NON-REFLEXIVE BINDING IN WARLPIRI

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Abstract

This paper presents an f-command based analysis of non-reflexive (possessive) Warlpiri binding. Simpson (1991) provides a c-command based analysis of a set of non-reflexive binding data, and explains binding differences between English and Warlpiri binding data by a difference in structure, proposing a flat structure for Warlpiri and a hierarchical structure for English. I assume a more hierarchical structure for Warlpiri along the lines of Simpson (2007) and illustrate that an f-command based approach using lexical specification of binding constraints as proposed by Dalrymple (1993) is better capable of accounting for the Walrpiri binding data. Not only does a hierarchical structure for Walrpiri not allow for a c-command based approach, but a level of variation in the binding data in Warlpiri illustrates that lexical specification of binding constraints for different dialects/individual speakers is necessary to account for the data. For the specific variety of non-reflexive binding data described by Simpson (1991) I propose an analysis only taking f-command into account (and not the grammatical function hierarchy or f-precedence), which is a novel way of accounting for binding data.

1 Introduction

Warlpiri is a language of the Pama-Nyungan language family spoken in Australia, and has around 2,500 speakers (according to the 2006 census). It is traditionally referred to in the literature as a typical case of a "non-configurational" language, a language which illustrates free word order, the use of syntactically discontinuous constituents, and extensive use of null anaphora (Hale, 1983). Languages traditionally labelled as non-configurational, including Warlpiri, have received different types of analyses in different frameworks. In transformational frameworks, such as Principles and Parameters and Minimalism, grammatical functions are defined in terms of tree configurations. This means that configurational and non-configurational languages are the same underlyingly. This point is argued by Legate (2002) for Warlpiri, claiming that Warlpiri is in fact a configurational language, and that any variation is accounted for by a microparametric analysis. Binding phenomena are accounted for by the phrase structural relation of c-command. In LFG, trees represent the surface word order of a sentence, and all information about grammatical functions is contained inside the f-structure. Configurational and non-configurational languages may have different c-structures in LFG. In LFG, both the relations of c-command and f-command have been used in different works to account for binding phenomena. F-command is more widely used, but c-command has been used to account for Warlpiri binding by Simpson (1991).

This paper will look at a case of apparent lack of subject/object asymmetry in Warlpiri, namely non-reflexive, possessive binding. In approaches using c-command to account for binding, configurational languages have been assigned hierarchical structures to account for subject/object asymmetries in the binding data. Non-configurational languages, as mentioned, have often been analysed as being underlyingly configurational (Legate, 2002), with a hierarchical structure, but they have also often been analysed as having a flat structure, e.g. Simpson (1991) for Warlpiri. The flat structure neatly accounts for the lack of subject/object asymmetries attested in a variety of Warlpiri described by Simpson (1991). In this paper it will be illustrated that LFG's relation of f-command is better capable of accounting for the non-reflexive binding data in Warlpiri, assuming lexical specification of binding constraints.

Before illustrating the data, I will discuss general word order characteristics and proposed structures for Warlpiri in Section 2 and provide an introduction to binding in Section 3. Section 4 gives an overview of the non-reflexive binding data, followed by a discussion of an account of this data in Warlpiri by Simpson (1991) in Section 5. In Section 6 I discuss arguments in favour of an f-command analysis and lexical specification, and provide a new analysis for the binding data. In Section 7 further evidence is provided for a lexical specification analysis, illustrating a multitude of dialects, and the conclusion of this paper follows in Section 8.

2 Warlpiri word order and structure

As mentioned, Warlpiri is known for its 'free' word order. The term 'free' here is not actually accurate, as the word order appears to be determined by discourse functions (Simpson, 2007). The word order is, however, unconstrained by the syntax:

(1)   a. *Ngarrka-ngku ka   wawirri   panti-rni.*
           man-ERG   AUX kangaroo.ABS spear.NPST

        b. *Wawirri   ka   panti-rni   ngarrka-ngku.*
           kangaroo.ABS AUX spear.NPST man-ERG

        c. *Panti-rni   ka   ngarrka-ngku wawirri.*
           spear.NPST AUX man-ERG   kangaroo.ABS

           'The man is spearing the kangaroo.'

    (Hale, 1983, p. 6)

Any of these orderings is allowed, with all relative orderings of subject, object and verb being allowed. In terms of grammatical functions and the verb there is thus free word order, but the different orderings will be appropriate in different information structural contexts. The only syntactic (and not information structural) constraint in Warlpiri sentences is the set position of the auxiliary element (marked as AUX), which in these cases occurs in second position. The auxiliary AUX is not really an auxiliary in the traditional sense; it is a constituent which expresses negation, modal, aspectual and temporal relations, as well as subject and non-subject person and number features (Laughren, 1999). In the literature it is referred to as AUX and I will retain this term to denote this constituent.[1] The AUX is argued to be an enclitic which forms a phonological unit with the preceding phonological word (Nash, 1980; Austin & Bresnan, 1996).

The auxiliary constituent appears in second position in the sentences in (1), and many works on Warlpiri give this as the set position of the AUX, e.g. Hale (1983); Simpson (1991). As an enclitic, it attaches to the first phonological word. Later works, however, point out that the auxiliary may occur in first or third position as well. An example of first position is the following (with the AUX in bold):

(2)   **Kapi-rna-rla**   *yi-nyi.*
      FUTCOMP-1sS-3sDAT give.NPST
      'I will give (it) to him.'

    (Hale *et al.* , 1995, p. 1432)

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[1]The auxiliary appears in most sentences but it is in fact optional: if the (main) verb is marked by either an irrealis or a past tense suffix, the auxiliary may be phonologically null (Laughren, 1999). Simpson (1991) notes that in nominal-headed sentences in Warlpiri the auxiliary is also optional.

Here we see that the AUX appears in first position followed by the verb. Hale *et al.* (1995) mention that the other ordering (V - AUX) is allowed too. They claim that when the auxiliary is disyllabic or longer, it is allowed to appear in initial position, which is the case in (2). The view as the AUX as an enclitic might explain this: if it is monosyllabic it cannot stand by itself.[2] When the AUX appears sentence-initially like this, Laughren *et al.* (2005) claim that this is to emphasize the tense/aspect component of the AUX. An example of the AUX in third position is the following:

(3) *Pangurnu-ju nyarrpara-wiyi **ka-nkulu** marda-ni?*
 shovel-KN   where-before   PRES-2PL hold.NPST

 'Where have you got a shovel?'

 (Hale (1959) via Simpson (2007, p. 409))

In this example, Simpson (2007) claims, the first constituent, *pangurnuju* has a topic function, and the second constituent *nyarrparawiyi* has a focus function (as is also evident from the fact that it is a wh-word). This gives us the order TOPIC - FOCUS - AUX - V.

Several structures have been proposed for Warlpiri over the years. Simpson (1991) proposes a flat structure, based on the fact that ordering appears free at first glance. Simpson (1991) assumes flat structures with a root S node. An example of this is shown in (5), for the example in (4):[3,4]

(4) *Kurdu-jarra-rlu   ka-pala   maliki   wajili-pinyi wita-jarra-rlu.*
 child-DUAL-ERG PRES-3DU.SUBJ dog.ABS   chase-NPST small-DUAL-ERG

 'The two small children are chasing the dog.'

