

In the mood for control

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Abstract

The aim of this paper is to provide an account of *na*-clauses in Modern Greek, by focusing on the properties of the ‘mood’ particle *na* and its relation to the subject it embeds. It is argued that *na* has the effect of subsuming the lexical realization of the subject, mediating (along with verbal agreement) its interpretation. In control contexts, clause-union takes place, leading to the identification of the embedded (unrealized) subject with one of the matrix arguments. In non-control contexts, where no clause-union is at stake, free reference is the available option. It is also argued that the same approach can extend to *to*-complements in English. Any differences between the two grammars further related to the presence vs. absence of verbal agreement.

Keywords: chain, control, inflection, lexicalization, nominal.

1. Introduction

A basic property of Modern Greek (MG), which is by and large shared by the other Balkan languages as well, is the absence of infinitives and the use of finite forms in those contexts where the Romance (and Germanic) languages use the infinitive. The finite clauses of this type are characterized as ‘subjunctive’, and are introduced by a particle (glossed as ‘PRT’) followed by the finite verb (for an overview see Joseph 1983, Terzi 1992, Rivero 1994). Consider for example the MG data in (1) below:

- (1) a. *na trexi* (–past, –perfective)
PRT run-3SG
‘He must run’, ‘It is possible that he’s running.’
- b. *na treksi* (–past, +perfective)
PRT run-3SG
‘He must run’, ‘Can he run?’
- c. *na etrexe* (+past, –perfective)
PRT ran-3SG
‘I wish he were running’, ‘Could it be the case that he was running?’
- d. *na etrekse* (+past, +perfective)
PRT ran-3SG
‘I wish he had run’, ‘Is it possible that he ran?’

A number of different readings arise, depending on the verbal specification (+/–past, +/-perfective), the clause-type (i.e. interrogative or not, see Rouchota 1994), and the distribution of *na* in a root or embedded context.

A comparative approach to *na*-clauses raises the following questions: first, how do the forms in (1) compare to the Romance-type subjunctive, and second, how do they compare to infinitives? Both questions are addressed by Quer (this issue), and will form the background of the present discussion. The answer to the first question can shed some light on the formal notion of mood, irrespectively of its morphosyntactic realization. The answer to the second question can lead to an account of the similarities with infinitives in relation to the notion of finiteness. The latter becomes even more important once we consider phenomena such as control that typically require a non-finite context, but nevertheless involve a finite ‘subjunctive’ context in MG (and the rest of the Balkan languages), as in (2):

- (2) O Kostas matheni *na* odhiji.
 the Kostas learn-3SG PRT drive-3SG
 ‘Kostas is learning (how) to drive.’

Control cannot be seen independently of the predicate that selects a *na*-complement. For example, substituting *matheni* for volitional *theli* (‘wanted’) has a different effect on the interpretation of the subject, as illustrated in (3) below:

- (3) O Kostas theli *na* odhiji.
 the Kostas want-3SG PRT drive-3SG
 ‘John wanted (him) to drive.’

The English translation of (3) shows that the embedded subject could be coreferential with that of the matrix clause (i.e. *o Kostas*), but it doesn’t have to. The construction in (3) brings in another dimension that distinguishes Balkan from Romance complementation. As has been extensively discussed in the literature (Picallo 1985, Kempchinsky 1986, Farkas 1992, Terzi 1992), subjunctive complements of volitional predicates in Romance trigger subject obviation (cf. the French example in (4)):

- (4) a. *Je veux que je parte
 I want-1SG that I leave-SUBJ-1SG
 b. Je veux partir.
 I want-1SG leave-INF.
 ‘I want to leave.’

While the infinitive in (4b) creates a control context, the subjunctive in (4a) triggers an anti-control effect (obviation). Given that control in MG is only possible inside a finite ‘subjunctive’ clause, the answers to the questions raised above regarding the similarities and differences between *na*-clauses on the one hand, and Romance subjunctives and infinitives on the other, cannot be seen independently of other syntactic phenomena.

In the present paper I focus on the properties of the ‘subjunctive’ particle *na* and its relation with the subject it embeds. Within this context, my aim is twofold: first, to address some of the questions raised by Quer (this issue) regarding the properties of mood as a syntactic category and its parametric manifestations, and second, to provide a better understanding of control in finite contexts and in general.

The paper is organised as follows: Section 2 provides a rather detailed discussion of the distribution of *na*-complements, as well as an account of the properties of *na* itself and how it may differ from the morphological subjunctive that we find in Romance languages. Section 3 presents the basic proposal, namely that *na* is a nominal (locative) element that is situated in the left periphery. Being nominal it behaves like a (locative) subject and satisfies the EPP along with verbal inflection. Section 4 discusses control, based on the idea that the interpretation of the subject is mediated by the particle *na*; in control complements, the anaphoric interpretation assigned to the embedded subject is a by-product of the interpretation assigned to the *na*-clause itself. The distinct location of the relevant nominal features (particle vs. verbal morphology) can be held responsible for other parametric differences (cf. obviation effects). Section 5 focuses on the comparison between *na*- and English *to*-infinitives as well. It is argued that *to*, like *na*, also satisfies the EPP, i.e. it is itself a subject. The individual differences between the two grammars are argued to follow from the presence vs. absence of inflection on the verb in *na*- and *to*-clauses respectively. As a

result, the set of complements that exhibit control in MG is more restrictive compared to English (and possibly Romance), since the former, but not the latter, always provides an independent lexicalization of the subject through verbal agreement. Control is then derived without the mediation of specialized empty categories, such as PRO, pro, or even an A-trace/copy. Section 6 concludes the discussion.

