# First conjunct agreement without government\*

#### Alan Munn

MPG-ASG/Michigan State University

#### 1. Introduction

Aoun, Benmamoun and Sportiche (1994) (henceforth ABS) propose an analysis of agreement in various dialects of Arabic which attempts to account for 2 types of asymmetries in agreement, listed in (1):

- (1) a. SV vs. VS agreement
  - b. 1st conjunct agreement

The basic facts they wish to account for are the following: (i) while SV agreement is 'full' agreement, VS agreement is often impoverished in some way; (ii) first conjunct agreement is only possible with VS order; it is impossible with SV order.

ABS treat (1a) and (1b) as separate issues because they want to defend the theory of agreement stated informally in (2). In particular, they argue against a theory such as that stated informally in (3):

- (2) A subject NP can only agree in a Spec/Head relation with its verb.
- (3) A subject NP can agree with its verb if either:
  - (i) V and NP are in a Spec/Head relation
- or (ii) V governs NP

Clause (ii) of (3) describes the phenomenon of Agreement under Government (henceforth AuG), commonly found in many languages.

One striking property of AuG is that it allows first conjunct agreement as in (4):

(4) First conjunct agreement
If V governs [NP<sub>1</sub> and NP<sub>2</sub>], V may/must agree with NP<sub>1</sub>

Coordinate NPs usually trigger plural agreement in subject position. Under government, however, they may show singular agreement (for example) if the first conjunct is singular.

First conjunct agreement is well attested in languages which exhibit AuG, as the examples from English, Irish (McCloskey and Hale 1984, McCloskey 1986, 1989), Portuguese (Munn 1993) and Arabic (Mohammed 1987, Benmamoun 1992, Aoun, Benmamoun and Sportiche 1994) given in (5-8) show. Although more common in VSO languages, AuG, and therefore first conjunct agreement, is not limited typologically, but rather arises whenever the correct configurations occur.

Phonetic transcription note: ? = 2,  $\underline{s}$ ,  $\underline{t} = \underline{s}$ ,  $\underline{t}$ ,  $\underline{s} = \underline{t}$ ,  $\underline{s} = \underline{t$ 

<sup>\*</sup> Parts of this paper have been presented at NELS 25, the University of Maryland, Wayne State University and the Max-Planck-Gesellschaft, Berlin. I would like to thank Jamal Ouhalla, Cristina Schmitt and Chris Wilder for providing me with data, and Cristina Schmitt and Chris Wilder for much helpful discussion.

- (5) a. There is a man and a woman in the room. (English)
  - b. \*There are a man and a woman in the room.
- (6) a. Bhíos *pro*-féin agus Eoghan i láthair. (Irish) be-PAST.1SG EMPH. and Owen present 'Owen and I were present.'
  - b. \*Bhi *pro*-féin agus Eoghan i láthair. be-PAST EMPH. and Owen present 'Owen and I were present.'
- (7) a. Estava aberta a janela e o portão. (Brazilian Portuguese) be-PAST.SG open-F.SG the window.F.SG and the door.M.SG 'The window and the door were open.'
  - b. ??Estavam abertos a janela e o portão.
    be-PAST.PL open-M.PL the window.F.SG and the door.M.SG
    'The window and the door were open.'
- (8) a. qara?a ¿umar wa ¿aliyaa? l-qi<u>ssa</u> (Standard Arabic) read.3MS Omar and Alia the-story
  'Omar and Alia read the story.'
  b. qara?at ¿aliyaa wa ¿umar l-qis<u>ssa</u>
  - read.3FS Alia and Omar the-story
    'Alia and Omar read the story.'

It should be clear from the data above that first conjunct agreement can be simply accounted for with the theory given in (3) with the assumption that the first conjunct of a set of conjoined NPs is, in fact governed by a verb that governs the conjoined set as a whole. On a theory such as that in (2), however, the first conjunct agreement is on the surface a puzzling problem. In denying AuG, ABS lose the generalisation that first conjunct agreement is available only under government configurations. If all agreement is Spec/Head agreement, first conjunct agreement is a serious problem. ABS's position on first conjunct agreement is to deny its very existence. Instead, they claim that first conjunct agreement is actually derived from a biclausal coordinate structure wherein the "first" conjunct is the subject of the first clause and the "second" conjunct is the subject of the second clause. The second clause, under their analysis, has undergone rather radical deletion, since all that remains of it is its subject. Schematically their solution can be shown in (9), where Ø stands for some sort of deleted element. I will call this rule Conjunction Reduction, although, like ABS, I will not commit to any particular instantiation of it.

- (9) Conjunction Reduction [V NP<sub>1</sub>]<sub>S</sub> and [V NP<sub>2</sub>]<sub>S</sub>  $\rightarrow$  V NP<sub>1</sub> and Ø NP<sub>2</sub>
- In (9), V and NP<sub>1</sub> agree unexceptionally and some form of deletion takes place to transform the structure into its surface form.

ABS deny the existence of AuG because they argue that allowing only a single relation for agreement is conceptually simpler. They argue that the difference in VS vs. SV agreement in Standard Arabic (SA) cannot be the result of agreement with some higher expletive element, and so argue that the agreement is with the post verbal subject, and that agreement is lost under head movement. They leave unanswered the question of how and why the agreement is

86

lost, since it is not lost, for example by verb raising to Comp in English. In order to maintain their proposal, however, they lose completely a very strong cross-linguistic generalisation about languages that exhibit AuG: if a language has AuG it will also show first conjunct agreement in exactly those places that AuG holds.

ABS deal only with varieties of Arabic, but if their analysis is correct, they are implicitly making a much wider claim: all first conjunct agreement is biclausal, and there is no correlation between AuG and first conjunct agreement.

In these remarks, I will show that the biclausal analysis of first conjunct agreement is untenable, and that first conjunct agreement is possible (and in fact sometimes obligatory) in cases where a biclausal analysis is impossible. If agreement under government is allowed, first conjunct agreement will follow from the phrase structure of coordinate structures without further stipulation. In addition, I will show that there are certain differences between governed agreement and Spec-head agreement that mitigate against the two being assimilated completely.