(5)
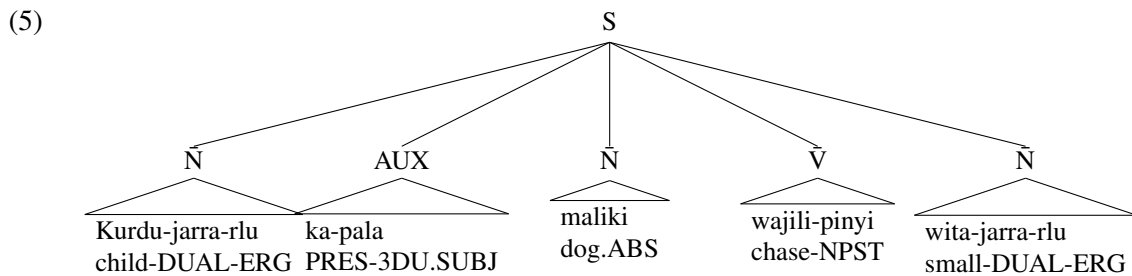
This structure is important for the discussion in this paper, as it plays a central role in Simpson's (1991) account of Warlpiri binding which will be discussed later.
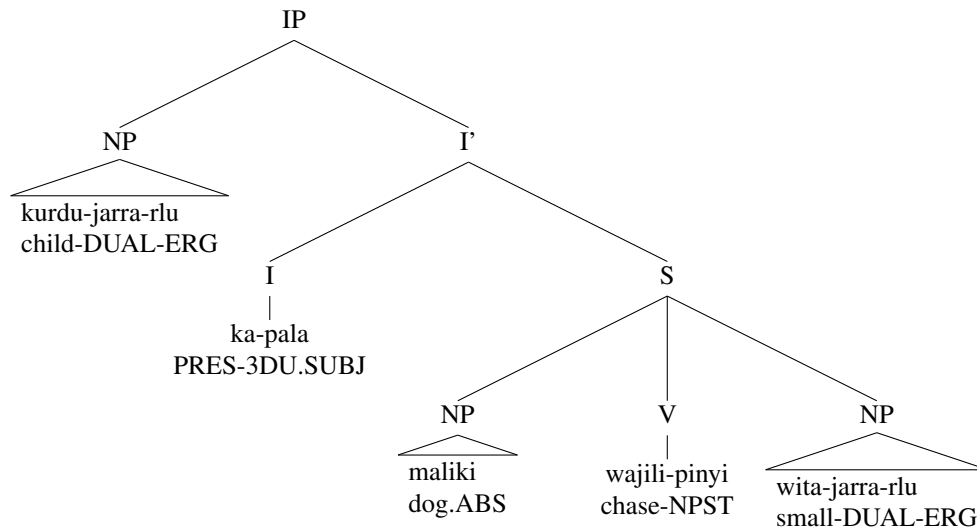
The structure in (5) has been fine tuned by Austin & Bresnan (1996), to include the fact that the position before the AUX is taken up by (a) specific discourse function(s). Austin & Bresnan (1996) propose a structure with an IP level, extending Simpson's (1991) analysis in line with suggestions by Kroeger (1993). This gives us a structure like the one in (6), for example (4):

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[2]The exact factors playing a role in determining the position of the AUX are still debated. For example, Legate (2008) challenges the idea that AUX elements are second position clitics, and that their placement depends on whether they are monosyllabic or polysyllabic.

[3]Note that example (4) contains a nominal discontinuity, namely between *kurdu-jarra-rlu* ('child', dual number, ergative case) and *wita-jarra-rlu* ('small', dual number, ergative case). As mentioned, Hale (1983) takes this to be a characteristic of non-configurational languages.

[4]The use of N̄, V̄ and AUX as constituents is a choice made by Simpson (1991) in her analysis of Warlpiri; I will not go into details on this, but the overall structure should be clear.
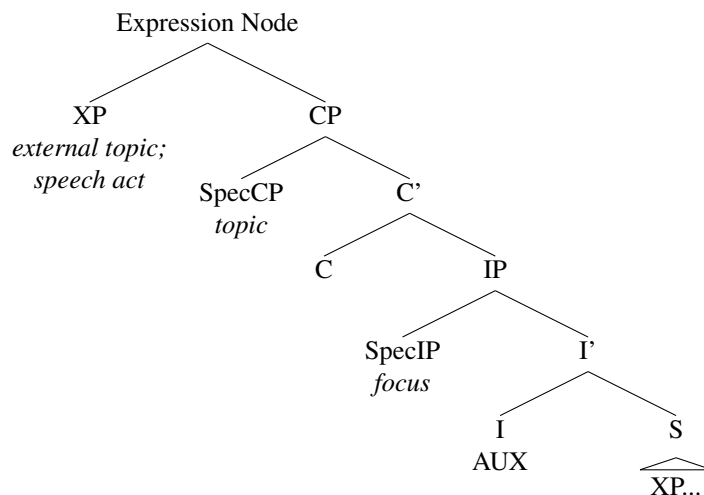
(6)

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                          IP
                   ┌──────┴──────┐
                  NP             I'
            ┌──────┴──────┐  ┌────┴────────┐
      kurdu-jarra-rlu     I              S
      child-DUAL-ERG      │      ┌───────┼────────┐
                       ka-pala  NP       V        NP
                    PRES-3DU.SUBJ ┌──┴──┐  │   ┌───┴───┐
                               maliki wajili-pinyi wita-jarra-rlu
                               dog.ABS chase-NPST  small-DUAL-ERG
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The positing of an IP gives the AUX a fixed position, namely in I. Any pre-AUX constituent appears in SpecIP, making it possible to be assigned a specific discourse function (Aissen, 1992; Kroeger, 1993; King, 1995; Bresnan, 2001). According to Swartz (1988), this is the focus function in Warlpiri, but as has been shown in example (3), there may also be a topic constituent preceding the AUX (in fact, in (3) there is both a topic and a focus constituent preceding the AUX). Note that the sister of I is the exocentric S category. This gives at least a partial flat structure to the overall Warlpiri structure.

The observation that two constituents may appear before the AUX led Simpson (2007) to revise her own 1991 structure and propose a structure including both an IP and a CP:

(7)

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                    Expression Node
                   ┌──────┴───────┐
                  XP             CP
            external topic;  ┌────┴────┐
            speech act    SpecCP      C'
                           topic   ┌──┴───┐
                                   C     IP
                                      ┌───┴────┐
                                   SpecIP      I'
                                    focus   ┌──┴───┐
                                            I      S
                                           AUX     └─┐
                                                   XP...
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The root node of this structure is what Simpson (2007) refers to as an Expression node, accounting for the existence of external, hanging topics and what she refers to as 'speech acts' appearing before the CP clause. As speech act markers she lists *karinganta* ('I say'), *kulanganta* ('I thought counterfactually') and *kala* ('but'). Relevant for the current discussion is mainly the inclusion of CP and IP projections. This means that there are two specifiers of functional projections, rendering a specific position for both topic (SpecCP) and focus (SpecIP). Simpson (2007) claims that verbs can be base-generated in C, following Grimshaw's extended projections (Grimshaw,

2005). This would account for the position of verbs before the AUX: this order is allowed.[5] In this paper I will assume that the structure in (7) is the correct one for Warlpiri, as it takes into account that Warlpiri word order is strongly determined by the discourse, and moreover it is able to account for the Warlpiri examples in which more than one constituent may appear before the AUX, as shown in example (3).

3 Binding and its LFG analysis

Binding refers to the distribution of pronouns and the relation to their antecedent. Different anaphoric elements show different constraints on how they may be bound. See the following examples:

(8)   Peter$_i$ sees himself$_{i/*j}$.

(9)   Peter$_i$ sees him$_{*i/j}$.

