

## Complementizer Agreement and the Relation between $C^0$ and $T^0$

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Several proposals suggest a  $\phi$ -feature dependency between  $C^0$  and  $T^0$  (see, e.g., Zwart 1993, Chomsky 2008). In most (if not all) of these proposals, the core piece of empirical evidence is complementizer agreement (CA). On the basis of two sets of CA data, CA with coordinated subjects and CA with external possessors, we conclude that there is no  $\phi$ -feature dependency between  $C^0$  and  $T^0$ ; instead,  $C^0$  and  $T^0$  must each be endowed with a discrete set of  $\phi$ -features.

*Keywords:* complementizer agreement, relation between  $C^0$  and  $T^0$ , Agree, PF, adjacency, external possessor, first conjunct agreement

### 1 The Issue

A substantial set of West Germanic dialects displays complementizer agreement (CA; see, e.g., Bayer 1984, Law 1991, Haegeman 1992, Zwart 1993, 1997, Carstens 2003). Consider the example of this phenomenon in (1) (from Barbiers et al. 2006).

- (1) *Katwijk Dutch*
- a. . . . *dat ik zuinig leef.*  
that I frugal live.SG  
'... that I live frugally.'
- b. . . . *datt-e we/jullie/hullie gewoon lev-e.*  
that-PL we/you.PL/they normal live-PL  
'... that we/you/they live normally.'

The Katwijk Dutch complementizer *dat* 'that' agrees in number with the subject of the embedded clause: when the subject is plural, there is inflectional morphology on the complementizer. Note that in these examples not only the complementizer, but also the finite verb, agrees with the subject.

There are a number of analyses of CA. In the majority of these, CA has been presented as (the core piece of) evidence supporting the hypothesis that there is a close connection between  $C^0$  and  $T^0$  (see, e.g., Den Besten 1977, 1989, Zwart 1993, 1997, Chomsky 2008). The first implementation of this connection is found in analyses in which CA is taken to reflect the movement of a functional head position in the IP domain (or the features of such a head), either  $I^0$ ,

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$T^0$ , or  $\text{Agr}_S^0$ , to  $C^0$  (see Den Besten 1977, 1989, Hoekstra and Marácz 1989, Zwart 1993, 1997, Watanabe 2000). The second implementation of this connection was put forward by Chomsky (2008), who argues that the  $\phi$ -features of  $T^0$  (realized as verbal agreement and henceforth abbreviated as TA) are inherited from  $C^0$ .  $T^0$  enters the derivation without  $\phi$ -features, and it gets them from  $C^0$  when the latter is merged. The fact that in some languages agreement is actually spelled out on a  $C^0$ -related element like the complementizer seems to support the idea that  $C^0$  starts out with  $\phi$ -features. More precisely, Chomsky (2008:159n26) states that “sometimes the  $\phi$ -features of C are morphologically expressed, as in the famous West Flemish examples.” Most likely, Chomsky is referring here to the CA examples discussed in, for instance, Haegeman 1992.

In both of these implementations, CA is seen as an additional reflex of the feature-checking relation between  $T^0$  and the subject, which leads to TA.<sup>1</sup> If the  $\phi$ -features on  $C^0$  and on  $T^0$  are in fact the same set of features, the clear prediction is that the  $\phi$ -features spelled out on the complementizer must be the same as those spelled out on the finite verb.

The goal of this remark is twofold. (a) We will provide empirical evidence to challenge the claim that there is a featural dependency between  $C^0$  and  $T^0$ . We will also briefly discuss some alternative proposals and show that they are empirically inadequate. (b) We will elaborate on West Flemish external possessor agreement, which is the empirical cornerstone of our argumentation and which has hitherto not been observed or discussed in the literature.

The article is organized as follows. In section 2, we show that CA and TA do not result from the same feature-checking relation. In section 3, we argue against some alternative (nonsyntactic) analyses of CA: feature checking at the PF interface via linear adjacency and prosodic domains (Ackema and Neeleman 2004, Fuß 2007, 2008, Miyagawa 2009), and analyses in terms of analogy (Kathol 2001, Zwart 2006). The data presented lead to the conclusion that CA is the result of a different syntactic feature-checking relation than TA, along the lines proposed by Carstens (2003, 2009). In section 4, we discuss the (novel) external possessor agreement data in more detail.

