. Tense) is a way to create a configuration of the type head (verb) - specifier (subject) that allows the features of the inflected verb to be deleted.

In this theory the presence of an empty *pro* subject is surprising at first sight. The theory appears to force us to assume that *pro* has interpretable features, but it is hard to see how an empty category can have interpretable syntactic features of itself. In line with many proposals in the literature we may assume that in *pro*-drop languages it is the verbal inflection that provides the interpretable features for *pro*. In languages such as Italian and Spanish the verbal paradigm is fully specified with respect to the (uninterpretable) phi-features for person, number and gender. We now may expect *pro* to appear if the unspecified phi-features of *pro* can be interpreted as a consequence of Agree with the specified features of the inflected verb. In these cases Agree thus establishes two things: it determines the unspecified feature value of *pro* and it allows the

uninterpretable features of the inflected verb to be deleted as soon as the feature value of *pro* has been fixed.

The agreement system shows two oppositions that are relevant to the agreement process under Agree. A particular morpho-syntactic feature can be interpretable (+I) or uninterpretable (–I). This distinction is relevant for LF, in such a way that uninterpretable features have to be deleted in the course of the derivation. Nominal features on verbs, such as number and person features, are taken to be uninterpretable, and have to be deleted through an Agree-relation with a nominal phrase, the nominal features of which can and must be interpreted.

In addition to the I-opposition, we also have an opposition between specified features (+S) and unspecified features (–S). Specification implies that the value of a particular morpho-syntactic feature can unambiguously be determined. Lexical pronominals and finite verbs in Spanish and Italian are taken to be specified for all their features. On the other hand, *pro* and finite verbs in languages such as Dutch and English are unspecified or underspecified underlyingly. This gives rise to the pattern in (33).

- (33) Feature oppositions before Agree
- | | |
|----------|--------------------------------|
| +S, +I = | lexical pronouns |
| +S, –I = | inflection in Spanish, Italian |
| –S, +I = | <i>pro</i> |
| –S, –I = | inflection in Dutch, English |

At LF the uninterpretable features of the finite verb must be deleted and the interpretable features of pronominals must be specified. This requirement thus triggers subject-verb agreement and determines the occurrence of *pro* subjects.

In a non-*pro*-drop language the verbal inflection is underspecified with respect to the pronominal phi-features. It thus cannot provide *pro* with the required feature values through Agree, and a lexical pronoun with independent lexical features must be present in order to delete the uninterpretable features of the inflected verb.

It has been observed that *pro*-drop phenomena not only show up in languages with a rich verbal inflection (e.g. Spanish, Italian), but also in languages with no verbal inflection, such as Chinese (cf. Jaeggli & Safir 1989, Huang 1989). This can be made to follow from the agreement system discussed here if we assume that the verb does not have (uninterpreted) morphosyntactic phi-features in these languages. In that case, the operation Agree does not have to delete uninterpreted features. The *pro* subject can then be interpreted unrestricted by morpho-syntactic considerations, i.e. *pro* has no (unspecified) morpho-syntactic features either. The interpretation of *pro* should then be derived through other mechanisms. This view is based on the perspective that *pro* is an empty category that receives its interpretation through syntactic and pragmatic operations. *Pro* has no intrinsic, unspecified morpho-syntactic properties. If a language has a verbal paradigm that makes use of a morpho-syntactic feature *x*, *pro* in this language should be specified for *x* through Agree; this is necessary in order to delete the uninterpretable feature on the inflected verb before LF. If *x* is not morpho-syntactically relevant in the verbal paradigm, *pro* will not be specified for this feature through Agree.

This line of argumentation may provide us with an explanation for the fact that *pro* appears in imperatives in non-*pro*-drop languages such as Dutch and English. In Dutch the verbal inflectional paradigm distinguishes between 1st, 2nd, 3rd, polite and plural. Standard Dutch has the agreement system as given in (34).

