

# Obligatory Control and Raising in Modern Greek Subjunctive Complements

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*Abstract.* In this paper, I will outline various accounts of control in certain Modern Greek (MG) subjunctive complements. After discussing the benefits of Landau's (2003a) analysis, I introduce evidence from Alexiadou and Anagnostopoulou 1999 that MG exhibits properties of raising in complements of aspectual predicates, which Landau's theory categorizes as Obligatory Control. To enrich the empirical adequacy of the theory, I argue that these raising predicates lack semantic tense and thus are not subject to the stipulations of the control module. This derives the effects of raising in the necessary environment without compromising the theory of control presented in Landau 2003a.

## 0. Introductory remarks

The existence of Obligatory Control (OC) in finite contexts has been a topic of considerable debate. I will recount several of the arguments that Modern Greek has OC in certain subjunctive complements. Considering the evidence that OC exists in finite contexts, existing theories of Control need to be refined in order to account for the distribution of PRO. However, not all subjunctive complements in MG display properties of OC and there is even evidence of Raising in complements of aspectual predicates. Landau (2003a) provides a model of control that seeks to account for the distribution of PRO in all contexts. While effective for the majority of subjunctive complements in MG, this model stipulates OC in aspectual complements and is incompatible with the Raising evidence. I will argue that these predicates may select for complements that lack semantic tense and are not always subject to the feature assignment of the control module.

## 1. Modern Greek subjunctive complements and Control

MG displays evidence of OC in subjunctive complements to aspectual matrix predicates. These constructions display full subject agreement on the embedded verb and appear with the subjunctive mood clitic, *na*.

- (1) O petros kseri na kolimbai. (Alexiadou & Anagnostopoulou 1999)  
the Peter<sub>NOM</sub> knows<sub>3SG</sub> to swim<sub>1SG</sub>  
'Peter knows how to swim.'

No non-VP material may intervene between the subjunctive marker and the embedded verb and I assume that *na* resides in T (following Terzi 1997 and Landau 2003).<sup>1</sup>

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<sup>1</sup> It is not essential that *na* heads the embedded TP as long as T has the appropriate features licensed; however, this has been the tradition in recent literature.

Given that MG is a pro-drop language and any null subject could be analyzed as *pro*, the debate about control in Balkan languages has largely centered on the distribution of PRO versus *pro*. Philippaki-Warbuton (2002, 1999) adheres to the view that control does not occur in finite contexts; however, the view that these constructions involve obligatory control dominates the literature (see Krapova 2001, Terzi 1997, Varlokosta and Hornstein 1993). They point out that lexical DP subjects are disallowed in certain embedded clauses:

- (2) \*O petros kseri na kolimbai i maria.  
 the Peter<sub>NOM</sub> knows<sub>3SG</sub> to swim<sub>3SG</sub> the Mary<sub>NOM</sub>

Similarly, agreement on the embedded clause must match that of the main clause:

- (3) \* O petros kseri na kolimbao.  
 the Peter<sub>NOM</sub> knows<sub>3SG</sub> to swim<sub>1SG</sub>

In addition, the constructions display all of the classic properties of control structures. In Higginbotham 1992 it is noted that controlled complements forbid split antecedents, permit only sloppy readings under VP ellipsis, and require a *de se* interpretation. Varlokosta & Hornstein (1993) provide the following MG examples:<sup>2</sup>

- (4) a. \*O janis kseri na bothisoun o enas ton allo.  
 the john knows<sub>3SG</sub> to help<sub>3PL</sub> each other
- b. O janis kseri na kolimbai to idhio ke o vasilis.  
 the John knows<sub>3SG</sub> to swim<sub>3SG</sub> the same the Bill  
 “John knows swimming and Bill knows swimming”
- c. O atichis kseri<sub>3SG</sub> na emtimisi to metalio.  
 the unfortunate knows to appreciate<sub>3SG</sub> the medal (de se)  
 “The unfortunate knows how to appreciate the medal”

The examples in (4) show via standard diagnosis that the null subject must be controlled. (4a) shows a ban on split antecedents. (4b) illustrates the sloppy reading under VP-ellipsis. The available interpretation in (4c) is *de se*, in which PRO must be interpreted as identifying the speaker (terminology in Higginbotham 1992 among others). Given this support for a PRO analysis in these constructions, I turn now to the treatment of PRO within finite clauses.

