New LFG Grammatical Functions (GFs) for verb MWEs

WG2

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Samaridi and Markantonatou (2014) (SM) proposed an LFG analysis of Modern Greek (MG) free subject verb MWEs that draws on the idea 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. So, for the MWE in (1), the XLE lexicon contains the WWS την_τρίχα_τριχιά marked as noun.fem.acc.sg and the verb κάνω<SUBJ, OBJ>, OBJ PRED= 'την τρίγα τριγιά'.

 H Αίμη κάνει την the Emy make.3rd.sg the-fem.acc.sg τρίχα τριχιά hair. fem.acc.sg rope.fem.acc.sg 'Emy exaggerates things.'

However, 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 and is defined for (1). What are the diagnostics for OBJ that is assigned to $\tau\eta\nu_{\tau}\rho_{1}\alpha_{\tau}$ SM? In MG, the OBJ is typically realised with a constituent NP in the accusative case, (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 and becomes a SUBJ in passivization and the causative-inchoative alternation. The WWS in (1) does not Niki Samaridi National and Kapodistrian University of Athens nsamaridi@gmail.com

cliticise, gives no long distance dependency phenomena and does not passivize (the verb $\kappa \dot{\alpha} v \omega$ does not passivize anyway). There is causative-inchoative pair $\kappa \dot{\alpha} v \omega$ the vivoµaı (make-become), however, the two verbs are not related morphologically. Lastly, it is doubtful whether the question with τi is not an "echo" one. So, evidence for objecthood is meager. As regards the phrasal category diagnostic, it is not clear which PoS could be assigned to $\tau\eta\nu_{\tau}\rho_{\chi\alpha_{\tau}}$ for the OBJ status was guaranteed on independent grounds, then we could perhaps argue that the WWS has the distributional behavior of nouns. Similar problems have cropped up with all the types of MG verb MWEs we studied (~ 1300 MWEs).

 (2) www.loutrakiblog.gr/2013/12/blog-post_24.html την τρίχα τριχιά κάνετε μωρέ!!! the hair rope make.2nd.pl EXCLAM

However, since MWEs are by definition non-compositional it is only normal that they divert from notions and diagnostics that have been developed precisely for compositional structures. If (1) was compositional, τριχιά would be controlled by $\tau \rho i \chi \alpha$ and adjective modification of both τρίχα and τριχιά, clitic replacement of τρίχα, word order permutations etc. would be allowed--but they are not. Observed word order permutations (2) show that $\tau\eta\nu_{\tau}\rho_{1}\chi\alpha_{\tau}\rho_{1}\chi_{1}$ is an obligatory phrasal constituent that enjoys the word order freedom of MG verbal

complements although it is not an OBJ (or any other GF). Such facts have convinced us that new GFs are required for encoding MWEs. Drawing on our data, we concluded that we would need just two new GFs which we called FIXCONST and 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)-(5), therefore bearing morphological features, or POSS demanding a (6)-(7)(no morphological features). An obligatory, semi-fixed WWS constituent with nominal (8)-(10) or verbal (11)-(13) morphological features is controlled by SUBJ/OBJ and functions as an XFIXCONST. In this new set up, την_τρίχα_τριχιά (1) is again encoded as a separate WWS entry in the XLE lexicon, this time with no grammatical features, while the verb is encoded as κάνω <SUBJ, FIXCONST>. ^FIXCONST PRED= 'την_τρίχα_τριχιά'. In (3), στ' αυγά_μου (4) is bound by the free subject of (3).

(3) $\pi\epsilon\varsigma \quad \sigma\tau\eta\nu \ E\lambda\epsilon\nu\eta_j \quad \nu\alpha$ tell.imp to-the Eleni j.fem.3rd.sg to $\kappa\dot{\alpha}\tau\sigma\epsilon\iota_i \quad \sigma\tau' \quad \alpha\nu\gamma\dot{\alpha} \quad \tau\eta\varsigma_i$ sit j.3rd.sg on-the eggs hers j.fem.3rd. sg 'Tell to Eleni not to be involved.'

(4) στ'_αυγά_μου, PRED 'στ'_αυγά_μου'
 ^FIXCONST NUM = ^SUBJ NUM
 ^FIXCONST PERS = ^SUBJ PERS,
 ^FIXCONST GEND=^SUBJ GEND

(5) κάθομαι<SUBJ, FIXCONST>, ^FIXCONST PRED = 'στ' αυγά μου'

(6) www.newsbeast.gr/sports/arthro/284785/**efa** gan-ti-skoni-tou-diamadidi/

ΤησκόνητουΔιαμαντίδηthe.accdust.accthe.genDiamantidis.genέφαγανοιαφοίΓκασόλeat.3rd.pl.pastthe.nombros.nomGasol'BrosGasolwereovertakenbyDiamantidis.'''''''

(7) τη_σκόνη, PRED 'τη_σκόνη<POSS>'

The WWS in (3) is a constituent that behaves exactly like the WWS $\tau\eta\nu_{\tau}\tau\rhoi\chi\alpha_{\tau}\tau\rhoi\chii\alpha$ (1) plus the binding behavior. Binding constraints are encoded on the WWS in the XLE lexicon (4). The verb entry is (5).

XFIXCONST is used with MWEs like (8) and (11). The WWS $\tau \alpha \pi i_\kappa \alpha \iota_\psi \psi \chi \rho \alpha \mu \omega \varsigma$ (9), contains the bound word $\tau \alpha \pi i$ and the otherwise normal adjective $\psi \psi \chi \rho \alpha \mu \omega \varsigma$, that agrees in gender, number and case with the subject. The entries (9) and (10) are used in the XLE for (8).

- (8) μένω ταπί και ψύχραιμος
 stay. 1st.sg bw and cool.sg.nom.masc
 'I am penniless.'
- (9) ταπί_και_ψύχραιμος
 PRED= 'ταπί_και_ψύχραιμος <SUBJ>',
 ^NUM, ^GEND, ^CASE
- (10) μένω<SUBJ, XFIXCONST>,
 ^XFIXCONST PRED 'ταπί_και_ψύχραιμος
 <SUBJ>',^SUBJ = ^XFIXCONST SUBJ

For (11): (i) the entry for the fixed WWS $\mu\alpha\dot{\rho}\alpha_{\mu}\dot{\alpha}\tau_{1\alpha}$ (12) bears no morphological features (ii) the subject of the semi-fixed sentential complement is controlled by the subject of the verb (verb entry given in (13)).

- (11) κάνω μαύρα μάτια να δω make.1st.sg black eyes to to see. 1st.sg τα παιδιά the children
 'I have not met the children for long.'
- (12) μαύρα_μάτια, PRED 'μαύρα_μάτια'
- (13) $\kappa \dot{\alpha} v \omega <$ SUBJ,FIXCONST, XCOMP>, ^FIXCONST PRED= ' $\mu \alpha \dot{\rho} \alpha _\mu \dot{\alpha} \tau \iota \alpha$ ' ^XCOMP PRED= $\delta \omega <$ SUBJ,OBJ>, ^XCOMP SUBJ = ^SUBJ

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