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EMPTY CATEGORIES AND RELATED PHENOMENA
IN PRO-DROP LANGUAGES:
EVIDENCE FROM MODERN GREEK

BY
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UNIVERSITY OF OTTAWA

*Dedicated with
love and respect
to my parents
George and Soula Kostopoulou*

*... κι αν'ότωχική τη βρήκες, η Ιθάκη δε σε γέλασε.
Έτσι σοφός που έγινες με τόση πείρα,
ήδη θα το κατάλαβες οι Ιθάκες τι σημαίνουν.
"Ithaca", Konstandinos Kavafis*

Abstract

The present study aims at providing a synchronic syntactic analysis of the Modern Greek language, with special emphasis on the syntactic behaviour of the Empty Categories, *pro* and PRO. Ultimately it hopes to shed some light on the Modern Greek sentence, its structure and function. It is demonstrated that the Government and Binding Theory should be reconsidered with respect to Empty Categories, in order to accommodate data from Modern Greek. More specifically, this pro-drop language that totally lacks infinitival clauses does not seem to have PRO. As a result, a series of consequences are brought up and discussed within the Government and Binding framework.

Particular emphasis is given to the special nature of Control in Modern Greek, as well as to the arbitrary interpretation of some empty pronominals which replace PRO_{arb}.

Thesis supervisor: Professor María-Luisa Rivero

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Chapter 1

Introduction

1.1 Introductory remarks on the Modern Greek language

This thesis deals primarily with Modern Greek (henceforth MG), a pro-drop language, in which subjects may or may not be phonetically present.

MG is the living representative of the Hellenic branch of Indoeuropean, and constitutes a separate branch in the Language Family Tree. Despite its separate status, it shares with other Balkan languages some properties such as the lack of nonfinite complements.

The adjective *modern* locates the language in time, as MG should be distinguished from Greek (or Ancient Greek), its immediate ancestor. The modern period of the Greek language is considered to have begun after the 16th or 17th century (see Joseph and Philippaki-Warburton 1987). In

reality, 16th and 20th century Greek differ a lot.

Almost the entire body of MG data used in the thesis comes from my linguistic intuitions. Often the data are tested against the grammaticality judgements of other native speakers of Greek. All examples are taken from every day spoken language.

1.2 Theoretical preliminaries on Empty Categories

It is a well known fact of the G(overnment) and B(inding) theory of Grammar that languages allow null elements to occur as subjects or objects in clauses. The phonologically E(mpty) C(ategories) NP-*trace*, WH-*trace*, PRO and *pro* constitute an important part of the grammar, their examination involving essential modules of GB (ie., the theories of Bounding, Government, Control and Binding, θ - and Case theory). They exist as a consequence of the *Projection Principle*, which states that lexical structure must be represented categorially at every syntactic level, ie., L(ogical) F(orm), D(eep) and S(urface) structure¹. As a result, elements of lexical structures can appear overtly, that is, be phonetically realized, or exist as

¹Chomsky 1981, 1982, 1986.

phonetically non-realized EC's. An example of the latter is given in (1) below.

(1) *the movie I saw* EC

In (1) the EC stands for the understood object of *saw* which is not phonetically realized and yet required. The θ -role assignments of the verb *see* require that it have a subject (*agent*), as well as an object (*theme* or *patient*). In (1) the object requirement is fulfilled by the non-phonetically realized EC. These relations known as thematic relations, or θ -roles, are necessary for the lexical structure of each verb to be satisfied.

EC's were introduced in syntactic theory in order to achieve a better understanding of various syntactic phenomena. They are expected to shed light on the Semantics of structures and the way that it relates to Syntax. Although phonetically null, they are supposed to exist in mental representations. As Chomsky states (1986:114):

...empty categories appear in mental representations in a manner determined by the trace theory of movement rules, the projection principle, and the various binding principles... If movement did not leave an empty category (trace), then these facts [facts relating to the satisfaction of lexical structure] would remain a mystery.

In other words, EC's are a mirror of UG, defined as the biologically determined faculty which is crucial in the acquisition of Language.

1.3 Aims of the present study

I am going to investigate the status of EC's in MG focussing mainly on PRO and *pro*. Consequently, the MG sentence structure is being under examination. It is not among the aims of this thesis to provide a complete analysis of the syntactic phenomena brought up in the course of the research. Rather I will try to highlight the problematic areas and provide a detailed description of the relevant constructions. In addition to this, I will discuss the factors which, according to my opinion, relate to a classification of lexical items. Moreover, the implications of the proposed analysis will be brought up and discussed within the GB framework. Finally, previous research relating to the theory of EC's will be surveyed and commented upon.

Only very recently have linguists shown interest in the Modern Greek language from the perspective of current theories. The relatively small amount of linguistic research on the syntax of MG has been a slight obstacle to this work. Not being able to refer to a fair-sized previous research, I had to rely on proposed theories about other languages not always similar to MG. As it has already been mentioned, MG shares with other Balkan

languages the lack of infinitives². Consequently, the theories developed for pro-drop languages like Italian and Spanish or Portuguese, which retain their infinitival forms, have to be approached with a critical eye, if they are to be used for MG. On the other hand, MG proved to be a rich area for linguistic research for exactly the same reason that makes its examination hard in the beginning: the lack of a considerable amount of previous research.

1.4 Outline

The thesis is structured as follows:

Chapter 2 provides a survey of selected theories on EC's. In particular, I discuss the original GB approach (Chomsky 1981), the *Consequences* modified GB approach (Chomsky 1982), Rizzi's theory as given in *Issues in Italian Syntax* (1982) and Suñer (1986) in her article "Big PRO and little pro". The focus of this chapter is on the evolution and expansion of the typology of EC's from a historical point of view.

Chapter 3 focusses on the actual MG data and the status of its EC's. The putative absence of PRO due to the lack of nonfinite clauses is discussed.

²For a more detailed description of MG see section 3.2.

Modern Greek gerunds are examined separately because they seem to be the sole instance of clauses that could accommodate PRO.

Chapter 4 deals with Control and Exceptional Case Marking (ECM) phenomena. I will try to provide answers to the questions: What will be a theory of Control without PRO, the only ungoverned, therefore, controlled element? It seems that MG has Control structures that are semantically identical to the English ones but syntactically quite different. Is there Obligatory Control? How can we distinguish between ECM and Control from object?

Chapter 5 focusses on arbitrary pronominals in MG. It seems that this language lacks PRO_{arb} and has arbitrary persons instead. So I will identify the factors behind the arbitrary reference of pronominals.

The thesis closes with a recapitulative conclusion.

Chapter 2

A survey of selected theories on Empty Categories

2.1 Introduction

In this section I am going to give a brief overview of the GB literature on EC's from Chomsky (1981) to Suñer (1986). I have to admit that the survey is selective and by no means exhaustive. The aim is to show how the typology of EC's was reformed and expanded since Chomsky (1981). I will also try to demonstrate how some fairly recent proposals fail to explain certain issues with respect to pro-drop languages and in particular with respect to MG.

2.2 The original GB approach

2.2.1 The status of PRO

Of the three original EC's, i.e., NP-trace, PRO and variable (Chomsky 1981), PRO is the one that appears in ungoverned NP-subject positions. As a result, PRO does not receive Case, the INFL(ection) node in its sentence not containing AGR(reement). Because the various principles and modules of Grammar interact, PRO has some more reasons to be ungoverned, more specifically, because of a clash of principles A and B of the Binding Theory. PRO having the status [+pro, +ana] provides a problem for the following:

- Principle A: an anaphor is bound in its governing category
- Principle B: a pronominal is free in its governing category

Because of the so-called pro-drop languages, languages that do not always require an overt subject, the theory briefly outlined above had to be reviewed. The EC's that appear in structures like the following, taken from MG, have to be examined as well.