(34)	feature	inflected V	pronoun
	[1]	V- \emptyset	<i>ik</i>
	[2]	V- <i>t</i> / V- \emptyset	<i>jij</i>
	[3]	V- <i>t</i>	<i>hij / zij / het</i>
	[2, +polite]	V- <i>t</i>	<i>U</i>
	[1, +plu]	V- <i>en</i>	<i>wij</i>
	[2, +plu]	V- <i>en</i>	<i>jullie</i>
	[3, +plu]	V- <i>en</i>	<i>zij</i>

Given the impoverished verbal inflectional paradigm it is clear that the present morpho-syntactic features are unspecified (–S). This implies that *pro* is unavailable in Dutch. Let us assume, however, that the C/Imp node in Dutch has a specific 2nd person feature, its presence being related to the fact that imperatives always have an addressee as their subject for semantic/pragmatic reasons. The imperative verb that is moved to C/Imp is now specified for 2nd person by occupying the C/Imp node. If correct, it follows that *pro* may show up in this configuration (cf. Barbiers, this volume). The uninflected verb is normally underspecified in that it may agree with 1st and 2nd person. However, if the imperative construction provides the means to disambiguate the feature content of the inflected verb, *pro* can be assigned the (+S)-feature [2], which in turn allows the uninterpretable(–I) feature of V to be deleted under Agree.

The assumption that C/Imp is inherently specified as 2nd person allows us to explain the appearance of *pro* in a non-*pro*-drop language such as Dutch. The fact that the polite verbal form shows up in imperatives is expected. As we have seen above, the polite form is characterized by the morphosyntactic (–S)-features [2] and [polite]. Movement to the C/Imp-position is possible, due to the [2]-feature on the verb. No feature clash arises. Through movement to C/Imp the feature value for person on the verb will become specified. It follows that *pro* is not allowed in this case, due to the fact that the verb contains an unspecified feature [polite]. A polite lexical pronoun (*U*) thus has to show up in order to delete the uninterpretable feature [polite] on the *t*-inflected imperative verb. The same holds for plural imperative verbs. The *en*-inflected verb which contains the features [2,+plu] moves to the imperative C-position. By moving it to this position the person feature will become specified. However, the unspecified [+plu] feature on the verb will prevent *pro* from appearing in the subject position. The lexical pronoun *jullie* is necessary to delete the uninterpretable number feature on V.

We thus are able to account for the distribution of imperative verbs (uninflected and *t*- / *en*-inflected verbs) and for the distribution of *pro* in imperatives (in the case of uninflected verbs only) by assuming that imperatives are characterized by the presence of a specified feature for 2nd person in the C-position. It also follows that *pro* can be interpreted as a 2nd singular, a 2nd plural or a 2nd polite pronoun. As said before, *pro* has no inherent lexical features. This implies that *pro* is found in those cases in which the relation Agree is able to assign sufficient specific content to *pro* in order to delete the uninterpretable features of the finite verb. In uninflected imperatives the specified feature [2] is the only feature that is morpho-syntactically relevant. It does not imply that *pro* must be 2nd person singular. It may just as well be interpreted as 2nd person plural due to an abstract semantic feature [+plu] or as 2nd person polite, due to a semantic feature [+polite].

For lexical pronouns the situation is different, since they are inherently specified for morpho-syntactic features. Apparently, a verb that is characterized by the feature [2] does not

agree with a pronoun characterized as [2, +plu] (*jullie*) or [2, +polite] (*U*). Agreement thus presupposes an identical set of morpho-syntactic features on both elements (in terms of Chomsky 1999: probe and goal must have an identical set of features). *Pro* is by default characterized by the same set of features as the finite verb since *pro* has no inherent morpho-syntactic set of features. Lexical pronouns have lexically determined inherent features. If we assume that Agree causes the morpho-syntactic features of the pronoun to be present on the inflected verb (and vice versa), the presence of the morpho-syntactic feature [+plu] on the pronoun, forces the verb to be realized as [+plu].

