New LFG Grammatical Functions (GFs) for (free subject) verb MWEs

Stella Markantonatou¹ and Niki Samaridi²

¹Institute for Language and Speech Processing/ "Athena" RIC, <u>marks@ilsp.gr</u>
²National and Kapodistrian University of Athens, <u>nsamaridi@gmail.com</u>

PARSEME 3rd general meeting, Frankfurt, Germany, 8-9 September 2014 – WG2

Standard LFG Grammatical Functions (GFs) can not be applied on MWE data

Applying the standard LFG GFS

Samaridi and Markantonatou (SM), 2014:

- The LFG analysis of Modern Greek (MG) free subject verb MWEs assumes that MWEs (contain parts that) have the status of a word.
- The XLE parser is instructed by a preprocessor to treat identified WWSs as words complete with PoS and morphological features.
- (1) Η Αίμη κάνει την τρίχα τριχιά the Emy make.3rd.sg the-fem.acc.sg hair.fem.acc.sg rope.fem.acc.sg 'Emy exaggerates things.'

Entries in the XLE lexicon

WWS την_τρίχα_τριχιά = noun.fem.acc.sg κάνω <SUBJ, OBJ>, OBJ PRED= 'την_τρίχα_τριχιά'

However, talking about LFG GFS...

• LFG GFs are defined on the basis of their syntactic function (Dalrymple 2001) with diagnostics that should also apply to MG verb MWEs.

SUBJ is the only GF that triggers agreement on the verb in MG. It is defined for (1) (Η Αίμη (Emy)).

Which are the diagnostics for **OBJ** that is assigned to την_τρίχα_τριχιά by SM?

Diagnostics for OBJ in MG

- •Phrasal category diagnostic: It is typically realised with a constituent NP in the accusative case
- it is a constituent
- (provided meaning is preserved) It is replaced by a clitic and allows for clitic doubling
- it can be questioned with $\tau \iota$ 'what'
- it participates in long distance dependency phenomena
- it becomes a SUBJ in passivization and the causative-inchoative alternation.

Application of the OBJ diagnostics on the WWS την_τρίχα_τριχιά:

Constituency: την_τρίχα_τριχιά is an obligatory phrasal constituent that enjoys the word order freedom of MG verbal complements (2)

- (2) www.loutrakiblog.gr/2013/12/blog-post_24.html την τρίχα τριχιά κάνετε μωρέ!!!
- the hair rope make.2nd.pl EXCLAMit does not cliticise
- it gives no long distance dependency phenomena
- it does not passivize
- it is doubtful whether the question with $\tau \iota$ is not an "echo" one

Phrasal category diagnostic: it is not clear which PoS could be assigned to την_τρίχα_τριχιά. If the OBJ status was guaranteed on independent grounds, then we could perhaps argue that the WWS make. has the distributional behavior of nouns.

References

Dalrymple, M. 2001. Lexical Functional Grammar. Syntax and Semantics 34. Academic Press Samaridi, N. and Markantonatou, S. 2014. Parsing Modern Greek verb MWEs with LFG/XLE grammars. *The 10th Workshop on Multiword Expressions (MWE 2014), Workshop at EACL 2014* (Gothenburg, Sweden), April 26-27, 2014

New LFG Grammatical Functions (GFs) for MWES

MWEs' non-compositionality makes them divert from notions and diagnostics developed precisely for compositional structures.

New GFs are required for encoding MWEs: FIXCONST,XFIXCONST



- A phrasal obligatory constituent, other than the subject, that functions as **FIXCONST** in a verb MWE may be fixed (1) and bear no morphological features, or be semi-fixed allowing for anaphoric binding (3), bearing anaphoric morphological features, or demanding a POSS (4) (no morphological features).
- An obligatory, semi-fixed WWS constituent with nominal (5) or verbal (6) morphological features that subcategorises for a SUBJ controlled by SUBJ/OBJ and functions as an XFIXCONST.

New entries in the XLE lexicon

WWS την_τρίχα_τριχιά, PRED 'την_τρίχα_τριχιά' κάνω <SUBJ, FIXCONST>,
^FIXCONST PRED= 'την_τρίχα_τριχιά'

Examples (3)-(6)

(3) πες στην Ελένη_j να κάτσει_j στ' αυγά της_j tell.imp to-the Eleni_j.F.3rd.S to sit_j.3rd.S on-the eggs hers_j.F.3rd. S 'Tell to Eleni not to be involved.'

PRED 'στ'_αυγά_μου',

κάθομαι <SUBJ, FIXCONST>,

^FIXCONST NUM = ^SUBJ NUM, ^FIXCONST PERS = ^SUBJ PERS

(4) www.newsbeast.gr/sports/arthro/284785/efagan-ti-skoni-tou-diamadidi/

Tη σκόνη του Διαμαντίδη έφαγαν οι
the acc dust acc the gen Diamantidis gen eat 3rd.pl.past the nom

'The... were overtaken by Diamantidis.' PRED 'τη_σκόνη<POSS>',

τρώω <SUBJ, FIXCONST>,

^FIXCONST PRED= 'την_σκόνη<POSS>'

(5) μένω ταπί και ψύχραιμος stay. 1st.sg bw and cool.sg.nom.masc

PRED= 'ταπί_και_ψύχραιμος <SUBJ>', ^NUM, ^GEND, ^CASE

μένω<SUBJ, XFIXCONST>,

'I am penniless.'

^XFIXCONST PRED 'ταπί_και_ψύχραιμος<SUBJ>',

^SUBJ = ^XFIXCONST SUBJ

(6) κάνω μαύρα μάτια να δω τα παιδιά make.1st.sg black eyes to to see. 1st.sg the children 'I have not met the children for long.'

PRED 'μαύρα_μάτια'

κάνω<SUBJ,FIXCONST, XCOMP>,

^FIXCONST PRED= 'μαύρα_μάτια',

^XCOMP PRED= $\delta\omega$ <SUBJ,OBJ>, ^XCOMP SUBJ = ^SUBJ