

# One Probe, Multiple Goals: the case of First Conjunct Agreement<sup>\*</sup>

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In this paper I discuss the first part of my thesis, namely variation concerning agreement with coordinated subjects in Dutch dialects. I show that a verb or a complementizer in some variants of Dutch agrees with the first conjunct of a coordinated subject and in other variants with the coordinated subject as a whole. I argue that the locus of this micro-variation should be attributed to the post-syntactic lexicon. The syntactic derivation in these varieties is identical. The analysis is extended to the typologically unrelated languages Irish and Arabic.

## 1. Introduction

Corbett (1983) shows that languages have different strategies to deal with agreement with coordinated arguments. Some languages agree with one of the conjuncts of the coordinated argument (so-called *partial agreement*), others agree with the “resolved” features of the coordinated argument as a whole (henceforth referred to as *resolved agreement*). The resolved feature set is a combination of the feature sets of the conjuncts. An illustration of these two strategies is provided in (1a) and (1b) respectively (from Johannessen 1998:31, who attributes the example to Van Oirsouw 1987).

- (1) a. **Gatal**      **?el-walad** we-l-banaat    ?el-bisse  
      killed-<sub>3SG.M</sub> [the boy    and-the-girls] the cat  
      b. **?el-walad** **we-l-banaat** **gataluu**    ?el-bisse  
      [the boy    and-the-girls] killed-<sub>3PL.M</sub> the cat  
      ‘The boy and the girls killed the cat.’

[Palestinian Arabic]

In (1a) the finite verb agrees with the first conjunct of the coordinated subject. In (1b), however, the feature specification on the finite verb, which is [3PL.M], is not identical to either of the feature bundles of the conjuncts, which are [3SG.M] and [3SG.F] respectively. Rather, it carries a combination of these features. The resolved feature set of a coordination of DPs is formed systematically. Corbett (1983) shows that the value for number in the resolved feature set is always plural. The value for person in this phi-feature set is dependent on the specification for person in the feature sets of the conjuncts. When (at least) one of the conjuncts has the specification first person, the resolved feature set is also first person. When none of the conjuncts is first person, but (at least) one of them is second person, the resolved

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feature set is specified for second person. Finally, when none of the conjuncts is first or second person, the value for person in the resolved feature set is third person.

The same pattern can be found in dialects of Dutch. I illustrate this on the basis of examples displaying so-called complementizer agreement (henceforth CA, cf. among others Hoekstra & Smits 1997, Van Haeringen 1958, Haegeman 1992, Zwart 1993). CA is the phenomenon whereby a complementizer agrees in phi-features with the embedded subject. An example of CA is provided in (2) below (from Haegeman 1992).

- (2) Kpeinzen **da-n** zunder **goa-n** kommen.  
 I.think that-PL they go-PL come  
 ‘I think that they are going to come.’

[Lapscheure Dutch]

In this example, the complementizer *da* ‘that’ agrees with the embedded subject *zunder* ‘they’ as is indicated by the plural inflection on this complementizer. When the complementizer is coordinated, dialects differ as to whether they show partial agreement or resolved agreement (data in (3b) are from the SAND-project, cf. Barbiers et al. 2005).

- (3) a. Ich dink **de-s** **doow** en ich ôs kenne treffe.  
 I think that-2SG [you<sub>SG</sub> and I]<sub>1PL</sub> each.other<sub>1PL</sub> can-PL meet  
 ‘I think that you and I can meet.’

[Tegelen Dutch]

- b. **Oa-n** **Bart en** **Liesje** nie ipletn ...  
 if-3PL [Bart and Liesje]<sub>3PL</sub> not watch.out  
 ‘When Bart and Liesje don’t watch out...’

[Tielt Dutch]

In (3a) the complementizer *det* agrees with the first conjunct of the coordinated subject, *doow* ‘you’, resulting in the form *des*. If the complementizer agrees with the resolved feature set of the coordinated subject, it should have shown [1PL]-agreement. In (3b) the complementizer *oa* ‘if’ shows plural agreement. This means that it does not agree with one of the conjuncts as they are both singular. Rather it agrees with the resolved feature set of the coordinated subject. In this paper, I show that it is systematically determined whether agreement with a coordinated subject leads to partial agreement or resolved agreement. I argue that this type of variation can be fully reduced to the lexicon. The syntactic derivation of examples (3a) and (3b) is exactly the same. The variation arises at the level of morphology, which I assume to be post-syntactic (cf. Halle & Marantz 1993). More in particular, I show that it is the affix inventory of the language which is responsible for this type of variation.

This paper is organized as follows. In section 2 I provide an analysis for the data concerning CA with coordinated subjects in Dutch dialects. In section 3 I explore the agreement relation between the finite verb and the coordinated subject.<sup>1</sup> Finally section 4 sums up the results of this paper.

<sup>1</sup> In this paper I restrict myself to verbal agreement with coordinated subject in SVO- and CSOV-contexts. For a discussion of agreement with coordinated subjects in VSO-contexts in Dutch dialects, I refer the reader to Van Koppen (2005).

## 2. Complementizer agreement with coordinated subjects in Dutch dialects

## 2.1 Prerequisite: the analysis of complementizer agreement

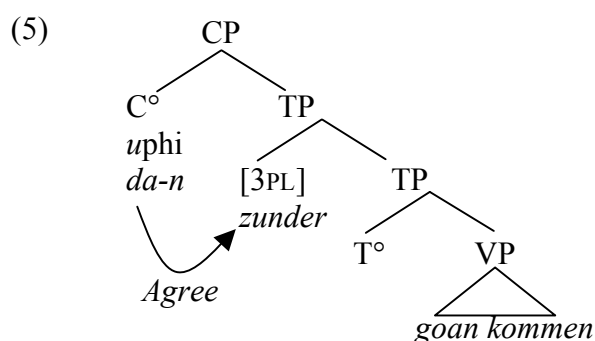
Before I discuss the analysis of CA with coordinated subjects, I will first make explicit the analysis of CA with non-coordinated subjects. Reconsider the example in (2), repeated here as (4).

- (4) Kpeinzen **da-n** zunder **goa-n** kommen.  
 I.think that-PL they go-PL come  
 ‘I think that they will come.’

[Lapscheure Dutch]

I assume, following among others Van Craenenbroeck & Van Koppen (2002) and Carstens (2003), that the presence of an affix on the complementizer indicates the presence of phi-features on  $C^\circ$ . These phi-features on  $C^\circ$  are – just like the phi-features on  $T^\circ$  – uninterpretable in the sense of Chomsky (1995), which means that they require syntactic checking. Feature checking takes place via the operation Agree (Chomsky 2000). This mechanism relates the uninterpretable, or in more recent terminology unvalued, phi-features of a certain head (the Probe) to a set of interpretable (or valued) phi-features (the Goal) in the c-command domain of the Probe. In this analysis of CA there are (at least) two sets of unvalued phi-features in the extended VP-domain of dialects with CA: on  $T^\circ$  and on  $C^\circ$ . The former features are spelled out on the finite verb, the latter on the complementizer. This means that the agreement morphology on the finite verb is the result of different agreement relation than that on the complementizer. As the affix on the complementizer and the one on the finite verb are not dependent on the same relation (as for instance argued by Zwart 1993, 1997), it should be possible that the affix on the finite verb spells out different features than the one on the complementizer. The example in (3a) illustrates this: the affix on the complementizer reflects a partial agreement relation, whereas the one on the finite verb indicates resolved agreement.

Consider the structure in (5). The subject has moved to Spec,TP.<sup>2</sup> Then  $C^\circ$  is merged.  $C^\circ$  has unvalued phi-features, which have to be checked. Agree searches the c-command domain of  $C^\circ$  and finds the interpretable phi-features of the subject as a potential Goal. This agreement relation is spelled out as CA.



<sup>2</sup> It is standardly assumed that once the subject has checked its case features against  $T^\circ$  it can no longer be used as a Goal since it is not active anymore (cf. Chomsky 2000). Carstens (2003) among others modifies this view and argues that Goals become inactive when the phase in which they checked their unvalued features is spelled out.

## 2.2 CA with a coordinated subject

In this subsection, I provide an account for the fact that in Tegelen Dutch the complementizer agrees partially with the coordination, whereas in Lapscheure Dutch it shows resolved agreement. Consider again the examples in (3a) and (3b), repeated here as (6a) and (6b) respectively.

- (6) a. Ich dink **de-s** **doow** en ich ôs kenne treffe.  
 I think that-2SG [you<sub>SG</sub> and I]<sub>1PL</sub> each.other<sub>1PL</sub> can-PL meet  
 ‘I think that you and I can meet.’

[Tegelen Dutch]

- b. **Oa-n** **Bart en** **Liesje** nie ipletn ...  
 if-3PL [Bart and Liesje]<sub>3PL</sub> not watch.out  
 ‘When Bart and Liesje don’t watch out...’