6. *U* as a third person pronoun

The polite pronoun *U* is not necessarily 2nd person morphosyntactically. It may cooccur with a 3rd person reflexive, as is shown in (35a) or a finite verb inflected for 3rd person singular (35b).

- (35) a. U_i vergist $U_i(\text{zelf}) / \text{zich}_i$.
 you[+polite] mistake yourself[+polite,refl.2nd] / himself[refl.3rd]
 'You are mistaken.'
- b. U heeft / hebt betaald.
 you[+polite] has[3] / have[2] paid
 'You have paid.'

It even appears to be the case that the polite pronoun *U* can be 2nd and 3rd person at the same time. It may show 2nd person agreement with the inflected verb and 3rd person agreement with a reflexive anaphor, or vice versa. This is demonstrated in (36).

- (36) a. U hebt zich vergist.
 you[+polite] have[2] himself mistaken
 'You are mistaken.'
- b. U heeft U vergist.
 you[+polite] has[3] yourself[+polite] mistaken

From this it follows (a) that the pronoun *U* is formally ambiguous between 2nd and 3rd person; and (b) that the mechanism of subject-verb agreement has to be distinguished from agreement in a binding context.

This morphosyntactic ambiguity is also found in *t*-inflected imperatives, as in (37). However, there are two exceptions to this. First, the imperative verb cannot appear inflected for third person. This is demonstrated in (38).

- (37) a. Vergist U $U(\text{zelf})$ niet!^{xii}
 mistake you[+polite] yourself[+polite] not
 'Don't make mistakes!'
- a. Vergist U zich niet!
 mistake you[+polite] himself[3] not
- (38) a. Heb U zelf lief! (cf. 36a)
 have[2] PRT you[+polite, refl] love

- b. 'Love yourself!
 *Heeft Uzelf lief! (cf. 36b)
 have[3] PRT you[+polite, refl] love

With respect to the binding properties of the polite subject, we find a difference between a lexical subject *U*, as in (37), and *pro* in (39).

- (39) a. Vergis U(zelf) niet! (cf. 37a)
 mistake *pro* yourself[+polite] not
 'Don't make mistakes!'
 b. *Vergis zich niet! (cf. 37b)
 mistake himself[3] not

The ungrammaticality of (38b) and (39b) follows directly from the assumption that in imperatives the C-position is specified for 2nd person. This accounts for the ungrammaticality of (38b) in an obvious way. The ungrammaticality of (39b) follows as well. As has been discussed above, *pro* in imperatives is second person as the consequence of agreement with a verb specified for 2nd person in C/Imp. There is no way that *pro* will be morphosyntactically specified for 3rd person, due to the lack of inherent lexical specification. It thus follows that (39b) cannot receive an interpretation since the anaphor *zich* cannot be bound.

7. Conclusions

We have argued that the distribution of verbs, the distribution of lexical pronouns and *pro* and the interpretation of *pro* in simple imperatives is determined by the following:

- simple imperatives are characterized by a C-position that contains a specified feature for 2nd person;
- only verbs that are characterized by the feature [2] can be moved to C. This implies that the uninflected verb ([2]), the *t*-inflected verb ([2,+polite]) and the *en*-inflected verb ([2,+plu]) show up as imperative verbs;
- the subject of uninflected imperatives can be *pro* since the imperative verb in C has a specified feature [2] that is assigned to *pro* under Agree. As a consequence the uninterpretable morphosyntactic person feature of the imperative verb can be deleted;
- the subject of the *t*-inflected resp. *en*-inflected imperative verb cannot be *pro*; the presence of *pro* would give rise to a non-well-formed LF since the imperative verb contains an uninterpretable feature [+polite] resp. [+plu];
- the interpretation of *pro* in uninflected imperatives is morphosyntactically restricted by the presence of the feature [2] only. Interpretatively, it may correspond to the lexical pronoun *jij* [2], *jullie* [2,+plu] or *U* [2,+polite];
- lexical pronouns have inherent features that are morphosyntactically relevant. The set of features of the pronoun is identical to the set of features of the inflected verb under Agree. This implies that uninflected imperatives only cooccur with *jij*, *t*-inflected imperatives with *U* and *en*-inflected imperative verbs with *jullie*.^{xiii}

