

## Collective (dis)agreement

On a 3/4 pattern of British English collective NPs

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This paper investigates plural agreement that is triggered by collective NPs that are morphologically singular in British English. Plural collective noun agreement freely alternates with singular agreement in this dialect, but there are unexpected restrictions which I provide an explanation for. I also discuss agreement mismatches that are found with collective nouns, and show how they can be accommodated in a minimalist framework. This paper adds to the debate on where agreement happens within the grammar, and I propose that it is both syntactic and post-syntactic following recent work elsewhere.

### 1. Introduction

It has long been known, at least going back to Corbett (1979) but discussed much elsewhere (see for instance Pollard & Sag 1994, Elbourne 1999, den Dikken 2001, Sauerland & Elbourne 2002, Wechsler & Zlatić 2003, Sauerland 2004a,b) that British English (BrE) differs from (standard) American English (AmE) in that collective NPs (CNPs henceforth) that are morphologically singular trigger both plural and singular agreement on the verb in BrE, whereas only singular agreement is allowed in AmE. By CNPs, I mean those nouns that represent a plurality of members, but a singular collection of them. Thus, both sentences in (1) are acceptable to a speaker of BrE, but only (1a) is typically acceptable to a speaker of AmE:<sup>1</sup>

- (1) a. The government is failing the nation.  
b. The government are failing the nation.

This alternation is not restricted to *government*, and is in fact quite general across CNPs:<sup>2</sup>

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<sup>1</sup> From this point on I restrict my attention to BrE, unless otherwise noted. I return to dialectal variation briefly in section 4.1. I focus on morphologically singular CNPs, setting aside their plural counterparts.

<sup>2</sup> As Levin (2001) shows, there is variation in how freely different CNPs trigger plural agreement. For instance, *army* shows a 4:1 preference for singular verb agreement, whilst *crew* shows a 2:1 preference for plural verbal agreement. In this paper I abstract away from this variation, focusing on the underlying ability of CNPs to trigger both types.

- (2) a. The pride is hunting zebra.  
b. The pride are hunting zebra.

- (3) a. My team is losing again.  
b. My team are losing again.

- (4) a. The public is demanding an investigation into the behaviour of the banks.  
b. The public are demanding an investigation into the behaviour of the banks.

The alternation in agreement is not restricted just to verbal agreement either. Both plural and singular anaphors can be licensed by CNPs:

- (5) a. The committee has given itself a budget increase.  
b. The committee have given themselves a budget increase.

As noted by Corbett (1979) (see also Elbourne 1999 and den Dikken 2001 for analyses), the alternation does not extend to demonstratives, which are only allowed to be singular:

- (6) a. This government is/are corrupt.  
b. \*These government is/are corrupt.

I will return to the issue of demonstrative agreement below, but for now it is important to note that singular demonstratives appear even in clearly plural contexts, and so it is not simply the case that the CNP can only refer to the collection reading with demonstratives. (7a) shows this by the use of a floating quantifier, and (7b) shows the singular demonstrative appearing with the CNP, which in turn is the subject of the verb *meet*, a classic indication of semantic plurality as singular things cannot meet:

- (7) a. This government are all corrupt.  
b. That committee met for over 12 hours, yet could still not hammer out a deal.

All of these properties have been previously noted in the literature, but less commonly noted is that plural agreement is systematically more restricted than singular agreement even where not attributable to semantics. As noted by Elbourne (1999), plural agreement is not allowed in existential constructions:

- (8) a. There is a committee deciding the budget for next year.  
b. \*There are a committee deciding the budget for next year.  
c. There is a new dominant pride on these grasslands.  
d. \*There are a new dominant pride on these grasslands.

This is surprising, since English does allow for plural agreement with a plural associate in the existential construction:

- (9) There are three cats in the alleyway.

Another surprising restriction of plural agreement comes from reconstruction effects in raising constructions, where English generally allows a raised indefinite to reconstruct into the lower clause (see Sauerland & Elbourne 2002 on ‘total reconstruction’, also Fox 1999, Bobaljik 2002):

(10) A pig is likely to run the farm.  $\exists > \text{likely} / \text{likely} > \exists$

CNPs are also allowed to reconstruct into a lower scope position, however, as Elbourne (1999) demonstrates, this is only possible if the matrix verbal agreement is singular; reconstruction is not allowed if the verb is plural:

(11) a. A northern team is likely to be in the final.  $\exists > \text{likely} / \text{likely} > \exists$   
 b. A northern team are likely to be in the final.  $\exists > \text{likely} / * \text{likely} > \exists$

Den Dikken (2001) notes a final restriction on plural agreement with CNPs. He shows that (12a) is ambiguous in a way that (12b) is not. (12a) has both a subject reading of the CNP, given in (13a), as well as a predicate reading (13b). (12b), with plural agreement, lacks the predicate reading:

(12) a. The best committee is theirs. committee =  $\sqrt{\text{subject}} / \sqrt{\text{predicate}}$   
 b. The best committee are theirs. committee =  $\sqrt{\text{subject}} / * \text{predicate}$

(13) a. The best committee belongs to them. (subject reading)  
 b. The committee that they belong to is the best committee. (predicate reading)

A further curiosity concerning the agreement of CNPs is to do with mismatches of agreement. (7a) above shows that mismatches are allowed as there is a singular demonstrative and a plural verb agreeing with the same CNP. Elbourne (1999) (see also Wechsler & Zlatić 2003) takes this as an indication that CNPs in BrE are simultaneously singular and plural, that is they have both singular and plural number features. I will return to this point below, but the important observation here is that mismatches are restricted. This can be shown with sentences involving verbal agreement and anaphoric agreement. We can see in (14) that sentences involving matching agreements are fine. Mismatches are only **acceptable** when the anaphor is plural and the verb singular (14c); the other way round is sharply degraded, shown in (14d). Thus, of the 4 logically possible combinations of agreement when there are two targets, only 3 are manifested. I will refer to this as the 3/4 pattern:

(14) a. The government has offered itself up for criticism (with this economic policy).  
 b. The government have offered themselves / each other up for criticism.  
 c. The government has offered ?themselves / each other up for criticism.  
 d. \*The government have offered itself up for criticism.

This pattern to my knowledge has not been noticed before in the literature (though see Huddleston & Pullum 2002:495 regarding pronouns). Pollard & Sag (1994:71) claim that sentences with mismatches are not allowed. So, for them only (14a,b) would be acceptable.

Whilst it is true that there is a slight degradation with *themselves* (but not *each other*) in (14c), speakers systematically make a very clear distinction between (14c) and (14d) (all 9 native speakers I asked agreed on this point).

To summarize this section, we have seen that CNPs in BrE seem to freely control either singular or plural agreement, however there are certain contexts where plural agreement is restricted. Crucially, these contexts cannot be attributed to semantic incompatibility. For instance, whilst the sentences with plural agreement are traditionally thought to coincide with an aggregate reading of the CNP (see Pollard & Sag 1994, though this is more of a preference than absolute), there is no good reason why a CNP that is understood as an aggregate should be precluded from the above mentioned environments.

The rest of the paper is organized as follows. In section 2 I briefly discuss three previous accounts of the restrictions on plural agreement, showing that they do not adequately capture the facts, whilst building towards my analysis. In section 3 I show the true generalization on where plural agreement is licensed that we should strive to capture, which I term *LF-visibility*. I show that plural agreement is only able to be controlled by the CNP when the target of agreement is c-commanded by the CNP at LF. In section 4 I present my analysis of why plural agreement fails in existential constructions, does not allow for scope reconstruction and does not permit a predicate reading of a CNP. The analysis is based on the idea that there is agreement both syntactically and post-syntactically, in line with - but differing in detail from - recent proposals by Migliori (2011), Arregi & Nevins (2012) and Bhatt & Walkow (to appear). I show that whilst agreement is able to take place both syntactically and post-syntactically, there is an upward directional restriction on agreement within the syntax that is absent post-syntactically. This allows us to derive the generalization given in section 3. In section 5 I show how this analysis also allows us to capture the 3/4 pattern of agreement given in (14) before concluding the paper.

