

LFG Morphosyntax problems

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Free word order in LFG

Warlpiri (ERG and ABS are cases in Warlpiri). All 3 of the following sentences have the same gloss:

The two small children are chasing a dog.

(1)

Kurdu-jarra-rlu	wita-jarra-rlu	ka-pala	maliki	wajilipi-nyi
child-DUAL-ERG	small-DUAL-ERG	PRES-DUAL	dog-ABS	chase-NONPAST

(2)

Kurdu-jarra-rlu	ka-pala	maliki	wajilipi-nyi	wita-jarra-rlu
child-DUAL-ERG	PRES-DUAL	dog-ABS	chase-NONPAST	small-DUAL-ERG

(3)

maliki	ka-pala	Kurdu-jarra-rlu	wajilipi-nyi	wita-jarra-rlu
dog-ABS	PRES-DUAL	child-DUAL-ERG	chase-NONPAST	small-DUAL-ERG

C-structure rules

- [R1] a. $S \rightarrow X \{Aux\} X^*$ where $X = NP, V$
 b. $NP \rightarrow N^*$
- [R2] a. Assign $(\uparrow \text{SUBJ}) = \downarrow$ $(\uparrow \text{OBJ}) = \downarrow$ freely to NP
 b. Assign $\uparrow = \downarrow$ to N, V, or Aux.

Lex entries

(L1)	kurdu-jarra-rlu	N	(↑ PRED) = 'child'
			(↑ NUM) = DUAL
			(↑ CASE) = ERG
(L2)	maliki	N	(↑ PRED) = 'dog'
			(↑ NUM) = SG
			(↑ CASE) = ABS
(L3)	wita-jarra-rlu	N	(↑ ADJ PRED) = 'small'
			(↑ NUM) = DUAL
			(↑ CASE) = ERG
(L4)	wajilipi-nyi	V	(↑ PRED) = 'chase(↑ SUBJ)(↑ OBJ)'
			(↑ TENSE) = NONPAST
			(↑ SUBJ CASE) = ERG
			(↑ OBJ CASE) = ABS
(L5)	ka-pala	Aux	(↑ ASPECT) = PRESENT.IMPERFECT
			(↑ SUBJ NUM) = DUAL

Helpful hints

Before doing the following Latin problem make sure you understand how the mini Warlpiri grammar works.

1. Make sure you can draw the C-structures and F-structures for (1)-(3).
2. Don't hand this in.
3. Warlpiri doesn't have an ADJ/NOUN distinction at all, so *wita-jarra-rlu* can be a head noun its own ('small one') and *maliki* ('dog') can be an Adj ('doggy'), in which case it generally follows the head noun (preference). So there is an alternative entry for *maliki* with the annotation:

(↑ ADJ PRED) = 'dog'

and an alternative entry for *wita-jarra-rlu* with the annotation:

(↑ PRED) = 'small'

Note: This annotated C-structure part of the grammar forces this multiplication of lexical entries. As you are building your F-structures, think about why.

Latin Problem

[Note: The following Latin problem is adapted from Aaron Broadwell's

<http://www.essex.ac.uk/linguistics/LFG/www%2Dlfg.stanford.edu/pubs/lf>

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Latin syntax and agreement

1. Write a grammar for this data, including PS-rules imposing grammatical relations and lexical entries accounting for agreement phenomena. Use case specifications in the lexical entries.
2. Draw the structures that your grammar assigns to (3) (11), and (15) and explain why (11) and (15) are ungrammatical.

1. Puer malus puellam amat, The bad boy loves the girl.
2. Amat puellam hic puer. This boy loves the girl.
3. Hunc puerum amat puella. The girl loves this boy.
4. Hi pueri boni hanc puellam amant. These good boys love this girl.
5. Hae puellae pueros amant. These girls love the boys.
6. Amant. They love him/her/them.
7. Venit bonus puer. The good boy is coming.

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|-----|--------------------------------|-----------------------------------|
| 8. | Haec puella venit. | This girl is coming. |
| 9. | Veniunt hae malae puellae. | These bad girls are coming. |
| 10. | Venit. | S/he is coming. |
| 11. | *Puellam venit puer. | |
| 12. | Hic puer est Quintus. | This boy is Quintus. |
| 13. | Haec puella bonam cenam parat. | This girl prepares a good dinner. |
| 14. | Hic vir malus laborat in agro. | This bad man works in the field. |
| 15. | *Hic puella laborat. | |