[Tielt Dutch]

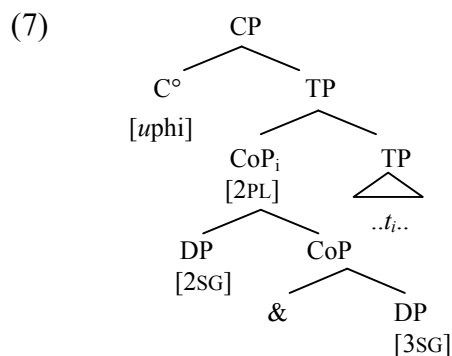
I propose that the locus of the variation found between Tegelen Dutch and Tielt Dutch, lies in the post-syntactic lexicon rather than in the syntactic derivation. I show that when Agree searches for a Goal in the c-command domain of Probe C° and is confronted with a coordinated subject, it finds two equally local, matching Goals: (i) the phi-feature set present at the maximal projection dominating both conjuncts and (ii) the phi-feature set of the first conjunct. I propose that Agree relates the Probe to these Goals simultaneously. The decision as to which one of these Goals eventually determines the agreement morphology on the complementizer is postponed to the level of Morphology. It is made on the basis of the affix inventories present in the language. When the relation with the phi-feature set of the maximal projection determines the affix on the complementizer, the result is resolved agreement. When, on the other hand, the relation with the first conjunct is spelled out, the result is partial agreement. In short, I argue for an intricate interaction between Syntax and Morphology. During the syntactic derivation the potential Goals for a certain Probe are identified. At the level of Morphology it is decided which of these Goals determines the affix on the Probe.

In subsection 2.2.1, I discuss the syntactic part of the derivation in detail. This derivation is similar for Tegelen Dutch and Tielt Dutch. The morphological part of the derivation will be provided in subsection 2.2.2. Subsection 2.2.3 discusses a prediction concerning the relation between locality and agreement with coordinated subjects. Finally section 2.2.4 summarises this section.

### 2.2.1 CA with a coordinated subject: syntactic derivation

Reconsider the examples in (6). The relevant part of the syntactic derivation of these examples is provided in (7). The structure contains the phi-feature specification belonging to the example in (6a) from Tegelen Dutch. However, the same structure could be used to represent the derivation of example (6b) from Tielt Dutch, the only difference would be the phi-feature specification.

I assume coordinated subjects to be organised in a Coordination Phrase, henceforth CoP, cf. among others Kayne 1994, Johannessen 1998, Munn 1993 for argumentation). Furthermore, I assume that the so-called ‘resolved’ features are present on CoP (the maximal projection dominating all conjuncts) (cf. also Soltan 2004).



The structure in (7) represents the stage in the derivation where  $C^\circ$  is merged with TP. The coordinated subject (CoP) has moved to Spec,TP. By assumption,  $C^\circ$  in dialects with CA has uninterpretable phi-features. The mechanism Agree has to search for a matching Goal within the c-command domain of  $C^\circ$ . This c-command domain contains (at least) three potential Goals with matching features<sup>3</sup>, i.e. CoP, the first conjunct and the second conjunct. Although all three Goals match the features of the Probe, the Probe ends up agreeing with either CoP or with the first conjunct. It never agrees with the second conjunct in the languages and dialects under discussion.<sup>4</sup> I argue this is the case because the second conjunct is never local enough to serve as a Goal. I define locality in terms of c-command. The definitions of respectively ‘equally local’ and ‘more local’ are provided in (8) and (9).

(8) **Equally local**

Y and Z are equally local to X iff,

- (i) X c-commands both Y and Z
- (ii) the set of nodes that c-command Y is equal to the set of nodes that c-command Z.

(9) **More local**

Y is more local to X than Z iff,

- (i) X c-commands both Y and Z
- (ii) the set of nodes that c-command Y is a proper subset of the set of nodes that c-command Z.

The definition of c-command is given in (10).

(10) **C-command**

X c-commands Y, iff

- (i) X excludes Y<sup>5</sup>
- (ii) the first node that dominates X, also dominates Y.

For the structure in (7), this means that CoP and the first conjunct are more local to  $C^\circ$  than the second conjunct, as the former two potential Goals are c-commanded by a proper subset of the nodes that c-command the second conjunct. CoP and the first conjunct are only c-

<sup>3</sup> ‘Matching features’ are features that are of the same type (for instance phi-features). They do not need to have the same values.

<sup>4</sup> Agreement is never attested in the languages under discussion here. However there are several languages, like for instance Swahili (cf. Johannessen 1998), which display this phenomenon. I will not go into this type of languages here but focus on the interaction between resolved agreement and partial agreement with the first conjunct.

<sup>5</sup> X excludes Y if no segment of X dominates Y.

commanded by  $C^\circ$ , whereas the second conjunct is c-commanded by  $C^\circ$  and by the first conjunct.

CoP and the first conjunct, on the other hand, are equally local with respect to  $C^\circ$ . They are c-commanded by the same set of nodes: namely only by  $C^\circ$ . The question arises what happens if the c-command domain of the Probe contains two equally local Goals. Let's first see what happens when the c-command domain of the Probe contains just one suitable Goal. Agree identifies an element as a suitable Goal when it meets the following requirements: it has to be local and it has to have matching features (cf. Chomsky 2000, 2001a,b). I would like to propose that it is this relation between Probe and Goal that takes care of 'feature valuation/checking', rather than for instance copying of the values of the Goal's features onto the Probe. This conception of Agree is in a sense similar to 'feature sharing' as proposed by Frampton & Gutmann (2000) and also to the conception of agreement as adopted in HPSG-accounts of agreement (cf. for instance Pollard & Sag 1994, Kathol 1999): a Goal shares its features with the Probe as it is in an agreement relation with the Probe.

In the configuration in (7), there are two potential Goals. They are equally local with respect to the Probe and they both have matching features. Normally, when the c-command domain of a Probe contains more than one suitable Goal, the more local Goal is selected over the other available Goal(s) (cf. Chomsky 2000, 2001a,b). As it is not the case that one of the Goals is more local to the Probe than the other, this principle does not work here. There are two ways to interpret the observation that Agree always relates the Probe to the more local Goal: either Agree 'sees' all available Goals in the c-command domain of the Probe, but only relates the most local Goal to the Probe or Agree only 'sees' the most local Goal with respect to the Probe. Although nothing really hinges on it, I assume that the latter interpretation of this statement is correct: Agree only 'sees' the most local Goal in the c-command domain of the Probe. When two Goals are equally local, they are found in the same application of the operation Agree. I assume that as they are identified as suitable Goals simultaneously, Agree establishes a relation between both these Goals and the Probe. The only thing the mechanism Agree can do is relate a Probe to a Goal, it cannot choose to not relate a certain Goal to the Probe. Arguably, it cannot select one Goal over the other when both are equally local. This means that the derivation as such (with one Probe related to more than one Goal) is sent off to PF and hence to Morphology. Note that this does not result in a problem for the syntactic component as the features of the Probe are in a relation with a Goal. The syntactic requirement to relate a Probe to a Goal is hence fulfilled. I would like to propose that it is only at this level that it is decided which one of these two Goals determines the agreement morphology on the Probe.

Concretely, this means that during the syntactic derivation of both example (6a) from Tegelen Dutch and example (6b) from Tiel Dutch, Probe  $C^\circ$  is related to two Goals simultaneously: CoP and the first conjunct in Spec,CoP. The derivation of these two examples is exactly the same up until this point.

## 2.2.2 CA with a coordinated subject: morphological part of the derivation

### 2.2.2.1 Introduction

In the case that a Probe for agreement is related to only one Goal, the features expressed on the Probe are determined by this Goal. Put differently, the agreement affix on the Probe reflects (a part of) the feature specification of the Goal. Halle (1997) suggests that the insertion of affixes is regulated via the Subset Principle. The definition of this principle is provided in (11) (Halle 1997: 428, cf. also Harley & Noyer 1999:5).

**(11) Subset Principle**

*The phonological exponent of a Vocabulary Item is inserted into a morpheme in the terminal string if the item matches all or a subset of the grammatical features specified in the terminal morpheme. Insertion does not take place if the Vocabulary Item contains features not present in the morpheme. Where several Vocabulary Items meet the conditions for insertion, the item matching the greatest number of features specified in the terminal morpheme must be chosen.*

When there is only one Goal for a certain Probe, the Subset Principle defines which affix is more suitable to replace the feature bundle on the Probe, i.e. which feature bundle matches most features of the Probe.

In (7), the Probe is not related to just one Goal, but to two Goals. The question arises what happens if Morphology is confronted with such a configuration. There are several logical possibilities:

- (i) Both agreement relations are spelled out, resulting in two affixes on the Probe. Each affix reflects the feature specification of one Goal.
- (ii) One of the agreement relations is spelled out, resulting in one affix on the Probe. The feature specification of only one of the two Goals is spelled out on the Probe.
- (iii) Both agreement relations are spelled out, resulting in one affix expressing (a subset of) the features of both Goals at the same time.
- (iv) None of the agreement relations are spelled out, resulting in either a crashing derivation (Morphology is not able to cope with the situation) or in no agreement affix on the Probe.