## 2. Mereology, pluringulars and hidden definites

In this section I discuss previous accounts of the restrictions on plural agreement of CNPs, by which I refer to the facts of existentials, reconstruction and predicate readings. As mentioned in the introduction, the 3/4 pattern has not been previously noted in the literature so I largely postpone further discussion of it until section 5, other than to point out that it is incompatible with the accounts under discussion.

There are at least two potential ways that one could attempt to explain why plural agreement is restricted, and there are proposals encompassing both. Firstly, it could be argued that the reason why plural agreement fails is not due to anything to do with agreement *per se*, but there is something about plural agreeing CNPs that precludes them from the illicit environments. That is, CNPs that control plural agreement are somehow different from CNPs that control singular agreement, and it is that which prevents them from being in existential constructions, reconstructing for scope and having predicate readings. This style of analysis has been (differently) offered by both den Dikken (2001) and Sauerland (2004a,b). The second type of approach is to assume that there is no difference between CNPs that trigger plural agreement and those that trigger singular agreement, but the reason why plural agreement fails is more a structural problem as the plural feature is somehow unable to enter into agreement in certain configurations. This style of proposal is given by Elbourne (1999).

As I will show, any successful analysis must be of type 2; the restrictions on plural agreement have nothing to do with the nature of the CNP itself, but rather the mechanism of agreement is such that the plural feature is rendered inaccessible in exactly the environments that plural agreement fails. I will however first discuss the type 1 approaches, as the way that they fail forces our hand into adopting a type 2 approach.

### 2.1. Den Dikken's pluringulars and Sauerland's hidden definites

As previously stated, the logic of type 1 approaches goes as follows. Plural agreement is not allowed in some constructions where singular agreement is allowed. If it were the case that we could find some element that is independently prohibited from being in those instances where plural agreement is disallowed, then as long as the reason is plausibly related to CNPs, we can analyze plural agreeing CNPs as being an instance of that element and therefore explain why there is no plural agreement. Plural agreement would not be possible as the necessary element is independently disallowed in that environment. This though has the possible drawback of course of analyzing plural-agreeing CNPs as different from singular agreeing CNPs.

Sauerland (2004a,b) offers an analysis of type 1. He claims that plural agreeing CNPs such as *a committee*, even when they look like indefinite DPs, are in fact *hidden definites*. For Sauerland, the plurality aspect of the CNPs is not featurally encoded within the CNP itself (an assumption shared with den Dikken below), but in fact arises from the addition of a plural operator  $\Gamma^{-1}$  to the CNP (see Link 1991 on the semantic plurality adopted by Sauerland).  $\Gamma^{-1}$  turns the atomic CNP into its plurality of members and in doing so, makes the semantic type of the DP as a whole  $\langle e, e \rangle$ , a definite expression. This analysis explains why there is no plural agreement in existential constructions, as plural agreement will only be licensed in the presence of  $\Gamma^{-1}$  on the CNP, since there is no plural feature on the CNP itself. However, there is a well known definiteness restriction in existential constructions, and so the CNP with  $\Gamma^{-1}$  is the wrong semantic type, and is prohibited. Thus, plural agreement is not able to be licensed. Sauerland also claims that the reason that there is no scope reconstruction with plural agreement is due to the fact that definite expressions do not reconstruct, a phenomenon he attributes to Fox's (2000) scope economy. Reconstruction is possible for CNPs like *a committee* when there is singular agreement, because lacking  $\Gamma^{-1}$  they are indefinite expressions, and so are able to reconstruct. There is however no discussion of the restriction on predicate readings given in (12), and it is unclear how these could be assimilated into Sauerland's explanation, given that there is clearly no restriction on definite expressions being predicates:

- (15) a. The lion is **the king of the jungle**.  
 b. I consider the tiger **the most ferocious animal** around.

Den Dikken (2001) also takes this type of approach, choosing to analyze plural agreeing CNPs (*pluringulars* as he terms them - elements that look singular but are really plural) as plural pronouns. According to den Dikken, plural CNPs are actually composed of an appositive structure headed by a plural *pro* combining with the CNP. Singular agreeing CNPs are simply the CNP without any *pro*. So, there is no sense that the CNP itself is simultaneously singular and plural, which as I will discuss shortly was Elbourne's (1999)

claim, as well as what I will argue for. Rather, for den Dikken the plurality of the CNP comes solely from the plural *pro*. By virtue of heading the DP and being silent, *pro* only makes it seem as though the CNP is plural by controlling plural agreement. Despite the undesirability of appealing to *pro* in English, den Dikken claims that this account offers a number of benefits. Firstly, den Dikken claims that plural pronouns in English are unable to be predicates. If the predicate readings of (12) are derived from having the CNP in predicate position, then we expect plural agreement not to be possible under den Dikken's analysis as it would require a plural pronoun to be a predicate by virtue of the plural *pro*. Singular agreeing CNPs do not face this problem as there is no *pro* contained within the DP and so can be predicates. Secondly, den Dikken claims that we can explain the ban on plural agreement in existential constructions, as pronouns are not allowed to be the associate of an existential construction, unless on a list reading.<sup>3</sup> Den Dikken does not discuss the reconstruction effects.

Both den Dikken's and Sauerland's theories claim to capture two out of the three aforementioned restrictions on plural agreement. However, there are two problems that neither analysis is able to capture. Elbourne (1999) showed that there is a need to treat CNPs as simultaneously singular and plural on the basis of instances where there is mixed agreement, such as in (7a) above, where there is a singular demonstrative and plural verbal agreement. Now, it could be argued that demonstratives simply are unable to be plural due to an arbitrary restriction on semantic agreement, such that demonstratives independently are unable to show agreement with the semantic features of the CNP.<sup>4</sup> Corbett (1983) shows that such arbitrary restrictions do exist in the Slavic languages. More troubling for Sauerland and den Dikken is the fact that agreement mismatches are allowed in the same sentence, crucially involving elements which *can* show both singular and plural agreement. Such a case is manifested in (14c), repeated below, where there is singular verbal agreement and a plural anaphor (recall from section 1 that both of these elements can show either singular or plural agreement):

(14) c. The government has offered ?themselves / each other up for criticism.

This is very problematic for any approach of type 1, because mismatches are unpredicted; plural agreeing CNPs should only license plural agreement. The fact that both agreements are able to be simultaneously controlled by the same CNP shows us that it is not the case that

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<sup>3</sup> Den Dikken claims the list readings are irrelevant for the task at hand because they are not true *there*-sentences, as 'the pronoun never triggers agreement with the finite verb to begin with (den Dikken 2001:34).' This can be shown in the following:

- (i) There's always them.
- (ii) \*There are always them.

I am inclined to agree with him on this point, though not necessarily because of the lack of agreement. English agreement in existential constructions is more variable than often stated in the literature, with many dialects (including the author's) freely allowing singular agreement with plural associates (see Meechan & Foley 1994, Schütze 1999 a.o. for discussion), so it is not clear whether there is truly a different kind of agreement at play in (i). At any rate, the list reading of existential constructions does allow for definite DPs to be associates (iii), which is clearly disallowed in true existentials (iv):

- (iii) Well, there's always the pub if we get bored.
- (iv) \*There is the pub on the corner.

<sup>4</sup> I loosely use the term semantic agreement here to keep with Corbett's terminology. The CNPs do have semantic plurality, as shown by (7b) above.

there are plural agreeing CNPs and singular agreeing CNPs, and these are qualitatively different from each other, but rather it must be the case that CNPs have the ability to control both agreements. This fact strongly pushes us to reject any type 1 approach, as they crucially rely on plural agreement being controlled by a CNP that is different from a CNP that controls singular agreement.