## 2 Empirical Evidence against a $\phi$ -Feature Dependency between $C^0$ and $T^0$

Two sets of data from Dutch dialects serve to show that the  $\phi$ -features of  $C^0$  are not simply an additional reflex of the agreement relation between  $T^0$  and the subject. The first set of data concerns agreement with coordinated subjects in Limburgian, and the second set concerns agreement with a special type of possessor construction in West Flemish.<sup>2</sup>

### 2.1 Agreement with Coordinated Subjects in Limburgian

The Limburgian CA paradigm is quite poor (as most CA paradigms are; see Hoekstra and Smits 1998): the complementizer agrees only with the second person singular subject *doow* ‘you’.

<sup>1</sup> Fuß (2008) also argues that CA is dependent on the features checked in  $T^0$ . The only difference is that in his analysis, the agreement morpheme on the complementizer is inserted postsyntactically. Fuß’s analysis makes the same prediction as the analyses discussed in the text, namely, that CA and TA should express the same  $\phi$ -feature-checking relation. Therefore, the empirical problems that we raise for the analyses in the text also apply to Fuß’s analysis.

<sup>2</sup> See Carstens 2003 for additional arguments against a  $T^0$ -to- $C^0$  movement approach to CA.

(2) *Limburgian*

Ich denk de-*s* doow Marie ontmoet-*s*.

I think that-2SG you.SG Marie meet-2SG

'I think that you will meet Marie.'

The finite verb also agrees with the second person subject in this example. The ending on the complementizer and the verb is the same: an *s*-suffix. This seems to confirm the idea that the agreement on the complementizer in some way depends upon the agreement on the finite verb.

The example in (3), however, shows that this idea cannot be maintained.

(3) *Limburgian*

Ich dink de-*s* [toow en Marie] kump.

I think that-2SG you.SG and Marie come.PL

'I think that you and Marie will come.'

The subject in this example consists of a second person singular pronoun (first conjunct) coordinated with a third person singular proper name (second conjunct).<sup>3</sup> The finite verb appears in the plural, agreeing with the complete coordination. The complementizer, on the other hand, agrees with the second person singular first conjunct. This clearly shows that the agreement on the complementizer and the agreement on the finite verb are not the result of the same  $\phi$ -feature-checking relation. Hence, CA cannot be used as an argument that  $C^0$  and  $T^0$  share the same set of  $\phi$ -features.<sup>4</sup>

2.2 *Agreement with External Possessors in West Flemish*

A similar argument can be found in a slightly different setting in West Flemish (WF). WF has a generalized CA paradigm (see Haegeman 1992 for details), in which not only pronominals but also DPs trigger CA. In (4), both the complementizer *omda(n)* 'because' and the finite auxiliary *een* 'have' agree with the subject, *die venten* 'those guys', and they have the same *n*-suffix. This might indicate that CA and TA depend upon the same  $\phi$ -feature-checking relation. (In the rest of the article, unless otherwise noted, examples are from West Flemish.)

(4) . . . *omda-n* die venten toen juste gebeld *een*.

because-PL those guys then just phoned have.PL

' . . . because those guys called just then.'

However, closer inspection of the WF data shows that in this case as well, the hypothesis of a single feature-checking relation cannot be maintained. Crucial for the discussion is (5), which

<sup>3</sup> The coordinated subject cannot have been derived from sentence coordination and concomitant conjunction reduction (as Aoun, Benmamoun, and Sportiche (1994) argue to be the case for similar constructions in Arabic) since the predicate in Limburgian can contain a reciprocal or consist of a verb like 'meet' that needs a collective subject (see Van Koppen 2005).

<sup>4</sup> For reasons of space, we do not discuss CA with coordinated subjects any further. For a detailed analysis, see Van Koppen 2005, 2007, to appear.

displays the external possessor agreement (EPA) pattern, a phenomenon that has, to the best of our knowledge, not previously been discussed in the literature.

