

Obligatory Object Control constructions in Greek: an LFG/XLE treatment

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Control constructions in Greek *na* subordinate clauses have been widely discussed in the literature and they still remain a controversial topic (Iatridou 1993, Varlokosta 1994, Philippaki-Warbuton and Catsimali 1999, Landau 2002). In this paper, we study obligatory object control (OOC) in *na* subordinate clauses focusing on the verbal predicates illustrated in (1).

- (1) mathainw ‘teach, voithw ‘help’, peithw ‘persuade’, empodizw ‘prevent’, protrepw ‘urge’, epitrepw ‘allow’, apagoreuw ‘forbid’.

In the analysis of OOC in English the subject of the infinitive is *functionally controlled* by the object of the matrix verb (Bresnan 1982). In the corresponding structure in Greek, the subordinate clause lacks an infinitival verb form but surfaces as a *na*-clause, exemplified by (2) (Triadafillidis 1941, Philippaki 2004, Roussou 2009). *Na*-complements differ from infinitives, among others, in that in combination with certain control verbs, they license overt subjects (see (3)).

- (2) O Nikos apagoreuei ths Marias na erthei.

The-DEF Nikos-NOM forbid-3SG the-DEF Maria-GEN to-COMPL come-3SG

‘Nikos forbids Maria to come.’

- (3) O Nikos apagoreuei na erthei h Maria.

The-DEF Nikos-NOM forbid-3SG to-COMPL come-3SG the-DEF Maria-NOM.

‘Nikos forbids Maria to come.’

As a result, the standard analysis of English OOC does not extend to Greek. We propose an account embedded in the framework of the *Greek LFG/XLE Grammar Development*.

Control is a dependency between an unexpressed subject (the controlled element) and an expressed or unexpressed constituent (the controller; Bresnan 1982). In the cases at hand, the object of the matrix clause is always overt and functions as the controller of the subject of the *na* complement. In the literature, there is a general agreement that *na* subordinate clauses display the semantic properties characteristic of control infinitives. Varlokosta (1994) demonstrated, for one, that the subject of *na*-clauses systematically is assigned *de se* readings, just like control subjects in English. However, there is no consensus on how to define the verb class licensing control constructions (Iatridou 1993, Varlokosta 1994, Alexiadou and Anagnostopoulou 1999, Philippaki and Catsimali 1999, Spyropoulos 2007, Kotzoglou and Papangeli 2007, Beys 2007, Roussou 2009). We pursue this issue in a corpus study based on the Hellenic *National Corpus* (HNC ; <http://hnc.ilsp.gr/>), a balanced corpus of Greek that currently contains about 50.000.000 words. All these predicates are exhaustive control verbs.

In Greek the object controller can be marked by accusative (4a), genitive case (4b) or it can be embedded within a PP, which is considered to be an oblique argument (OBL-TO) (4c).

- (4) a. O Kostas mathainei th Maria na milaei Agglika.
The-DEF Kostas-NOM teaches-3SG the-DEF Maria-ACC to-COMPL speak-3SG
English-ACC
'Kostas teaches Maria to speak English.'
- b. O Kostas mathainei ths Marias na milaei Agglika.
The-DEF Kostas-NOM teaches-3SG the-DEF Marias-GEN to-COMPL speak-3SG
English-ACC
'Kostas teaches Maria to speak English.'
- c. O Kostas mathainei sth Maria na milaei Agglika.
The-DEF Kostas-NOM teaches-3SG se-PREP Maria-ACC to-COMPL speak-3SG
English-ACC
'Kostas teaches Maria to speak English.'

Bresnan (1982) distinguishes between two types of control, *functional* and *anaphoric*, the former of which by definition applies in contexts where the controller and the controllee match in features. LFG uniformly treats control constructions as manifestations of functional control. This analysis predicts featural identity between controller and controllee for OOC in English (see (5)) and Greek subject control constructions ((6); for pertinent f-structures see appendix).

- (5) Frank persuaded Mary to leave.
- (6) H Zwh emathe na kolumpaei.
the-DEF Zwh-NOM learned-3SG to-COMPL swim-3SG
'Zoi learned to swim.'

But in Greek OOC, the controller and the controllee can also differ in Case features. An instance of such a mismatch is (7), where the embedded subject modifier *teleftaios* 'last', which is in an agreement relation with the covert subject, surfaces with a nominative ending, while the controller (*to Gianni* 'John') bears accusative case (Iatridou 1993, Kotzoglou and Papangeli 2007, Roussou 2009). Given that agreement is mediated by features, we can conclude that the null subject of the *na* embedded clause also bears nominative.

- (7) H Maria epeise **to Gianni**_{ACC} na fugei teleftai-**os**_{NOM}.
the-DEF Maria-NOM persuaded 3SG- the-DEF **Gianni-ACC** to-COMPL leave-3SG
last-MOD-NOM.
'Maria persuaded Gianni to leave last.'

