

## *Non-reflexive Binding in Warlpiri*

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Warlpiri is a (relatively) free word order language in which non-reflexive binding shows interesting patterns which are very different from those in languages such as English [Simpson, 1991, Legate, 2002]. These patterns seem to indicate that in some dialects of Warlpiri (the dialect as described by Simpson [1991]), linear precedence and the grammatical function hierarchy do not play a role in this type of binding. This paper shows that non-reflexive binding in these dialects of Warlpiri can be accounted for with an f-command-only approach, excluding other factors from the analysis.

Binding is generally accounted for by f-command in LFG, and not by c-command as in other theories. However, f-command alone is often not sufficient to account for binding phenomena. The grammatical function hierarchy (and to some extent f-precedence) are assumed to play a role in binding, explaining for example the difference in grammaticality between the English *John<sub>i</sub>'s dog chases him<sub>i</sub>* and *\*He<sub>i</sub> chases John<sub>i</sub>'s dog* [Bresnan, 2001, Dalrymple, 2001], e.g. because an antecedent, or a phrase containing the antecedent, must be higher on the grammatical function hierarchy than the pronoun it binds (or alternatively, a non-pronoun like 'John' cannot be bound by a pronoun). In Warlpiri there are dialects in which one does not find binding asymmetries of this kind.

Non-reflexive Warlpiri binding has been discussed by Simpson [1991] and Legate [2002], both with a c-command approach. Simpson provides an LFG analysis of Warlpiri binding, and accounts for the following examples with c-command:

(1a) *Jakamarra-kurlangu maliki ka nyanungu-rlu wajili-pi-ny<sub>i</sub>.*  
Jakamarra-POSS dog-ERG AUX he-ERG chase-NPST  
'He<sub>\*i/j</sub> chases Jakamarra<sub>i</sub>'s dog.'

(1b) *Jakamarra-kurlangu maliki-rli ka nyanungu wajili-pi-ny<sub>i</sub>.*  
Jakamarra-POSS dog-ERG AUX he chase-NPST  
Jakamarra<sub>i</sub>'s dog chases him<sub>\*i/j</sub>.'

(2a) *Jakamarra ka nyanungu-nyangu-rlu maliki-rli wajili-pi-ny<sub>i</sub>.*  
Jakamarra AUX he-POSS-ERG dog-ERG chase-NPST  
'His<sub>i/j</sub> dog chases Jakamarra<sub>i</sub>.'

(2b) *Jakamarra-rlu ka nyanungu-nyangu maliki wajili-pi-ny<sub>i</sub>.*  
Jakamarra-ERG AUX he-POSS dog chase-NPST  
'Jakamarra<sub>i</sub> chases his<sub>i/j</sub> dog.'

[Simpson, 1991, p. 179-181]

Examples (1a) and (1b) both illustrate anaphoric binding, with the pronoun being the subject in (1a) and the object in (1b). In both cases binding is ungrammatical. Simpson gives similar examples in which the pronoun precedes its antecedent; these are also ungrammatical. Examples (2a) and (2b) display anaphoric binding with a possessive pronoun. The binding here is grammatical, and also here the relative ordering between antecedent and pronoun does not matter for the grammaticality of the sentence. The f-structure of (1a) is the following:

$$\left[ \begin{array}{l} \text{PRED} \text{ 'chase<SUBJ,OBJ>} \\ \text{SUBJ} \left[ \begin{array}{l} \text{PRED} \text{ 'PRO'} \end{array} \right] \\ \text{OBJ} \left[ \begin{array}{l} \text{SPEC} \left[ \begin{array}{l} \text{PRED} \text{ 'Jakamarra'} \end{array} \right] \\ \text{PRED} \text{ 'dog'} \end{array} \right] \end{array} \right]$$

Binding is ungrammatical in (1a), so we can say that the pronoun may not f-command its antecedent. The same is true for (1b). In (2a) and (2b) the pronoun does not f-command its antecedent; these examples are grammatical. The following table summarizes the Warlpiri data and contrasts it with English:

	Warlpiri	English	Type of sentence
(a) $J_i$ 's dog chases $him_i$ .	X	✓	Pronoun is OBJ
(b) $He_i$ chases $J_i$ 's dog.	X	X	Pronoun is SUBJ
(c) $His_i$ dog chases $J_i$ .	✓	✓	Possessive pronoun is in SUBJ
(d) $J_i$ chases $his_i$ dog.	✓	✓	Possessive pronoun is in OBJ

This table (along with the examples (1a)-(2b)) illustrate that there are no subject/object asymmetries in this dialect of Warlpiri, contrasting with English in this respect. As noted above, f-precedence also does not play a role.

This paper proposes an f-command-only approach to account for non-reflexive binding in this dialect of Warlpiri, which contrasts with more elaborate analyses of binding which include the grammatical function hierarchy (and/or f-precedence). This is novel, as an f-command-only analysis has not been proposed before for any language. This analysis shows that f-command on its own can be powerful in accounting for binding in some dialects. This is true for non-reflexive binding; we acknowledge that there is an asymmetry in reflexive Warlpiri binding as described by Bresnan [2001]. We believe that this is evidence in favor of lexical specification of binding constraints, as proposed by Dalrymple [1993]. For reflexive binding we can lexically specify a constraint taking the grammatical function hierarchy and/or f-precedence into account, along with f-command; for non-reflexive binding we can specify a constraint only taking f-command into account.

This proposal is the first f-command based analysis for Warlpiri, as previous work on Warlpiri binding has been based on the c-command relation. Simpson [1991] claims that Warlpiri binding should be analyzed with c-command rather than f-command as the central relation, because this yields a uniform rule. She discusses f-command, but argues against it because it does not yield a uniform constraint. This paper argues that the analysis is much cleaner with an f-command based approach, incorporating lexical specification of binding constraints as opposed to uniformity of constraints, as is common in the LFG literature. Our analysis fits better with current LFG binding literature than Simpson [1991]'s account.

Moreover, this paper argues that the patterns of binding in this dialect of Warlpiri, which show no influence of f-precedence, reflect its non-configurational nature. Warlpiri is traditionally classified as a free word order language, with in principle free ordering of constituents (with a few exceptions, such as the position of the auxiliary). This is emphasized by the fact that f-precedence plays no role: it reflects free word order. By analyzing binding with f-command rather than c-command, we assume that binding is constrained only in the f-structure domain rather than the c-structure domain. In that sense, binding does not contribute to the relative configurational or non-configurational status of a language, since this is limited to the c-structural domain. However, it appears that the relative configurationality is reflected in binding, and this can be incorporated into a larger theory of configurationality, which I have begun.

## References

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