- (5) ... *omda-n die venten* toen juste *underen computer* kapot was.  
 because-PL those guys then just their computer broken was  
 ‘... because those guys’ computer broke just then.’

In this example the subject, *die venten underen computer* ‘those guys’ computer’, seems to be discontinuous. The possessor *die venten* ‘those guys’ precedes the focusing temporal adverb *toen juste* ‘just then’, and the possessee *underen computer* ‘their computer’ follows this adverb. We return to this pattern in section 4.<sup>5</sup> For now, it suffices to observe that this example shows that the agreement on the complementizer is not necessarily the same as the agreement on the finite verb. Crucially, in (5) the complementizer agrees with the possessor *die venten* ‘those guys’ as shown by its plural *n*-ending. The finite verb, on the other hand, agrees with the singular possessee *underen computer* ‘their computer’. This example forces us to conclude that the agreement on the complementizer and the agreement on the finite verb are not the result of a unique feature-checking relation. Hence, CA cannot be used to support the idea that  $C^0$  and  $T^0$  share  $\phi$ -features.

### 2.3 Summary

First conjunct agreement (FCA) in Limburgian and EPA in WF show that CA and TA cannot result from a unique  $\phi$ -feature-checking relation. As a consequence, CA cannot be used to argue in favor of a  $\phi$ -feature dependency relation between  $C^0$  and  $T^0$ . Instead, the data suggest that CA and TA result from independent feature-checking relations.

### 3 Arguments against a Nonsyntactic Analysis of Complementizer Agreement

An alternative analysis of CA that has been implemented in several different ways is that CA is the result of a nonsyntactic, PF mechanism.<sup>6</sup> Ackema and Neeleman (2004), for instance, argue that certain instances of feature checking take place at the PF interface if both elements involved in the feature-checking relation are in one prosodic domain. They represent this schematically as follows:

- (6) {[A (F1) (F2) (F3) ... ] [B (F1) (F2) (F3) ... ]}  
 → {[A (F1<sub>i</sub>) (F2<sub>j</sub>) (F3<sub>k</sub>) ... ] [B (F1<sub>i</sub>) (F2<sub>j</sub>) (F3<sub>k</sub>) ... ]}

This schema should be read as follows: if A with features F1, F2, and F3 and B with features F1, F2, and F3 are in one prosodic domain, { }, the uninterpretable features F of A are related

<sup>5</sup> As pointed out by an anonymous reviewer, EPA is strikingly reminiscent of the ‘‘broad subject’’ discussed in Alexopoulou, Doron, and Heycock 2004. For more discussion, see Haegeman and Danckaert 2011.

<sup>6</sup> Chomsky (2007:19n26) also seems to suggest something along these lines: ‘‘[I]t might be that what appears phonetically at C, in some cases at least, is the result of subsequent concord, not agreement.’’ However, since Chomsky gives no further details about a formalization of concord, it is difficult to evaluate the implications of this remark. See Carstens 2000, Giusti 2008.

to the matching interpretable features F of B and/or vice versa, where the right edge of an XP is the right edge of a prosodic domain. CA is one of the cases Ackema and Neeleman present as an instance of prosodic checking.

- (7) Kpeinzen {*da-n die venten*} Marie kenn-en.  
 I.think that-PL those guys Marie know-PL  
 'I think that those guys know Marie.'

Here, the complementizer *da-n* 'that' and the subject *die venten* 'those guys' are in one prosodic domain. The uninterpretable  $\phi$ -features of the complementizer are checked at PF against the interpretable features of the subject within this prosodic domain, resulting in CA.<sup>7</sup>

Another implementation of this idea is put forward by Miyagawa (2009), who argues that CA is the result of string adjacency at PF. In particular, he says, "I will speculate that the complementizer portion of the agreement receives its valuation not in narrow syntax but in PF" (p. 68) and "[I]t appears that in complementizer agreement, the probe-goal relation is established strictly through string adjacency, of the type familiar in phrasal phonology" (p. 124). Similar linear adjacency approaches are proposed by Kathol (2001) and Zwart (2006), who appeal to analogy to account for CA.