Here we see that the reflexive pronoun in (8) must be bound by the subject of the sentence. The pronoun 'him' in (9) cannot be bound by the subject of the sentence, but it is allowed to corefer with an external person (although this is not binding, as the antecedent itself does not appear inside the clause). The examples in (8) and (9) reflect the traditional Binding Conditions A and B respectively, as proposed by Chomsky (1981). These conditions are not generally assumed within LFG, but will be shown here for the sake of completeness:

(10)   Binding conditions along the lines of Chomsky (1981, p. 188)[6]

- **Binding Condition A:** A reflexive anaphor is bound in its governing category: it must have a local antecedent
- **Binding Condition B:** A pronoun (non-reflexive) is free in its governing category: it can have an antecedent as long as the antecedent is not local and does not c-command the pronoun.
- **Binding Condition C:** An R-expression is free: it cannot have an antecedent that c-commands it.

(11)   **C-command**: node A c-commands node B iff:
   - A does not dominate B
   - B does not dominate A
   - the branching node that dominates A also dominates B

Binding Condition A allows for example (8) and Binding Condition B ensures that (9) is ungrammatical. There is also Condition C, which accounts for a sentence such as the following:

(12)   He$_{*i/*j/k}$ believed that Peter$_i$ had seen John$_j$.

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[5]Simpson (2007) also claims that the negator *kula* is a complementiser and therefore appears in C position. Examples of *kula* - FOCUS - AUX are in fact attested (see Simpson (2007)). She states that examples of this kind are rare, as the negator itself already has a focus function of some kind. Having *kula* in C position, would imply that it could be preceded by a topic constituent; examples of this kind are indeed attested, see Simpson (2007). She does not mention any other elements that can occur in C position.

[6]The exact phrasing of these conditions has been augmented in order to make the conditions more clear.

This is traditional binding theory, and it is not used in LFG. In LFG, the relation of f-command if often used instead of c-command to account for binding phenomena. Moreover, the grammatical function hierarchy and f-precedence are assumed to play a role in many cases of binding. Their definitions are as follows:[7]

(13)   • **F-command**: f-structure f f-commands f-structure g iff:
          - f does not contain g
          - all f-structures that contain f also contain g
          (Dalrymple, 2001)

       • **Grammatical function hierarchy**:[8]
          SUBJ > OBJ > OBJ_θ > OBL_θ > COMPL > ADJUNCT
          (Bresnan, 2001)

       • **F-precedence**: f f-precedes g if the rightmost node in $\phi^{-1}(f)$ precedes the rightmost node in $\phi^{-1}(g)$
          (Bresnan, 2001)

Note that f-command and f-precedence are LFG-specific concepts, but that the grammatical function hierarchy has been used in other frameworks as well. F-command is similar to c-command, except that it applies to f-structures instead of c-structures. Both c-command and f-command allow for mutually c-commanding/f-commanding nodes. F-precedence is an f-structure concept, though it makes reference to c-structure; it relies on linear order. It has been noted in theories of binding that the grammatical function hierarchy and linear order play a role; the LFG-specific version of the grammatical function hierarchy and f-precedence are the LFG equivalents of this. Interestingly, Bresnan (2001), instead of using c-command, uses a relation called *Syntactic Rank* to account for binding data (at least in English), a relation which takes both f-command the grammatical function hierarchy into account:

(14)   **Syntactic Rank:** *A* locally outranks *B* if *A* and *B* belong to the same f-structure and *A* is more prominent than *B* on the grammatical function hierarchy. *A* outranks *B* if *A* locally outranks some *C* which contains *B*.
       (Bresnan, 2001)

As will be illustrated in later sections, one does not need a relation like this to account for the non-reflexive Warlpiri data; one only needs f-command.

In order to see how these factors play a role, we need to look at some more data. Take for example the following ungrammatical example with a reflexive:

(15)   Himself$_{*i/*j}$ sees Peter$_i$.

If one compares this example to example (8) ('Peter$_i$ sees himself$_{i/*j}$') it is evident that there is an asymmetry between subject and object. Under traditional binding accounts, assuming c-command plays a role, (15) can be ruled out in the bound to *i* ('Peter') reading because of the structural superiority of the pronoun: the pronoun c-commands its antecedent. This is if one assumes that English has a hierarchical structure, which is common. Traditional binding analyses

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[7]The exact definition of f-precedence varies in different accounts; we assume the definition by Bresnan (2001) here. For slightly differently phrased definitions, see for example Bresnan (1995) and Dalrymple *et al.* (2001). The exact definition does not make a difference for the purposes of this paper.

[8]Bresnan (2001) refers to this hierarchy as the 'relational hierarchy'. A grammatical function hierarchy of this kind was originally introduced by Keenan & Comrie (1977).

account for the ungrammaticality of the bound reading in (15) with the use of Binding Condition C; example (15) is a violation of Condition C. This shows that something which might appear to be a linear order phenomenon (the pronoun preceding the antecedent in (15)) can be reduced to an asymmetry in strcuture in accounts of binding using c-command. The bound to j reading is out as well because of Condition A; the reflexive needs a local antedecent. In an LFG account using f-command, c-structural superiority is not available to account for binding data, so one needs to appeal to other factors. Considering that example (8) is grammatical with a bound reading but (15) is not, one could either say that f-precedence plays a role, or that the grammatical function hierarchy plays a role. Assuming that f-precedence plays a role, one could say that pronouns may not precede their antecedents. Assuming that the grammatical function hierarchy plays a role, one could say that a reflexive pronoun may only be bound by a subject and not by an object. In this particular example another issue is the morphology: there is no subject reflexive (e.g. something like 'heself').

An example which does not have the morphology problem that (15) has, but shows a similar grammaticality pattern, is example (12), repeated here in (16):

(16)   He$_{*i/*j/k}$ believed that Peter$_i$ had seen John$_j$.

Recall that in traditional binding theory the ungrammaticality of the bound readings is taken to be a violation of Condition C, appealing to the structural superiority of the pronoun. Even though it seems that linear ordering appears to play a role at first glance, as in (15), one can use a structural relation to account for the ungrammaticality. The same thing is true in an f-command approach: in this type of approach one can account for the ungrammaticality of the bound readings by saying that the pronoun f-commands it antecedent, ruling the sentence out. This shows that things that appear to be due to linear order/f-precedence (or the grammatical function hierarchy) can in some cases be easily accounted for by c-command or f-command.

So far I have discussed both c-command and f-command based approaches. In Section 1 it was mentioned that transformational accounts always use c-command (forced by the choice of theory, as f-command is an LFG-specific concept). In these accounts, many linear order phenomena can be reduced to an asymmetry in structure. The same is true for Simpson's (1991) LFG analysis, as she uses c-command. How this works will be explained in more detail in Section 5. However, in LFG most accounts have appealed to f-structural rather than c-structural means to account for binding phenomena (Dalrymple, 1993; Bresnan, 2001; Dalrymple, 2001). F-command is used instead of c-command to account for binding phenomena (or in the case of Bresnan (2001), Syntactic Rank, which incorporates f-command).

There are good reasons to choose an f-command over a c-command approach, and the most compelling piece of evidence comes from work on binding by Dalrymple (1993), an approach which I follow in this paper. She proposes to have lexical specification of binding constraints rather than universal constraints proposed in more traditional (especially transformational) accounts of binding. Based on data from Norwegian and Marathi she illustrates that the distinction between reflexives and (non-reflexive) pronominals (versus reciprocals) is not as straightforward as had previously been assumed. Dalrymple shows that these languages have more than simply two kinds of anaphoric elements. For example, Norwegian has five anaphoric elements in total and two different anaphoric elements (*seg selv* and *ham selv*) which together correspond to the reflexive in English.

(17)   a. *Jon fortalte meg om   seg selv/*ham selv.*
          Jon told   me about self

          'Jon_i told me about $himself_i$.'

   b. *Vi fortalte Jon om   *seg selv/ham selv.*
         we told   John about self

         'We told $John_i$ about $himself_i$.'