I agree, however, with ABS's conclusion that agreement is best explained by the theory in (2) rather than the theory in (3). In the last section of the paper I will address the issue of how to account for agreement under government without government and argue that a feature checking account can allow for two slightly different configurations for agreement, and these can account for the differences between Spec-head agreement and governed agreement, without the need for government as a relation in the grammar.

## 2. ABS's arguments for a biclausal analysis

The core of ABS's argument for a biclausal analysis of first conjunct agreement cases lies in showing that the conjoined subject in first conjunct agreement does not behave like a plural subject semantically, i.e. they argue (correctly) that if first conjunct agreement was simply a surface syntactic fact, there should be no difference semantically between first conjunct agreeing subjects and regular plural subjects, since the conjoined NPs should denote a (semantic) plural. There are five basic cases they discuss where the conjoined subject with first conjunct agreement is incompatible with various kinds of other elements in the sentence which require plurality. In each of these cases, I will show that, although ABS are correct in showing that a plural is required to license the extra element, they fail to show that a *semantic* plurality is sufficient to license the extra element. If a syntactically singular semantic plural does not license the extra element, then we can assume that there is some *formal* licensing requirement which requires a *syntactic* plural. This will not be satisfied in first conjunct agreement cases, which show non-plural agreement.

The other side of the argument is as follows: if first conjunct agreement is biclausal, then any elements that require a semantic plural to be licensed, but have no *syntactic* requirement for plurality, should not be permitted. I will show that such elements exist, and are allowed with first conjunct agreement, which thus cannot be biclausal.

### 2.1 Semantic vs. syntactic plurality

ABS's analysis rests on the claim that first conjunct agreement subjects behave like semantic singulars, i.e. although on the surface they look like plurals, each conjunct is a singular subject of its own clause. Before proceeding, it will be useful to review the distinction between semantic and syntactic plurality, and their interaction.

The independence of syntactic and semantic plurality can be easily demonstrated by the existence of semantic plurals like *group* which behave syntactically as a singular, and the existence of *pluralia tantum* expressions such as *scissors* which are semantically singular but

syntactically plural. Consider now a predicate like *meet* in English, which requires only a semantic plural subject when used intransitively. Because of this, both syntactically singular or syntactically plural subjects can appear as in (10a/b). The syntactically plural, but semantically singular *scissors* can not appear as the subject of *meet* as in (10c). The unacceptability of (10b) is not merely pragmatic, as (10d) shows.

- (10) a. The men are meeting tomorrow.
  - b. The group is meeting tomorrow.
  - c. \*The scissors are meeting tomorrow.
  - d. A group of scissors is meeting tomorrow.

Not all predicates that require semantic plurals are like *meet*, however. Some may require both syntactic plurality and semantic plurality. The predicate *be similar* is one such predicate and as a result neither singular semantic plurals nor plural semantic singulars are permitted as its subject as the data in (11) show.<sup>1</sup>

- (11) a. The men are similar.
  - b. \*The group is similar.
  - c. \*The scissors are similar.

There also exist syntactic elements that require syntactic plurality to be licensed, but which do not require semantic plurality. Reflexive pronouns fall into this category, as the examples in (12) show. In (12a), the semantically plural *group* can not bind a plural reflexive, while in (12c) the semantically singular *scissors* can bind a plural reflexive.

- (12) a. \*The group is keeping themselves in shape.
  - b. The group is keeping itself in shape.
  - c. The scissors are by themselves on the table.
  - d. \*The scissors are by itself on the table.

Finally, there are elements that require a semantic plural to be licensed, but are not sensitive to the syntactic plurality of their licenser. Elements such as *together* and *same/different* fall into this category as the data in (13) and (14) show.<sup>2</sup>

- (13) a. The group wore different hats.
  - b. The men wore different hats.
  - c. \*The man wore a different hat.
  - d. \*The scissors were different colours.
- (14) a. The group left at the same time.
  - b. The men left at the same time.
  - c. \*The man left at the same time.
  - d. \*The scissors fell at the same time.

With these differences in mind, we can now examine the data that ABS give to show that first conjunct agreement is not semantically plural.

Note that similar has a discourse linked reading which is not relevant here, as in *That tree has an interesting pattern on its bark. This tree is similar.* 

Note that *same/different* also have a discourse linked reading as described in fn. 1 above.

## 2.2 together

ABS show that the modifier *sawa* 'together' in Lebanese Arabic can only modify a conjoined SV subject (15a) but not a conjoined VS subject with first conjunct agreement (15b). Since Lebanese Arabic allows full agreement in VS order, plural agreement is obligatory with *sawa* (15c).

- (15) a. Kariim w Marwaan raaHo sawa (Lebanese Arabic) Kareem and Marwaan left.PL together
  - b. \*RaaH Kariim w Marwaan sawa left.3M.SG Kareem and Marwaan together
  - c. RaaHo Kariim w Marwaan sawa left.PL Kareem and Marwaan together

What ABS do not show is a singular subject that is semantically plural. If we examine such cases, as in (16) we find that the modifier *sawa*, unlike the English *together* requires a syntactically plural antecedent.

- (16) a. el jamaa raaHet (LA) the group left.F.SG
  - b. \*el jamaa raaHet sawa the group left together
  - c. el rijat raaHu sawa the men left.M.PL together

In (16a) *el jamaa* 'the group' controls singular agreement, yet when it appears with *sawa* 'together' it cannot appear with singular agreement as in (16b). This shows that 'together' in Arabic clearly requires syntactic as well as semantic plurality to be licensed, and so does not constitute an adequate test to show that first conjunct agreement is biclausal.