Sections 3.1 and 3.2 provide arguments against these adjacency approaches. The first argument comes from cases where there is no adjacency or where C<sup>0</sup> and the subject are not in the same prosodic phrase, yet CA is found. The second argument shows that CA is sensitive to the internal structure of the subject. We show that this is unexpected from the point of view that CA is the result of simple adjacency or prosodic phrasing.

<sup>7</sup> Two notes are in order here. First, Ackema and Neeleman (2004) provide the following argument in favor of their prosodic checking account. They show that the complementizer and the subject in East Netherlandic are sensitive to intervention of an adverb. If the adverb *op den wärmsten dag van 't joar* 'on the hottest day of the year' intervenes between the complementizer *dat/darre* 'that' and the subject *wiej* 'we', CA is impossible.

(i) *East Netherlandic*

- a. ... \*dat/dar-re wiej noar 't park loop-t.  
 that/that-PL we to the park walk-PL  
 '... that we are going to the park.'
- b. ... dat/\*dar-re op den wärmsten dag van 't joar ook wiej noar 't park loop-t.  
 that/that-PL on the hottest day of the year also we to the park walk-PL  
 '... that on the hottest day of the year, we too are going to the park.'
- (Ackema and Neeleman 2004:235)

Van Koppen (2005, to appear) shows that East Netherlandic CA differs significantly from the other, more regular instances of CA found in WF. As we show below, WF allows intervention of this type. The analysis Van Koppen provides also explains the ungrammaticality of (ib).

Second, Fuß (2008) notes that the Limburgian coordination data discussed in section 2.1 are problematic for his analysis (see footnote 1). He notes that the dialects that allow this type of agreement with the first conjunct of a coordinated subject have the type of prosodic checking rule proposed by Ackema and Neeleman (2004). However, as we show in the text, this approach to CA faces several substantial problems. For more detailed arguments against a prosodic checking account of agreement with the first conjunct of a coordinated subject, see Van Koppen 2005, to appear.

### 3.1 Linear Adjacency/Prosodic Phrasing and Complementizer Agreement (I)

A linear adjacency or prosodic phrasing approach to CA predicts (a) that CA will be triggered if there are  $\phi$ -features adjacent to  $C^0$  and (b) that CA will not be triggered by the subject if  $C^0$  is separated from the subject by another XP. We show that both predictions are falsified by data from WF.

Consider the examples in (8). The complementizer *dat* ‘that’ in (8a) is the form that arises with a singular third person subject, as expected with the subject *zelfs Valère* ‘even Valère’. WF has the very marginal option of fronting a focused direct object across the subject, (8b). Fronting a third person plural direct object leads to a configuration in which the complementizer is adjacent to a set of third person plural interpretable features. However, this configuration does not lead to (the expected) CA with the fronted object DP, (8c).<sup>8</sup>

- (8) a. Kpeinzen *dat zelfs Valère* *zukken boeken* niet leest.  
 I.think that even Valère such books not reads
- b. ??Kpeinzen {*dat zukken boeken*} *zelfs Valère* niet leest.  
 I.think that such books even Valère not reads
- c. \*Kpeinzen {*da-n zukken boeken*} *zelfs Valère* niet leest.  
 I.think that-PL such books even Valère not reads  
 ‘I think that even Valère would not read such books.’

These examples are problematic for PF analyses of CA in yet another way. Consider the examples in (9), in which a plural subject, *zelfs men broers* ‘even my brothers’, cooccurs with a singular direct object, *zuknen boek* ‘such a book’ (see also Haerberli 1999 and Van Craenenbroeck and Van Koppen 2002 for similar examples). In (9b), the singular object is focused past the plural subject.

- (9) a. Kpeinzen *da-n/\*dat zelfs men broers* *zuknen boek* niet lezen.  
 I.think that-PL/\*that even my brothers such.a book not read
- b. ??Kpeinzen *da-n* *zuknen boek* *zelfs men broers* niet lezen.  
 I.think that-PL such.a book even my brothers not read
- c. \*Kpeinzen *dat* *zuknen boek* *zelfs men broers* niet lezen.  
 I.think that such.a book even my brothers not read  
 ‘I think that even my brothers do not read such a book.’

