

LFG and Morphosyntax

The architecture of LFG appears to be morphologically responsible:

- strict separation of syntax and morphology
- lexical integrity: so no syntacticisation of morphological phenomena
- equal, interacting and competing contributors in the functional domain

For example: treatment of pro-drop; definitions of wordhood at different levels (Mohanan)

Exponence related features

Many analyses involve the appearance of exponence related features at f-structure

1. For example:

is V

(↑TNS) = PRES

(↑PRED) = ('prog<(↑VCOMP)>')

(↑VCOMP PARTICIPLE) = PRES

(↑SUBJ) = (↑VCOMP SUBJ)

(↑SUBJ NUM) = SG

handing V

(↑PARTICIPLE) = PRES

(↑PRED) = 'hand<(↑SUBJ) (↑OBJ) (↑OBJ2)>'

PRED	'prog<.....>'
TENSE	PRES
SUBJ	[1][NUM SG]
VCOMP	[PART PRES SUBJ [1] PRED 'hand< ... >']

2. Structural and semantic cases both appear as features in f-structures.

For example, NOM, ERG and ACC may be considered structural cases in Hindi and Urdu and DAT, INST, GEN and LOC as semantic cases ((Mohanan 1994))

naadyaa=ko gaarii calaa-nii aa-tii

Nadya.F=Dat car.F=Nom drive-Inf.F.Sg come-Impf.F.Sg

hai

be.Pres.3.Sg

Nadya knows how to drive a car

Urdu: (Butt 1995)

PRED	'know<.....>'
ASP	IMPF
SUBJ	[1] [PRED 'Nadya' CASE DAT]
XCOMP	[CASE NOM GEND FEM SUBJ [1] PRED 'drive< ... >' OBJ [PRED 'car' CASE NOM GEND FEM]]

Urdu: (Butt 1995)

Similarly, Wambaya: (Nordlinger 1998)

Galalarrinyi-ni bugayini-ni gini-ng-a

dog.I-ERG big.I-ERG 3SG.MASC.A-1.O-NFUT

dawu

bite

The big dog bit me

$$\left[\text{SUBJ} \left[\begin{array}{l} \text{PRED 'dog'} \\ \text{CASE ERG} \\ \text{ADJ} \left[\text{PRED 'big'} \right] \end{array} \right] \right]$$

F-structure is defined as quite independent of exponence

“The principle of universality states that internal structures are largely invariant across languages. The formal model of internal structure in LFG is the f-structure...The concepts of “subject” (SUBJ), “object” (OBJ), “predicator”..abstract away from expression in terms of external order and category....” (Bresnan 2000)

and a rich vein of work uses a distinction between lexical heads (which are PRED bearing) and their functional co-heads (which are not).

This leaves a lot of morphosyntactic, feature cooccurrence phenomena to be dealt with elsewhere, outside of f-structure

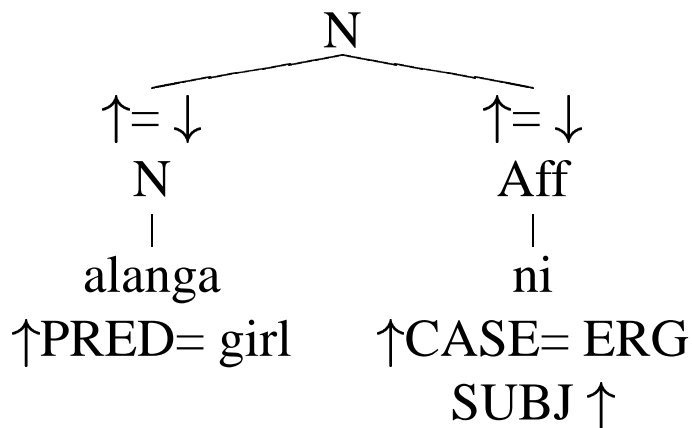
Models of Morphology

Scant attention has been paid to morphology in LFG. Many analyses use morphemes, albeit as a convenience shorthand (see (Nordlinger 1998) (page63, footnote 15))