#### 2.3 Reflexives and reciprocals

A similar case arises with reflexives and reciprocals. A reflexive object must have a plural antecedent, and here, plural agreement is obligatory in Lebanese Arabic even with VS order (i.e. first conjunct agreement is impossible.)

- (17) a. kariim w marwaan biHibbo Haalun . (LA)
  Kareem and Marwaan love themselves
  - b. kariim w marwaan biHibbo ba¿dun Kareem and Marwaan love each other
- (18) a. biHibbo kariim w marwaan Haalun (LA)
  Kareem and Marwaan love.3PL themselves
  - b. biHibbo kariim w marwaan ba¿dun Kareem and Marwaan love.3PL each other

- (19) a. \*biHibb kariim w marwaan Haalun (LA) love.3s Kareem and Marwaan themselves
  - b. \*biHibb kariim w marwaan ba¿dun (LA) love.3S Kareem and Marwaan each other

Again in these cases, ABS merely show that plural reflexives must be licensed by syntactically plural antecedents. The examples they give are not sufficient to show that the first conjunct agreement case which shows singular agreement is not semantically plural. If we assume that reflexives are licensed via agreement rather than simply through coreference with an antecedent, then the fact that first conjunct agreement is not sufficient to license a plural reflexive is unsurprising.

#### 2.4 meet

ABS also show that first conjunct agreement subjects can not appear with intransitive *meet* in Arabic. However, the data in (20) show that with a semantic plural as its subject, *lta?a* 'meet' cannot control singular agreement, thus only plural agreement is possible, even though *el jamma* 'the group' can control singular agreement with other verbs as shown in (16) above. *Meet* in English is different in this respect as (20c/d) show.

- (20) a. el jamaa lta?o (LA) the group met.PL
  - b. \*el jamaa lta?a the group met.SG
  - c. The group is meeting at 3:00.
  - d. \*The group are meeting at 3:00.

## 3. Against a biclausal analysis

The data above have shown that the inability of first conjunct agreement subjects to license elements such as *sawa* 'together', reflexives and reciprocals is not sufficient to show that such subjects are not conjoined and therefore not semantic plurals. Instead, the data simply show that many elements are sensitive to syntactic plurality, and this is not present when first conjunct agreement arises. In this respect, the data is somewhat equivocal: it is perhaps consistent with the biclausal analysis, but is also consistent with a phrasal coordination analysis with first conjunct agreement.

In order to show that first conjunct agreement is not biclausal, we need to provide examples which *do* require semantic plurality to be licensed, but do not require syntactic plurality. If such examples exist, the two theories make opposite predictions: if first conjunct agreement is biclausal, it should be impossible with these elements; if it is phrasal, the elements should be licensed.

One of the clearest cases of an element that is licensed by semantic plural<sup>3</sup> is *same/different* (see Carlson 1987, Moltmann 1992). As discussed above for English, adverbials such as *at the same time* are insensitive to the syntactic plurality of their licenser, but require a semantic plural to be licit. If first conjunct agreement is biclausal, then

This statement is not quite accurate. As Carlson (1987) showed, *same* and *different* are licensed semantically by a group of events. One way to form such groups is by having a semantically plural subject.

same/different adverbials should be impossible with it. In English this is not the case, as the acceptability of both (21a) and (21b) show.

- (21) a. There was a man and a woman in the room at the same time.
  - b. There was a man and a woman in the room at different times.

If conjunction were biclausal then (21) should be uninterpretable since *There was a man in the room at the same time/at different times* is unacceptable. The same kind of examples can be constructed for Arabic as (22) shows. In (22), first conjunct agreement is possible, despite the requirement of *bi nefs lwa?at* 'at the same time' or *nfs l-ktab* 'the same book' to have a semantically plural subject.<sup>4</sup>

(22) a. bi nefs lwa?at raaH Kariim w Marwaan at same time left.sG Kareem and Marwaan 'Karim and Marwan left at the same time.'

b. qra-t Alia w Omar nfs l-ktab read.F.SG. Alia and Omar same the.book 'Alia and Omar read the same book.'

(Moroccan Arabic)

## 3.1. Cross-linguistic considerations

As mentioned in the introduction, ABS's analysis is surely not simply an analysis of first conjunct agreement in Arabic, since by adopting the agreement theory in (2) they are denying first conjunct agreement altogether. I now turn to some more crosslinguistic data which shows that first conjunct agreement cannot be biclausal, and if the theory of agreement posited in (2) is correct, an alternative account of the facts must be given.

First consider the Irish examples discussed in McCloskey (1986, 1989). The basic facts about Irish first conjunct agreement are the following: when an agreeing head is present, the NP it agrees with must be *pro*. In conjoined VS structures then, the first conjunct must be obligatorily null. If the order of the conjuncts is reversed, the sentence is unacceptable unless an overt pronoun is present.

- (23) a. Bhíos *pro*-féin agus Eoghan i láthair. (Irish) be.PAST.1SG EMPH. and Owen present 'Owen and I were present.'
  - b. Bhí Eoghan agus \*(mé) féin i láthair. be.PAST Owen and me EMPH present 'Owen and I were present.'

The distribution of *pro* in Irish is linked directly to the presence of agreement. If first conjunct agreement is biclausal, as ABS claim, then they are claiming for Irish that an agreeing verb is allowed in the first clause of a clausal coordination, but not in the second clause. It is not clear how such a condition should be stated in the grammar.

<sup>&</sup>lt;sup>4</sup> Arabic seems to impose a syntactic plurality requirement for 'different'. Jamal Ouhalla (personal communication) informs me that (22a-b) require plural agreement in Moroccan Arabic when 'different times' or 'different books' is used.

On the other hand, the data in (23) receive a straightforward analysis if the first, but not the second conjunct is governed by the verb, and thus must be realised as *pro* when the verb shows agreement.<sup>5</sup>

McCloskey (1986:275) explicitly mentions that group readings are allowed with conjoined PP objects, one of which is a pronoun, and the following example from McCloskey (1989) clearly shows a group reading of the predicate, and provides further evidence against the biclausal analysis.