(1) — *piyeni sto sxolio*

go-3sg to+art school

'(he) goes to school'

(2) -- *piyeni sto sxolio o yanis*
go-3sg to+art school

'John goes to school'

It is quite obvious that the EC's in (1) and (2), represented by a dash, cannot be PRO: the INFL node contains AGR. Neither can it be NP or WH-trace.

As a solution to this problem we read in Chomsky (1981:320) that PRO can be:

- (a) a true argument, eg., in a control structure in non-pro-drop languages, as in (3)
- (b) a quasi argument, eg., the base generated subject of weather-verbs in pro-drop languages, as in (4)
- (c) a non-argument, eg., the impersonal pronominal of pro-drop languages, as in (5).

(3) *John wants* [PRO *to see you*]

(4) PRO *vrexi*
rain-3sg
'it rains'

(5) PRO *prepi na fiyi i maria*
must-3sg leave-3sg art Maria
subj

'Maria must leave'

According to Chomsky the non-argument PRO carries a superscript, PROⁱ, because it is coindexed with a post-verbal argument, an NP or a clause. Within this theory the EC's in (1) and (2) could be PRO's. In other words, pro-drop languages differ from non-pro-drop languages in that in the former, PRO may appear instead of a pronoun as a subject. It follows that in the pro-drop languages the subject position may be ungoverned, while the same position is invariably governed in the non-pro-drop ones. The question that remains to be answered now is what permits the subject in pro-drop languages to be ungoverned. The answer to this as given in Chomsky (1981) is found in the next section.

2.2.2 The pro-drop parameter

One more consequence of the GB theory with respect to the various sub-categories of PRO is that the control structures are essentially the same for different languages -ie., pro-drop and non-pro-drop. Parametric variation was introduced to allow for cross-linguistic differences like those between English and MG control structures (see (7) below). It is the value of the pro-drop parameter which changes in each case that produces different results. The rest of the theory remains basically the same.

The pro-drop parameter as given by Chomsky (1981:325), states that
(6) R may apply in the syntax,

where R is a rule which assigns the elements of INFL to the initial verbal element of VP. If rule R applies in the syntax, as in pro-drop languages, then AGR does not govern the subject at neither S-structure or LF. If, on the other hand, rule R applies at PF, then AGR governs the subject position at S-structure or at LF. The latter is the case of non pro-drop languages. In such languages the subject position is invariably governed and PRO cannot appear as the subject of a finite clause.

Even a cursory look at MG data proves that the analysis above, although well implemented, is inadequate. It seems that PRO and PROⁱ are not sufficient to explain all cases with EC's (besides NP-traces and variables). In MG there are instances that look like control structures and yet have inflected V's in the embedded clause, eg.,

- (7) —i *θelo* *to γiani;* —j *na fiyi*
 want-1sg art John leave-3sg

 ACC subj

'(I) want John to leave'

(7) looks like an Object Control structure¹. The second dash here represents the EC whose status is not clear. The question to be answered is: What is the status of the EC's in (1), (2) and (7)? We will return to this issue in chapter 3 where, the structure of MG sentences is discussed in further detail.

2.3 Little *pro* is introduced

Rizzi (1982) first discussed the possibility of a fourth EC occupying the empty subject and, later on, object positions in pro-drop languages like Italian. As he states:

a phonetically null subject with dummy interpretation can be found in the local context of a nominative assigner (tensed inflection or AUX-in-COMP)

a phonetically null subject with definite pronominal interpretation can be found in the local context of a tensed inflection (p. 130)

In essence, Rizzi –as well as other researchers later on– accept that there exist two types of *pro*, the exact status of which depends on their relation to AGR and the θ -criterion. Thus, *pro* is either *referential* or *expletive*.

(8) *pro mangia*
eat-3sg

¹For more on the issue of Object Control versus ECM see chapter 4 section 4.5

'(he) eats'
(9) *pro mangia Giovanni*
eat-3sg

'Giovanni eats'

Chomsky (1982) accepts *pro* as the fourth EC. His own argumentation (1987) in justification of it as the missing subject in pro-drop languages includes reasons like the non-anaphoric status of *pro*, its independent reference and its free status in its governing category. In other words, this fourth EC was required to fill the empty positions that were not suitable for PRO.

Besides Rizzi, Suñer (1986) noticed that the EC's typology containing only NP-trace, PRO and variables had to be expanded. She proposed that *pro*, the phonetically unrealized subject of tensed clauses in pro-drop languages, should have the features [+pro -ana] - as contrasted with the [+pro +ana] PRO - since *pro* appeared in governed positions.

The logic behind Suñer's proposal becomes apparent when we examine some Spanish sentences, where the reference of the embedded subject (*pro*) shows that it must be controlled by the matrix object-NP, despite the fact

that it is, at the same time, coindexed with AGR. This was observed to happen in sentences with perception verbs, the causative *dejar*, the existential *haber* and some other three-place predicates (see Suñer (1986:9)).

(10) *Te dejo que pro escribieras eso*
'he let you write that'

(11) *Los hay que pro no saben nada*
'there are those who know nothing'

Later I will demonstrate that MG behaves in a very similar way with respect to Control.

2.4 The pro-drop parameter revisited

Williams and Van Riemsdijck (1986) suggest that "The pro-drop parameter amounts to the choice of the level of the grammar between having AGR with or without nominal features" (p.303). Following Rizzi (1982) they propose that AGR is a proper governor when it is rich. Since AGR in pro-drop languages has the typical nominal features of gender number and person they suggest that it has nominal status, being [+N -V]. According to their proposal the *Empty Category Principle* (ECP), which states that an EC must be properly governed, is supplemented with this parametrized definition of AGR. Thus, we can predict the language behaviour with respect to

a wide variety of constructions.

2.5 Conclusion

In essence, this chapter has shown how the EC's inventory was expanded since Chomsky (1981) and how *pro* was accepted as the fourth EC to occupy the missing subject positions of tensed clauses in pro-drop languages. The EC's accepted within the GB Theory of Grammar are four:

(12) *John_i seems t_i to be sick* NF-trace

(13) *Who_i did you see EC_i?* wh-trace

(14) *I_i tried PRO_i to go* PRO

(15) *pro parla* *pro*
 '(he) speaks'

Chapter 3

The syntactic status of PRO and *pro* in Modern Greek

3.1 Introduction

Having discussed some properties of PRO and *pro* as given within GB using evidence from English, Spanish and Italian, I would now like to shift the focus to MG. I will assume the EC's typology as given in Chomsky (1982): NP-*trace*, WH-*trace*, PRO and *pro*. The two main questions that I will attempt to answer with respect to MG are:

- Where does *pro* appear?
- Where do we get PRO (if ever)?

Included in this chapter, is a brief description of the MG verbal paradigm. Related previous research is mentioned and commented upon, namely, Rizzi (1982), Suñer (1986) and Philippaki-Warbuton (1987).

3.2 Description of the MG verbal paradigm

Before I proceed with the examination of the MG data, I would like to familiarize the reader with the ways that the system of verbs works in this language. What follows is a brief description of the tenses, moods, voices, etc, which I hope will make reading through the data easier.

MG is a pro-drop language with an inflectionally rich verbal paradigm. Traditional grammars¹ identify eight tenses (present, past continuous, simple past, simple future, future continuous, present perfect, past perfect and future perfect) and three moods (indicative, subjunctive and imperative). A particularly interesting property of MG is that it totally lacks infinitives; in most cases their role has been taken over by the subjunctive preceded by the preverbal particle *na*. As a result, there is always person and number agreement between the verb and its subject even in control and raising structures. This raises interesting issues for the relevant theories within GB, as we will see in chapter 4. Another important feature is the role of Aspect and its contribution to arbitrary reference as it will be shown in chapter 5.