Which one of these possibilities arises is an empirical question. I show that when this situation arises in the languages and dialects under discussion in this paper, the second option seems to be utilised: Only one of the two agreement relations is spelled out. Morphology selects one of the two available Goals to determine the agreement morphology on the Probe. The relation between the Probe and the Goal that results in the most specific agreement morphology will be spelled out. For the structure in (7), this means that the relation between  $C^\circ$  and CoP takes precedence over that between  $C^\circ$  and the first conjunct in Spec,CoP if the former relation results in more specific morphology on the Probe and vice versa.

More in particular, on the basis of the Subset Principle the most suitable affix for each of these two relations is selected, resulting in two affixes: each affix matches the features of the relation it replaces best. Only one of these two affixes can eventually appear on the Probe. The question arises which mechanism selects the affix that will appear on the Probe. I assume that the mechanism responsible for this decision selects to insert the more specific of the two affixes, i.e. the affix expressing most features. Again this can be seen as an instance of the mechanism underlying the Subset Principle: a set of affixes is compared and the one expressing most features is selected.

This analysis is applied to Tegelen Dutch in section 2.2.2.2 and Tiel Dutch in section 2.2.2.3. In section 2.2.2.4 I discuss the German dialect Bavarian. This dialect displays a combination of partial agreement and resolved agreement.

## 2.2.2.2 Tegelen Dutch

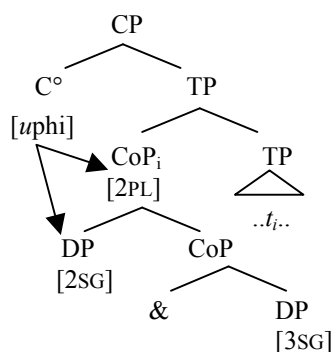
Recall the example in (3a), repeated here as (12).

- (12) Ich dink **de-s** **doow** en ich ôs kenne treffe.  
 I think that-2SG [you<sub>SG</sub> and I]<sub>1PL</sub> each.other<sub>1PL</sub> can-PL meet  
 ‘I think that you and I can meet.’

[Tegelen Dutch]

At the level of Morphology, Probe  $C^\circ$  is related to two Goals: the phi-feature set of CoP and that of the first conjunct in Spec,CoP. This configuration is given in (7) and repeated in (13).

(13)



Now the question arises which of these Goals will eventually determine the agreement morphology on the Probe, i.e. on the complementizer. In order to determine this we have to investigate the complementizer agreement paradigm of this dialect.

(14)

	CA
1SG	det
2SG	de-s
3SG	det
1PL	det
2PL	det
3PL	det

The table in (14) shows that only with a [2SG]-subject, the complementizer carries an agreement affix. The other person/number combinations do not result in agreement on the complementizer. In the structure in (13) there is a choice: either the relation between  $C^\circ$  and a [2SG]-Goal, or the relation between  $C^\circ$  and the [2PL]-Goal has to be spelled out. The former relation leads to the *s*-affix on the complementizer, whereas the latter does not lead to an agreement ending at all.<sup>6</sup> What the paradigm in (12) clearly shows is that in this case Morphology spells out the relation between  $C^\circ$  and the first conjunct of the coordinated subject, resulting in partial agreement on the complementizer. This relation leads to more specific agreement morphology than the other available relation.

Given the assumptions on affix insertion, the configuration in (13) should not be able to lead to agreement on the complementizer with the coordinated subject as a whole. The reason

<sup>6</sup> It is of course possible that in the person/number combinations that do not trigger overt agreement on the complementizer, there is actually a zero affix present. If this is the case, this zero affix is presumably less specific than the *s*-affix, as the latter singles out a specific person/number combination: second person singular, whereas the former behaves more like an elsewhere affix: it is inserted in all sorts of different phi-feature environments.



for this is that this relation leads to less specific agreement morphology than the relation between  $C^\circ$  and the first conjunct in Spec,CoP. This prediction is borne out by the ungrammaticality of the example in (15).

- (15) \* ... **det** **doow** **en** **ich** ôs treff-e.  
 ... that [you<sub>sg</sub> and I]<sub>1pl</sub> each.other<sub>1pl</sub> meet-pl  
 [Tegelen Dutch]

This analysis also predicts that when the second person pronoun does not constitute the first but the second conjunct, partial agreement is no longer possible. The reason for this is that in this case, the pronoun is not local enough to serve as a Goal for  $C^\circ$ . As the example in (16) shows, this prediction is also borne out.

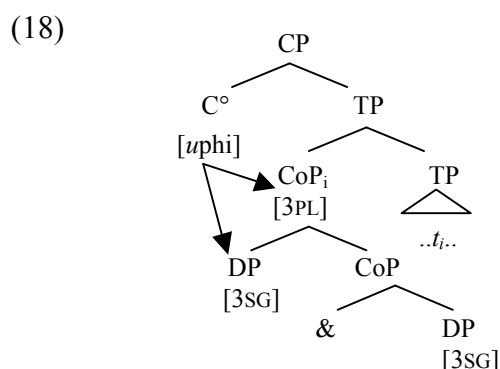
- (16) ... **det** / \***de-s** Marie en doow uch treff-e.  
 that / that-<sub>2SG</sub> [Marie and you<sub>SG</sub>]<sub>2PL</sub> each.other<sub>2PL</sub> meet-pl  
 ‘...that Marie and you will meet each other.’  
 [Tegelen Dutch]

### 2.2.2.3 Tielt Dutch

Now that we have established how partial agreement in dialects like Tegelen Dutch comes about, let’s look at resolved agreement in the dialect of Tielt. First recall the example in (3b) repeated here as (17).

- (17) **Oa-n Bart en Liesje** nie ipletn ...  
 if-<sub>3PL</sub> [Bart and Liesje]<sub>3PL</sub> not watch.out  
 ‘When Bart and Liesje don’t watch out...’  
 [Tielt Dutch]

When the derivation of this example is passed on to the level of Morphology, Probe  $C^\circ$  is related to two Goals: CoP with [3PL]-features and the first conjunct with [3SG]-features. This configuration is provided in (18).



When this derivation reaches the morphological component, it has to be decided which one of these Goals determines the affix on the Probe. In order to do so, it first has to be determined which affixes go with which Goals. Consider the paradigm of CA in Tielt Dutch below in (19). Apart from the complementizer and potential inflection, the subject pronouns are also provided (i.e. *kik*, *je*, *se*, *me*, *je*, *ze*).

(19)

	CA
1SG	oa-kik
2SG	oa-je
3SG	oa-se
1PL	oa-me
2PL	oa-je
3PL	oa-n-ze

The only person/number combination with a clear agreement affix belonging to it is [3PL]. In all other person there does not appear to be an agreement affix present. However, Haegeman (1992) argues for the dialect of Lapscheure (which is spoken in the same dialect area) that the first person plural also has an *n*-affix on the complementizer.<sup>7</sup> In this example this affix cannot be detected as it assimilates with the initial consonant of the pronoun. Assuming Tiel Dutch is not different from Lapscheure Dutch in this respect, this *n*-affix can be taken to either represent the feature specification [1PL] or [3PL]. The [2PL] in this dialect seems to behave like the [2SG]. For instance, the clitic pronoun for the [2SG] is equal to the one for the [2PL], as is clear from the table in (19). This is a common phenomenon in varieties of Dutch (cf. Maclean & Bennis 2005, also Goeman 1999:250 for an overview of the literature on the second person plural in Dutch dialects).<sup>8</sup> Therefore, I assume that the *n*-affix actually has the feature specification [PL]. It is not inserted in the second person plural, as the plural feature is actually not present or active in this case. This means that the relation between C° and CoP in (18) results in the presence of an *n*-affix on the complementizer, whereas the relation between C° and the first conjunct does not result in agreement morphology. Again it is the relation resulting in an agreement affix that takes precedence over the relation which does not result in an agreement affix.

#### 2.2.2.4 Bavarian

In the preceding subsections, two cases were discussed with the configuration in which there is one Probe related to two Goals. In both dialects it is the case that one of the relations does not result in an agreement affix on the Probe, whereas the other one does. In both dialects it is the relation resulting in an affix which determines the agreement morphology on the Probe. The only difference between these dialects is that in Tegelen Dutch it is the relation with the first conjunct that gets realized on the complementizer, resulting in partial agreement, whereas in Tiel Dutch it is the one with CoP, resulting in resolved agreement. In this subsection, I discuss a German dialect in which both relations result in an affix on the complementizer, namely Bavarian.

Bavarian, like Tegelen Dutch, has CA with [2SG]-subjects. Interestingly, this German dialect also displays CA with [2PL]-subjects. This is illustrated in example (20) (cf. Bayer 1984:233).