The analysis proposed here is crucially dependent on the assumption that in imperatives the C-position, i.e. the position that determines the pragmatic force or sentence type, contains a specified feature for 2nd person. This assumption has been motivated by the semantic/pragmatic fact that imperatives are directed towards an addressee. The rest of the analysis of imperatives is determined by a particular interpretation of the theory of agreement that is quite similar to the theory proposed in Chomsky (1999).

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Notes

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- ⁱ. I thank Sjeff Barbiers, Johan Rooryck and Wim van der Wurff for comments on an earlier version of this paper.
- ⁱⁱ. Although I believe that the absence of overt inflection indicates the absence of inflection, rather than the presence of \emptyset -inflection, I will not discuss this issue here.
- ⁱⁱⁱ. For an explanation of this contrast in terms of the position of the verb (C vs AgrS) see Zwart (1993, 2000) and Travis (1984). I adopt an analysis along these lines below.
- ^{iv}. The feature [+polite] appears to be similar to the feature [+honorific] that plays a role in the agreement system of languages such as Japanese and Korean.
- ^v. The occurrence of the verb form *wees(t) / wezen* in (10c) and (11b/c) indicates unambiguously that these sentences are imperatives, since these forms of the verb *zijn* show up in imperatives only. In yes/no-questions for instance, we find different verb forms: *ben, bent* or *zijn*, as in (i).

- (i) a. Ben/*Wees je bang voor slangen?
are you[-plu] afraid for snakes
- b. Bent/*Weest U bang voor slangen?
are-*t* you[+polite] afraid for snakes
- c. Zijn/*Wezen jullie bang voor slangen?
are-*en* you[+plu] afraid for snakes

The stem *wees* also appears in other forms of the irregular verb *zijn* 'to be', such as the infinitival form *wezen* 'to be' — which is in most environments an alternative to the infinitive *zijn* —, the participle *geweest* 'been' and the past tense *was/waren* 'was, were'. However, the verb forms *wees* and *weest* are exclusively reserved for imperative forms in standard Dutch, and thus constitute an interesting test to decide whether a particular construction can be taken to be imperative.

- ^{vi}. In imperative clauses the imperative verb cannot be preceded by the subject, i.e. the subject cannot be raised to SpecCP (SpecImpP). In cases in which we find an apparent initial subject, the subject is clearly left dislocated as is evident from the heavy intonation break.

- (i) a. Jij, ga toch naar huis!
you, go PRT to home
- b. Man, rot toch op!
man, go PRT away

Of course, we should raise the question why movement to SpecCP is excluded in imperatives. I have not a really illuminating answer to this question. Just as in yes/no-questions I will assume that the SpecCP position contains an operator that blocks movement to this position. This view might provide the means to explain the fact that the SpecCP position in imperatives can be lexically filled in German (cf. Reis & Rosengren 1992, Barbiers this volume). If we follow Barbiers in that this difference is related to the fact that German imperative verbs have a distinct imperative inflectional paradigm, the topicalization possibility in German might be due to the fact that, in contrast to Dutch

(see below), C does not contain an imperative feature in German. It is located on the verbal inflection itself. This makes it possible for C to contain a topic feature in German, but not in Dutch.