(24) An ndéanfá-féin agus Liam an dinnéar anocht? (Irish)
Q do-Cond.2Sg.-Emph. and Bill the dinner tonight
'Would you and Bill make the dinner tonight?'

#### 3.2 Relative clauses

ABS also argue that relative clauses provide support for the biclausal analysis. They show that a relative clause with a conjoined head such as (25) cannot take part in first conjunct agreement.

The unacceptability of (25) does not conclusively show that first conjunct agreement is biclausal. First of all, consider a corresponding English example:

- (26) a. There is a dog and a cat that hate each other in the next room.
  - b. \*There are a dog and a cat that hate each other in the next room.
  - c. There are two dogs and a cat that hate each other in the next room.

Here, first conjunct agreement is obligatory despite the presence of the relative clause and the reciprocal inside it. This example clearly shows that the first conjunct agreement does not entail lack of semantic plurality.

Relative clauses in Irish also provide an argument against treating coordination as biclausal. In Irish, resumptive pronouns are disallowed in the subject position of the clause subjacent to the head of a relative clause, as in (27a/b)

- (27) a. \*an fear a raibe sé breoite
  the man comp be.PAST he ill
  'the man who was ill'

  (Irish)
  - b. \*na daoine a rabhadar *pro* breoite the people comp be.PAST.3.PL pro ill 'the people who were ill'

A further problem for a biclausal analysis of first conjunct agreement in Irish is the fact that in conjoined subjects, only the first NP in the conjuncts receives nominative case, while the other conjuncts receive accusative (default) case. Again, if first conjunct agreement is biclausal, then somehow accusative case must be stipulated to be assigned in the second clause. It is again unclear how this could be effected.

If first conjunct agreement were biclausal, then a resumptive pronoun in the subject position of a relative clause should be ruled out as it is in (27). This is not the case, however, as (28) shows.

nadaoine a rabhadar *pro* féin agus a gclann mhac ábalta ar isach the people COMP be.PAST.3.PL *pro* emph and their family sons.GEN able on fishing

'the people that they and their sons were capable of fishing'

(Irish)

Portuguese also shows first conjunct agreement with relative clauses. While the verb inside the relative clause is plural and has a reflexive clitic, the matrix verb must agree with the first conjunct. The contrast between (29b/c) shows that this is a case a first conjunct agreement, rather than singular agreement with a null expletive subject.<sup>6</sup>

- (29) a. É o homem e a mulher que se detestam (Brazilian Portuguese) is-3sG the.M.SG and the.F.SG who SE hate-PL (It) is the man and the woman who hate each other
  - b. São os homens e a mulher que se detestam are-3PL the men and the woman who hate each other (It) is the men and the woman who hate each other
  - c. \*É os homens e a mulher que se detestam is-3sG the men and the woman who hate each other (It) is the men and the woman who hate each other

It is clear that the data from English, Irish and Portuguese cannot be accounted for with a biclausal analysis, and thus the generality of ABS's solution is clearly compromised. What accounts for the lack of first conjunct agreement in the Arabic cases is unclear, however, but it is not definitively due to the purported biclausal nature of first conjunct agreement.

## 3.3. Mixed agreement

A major prediction of the biclausal analysis of first conjunct agreement is that 'mixed' agreement should never occur, since both clauses contain singular verbs. In fact these are the cases that ABS show to be ungrammatical in Arabic. Again, Irish provides a counterargument to the generality of the claim. McCloskey (1986) shows that first conjunct singular agreement can coocur with plural agreement in certain Irish predicative constructions. These predicative constructions are formed by prefixing a possessive clitic onto a noun or verbal noun as shown in (30).

- (30) a. Tá mé 'mo dhochtúir. (Irish)
  am I 1.SG doctor
  'I am a doctor.'
  - b. Tá mé 'mo sheasamh. am I 1.SG stand VN 'I am standing.'

This is not to say that there is no expletive. There may well be, but the agreement is with the first conjunct. ABS (p. 200) make the same point in their discussion of Arabic.

With a conjoined subject, the verb agrees with the first conjunct in the singular, while the predicate shows up with the plural clitic, as in (31).

- (31) a. Tá mise agus mo dheartháir 'nár ndochtúirí. (Irish) am I+CONTR and my brother 1.PL doctors 'My brother and I are doctors.'
  - b. bhínn *pro*-féin agus an seanduine 'nár suí. be.PAST.HAB.1.SG *pro*-EMPH and the old fellow 1.PL sit 'The old fellow and I used to be sitting.'

If we were to suppose that the examples in (31) were derived from clausal paraphrases, then we would have to explain how the plural clitic in the second conjunct is sensitive to the structure after conjunction reduction, while the agreement in the first conjunct is sensitive to the agreement before conjunction reduction.

## 3.4 First conjunct agreement within the Noun Phrase

Further evidence against the biclausal analysis of first conjunct agreement comes from first conjunct agreement facts in NPs in Brazilian Portuguese. Brazilian Portuguese, (BP) like other Romance languages, has both prenominal and postnominal adjectives, along with prenominal determiners, all of which show agreement. Depending on the order of the adjectives, it is possible to have mixed agreement with first conjunct agreement on the determiner and the prenominal adjectives and both conjunct agreement on the postnominal adjective. An example of this is given in (32). In (32a), the first conjunct is feminine, and all prenominal elements agree with it in gender and number. The unacceptability of (32b/c) shows that the prenominal elements must agree with the first conjunct, while the acceptability of (32d) shows that the postnominal adjective *famosos* 'famous' is agreeing with both conjuncts and not simply the second conjunct.

- (32) a. Eu encontrei as minhas velhas amigas e amigos famosos. (BP)

  I met the-F.PL my-F.PL old-F.PL friends-F.PL and friends-M.PL famous-M.PL

  'I met my famous old female freinds and male freinds.'
  - b. \*Eu encontrei os meus velhos amigas e amigos famosos.