Further trouble for any type 1 approach comes from the fact that it is possible to have a CNP in an existential construction which licenses a plural anaphor. Such a situation is entirely unpredicted by type 1 approaches, that crucially disallow CNPs that can control plural agreement from appearing in existential sentences. But, as shown in (16), this is entirely fine:<sup>5</sup>

- (16) a. There is a committee meeting with each other in that room.  
 b. There is a team starting to psych themselves up in that dressing room, I'd stay out.

Den Dikken (in footnote 19) suggests that it may be possible to assimilate sentences like (16) under a theory of partial control (see Landau 2000), without offering a mechanism. It is unclear to me how a mechanism of partial control would unproblematically capture these facts, and the onus must be on a proponent of this view to show this.<sup>6</sup> However, even if these sentences can be assimilated to a type 1 approach, the point above still stands that CNPs really can control both singular and plural agreement, rendering any type 1 distinction between singular and plural agreeing CNPs superfluous.

## 2.2. Elbourne's mereology

Elbourne (1999) offers an analysis of type 2, where there is no difference between a CNP that controls plural agreement and one that controls singular agreement. What is important for Elbourne, and my approach will follow in this spirit, is the structural position of the CNP. Elbourne assumes that all CNPs in BrE are simultaneously singular and plural, and have two features that encode number. Their number feature is singular, but there is also a *mereology* feature that is plural, which according to Elbourne (p87) 'indicates whether or not the entity under discussion is being conceived of as consisting of more than one member.' The mereology feature is lacking in dialects that do not show plural agreement from CNPs, such as AmE and so there cannot be any plural agreement there. Elbourne assumes that the restrictions on plural agreement come from a restricted nature of this mereology feature relative to the regular number feature. Crucially for Elbourne, the feature is not able to raise covertly, though it is not explained why this should be the case. Elbourne assumes the spec-head approach to feature checking of Chomsky (1995), where a spec-head relationship at some stage before the transfer to semantics is necessary for features to check.

Elbourne claims that this approach allows us to explain why there is no plural agreement in existential constructions with CNPs. He adopts the *there*-replacement approach of Chomsky (1995), where associates remain overtly low in existential constructions, but the

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<sup>5</sup> My thanks to an anonymous reviewer who points out the following sentence, where plural agreement is optionally permitted on the verb in the embedded clause:

(i) There is a committee that decide(s) the budget.

<sup>6</sup> Note also that (16b) involves *start*, an aspectual verb, which Landau claims prohibit partial control.

features must raise covertly to check under spec-head agreement. If we couple this with the assumption that the mereology feature cannot raise covertly, then we can only get singular agreement in existential constructions. Elbourne assumes that the number feature on  $T^0$  can either be singular or plural, and can be checked either by the number or mereology feature of the CNP. Now, in cases where the mereology feature is unable to enter into a relationship with  $T^0$ , for instance when it would need to be done covertly, then the only derivation that will succeed is one where the number feature on  $T^0$  is singular.

In order to capture the facts on scope reconstruction (there is no discussion but the predicate reading facts may be able to be captured in a similar vein), Elbourne appeals to PF-movement (for full discussion of this mechanism beyond BrE, see Sauerland & Elbourne 2002). The idea is that in the sentences where a DP takes wide scope there is movement within narrow syntax. However, when an element reconstructs for narrow scope, but remains pronounced high, there is actually only whole category movement in the PF-branch. In narrow syntax, the DP remains in the low position and takes narrow scope at LF. Under the spec-head approach to feature checking the formal features of the DP must raise covertly to check the matrix  $T^0$  features. Everything is fine in the sentences in (11a) where the singular number feature can raise, but the interesting case is (11b) where the narrow scope reading is lacking. Here, Elbourne claims what is happening is that the CNP remains covertly in the embedded clause and so takes scope underneath *likely*, but is pronounced high due to movement in the PF-branch. The reason why this sentence fails on the narrow scope reading is because the plural feature on the matrix  $T^0$  is unable to be checked, as this would require the mereology feature of the CNP to raise covertly. Since this is not possible, the derivation crashes. Wide scope readings are possible because there is no covert feature movement involving the CNP; the mereology feature raises into the matrix clause when the CNP overtly moves there.

There are problems for this account however. Firstly, as shown by the following pattern from den Dikken (1995), it doesn't seem to be the case that there is covert feature movement to  $T^0$  in existential constructions, otherwise we would expect the following binding configurations to be allowed:

- (17) a. Some applicants<sub>i</sub> seem to each other<sub>i</sub> to be eligible for the job.  
 b. \*There seem to each other<sub>i</sub> to be some applicants eligible for the job.  
 c. Someone<sub>i</sub> seems to his<sub>i</sub> mother to be eligible for the job.  
 d. \*There seems to his<sub>i</sub> mother to be someone eligible for the job.

Elbourne's account crucially relies on the mereology feature being unable to raise covertly, and so if agreement between  $T^0$  and the associate can be done at a distance in existential constructions, without any necessary movement of the features of the associate, then there is no way that Elbourne can account for the lack of plural agreement here. I also see no easy way that the 3/4 pattern can be accommodated into Elbourne's approach. There seems to be no good reason why one of the mismatches should be allowed whilst the other one is sharply degraded. Elbourne's system does allow agreement mismatches with demonstratives (see (6)), which he allows by stipulating that some processes such as demonstrative agreement can only target the number feature, whilst verbal agreement can target either number or mereology on the CNP. Elbourne's approach then fails empirically and we need to look for an

alternative.<sup>7</sup> In what I will propose below however, there is no fundamental problem with the style of approach Elbourne took, i.e. looking at the structural configuration of the sentence rather than the CNP itself. The problem for Elbourne though was the appeal to properties of the feature that expresses plurality. The actual explanation for why plural agreement is restricted however is that different agreement mechanisms access these features differently.

### 2.3. Summary

In this section I have outlined three approaches to the restrictions on plural agreement shown by CNPs. I showed that any approach which appeals to a distinction between CNPs that control singular agreement and those which control plural agreement, despite looking promising, fails empirically because a single CNP can clearly be shown to control both agreements simultaneously. Furthermore, it does appear as though CNPs that trigger plural agreement are able to be the associate of existential constructions, despite the fact that they are unable to control plural agreement on the verb in that context. Secondly, Elbourne's account was shown to be unable to capture all the empirical facts, and there are also conceptual issues that are left unexplained, such as why mereology cannot raise covertly. Importantly though, there does not appear to be anything that militates against the style of Elbourne's analysis (type 2), unlike as is the case for Sauerland's and den Dikken's. In the following two sections, I develop an approach where it is the structural configuration that determines whether plural agreement can be controlled by the CNP, first showing what is the (novel here) true generalization of where plural agreement is licensed, and then showing how we can capture the facts.

### 3. *LF-visibility*

In this section I show that it is in fact the structural configuration that is the main determinant of where plural agreement can be controlled by the CNP. The generalization at play is what I will term *LF-visibility* (in section 4.2 I provide an account of this generalization):

(18) *LF-visibility* (descriptive generalization)

With CNPs, plural agreement requires the controller to c-command the target at LF, but singular agreement does not.