   (Dalrymple, 1993, p.27-29)

The anaphoric element *seg selv* has to refer to the subject in its coargument domain (the domain containing all the coarguments of the anaphoric element), and the element *ham selv* has to refer to an argument in its minimal complete nucleus which is not the subject (the minimal domain including a SUBJ function (Dalrymple, 2001)). More formally, we say that *seg selv* has to be bound to the subject in its coargument domain, and *ham selv* has to be bound to an argumet in its minimal complete nucleus, but disjoint from the subject in its minimal complete nucleus. Each of these elements thus has different binding conditions. This data shows that Condition A cannot fully take care of the data; lexical specification is a way to deal with this. For a full overview of the five different anaphoric elements and their binding conditions, see Dalrymple (1993). Each element has different domains in which they must be bound, or must be free. For our purposes it is important that lexical specification of binding constraints enables one to give different constraints to individual anaphoric elements, rather than having a single (cross-linguistic) rule for binding.

4   Warlpiri non-reflexive possessive binding data

The specific data that is central to this paper are non-reflexive possessive binding data. This is data originally elicited by Mary Laughren and presented by Simpson (1991) as evidence for her use of c-command in accounting for Warlpiri binding (as will be discussed in the next section). Interestingly, in this set of Warlpiri binding data, linear order and the grammatical function hierarchy do not appear to play a role. The first set of data that Simpson (1991) provides is one in which the pronoun is an argument of the verb, and its antecedent is embedded inside a coargument. This data is shown in (18) in the case where the pronoun is the subject:

(18)   Pronoun functions as subject (PRO-SUBJ):

   a. *Jakamarra-kurlangu maliki ka   nyanungu-rlu wajili-pi-nyi.*
      Jakamarra-POSS   dog   PRES he-ERG   chase.NPST

      '$He_{*i/j}$ chases $Jakamarra_i$'s dog.'

   b. *Nyanungu-rlu ka   Jakamarra-kurlangu maliki wajili-pi-nyi.*
      he-ERG   PRES Jakamarra-POSS   dog   chase.NPST

      '$He_{*i/j}$ chases $Jakamarra_i$'s dog.'

   (Simpson (1991, p. 179), elicited by Mary Laughren)

This data (which will be referred to as PRO-SUBJ examples) illustrates that binding between a pronoun and an antecedent embedded in a coargument of the pronoun is not grammatical. The fact that both orders, *pronoun > antecedent* and *antecedent > pronoun*, are ungrammatical, implies that linear ordering does not play a role in this type of binding. Now let us look at the case where the pronoun is the object:

(19) Pronoun functions as object (PRO-OBJ):

    a. *Jakamarra-kurlangu maliki-rli ka nyanungu wajili-pi-nyi.*
        Jakamarra-POSS   dog-ERG PRES him   chase.NPST
        'Jakamarra$_i$'s dog chases him$_{*i/j}$.'

    b. *Nyanungu ka Jakamarra-kurlangu maliki-rli wajili-pi-nyi.*
        him   PRES Jakamarra-POSS   dog-ERG chase.NPST
        'Jakamarra$_i$'s dog chases him$_{*i/j}$.'

    (Simpson (1991, p. 179-180), elicited by Mary Laughren)

This data (which will be referred to as PRO-OBJ examples) is very similar to the one in (18), other than the case marking. Again the sentences are ungrammatical in either order. The fact that the same grammaticality pattern arises with the pronoun as either subject or object shows that there is a symmetry in binding, and it implies that the grammatical function hierarchy, which is assumed to play a role in many LFG accounts of binding, does not play a role in this data.

Both of these observations, the fact that both linear ordering and the grammatical function hierarchy do not play a role in this data, are interesting. The symmetry attested in this Warlpiri data is unlike that seen in many other languages. An example of this is English, widely discussed in the binding literature. I will illustrate the difference here as it plays a role in the next section discussing arguments brought forth by Simpson (1991) for an analysis based on c-structure relations. In English there are the following patterns for the PRO-SUBJ and PRO-OBJ examples:

(20) a. English PRO-SUBJ:
      He$_{*i/j}$ chases John$_i$'s dog.
    b. English PRO-OBJ:
      John$_i$'s dog chases him$_{i/j}$.

We thus see that the English PRO-SUBJ patterns with the Warlpiri data by being ungrammatical with the coreference, whereas the PRO-OBJ example is fine in English, and therefore different from the Warlpiri data.[9] In transformational accounts, as well as in Simpson's (1991) LFG account, this asymmetry in English has been accounted for by positing a VP constituent and working with a relation of c-command, as will be illustrated in the next section.

Apart from the type of data where a pronoun is itself an argument of the verb, there is also data in which the pronoun appears as a possessive pronoun. The patterns are different from the PRO-SUBJ and PRO-OBJ examples, but they too illustrate that linear order does not play a role in this set of data. There are again two different cases, one in which the possessive pronoun appears inside the subject (with the antecedent being the object), and one in which the possessive pronoun appears inside the object (with the antecedent being the subject). The first kind will be referred to as POSS-IN-SUBJ examples and the second kind as POSS-IN-OBJ examples:

(21) Possessive pronoun inside subject (POSS-IN-SUBJ):

    a. *Jakamarra ka nyanungu-nyangu-rlu maliki-rli wajili-pi-nyi.*
        Jakamarra PRES he-POSS-ERG   dog-ERG chase.NPST
        'His$_{i/j}$ dog chases Jakamarra$_i$.'

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[9]I do not discuss linear order for the English data as English word order is much more rigid than Warlpiri word order in terms of argument functions. I focus purely on the binding differences depending on what role the subject and object play in binding.

b. *Maliki   nyanungu-nyangu-rlu   ka   Jakamarra   wajili-pi-nyi.*
   dog   he-POSS-ERG   PRES   Jakamarra   chase.NPST

   'His$_{i/j}$ dog chases Jakamarra$_i$.

(Simpson (1991, p 180), elicited by Mary Laughren)

(22)   Possessive pronoun inside object (POSS-IN-OBJ):

   a. *Jakamarra-rlu   ka   wajirli-pi-nyi   maliki   nyanungu-nyangu.*
      Jakamarra-ERG   PRES   chase.NPST   dog   he-POSS

      'Jakamarra$_i$ chases his$_{i/j}$ dog.

   b. *Nyanungu-nyangu   ka   wajirli-pi-nyi   maliki   Jakamarra-rlu.*
      he-POSS   PRES   chase.NPST   dog   Jakamarra-ERG

      'Jakamarra$_i$ chases his$_{i/j}$ dog.

(Simpson (1991, p. 180), elicited by Mary Laughren)

Notice that the pronoun in these examples is the same as in the PRO-SUBJ and PRO-OBJ examples (*nyanungu*), but it now has the possessive suffix *-nyangu*. We see that both the POSS-IN-SUBJ and the POSS-IN-OBJ examples are grammatical with coreference, no matter what the relative ordering of pronoun and antecedent is. This shows that linear ordering also does not play a role here. Whether the grammatical function hierarchy plays a role is a slightly different story. The big difference between the non-possessive pronoun data (PRO-SUBJ and PRO-OBJ) and the possessive pronoun data (POSS-IN-SUBJ and POSS-IN-OBJ) is that in the second set the pronoun is embedded inside an argument of the verb; it it not an argument iself as it is in the first set of data. I leave this issue open for the moment.

Briefly contrasting this with English again, we see that the patterning in Warlpiri and English is the same (apart from the freedom of word order in terms of argument functions). In English these examples are also acceptable with coreference:

(23)   a. English POSS-IN-SUBJ
         His$_{i/j}$ dog chases John$_i$.

       b. English PRO-OBJ:
         John$_i$ chases his$_{i/j}$ dog.

As a summary of the grammaticality patterns for the Warlrpiri and English possessive binding data, there is the overview in Table 1.