In (9a), the complementizer *dan* ‘that’ in  $C^0$  and the subject *zelfs men broers* ‘even my brothers’ agree in  $\phi$ -features. In (9b–c), the complementizer and the plural subject are not linearly adjacent

<sup>8</sup> Ackema and Neeleman (2004) actually provide this counterexample themselves. They argue that CA with the fronted direct object is impossible in this case because the object is in an  $\bar{A}$ -position. They assume that  $\phi$ -features must be checked against arguments in an A-position. Arguments in an  $\bar{A}$ -position are not felicitous as controllers of agreement relations. This type of account presupposes that while feature checking can be postponed until PF, the syntax of the language will determine whether agreement can take place. Thus, an agreement relation will be established in the syntax between  $C^0$  and the subject in an A-position, and features will be checked at PF. No such agreement will be established between  $C^0$  and an object in an  $\bar{A}$ -position; hence, no checking will take place. We thank an anonymous reviewer for detailed discussion of this point.

and they are not in one prosodic domain. Nevertheless, this configuration does lead to CA with the plural subject, which is unexpected from a prosodic phrasing or linear adjacency approach.

The marginal status of the examples in (8b) and (9b) is due to focus fronting and is independent of the agreement mechanism. Focus fronting is definitely marked in WF. The examples do not improve if both focused object and subject are singular (8d) or plural (9d).

(8) d. ??Kpeinzen {dat zuknen boek} *zelfs Valère* niet leest.  
I.think that such.a book even Valère not reads

(9) d. ??Kpeinzen *da-n* zukken boeken *zelfs men broers* niet lezen.  
I.think that-PL such books even my brothers not read

(10) shows the same pattern but with an adverb rather than an argument intervening between the complementizer and the subject. The complementizer *dan* ‘that’ in C<sup>0</sup> and the subject *men twee broers* ‘my two brothers’ are not in one prosodic domain and they are not linearly adjacent. However, this configuration leads to CA.

(10) a. . . . *da-n*/?\*dat toen juste men twee broers kwamen.  
that-PL/that then just my two brothers came  
‘ . . . that my two brothers came just then.’

b. . . . *da-n*/?\*dat juste ip dienen moment men twee broers kwamen.  
that-PL/that just at that moment my two brothers came  
‘ . . . that my two brothers came just at that moment.’

Observe that while focus fronting in (8) and (9) always leads to a degradation, an intervening adjunct does not. Examples such as (10a–b) are particularly troublesome for a PF account of CA.

### 3.2 Linear Adjacency/Prosodic Phrasing and Complementizer Agreement (II)

Another empirical argument against a linear adjacency account comes from the comparison between (11a) and (11b). (11a) displays the EPA pattern discussed above: in (11b), the possessor and the possessee form one constituent.

#### (11) West Flemish

a. . . . *omda-n*/\*omdat *André en Valère* toen juste *underen computer*  
because-PL/because André and Valère then just their computer  
kapot was.  
broken was  
‘ . . . because just then André and Valère’s computer was broken.’

b. . . . *omdat*/\*omda-n *André en Valère* *underen computer* kapot was.  
because/because-PL André and Valère their computer broken was  
‘ . . . because André and Valère’s computer was broken.’

In both (11a) and (11b), the complementizer *omdat/omdan* ‘because’ in C<sup>0</sup> and the possessor *André en Valère* ‘André and Valère’ are in one prosodic domain (and linearly adjacent). However, this configuration leads to CA with the possessor *André en Valère* in (11a), which displays the discontinuous possessor pattern, but not in (11b), where the possessor is part of the DP containing the possessee.

### 3.3 Summary

The data presented in this section show that CA does not result from a  $\phi$ -feature-checking relation at PF via either string adjacency (contra Miyagawa 2009) or prosodic phrasing (contra Ackema and Neeleman 2004).