    I met the-M.PL my-M.PL old-F.PL friends-F.PL and friends-M.PL famous-M.PL
  - c. \*Eu encontrei os meus velhas amigas e amigos famosos I met the-M.PL my-M.PL old-F.PL friends-F.PL and friends-M.PL famous-M.PL
  - d. Eu encontrei os meus velhos amigos e amigas famosos.

    I met the-F.PL my-F.PL old-F.PL friends-F.PL and friends-M.PL famous-M.PL
    'I met my famous old female friends and male friends'

The meaning of (32a) is that both the prenominal and the postnominal elements take scope over both conjuncts, thus the agreement pattern cannot be attributed to meaning in these cases. Nor can these NPs be interpreted as biclausal, since they can be modified by *juntos* 'together', (which agrees in the plural) or by *no mesmo dia* 'on the same day' as the examples in (33) show.

- (33) a. Eu encontrei as minhas velhas amigas e amigos juntos. (BP)

  I met the-F.PL my- F.PL old- F.PL friends- F.PL and friends-M.PL together- M.PL
  - b. Eu encontrei as minhas velhas amigas e amigos no mesmo dia. I met the-F.PL my- F.PL old- F.PL friends- F.PL and friends-M.PL on the same day

### 3.5 First conjunct agreement in participial absolutes

Schmitt (to appear) shows that first conjunct agreement effects show up in participial absolutes and *have*+agreeing participle constructions, both in Brazilian Portuguese and in Spanish. The data for participial absolutes is given in (34); similar examples exist for *have*+agreeing participles.

- (34) a. Arrumadas as salas e o quarto, ... (BP) tidied up-F.PL the-F.PL living-room-F.PL and the-M.SG bedroom-M.SG
  - b. \*Arrumados as salas e o quarto ...
    tidied up-M.PL the-F.PL living-room and the-M.SG bedroom-M.SG
  - c. Arregladas las salas y el cuarto, ... (Spanish) tidied up-F.PL the-F.PL living-room-F.PL and the-M.SG bedroom-M.SG
  - d. \*Arreglados las salas y el cuarto,...
    tidied up-M.PL the-F.PL living-room-F.PL and the-M.SG bedroom-M.SG

The participial absolutes offer a striking example of how first conjunct agreement is compatible with collective predicates. Participial absolutes are permitted with transitive verbs and unaccusatives. Consider a verb like *combine*, which has only a group interpretation when used unaccusatively. First conjunct agreement is possible in these cases as (35), from Brazilian Portuguese, show shows.

(35) Combinada a prata e o ouro, a Maria tinha o suficiente para fazer um anel combined-F.SG the.F.SG silver and the.M.SG gold, the Maria had the sufficient for to.make a ring.

(BP)

'With the gold and the silver combined, Maria had enough to make a ring.'

## 4. Distinctions between governed agreement and Spec-head agreement

ABS's attempt to give what is essentially a semantic account of first conjunct agreement fails when confronted with the wide array of crosslinguistic first conjunct agreement facts. Before pointing to a solution to the facts, I would like to mention an important difference between governed agreement and Spec-head agreement, which, as far as I am aware, has not been noticed before.

It is well known that conjunction usually requires some sort of default feature resolution rules, for example, in languages with gender agreement, a conjoined masculine and feminine noun will resolve to masculine plural. This constraint is clearly violated in cases of first conjunct agreement, as we have seen in both the Arabic examples and the Portuguese examples.

Another example of this agreement resolution was noted for English by Sag et al. (1985). Sag et al. show that there is a hierarchy of agreement patterns exhibited between conjoined pronouns which bind reflexives, as the data in (36) shows.

- (36) a. He and she are proud of themselves.
  - b. You and he are proud of yourselves/\*themselves.
  - c. You and I are proud of ourselves/\*yourselves.
  - d. He and I are proud of ourselves/\*themselves.

The generalisation needed to account for the facts is a hierarchy of 1st > 2nd > 3rd person. What is important here is that the order of conjuncts is not relevant for this kind of agreement. This sort of resolution for person seems to be universal. Given that first conjunct agreement only arises in English in *there* constructions, it is not possible to test whether the resolution holds in governed agreement configurations, since pronouns are generally not permitted in *there* constructions. However, in Portuguese, it is possible to show that in governed agreement configurations, the hierarchy is 'violated' or overridden by the first conjunct's syntactic requirements. The relevant data is given in (37).

- (37) a. Eu e as meninas saímos. (BP)
  I and the girls left.1PL
  - b. As meninas e eu saímos. the girls and I left.1PL
  - c. \*As meninas e eu saíram. the girls and I left.3PL
  - d. Foram as meninas e eu que compramos as flores. were.3PL the girls and I who bought.1PL the flowers
  - e. Fui eu e as meninas que compramos as flores. was.1SG I and the children who left.1PL
  - f. \*Fui as meninas e eu que comprei as flores. was.1SG I and the girls that bought.1SG the flowers

The contrast between (37a/b) and (37c) shows that a conjoined subject containing a first person pronoun can never control third person agreement, independent of the order of the conjuncts. However, as the contrast between (37d/f) shows, when the agreement in postverbal, third person agreement is obligatory when the third person conjunct is the first one.

The examples above show that there is a fundamental asymmetry between governed agreement and Spec-head agreement. While the former seems to only 'see' the governed element (in these cases the first conjunct), Spec-head agreement is able to 'see' more than the first conjunct. In this sense, Spec-head agreement is looser than governed agreement, and thus may be affected by other factors.

To show this is so, consider the well-known, but not very well understood, phenomenon of collective noun agreement in British English. In British English, collective nouns can agree in either the singular or plural, as in (38).

- (38) a. The band are going to be playing at 6:00. (Br. E)
  - b. The band is going to be playing at 6:00.

Although (38a) looks like *band* can be either plural or singular, as Barlow (1992) (citing Corbett 1979) shows, such nouns cannot take plural demonstratives as in (39), even when they control plural agreement on the verb.