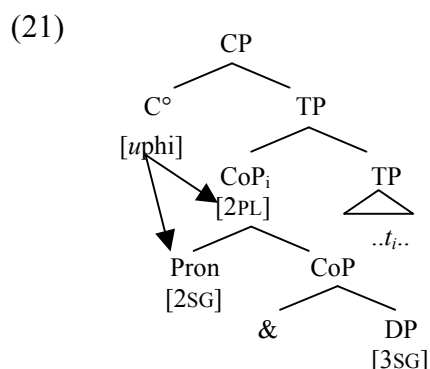
<sup>7</sup> In the dialect of Lapscheure (cf. Haegeman 1992) there is also an *n*-affix present in the first person singular. This affix cannot appear in this dialect. Furthermore, she provides some evidence in favour of the idea that there is an underlying *t*-element in the third person singular and the second person. I refer to Van Koppen (2005) for an in depth discussion of CA in this dialect and also for arguments showing that this *t*-element is indeed present, but should not be considered an affix.

<sup>8</sup> The question arises at this point how the fact that the second person plural behaves like a second person singular should be implemented in the system. One way of implementing it would be to stipulate an impoverishment rule (cf. Bonet 1991) that states that in the environment of the feature specification second person, plural is not active.

- (20) a. ... **da\_-st** **du** kumm-st.  
           that-2<sub>SG</sub> you<sub>SG</sub> come-2<sub>SG</sub>  
           ‘...that you are coming.’  
       b. ... **da\_-ts** **ihr** kumm-ts.  
           that-2<sub>PL</sub> you<sub>PL</sub> come-2<sub>PL</sub>  
           ‘...that you are coming.’

[Bavarian]

In Bavarian the subject can also be coordinated, resulting in the same configuration as discussed above for Tegelen Dutch and Tielts Dutch, in which the C°-Probe has both CoP and the first conjunct as its Goals. As this dialect not only shows agreement with [2<sub>SG</sub>]-subjects, but also with [2<sub>PL</sub>]-subjects, it is particularly interesting for the current investigation. It provides a case in which both the relation between C° and CoP and that between C° and the first conjunct in Spec,CoP results in CA. This is represented in the structure in (21).



The question arises which Goal, i.e. the one with [2<sub>sg</sub>]-features or the one with [2<sub>pl</sub>]-features, determines the affix on the complementizer. Consider the table in (22) displaying the CA-paradigm in Bavarian (cf. Bayer 1984:233).

(22)

feature specification subject	affix on the complementizer
1SG	
2SG	-st
3SG	
1PL	
2PL	-ts
3PL	

This table shows that there are two agreement affixes in the CA-paradigm; one appears with [2<sub>SG</sub>]-subjects, the other with [2<sub>PL</sub>]-subjects. This means that the feature inventory of Bavarian can be represented as in (23).<sup>9</sup>

- (23) [2<sub>SG</sub>] → -st  
       [2<sub>PL</sub>] → -ts

With this feature inventory in mind, consider the examples in (24).

<sup>9</sup> At this point the question arises if the feature value singular should be present in the feature inventory. Harley & Ritter (2002) for instance argue that negative feature values, expressing the default value of a feature, are not present in the feature inventory. However, I do assume that the default values of features are present in the affix inventory (cf. also Vanden Wyngaerd 1994, Rooryck 2000, Van Koppen 2005).

- (24) a. ... **da\_-st** **du** und d'Maria an Hauptpreis gwunna hab-ds.  
           that-2<sub>SG</sub> [you<sub>SG</sub> and the Maria]<sub>2<sub>PL</sub></sub> the first.prize won have-2<sub>PL</sub>
- b. ... **da\_-ts** **du** **und** **d'Maria** an Hauptpreis gwunna hab-ds.  
           that-2<sub>PL</sub> [you<sub>SG</sub> and the Maria]<sub>2<sub>PL</sub></sub> the first.prize won have-2<sub>PL</sub>  
           ‘...that Maria and you have won the first prize.’

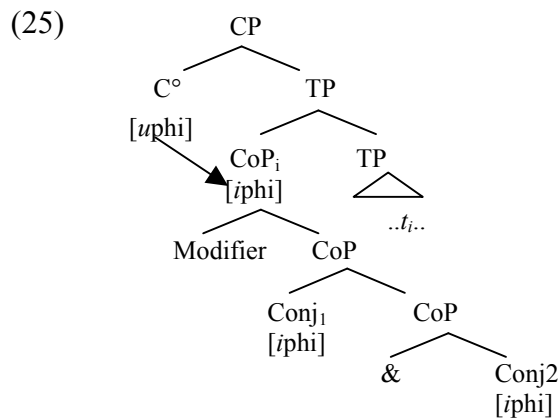
[Bavarian]

In both the a- and the b-example of (24), the ‘resolved’ feature specification of the coordinated subject is [2<sub>PL</sub>], as illustrated by the agreement affix on the finite verb habds ‘have’. The first conjunct in the coordinated subject is (specified for) [2<sub>SG</sub>]. The affix on the complementizer can either reflect the resolved [2<sub>PL</sub>]-features of CoP, or the [2<sub>SG</sub>]-features of the first conjunct. Put differently, both Goals are able to determine the agreement affix on the Probe.

This is expected given the fact that both affixes express person and number: they are equally specific. The mechanism responsible for choosing which Goal determines the affix on the Probe makes this decision on the basis of which affix spells out most features. In this case the affixes spell out an equal amount of features and hence both affixes can appear. The mechanism under consideration randomly picks one or the other affix.<sup>10</sup>

### 2.2.3 Locality and CA with coordinated subjects

One prediction the analysis of CA with coordinated subjects makes, concerns modification of the coordinated subject. When CoP is more local with respect to C° than the first conjunct in Spec,CoP, the first conjunct is no longer a Goal and partial agreement should be impossible. This situation arises when the coordinated subject is modified by a focus particle. Consider the schematic representation of this configuration in (25).



Reconsider the definition of c-command and locality provided in (8)-(10). In the configuration in (25), the first conjunct is c-commanded by the modifier and by C°. CoP is only c-commanded by C°. This means that CoP is more local with respect to C° than the first conjunct. In other words, the first conjunct is a potential Goal for C°, but as it is not local

<sup>10</sup> Halle & Marantz (1993) also discuss cases in which it is impossible to establish which affix should be inserted on the basis of the feature specifications of the competing affixes. They suggest that in this case one affix should be stipulated as the winner ‘...by imposing an extrinsic order of precedence between the two Vocabulary entries in question...’ (Halle & Marantz 1993:120). This mechanism is clearly not at work in the case of Bavarian. In Bavarian it is not the case that one affix is stipulated as the winner, but rather that either one of the competing affixes is inserted.

enough,  $C^\circ$  cannot enter into an agreement relation with this Goal. This means that when there is an element modifying CoP, CA reflecting the features of the first conjunct in Spec,CoP should not be possible. With this reasoning in mind, consider the data in (26) from Tegelen Dutch.<sup>11</sup>

- (26) ... det / ?de-s auch doow en Anna komm-e  
       that / that-2SG also [you<sub>SG</sub> and Anna]<sub>2PL</sub> come-PL  
       ‘... that you and Anna will also be coming.’

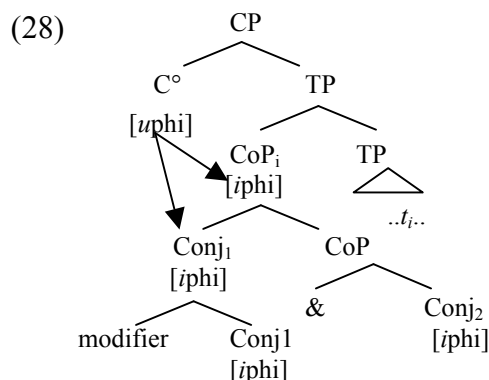
[Tegelen Dutch]

Two things have to be noted about this example. First of all, both the complementizer with CA and the complementizer without CA are possible in this example. This is remarkable as in example (15) from Tegelen Dutch, repeated here as (27), only the variant with the inflected complementizer is possible.

- (27) ... de-s / \*det doow en ich ôs treff-e.  
       that-2SG / that [you<sub>SG</sub> and I]<sub>1PL</sub> each.other<sub>1PL</sub> meet-PL  
       ‘...that you and I will meet each other.’

[Tegelen Dutch]

Furthermore, it has to be noted about the example in (26) is that the use of the complementizer with CA results in a more degraded sentence than the use of the non-inflected complementizer. However, the prediction introduced above is not fully met by these data. In the example from Tegelen Dutch, CA reflecting the agreement relation with the first conjunct of the coordinated subject only leads to a degraded but not to a fully ungrammatical sentence. I would like to argue that this is caused by the fact that the modifier, in this case the focus particle *auch* ‘also’, can be either modifying the coordinated subject as a whole or just the first conjunct. When it modifies the coordinated subject as a whole, it modifies CoP and in this case the focus particle c-commands the first conjunct. This is illustrated in (25). If, on the other hand, the focus particle modifies just the first conjunct, then it is still equally local to  $C^\circ$  as CoP. The latter configuration is reflected in the structure in (28).