An example of the paradigm of a regularly conjugated verb is given in

¹Triandafillides (1949, 1976)

Table 3.1: Example of conjugated verb in active voice

Tense	Indicative	Subjunctive	Imperative
Present	<i>lin-o</i> 'I untie'	<i>na lis-o</i>	<i>lin-e</i> <i>lis-e</i>
Past Continuous	<i>e-lin-a</i> 'I was untying'		
Past Simple	<i>e-lis-a</i> 'I untied'	<i>na e-lin-a</i>	
Future Simple	<i>θα lis-o</i> 'I will untie'		
Future Continuous	<i>θα lin-o</i> 'I will be untying'		
Present Perfect	<i>εχο lis-i</i> 'I have untied'	<i>na εχο lis-i</i>	
Past Perfect	<i>ιχα lis-i</i> 'I had untied'	<i>na ιχα lis-i</i>	
Future Perfect	<i>θα εχο lis-i</i> 'I will have untied'		

table 3.1.

In the same way, special affixes are added to the verb root when it is inflected for the various persons and numbers, as in table 3.2.

Notice that the pronoun within the parentheses can be dropped with-

Table 3.2: Example of verb conjugated for person and number

<i>(εγo)</i>	<i>lin-o</i>	1sg
<i>(εσι)</i>	<i>lin-is</i>	2sg
<i>(αftos/i/o)</i>	<i>lin-i</i>	3sg
<i>(εμισ)</i>	<i>lin-ume</i>	1pl
<i>(εσις)</i>	<i>lin-ete</i>	2pl
<i>(αfti/ες/α)</i>	<i>lin-un</i>	3pl

Table 3.3: Example of verb conjugated in passive voice

Tense	Indicative	Subjunctive	Imperative
Present	<i>lin-ome</i> 'I am being untied'	<i>na liθ-o</i>	<i>lis-u</i>
Past Continuous	<i>lin-omun</i> 'I was being untied'		
Past Simple	<i>liθ-ika</i> 'I was untied'	<i>na liθ-o</i>	
Future Simple	<i>θα liθ-o</i> 'I will be untied'		
Future Continuous	<i>θα lin-me</i>		
Present Perfect	<i>εχο liθ-i</i> 'I have been untied'	<i>na εχο liθ-i</i>	
Past Perfect	<i>ιχα liθ-i</i> 'I had been untied'	<i>na ιχα liθ-i</i>	
Future Perfect	<i>θα εχο liθ-i</i> 'I will have been untied'		

out creating any ambiguity to the verb; the richness of the verb-ending morphology compensates for the pronoun drop, as it happens in other pro-drop languages².

It should also be mentioned that MG has three voices (active, passive and middle) which are formed with the use of other affixes. In several cases the passive and middle voices are represented by the same form (Table 3.3).

One more form of the verb is that of the gerund, found in traditional

²An interesting observation has been made by Franks (1984). He noticed that even in 'typical' non-pro-drop languages it is common to leave out the subject pronoun, when the verb is unambiguous, eg., *Wanna go for a walk?*, *Went home last week*.

Table 3.4: The tenses of gerunds

Tense	
Present	<i>linondas</i> 'untying'
Present Perfect	<i>exondas lisi</i> 'having untied'

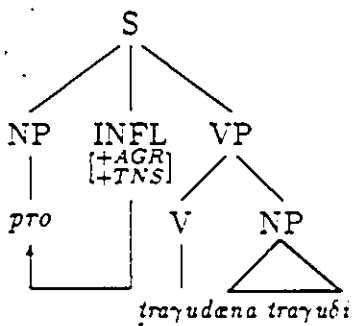
grammars (Triandafillides 1949, 1976) under the participle label. It appears only in two tenses, present and present perfect, and is not conjugated for person, number or gender (see table 3.4) It is, therefore, reasonable to assume that it lacks AGR, whereas it contains TENSE and ASPECT. This assumption will be important for the analysis that I propose in section 3.4.2.

3.3 On the status of *pro*

Following Chomsky (1982 and later work) I assume that *pro* is the EC in the missing subject position of tensed clauses in pro-drop languages. In a similar way as in Italian (Rizzi 1982), I assume that there must exist two types of *pro* in MG, the exact status of which depends on their relation to AGR and the θ -criterion. Thus in tree (1) *pro* is *referential*, whereas in tree (2) it is *expletive*.

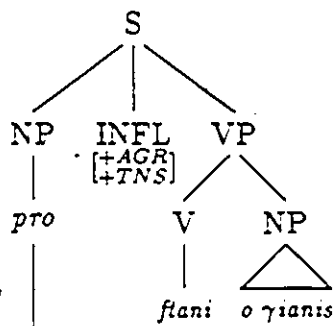
In (1) the INFL containing person, number and tense is assumed to

Figure 3.1: Referential and expletive *pro*



'He sings a song'

Tree 1



'John arrives'

Tree 2

govern the referential *pro* and assign nominative case to it. In (2) the postposed NP *o yanis* carries nominative case. Here we should assume that *pro* absorbs Case and then transmits it to the postposed NP.

We are obliged to identify the missing subject in sentences like (1) and (2) as *pro* and not as any other EC for the following reasons: It cannot be PRO not only because it appears in a governed site, but also because, unlike PRO, it has independent reference and is free in its governing category. Unlike PRO, it cannot be NP-trace either because it is not A-bound in its governing category. Finally, it cannot be a variable because it does not seem to be bound by an operator.

In LGB (Chomsky 1981), the derivation of a sentence like (1) would entail the following steps:

D-structure	NP [INFL AGR] <i>traγud-</i>
Rule R	NP <i>traγud-AGR</i>
S-structure	<i>PRO traγud-AGR</i>

For a sentence like *traγudai o yanis* (literally, 'sings John') the procedure is the same with the addition of one more step:

Subject inversion	<i>traγud-AGR NP</i>
S-structure	<i>PRO traγud-AGR o yanis</i>

Finally, for a sentence like (3) below, where an ergative verb is used the additional rule of *NP fronting* is required:

(3) *o yanis ftani*
art John arrive-3sg
NOM
'John arrives'

The prerequisites are, first, that preverbal PRO must be present only when a lexical subject NP is absent, and second, that PRO is the EC in a preverbal position, when the lexical NP is absent³.

In contrast to the above Philippaki-Warburton (1987) suggests that the element fulfilling the subject argument role is not an EC located outside the verb, but a pronominal encoded in the ending of the verb expressing person and number, which she calls a *subject clitic*. This subject clitic is like *pro* and is base generated at the verbal ending. In other words, it is verbal agreement itself (AGR). Consequently, Rule R (Chómsky 1981) and Subject inversion (Rizzi 1982) are considered as redundant in MG. The lexical NP is in a peripheral \bar{A} position and is a TOPIC.

Whether or not *pro* is identified with AGR can only be decided after a thorough linguistic scrutiny of MG, which is beyond the aims of this work. One objection that could be expressed at the moment concerns the Projection Principle, which requires that the argument structure of a verb

³Instead, the position that I follow is the updated version of GB (Chomsky 1982 and 1987 and Rizzi 1982) with *pro*, as seen in analyses (1) and (2).

be satisfied at every syntactic level. According to Philippaki-Warbuton's analysis the subject clitic does not fulfill the external argument role of the verb on a syntactic level, but rather on a morphosyntactic one. This assumption obviously contradicts the Projection Principle and creates further complications.

Besides the above, the apparent absence of [that-e] effects that Philippaki-Warbuton (1987:313) hopes to bypass through her account claiming that "...there is never an empty category subject... this offers a natural explanation for the violation observed in pro-drop languages, including Greek of the *[that-e] filter", have been adequately analysed by Rizzi (1982). Rizzi claims that Italian sometimes *has* [that-e] effects similar to English which are, at other times, avoided by wh-extracting the subject from a postverbal position. I assume that a similar explanation is available for MG in cases like:

- (4) *pios pro nomizis oti pro piye sto sinema*
 who think-2sg COMP go-3sg to+art movies
 past

'who do you think (that) went to the movies?'