Table 1: An overview of the possessive binding data contrasting Warlpiri and English

|	Warlpiri	English	Type of sentence
(a) He$_i$ chases J$_i$'s dog.	*	*	PRO is SUBJ
(b) J$_i$'s dog chases him$_i$.	*	✓	PRO is OBJ
(c) His$_i$ dog chases J$_i$.	✓	✓	POSS PRO in SUBJ
(d) J$_i$ chases his$_i$ dog.	✓	✓	POSS PRO in OBJ

This table can be used as a reference in the next section.

5 Simpson's arguments for a c-command analysis

The data presented in the previous section has been accounted for by Simpson (1991) with the use of c-structural relations, uncommon for an LFG approach. She even argues specifically against an f-command based approach. Simpson's argument is as follows. She assumes a flat structure for Warlpiri (as illustrated above in (5)), and a hierarchical structure with VP (thereby creating a structural subject-object asymmetry) for English. Her main aim is to have a uniform binding constraint for both Warlpiri and English (and presumably for other languages too, although Simpson (1991) does not mention this explicitly). The constraint that she assumes is that **a pronoun may not c-command its antecedent.** In order to see how this constraint accounts for the data in Table 1 we need to look at some actual structures.

First we will start by looking at the PRO-OBJ and PRO-SUBJ examples. An example of a structure of a PRO-OBJ example in Warlpiri, ungrammatical with a coreference reading, is the following:[10]

(24) PRO-OBJ Warlpiri structure:
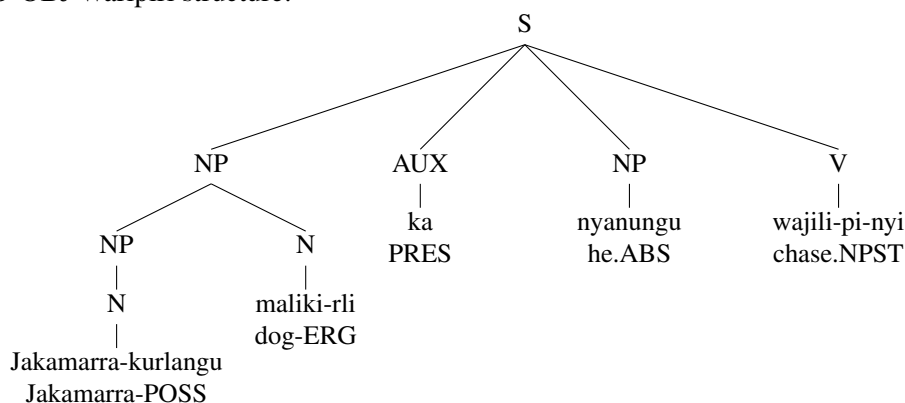
*'Jakamarra's dog$_i$ chases him$_i$.'

This is ungrammatical, Simpson (1991) claims, because the pronoun c-commands its antecedent. It is also clear that the relative order between antecedent and pronoun does not matter, as we are dealing with a flat structure and hence with mutual c-command. The PRO-SUBJ example is ungrammatical for the same reason as the PRO-OBJ example is (one can imagine a similar flat structure with the only difference being the case marking), also in either order. In English the PRO-OBJ example is acceptable with coreference, because the pronoun does not c-command its antecedent:
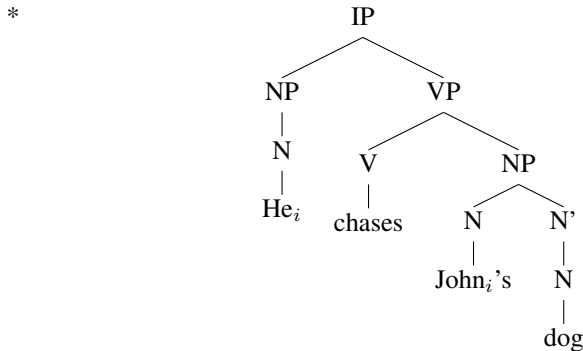
(25) PRO-OBJ English structure:

---
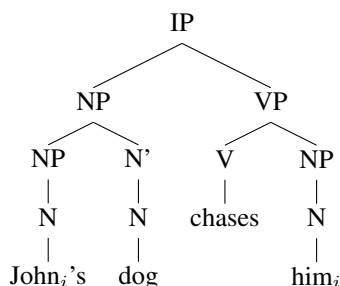
[10]Note that Simpson (1991) used N̄ to denote nominal constituents; here we simply use NP. The choice of constituent is not directly relevant to the issues at hand. The possessor is represented in SpecNP.

The English PRO-SUBJ example is not acceptable with coreference, however, and this is because the pronoun in this case does c-command its antecedent:
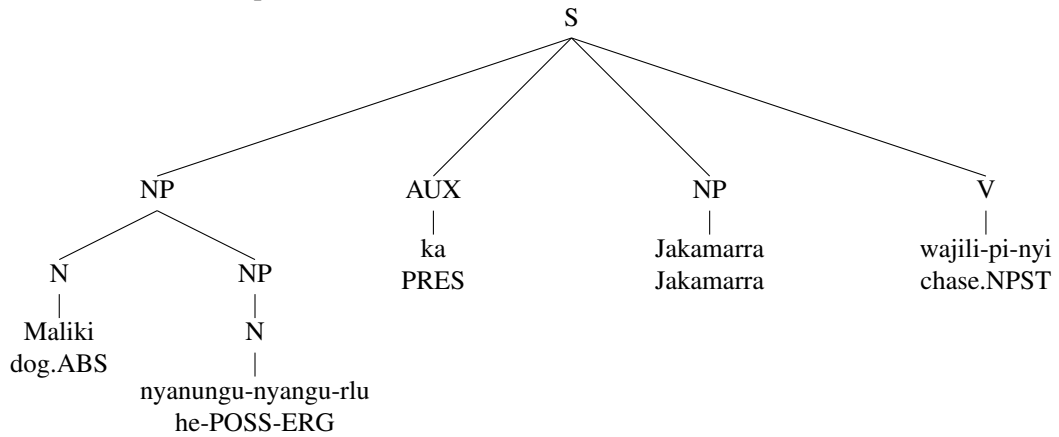
(26) PRO-SUBJ English structure:

```
*                                IP
                          ┌──────┴──────┐
                         NP             VP
                          |         ┌────┴────┐
                          N         V         NP
                          |         |      ┌──┴──┐
                         He_i    chases    N     N'
                                           |     |
                                        John_i's N
                                                 |
                                                dog
```

This clearly illustrates that the asymmetry in English structure accounts for the asymmetry in binding patterns, and that the symmetry in Warlpiri structure accounts for the symmetry in binding patterns.

Now the possessive pronoun data will be looked at. As has been illustrated, these examples are all grammatical with coreference, and the reason for this according to Simpson (1991) is because the pronoun is always embedded inside another NP, meaning it does not c-command its antecedent (in either Warlpiri or English). The structure for a Warlpiri POSS-IN-SUBJ sentence (grammatical with coreference) is the following:
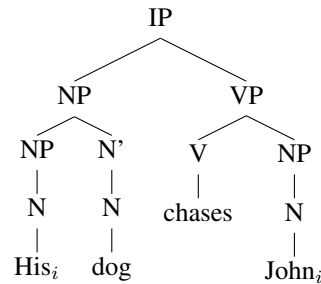
(27) POSS-IN-SUBJ Warlpiri structure:

```
                                        S
             ┌──────────────┬───────────┴────────┬──────────────────┐
            NP             AUX                   NP                  V
        ┌────┴────┐         |                     |                  |
        N         NP        ka                 Jakamarra        wajili-pi-nyi
        |         |        PRES                Jakamarra        chase.NPST
      Maliki      N
      dog.ABS     |
           nyanungu-nyangu-rlu
              he-POSS-ERG
```

'His_i dog chases Jakamarra_i.'