<sup>2</sup> It is hard to see how (4b) could yield a strict reading.

## 2. Different approaches to OC in finite contexts

### 2.1. Government and binding

GB handles control by stipulating that PRO can only be licensed by –FIN tense and thus in an ungoverned position. Being ungoverned prevents PRO from bearing case and from occurring in finite contexts. The Minimalist program has dispensed with the notion of government (Chomsky 1993) and control must be handled in another way.

### 2.2. Case- theoretic

One of Minimalism’s widespread alternatives to the ungoverned PRO approach is the use of special null case licensed by nonfinite I (Chomsky & Lasnik 1993). Terzi (1997) and Krapova (2001) take this theoretical approach to the distribution of PRO in MG complement clauses. Both accounts employ a partial checking of T as sufficient to license null case.

Landau (2003a) presents three general arguments against any case-theoretic approach to control: (i) such theories are refuted by many attestations of case-marked PRO, (ii) these theories falsely predict total availability of lexical DPs in finite complements, and (iii) even the case-theoretic approaches made to work for Balkan languages fail to generalize to instances of finite control in non- Balkan languages.

One illustration of case-marked PRO comes from Philippaki-Warburton & Catsimali 1999.

- (5) Anangasan tin eleni PRO na milisi afti i idhja.  
 forced the Eleni<sub>ACC</sub> PRO<sub>NOM</sub> to speak she<sub>ACC</sub> herself<sub>NOM</sub>  
 ‘They forced Helen to speak herself’

The reflexive *i idhja* appears in nominative case and presumably agrees with the null subject, which I have taken to be a nominative PRO.<sup>3</sup> Landau (2003a) takes PRO as free to bear non- special case and finds a different solution for determining its distribution.

### 2.3. Agreement- based

Landau (2003a) presents a solution to the conundrum of PRO’s distribution in finite contexts where OC is a reflex of Agree and the checking and erasure of two intersecting features. In a thorough typological study, Landau (2003a) links tense alternations to agreement in selected complements as features. The presence of anaphoric tense is used to distinguish controlled complements (c-subjunctives) from free

<sup>3</sup> It should be noted, however, that Philippaki-Warburton & Catsimali use the evidence of nominative case on the null subject as argument for *pro* and against the possibility of controlled PRO in this environment—as for them, PRO cannot bear case.

complements (f-subjunctives) by Krapova 2001, Terzi 1997, and Varlokosta & Hornstein 1993 to name a few. In the following section I outline the “calculus of control” in Landau 2003.

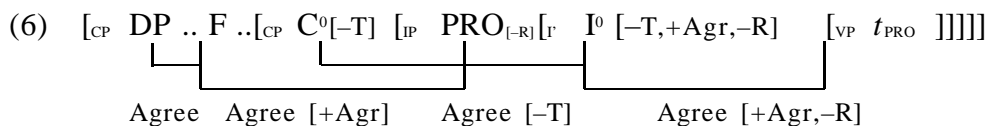
The relevant features are [T] and [Agr] on both nodes I and C. [T] is always interpretable on I, but uninterpretable on C and is checked between I and C to account for the intuition that I and C are matched for certain clause types (the “I-to-C conspiracy”). Checking erases the uninterpretable copy of the feature checked and leaves intact the interpretable copy. Embedded C carries a [T] feature when it is licensed by the selecting matrix predicate.

The matrix predicate selects for one of two types of tense on complements: free tense or selected [+/-T]: dependent and anaphoric respectively. “Free tense” means no tense is selected by the predicate so there is no [T] feature on C and I can bear an independent [+T]. The presence of agreement morphology implies that I is [+Agr] and infinitives are [-Agr]. On C, overt agreement [+Agr] is parasitic on [+T].<sup>4</sup> Table 1 illustrates the relevant features on C and I for controlled complements:

**Table 1**

	C	I
Balkan C-subjunctives	[-T]	[-T][+Agr]

Using feature specifications such as in Table 1, the appropriate referential feature [R] is assigned. Landau (2003a)’s R-assignment rule states that whenever I or C are specified for [+T,+Agr], then DP is [+R]. If there is any other feature specification, then DP is [-R]. If a DP has no [T] or [Agr] features, it receives no [R] value. Thus, [-T,+AGR] on I or C is a condition for [-R] assignment to the DP subject/PRO, as shown in the derivation of (6):