It should be noted that the generalization only covers the restrictions on plural agreement to do with existentials, reconstruction and predicate readings. The 3/4 pattern will be shown in section 5 to come from an economy condition that operates on feature valuation. What *LF-visibility* does is it allows us to predict precisely where plural agreement is able to be controlled, and where it is not able to be. Put simply, whenever the CNP is in a position that c-commands the target of agreement at LF, plural agreement can but need not be licensed. This differs crucially from the approaches of Sauerland and den Dikken, where plural

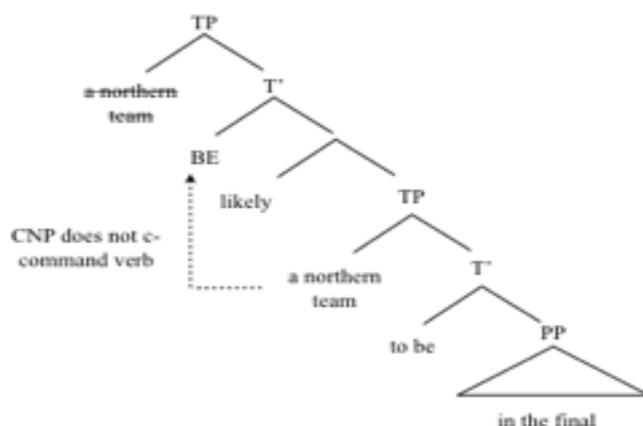
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<sup>7</sup> A further problem is the assumption that BrE has a mereology feature that AmE lacks. As far as I can tell, CNPs in both dialects are interpreted in exactly the same way, so despite Elbourne's claims that it indicates internal plurality of the CNP, it is unclear why BrE would encode this by means of a feature, when AmE can apparently do this without.



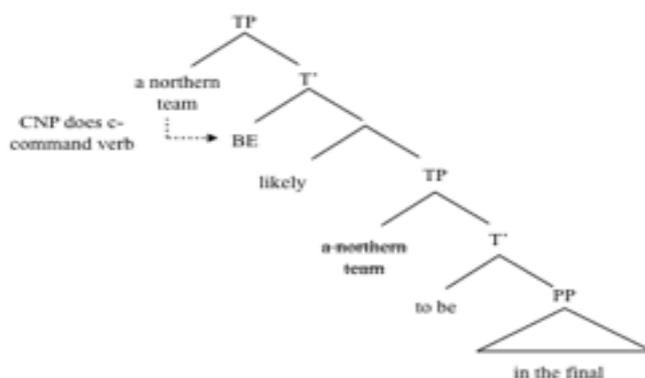
when the CNP is in a position that does not c-command the target of agreement (here the verb) at LF that plural agreement is unable to be controlled:

(22)



In the wide scope configuration however, where plural agreement is licensed, we see that the CNP does c-command the verb:

(23)



This allows us to draw a stronger conclusion than was the case with the existential sentences. There, it could have been the case that the position of pronunciation of the CNP was important, which is the same as the position which it is interpreted in. However, from the scope reconstruction cases, we can see that it really is the position of interpretation which is important. In both the wide scope reading and the narrow scope reading, the CNP is pronounced in the same position. In the wide scope position both agreements can be licensed, however in the narrow scope reading only singular agreement is possible. This strongly suggests that it is the LF position of the CNP which is important for determining whether plural agreement is licensed.

Confirmation of this is given by the lack of plural agreement when there is a predicate reading of the CNP. Recall the data that we are interested in from section 1, (12), with the associated readings in (13), repeated below:

- (12) a. The best committee is theirs. committee =  $\sqrt{\text{subject}} / \sqrt{\text{predicate}}$   
 b. The best committee are theirs. committee =  $\sqrt{\text{subject}} / * \text{predicate}$
- (13) a. The best committee belongs to them. (subject reading)  
 b. The committee that they belong to is the best committee. (predicate reading)

The first thing to note about the different readings is that they seem to arise from two distinct constructions. The subject readings come from a construction where the subject of the predicate raises from the small clause into Spec,TP. The predicate readings on the other hand involve a predicate inversion structure, like the sentence in (24) (see den Dikken 1998). Here the predicate *the fastest creature in this zoo* has overtly raised into Spec,TP and the subject of the predicate (to adopt den Dikken's 2007 terminology) remains within the small clause:

- (24) The fastest creature in this zoo is that cheetah.

The overt structures for the subject reading and the predicate reading are thus as in (25a,b) respectively, with XP denoting a small clause:

- (25) a. [TP [DP The best committee]<sub>i</sub> BE [XP t<sub>i</sub> [X' X [DP theirs]]]]  
 b. [TP [DP The best committee]<sub>i</sub> BE [XP [DP theirs] [X' X t<sub>i</sub>]]]

This looks problematic for the generalization given in (17), since the CNP in (25b) appears to be in a position to c-command the target of agreement, T<sup>0</sup>. English finite verbs show a very strong preference to agree with the element in Spec,TP and so the predicate will be the controller. We can see this from instances when the predicate and the subject of predication differ in  $\phi$ -features. In this case, we find agreement with the predicate rather than the *in situ* subject (examples slightly modified from den Dikken 2007):

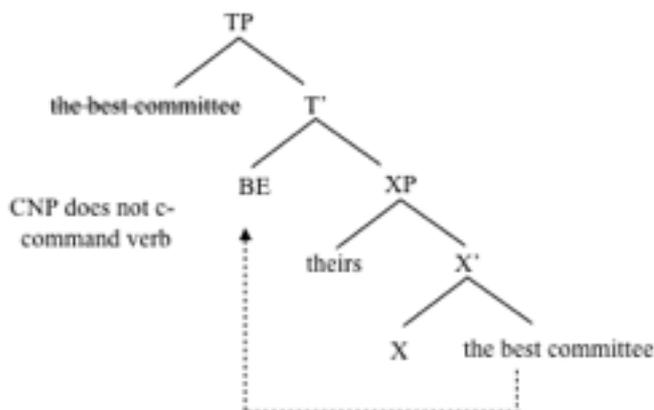
- (26) a. The biggest problem is/\*are the children  
 b. The best candidate is/\*am me.

This is problematic, because as things stand, we seem to have a CNP that cannot control plural agreement, despite being in a position where it should be able to (given that I am arguing for *LF-visibility*). However, Heycock (1995) shows that just as is the case with scope reconstruction, the overt position of a predicate is not necessarily that where it is at LF. Specifically, Heycock argues that predicates obligatorily reconstruct into their base position at LF.<sup>8</sup> So, at LF the predicate readings will actually have the structure as in (27), with the strikethrough indicating the pronounced, but not the interpreted position. Nothing changes in the subject readings; not being predicates the subject of predication is fine to stay in Spec,TP throughout the derivation after moving there.

- (27)

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<sup>8</sup> Thanks to Karlos Arregi (p.c.) for pointing the relevance of Heycock's work to me.



To summarize this section, we can see from the LF structures in (19b), (22) and (27) that plural agreement is not licensed precisely in those environments where the CNP does not c-command the target of agreement at LF. Singular agreement however is not subject to the same restrictions, and is licensed in all of the configurations under discussion. It seems unlikely to me that the licensing of plural agreement is unconnected to the structural position of the CNP, given that we find the same state of affairs in all the cases above. *LF-visibility*, which descriptively captures this state of affairs, is therefore the generalization that we should strive to explain in order to understand why plural agreement from CNPs has the restrictions it does.

Before moving on from this section, I wish to briefly discuss two potential counterexamples, showing that they too can plausibly be subsumed under the present proposal. Firstly, den Dikken (2001:fn16), citing personal communication from Maurice Williams, gives the following sentence where there is plural agreement in an apparent existential construction:

(28) There **are** in the room [a committee that...]

Den Dikken notes that plural agreement is only good if the associate is sufficiently heavy, and concludes that these constructions are not true existential sentences, but have some different analysis. Locative inversion also seems to allow for plural agreement, though there is variation among speakers here:

(29) %Out in the hallway are a committee.