3.4 On the status of PRO

3.4.1 The absence of PRO

I would like to propose that there is no PRO in MG, a possible exception being the subject positions of gerunds (see subsection 3.4.2.).

Chomsky's position is that PRO being a [+anaphoric, +pronominal] element is ungoverned and can appear in non-case-marked positions such as (5).

(5) *John wants [PRO to party all the time]*

In (5) PRO is ungoverned because of the lack of a governor; the INFL of the embedded VP does not contain AGR, and *want* cannot govern the embedded subject position either.

First, since MG lacks infinitives –even in the equivalent of the English Control sentences– all clauses are finite. Thus, it appears that the embedded AGR governs the embedded subject position.

(6) *pro; θelo pro; na fiγo*
want-1sg leave-1sg
subj

'I want to leave'

(7) *pro; θelo pro; na fiγi o γianis;*
want-1sg leave-3sg John-NOM

subj
 {
 'I want John to leave'

Furthermore, PRO is a [+dependent] element that needs an antecedent to fix its reference upon. Like anaphors do, and it cannot take a split antecedent, just like a reflexive (Chomsky 1987:125). Data from MG show that the positions where we could postulate a PRO seem suitable to accommodate a pronominal element which has specific independent reference and can take a split antecedent. Contrast (8) with (10) and (9) with (11) below.

(8) *pro θelo -- na erθis*
 want-1sg come-2sg
 subj

'I want (you) to come'

(9) *o vasilis iθele [o θomas na apofasisi [-- na kolimβisun mazi]]*
 art Bill want-3sg art Tom decide-3sg swim-3pl together
 past subj subj

'Bill wanted Tom to decide to swim together'

(10) *I want PRO to come*

(11) **Bill wanted [Tom to decide [PRO to swim together]]*

In (9) the EC represented by a dash is not an anaphor because, unlike the equivalent EC in (11), (PRO), it can take a split antecedent, here the

NP's *vasilis, thomas*. From (8)–(11) we conclude that this EC must be a pronominal and not an anaphor. It would be reasonable to assume that it is *pro* and not PRO. Philippaki-Warbuton (1987) has proposed the lack of PRO in MG as well. Her main argument is the absence of non-finite clauses, the only structures that can have PRO.

One more issue to be discussed as a consequence of the lack of PRO is that of pronominal arbitrary reference. It has been proposed (Jaeggli 1986) that in English PRO_{arb} appears where there is no antecedent in an A-position for it to receive some specific reference.

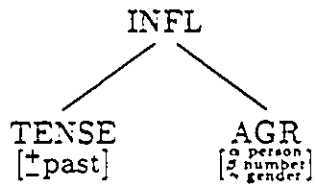
(12) *It would be a good idea [PRO_{arb} to return to Greece]*

But PRO is a [+ dependent] element, whereas *pro* is not. Since *pro* is supposed to replace PRO in all instances, the question that raises is how can a [- dependent] element (*pro*) receive arbitrary reference?⁴ Moreover, I believe that the existence of sentences like (8) should lead us to a reconsideration of Control theory in general in order to apply it to MG. Could one speak of Control when the embedded clause is finite?⁵

⁴see Chapter 5

⁵see Chapter 4

Figure 3.2: Components of INFL



3.4.2 A look at MG gerunds

In this section I will discuss the subjects of gerunds, which seem to provide a problem with respect to the putative lack of PRO in MG. It is usually assumed since Chomsky (1981) that it is AGR in INFL which governs the subject of a clause (see figure 3.2).

Since uninflected MG gerunds lack AGR, two possibilities arise:

- gerunds' subjects are ungoverned internally (ie., within their clause)

subject of gerunds positions. So I would like to adopt the second alternative given above.

3.5 Conclusion

To sum up, I have assumed that PRO does not exist for the simple reason that non-finite clauses are absent in MG. Therefore, in the usual finite clause the features in INFL govern the subject position, and the same is true for gerunds. Instead of PRO, I have postulated *pro* as the missing subject of all clauses. This suggestion, however, creates several problems with respect to the theories of Binding and Control and these will be discussed in the chapters that follow.

Chapter 4

Control structures in Modern Greek

4.1 Introduction

Control structures can be described as those where a semantic relation holds between the matrix subject or object and the embedded subject. The Control module of Grammar is the one designated to determine the referential properties of PRO. According to Chomsky (1981), first, controlled elements are ungoverned, and second, controlled clauses must have an INFL without AGR. I will try to show that data from MG challenge both these claims.

As it has been shown in the previous chapter, I assume that PRO does not exist in MG. Yet, in structures like (1) and (2) below there exists a semantic relation between the subjects of the two clauses similar to the relation within English control structures, given in the translations of each

one.

- (1) *pro*_i *θelo* *pro*_i *na fiyo*
want-1sg leave-1sg
subj

'I want to leave'

- (2) *pro*_i *episa* *ta pedia*, *na fiyun*
persuade-1sg art children leave-3pl
past subj

'I persuaded the children to leave'

In (1) it can be argued that the matrix subject controls the embedded one since they are coreferential. Nevertheless, it would be equally justified to argue that the AGR of the embedded clause governs the EC there. In (2) I assume that the NP *ta pedia* functions as the object of the matrix verb, *episa* 'I persuaded'. In this case, (2) is an instance of Obligatory Control from Object. Alternatively, it can be argued that the AGR of the embedded verb governs the EC within the embedded clause. In this chapter I will examine how control structures behave in MG. I believe that despite the lack of PRO, the only controlled element, the phenomenon of Control does exist in this language. Semantically it must be the same as in English. Syntactically, however, it seems to be quite different. We should, therefore, alter or expand our theory, in order to account for the phenomenon in MG.

The specific issues that are addressed in this chapter are :

- How can a governed element like *pro* be controlled?
- How do O(bligatory) C(ontrol) verbs behave in MG?
- How can we distinguish between Exceptional Case Marking (ECM) and Control from Object?

4.2 The properties of PRO

As mentioned in section 4.1, Control theory deals with the referential properties of PRO. More specifically, it deals with its nature, distribution, antecedent status, and relation of this antecedent to PRO.

The GB theory has described PRO as a pronominal anaphor, which, consequently, is ungoverned because of a clash of Binding principles A and B, which require from it to be simultaneously bound and free in its governing category. Because it is ungoverned it can only appear in positions like the subject of non-finite clauses that lack AGR, a potential governor.

Its antecedent can be the subject or object of the matrix clause. It has been proposed that the structural relationship between PRO and its antecedent is that of c-command (Williams 1981). However, Chomsky (1981 and later work), rejects this¹.

¹To resolve this controversy is beyond my aims at this point. Rather, I will focus on the semantic relationship which is one of referential dependency.

In certain analyses² PRO_{arb} is like PRO in that it is [+ dependent] and ungoverned. Their difference lies in the fact that the former takes an operator in COMP as its antecedent (see (3) below). As a result it cannot be found in embedded clauses where the COMP position is already filled (see (4)).

(3) *It is time* [COMP Op [_S PRO_{arb} to leave]]

(4) *They asked me* [COMP how [_S *PRO_{arb} to bake the cake]]

4.3 Obligatory Control

Williams (1981) identifies some properties of OC; These are:

- (a) A lexical NP cannot appear in the position of PRO
- (b) The antecedent precedes the controlled PRO
- (c) The antecedent c-commands the controlled PRO
- (d) The antecedent is thematically or grammatically uniquely determined
- (e) There must be an antecedent

The ungrammaticality of the controlled reference of the examples that follow can be explained according to Williams based on the conditions above³.