## 4 External Possessor Agreement

In this section, we expand on the EPA pattern in WF, which is one cornerstone of our line of argumentation. Though a full account would take us too far, we will present the crucial properties of the construction and sketch a line of analysis.

### 4.1 The Properties of External Possessor Agreement in West Flemish

As already discussed, the crucial property of EPA is that, put informally, the subject seems to be split into a lower possessee subject and a higher possessor subject. The former agrees with the finite verb; the latter displays CA. In this section, we list the main properties of EPA and we outline an analysis. In addition to shedding new light on the problem of CA, the WF data are relevant for the study of the architecture of subject positions (see Cardinaletti 1997, 2004).

*4.1.1 The Possessee DP Is VP-External* As shown by (12), in the EPA pattern both the EP and the possessee DP are VP-external: in (12a), both the EP *Valère* and the possessee *zen broere* ‘his brother’ precede the marker of sentential negation *niet*, which is external to vP; in (12b), they appear to the left of an adjunct (*were* ‘again’) and a floating quantifier (*al* ‘all’); in (12c), they precede the temporal adjunct *atent* ‘always’.

- (12) a. . . . dat Valère toen juste zen broere *niet* in Gent was.  
           that Valère then just his brother not in Ghent was  
           ‘ . . . that just then Valère’s brother wasn’t in Ghent.’  
       b. . . . dat Valère toen juste zen koeien *were al* ziek woaren.  
           that Valère then just his cows again all ill were  
           ‘ . . . that just then Valère’s cows were again all ill.’  
       c. . . . dat Valère tegenwoordig zenen GSM *atent* an stoat.  
           that Valère these.days his mobile.phone always on stands  
           ‘ . . . that nowadays Valère’s mobile phone is always switched on.’

We assume that the possessee has moved to the canonical subject position, which we provisionally identify as Spec,TP.<sup>9</sup> We come back to the position of the EP in section 4.1.3.

*4.1.2 The External Possessor Has Subject Properties* In addition to triggering CA, the EP displays a second subject property: for speakers who allow a pronominal variant of the EP, it cannot be realized as a dative (13); instead, it must be realized as a nominative (14).

<sup>9</sup> Adopting an articulated hierarchy of subject positions, as in Tortora and Den Dikken 2009, would have implications for the label of this position. See footnote 10.



- (13) a. \*... dat *eur ier* toen juste *eur scheerapparaat* kapot was.  
 that her here then just her razor broken was  
 Intended meaning: ‘... that just then her razor broke.’
- b. \*... dat/da-n *under* toen juste *underen computer* kapot was.  
 that/that-PL them then just their computer broken was  
 Intended meaning: ‘... that their computer broke just then.’
- (14) a. %??. ... dat *zie ier* toen juste *eur scheerapparaat* kapot was.  
 that she here then just her razor broken was  
 Intended meaning: ‘... that just then her razor broke.’
- b. %??. ... da-n *zunder* toen juste *underen computer* kapot was.  
 that-PL they then just their computer broken was  
 Intended meaning: ‘... that their computer broke just then.’

4.1.3 *The External Possessor Is Higher than the Canonical Subject Position* As shown in (15), in EPA patterns the possessor and the possessee are separated by an adjunct that modifies the clausal domain; in (15a), this is a focused temporal adjunct *toen juste* ‘just then’. This adjunct is a crucial ingredient in licensing EPA: without it EPA is not possible, as shown in (15b).

- (15) a. ... omda-n/\*omdat André en Valère *toen juste* underen computer kapot was.  
 because-PL/because André and Valère then just their computer broken was
- b. ... omdat/\*omda-n André en Valère underen computer kapot was.  
 because/because-PL André and Valère their computer broken was  
 ‘... because André and Valère’s computer broke (just then).’