(28) and (29) at face value seem to argue against *LF-visibility*, as we have plural agreement despite the CNP not c-commanding  $T^0$ . However, there does seem to be room to fit them in. Note that there is focus at play in both of these constructions. Given the heaviness requirement, (28) can be plausibly treated as some form of heavy NP shift (HNPS), which does involve focus on the shifted NP (Williams 2003). Locative inversion is also well known to require a specific type of focus, namely *presentational focus*, see Rochemont (1986) and Bresnan (1994). Williams notes that there is a general preference for focus to be right peripheral in English (though this is a preference, not an absolute requirement, see Bobaljik

& Wurmbrand 2012 for pertinent discussion here). Suppose then that focus of the type required in HNPS and locative inversion triggers movement to a rightward peripheral position, which I assume to be at least as high as adjoined to TP, possibly higher.<sup>9,10</sup> Space limitations prevent further investigation here, but I leave the matter open for future research.

#### 4. *Whence LF-visibility?*

Up to this point I have shown that the restrictions on plural agreement with CNPs are not attributable to something that makes CNPs that control plural agreement different from those that control singular agreement. This was the failure of type 1 approaches discussed in section 2. The real issue must therefore be something separate from the CNP itself (as a whole). Elbourne (1999) explored the idea that the determining factor was that the feature encoding plurality on the CNP was unable to raise covertly, and it was this that accounted for the fact that plural agreement was more restricted than singular agreement. In section 3 I showed that Elbourne was on the right track in looking at the structural position of the CNP, as by looking at the LF positions we can predict the environments in which plural agreement is licensed. As Elbourne's account was unable to capture the facts we cannot posit any difference in behavior between the features themselves so we must look for an alternate explanation. Here I will propose the restrictions on plural agreement do not come from anything about the CNPs themselves, nor the features that comprise them; rather it is the mechanism of agreement that renders plural agreement more limited than singular agreement.

##### 4.1. *Simultaneous number*

Firstly, I follow Elbourne (1999) and Wechsler & Zlatić (2003) in assuming that CNPs are simultaneously encoded for singular and plural features. However, I make the stronger claim that this is true for all dialects of English, not restricted to BrE.<sup>11</sup> I make this stronger claim for two reasons. Firstly, as far as I can tell, CNPs are not interpreted any differently across the dialects of English, and BrE doesn't seem to allow for a wider range of readings than, say, AmE, so the idea that BrE is special in this respect strikes me as unlikely. Secondly, Levin (2001) provides a corpus analysis of agreement patterns in English, where it is shown that BrE has a higher rate of plural agreement than AmE with CNPs in both written and spoken form. This is not surprising, as speakers of AmE judge sentences with plural agreement as ungrammatical. Interestingly though, Levin shows that the rate of plural agreement in

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<sup>9</sup> Thanks to Jason Overfelt (p.c.) for suggesting an approach along these lines.

<sup>10</sup> There is some reason to believe that the rightward movement would be at least as high as TP (though perhaps even higher if focus positions are within the CP, for instance Rizzi 1997). Rochemont (1986) assumes a movement to the right edge of VP, however due to anti-locality (see for instance Grohmann 2003, Bošković 2005) movement from within VP to adjoin to VP will be too short. In (28,29) movement of the CNP would need to evacuate at least the XP that it's base generated in and move at least as high as TP.

<sup>11</sup> Perhaps even in a wider range of languages. There are scattered examples of CNPs in languages removed from English which apparently show plural agreement, see for instance Corbett (2000:188-191), who cites Spanish, Old Church Slavonic, Paumari, Kabardian and Samoan as some examples. Ana Bastos-Gee (p.c.) also informs me that something similar is possible in colloquial Brazilian Portuguese. Space constraints prevent me from looking further at these here, so I refer the reader to the discussion in Corbett (2000) and references therein (where CNPs are referred to as *corporate nouns*).

Australian English falls somewhere in between BrE and AmE. From my own consultation with speakers of Canadian English (see also Landau 2000:48), this dialect also allows for plural agreement, though perhaps it is not as readily accepted as BrE (New Zealand English is also reported to pattern like BrE but at a slightly lower frequency, Corbett 2000:189). The fact that there is varying rates of acceptance across the dialects of English, in particular the data from Levin, which is extensive, shows that there is clearly not a situation where some dialects have some feature on CNPs that allows them to agree plural, whilst others lack it. This would lead us to expect binary distinctions between dialects of those that either allow or disallow plural agreement, yet this is not the case. What seems to be happening is that *all* dialects of English have the ability to license plural agreement - so have the same feature specifications for CNPs - but there is variation across the dialects in how acceptable it is. Elbourne assumed that the plural (his mereology) feature was missing from AmE CNPs, but this appears to be an illusion. Rather, the plural feature is there but AmE speakers simply do not access it.

This idea has been suggested before in a different guise. Landau (2000) proposes that CNPs in BrE and AmE have the same semantic and syntactic specifications based on partial control. As shown by Landau, PRO in partial control contexts can inherit semantic plurality even from DPs that are morphosyntactically singular. The CNPs under discussion here are clearly morphologically singular (cf. *committees*, which is the plural version), but speakers of AmE clearly allow CNPs to occur with predicates that express semantic plurality, such as the collective predicate in (30):

(30) The committee gathered to discuss the proposal.

As Landau shows however, it is only speakers of BrE who allow for plural syntactic dependencies, such as the ability to license anaphors in partial control contexts. (31) is thus ungrammatical in AmE but fine in BrE:<sup>12</sup>

(31) %John told Mary that he preferred to meet each other at 6 today.

Landau concludes from this that whatever encodes semantic plurality (which I take here to be a feature for reasons that will become clear presently) is syntactically active in BrE, but syntactically inert in AmE. That is, in AmE it does not do anything until semantics, but in BrE it can play a part in the derivation, and by extension feature valuation. The range across the dialects will simply come from how acceptable each dialect finds plural agreement.<sup>13</sup>

Returning to the task at hand, I propose then that CNPs should have the following feature specification for number; they are morphosyntactically singular but semantically plural:

(32) {*u*F:singular, *i*F:plural}

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<sup>12</sup> Hazel Pearson (p.c.) informs me that there isn't uniform agreement of Landau's relevant examples by speakers of BrE, so we must take the conclusion with a pinch of salt. Nothing too important for me rests on Landau's active/inert distinction, but it is a natural fit with what I am proposing.

<sup>13</sup> Here I do not discuss how exactly this would work, but an interesting idea pointed out to me by Jonathan Bobaljik (p.c.) is the multi-grammar approach of Yang (2002). I leave this open for future research, but note also that Yang's approach may also give us some explanation for why singular agreement is in general more frequent, depending on the weighting of the speaker's grammars.

The idea behind (32) is that  $\phi$ -features are comprised of pairs which are divided at transfer to the interfaces (see Wurmbbrand 2012a for a similar proposal). A feature which has the need to be expressed both morphologically and semantically will come in two parts. Number is such an example since it is expressed in the morphology, but clearly needs to be present in semantics. Case features on the other hand I assume to be only morphological as I see no plausible semantic import. At spell-out, the features are sent separately to the interfaces. *i*Fs, interpretable features, are sent to semantics and are what get interpreted, whilst *u*Fs, the semantically uninterpretable morphosyntactic features that are usually manipulated by the syntactic component, are sent to PF and realized morphologically. In the overwhelming majority of cases, at least in English, *i*Fs and *u*Fs of NPs will have the same value so they look as though they are simply one feature. It is in the cases where the values diverge, as is the case with CNPs, that we see that  $\phi$ -features really are built up of separate parts.<sup>14</sup> Crucially, the features necessarily split at spell-out; *i*Fs are never present in the morphological component and vice versa. Note that I am not adopting the proposal of Chomsky (2001), where feature uninterpretability is directly correlated with a lack of a value. Instead, I adopt the assumptions of Pesetsky & Torrego (2007) and Bošković (to appear), where both uninterpretable features and interpretable features can be unvalued, and so must agree with another feature in order to get a value (see section 4.2 for further discussion). This will be important, as I assume that anaphors have *unvalued interpretable* features that must be valued within the syntax via an Agree relationship (see the discussion in section 4.2 below).