It follows that (7) (and (4)) cannot be subsumed under cases of functional control, contradicting the XCOMP analysis of Greek *na* clauses.

We propose to treat OOC as an instance of anaphoric control in the sense of Bresnan (1982), hence to analyze *na* subordinate clauses as implicating COMP functions. Given that COMP is also used as a formal device to model partial control our analysis creates a hitherto unexplored prediction: OOC in Greek should admit partial control (Landau 2013; Pearson 2015). At first sight, this prediction is not confirmed, as shown by the ill-formedness of the partial control structure in (8); (9) demonstrates that partial control is attested with subject control predicates.

- (8) *O Giannis mathainei h Maria na mazeuei mazi tomates/na sunanththoun.
the-DEF Giannis-NOM teaches-3SG the-DEF to-COMPL pick up-3SG together-
ADV tomatoes-ACC/to meet-3PL
'Giannis teaches Maria to pick up tomatoes together/to meet.'

- (9) O Giannis proteine na sunanththoun.
 the-DEF Giannis-DEF proposed-3SG to-COMPL meet-3PL
 ‘Giannis proposed to meet.’

Interestingly though, the absence of collective readings for the OOCsubject correlates with the absence of a second property which has been found to be characteristic of partial control predicates, i.e. temporal independence of the embedded clause. Combining a future oriented embedded adverbial with past matrix predicate (10) leads to ill-formed results (on the relation between partial control and tense see Landau 2013; Pearson 2015).

- (10) *Chthes o Giannis emathe na grafei aurio.
 Yesterday the-DEF Giannis-NOM learned-3SG to-COMPL write-3SG tomorrow-
 ADV
 ‘* Yesterday, Giannis learned to write tomorrow.’

Examples like (5) can also be treated using anaphoric control (Dalrymple 2001, Falk 2001). In these cases, the object of the matrix verb and the non overt subject of the embedded clause are “both considered to be thematic arguments of their respective verbs, and so they must be two distinct D-structure elements” (Falk 2001:141). This analytical option has not been pursued for English. On the other hand, in languages like Greek and Icelandic, which use extensive morphological case marking, anaphoric control seems to be the only way to treat OOC.

Bresnan (1982) argues that anaphoric control requires the presence of PRO, which is expressed only in f-structure. We propose that in Greek OOC constructions the subject of the *na* subordinate clause is a PRO anaphorically controlled by the object of the matrix verb (11). This anaphoric relation between PRO and its antecedent (object or oblique) must be overtly expressed in the f-structure. For this reason, we introduce a new feature “ANAPH_C_BY” with the value OBJ or OBL-TO, signaling that the predicates in (11) are not only marked for anaphoric control but also include a lexically required feature restricting arguments to a particular type of *na* complements (de se properties). As a result, there are two subtypes of COMP, one for clausal arguments that have their own overt or non overt subject and one for clausal arguments that have their subject anaphorically controlled by the object of the matrix verb.

- (11) O Kostas mathainei th Maria [na PRO milaei Agglika].
 The-DEF Kostas-NOM teaches-3SG the-DEF Maria-ACC [to-COMPL PRO speak-
 3SG English-ACC]
 ‘Kostas teaches Maria to speak English.’

We follow Bresnan (1982) in that PRO is a semantic form and thus should be introduced in the lexicon. Specifically, it is introduced in the lexical entry of the governing verb. We claim that since PRO is the subject of the *na* subordinate clause it is case marked with nominative. Thus, the lexical entry for the control verb *mathainw* looks as in (12):

- (12) mathainei V (↑PRED)= 'MATHAINW <(↑ SUBJ) (↑ OBJ) (↑ COMP)>'
 (↑ COMP SUBJ PRED) = 'PRO'
 (↑ COMP SUBJ CASE) = NOM
 (↑ COMP SUBJ ANAPH_C_BY) = OBJ.

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Appendix

1. The f-structure of (5):

SUBJ	[PRED 'Frank' CASE NOM NUM SG GEND MALE]
TENSE	PAST
PRED	'persuade <(↑ SUBJ)(↑ OBJ)(↑ XCOMP)>'
OBJ (1)	[PRED 'Mary' CASE ACC NUM SG GEND FEM]
XCOMP	[PRED 'leave <(↑ SUBJ)>' SUBJ [1]]

2. The f-structure of (6):

SUBJ (1)	[PRED 'Zoi' CASE NOM NUM SG GEND MALE DEF +]
TENSE	PAST
PRED	'mathainw <(↑ SUBJ)(↑ XCOMP)>'
XCOMP	[PRED 'kolumpaw <(↑ SUBJ)>' SUBJ [1]]