This example is fine because the pronoun does not c-command its antecedent. Again, the relative order between antecedent and pronoun does not matter. One can imagine a similar structure for the POSS-IN-OBJ examples with the same outcome, in either order. For English there is the same pattern with the possessive pronoun being embedded:
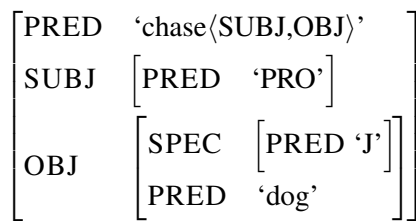
(28) POSS-IN-SUBJ English structure:

```
                    IP
              ┌─────┴─────┐
             NP           VP
           ┌──┴──┐      ┌──┴──┐
          NP    N'      V    NP
          │      │      │     │
          N      N   chases   N
          │      │            │
        His_i   dog         John_i
```
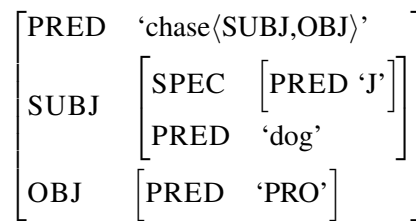
Recall that that the POSS-IN-OBJ example for English with the embedded pronoun is grammatical, which should be evident from the embeddedness of the structure.

This is part one of Simpson's reasoning, arguing in favour of a c-command approach. Secondly, she specifically argues against an f-command approach. Her point is that the f-structure for the Warlpiri and English sentences are pretty much the same, and that if one wants to posit a uniform constraint (as the one she gives for c-command) one cannot account for the difference in data as summarized in Table 1 with the use of f-command. Here are the f-structures for the PRO-SUBJ and PRO-OBJ examples:

(29) PRO-SUBJ f-structure:

$$
\begin{bmatrix}
\text{PRED} & \text{`chase}\langle\text{SUBJ,OBJ}\rangle\text{'} \\
\text{SUBJ} & \begin{bmatrix} \text{PRED} & \text{`PRO'} \end{bmatrix} \\
\text{OBJ} & \begin{bmatrix} \text{SPEC} & \begin{bmatrix} \text{PRED `J'} \end{bmatrix} \\ \text{PRED} & \text{`dog'} \end{bmatrix}
\end{bmatrix}
$$

(30) PRO-OBJ f-structure:

$$
\begin{bmatrix}
\text{PRED} & \text{`chase}\langle\text{SUBJ,OBJ}\rangle\text{'} \\
\text{SUBJ} & \begin{bmatrix} \text{SPEC} & \begin{bmatrix} \text{PRED `J'} \end{bmatrix} \\ \text{PRED} & \text{`dog'} \end{bmatrix} \\
\text{OBJ} & \begin{bmatrix} \text{PRED} & \text{`PRO'} \end{bmatrix}
\end{bmatrix}
$$

Importantly, the f-structure for Warlpiri and English is (largely) the same for these sentences. The f-structural relations between pronoun and antecedent are exactly the same. As illustrated, the PRO-OBJ examples are ungrammatical in Warlpiri with coreference but grammatical in English with coreference; a uniform constraint on the f-structure (using f-command) can therefore not account for the data. However, as will be seen later, there does not appear to be a clear reason to posit a uniform constraint. In any case, Simpson (1991) gives this as an argument against the use of f-command in accounting for this binding data.
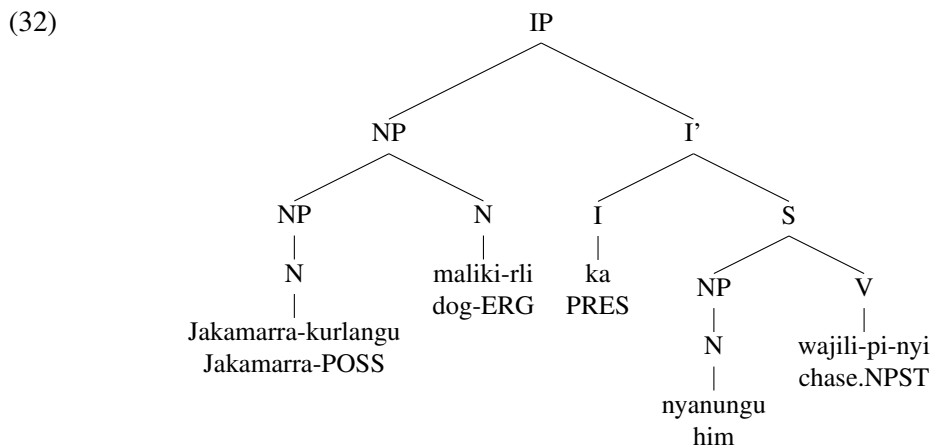
6   An f-command analysis

In this section I will illustrate that one can in fact account for the binding data presented in Section 4 with the use of f-command. In order to do this I do not assume a uniform constraint for different languages, but rather lexical specification of binding constraints of individual anaphoric elements. There does not appear to be a clear reason to assume a uniform constraint for different languages. As explained in Section 3, Dalrymple (1993) has proposed an account of binding with lexically specified constraints for individual anaphoric elements in different languages. I assume that this is the right type of analysis for the Warlpiri data presented in Section 4. Taking this approach, it will be shown that for the Warlpiri data, one can have an analysis only taking f-command into account, excluding linear order and the grammatical function hierarchy from the analysis. This is novel; as far as I am aware, there have been no accounts for any language giving an analysis only taking f-command into account. Most accounts of binding are required to take

either f-precedence or the grammatical function hierarchy into account, but the Warlpiri data does not require this.

There are several arguments to propose a binding analysis of the Warlpiri data using f-command and lexical specification, going against Simpson's (1991) proposal. Firstly, Simpson's arguments from 1991 are no longer valid with her more recent structure as proposed in Simpson (2007) and shown above in (7). The second reason is that there appear to be dialects of Warlpiri that have different patterns than the ones summarized in Table 1. Thirdly, reflexive binding in Warlpiri displays an asymmetry that does not exist in the non-reflexive binding data which was presented from Simpson's (1991) work. The two last reasons will be discussed in the next section. Firstly, let us look at the first argument.

Recall the more recent structure proposed for Warlpiri by Simpson (2007) (the one I assume as well in this paper) as shown in (7), with a SpecCP position for topic constituents and a SpecIP position for focus positions. This is a hierchical structure. As an example of this, see the tree in (32) for the PRO-OBJ example in (31), repeated from (19a):

(31) *Jakamarra-kurlangu maliki-rli ka   nyanungu wajili-pi-nyi.*
      Jakamarra-POSS   dog-ERG   PRES   him   chase.NPST
      'Jakamarra$_i$'s dog chases him$_{*i/j}$.'

(32)

```
                            IP
                 _____|_____
                NP                      I'
           _____|_____            _____|_____
          NP          N          I             S
          |           |          |         ____|____
          N       maliki-rli    ka        NP        V
          |       dog-ERG      PRES        |        |
    Jakamarra-kurlangu                     N    wajili-pi-nyi
    Jakamarra-POSS                         |    chase.NPST
                                        nyanungu
                                          him
```

Notice that in this tree structure, the first constituent, *Jakamarra-kurlangu maliki-rli* ('Jakamarra's dog'), is in focus position. It could also be in topic position; for this particular sentence there is no context given so either is possible. In either case, importantly, the antecedent appears higher in the tree than the pronoun, and therefore the antecedent c-commands the pronoun but not vice versa. As explained, Simpson (1991) accounts for the symmetric Warlpiri data (and the fact that linear order does not play a role) with an appeal to Warlpiri's flat structure. Her 1991 argument is no longer valid with a hierarchical structure of the kind shown in (32). In her original flat structure, the constraint stating that a pronoun may not c-command its antecedent, accounts for the ungrammaticality of the PRO-SUBJ and PRO-OBJ examples, in either relative order, *pronoun > antecedent* or *antecedent > pronoun*. In the hierarchical structure, one can no longer account for the case where the antecedent appears in the left periphery and the pronoun under S (as in (32)), as the pronoun in that case does not c-command its antecedent, but the sentence is still ungrammatical under the bound reading. This straightforwardly rules out a c-command analysis with a uniform rule for both English and Warlpiri.