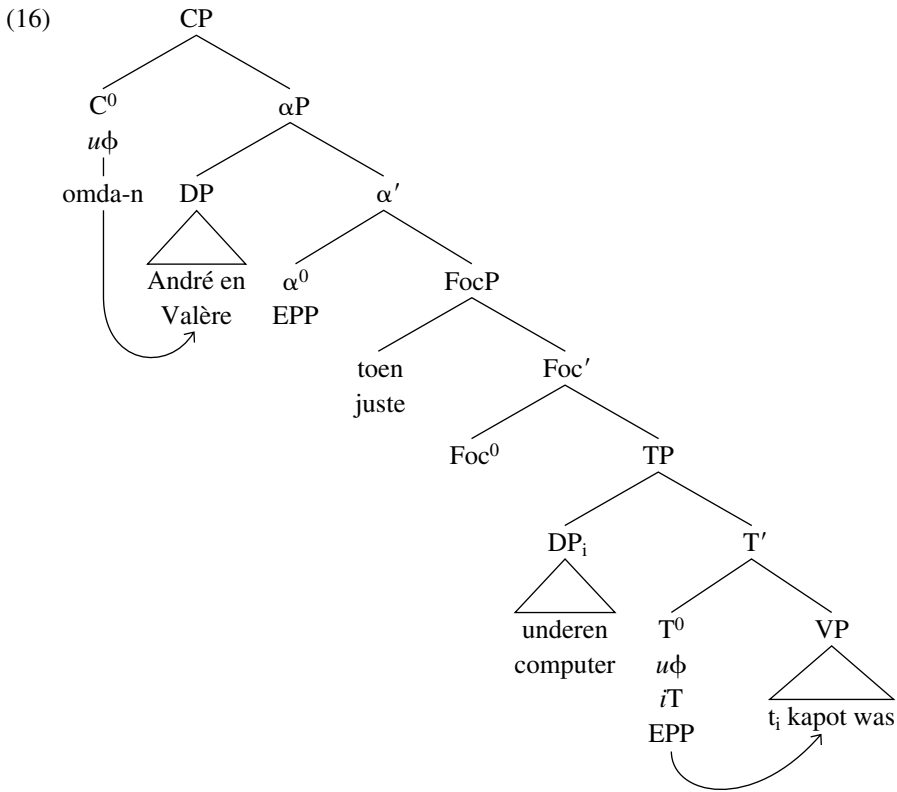
We postulate that the presence of the focused temporal adjunct defines two domains for the subject: the lower Spec,TP (i.e., the canonical subject position) and a higher position. Tentatively, given the subject properties of the EP, we identify this position as an A-position that, following Miyagawa (2009:chap. 3), we label *αP*. Our proposal is in the spirit of recent proposals for the architecture of the high IP domain such as Saito’s (2006) Theme projection; Shlonsky’s (1994) AgrCP; the high SubjP proposed by Cardinaletti (1997, 2004), Rizzi and Shlonsky (2006, 2008), Rizzi (2007), and Tortora and Den Dikken (2009);<sup>10</sup> and the high Topic position in the middle field proposed by Frey (2000, 2004) and Grewendorf (2005). We postulate that the projection of the position is licensed by the availability of the focused adjunct, though the precise conditions that are involved remain to be worked out.

## 4.2 Complementizer Agreement and the External Possessor: Two Probes, Two Goals

The focused temporal adjunct is merged in a focus projection that allows for the projection of the high subject projection. Along the lines of Carstens (2003), we propose that both  $C^0$  and  $T^0$

<sup>10</sup> Haegeman and Danckaert (2011) explore the analysis of the EP in line with recent cartographic proposals for multiple subject positions in the spirit of Cardinaletti 1997, 2004, Rizzi 2007, and Tortora and Den Dikken 2009. This is not the place to develop this point, which is tangential to the main argument of our article.

are associated with uninterpretable features:  $C^0$  agrees with the most local goal, the external possessor base-generated in  $\alpha P$ ;  $T^0$  agrees with the most local goal, the subject in  $\text{Spec,VP}$ . (16) is a representation of (15a).<sup>12</sup>



<sup>11</sup> See Haegeman 2004 for detailed arguments that EPs are not extracted from the DP containing the possessor.

<sup>12</sup> When we combine this analysis with the data on CA with coordinated subjects, we expect to find cases in which the complementizer agrees with the first conjunct of the coordinated EP. Unfortunately, we have not yet been able to find a speaker who allows both EPA and FCA. Hence, we have not yet been able to test this prediction.