As will be discussed in greater detail below however, there are instances where *i*Fs can have a morphological effect, but only when they enter into feature valuation within the syntax prior to spell-out. Once a feature is valued within the syntax there is no need to value in the morphology, so we will see semantic agreement overtly manifested. This can only happen when semantic features are accessible to the syntax, which normally only manipulates the morphosyntactic *u*Fs. BrE is thus special in this respect compared to AmE, as the *i*Fs on CNPs are syntactically active.

Following this assumption about the nature of features, coupled with Landau's conclusion that the semantic number (so the *i*F:plural) of BrE CNPs is syntactically active, we can see why BrE does allow for plural agreement but AmE does not. In AmE the *i*F is not able to be accessed by the syntax, nor be visible to any post-syntactic valuation (having been sent to semantics), so there is no opportunity for the number feature on T<sup>0</sup> to be valued plural and have effects for lexical insertion. In BrE however, as long as the valuation happens in the syntax via Agree, T<sup>0</sup> (or some other element) can have a plural value.

#### 4.2. The locus and direction of agreement

In the previous subsection we saw why it is the case that AmE does not allow plural agreement, but BrE does. However, nothing in the discussion there got to the issue at the heart of this paper, namely why is plural agreement more restricted than singular? Here I will give an answer to this, before walking through some derivations in the next subsection.

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<sup>14</sup> Another example would be grammatical gender, which is clearly arbitrary in many languages. *Mädchen* (girl) in German for instance is grammatically neuter, but semantically feminine, and pronouns can agree with either gender.

Much work in minimalist syntax has taken agreement (here, feature valuation) to happen exclusively within the syntax, see for instance Chomsky (1995, 2000) and Bošković (2009) for just some instances of this. However there has been heated debate over this point and there is recent work suggesting that there is a need to have agreement at least in part happen post-syntactically. Bobaljik (2008), building on the ideas of Marantz (1991), takes a strong position and proposes that *all* agreement is post-syntactic, and is exclusively handled within the morphological component. Other work has taken the middle ground, and argued that agreement happens both within the syntax and post-syntactically. Examples of this approach are Migliori (2011), Arregi & Nevins (2012), Wurmbrand (2012a) and Bhatt & Walkow (to appear). I will also adopt this approach, though there are differences between my system and the above. Crucially what I will propose is that agreement works differently within the different domains. Agreement within the syntax is unidirectional whereas post-syntactic agreement is bidirectional.

Looking cross-linguistically, there is plenty of evidence that morphological agreement is bidirectional, and that a target for agreement can be valued by an element that either c-commands it, or it c-commands. Baker (2008) draws this conclusion and argues that the traditional Chomskian agreement mechanism (see for instance Chomsky 2000, 2001), which is generally taken to be downward probing, really needs to allow for probing to look either way. Whilst Agree going downwards is widely assumed since Chomsky (2000), Baker argues that any c-command relation between probe and goal is sufficient. Therefore even if the agreement target (the probe in minimalist terms) does not c-command the controller (goal), as would be required for Agree in the system of Chomsky (2000), an Agree relationship is still possible as long as the controller c-commands the target, resulting in the possibility of upward agreement. We can see both directions manifested in Icelandic. (33a) (taken from Zaenen, Maling & Thráinsson 1985) shows agreement in a downward configuration, where the target  $T^0$  gets its  $\phi$ -features valued from a controller that it c-commands, the nominative object. (33b) (from Baker 2008) shows upward agreement, where the predicate adjective target gets its features valued by the controller that c-commands it:

- (33) a. Um veturinn voru konunginum gefnar ambáttir. (Icelandic)  
 In the.winter were.PL the.king.DAT given slaves.NOM  
 ‘In the winter, the king was given (female) slaves.’
- b. María er góð.  
 Maria.NOM is good.F.SG.NOM  
 ‘Maria is good.’

I adopt the spirit of Baker’s proposal here, but following Bobaljik (2008) I take agreement of this nature to be in the post-syntactic component. There is also a need however to have some feature valuation within the syntax. Take for instance binding of anaphors. Following Reuland (2001, 2011) I assume anaphors to be unspecified for their features and so must enter into a relationship with an antecedent to get a semantic value and a morphological value. As there is a need to value a semantic feature, valuation cannot be solely in the morphology, as the *i*Fs cannot receive a value there. Therefore, valuation must happen at least in part elsewhere, so I assume this to be syntactic (anaphors are also well known to show locality effects similar to syntactic locality). There already exists within the minimalist

framework such an operation, namely Agree, see Chomsky (2000, 2001) (see also Pesetsky & Torrego 2007, Bošković 2007 for variants on Chomsky's Agree). The conception of Agree that I will adopt however is Reverse Agree, put forward by both Zeijlstra (2010) and Wurmbrand (2012a, to appear). They argue that downward agree is insufficient, given phenomena such as negative concord, anaphor binding, parasitic participles, amongst others. The crucial problem is the direction of Agree. Under the traditional Chomskian conception, Agree is downward probing, where an unvalued feature probes into its c-command domain to look for a matching feature from which to get a value. However, the phenomena discussed by Wurmbrand and Zeijlstra indicate that syntactic dependencies are really the opposite, with the unvalued feature in a position where it gets a value from something that c-commands it. Under the Reverse Agree approach, as suggested by the name, Agree is reversed; the unvalued feature gets valued by a higher valued feature, with the probe looking upwards in the tree for a goal (I refer the reader to both Zeijlstra's and Wurmbrand's work for further motivations and benefits to this system, which for space considerations I am unable to address here). A definition of syntactic agreement that I will adopt is given in Wurmbrand (to appear):

(34) Reverse Agree

A feature  $F: \_$  on a head  $\alpha$  is valued by a feature  $F:val$  on  $\beta$ , iff

- i.  $\beta$  c-commands  $\alpha$ .
- ii. There is no  $\gamma$  with a valued interpretable feature  $F$  such that  $\gamma$  c-commands  $\alpha$  and is c-commanded by  $\beta$ .
- iii.  $\alpha$  is accessible to  $\beta$ .

Consider what all this does for us so far. In section 4.1 I outlined the view of features that I assume, where what is usually taken to be a single  $\phi$ -feature is actually comprised of two parts, an interpretable  $iF$  and an uninterpretable  $uF$ , which are used by the semantics and morphology respectively. If agreement is post-syntactic (i.e. at morphology), the unvalued feature can look either way in the structure, both up or down, keeping to Baker's (2008) conclusion on the bidirectional nature of agreement. As long as the  $uF$  is accessible to the feature that is trying to agree with it (by which I mean within the same phase) and there is some c-command between them (one has to c-command the other), then valuation will be able to take place. For our purposes with CNPs, singular agreement, being the  $uF$  value on the CNP, will be bidirectional. Plural agreement on the other hand involves the  $iF$  of the CNP. So, if some feature tries to agree with the  $iF$  of the CNP, it must do so within the syntax, as the  $iF$  will not be present in the morphological component for valuation there (recall that only  $uFs$  are sent to morphology). Therefore, when plural agreement is controlled by a CNP, the valuation must have happened within the syntax, and consequently must have involved Reverse Agree. Plural agreement with CNPs is thus unidirectional.