In (28), the modifier is not c-commanding the first conjunct. CoP and Conj1 are equally local with respect to  $C^\circ$  as the set of nodes c-commanding CoP is equal to the set of nodes c-commanding Conj1. This means that  $C^\circ$  can agree with both CoP and the first conjunct and hence that the complementizer can show partial agreement.

<sup>11</sup> For argumentation in favour of the claim that focus particles are adjuncts, rather than projecting their own category, see Barbiers 1995:71. Furthermore, I refer the reader to Barbiers 2003 for argumentation in support of the idea that focus particles are adjuncts attached to the projection they are modifying, rather than being clausal adverbs as argued for by Buring & Hartmann 2001.

In other words, the example in (26) is syntactically ambiguous. We can disambiguate this example in the following way. Consider the example in (29).

- (29) Context: I think that not only HE and Marie will have to dance, but  
 ... **de-s** auch **DOOW** en Marie zulle moete danse.  
 that-2SG also [YOU<sub>SG</sub> and Marie] will have.to dance  
 ‘...that YOU and Marie also have to dance.’

[Tegelen Dutch]

In this example, stress is put on the first conjunct, forcing the interpretation in which the focus particle modifies just the first conjunct. In this case, the use of the inflected complementizer results in a fully grammatical sentence. This shows that when the context is such that the reading in which the focus particle modifies just the first conjunct of the coordinated subject is possible as in (29), the sentence is grammatical with the inflected complementizer.<sup>12</sup>

This analysis makes two further predictions. First of all, modification of the subject by a focus particle should not have this effect when the subject is not coordinated. In this case, the focus particle is merged with the maximal projection of the pronominal projection. However, this does not have any influence on the locality of the phi-features of the pronominal projection to C°. As a consequence, the complementizer should be able to agree with a modified subject pronoun. This prediction is borne out by the example in (30).

- (30) ... **de-s** / ?\*det auch **doow** kum-s.  
 that-2SG / that also you<sub>SG</sub> come-2SG  
 ‘...that you too will come.’

[Tegelen Dutch]

Secondly, in a dialect in which CA reflects the agreement relation with CoP, rather than the one with the first conjunct, modification of the subject by a modifier should not have any influence on the appearance of CA. The reason for this is that no matter where the focus particle attaches, CoP will always be local enough to serve as a Goal. In Lapscheure Dutch, like in Tielts Dutch, the complementizer agrees with CoP as illustrated in example (31) (from Haegeman 1992).

- (31) ... **da-n** / \*da **Valère en Pol** morgen goa-n.  
 that-3PL / that [Valère and Pol]<sub>3PL</sub> tomorrow go-PL  
 ‘...that Valère and Pol will go tomorrow.’

[Lapscheure Dutch]

As expected, CA has to appear when the coordinated subject is modified by a focus particle, as is illustrated by the example in (32) (Liliane Haegeman p.c.).

- (32) ... **da-n** / \*da zelfs **Valère en Pol** morgen goa-n.  
 that-3PL / that even [Valère and Pol]<sub>3PL</sub> tomorrow go-PL  
 ‘...that even Valère and Pol will go tomorrow.’

[Lapscheure Dutch]

Although more thorough investigation into modification of coordinated subjects and the appearance of partial agreement on the complementizer should be carried out, the data point

<sup>12</sup> The informant notes however that the non-inflected complementizer can also occur in this example. I do not have an explanation for this at present.

into the direction predicted by the analysis of partial agreement on the complementizer provided in the previous subsections.

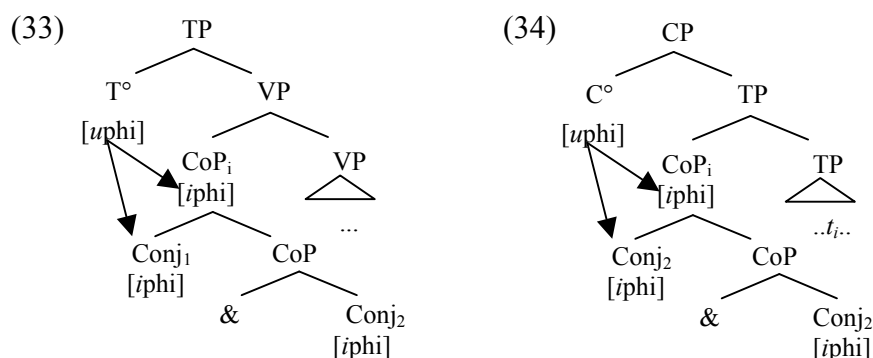
### 2.2.4 Conclusion

The analysis put forth in this section for CA with coordinated subjects claims that the variation attested in this construction results from differences in the affix inventory of a language or dialect, i.e. from differences in the (post-syntactic) lexicon. This result is in line with the assumptions about the locus of micro-variation advocated in the Minimalist Program: micro-variation should be reduced to variation in the lexicon (cf. Chomsky 1995:169-170). The syntactic part of the analysis is exactly the same for all three dialects under consideration here: Bavarian, Tegelen Dutch and Tiel Dutch. A Probe encounters two Goals at the same time and enters into an agreement relation with these two Goals. The question whether a Probe ends up showing partial agreement or resolved agreement is entirely dependent on which of these two agreement relations results in more specific agreement morphology.

### 3. Verbal agreement with coordinated subjects in Dutch dialects

In this section, I discuss agreement between the finite verb and the subject. The agreement morphology on the finite verb is a reflex of the agreement relation between the clausal head  $T^\circ$  and the subject. The question arises if this Probe behaves similar with respect to coordinated subjects as  $C^\circ$ . Put differently, the question arises if the finite verb also shows either partial agreement or resolved agreement.

I show that given the current assumptions on the interaction between Syntax and Morphology,  $T^\circ$  is expected to enter into an agreement relation with both Goals, resulting in either partial agreement or resolved agreement on the finite verb. Counter to these expectations the finite verb cannot agree with the first conjunct or the coordinated subject in the SVO- and the CSOV-order. Consider the structures in (33) and (34), representing the stage of the derivation in which respectively  $T^\circ$  and  $C^\circ$  are merged.



According to the assumption concerning locality and c-command provided in (8)-(10), it is the case that in both (33) and (34), the Probe ( $T^\circ$  and  $C^\circ$  respectively) encounters two equally local Goals: CoP and the first conjunct in Spec,CoP. In the preceding section, I have shown that this configuration leads to a situation in which the complementizer (on which the features of  $C^\circ$  are spelled out) can show resolved agreement or partial agreement. Given the similarity between the configuration in (33) and (34), one would expect that the finite verb (on which the features of  $T^\circ$  are spelled out) also has both options. This expectation is not borne out by

the data, however. In the dialects of Dutch and German discussed here, the finite verb cannot agree with the first conjunct of the coordinated subject in the SVO- and CSOV-word order. This is exemplified by the examples in (35) and (36) for Tegelen Dutch and Bavarian respectively.

- (35) Doow en Marie \*ontmoet-s / ontmoet-e uch.  
 [you<sub>SG</sub> and Marie]<sub>2PL</sub> meet-2<sub>SG</sub> / meet-<sub>PL</sub> each.other<sub>2PL</sub>  
 ‘You and Marie will meet each other.’

[Tegelen Dutch]

- (36) Du und d’Maria \*ho-sd / hab-ds an Hauptpreis gwunna.  
 [you<sub>SG</sub> and the.maria]<sub>2PL</sub> have-2<sub>SG</sub> / have-2<sub>PL</sub> the first.prize won  
 ‘You and Maria have won the first prize.’

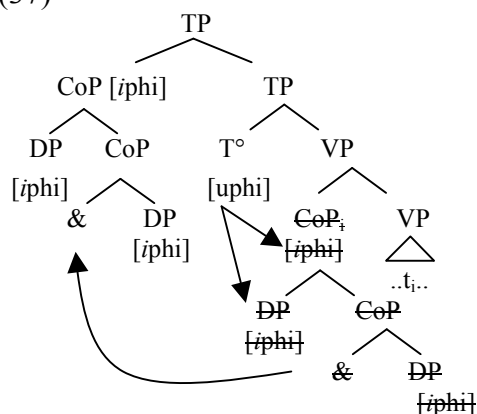
[Bavarian]

In the next subsection, I discuss the difference between verbal agreement and CA with respect to their behaviour concerning coordinated subjects. I show that the difference is caused by the fact that the coordinated subject moves out of the c-command domain of  $T^\circ$ , whereas it does not move out of  $C^\circ$ ’s c-command domain.