vii. As has been argued in Bennis (2000) I will assume that each functional projection in a particular language has to be interpretable at the interfaces with non-linguistic components of the cognitive system. If we take LF and PF to be relevant levels, this requirement predicts that a functional projection such as CP not only constitutes a phrase that is necessary to provide clause-peripheral structure, but it also should have a particular interpretation at the level of LF. Relevant interpretative functions of CP might be argued to be [question], [relative], [topic] etc. In this spirit the interpretative function of CP can also be taken to be [imperative]. This view implies that the categorial label CP is in fact shorthand for projections that assign interpretative force to a clause. We thus may replace CP by QuP, RelP, TopP or ImpP (et cetera). I will not discuss this issue here. In line with traditional views I will keep using C/CP, but it should be clear that this projection in imperatives is more precisely characterized as Imp/ImpP.

viii. This analysis differs clearly from analyses presented for English imperatives by Rupp (2000, this volume) and Potsdam (1998, this volume). They argue at length that in English the imperative verb is in a lower verbal functional projection. Whether this is true or not (cf. Beukema and Coopmans (1989), Platzack (this volume) for a different view), it does not really affect the argument presented here given that in English the peripheral functional structure of the verbal projection is clearly different, as can among other things be derived from the fact that topicalization in English does not trigger verb movement to C.

ix. The subject can be left out too in infinitival and participial imperatives, as demonstrated in (2b) and (3b). Although I will not discuss these imperatives here any further, I assume that in those cases the subject position cannot be lexically realized, due to the lack of structural nominative Case. If a lexical subject is present, as in (2a) and (3a), it appears in right peripheral position.

x. As has been observed in the literature, imperatives do not occur with past-tense marking. Relevant examples from Dutch are given in (i).

- (i) a. *Ging dan maar weg!
went PRTs away
- b. *Was maar niet bang!
was PRT not afraid

I will assume that this implies that there is no formal expression of Tense in imperative clauses. However, there is a set of perfective imperatives, or rather optative constructions, that occur with a past-tense auxiliary. Examples are given in (ii).

- (ii) a. Had dat nou toch gedaan!
had that PRTs done
'You should have done that.'
- b. Was maar niet zo haastig geweest!
Was PRT not so fast been
'You should not have been in such a hurry.'

These clauses have most of the properties of imperfect imperatives, such as V1 and the non-lexical second person subject. In this case the past auxiliary seems to implicate irrealis instead of past (the participle indicates perfect aspect).

Barbiers (this volume) argues that past tense may be realized on imperatives in particular contexts. Since in my opinion the examples he provides are ungrammatical, I will hold on to the view that Tense is not present in imperatives.

^{xi}. These postverbal DPs are like vocatives in several respects. This is of course to be expected given that these DPs have to be interpreted as addressees. For the purposes of our argumentation it does not really matter whether we take them as vocatives or as genuine right-dislocated DPs, as long as they are not taken to be syntactic subjects.

^{xii}. This sentence is somewhat marked in comparison to (37b). This seems to be caused by the fact that both polite pronouns *U* are strictly adjacent. If we separate both occurrences, as in (i), there appears to be no difference in acceptability between *zich* 'himself' or *U(zelf)* 'yourself' as the reflexive anaphor.

- (i) Bijt U nu maar eens van U / zich af!
 Bite you[+polite] PRTs from yourself / himself
 'Defend yourself!'

^{xiii}. There is a set of rather confusing data in which a non-expected subject shows up in imperatives. Relevant cases are given in (i).

- (i) a. Laat *ik / mij* beginnen met een citaat!
 let I begin with a quotation
 'Let me start with a quotation.'
 b. Kijk *hij / hem* eens rennen!
 look he PRT run
 'See him run!'

In these sentences the subject of the embedded clause may appear as a nominative subject in the main clause. The alternative version with an objective pronoun is a regular imperative in which the imperative verb provides exceptional case-marking to the embedded subject. The surprising fact is the appearance of the nominative subject in (i). I don't know how to account for these facts. Given the very limited distribution and idiosyncratic properties of this construction I will consider the sentences in (i) idiomatic exceptions.