The probe of operation AGREE is the matrix functional head which licenses the controller DP: I or *v*. Assuming that checked features persist to the end of their phase, the controller DP does not deplete the features of the functional head so they can enter another checking relation before they are erased. The goal is either PRO or the embedded Agr. Agr is a potential goal because it consists of uninterpretable features which must be erased. PRO is a potential goal because of its anaphoric feature [-R]. In (6) a PRO subject checks [-R] and [+Agr] features on I which then checks [-T] on C. PRO

<sup>4</sup> Landau’s proposal provides no evidence of agreement marking on C and acknowledges it as a part of the technology.

establishes an Agree relation with the matrix antecedent as stipulated by being [-R].

### 3. Raising in complements of aspectual predicates

Under Landau (2003a)'s classification, aspectual predicates such as *arxizo* 'start' and *stamatao* 'stop' select for obligatory controlled complements and have PRO as the subject. However, there is evidence that these complements are ambiguous<sup>5</sup> between control and raising as is discussed for MG in Alexiadou and Anagnostopoulou 1999 and noted cross-linguistically in Landau 2003b.

The evidence for raising in the complements of aspectual verbs lies in the systematically distinct behavior of these predicates when compared to the rest of the class of c-subjunctives which take PRO as their subject. The aspectual complements differ from the other control complements with respect to binding and idiom formation tests.

#### 3.1. Binding Facts

In MG, an overt anaphor can raise from a position below the lower object of certain complements (under the VP-internal Subject Hypothesis (Kitagawa 1986)), which permits it to be bound by that object.

- (7) O eaftos<sub>i</sub> tu arxizi na **tu**<sub>i</sub> aresi t<sub>i</sub>.  
 the self<sub>NOM</sub> his start<sub>3SG</sub> to **CL**<sub>GEN</sub> appeal<sub>3SG</sub>  
 'He starts to like himself.'

The anaphor starts within VP and thus is bound by the pronominal clitic before raising to its position within the matrix clause.

Obligatory control predicates, on the other hand, show that the nominative anaphor cannot reconstruct to a position below the lower object and the unbound anaphor violates Principle A of binding:

- (8) \*O eaftos<sub>i</sub> tu kseri na **tu** aresi.  
 the self<sub>NOM</sub> his know<sub>3SG</sub> to **CL**<sub>GEN</sub> appeal<sub>3SG</sub>

Another instance in which these predicates differ from control is the obviation of weak-crossover (WCO) effects with quantificational clitic doubling. WCO effects arise when there is no clitic doubling of the object:

- (9) a. Kathe mitera sinodepse to pedhi tis to sxolio.  
 every mother accompanied the child hers at school  
 'Every mother accompanied her child to school'

<sup>5</sup> See Alexiadou and Anagnostopoulou 1999 for more discussion of the ambiguity and the problems surrounding these as restructuring predicates. In this paper, I focus only on the relevant instances of raising.

- b. ?\*I mitera tu sinodepse to kathe pedhi sto sxolio.  
 the mother his accompanied the every child at school  
 ‘?\*His mother accompanied every child to school.’
- c. I mitera tu **to** sinodepse to kathe pedhi sto sxolio.  
 the mother his **CL<sub>acc</sub>** accompanied the every child at school  
 ‘His mother accompanied each child to school’

With the object clitic introduced as in (9c), the subject is under its scope according to the VP-internal Subject Hypothesis before moving higher in the structure. Hence the pronoun variable may be bound and the WCO effects obviated.

When a raising predicate is introduced, quantificational object clitic-doubling is still felicitous as a means of obviating WCO effects:

- (10)a. Kathe mitera arxise na sinodevi to pedhi tis to sxolio.  
 every mother started to accompany the child hers at school  
 ‘Every mother started to accompany her child to school’
- b. ?\*I mitera tu arxise na sinodevi to kathe pedhi sto sxolio.  
 the mother his started to accompany the every child at school  
 ‘?\*His mother started to accompany every child to school.’
- c. I mitera tu arxise na **to** sinodevi t to kathe pedhi sto sxolio.  
 the mother his started to **CL<sub>acc</sub>** accompany the every child at school  
 ‘His mother started to accompany each child to school’

However, such obviation of WCO effects is not found in obligatory control predicates—consider the ungrammaticality of (11c):