(5) **John tried Bill to win*

²Epstein (1984), Jaeggli (1986).

³The examples are taken from Williams (1980) and Van Riemsdijk and Williams (1986)

- (6) *John tried PRO Bill to win
- (7) PRO_i to leave would be John's_i pleasure
- (8) John promised Bill PRO to leave
- (9) *It was tried PRO to leave

On the one hand, MG exemplifies instances of OC like the following:

- (10) pro *epixirise* pro *na aftoktonisi*
 attempt-3sg commit suicide-3sg
 past subj

'He attempted to commit suicide'

- (11) *pro *epixirisa* to *γianina aftoktonisi*
 attempt-1sg John commit suicide-3sg
 past ACC subj

*I attempted John to commit suicide'

As condition (a) requires, a lexical NP cannot replace the controlled EC in (10). Hence the ungrammaticality in (11). Condition (b), however, is not satisfied for the same verb, given the free word order in MG:

- (12) pro *na aftoktonisi* pro *epixirise*
 commit suicide-3sg attempt
 subj past

'he attempted to commit suicide'

In (10) the antecedent *c*-commands the controlled EC (condition (c)), it is thematically uniquely specified (condition (d)), and, finally, there exists an antecedent, although phonetically unrealized (condition (e)). So the verb *epixirisa* 'I attempted' is one of OC but this property seems to depend on specific lexical items rather than on an independent theory of OC based on structural properties such as (a)-(e) above.

On the other hand, some MG verbs like *prospatho* 'try', *apofasizo* 'decide', which would be expected to be OC verbs, appear to behave much more freely than their English counterparts.

- (13) *pro;* *prospatho* *pro;* *na firi* *o yanis*
 try-1sg leave-3sg John
 subj art NOM

'I try (for) John to leave'

- (14) *pro;* *apofasisa* *pro;* *na firume*
 decide-1sg leave-3pl
 past subj

'I decided (for) us to leave'

Unlike its English equivalent 'try' the verb *prospatho* is not one of OC since in (14) the embedded EC is not controlled at all. Again the MG verb *apofasizo* is different from its English counterpart which requires OC.

through Control by the matrix object or subject. Should we question then the validity of Control theory or should we alter it?

One way out of this problem is given by Suñer (1986). Although the coexistence of Control and Government seems to contradict the Chomskyan theory of Control, Suñer claims that it does not. She explains that coindexing in null-subject languages like Spanish, between *pro* and the matrix object or subject is not done through Control theory "...but rather through the conjunction of the theory of indexing and the intrinsic properties (syntactic as well as semantic) of the matrix predicates." (p.9). It seems reasonable to accept Suñer's proposal to assume that *pro* cannot be both governed and controlled in the conventional manner of Control. Since we cannot question the existence of AGR or the fact that it can govern *pro* we should reconsider Control theory. As I said before, Control will depend on the lexical properties of the matrix verb, not on an independent theory of Control based on PRO.

4.5 ECM versus Control from Object

ECM has been defined as the property of certain predicates by which lexical subjects are allowed in infinitival complements in English as in (16), where

believes assigns accusative to the embedded subject *John*.

(16) *Bill believes* [_S *John to have left*]

In contrast, Control from object is exemplified in (17) below, where PRO is controlled by the accusative object of the matrix clause:

(17) *I persuaded Bill* [_S PRO *to go*]

As previous research indicates,⁴ distinguishing between ECM and Object Control is not always obvious in MG. It depends on the way that the brackets are placed within the construction. As subjunctives have no complementizer or they have a null complementizer, clausal boundaries are not overtly indicated. For example in (18) we could postulate two different kinds of bracketing and, as a result, two different structures.

(18) — *θelo* [*ti maria na fiγi*] ECM
 Maria-ACC

(19) — *θelo ti maria* [— *na fiγi*] Object Control
 Maria-ACC

'I want Maria to leave'

Structure (18) represents the ECM position: the matrix verb takes a clausal complement and assigns accusative case to the embedded subject.

⁴Kakouriot's (1980), Ingria (1981)

accusative. The same can be demonstrated through use of a quantifier like *monos* 'alone' or *oli* 'all' (plural, masculine).

(21) *pro episa tus emates [CP pro na fiyun oli]*
 persuade-1sg art workmen leave-3pl all
 past ACC NOM subj NOM

'I persuaded the workmen to leave all'

(20) also supports Philippaki-Warburton's idea that *to yanis* is in topic position. The TOPIC would receive accusative from the matrix verb, and *pro* would still be located as embedded subject. Her proposal bypasses the ECM-Control from object question: *to yanis* is not anymore in object position, so we do not have Object Control. At the same time *pro* is justified as the argument receiving Nominative.

Further support for structure (20) is given by the ungrammaticality of (22) below.

(22) *pro thelo to yanis [CP pro na fiyi *yelasto]*
 want-1sg art John leave-3sg smiling
 ACC NOM subj ACC

'I want John to leave smiling'

Perhaps, the lexical properties of the verb would help us decide about bracketing in the examples discussed. To be more specific, if the verb *thelo*

subcategorizes for an object-NP plus a clause, we can assume that (19) is the correct bracketing. If it only takes a sentential complement as its object, then (18) must be the correct one.

4.6 Conclusion

To recapitulate, I have tried to highlight the areas of Control in MG that provide some problems to the GB theory. On the issue of controlled *pro* I have observed that this EC is redundantly controlled in MG. Instead we should assume that it gets an index through the theory of indexing and taking into account the semantic and syntactic properties of the predicates. With respect to a classification of MG control verbs, it has been shown that they behave quite differently from the English ones, allowing OC more freely, that is OC in MG is not as strict as it is in English. Finally, as to how we can distinguish between ECM and Object Control, the issue remains open to further discussion.

Chapter 5

Arbitrary pronominals in Modern Greek

5.1 Introduction

This chapter deals with the semantic interpretation that some empty pronominals receive in MG. I will show that several *pro* positions can be interpreted as arbitrary despite the fact that they are morphologically marked for person. In English the equivalent is expressed by third person plural (3pl) or second singular (2sg):

- (1) *They sell coke everywhere*
- (2) *You can buy wine only at the liquor store*

Jaeggli (1986) has discussed similar phenomena in Spanish so his proposals are briefly presented. Trying to apply his proposed analysis, I found that

MG behaves similarly in some respects, but it deviates from his assumptions in several respects: arbitrary reference of MG pronominals seems to be related to tense and aspect, modal environment and some other factors. As far as I know, such conditions have not been studied systematically in MG or other pro-drop languages. This is precisely what the present chapter focusses on.

5.2 Arbitrary plural pronominals in English and Spanish

5.2.1 Jaeggli 1986

Several constructions involving arbitrary pronominals in Spanish are described, compared and investigated in Jaeggli (1986). The similarities between certain Spanish and English constructions receiving arbitrary reference are accounted not in terms of the pro-drop parameter (Chomsky 1981), but rather in terms of the way in which arbitrary pronouns receive an interpretative index. Moreover, this is directly related to the way Case and thematic roles are assigned to them.

To be more specific, the impersonal *they* in English, as in (3) below, is regarded as similar to the arbitrary plural in Spanish, as exemplified in (4),
(3) *They sell cigarettes at all gas stations*

(4) *pro llaman a la puerta*
call-3pl

'(they) are calling at the door'

According to Jaeggli, the similarity lies on the fact that both the English and Spanish pronominals, overt and empty respectively, receive arbitrary reference. The two apparently different pronominals share the property that they are [+dependent] elements which lack an antecedent. [+dependent] elements are defined as those that fix their reference by linking it to an antecedent (p.74). It is only referentially dependent pronominal elements which lack an antecedent that receive arbitrary interpretation (p.75). In contrast, arbitrary interpretation is impossible with [-dependent] pronominals such as overt pronominals in Spanish. It is also impossible with [+dependent] pronominals with a specific antecedent as those in passive, ergatives or middle voice constructions in English (p.52).