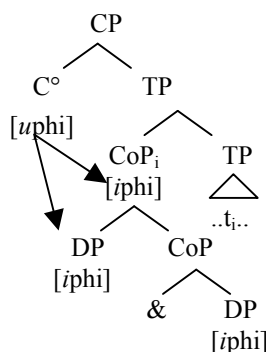
### 3.1 Movement and its consequences for agreement

The question that has to be answered is why  $C^\circ$  entertains a relation with the first conjunct in Spec,CoP at the level of Morphology, whereas  $T^\circ$  does not. The only property distinguishing  $T^\circ$  from  $C^\circ$  with respect to the relation with the subject is that the coordinated subject moves out of the c-command domain of  $T^\circ$  during the syntactic derivation, while it does not move out of the c-command domain of  $C^\circ$ . This is depicted in the structures in (37) and (38).

(37)



(38)



In (38), the coordinated subject containing  $C^\circ$ ’s Goals, CoP and the first conjunct in Spec,CoP does not (necessarily) move out of the c-command domain of Probe  $C^\circ$ . In (37), on the other hand, the coordinated subject does move out of the c-command domain of  $T^\circ$  to Spec,TP necessarily in order to fulfill  $T^\circ$ ’s EPP requirement. The fact that movement of the coordinated subject past the Probe leads to the bleeding of partial agreement on that Probe has also been observed for other languages. Consider, for instance, the data in (39) from Polish (cf. Citko 2004:1-2).

- (39) a. Do pokoju **wesz\_a** **m\_oda** kobieta i ch\_opiec  
 to room entered<sub>F.SG</sub> [young woman and boy]  
 ‘Into the room walked a young woman and boy.’



- b. m\_oda kobieta i ma\_ych\_opiec weszli / \*wesz\_a do pokoju  
 [young woman and small boy ] entered<sub>PL</sub> / entered<sub>SG</sub> to room  
 ‘A young woman and a small boy entered the room.’

[Polish]

In the example provided above, the finite verb agrees with the first conjunct of a coordinated post verbal subject, but it cannot agree with the first conjunct of a coordinated pre-verbal subject. This effect has not only been noted for Polish, but also for – for instance – Arabic as shown in example (1) (cf. Soltan 2004, Aoun et al. 1994, Munn 1999), Russian (cf. Babyonyshev 1996), modern and biblical Hebrew (cf. Doron 2000) and Brazilian Portuguese (cf. Munn 1999).<sup>13</sup> The impossibility of partial agreement with movement thus seems to be a more common characteristic. The question is how movement of the coordinated subject out of T°’s c-command domain affects the agreement relations T° entertains. In order to account for this, I make two assumptions: (i) the mechanism Agree does not take place at every step in the derivation, but only once, when the derivation is concluded namely at Spell Out (cf. among others Chomsky 2000:13-14, Van Craenenbroeck & Van Koppen 2002)<sup>14</sup> and (ii) copies of movement are inaccessible for operations like Agree (cf. also Van Koppen 2005, forthcoming).<sup>15</sup> There are two ways to implement the idea that the internal structure of copies is not available for these kinds of relations. The first one is to assume that copies do not have internal structure at all, but rather only contain the features present on the maximal projection of the moved item. I refer to this type of copies as reduced copies. Reduced copies are very much comparable to traces, i.e. items left behind by the moved item that only serves as a placeholder or marker of the moved item. As the copy does not have internal structure, there cannot be a relation with an item that is part of this internal structure. This way of looking at copies of movement provides a natural explanation for the fact that spelled out copies of movement are always reduced in the sense that they spell out only the functional features of the moved item (cf. Van Koppen 2005). The problem with assuming reduced copies or traces however is caused by reconstruction. As the reduced copy only contains the features of the maximal projection, it is unclear how reconstruction should be analysed. Although there are ways to deal with reconstruction without making use of copies of movement, I will leave this hypothesis as a subject for further research.

Another, potentially somewhat less controversial, way to implement the idea that the internal structure of copies is not accessible for agreement relations is to assume that copies of moved items are in fact similar to these moved items, but that they are for some (yet to be uncovered) reason opaque for agreement relations.<sup>16</sup> As copies of movement are similar to the moved item, reconstruction can be analysed via the (by now) standard way, making use of the copy theory of movement (cf. among others Sauerland 1998). Extending the copy-metaphor,

<sup>13</sup> Inversion of subject and verb seems to have a more general effect on agreement. Samek-Lodovici (2003), among others, argues that agreement impoverishes under subject inversion. He provides examples from, among other languages. Standard Arabic (cf. also Bahloul & Harbert 1992 for similar observations), Trentino and Fiorentino (cf. also Brandi & Cordin 1989).

<sup>14</sup> That the agreement takes place late is also argued for by Bobaljik 2006 and Ackema & Neeleman 2005.

<sup>15</sup> There are several other potential analyses for the fact that movement leads to the impossibility of partial agreement. For instance, the fact that the subject is in a Spec,Head-relation with Probe T°, but not with Probe C° might be relevant for the impossibility of partial agreement in the former case. For arguments against this view, cf. Van Koppen 2005.

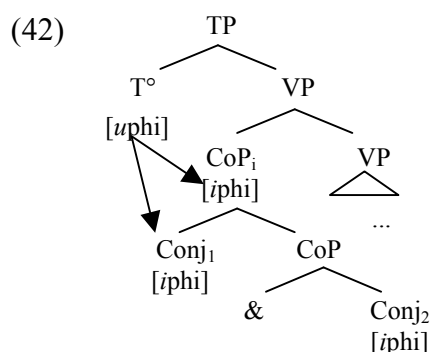
<sup>16</sup> Note that both interpretations of the copy theory of movement and the one discussed above view the moved item and the copy as separate items, as the characteristics of the copy are different from those of the moved item (one is inaccessible to agreement relations, the other one is not). Another interpretation of the copy theory of movement is that a copy and the moved item are actually two occurrences of one and the same entity appearing in two places (cf. among others Gärtner 2002). As these items are actually one item, they have the same characteristics.



case, resolved agreement rather than partial agreement is expected to appear on the finite verb. As I have already mentioned above, there are indeed many languages that allow for partial agreement in the VSO-order but that do not have partial agreement in the SVO-order. In this section, I demonstrate this on the basis of agreement between coordinated subjects and finite verbs in VSO-languages like Irish and Arabic.<sup>17</sup> A second prediction is that partial agreement on the complementizer is not compatible with subjects moving past the Probe, whereas resolved agreement on the complementizer is.

### 3.3.1 First conjunct agreement in Irish and Standard Arabic

I have proposed that the absence of partial agreement on the finite verb is the result of movement of the coordinated subject out of the c-command domain of  $T^\circ$ . The subject leaves behind a copy of movement. The internal structure of this copy is not accessible for agreement relations. As a consequence, the agreement relation between  $T^\circ$  and the first conjunct in Spec,CoP that cannot be established by Agree. If the subject does not move out of this domain, however, the situation arises in which partial agreement on the finite verb is expected to be able to arise. In this case the subject is not a copy of movement, it is not inaccessible for Agree and the agreement relation between  $T^\circ$  and the first conjunct in Spec,CoP can be established and spelled out on the finite verb. This situation is schematically represented by the structure in (42).



When the derivation in (42) is sent off to the interfaces without any further movement of the subject, one of these two relations has to be spelled out at the level of Morphology. When the relation between  $T^\circ$  and the first conjunct in Spec,CoP is spelled out, partial agreement appears on the finite verb. I argue that this is exactly what happens in Irish and Standard Arabic. First consider the example in (43) (from McCloskey 1986: 248).<sup>18</sup>

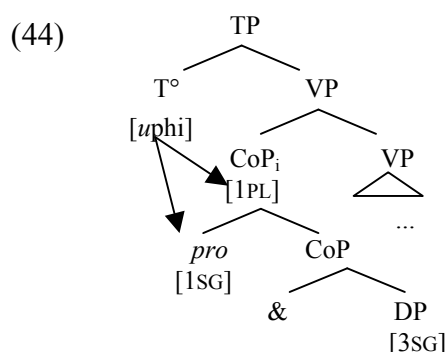
- (43) Bhíos *pro*-féin agus Tomás ag caint le chéile  
 be-PAST-1SG [*pro*-EMPH and Thomas] talk PROG. with each.other  
 ‘Thomas and I were talking to one another.’

[Irish]

<sup>17</sup> This prediction cannot be tested in varieties of Dutch, as in these varieties the subject usually moves to Spec,TP (i.e. it moves across the inflectional projection). The only context in which the subject does not move across the inflectional head is in expletive constructions. However, given that these constructions usually have indefinite subjects, and given that the agreement on the finite verb with coordinated indefinite DPs differs from that with coordinated definite DPs, it is not so clear what predictions the current analysis would make.

<sup>18</sup> Abbreviations: EMPH = emphatic, PROG = progressive, PAST = past tense.

This example shows the customary VSO-word order in Irish: the finite verb precedes the subject which in turn precedes the rest of the clause. McCloskey (1996) argues convincingly that in the VSO-order in this language the verb is in  $T^\circ$  and the subject stays in Spec,VP. What is striking about this example, is that affix on the finite verb *bhíos* ‘be’ does not show resolved agreement, but rather partial agreement. As such, this example from Irish corroborates the prediction made by the analysis for the absence of partial agreement on the finite verb in varieties of Dutch discussed in the previous section: it shows that partial agreement can occur on the finite verb if the subject does not move out of the c-command domain of  $T^\circ$ .<sup>19</sup> Furthermore, a closer inspection of the Irish agreement pattern shows that the appearance of partial agreement on the finite verb instantiates another case in which the relation resulting in the most specific agreement morphology is spelled out. To see this, consider the derivation in (44) of the example in (43).