- (11)a. Kathe mitera kseri na sinodevi to pedhi tis to sxolio.  
 every mother knows how to accompany the child hers at school  
 ‘Every mother knows how to accompany her child to school’
- b. ?\*I mitera tu kseri na sinodevi to kathe pedhi sto sxolio.  
 the mother his knows how to accompany the every child at school  
 ‘?\*His mother knows how to accompany every child to school.’
- c. \*I mitera tu kseri na **to** sinodevi to kathe pedhi sto sxolio.  
 the mother his knows how to **CL<sub>acc</sub>** accompany the every child at school  
 ‘\*His mother knows how to accompany each child to school’

Alexiadou and Anagnostopoulou (1999) attribute the obviation effect to the subject’s reconstruction to a position below the object clitic. In predicates where the subject cannot reconstruct to a lower position, clitic doubling does not obviate WCO effects, as shown in (11c).

### 3.2. Idiom Formation

Nominatives in idiomatic expressions in MG occur post-verbally:

- (12) Mu bikan psili st'aftia.  
 CL<sub>ISGGEN</sub> entered<sub>3PL</sub> fleas<sub>NOM</sub> in the ears  
 'I became suspicious'

Both the aspectual matrix verb and the embedded predicate agree with the subject:

- (13) Stamatisan na mu benun psili st'aftia.  
 stopped<sub>3PL</sub> to CL<sub>ISGGEN</sub> enter<sub>3PL</sub> fleas<sub>NOM</sub> in the ears  
 'I stopped being suspicious'

Even though the nominative depends only on the lower verb for its interpretation, it agrees with both verbs obligatorily. This necessary agreement between the subject and the matrix verb supports an argument that at some point in the derivation, there must be covert raising of the nominative to the higher clause manifested as Long Distance Agreement. This behavior is in contrast to the impossibility of idioms embedded under other c-subjunctives:

- (14) \*Kserun na mu benun psili st'aftia  
 know<sub>3PL</sub> to CL<sub>ISGGEN</sub> enter<sub>3PL</sub> fleas<sub>NOM</sub> in the ears

### 3.3 Raising and the Agreement Approach to Control

The raising evidence is not accounted for under the model presented. On this view, all c-subjunctives—including the ambiguous aspectual complements above—are subject to the feature assignments of control module. In this section I discuss the relevant differences between aspectual complements and their c-subjunctive counterparts.

Aspectual complements have been noted to lack semantic tense (see Martin 1996) and such MG complements also seem to lack semantic tense. For example, they do not permit a temporal adverb with independent reference in the lower clause:<sup>6</sup>

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<sup>6</sup> Further evidence arguing against [T] on the lower clause comes from pseudo-cleft formation. Control structures allow pseudo-clefts whereas the relevant raising ones do not:

- (i) afto pu kseri o Janis ine na kolimbai (A & A 1999)  
 this that knows the John is to swim  
 "What John knows is how to swim"
- (ii) \*afto pu arxise o Janis ine na kolimbai  
 this that started the John is to swim

- (15) \*o Janis arxizi na anisixi avrio  
 the John begin<sub>3SG</sub> to worry<sub>3SG</sub> tomorrow

The fact that an indexical temporal adverb cannot be used in the lower clause suggests that [+T] is not a possible feature on I, contrary to what Landau (2003a) suggests for raising complements. If aspectual predicates select IP complements that lack a [T] feature, they do not meet the specifications of the control module, no [-R] assignment takes place, and the derivations would proceed as follows:

- (16) [<sub>CP</sub> DP .. F .. [<sub>IP</sub> *t*<sub>i</sub> [<sub>I</sub> I<sup>0</sup> [+Agr] [<sub>VP</sub> *t*<sub>i</sub> ]]]]
- Agree [+Agr]      Agree [+Agr]

This analysis remains consistent with the prevalent view that aspectual complements lack semantic tense yet does not undermine any aspect of the agreement approach to control in Landau 2003.

#### 4. Conclusion

I have demonstrated that MG displays properties of control in certain subjunctive complements. Outlining the calculus of control presented in Landau 2003, I evaluated the categorization of complements of aspectual predicates as obligatory control. I then argued that these predicates may select for complements that lack semantic tense and hence are not always subject to the feature assignment of the control module. This accounts for the binding evidence of Raising in these constructions and differs from Landau (2003a)'s suggestion that raising complements are [+T].

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