Instead, I propose an f-command based analysis. Recall the grammaticality patterns for the non-reflexive data, as shown in Table 1 and repeated in Table 2.

Table 2: Repetition of the possessive binding data contrasting Warlpiri and English

	Warlpiri	English	Type of sentence
(a) He$_i$ chases J$_i$'s dog.	X	X	PRO is SUBJ
(b) J$_i$'s dog chases him$_i$.	X	✓	PRO is OBJ
(c) His$_i$ dog chases J$_i$.	✓	✓	POSS PRO in SUBJ
(d) J$_i$ chases his$_i$ dog.	✓	✓	POSS PRO in OBJ

The constraint which I propose applies to the specific anaphoric element *nyanungu* (present in all of the non-reflexive binding examples presented in Section 4). It is as follows:

(33) Lexically specified constraint on anaphoric element *nyanungu* (in the data presented by Simpson (1991), elicited by Mary Laughren):
nyanungu may not f-command a coreferent R-expression

Here specifically we refer to coreferent R-expressions rather than general antecedents, as this is the only data that is available. In order to generalize to all antecedents one would need data of the kind *His dog chased him* or *He chased his dog* to test if the same constraint applies when the antecedent itself is a pronoun. Currently, the constraint does not rule these examples out. The validity of the constraint in (33) becomes clear when we look at the f-structures for PRO-SUBJ and PRO-OBJ examples:

(34) PRO-SUBJ f-structure:

$$
\begin{bmatrix}
\text{PRED} & \text{`chase}\langle\text{SUBJ,OBJ}\rangle\text{'} \\
\text{SUBJ} & \begin{bmatrix} \text{PRED} & \text{`PRO'} \end{bmatrix} \\
\text{OBJ} & \begin{bmatrix} \text{SPEC} & \begin{bmatrix} \text{PRED `J'} \end{bmatrix} \\ \text{PRED} & \text{`dog'} \end{bmatrix}
\end{bmatrix}
$$

(35) PRO-OBJ f-structure:

$$
\begin{bmatrix}
\text{PRED} & \text{`chase}\langle\text{SUBJ,OBJ}\rangle\text{'} \\
\text{SUBJ} & \begin{bmatrix} \text{SPEC} & \begin{bmatrix} \text{PRED `J'} \end{bmatrix} \\ \text{PRED} & \text{`dog'} \end{bmatrix} \\
\text{OBJ} & \begin{bmatrix} \text{PRED} & \text{`PRO'} \end{bmatrix}
\end{bmatrix}
$$

These examples are ungrammatical with coreference, and this can be explained with the constraint in (33), because the pronoun f-commands its antecedent (in both the PRO-SUBJ and PRO-OBJ examples, where the antecedent is an R-expression). The same constraint applies to the examples in which the pronoun is a possessive pronoun:

(36) POSS-IN-SUBJ f-structure:

$$
\begin{bmatrix}
\text{PRED} & \text{`chase}\langle\text{SUBJ,OBJ}\rangle\text{'} \\
\text{SUBJ} & \begin{bmatrix} \text{SPEC} & \begin{bmatrix} \text{PRED `PRO'} \end{bmatrix} \\ \text{PRED} & \text{`dog'} \end{bmatrix} \\
\text{OBJ} & \begin{bmatrix} \text{PRED `J'} \end{bmatrix}
\end{bmatrix}
$$

(37) POSS-IN-OBJ f-structure:

$$
\begin{bmatrix}
\text{PRED} & \text{`chase}\langle\text{SUBJ,OBJ}\rangle\text{'} \\
\text{SUBJ} & \begin{bmatrix} \text{PRED `J'} \end{bmatrix} \\
\text{OBJ} & \begin{bmatrix} \text{SPEC} \begin{bmatrix} \text{PRED} & \text{`dog'} \end{bmatrix} \\ \text{PRED `PRO'} \end{bmatrix}
\end{bmatrix}
$$

The possessive pronoun data is grammatical with coreference, and the reason for this is because in this case the pronoun does not f-command its antecedent. Therefore, one invidual constraint, which is lexically specified for *nyanungu*, accounts for this set of data.

Interestingly, the constraint in (33) suffices to account for the cases in which the pronoun is the subject (PRO-SUBJ) and also the cases in which the pronoun is the object (PRO-OBJ): this means one does not have to make reference to the grammatical function hierarchy to account for the data. Also, as illustrated by the fact that there is no difference in grammaticality between the cases in which the pronoun follows its antecedent or precedes it, it becomes clear that f-precedence also does not need to be included in an analysis. We thus have the one simple binding constraint on *nyanungu* which only makes reference to the relation of f-command and nothing else. This is especially interesting, as it has not been proposed before for any other binding data as far as we are aware.

This constraint can be formalized in the way proposed by Dalrymple (1993). She uses the following templates of positive and negative binding constraints:

(38)   a. Positive binding constraint:
           $((\text{DomainPath} \uparrow) \text{AntecedentPath})_\sigma = \uparrow_\sigma$

        b. Negative binding constraint:
           $((\text{DomainPath} \uparrow) \text{AntecedentPath})_\sigma \neq \uparrow_\sigma$

In these constraints, DomainPath is the f-structure that contains the anaphoric element and its antecedent, and AntecedentPath is the path from the anaphoric element to its antecedent. The up arrow $\uparrow$ refers to the f-structure of the anaphoric element itself, and the subscript σ refers to s(emantic)-structure. Essentially what these constraints are trying to do is, on s-structure level, equate (for the positive constraint) or not equate (for the negative constraint) an anaphoric element to a particular antecedent. For our constraint we have the formalization in (39):

(39)   **Constraint:** *nyanungu* may not f-command a coreferent R-expression (for data
        represented by Simpson (1991), originally elicited by Mary Laughren):

$$((\text{GF} \uparrow) \; \text{GF*} \quad \underset{\neg(\rightarrow \text{PRONTYPE})}{\text{GF}} \quad)_\sigma \neq \uparrow_\sigma$$

Here one can see that the DomainPath is GF, meaning that DomainPath is unconstrained. Importantly, however, there is no functional uncertainty inside DomainPath, meaning that we are always talking about GFs as arguments of the verb (or adjuncts, although I have no data about adjuncts). One can go out from the f-structure of the anaphoric element, and then go as deep into the f-structure containing the antecedent (signified by the functional uncertainty on GF* in AntecedentPath), as long as one ends at a GF which does not have a PRONTYPE, i.e. is an R-expression. This is thus the way to represent f-command, with $\neq$ representing that it is a negative constraint. Note that this constraint neatly rules out the case where the pronoun f-commands itself, by ensuring that the antecedent does not have a PRONTYPE (because the pronoun itself must have a PRONTYPE).