-ni:

((SUBJ ↑) OBJ)

(↑CASE) = ERG



and plenty of other examples

We need the ERG marker on an adjunct to constrain the CASE features of the f-structure **within which it is embedded as an ADJUNCT**

-ni:

((SUBJ ↑) OBJ)

(↑CASE) = ERG

bugayini:

(ADJ ↑)

(↑PRED) = 'big'

The morphology composes (concatenates) *bugayini* and *ni*: the relevant embedding is achieved by composing the functional designators of the stem and the affix such that the affix embeds the functional designator of the stem into its own, with the result that the lower f-structure projected by the affix is substituted for the higher f-structure projected by the stem to which it is attached.

Principle of Morphological Composition

where x is a string of attributes:

$$\begin{array}{cc} \text{Stem} & \text{Aff} \\ (\text{GF}^n \uparrow) & ((\text{GF}^m \uparrow) x) \end{array}$$

\Rightarrow

$$\begin{array}{cc} \text{Stem} & \text{Aff} \\ (\text{GF}^n \uparrow) & ((\text{GF}^m (\text{GF}^n \uparrow)) x) \end{array}$$

which effectively alters (in context) the information associated with the affix.

-ni:

$$\begin{array}{l} (\text{SUBJ} (\text{ADJ} \uparrow)) \\ ((\text{ADJ} \uparrow) \text{CASE}) = \text{ERG} \end{array}$$

Distinguishing Sets of Morphosyntactic Features

Several sets of AGR features appear to be required in several circumstances.

1. Cases of Asymmetric Agreement

Daethost ti a minnau/Siôn
came.2S 2S and 1S/Siôn

You and I/Siôn came

Roedd Wyn yn siarad amdanat ti a Siôn
was.3S Wyn asp speak about-2S 2S and Siôn

Wyn was talking about you and Siôn

Mae Siôn ac Emyr yn ysgrifenyddwr rhagorol
is Siôn and Emyr PT writers excellent

Siôn and Emyr are excellent writers

Ni chaffodd ef a'i milwyr eu lladd yma
NEG got.3S he and-3SM soldiers 3PL kill there