In terms of feature inheritance (FI), (16) is problematic in that after FI [ $u\phi$ ] remains on  $C^0$  (see Richards 2007, Chomsky 2007). Two solutions can be envisaged: either allowing multiple FI, whereby the features of  $C^0$  are inherited by  $T^0$  and by a higher functional head in the C domain (but see Richards 2007 for arguments against this); or, in a more radical departure from the original proposal, postulating multiple phases, each with FI (Van Craenenbroeck and Van Koppen 2007).

For sentences without an EP and for which, by hypothesis,  $\alpha P$  is not projected, we assume that both  $C^0$  and  $T^0$  have uninterpretable  $\phi$ -features and probe for the subject. For a precise implementation that remains compatible with current theoretical assumptions, see Carstens 2000, 2003. Along the lines of Carstens's work, we would assume that owing to its case feature, the subject in  $\text{Spec,TP}$  remains active until the (CP) phase is completed—that is, even after having been checked by  $T^0$ .

Since the focus of this article is CA, we have so far only illustrated EPA in embedded domains. An important observation, however, is that EPA is actually only available in embedded domains and that it is incompatible with  $T^0$ -to- $C^0$  movement: (17) shows that, regardless of the agreement patterns, EPA is not available in subject-initial and non-subject-initial verb-second root clauses.

- (17) a. \*Jehan was toen juste zen scheerapparaat kapot.  
           Johan was then just his razor broken  
       b. \*Jehan was/woaren toen juste zen computers kapot.  
           Johan was/were then just his computers broken  
       c. \*Was Jehan toen juste zen scheerapparaat kapot?  
           was Johan then just his razor broken  
       d. \*Was/Woaren Jehan toen juste zen computers kapot?  
           was/were Johan then just his computers broken

We assume that the availability of EPA is dependent on the licensing of nominative case on the EP (see section 4.1.2). In embedded clauses, the uninterpretable  $\phi$ -features on  $C^0$  act as a probe and CA can introduce an additional instance of nominative case, thus licensing the EP (see also Haegeman 1986, 1992). In nonembedded (verb-second) clauses, however, head movement from  $T^0$  to  $C^0$  checks the uninterpretable  $\phi$ -features of  $C^0$  (Den Besten 1977, 1989). This means that  $C^0$  is no longer a probe and that the additional nominative case required for licensing of the EP is unavailable.<sup>13</sup>

The analysis of EPA provided here crucially depends on the hypothesis that CA and TA do not result from the same feature-checking relation between  $\phi$ -features of  $T^0$  and the subject. CA with the EP signals the presence of a discrete  $\phi$ -feature set on  $C^0$ , which appears in addition to the  $\phi$ -feature set on  $T^0$  that leads to TA.

## 5 Conclusion

In this remark, we have presented empirical evidence showing that CA is the result neither of  $\phi$ -feature sharing between  $C^0$  and  $T^0$  nor of a PF feature-checking relation. The data discussed here also lead to the conclusion that CA cannot be construed as evidence supporting the claim that there is a  $\phi$ -feature dependency between  $C^0$  and  $T^0$ . The data discussed, and in particular the WF

<sup>13</sup> An alternative would be to assume that the projection of FocP creates an intervention effect for the movement of  $T^0$  to  $C^0$ , much in the spirit of Rizzi's (1997) account of the incompatibility of topicalization and  $T^0$ -to- $C^0$  movement in English (ib) in terms of intervention (see also Cinque and Rizzi 2010:65).

- (i) If (tomorrow) you should see him . . .  
 (ii) Should (\*tomorrow) you see him . . .

EPA phenomenon, support analyses such as that developed by Carstens (2003), according to which CA is the result of a syntactic  $\phi$ -feature-checking relation between the  $\phi$ -features of  $C^0$  and the subject and TA is the result of a syntactic  $\phi$ -feature-checking relation between  $T^0$  and the subject. The EPA data also contribute to a deeper understanding of the architecture of subject positions.

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