The positions where arbitrary plural pronominals are allowed are syntactically restricted: transitive, unergative intransitive and raising sentences in Spanish. As Jaeggli observes, these environments share the property that "...the position occupied by the arbitrary plural pronoun is neither assigned objective case nor a θ -role directly by the verb, nor is it in a chain

which is assigned a θ -role by the verb" (p.75). Such positions (ie., positions assigned a θ -role) would be found in passive, ergative and middle voice constructions. The special characteristic of the arbitrary plural construction is exactly that it is assigned an index at LF. "Hence they [arb. plurals] are restricted to appear in positions which do not enter into crucial Case or thematic relations until LF" (p.75).

One more point brought up by Jaeggli is the different status of PRO_{arb} (as in NOC structures) and the impersonal *se* and arbitrary 3pl constructions. In a sequence of two PRO_{arb} , as in (5) below, both of them have to select the same individuals; they have to be linked in reference.

(5) *PRO winning this game requires [PRO mastering the end of the game]*

In the case of impersonal *se* and the arbitrary 3pl this is only an option. The two pronominals may or may not be linked in reference as is the case in (6) and (7).

(6) *Para que ahí se pueda ganar mucho dinero cultivando marihuana es necesario que se controle muy poco estrictamente la producción agrícola de esa región. (impersonal se)*

'In order (for arb) to make a lot of money planting marihuana there, it is necessary that arb control loosely the agricultural production of that region.'

(7) *Para que pro puedan ganar tanto dinero vendiendo drogas debe ser que pro controlan muy poco estrictamente el tráfico de drogas en este*

pais. (arbitrary 3pl)

'In order for arb to be able to make a lot of money selling drugs it must be the case that arb controls loosely the traffic of drugs in this country.'

The reason why PRO_{arb} behaves differently from impersonal *se* and the arbitrary plural is that PRO_{arb} requires to be bound by a null operator whereas the latter do not have to do so. Jaeggli concludes that "...an arbitrary pronominal cannot be in a chain that is case or θ -marked" (p.62). And this brings us back to the conclusion given in the previous page (Jaeggli p.75).

5.2.2 Critique of Jaeggli

Jaeggli's account seems unsatisfactory because it lacks clarity; he defines [+ dependent] elements as those requiring an antecedent and he claims that arbitrary reference accompanies [+ dependent] elements that lack an antecedent. Kondoravdi (1987:3) finds that his explanation is circular, as "...binding... can look to see whether a given pronominal is to have an arbitrary reference, and, if it does, the binding between the pronominal and the potential antecedent is annihilated".

In addition to the above, Jaeggli's predictions about passive and ergative verbs not being able to receive arbitrary reference are contradicted by data

from MG, as we will see later on in this chapter.

5.3 Arbitrary pronominals in Modern Greek

5.3.1 Persons that receive arbitrary reference

The equivalent of what Jaeggli and Suñer call the arbitrary plural pronominal can be expressed equally well with either 3pl or 2sg persons;

(8) *s afto to estiatorio — tros kala ke ftina*
in this art restaurant eat-2sg good and cheap

'in this restaurant (you) eat good and cheap'

(9) — *den milane me to stoma gemato*

NEG talk-3pl with art mouth full

'(they) don't talk with the mouth full'

The subjects in (8) and (9), represented by dashes, must be empty pronominals, governed by AGR and should, therefore, carry Case. In other words, they act like *pro*'s and not PRO's. Moreover, they may have arbitrary reference, despite the fact that they are morphologically marked for 2sg and 3pl. They could equally well be translated as:

(8) 'In this restaurant one eats well and cheap'.

(9) 'One should not speak with the mouth full'.

As Suñer (1982) points out, *pro_{arb}* is ambiguous between the arbitrary and the specific referent reading. A second characteristic of *pro_{arb}* is that it is indeterminate as to the number of referents. Arbitrary reference is found with null pronominal elements in both main and embedded clauses as shown in (10) and (11) respectively:

(10) *pro lene oti tha vrezí avrío*
say-3pl COMP rain-3sg
future

'(they) say that it will rain tomorrow'

(11) *mu ípe oti pro ton zitane sto tilefono*
me tell-3sg COMP him ask-3plat+art telephone

'(he/she) told me that they want him on the phone'

Sometimes the meaning of a sentence involving a 2sg verb can be expressed with 1pl retaining the arbitrariness in reference. The only thing that changes is that, when 1pl is used, the speaker is included in the subject as in the following:

(12) *to oti pro díps pro simeni oti*
art COMP be thirsty-2sg mean-3sg COMP
o oryanismos su xriazete nero
art organism yours need-3sg water

'the fact that you are thirsty means that your body needs water'

(13) *to oti* *pro dipsame* *pro simeni oti*
 art COMP be thirsty-1pl mean-3sg COMP
oryanismos mas xriazete *nero*
 art organism ours need-3sg water
 'the fact that we are thirsty means that our body needs water'

So far I have simply shown the ways by which arbitrary reference of pronominals is expressed in MG. To recapitulate these are:

- 2sg
- 3pl
- 1pl

5.3.2 The role of tense and aspect in arbitrary reference

In this section I will identify the environments where arbitrary reference is possible and exhaustively describe them, in relation to the features in INFL and the ways that they affect the properties of empty subjects. I will show that use of all the three alternatives (2sg, 3pl and 1pl) is not always possible in the same circumstances; in certain of them only two or one are allowed (examples follow).

Another point that I would like to make is that ergative and passive verbs in MG sometimes do allow arbitrary reference contrary to the claims of Jaeggli (1986:49). Finally, I will show that in several cases, where both the arbitrary and the definite choice are allowed slight modifications should

be made to the sentence, in order to get the arbitrary reference. Let's examine these facts more closely with examples drawn from MG.

To begin with, an example where all three persons will be allowed to receive arbitrary reference in an identical environment does not seem to be a possible case. Rather it seems that the 3pl person can have arbitrary reference more easily than the other two persons. For example, in (14) below the same sentence is used three times. (14a) definitely has arbitrary reference. (14b) is a less clear case of *pro_{arb}*. Finally, in (14c) where 1pl is used, *pro_{arb}* is not possible. Similar behaviour of *pro_{arb}* is shown in (15)¹.

- (14)(a) *o yanis θeli pro_{arb} na ton proseχun*
 want-3sg him pay attention-3pl
 'John wants attention to be paid to him'
 (literally, 'John wants that they pay attention to him')
- (14)(b) *o yanis θeli ?pro_{arb} na ton proseχis*
 want-3sg him pay attention-2sg
 'John wants attention to be paid to him'
 (literally, 'John wants that you pay attention to him')
- (14)(c) *o yanis θeli *pro_{arb} na ton proseχume*
 want-3sg him pay attention-1pl
 'John wants us to pay attention to him'
 (literally, 'John wants that we pay attention to him')
- (15)(a) *pro_{arb} ktipun tin porta*
 knock-3pl art door
 '(they/one) is/are knocking on the door'

¹The interpretation of the sentences is my own.

(15)(b) * pro_{arb} *ktipas tin porta*
 knock-2sg art door
 'you are knocking on the door'

(15)(c) * pro_{arb} *ktipame tin porta*
 knock-1pl art door
 'we are knocking on the door'

As mentioned before, sometimes the sentence should be modified, if we want to get arbitrary reference for the 2sg or the 3pl persons. The modifications include tense and/or aspect change or addition of some condition, so that the sentence's time reference is clearly unspecified. Such conditions can be given with adverbs (eg., *sixna* 'usually', *spania* 'rarely', *panda* 'always', etc...).