7   Other types of Warlpiri binding data

Another piece of evidence that lexical specification is the way forward, as mentioned, is the fact that it appears that different dialects exist, or even that individual speakers have different constraints on binding. Simpson (1991) does not only give the data displaying symmetry in binding as discussed so far. She also notes that there is data elicited by David Nash, which shows different binding patterns, implying that for the speakers he worked with, linear order does matter. For example, for the PRO-SUBJ examples, he found the following patterns:

(40) PRO-SUBJ examples as elicited by David Nash:

    a. *Jakamarra-kurlangu maliki ka   nyanungu-rlu wajili-pi-nyi.*
       Jakamarra-POSS   dog   PRES he-ERG   chase.NPST
       'He$_i$ chases Jakamarra$_i$'s dog.'

    b. *Nyanungu-rlu ka   Jakamarra-kurlangu maliki wajili-pi-nyi.*
       he-ERG   PRES Jakamarra-POSS   dog   chase.NPST
       *'He$_i$ chases Jakamarra$_i$'s dog.'

    (Simpson (1991, p. 179))

Here we see that the PRO-SUBJ example is ungrammatical in the order *pronoun > antecedent* (as in Simpson's original data), but that the order *antecedent > pronoun* is acceptable for Nash's speakers. Also, Nash found that the PRO-OBJ examples are grammatical, in either order, the opposite of Simpson's findings. Nothing is mentioned on the grammaticality of POSS-IN-SUBJ and POSS-IN-OBJ examples in Nash's speakers. Simpson (1991) mentions Nash's data but bases her own analysis only on the data elicited by Mary Laughren which was presented above. The fact that Nash's speakers show different binding patterns is very interesting; it illustrates that there might be different dialects, or that invidiual speakers have different constraints. In terms of an f-command account of this, there are the following generalizations:

(41) Patterns in Nash's data:

- Grammatical in Nash's data with coreference: PRO-OBJ examples in either order and PRO-SUBJ in order *antecedent > pronoun*
- Ungrammatical in Nash's data with coreference: PRO-SUBJ example in order *pronoun > antecedent*

    Generalizations about Nash's data:

- The f-command relation is irrelevant
- The pronoun *nyanungu* may not both f-precede its antecedent and be higher on the grammatical function hierarchy than the coargument in which the antecedent is embedded

According to these generalizations, it becomes clear that for Nash's data, the analysis is completely the opposite of the data originally presented by Simpson (1991), as f-command does not play a role, but both f-precedence and the grammatical function hierarchy do (at least it does for the argument in which the antecedent is embedded relative to the anaphoric element). This is a piece of evidence in favour of a lexical specification of binding constraints, as one can posit different constraints for different speakers/dialects, without having to posit universal rules.

A second type of evidence of variation is some data that was kindly elicited for me by Margit Bowler (p.c., Aug/Sep 2013). She tested for examples with embedded possessors, to see if embedding deeper than the first possessor of an argument of the verb makes any difference for the grammaticality of the coreference. She elicited the following PRO-OBJ example with a possessor embedded inside a possessor (in the order *antecedent > pronoun*):

(42) *Jangala-kurlangu-rlu yipilji-kirlangu-rlu maliki-rli yarlkurnu nyanungu.*
    Jangala-POSS-ERG   friend-POSS-ERG dog-ERG bite.PST   he.ABS
    Jangala$_i$'s friend's dog bit him$_i$.

This example is grammatical with the coreference reading, putting it more in line with Nash's data than the data elicited by Mary Laughren (and analysed by Simpson (1991)). The idea that a speaker would not find coreference acceptable in PRO-OBJ examples with only one possessor inside a coargument of the pronoun (as in Mary Laughren's elicited data), but would find coreference acceptable when the pronoun is coreferent with an even further embedded antecedent, seems unlikely. This example illustrates that variation appears to be quite widespread, and that lexical specification for individual speakers and/or dialects is a way to solve this problem. Two things should be said about the example in (42). Firstly, notice that the ergative case is marked on each part of the subject: on both possessors and on the head. This is uncommon: most of the time, there would only have one case marker (Hale *et al.* , 1995). In this particular sentence an issue is the lack of AUX, because the verb is in the past tense. If an AUX was present, it might be easier to say something more about constituency, with only a limited number of constituents being able to appear before the AUX. Potentially the three different parts of the subject are separate constituents. This is important for an overall c-structure of Warlpiri, but it does not make any difference for an f-command based binding analysis. A second issue with this data is that extensive embedding becomes more difficult to understand for the speaker and listener. Margit Bowler has pointed out that the speakers find it quite difficult to understand/produce sentences like these because of the many suffixes. This is a problem with embedded binding in general: it can become difficult to follow because of the many levels of structure. In any case, I note that this type of variation exists and needs to be accounted for: lexical specification is able to deal with this.

Finally, to give a complete picture, I note that the type of symmetry in the non-reflexive binding data as shown above in a particular dialect of Warlpiri cannot be found in reflexive binding (in at least a particular dialect). Bresnan (2001) provides the following reflexive binding data for English and Warlpiri, noting their similarity:

(43)   a. Lucy is hitting herself.

           b. *Herself is hitting Lucy.

(44)   a. *Napaljarri-rli   ka-nyanu   paka-rni.*
                 Napaljarri-ERG PRES-REFL hit.NPST
                 'Napaljarri is hitting herself.'

           b. *Napaljarri   ka-nyanu   paka-rni.*
                 Napaljarri.ABS PRES-REFL hit.NPST
                 'Herself is hitting Napaljarri.'

Here we see that the reflexive suffix in Warlpiri, *-nyanu* may not function as the subject and have the object as its antecedent. There is thus an asymmetry between subject and object in this type of reflexive binding. This can be dealt with with lexical specification, in this case by saying that the anaphoric element needs to be bound to a subject in its coargument domain. However, there is an issue here, namely that the reflexive suffix is in fact a bound suffix (to the AUX) and not a free pronoun. If we assume that the suffix projects a PRO on its own in the f-structure, this should not be a problem. The reflexive data in any case reinforces the fact that different binding patterns are attested within one language: not only are individual anaphoric elements constrained in different ways for different dialects/speakers, but different individual anaphoric elements also have different constraints which need to be accounted for. This is not a new finding; this is the reason why the traditional binding conditions A, B and C were introduced. However, lexical specification makes it possible to specify more than three different types of constraints (which is necessary for certain languages, as has been illustrated above), and it makes it possible to posit individual constraints for different dialects/speakers, as appear necessary in Warlpiri.

8   Conclusion

In this paper I have proposed an f-command only approach for a set of Warlpiri binding data which was elicited by Mary Laughren and presented by Simpson (1991). This type of analyis is unique in the fact that the grammatical function hierarchy and linear order do not appear to play a role; as far as I am aware, this has never been proposed for any language. I have explained Simpson's (1991) arguments for c-command, but show that in fact, they are no longer valid with her newer structure as proposed in Simpson (1991). Moreover, there does not appear to be a clear need to posit a uniform constraint as Simpson (1991) does. Rather, I propose a simple constraint for the data, which is lexically specified specifically for the anaphoric element *nyanungu*.

Further evidence for lexical specification of binding constraints (along the lines of Dalrymple (1993)) comes from the fact that the binding data shows variation and I believe that there might be several dialects and/or that individual speakers might have different internal constraints. A lexical specification analysis solves this neatly by allowing different dialects/speakers to have different constraints. Data from reflexive binding also shows that the symmetry attested in the non-reflexive binding examples in Simpson (1991) is not attested in reflexive binding, according to Bresnan (2001). This shows that symmetry of binding and therefore the lack of subject/object asymmetries is not an overall characteristic of Warlpiri. This means that this cannot be said to be a characteristic of non-configurational languages (if one were to classify Warlpiri as non-configurational, which I do[11]). This is an interesting outcome: in a classification of non-configurational languages one will need to look for other charactistics. In general, it appears that the issue of configurationality relates to c-structure only, meaning that binding, accounted for in the f-structure, is taken completely out of the domain of configurationality.

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[11]For my PhD thesis I am currently working on a more indepth investigation into the nature of configurationality, which will give more details on these types of issues.

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