- (39) a. \*These band are going to be playing. (Br. E.)
  - b. This band are going to be playing.
  - c. This band is going to be playing.

If the indefinite article is used, plural agreement is still possible on the verb as in (40).

- (40) a. A band from Poland are going to be playing. (Br. E)
  - b. A band from Poland is going to be playing.

If governed agreement is identical to Spec-head agreement, we should expect that collective nouns in British English should control either plural or singular agreement in *there* constructions, given the data in (40). However, as the data in (41) shows, this is not the case. In an *there* construction, agreement can only be with the singular. This contrasts with the standard cases of agreement in *there* constructions given in (41c/d) which show that agreement is indeed with the postverbal subject. (I am ignoring here the contracted form *there's* which essentially shows no agreement in English at all.)

- (41) a. \*There are a band from Poland playing.
  - b. There is a band from Poland playing.
  - c. \*There is two bands from Poland playing.
  - d. \*There are a man from Poland arriving.

Thus, whatever accounts for the ability of collective nouns in British English to control plural agreement is not generalizable to cases of governed agreement. It also does not extend to demonstrative agreement, a point we will return to below.

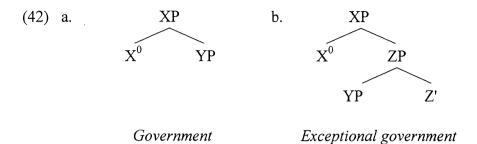
The data above clearly point to a difference between governed agreement and spec-head agreement, and this difference extends beyond cases of first conjunct agreement. This is important, because ABS's account of first conjunct agreement cannot be extended to cases of governed agreement which do not involve coordination.

## 5. Analysis: first conjunct agreement with government

The survey of data thus far has shown that in a wide variety of constructions, first conjunct agreement is obligatory in constructions that either force group readings or are compatible with them. The fact that group readings are incompatible with the biclausal analysis lends support to the idea that phrasal coordination plus agreement under government is necessary to account for first conjunct agreement. In addition to being empirically more sound, it is also conceptually superior in that it preserves the strong crosslinguistic correlation that first conjunct agreement will arise whenever agreement under government is possible. The fact that governed agreement has different syntactic properties than Spec-head agreement also lends force to the argument. In this section I will show that first conjunct agreement can be accounted for straightforwardly if one assumes an adjunction structure for coordinate structures.

Under standard definitions of government, (e.g. Aoun and Sportiche 1981, Chomsky 1986) the complement of a head is governed by the head (I will call this government), and the specifier of the complement is governed by the head provided the complement is made transparent in some way, either by stipulation or by incorporation into the governing head (I

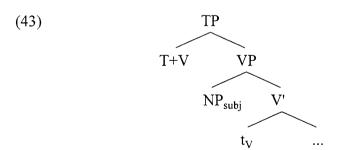
will call this exceptional government).<sup>7</sup> These two configurations are schematised in (42a/b), where in each case, X governs YP. In all of the cases discussed above, one of the two configurations in manifested.



Configuration (42a) is manifested in the determiner/prenominal adjective data from Portuguese, and also in the participial absolutes data, according to Schmitt (to appear). Configuration (42b) is manifested in the Arabic and Irish VS word orders. Depending on one's analysis of *there* constructions in English, either of (42a) (if the coda of the *there* construction is adjoined to VP or (42b) is realised (if a small clause analysis of *there* constructions is adopted.)

If first conjunct agreement arises under government configurations, it must be the case that the first conjunct of a conjoined set of DPs in the position of YP in (42) must be governed. One way to effect this in (42a) is to assume that conjunctions head their own phrases and the conjuncts are in the specifier and complement of the conjunction phrase.<sup>8</sup> Provided we stipulate that the conjunction phrase itself is transparent to government, the first conjunct will be governed.

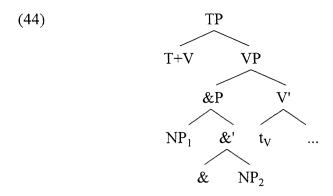
In two other analyses of first conjunct agreement in Arabic (Bahloul and Harbert 1992 and Benmamoun 1992), the facts are accounted for in exactly this way. What is not clear from either of these analyses, however, is whether putting the first conjunct in the specifier of the conjunction phrase actually gets the facts as required. For sake of discussion, assume, as Benmamoun (1992) does, that the postverbal subject in Arabic remains inside the VP, and agrees under government with the V+T complex shown in (43).



If we embed a conjunction phrase in the subject position above we get the structure in (44).

<sup>&</sup>lt;sup>7</sup> It is not important for the present discussion what the exact definition of government is, or, in fact, whether government is abandoned altogether as in Chomsky (1993). Whatever accounts for the standard cases of exceptional government should carry over in this framework. See below for more discussion.

Various arguments independent of the first conjunct agreement facts are presented in favour of treating conjunction structures as endocentric structures in which the first conjunct c-commands the second conjunct. See Munn (1992, 1993) for details.



While in (42a) we simply need to stipulate that the conjunction phrase is transparent to government, in (44) we must allow for 'exceptional' exceptional government, i.e. government into the specifier of a specifier. This amounts to allowing government to be recursively defined. There is independent evidence that such an extension of government is never permitted. <sup>9</sup>

If we take ECM verbs to be core cases of exceptional government, and government into the specifier of a specifier should be allowed, we should be able to embed an ECM clause as the subject of a small clause, but, as Stowell (1981) pointed out, this is never permitted.

- (45) a. I consider John to be foolish.
  - b. \*I consider John to be foolish to be obvious.

Johnson (1988) argued that gerunds with accusative subjects (ACC-ing gerunds) make an even stronger point for the lack of exceptional exceptional government. Consider the data in (64).

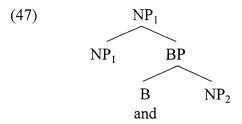
- (46) a. I consider John being here to be a problem.
  - b. \*Who do you consider t being here to be a problem?
  - c. I remember John being here.
  - d. Who do you remember being here?