(16)(a) pro_{arb} *den milane me to stoma gemato*
 NEG talk-3pl with the mouth full
 'one should not speak with the mouth full'

(16)(b) * pro_{arb} *den milas me to stoma gemato*
 NEG talk-2sg with the mouth full
 'you should not speak with the mouth full'

(16)(c) *pote pro den prepi pro_{arb} na milas me to stoma gemato*
 never NEG must-3sg talk-2sg with the mouth full
 'you should not never speak with the mouth full'

In (16c) the addition of the condition *pote den prepi* modifies the sentence, resulting in the possibility of pro_{arb} . Contrast this with (16b) above,

where only *pro* with definite reference is possible. The same is shown in

(17) below:

- (17)(a) **pro*_{arb} *tu telefonises*
 him call-2sg
 past
 ‘(you) called him’
- (17)(b) *pro*_{arb} *tu telefonis kje den apandai kanis*
 him call-2sg and NEG answer-3sg nobody
 ‘one calls him and nobody answers’
- (17)(c) *pro*_{arb} *tu telefonun diarkos*
 ^s him call-3pl all the time
 ‘somebody calls him all the time’

In (17b) we notice a change in the tense and aspect of the verb (past simple becomes present habitual) which accompanies the addition of the condition. The result is that the time reference of the sentence has become unspecified. The same result is effected with the adverb *diarkos* ‘all the time’ in (17c).

Another noteworthy phenomenon is the occasional allowing of arbitrary reference with passive and ergative verbs in MG. Recall that according to Jaeggli’s proposed analysis, passive and middle voice verbs as well as ergatives do not allow it. Some counter examples taken from MG are the following:

- (18)(a) *pro_{arb} silamvanese apo tin astinomia gia to paramikro s afti ti xora*
 be arrested-2sg by art police for the slightest in this art country
 'in this country you are arrested by the police even for the smallest
 crime'

Notice that arbitrary reference is not so clear with the 3pl in the same
 sentence

- (18)(a) *?pro_{arb} silamvanonde apo tin astinomia gia to paramikros afti ti xora*
 be arrested-3pl by art police for the slightest in this art country
 'in this country they are arrested by the police even for the smallest
 crime'

To sum up, what we have seen so far is that MG deviates from what
 Jaeggli has observed for Spanish in that:

- (a) it can have arbitrary reference assigned to 2sg and 1pl pronouns (besides 3pl)
- (b) it allows passive and ergative verbs to receive arbitrary reference
- (c) it allows arbitrary reference with a change in the time reference of the sentence (unspecified in time).

5.4 Arbitrary reference in Italian

The fact that 2sg may be arbitrary in reference has been observed by Cinque
 (1987) for Italian.

- (19) *Quando sei nasci ricco, puoi fare certe cose*
 'When you are born rich you can do certain things'

Cinque also observes that the arbitrary interpretation is lost when the time reference of the sentence is specific. Thus (20) below contrasts with (19); in (20) the 2sg person cannot be arbitrary.

(20) *Sei nato ricco, e allora puoi fare certe cose*
 'You were born rich, and thus you can do certain things'

His claim is that there are two usages of the arbitrary pronoun, which he calls *quasi-existential* and *quasi-universal*, respectively. In a systematic way he summarizes the properties of each one of them, which I repeat below:

<u>Quasi-existential interpretation</u>	<u>Quasi-universal interpretation</u>
(a) compatible with specific time reference	(a) incompatible with specific time reference
(b) incompatible with generic time reference	(b) compatible with generic time reference
(c) incompatible with contexts suspending the specificity of the time reference	(c) compatible with contexts suspending the specificity of time reference
(d) compatible with the existence of a single individual satisfying the description	(d) incompatible with the existence of a single individual satisfying the description
(e) restricted to [NP, S] θ -marked in D-structure	(e) non-restricted to [NP,S] θ -marked in D-structure

Cinque concludes that "The key to understanding of the two different *arb* interpretations and of their different clusters of properties appears to be the different semantics of the generic and specific time reference." (p.34)

I agree with Cinque's claim about time reference and its relation to arbitrariness of pronominals. It seems to me that this is the major factor related to arbitrary reference. The examples that follow, (21) and (22), show that the verbal category (in/transitive, un/ergative, copulative, passive and raising verbs) is not essentially related to the arbitrariness of the empty pronominal². In (21) 2sg is used exclusively, whereas in (22) only 3pl appears. I will leave 1pl aside for the moment.

(21)(a) Transitive *spani* *pro_{arb}* *vriskis* *fraules* *ton* *χimona*
 rarely find-2sg strawberries art winter
 'rarely one finds strawberries during the winter'

(21)(b) Intransitive *stin* *anglia* *pro_{arb}* *odiyis* *aristera*
 in+art England drive-2sg left
 'in England one drives on the left'

(21)(c) Unergative *den* *ine* *kalo* *pro_{arb}* *na* *dulevissto* *spiti*
 be-3sg good work-2sg in+art home
 SUBJ
 'it is not good for one to work at home'

(21)(d) Ergative *stin* *ezoxi* *pro_{arb}* *kimase* *pio* *efkola*
 in+art country sleep-2sg more easily
 'in the countryside one sleeps easier'

²Verb types taken as defined in Cinque (1987)

- (21)(e) Copulative *tipote den se sozi, an pro_{arb} em ise arostos apo AIDS*
nothing NEG you save-3sg if be-2sg sick from AIDS
'nothing can save you if you have AIDS'
- (21)(f) Raising *pro_{arb} fenese pio neos apro_{arb} ise*
seem-2sg more young if be-2sg
mikrokamomenos
built small
'one looks younger if one is built small'
- (21)(g) Passive *pro_{arb} silamvanese apo tin astinomía gia*
be arrested-2sg by art police for
to paramikro s afti ti λora
art slightest in this art country
'in this country you are arrested by the
police even for the smallest crime'
- (22)(a) Transitive *spania?pro_{arb} vriskun fraules ton ximona*
rarely find-3pl strawberries art winter
'rarely they find strawberries during the winter'
- (22)(b) Intransitive *stin anglia pro_{arb} odyun aristera*
in+art England drive-3pl left
'in England one drives on the left'
- (22)(c) Unergative *den ine kalo ?pro_{arb} na dulevun sto spiti*
be-3sg good work-2pl in+art home
SUBJ
'it is not good for them to work at home'
- (22)(d) Ergative *stin exoxi ?pro_{arb} kimunde pio eskola*
in+art country sleep-3pl more easily
'in the countryside they sleep easier'
- (22)(e) Copulative *tipote den se sozi, an ?pro_{arb} ine - arosti apo AIDS*
nothing NEG you save-3sg if be-3pl sick from AIDS
'nothing can save them if they have AIDS'
- (22)(f) Raising **pro_{arb} fcnonde pio nei an*pro_{arb} ine*

seem-3pl more young if be-3pl
mikrokamomeni
 built small
 'they look younger if they are built small'

(22)(g) Passive ?*pro*_{arb} *silamvanonde* *apo tin astinomia* *για*
 be arrested-3pl by art police for
to paramikro s afti ti χora
 art slightest in this art country
 'in this country they are arrested by the
 police even for the smallest crime'

In conclusion, (21) and (22) demonstrate that verbal category is not a primary factor as concerns the arbitrary reference of *pro*. Furthermore, they show that person, 2sg versus 3pl, is a far more important factor: the same verb may or may not permit *pro*_{arb} in both persons. Later I will show that verb category does play some role in arbitrary *pro* interpretation.