This gets us most of the way to explaining why plural agreement is more restricted than singular agreement, since the direction of agreement is restricted, but there is a step missing. In the case of scope reconstruction, so far there is nothing to stop a derivation where  $T^0$  agrees with the high copy of the CNP within the syntax, valuing plural on  $T^0$  in keeping with Reverse Agree, but then the lower copy of the CNP gets interpreted by the semantics giving a narrow scope reading. Such a situation would violate *LF-visibility*. We would thus expect plural agreement in reconstruction contexts, contrary to fact. Similarly, in the case of

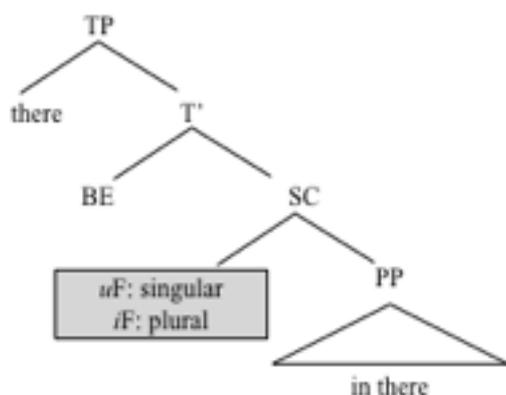
predicate readings, we would predict right now that plural agreement should be fine on a predicate reading of the CNP, since valuation of plural happens before the reconstruction of the predicate, again contrary to fact. There is a simple way of solving this problem. I assume that Reverse Agree, that is syntactic valuation, is evaluated at LF, following Bobaljik & Wurmbrand (2005) who argue that this is the case based on data from German, Japanese and Itelmen (so this is not an English specific proposal). Having Reverse Agree happen at LF is fairly simple if we adopt the single output syntax model of Bobaljik (1995, 2002) and propose that syntactic feature valuation is the last thing that happens before the phase is sent to the interfaces. That is, when an item has been merged more than once into the derivation, transfer to the interfaces involves choosing the position in which to realize the *i*Fs and the *u*Fs, and then Reverse Agree is evaluated. In effect then, syntactic valuation of features is really valuation at the point of transfer.

#### 4.3. Derivations

The preceding discussion guarantees that plural agreement is never possible when the CNP does not c-command the target of agreement and so *LF-visibility* is entailed by the system. If the CNP is to be interpreted in a position lower than the target (e.g.,  $T^0$ ), the *i*F feature will not c-command it, and therefore be in a position inaccessible for the target to value via Reverse Agree.

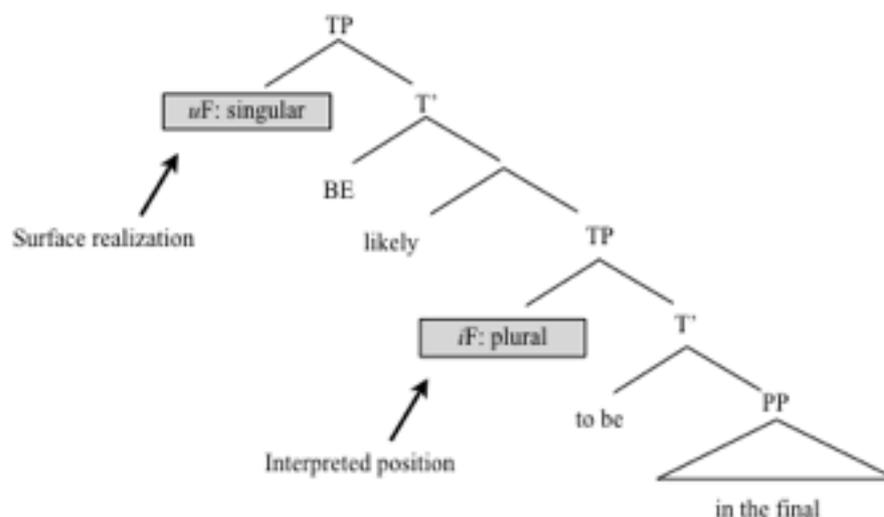
To see exactly why we have explained the restrictions on plural agreement with CNPs, allow me to walk through the relevant derivations. Firstly, we can very simply see that there cannot ever be any plural agreement in existential constructions where a CNP is the associate. Recall from den Dikken's (1995) examples given in (17) above, the associate in existential constructions is interpreted with narrow scope relative to  $T^0$ , and is of course pronounced in the same position. Showing the position of the number features of the CNP in the grey boxes in the below trees, we can see that the *i*F cannot be accessed by  $T^0$  as the valued feature does not c-command the unvalued feature of T. Reverse Agree therefore will not yield a value for T and it must wait until morphology to get a number value. In **this** case it will be valued singular, because the singular feature is accessible, with agreement going either way:

(35)



Similarly, in the scope reconstruction cases we can see why both singular agreement and plural agreement is possible when the CNP takes wide scope relative to  $T^0$ . In this position, Reverse Agree can happen and find a value of plural, because the *iF* features of the CNP are interpreted in the high position. If  $T^0$  waits until morphology to value its features, then singular agreement is also possible. On the other hand, if the CNP is interpreted with narrow scope, then the *iF*s of the CNP are beneath  $T^0$ . In this case,  $T^0$  is unable to get a plural value for its number feature. Recall that privileging of copies involves choosing where to interpret the *iF*s and where to pronounce the *uF*s of a DP that has merged more than once into the structure. The number feature of the DP splits its *uF*s and *iF*s and they are in separate places in the structure. Thus, in scope reconstruction cases, what is happening is the *iF*s of the reconstructed DP are realized in the embedded clause in order to get the narrow scope reading whilst the *uF*s are pronounced in the higher clause. Importantly, when the CNP reconstructs, the plural number *iF* will be inaccessible to  $T^0$  through to the point where Reverse Agree is evaluated, as in the embedded clause it does not c-command  $T^0$ . If  $T^0$  waits until morphology, then it still can only agree singular, as only the singular *uF* will be present in the morphological component.<sup>15</sup> Therefore, there cannot be plural agreement when the CNP takes narrow scope. The LF configuration is shown in (36):

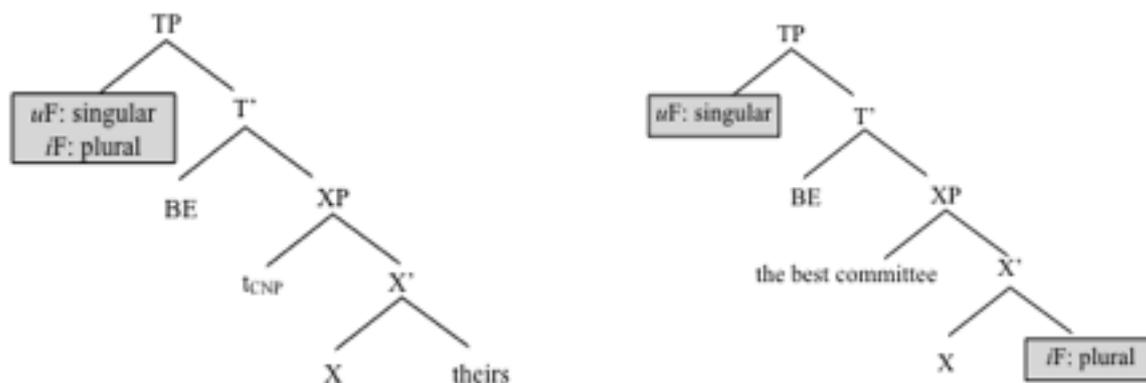
(36)



Finally, it is also explained why there is no plural agreement when the CNP is a predicate, but there is when it is the subject of a predicate. In the subject readings, there is pronunciation and interpretation in Spec,TP, so the plural *iF* is accessible to  $T^0$  via Reverse Agree. Predicates on the other hand must reconstruct at LF, and so the *iF*s of the CNP will not be accessible to  $T^0$  via Reverse Agree, rendering plural agreement impossible.

(37) a. Subject Readingb. Predicate Reading

<sup>15</sup> In principle  $T^0$  could also be valued singular by Reverse Agree, since the *uF* feature is in an accessible position.