In (46a), an ACC-ing gerund is possible as the subject of a small clause governed by consider. This contrasts minimally with (45a), thus, we might assume that gerunds are able to casemark their subjects internally. What is important though, is that extraction of the subject of the gerund is not permitted, thus consider in (46b) must not govern into the subject of gerund. This contrasts minimally with the extraction data in (46d) which shows that remember plausibly does govern into the subject position, even if it does not assign case to the subject.<sup>10</sup>

<sup>&</sup>lt;sup>9</sup> Raposo and Uriagereka (1990) argued for the recursive definition of government. By their definition, recursive government is always subject to minimality, i.e. a head can govern long distance provided there is no closer had that governs the projection in question. Even with their definition, exceptional government is not permitted.

Johnson uses this data to argue that gerunds are in fact CPs but his arguments are dubious, given the large amount of evidence to the contrary (cf. Reuland 1983, Abney 1987, Munn 1991).

Munn (1992, 1993) argues that the general unavailability of 'exceptional' exceptional government supports a different structure for coordination, one in which the Boolean phrase is adjoined to the first conjunct, as in (47).<sup>11</sup>



When we embed the structure given in (47) in either of (42a) or (42b), the first conjunct will be governed, either directly or by exceptional government, however that is to be cashed out in detail. By treating coordination as adjunction, all of the first conjunct agreement facts can be accounted for without appealing to stipulative extensions to the theory of government. The analysis also preserves the correlation between the agreement under government and first conjunct agreement which is lost under ABS's analysis.

## 6. First conjunct agreement without government?

I have not given a detailed analysis of all of the constructions described above, since in all cases the point is the same: first conjunct agreement cannot be given a biclausal analysis, but rather follows directly from agreement under government on the assumption that conjunction phrases are adjoined to the first conjunct. In this last section I would like to return to the idea, mentioned at the outset, that agreement under government can be accounted for without government, since, as ABS rightly argue, a disjunctive notion of agreement seems to be conceptually unsatisfactory. In the Minimalist framework (Chomsky 1993, 1995), government is dispensed with entirely, being subsumed (largely) by the Spec-head relation. A minimalist account of agreement under government will therefore need to be recast if minimalism is to be adopted. Recall, however, that the differences between governed agreement and 'regular' agreement still need to be accounted for.

If government does not exist as a relation in the grammar, then we need to ask what is its analogue in the Minimalist framework. In the minimalist program, all movement is driven by feature checking requirements.<sup>12</sup> Elements either move before Spell-Out or at LF. If we think in these terms, then if X (descriptively) agrees under government with YP then YP has not moved *relative* to X by Spell-Out. On the other hand, if YP is in (descriptively) a Spechead relation with X then YP has moved to the specifier of X overtly.<sup>13</sup> We can then recast the notion of agreement under government as the descriptive generalisation given in (48).

Two other arguments for the adjoined BP structure are presented by Munn. The first is that conjunction phrases can be extraposed, which is consistent with the idea that they are maximal projections. If the first conjunct were in the specifier of the conjunction phrase, the extraposed constituent would have to be a B'. A second argument comes from Munn's 1992 analysis of Across-the-Board (ATB) extraction as an instance of operator movement to the Spec BP position.

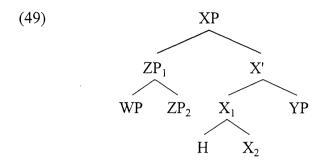
For concreteness I will assume the feature checking mechanism of Chomsky 1993 with the modification to the principle of Greed given in Chomsky 1995. Nothing crucial hinges on this particular point.

This is not to say that YP has not moved at all. Also, I am restricting this statement to agreement under government. We do not want to say, for example, that the verb in Comp agrees under government with the subject in Spec IP in (i) (as the unacceptability of first conjunct agreement in (ii) shows) but rather, that the subject and the verb have agreed in a Spec-head relation and then the verb has raised further.

<sup>(</sup>i) Who do John and Mary like

## (48) Agreement under government is always covert agreement.

A crucial notion within the checking theory is that of *checking domain*. Consider the schematic tree given in (49), adapted from Chomsky (1995:177).



The minimal *domain* of X is the set of nodes{YP, ZP, WP, H}. The *checking domain* of X is this set less the complement domain of X, in this case {YP}, thus the checking domain of X is {ZP, WP, H}. Both heads and complements must be in the checking domain, since both may need to have features to be checked. If we assume that X in (49) is some functional projection, then ZP is in a checking relation with X, as is H (or more properly, its chain).

We can now derive most of the properties of agreement under government (and therefore first conjunct agreement) if we assume the following:

## (50) Agreement under government is a head-head relation.

By assuming that agreement under government is a head head relation, we can still say that agreement is a checking relation within the Minimalist framework, but it will have subtle differences from the Spec-head agreement relation, given the adjoined BP structure argued for above.

Consider ZP in the tree in (49). Assuming Greed, ZP must have moved to satisfy some strong feature of X or of itself. WP, on the other hand, an adjunct to ZP has been pied-piped for independent reasons. Since the adjunct is in the checking domain, it may also enter into agreement relation with the head.

If we analyse agreement under government, then the head of the first conjunct raises covertly to check features. We can then return to the cases of distinctions between spec-head agreement and agreement under government. Agreement under government is 'strict' in the sense that it does not 'see' the other conjuncts, while spec-head agreement can see the other conjuncts. This fact may be derivable from the fact that the conjunction phrase is pied-piped in Spec-head agreement cases and is not in head-head agreement cases.

The first conjunct agreement facts inside the noun phrase support this idea. If NP internal agreement is effected by head movement within the noun phrase, as proposed by Longobardi (1994) for example, then we expect first conjunct agreement to be the norm with respect to determiner agreement, and this is the case, as described above. Adjuncts to the noun phrase, will agree with plural agreement, these being instances of Spec-head agreement.