Just as in the varieties of Dutch discussed above, Probe  $T^\circ$  has unvalued phi-features and is confronted with two potential Goals, CoP and the first conjunct in Spec,CoP. At the level of Morphology, one of these two available relations has to be spelled out on the finite verb. In order to see which relation results in richer agreement morphology on the finite verb, a closer look at the agreement system of Irish is required. As McCloskey & Hale (1984) show, Irish has two verbal forms: (i) an analytic form which is invariant and used with overt subjects and (ii) a synthetic form that inflects for person and number, but that is not compatible with overt subjects. These two forms are in complementary distribution: either the analytic form is used with an overt pronoun, or the synthetic form is used without an overt pronoun. If there is a synthetic form available, then this form has to be used. The analytic form results in

<sup>19</sup> A prediction this analysis makes is that partial agreement on the finite verb in Irish is not possible if the subject is extracted, as in this case the subject is no longer within the c-command domain of  $T^\circ$ . The subject leaves behind a copy. The internal structure of this copy is inaccessible, so that the relation between  $T^\circ$  and the first conjunct of the subject is no longer visible at PF. Unfortunately, this prediction cannot be tested, as synthetic verbs cannot be combined with subject extraction. Consider the examples in (i) and (ii) (Brian O’Curnáin p.c.).

(i) Túféin aL bhí mé ag ceapadh aL \*chuirfeá / chuirfeadh isteach ar an bpost sin.  
 you<sub>EMPH</sub> that was I think that put<sub>2P.SG</sub> / put<sub>ANALYTIC</sub> in on the job that  
 ‘It was you that I was thinking would apply for that job.’

(ii) Méféin agus Tomás a deir tú a bhí ag caint le chéile  
 [me<sub>EMPH</sub> and Tomás] that say you that were<sub>ANALYTIC</sub> at talking with each other  
 ‘Me and Thomas you said that were talking to one another.’ [Irish]

In (i) a non-coordinated subject pronoun is extracted and the embedded verb has to appear in the non-inflected analytic form. The same holds for the coordinated subject in (ii). It is extracted and the verb in the embedded clause does not show partial agreement. In both cases the subject is overt and not a *pro*-subject. This pattern might be related to the fact that in Irish inflected verbs only occur with *pro*-subjects, but that *pro*-subjects cannot be extracted. I leave this issue open as a topic for further research.

ungrammaticality in that case. This illustrated in the examples in (45) (from McCloskey & Hale 1984:490-491).

- (45) a. Chuirfinn isteach ar an phost sin.  
           put<sub>CONDIT.1SG</sub> in on the job that  
           ‘I would apply for that job.’  
       b. \* Chuirfinn mé insteach ar an phost sin.  
           put<sub>CONDIT.1SG</sub> I in on the job that  
       c. \* Chuirfeadh mé insteach ar an phost sin  
           put<sub>ANALYTIC</sub> I in on the job that  
       d. Chuirfeadh Eoghan insteach ar an phost sin  
           put<sub>ANALYTIC</sub> Owen in on the job that  
           ‘Owen would apply for that job.’

[Irish]

The contrast in grammaticality between the example in (45a) and the one in (45b) shows that if there is a synthetic form available, it has to be used: using the analytic form leads to ungrammaticality. In (45d) the analytic verb form can occur, as there is no synthetic form available. Furthermore, comparison of the example in (45c) with the one in (45d) shows that a synthetic form is not compatible with an overt subject pronoun.

In the derivation in (44), Morphology is confronted with an inflectional head  $T^\circ$  that entertains two agreement relations, one with CoP and one with *pro* in Spec,CoP. If the relation between  $T^\circ$  and CoP would be spelled out, the verb would show up in its analytic or non-inflected form, as the coordination as a whole is an overt subject and hence cannot be combined with a synthetic verb form. If on the other hand the relation between  $T^\circ$  and the first conjunct in Spec,CoP is spelled out, the verb appears in the synthetic form, as the first conjunct of this subject is non-overt *pro*. So, as the relation between  $T^\circ$  and the first conjunct in Spec,CoP results in more specific agreement morphology on the finite verb, it is this relation which is spelled out.

The same reasoning can be applied to Standard Arabic. Consider the examples in (46) (from Harbert & Bahloul 2002:50-51).

- (46) a. **xaraj-at al-bintu** wa ?al-waladu  
           left-3<sub>SG,F</sub> [the girl and the boy]  
           ‘The girl and the boy left.’  
       b. **xaraj-a ?al-waladu** wa al-bintu  
           left-3<sub>SG,M</sub> [the boy and the girl]  
           ‘The boy and the girl left.’

[Standard Arabic]

These examples show that in the VSO-order in Standard Arabic, the verb agrees with the first conjunct of the coordinated subject. The example in (46a) shows that when the first conjunct is feminine, the agreement on the finite verb is also feminine. When the first conjunct is masculine – as in the example in (46b) – the agreement on the finite verb is also masculine.<sup>20</sup> One dominant point of view concerning VSO-clauses in Arabic is that the finite verb occupies the head of the inflectional projection and the subject stays inside the VP (cf. among others Fassi-Fehri 1993, Bahloul & Harbert 1992, Harbert & Bahloul 2002, Mohammad 2000,

<sup>20</sup> Mohammad (2000) and Van Gelderen (1996) argue that the agreement morphology on the finite verb in VSO-clauses in Arabic is the result of agreement between an empty expletive in the specifier of the inflectional projection and the inflectional head, rather than between the inflectional head and the subject in VP. Following among others Fassi-Fehri (1993), Aoun, Benmamoun & Sportiche (1994) and Soltan (2004) I assume that agreement in these examples is not mediated by an empty expletive in the specifier of IP.

Soltan 2004).<sup>21</sup> The situation in Standard Arabic is – given this view – parallel to that in Irish. The verb is in the inflectional projection. It searches its c-command domain and finds two equally local suitable Goals to agree with, i.e. CoP and the first conjunct in Spec,CoP. It agrees with the first conjunct of the coordinated subject.<sup>22</sup> Interestingly, in Standard Arabic, in contrast to Irish, the coordinated subject can move past the finite verb, resulting in an SVO-clause. In these types of clauses partial agreement is not possible to appear on the finite verb, as predicted by the analysis. Consider the examples in (47) (from Mohammad 2000:112).

- (47) a. **al-waladu**    **wa**    **?al bintu**    xaraj-aa  
           [the boy        and    the girl]    left-M.DUAL  
           ‘The boy and the girl left.’
- b. **al bintu**    **wa**    **?al-waladu**    xaraj-aa  
           [the girl        and    the boy]    left-M.DUAL  
           ‘The girl and the boy left.’

[Standard Arabic]

The agreement on the finite verb in these examples necessarily reflects masculine dual features, regardless of the order of the conjuncts. It cannot show partial agreement. This is expected under the analysis of partial agreement put forth in the previous subsection. The subject in these examples moves to the specifier of the inflectional projection, out of the c-command domain of the inflectional head. The internal structure of the copy which the coordinated subject leaves behind is inaccessible for agreement relations. When Agree takes place, the inflectional head has no other option than to agree with CoP, resulting in resolved agreement on the finite verb.

To summarize, in contrast to finite verbs in Dutch dialects, finite verbs in Irish and Standard Arabic agree with the first conjunct of a coordinated subject. Partial agreement on the finite verb in these languages is facilitated by the fact that - in contrast to the varieties of Dutch - the coordinated subject has the option not to move out of the c-command domain of T°. As predicted, movement of the coordinated subject out of the c-command domain in Standard Arabic leads to bleeding of partial agreement on the finite verb in this language.

Partial agreement in Irish and Standard Arabic can be analysed in exactly the same way as partial agreement on the complementizer in varieties of Dutch. In all cases, a Probe is confronted with two equally local Goals. The Probe shares its features with both Goals. Morphology has to spell out one of these feature sharing relations. The features of the relation resulting in the most specific agreement morphology are spelled out on the Probe.

### 3.3.2 Subject extraction in CA-dialects

I have argued that partial agreement cannot occur on the finite verb in SVO- and CSOV-clauses due to movement of the coordinated subject out of T°'s c-command domain. The prediction this analysis makes is that if the coordinated subject moves out of C°'s c-command

<sup>21</sup> Aoun, Benmamoun & Sportiche (1994) argue that the finite verb in VSO-clauses actually moves to a higher position than the inflectional position. The main reason for this is that they assume that agreement always takes place via the Spec,Head-configuration.