He and his soldiers were not killed there

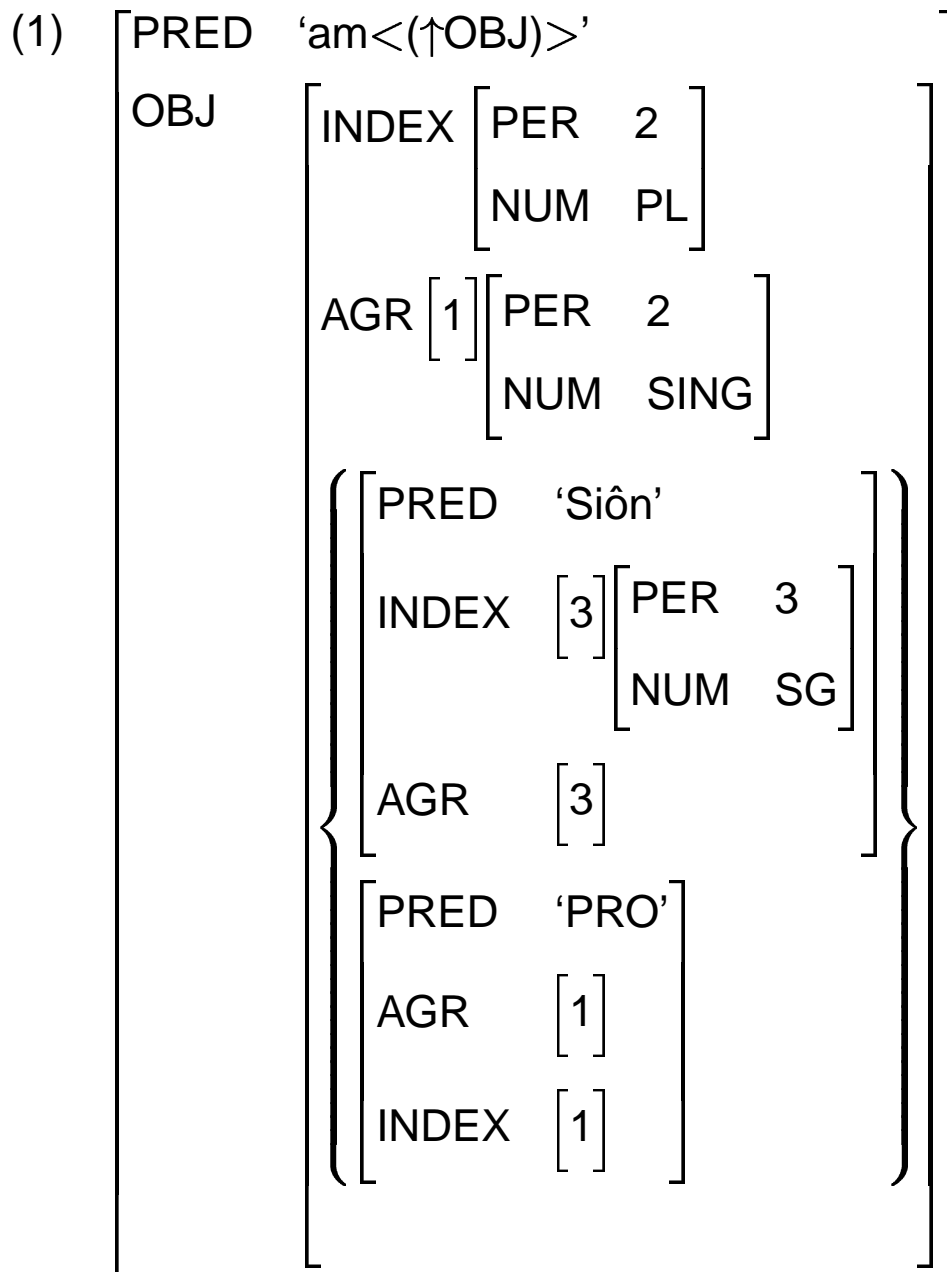
distinguish formal agreement features from semantically interpreted features. There are two possibilities:

1) distinguish a set of INDEX features from a set of AGR features and permit them to vary. In the general case they are token identical: $(\uparrow\text{AGR}) = (\uparrow\text{INDEX})$

Subject Verb agreement in languages showing asymmetrical agreement may involve AGR identity between coordinate structure as a whole and the first (or last) conjunct: SVA is therefore essentially treated as a concord phenomenon.



This also means that the f-structures have two sets of agreement features, one set of which is semantically interpreted, the other not.



2) Alternatively, the features which are relevant to morphosyntactic agreement alone can be factored out into another projection

2. Concord-Index Mismatches

For Serbo-Croat, (Zlatić and Wechsler 1997) show that some singularia tantum nouns: *deca* ‘children’, *vlastela* ‘landowners’, *braca* ‘brothers’ show mixed agreement patterns: FS within NP and NePL for coreferential pronouns. This provides evidence that the **one** object must have two separate sets of AV pairs, which cannot be equated.

Posmatrali amo ovu dobru decu. Ona
watched.1PL AUX this.FS good.FS children.FS they,NPL
su spavala. (Serbo-Croat)
AUX.3PL slept.NPL

We watched those good children. They slept.

INDEX	PER	3
	NUM	PL
CONCORD	GEN	NEUT
	NUM	SG
	GEN	FEM

Complex Predicates

A long tradition of work on complex predicates in LFG, treating the components as jointly defining one PRED value and one f-structure (e.g. (Alsina 1992),(Butt 1995)).

El mestre fa llegir un poema al nen
the teacher makes read.INF a poem to.the boy

The teacher makes the boy read a poem

However, morphosyntactic VFORM features cannot be shared (Frank 1996)

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