Recall the fact that in British English, a collective noun forces singular agreement under government, and cannot agree with a plural demonstrative, even though it can agree in the plural in canonical spec-head agreement configurations. If demonstratives are in Spec DP,

<sup>(</sup>ii) \*Who does John and Mary like

and agreement involves N raising to D, then we can account for the fact that the demonstrative must agree with the noun in the singular and never in the plural. Since the agreement facts in *there* constructions show the same effects, then whatever accounts for the raising of the associate to the expletive is a case of head-head relations and not Spec-head relations.

#### Conclusion

It is beyond the scope of these remarks to give a full analysis of all of the cases discussed above in terms of LF head (or feature) raising. It should be clear, however, that head-head agreement is an allowable case of agreement within the minimalist framework, and thus the argument that agreement under government is conceptually invalid does not hold under minimalist assumptions. What is interesting about this approach, however, is that it still encodes the subtle differences between the two types of agreement in terms of whether pied-piping of adjuncts is allowed or not. Heads will never be able to pied-pipe adjoined conjunction phrases, and this is consistent with the fact that agreement under government does not care about the other conjuncts with respect to feature resolution.

Spec-head agreement is predicted to allow for agreement with more than one element according to feature resolution rules of the usual type. This will follow, at least partially, by treating the conjunction phrase as an adjunct to the first conjunct and therefore in the checking domain when Spec-head agreement arises. If we treat the conjunction as a sort of plural pronominal element as Munn (1993) does, then the fact that agreement resolution is necessary in Spec head relations might follow. Conjunct resolution rules themselves are a poorly understood phenomenon, and I do not claim to have a full account for them here. Given the plural agreement facts in collective nouns in British English however, which arise only in Spec-head configurations, it is not entirely obvious that a purely syntactic account of the effects of Spec-head agreement can be found.

#### References

Abney, Steven. 1987. The noun phrase in its sentential aspect. Doctoral dissertation, MIT, Cambridge, Mass.

Aoun, Joseph, Elabbas Benammoun and Dominique Sportiche. 1994. Agreement, word Order and conjunction in some varieties of Arabic. *Linguistic Inquiry* 25:195-220.

Aoun, Joseph and Dominique Sportiche. 1991. On the formal theory of government. *The Linguistic Review* 2:211-236.

Barlow, Michael. 1992. A Situated Theory of Agreement. New York: Garland.

Benmamoun, Elabbas. 1992. Functional and inflectional morphology: Problems of projection, representation and derivation. Doctoral dissertation, USC, Los Angeles, California.

Chomsky, Noam. 1986. Barriers. Cambridge, Mass.: MIT Press.

Chomsky, Noam. 1993. A minimalist program for linguistic theory. In *The View from Building 20: Essays in linguistics in honor of Sylvain Bromberger*, ed. Kenneth Hale and Samuel J. Keyser, 1-52. Cambridge, Mass.: MIT Press.

Chomsky, Noam. 1995. The Minimalist Program. Cambridge Mass.: MIT Press.

Corbett, G. G. 1979. The agreement hierarchy. Journal of Linguistics 15:203-224.

Johnson, Kyle. 1988. Clausal gerunds, the ECP and government. *Linguistic Inquiry* 19:583-609.

Longobardi, Giuseppe. 1994. Reference and proper names: A theory of N-movement in syntax and Logical Form. *Linguistic Inquiry* 25:609-665.

- McCloskey, James. 1986. Inflection and conjunction in Modern Irish. *Natural Language and Linguistic Theory* 4:245-281.
- McCloskey, James. 1989. A note on agreement and coordination in Old Irish. In *A Festschrift for William Shipley*. ed. Sandra Chung and Jorge Hankamer 105-114. Syntax Research Center, University of California, Santa Cruz.
- McCloskey, James and Kenneth Hale. 1984. On the syntax of person-number inflection in Modern Irish. *Natural Language and Linguistic Theory* 1:487-533.
- Mohammed, Mohammed. 1987. Nominative case, I-subjects and subject-verb agreement. In *Proceedings of the Parasession on Agreement*, Chicago Linguistics Society, Chicago. Ill.
- Moltmann, Friederike. 1992. Reciprocals and *same/different:* towards a semantic analysis. *Linguistics and Philosophy* 15:411-462.
- Munn, Alan. 1987. Coordination and X-bar theory. *McGill Working Papers in Linguistics* 4-1:121-140.
- Munn, Alan. 1991. Binding in gerunds and the Leftness Condition. In *MIT Working Papers in Linguistics* 14. ed. Jonathan David Bobaljik and Tony Bures 163-178. MIT, Cambridge, Mass.
- Munn, Alan. 1992. A null operator analysis of ATB gaps. The Linguistic Review 9:1-26
- Munn, Alan. 1993. Topics in the syntax and semantics of coordinate structures. Doctoral dissertation, University of Maryland, College Park, Maryland.
- Raposo, Eduardo and Juan Uriagereka. 1990. Long distance case assignment. *Linguistic Inquiry* 21: 505-538.
- Reuland, Eric. 1983. Governing -ing. Linguistic Inquiry 14:101-136.
- Sag, Ivan, Gerald Gazdar, Thomas Wasow and Steven Weisler. 1985. Coordination and how to distinguish categories. *Natural Language and Linguistic Theory* 3:117-171.
- Schmitt, Cristina. 1996. Aspect and the syntax of noun phrases. Doctoral dissertation, University of Maryland, College Park, Maryland.
- Schmitt, Cristina. To appear. Lack of iteration: accusative clitic doubling, participial absolutes and *have*+agreeing participles. *Probus*.

Department of Linguistics, Michigan State University and Max-Planck Gesellschaft, Arbeitsgruppe Strukturelle Grammatik, Berlin

Wells Hall Michigan State University East Lansing MI 48824 U.S.A.

amunn@pilot.msu.edu