5.5 Other factors relating to arbitrary reference of pronouns

To be able to prove that it is mainly the time reference of the verb—in other words, TENSE/ASPECT in INFL—that decides about the non/arbitrary reference of the pronoun I am going to examine which tenses are inherently specified in time. These tenses should always be accompanied by specific reference, whereas the ones with generic time reference should not. The

eight tenses of the MG verbal paradigm are marked [\pm specific] in time reference below³.

Present	[\pm specific]
Past Continuous	[- specific]
Simple Past	[+ specific]
Simple Future	[+ specific]
Future Continuous	[- specific]
Present Perfect	[- specific]
Past Perfect	[- specific]
Future Perfect	[- specific]

It seems that tenses carrying [+ perfective] or [+ continuous] aspect are marked [- specific] for time reference, whereas those that are [- perfective] or [- continuous] are marked [+ specific]⁴.

In the sentences that follow I will attempt to show that arbitrary reference of the empty pronominal is allowed with tenses that are inherently

³Refer to tables 3.1 and 3.3, chapter 3 for an example of a conjugated verb

⁴Present tense is [+,- specific] because, despite its single morphological form it can have either [+ continuous] or [- continuous] aspect.

marked [- specific] in time. The same is expected to happen with the tenses which are interpreted as such because they are ambiguous.

- (23)(a) *pro_{arb} kanun ton stavro tus' otan pro_{arb} benun stin eklisia*
do-3pl art cross theirs when enter-3pl in+art church
present present
'one should cross themselves when they enter a church'
- (23)(b) *edo pro_{arb} den plironis tipota an den minis efcharistimanos*
here NEG pay-2sg nothing if NEG stay-2sg satisfied-2sg
present present
'here one pays nothing if one is not satisfied'
- (23)(c) *sinechos pro_{arb} anakaliptun kenuries thavmaturyes dietes*
all the time discover-3pl new miraculous diets
present
'they discover new miraculus diets all the time'
- (24)(a) *s afto to mayazi pro_{arb} dokimazes ola ta krasia dorean*
in this art store try-2sg all art wines free
past cont.
'in this store one used to try every wine for free'
- (24)(b) *s afto to mayazi *pro_{arb} dokimases ola ta krasia dorean*
in this art store try-2sg all art wines free
past simple
'in this store you tried every wine for free'
- (24)(c) *akomi pro_{arb} den anakalipsan to farmako yia ton karkino*
yet NEG discover-3pl art medicine for art cancer
past simple
'they haven't discovered the cure for cancer yet'
- (24)(d) *pro_{arb} piyenanpanda mazi sto sinema*
go-3pl always together to+art movies
past cont
'they always went to the movies together'

- (24)(e) *sta 1954 pro_{arb} kataferan pro_{arb} na zeperasun to fraɣma tu iχu*
 in+art manage-3pl art barrier art sound
 past simple
 'in 1954 they managed to break the sound barrier'
- (24)(f) *pro_{arb} θa me vlepun ke θa ɣelun*
 will me see-3pl and will laugh-3pl
 future
 'they will laugh when they see me'

The additional data in (23) and (24) clearly show that tense/aspect is a crucial but not unique factor in the interpretation of *pro*. Apparently other factors should be taken into consideration. These factors are:

- (a) person, as mentioned above.
- (b) type of verb, not necessarily along Jaeggli's classification.
- (c) modal context, i.e., futurity or conditionality.

5.6 Conclusion

To recapitulate, 2sg, 1pl and 3pl *pro* can receive arbitrary reference in MG, despite the fact that it is governed with and coindexed by AGR.

I demonstrated how Jaeggli's assumptions with respect to pronominal arbitrary reference fail to apply in MG and I suggested that one should rather look for other factors to account for it. More specifically, it is not the fact that the candidates for arbitrary reference are not assigned Case or

a θ -role directly by the verb. Rather, time reference (tense and/or aspect) decides whether *pro* is going to be arbitrary or not. Some other factors relating to *pro_{arb}* are: modal environment, type of verb and person (2sg vs. 3pl). Type of verb (verbal category) is important but not as presented by Jaeggli, since the factors are not Case or θ -role as he suggests.

MG defies Jaeggli's analysis in a fundamental point in his analysis: A [-dependent] element, *pro*, is able to receive arbitrary reference. According to Jaeggli it is only [+ dependent] elements that lack an antecedent which can be arbitrary.

It should be made clear that in this chapter I have simply highlighted some factors related to *pro_{arb}*. Further research is necessary, in order to comprehensively explain the phenomena and incorporate them in the general GB framework.

Chapter 6

Conclusion

Linguists have become increasingly aware of the relevance of cross-language studies. Such studies provide a wealth of valuable data that help in gaining a proper understanding of the ways that UG should be structured. Within this general approach, parametrization allows for cross-linguistic differences such as the ones between pro-drop and non-pro-drop languages. The basic theory of UG remains constant; it is only the value of the parameter that changes, so that languages demonstrate apparently different behaviours.

The present work hopes to promote this goal of contemporary linguistics by examining the little explored language of MG. One fact should be stressed: the primary aim is highlighting some interesting, ie., problematic, issues raised by MG, not always providing an answer. Among the questions that have been raised within the course of the thesis are:

- (a) Is PRO ever present in MG, despite the fact that all MG clauses are finite?
- (b) What would be a theory of Control without PRO?
- (c) In case we replace PRO by *pro*, how can we justify the fact that a governed element can appear in controlled positions?
- (d) What would be the conditions according to which *pro* can receive arbitrary interpretation?

Chapter 3 deals with question (a). It proposes that PRO does not exist at all in MG. This claim stands even for gerunds. PRO cannot be in subject-of-gerund position, because gerunds lack AGR but TENSE is regarded as a governor.

With respect to question (b), it is claimed in Chapter 4 that Control in MG is effected through a combination of a theory of indexing and the specific semantic and syntactic properties of the predicates. Control theory in MG seems to be semantically the same as in English, a matrix subject or object is related to the embedded subject, but it is syntactically different. PRO is replaced by a controlled *pro*. This brings us to question (c) of how a governed element like *pro* be controlled which has been answered above.

Chapter 5 answers question (d). It is suggested that the factors which determine the arbitrary reference of *pro* are person, tense and/or aspect in INFL, type of verb and modal context.

At the moment, when comparatively very little is known about the syntax of the MG sentence, MG might seem to be somehow "messy". By this I mean that it might seem suspect on theoretical grounds because MG syntactic phenomena are not consistent with the general analyses provided by GB. According to Ingria (1981:229), for example, Raising and Control (EQUI) phenomena in MG are syntactically free. Under the light of similar works it may be assumed that it is not always possible to provide a comprehensive, general system of rules for MG within the GB framework. My belief is, however, that only when more data are brought up and analysed will it become clear that MG complies with the GB rule system¹.

As it has already been mentioned, not always have I selected a specific solution among the alternatives that were brought up. A fair number of questions have remained unanswered:

- (a) The ECM versus Control from Object controversy
- (b) The classification of OC verbs in MG
- (c) Prevalent and secondary factors affecting the arbitrary reference of *pro*

With questions like the above still unanswered, it is obvious how much

¹For a treatment of Raising phenomena within GB see Rivero (1987) and (1988).

research there is to be done on MG. This language seems to offer a challenging opportunity for fruitful linguistic research.

Abbreviations

*	grammatically unacceptable
?	of doubtful grammaticality
1pl	first person plural
2sg	second person singular
ACC	accusative case
AGR	agreement
art	article
EC	Empty Category
ECM	Exceptional Case Marking
ECP	Empty Category Principle
GB	Government and Binding
INFL	inflection
LF	Logical Form
MG	Modern Greek
NEG	negation
NOC	Non-Obligatory Control
NOM	nominative case

OC	Obligatory Control
subj	subjunctive
UG	Universal Grammar

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²Not all the entries included here are cited in the text, as this is a Bibliography, not a List of References

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