### 5. Mixed agreement and the 3/4 pattern

Having shown why plural agreement is restricted, I now return to the cases of mixed agreement, and show how the 3/4 pattern can be incorporated into the current system. I also discuss why there is only ever singular agreement on demonstratives. The cases of mixed agreement are important to the issue at hand, but also in a wider theoretical context because it was these that led us to reject the approaches of Sauerland and den Dikken, where CNPs that controlled plural agreement were different from those that controlled singular agreement. This in turn led us to adopt the idea that  $\phi$ -features are really pairs and ultimately laid the foundation for explaining why CNP plural agreement is restricted in the way that it is.

Consider first the 3/4 pattern, repeated in (38) below. As shown above, this pattern is completely unpredicted for Sauerland and den Dikken, and also causes problems for Elbourne:

- (38) a. The government has offered itself up for criticism (with this economic policy).  
 b. The government have offered themselves / each other up for criticism.  
 c. The government has offered ?themselves / each other up for criticism.  
 d. \*The government have offered itself up for criticism.

This pattern also seems to cause a problem for the current system. Why should it be the case that (37d) is not possible? Nothing prevents the converse of (38c), which is ok. There is a very easy way that the pattern can be accommodated once we adopt the economy condition on feature valuation I call *valuation economy*, given in (39). This condition ensures that when there are multiple elements agreeing with some controller in the same domain, they will all get valued by the same feature on the controller. Importantly, the condition does not apply across different domains (which, as we have seen above, also involve different valuation mechanisms). Mismatches are possible only insofar as the different valuations happen at different points of the derivation. So, in the current setting, we can have agreement

mismatches when two elements agree with different features on the same controller, as long as one valuation happens syntactically and one valuation post-syntactically. If both happen at transfer, or both happen post-syntactically, they must target the same feature and the values will be equal.

(39) Valuation Economy

When an element enters into more than one agreement relation in the same domain, the same feature on the controller must be used for all targets of the same type.

Once we adopt this condition, (38d) actually becomes underivable, and predicted to be ungrammatical, whereas (38c) is still predicted to be fine. To see how, consider first (38a). Recall from section 4.2 that I assume that anaphors involving *iF* features being valued must enter into a Reverse Agree relationship at transfer in order to value their features for semantics. Therefore, the singular number on *itself* must have come about by syntactic valuation. (39) then restricts what value can appear on the verb in (38a). If the verb also tries to get a value at transfer, then by (39) it can only target the singular feature of the CNP, as targeting the plural feature would cause different values to be controlled by the CNP in the same domain. The verb can also wait until morphology to value its features, in which case the only value it can get is singular anyway since there are only *uFs* in the morphology. There are thus two possible derivations for (38a), but both will yield the same result. In (38b), where there is plural valuation on both the anaphor and the verb, we see a clear case of (39) holding within the syntax. The anaphor values plural via Reverse Agree, ensuring that the only valuation that  $T^0$  can get within the syntax is plural, which it does get.

The interesting situation is now what happens if the derivation proceeds as in (38b), with the anaphor valuing plural, but  $T^0$  waits until morphology to value its number feature. In this situation, we expect a mismatch to be possible. Different features will be able to be targeted on the CNP, since the valuations are happening in different domains and *valuation economy* is not an issue. In this case,  $T^0$  can take singular agreement post-syntactically, and we will end up with a sentence where the verbal agreement is singular, and the anaphor plural. This is what we find in (38c), which is of course the permitted mismatch. Now all that remains to be explained is why we do not find the converse and (38d) to be acceptable. The answer is simple. In (38d), the anaphor will be valued singular. Therefore, by (39) the only value that  $T^0$  can get via syntactic valuation is singular. To get any different value would require waiting until morphology. However, in the morphology the only feature on the CNP is the singular *uF*, and so if  $T^0$  does wait until morphology we would find a sentence with singular verbal agreement and a singular anaphor, which is of course (38a). The only way that (38d) can actually be derived is if the anaphor is valued singular at transfer, and  $T^0$  also values *at transfer*, targeting the plural feature. This however violates (39) and is predicted to be ungrammatical, which it is. There is simply no derivation where we can get the illicit

mismatch. The mismatch we do find however is possible because there is a well formed derivation with valuation occurring across different domains.<sup>16</sup>

Having seen that mismatches in agreement are possible, and provided a way of predicting which mismatches we expect to find, I now turn to the other mismatch that has been noted in the literature, where a singular demonstrative co-occurs with plural verbal agreement, such as in the following (from Elbourne 1999):

(40) {3,5,7,9} This set are all odd.

Interestingly, CNPs can never have plural demonstratives:

(41) {3,5,7,9} \*These set are all odd.

There is nothing that fixes one agreement within the syntax here and so (38) is not going to help. But, there is an appealing way in which the pattern can be captured in the preceding discussion. As long as we take c-command in Wurmbrand's definition of Reverse Agree given in (34) to mean *asymmetric* c-command (see Wurmbrand 2012b for this idea), then a demonstrative will not be able to Reverse Agree with the CNP which it modifies, as there is no asymmetric c-command relationship between the demonstrative in the D<sup>0</sup>, and the CNP, which is sister to D<sup>0</sup>.<sup>17</sup> The only way it can get valued is in the morphological component, resulting in singular agreement only. If c-command is not necessarily asymmetric, and in fact reduces to whatever the element is merged with (see for instance Epstein 1999 and Neeleman & van de Koot 2002 for different instantiations of this idea) then the demonstrative could potentially get a value via Reverse Agree, by agreement under sisterhood with the CNP it's merged with. In this case we would need to look elsewhere to find an explanation for the impossibility of plural agreement on the demonstrative. This issue however goes well beyond the scope of the discussion in this paper, so I leave the matter open.

## 6. Conclusions

In this paper I have argued for a treatment of CNPs in BrE that increases our empirical coverage of the facts, whilst keeping to the intuitive idea that CNPs in BrE are simultaneously singular and plural. I have also proposed that we are able to stretch this idea

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<sup>16</sup> Some readers may at this point be questioning why features wouldn't either all wait until morphology to get valued, or all get valued right away, both of which, due to (38), would entail that mismatches would never be possible (thanks to Željko Bošković (p.c.) for pointing out this concern to me). The issue is reminiscent of the discussion of *procrastinate* in Chomsky (1995) where features wait as long as possible to check, and the opposite approach where features check as soon as possible (Pesetsky 1989). As far as I can see, the issue does not really arise here. The issues surrounding *procrastinate* are only present in a system where one type of valuation is inherently more economical than another type of valuation. I do not make this assumption, and so assume valuation to be of the same cost, regardless of where it occurs. All that matters is that all features get a value at some stage of the derivation. Some features however will have to be valued at transfer, as they involve valuation of *i*Fs, such as is the case with binding and so cannot wait beyond this point. Doing so would leave features unvalued and cause the derivation to crash. Wurmbrand (2012a) articulates this further, and I refer the reader to her work for further discussion.

<sup>17</sup> Thanks to Jonathan Bobaljik (p.c.) and Andrew Nevins (p.c.) who independently pointed this out to me.

across all dialects of English, allowing us the conceptual advantage of not needing to posit any differences in the lexical items across the dialects. Rather, the difference comes from a parameterized difference across the dialects of English as to how readily speakers are allowed to agree with the semantic information on the CNP. Restrictions on plural agreement being controlled by CNPs have been shown to follow from how these features are accessed by agreement, and importantly not from any differences among CNPs or their features. Various questions remain to be solved which I must leave for further work. For instance, how exactly we are to encode this parametric difference between the dialects of English. It seems possible to appeal to language (and dialect) dependent thresholds on Corbett's (1979, 1983) hierarchy to do this, but it remains to be seen whether such an attempt can be truly explanatory or merely descriptive.

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