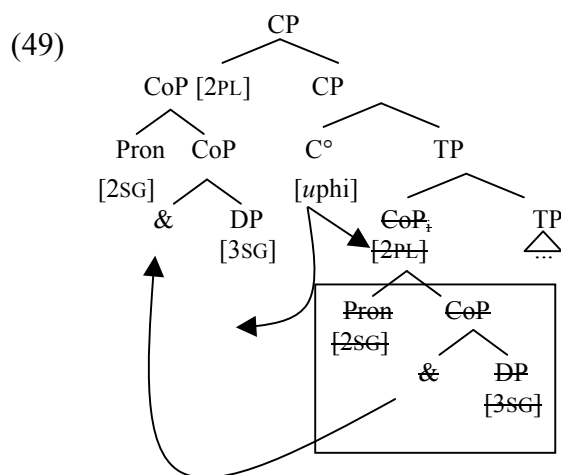
<sup>22</sup> More research into the verbal paradigm of Standard Arabic is necessary in order to establish that in this language too it is the relation with the Goal resulting in the most specific agreement morphology that is spelled out. It also has to be noted at this point that in other dialects of Arabic, like Moroccan Arabic and Lebanese Arabic not only partial agreement but also resolved agreement is possible in these contexts. It is clear that more research is necessary in order to capture the complex agreement system of the variants of Arabic. This research unfortunately does not fall within the scope of this paper.

domain, partial agreement should no longer be a possibility on the complementizer either. This prediction is borne out by the example in (48) from Tegelen Dutch.<sup>23</sup>

- (48) Doow en Marie denk ik,  
 [You<sub>SG</sub> and Marie] think I  
 a. \* ... **de-s** het spel zull-e winnen.  
           that-2<sub>SG</sub> the game will-<sub>PL</sub> win  
 b. ? ... **det** het spel zull-e winnen.  
           that the game will-<sub>PL</sub> win

[Tegelen Dutch]

The examples in (48) show that the complementizer cannot be inflected when the subject is extracted. The relevant part of the derivation of the example in (48) is represented by the tree structure in (49).



The subject CoP has moved from Spec,TP to Spec,CP in the derivation represented in (49). Specifically, it has moved to the edge of the strong CP-phase so that it is available for further movement. By moving, it has left a copy in Spec,TP. The internal structure of this copy is inaccessible for agreement relations. Agree takes place when the derivation is sent off to PF. As a consequence, the agreement relations of C° are established with the copy of the moved subject and not with the moved subject itself. In other words, when Agree takes place, no agreement relation between C° and the first conjunct in Spec,CoP can be established. Agree relates the unvalued features of C° to those of CoP. This relation has to be spelled out on the complementizer. As the [2PL]-features of this Goal do not correspond to an agreement affix that can appear on the complementizer, the non-inflected complementizer has to be inserted.

This analysis in turn makes two further predictions concerning CA with extracted subjects. First of all, if a non-coordinated [2SG]-subject moves to the matrix clause, CA is expected to be maintained. Secondly, if a coordinated subject is extracted in a dialect that agrees with the coordinated subject as a whole, like Lapscheure Dutch, CA is expected to be possible. The first prediction is borne out by the example in (50) from Tegelen Dutch (for similar data from Frisian cf. De Haan 1997).

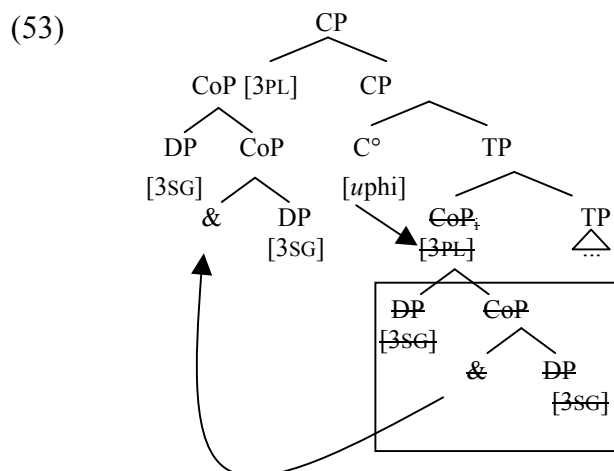
- (50) Doow denk ik de-s de wedstrijd zal-s winnen.  
 You think I that-2<sub>SG</sub> the game will-2<sub>SG</sub> win  
 ‘YOU, I think will win the game.’

[Tegelen Dutch]

<sup>23</sup> The example in (48) is somewhat degraded, due to the fact that the informants find subject extraction, especially of coordinated subjects, not fully acceptable.







The coordinated subject has moved from Spec,TP to the edge of the strong phase-level, in order to move further into the matrix clause. In (53),  $C^\circ$  cannot agree with the first conjunct, as the internal structure of the copy of the moved subject is opaque for agreement relations. At the spell out point to PF, Agree relates  $C^\circ$  to CoP only. Consequently, CoP determines the affix on the complementizer. In this dialect it is the case that both when the subject moves out of the c-command domain of  $C^\circ$  and when it does not move out of this domain, the relation with CoP is spelled out on the complementizer. Extraction of the subject out of the c-command domain of  $C^\circ$  therefore has no effect on CA.

The same point can be made by data from Bavarian. Recall that Bavarian complementizers show agreement in the second person singular and in the second person plural. Agreement between a complementizer and a [2PL]-coordinated subject with a [2SG]-first conjunct can result in either partial agreement or resolved agreement on the complementizer. This is illustrated in the examples in (24), repeated as (54).

- (54) a. ... **das-sd**      **du**      und    d'Maria      an Hauptpreis    gwunna    hab-ds  
           that-2SG      [you<sub>SG</sub>    and    the Maria]<sub>2PL</sub>    the first.prize    won      have-2PL  
       b. ... **das-ds**      **du**      **und**    **d'Maria**      an Hauptpreis    gwunna    hab-ds  
           that-2PL      [you<sub>SG</sub>    and    the Maria]<sub>2PL</sub>    the first.prize    won      have-2PL  
           '...that Maria and you won the first prize.'

[Bavarian]

Given the analysis presented above, the complementizer in Bavarian should still show [2PL]-agreement after extraction of the coordinated subject, but not [2SG]-agreement. This prediction is borne out by the data in (55).

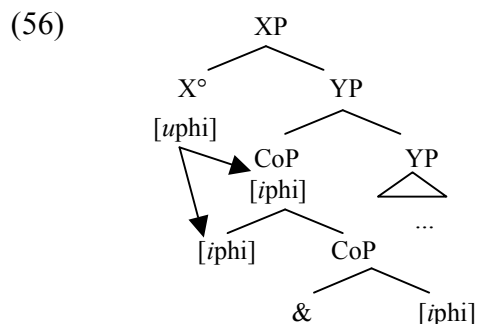
- (55) Du      und      d'Maria      glaub'e  
       [you<sub>SG</sub>    and      the Maria]<sub>2PL</sub>    believe.I  
       a. \* **das-sd**    an    Hauptpreis    gwunna    hab-ds  
           that-2SG    the    first.prize    won      have-2PL  
       b. **das-ds**    an    Hauptpreis    gwunna    hab-ds  
           that-2PL    the    first.prize    won      have-2PL  
           'You and Maria I think that have won the first prize.'

[Bavarian]

This example once again shows that when the coordinated subject is extracted, partial agreement is no longer possible, but resolved agreement is, as expected.

## 4 Summary

I have shown that a Probe for phi-features with a coordinated subject in its c-command domain encounters two equally local Goals: namely CoP and the first conjunct of the coordinated subject occupying the specifier of CoP. This configuration is represented in the structure in (56).



I have shown on the basis of hitherto undiscussed data from Germanic dialects that when the Probe is  $C^\circ$ , either the agreement relation with CoP or that with Conj1 can be spelled out on the complementizer: resulting in resolved agreement on the complementizer or partial agreement respectively. I have shown that these two ‘strategies’ for agreement with coordinated subjects identified by Corbett (1983) are actually two sides of the same coin: partial agreement arises when the relation with the first conjunct results in more specific agreement morphology, and resolved agreement when the relation with CoP does. Furthermore, partial agreement is possible on the complementizer (in dialects which display CA), but never on the finite verb in CSOV- and SVO-clauses. The agreement morphology on the finite verb reflects the phi-features of  $T^\circ$ , the complementizer those of  $C^\circ$ . I have argued that the inability of  $T^\circ$  to agree with the first conjunct of a coordinated subject is related to the movement of the coordinated subject out of the c-command domain of  $T^\circ$ . In other words, I have shown that partial agreement can only arise when the coordinated subject is within the c-command domain of the Probe, otherwise the Probe necessarily shows resolved agreement. I have argued that  $T^\circ$  cannot agree with the first conjunct, because  $T^\circ$  - in contrast to  $C^\circ$  - agrees with the copy of the moved subject. By assumption, the internal structure of this copy is unavailable for agreement relations. I have shown that this analysis of agreement with coordinated subjects can be applied to the Germanic dialects under discussion, as well as to Arabic and Irish.

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