2. The ‘subjunctive’ in MG

2.1. The distribution of *na*-complements

The basic mood opposition in MG is that of +/–imperative. In other words, verbal morphology distinguishes between two mood paradigms, that of the +imperative (only in the 2nd person singular and plural), and that of –imperative (for all persons). The –imperative can also be characterized as the ‘indicative’ paradigm, as it involves no other distinctions. As already pointed out in section 1, verbs in MG inflect for aspect (actually marked only for perfective aspect on the stem), tense and agreement; agreement is sensitive to the +/–past tense distinction, giving rise to two paradigms. The morphology of the MG verb is illustrated below with the verb *trexo* (‘run’) in all persons:

- (5) a. +Imperative:
Imperfective: trex-e, trex-(e)te.
Perfective: trek-s-e, trek-s-(e)te
- b. –Imperative, –Past
Imperfective:
 trex-o, trex-is, trex-i, trex-ume, trex-ete, trex-un
Perfective:
 trek-s-o, trek-s-is, trek-s-i, trek-s-ume, trek-s-ete, trek-s-un
- c. –Imperative, +Past
Imperfective:
 etrex-a, etrex-es, etrex-e, (e)trex-ame, (e)trex-ate, (e)trex-an
Perfective:
 etrek-s-a, etrek-s-es, etrek-s-e, (e)trek-s-ame, (e)trek-s-ate, (e)trek-s-an

The +past tense formation in (5c) also involves stress shift to the anti-penultimate syllable; in bisyllabic formations, the prefix (‘augment’) *e-* is used to carry the stress. The –past, +perfective verbal form in (5b) is described as ‘dependent’, since it cannot appear as a free morpheme, but has to be licensed by *na* or ‘future’ *tha* or some other designated element (see Holton et al. 1999: 220-222, Tsangalidis 2002, Giannakidou this issue).

It is clear from the above discussion that MG has no morphological subjunctive, in the sense that it does not have an inflectional paradigm that would be characterized as such. In this respect then it differs from Romance languages, which morphologically distinguish between indicative and subjunctive; it also differs from its predecessor, namely Classical Greek which had a four way mood system (indicative, subjunctive, optative, imperative). In the absence of any such morphological distinction, the particle *na* has been treated as the equivalent of the ‘subjunctive’ marker (a property which also seems to be shared with the root-clause particle *as*; see Giannakidou (this issue), as initially proposed by Veloudis & Philippaki-Warburton (1983) (and later assumed by Tsimpli 1990, Terzi 1992, Rivero 1994). As far as the verbal form that follows *na* is concerned, it can simply be characterized as the ‘indicative’, for the purposes of morphology at least (Lightfoot 1979, Tsangalidis 2002). The next question concerns the position of the *na* particle in the clause-structure, namely whether it is situated in the I or the C domain; this has been a rather controversial issue in the relevant literature. We will discuss this point in more detail in section 3.

With respect to the distribution of *na*-clauses, we observe that they can appear both in root and embedded contexts. As already pointed out in (1), root *na*-clauses give rise to a number of modal readings, depending on a number of interacting factors. In this respect, they have a typical subjunctive distribution. On the other hand, *na*-clauses may also appear in embedded contexts, as complements to various predicates. Generally speaking, *na*-complements may appear after the following classes of predicates:

- (6)
- a. *Modals*: *prepi* (must), *bori* (can/may), ...
 - b. *Aspectuals*: *arxizo* (start), *stamato* (stop), ...
 - c. *Volitionals*: *thelo* (want), *epithimo* (desire), ...
 - d. *Perception verbs*: *vlepo* (see), *akuo* (hear), ...
 - e. *Verbs of mental perception*: *thimame* (remember), *ksexno* (forget)
 - f. *Psych verbs*: *xerome* (be pleased), *lipame* (be sorry), ...
 - g. *Epistemic predicates*: *pistevo* (believe), *nomizo* (think), ...
 - h. *Verbs of saying*: *leo* (say), *dhiatazo* (order), ...
 - i. *Verbs of knowing*: *ksero* (know), *matheno* (learn), ...

The predicates in (6a-c) can only take a *na*-complement. The rest of the predicates may also take a complement clause introduced by the declarative complementizer *oti*, or (factive) *pu*, or interrogative *an* (see Roussou 2006).

In traditional grammars (see Tzartanos 1963: 8), the category of ‘volitionals’ is rather vaguely defined, given that it also includes verbs like *prospatho* (‘try’), *kataferno* (‘manage’), *epidhioko* (‘attempt’), *apilo* (‘threat’), *ipoxome* (‘promise’), etc., which are not volitional. Some of these predicates (e.g. *prospatho*, *kataferno*) may only take a *na*-complement, while others (e.g. *apilo*, *ipoxome*) may alternate between an *oti*- and a *na*-complement. On the other hand, Holton et al. (1999: 451-454) define a different class, the so-called ‘future-referring’ predicates (wishing, desiring, planning, requesting, etc.), of which volitionals form a proper subset. For purposes of clarity, I will follow their terminology, and refer to the predicates in (6c) as ‘future-referring’, keeping the term ‘volitional’ for the relevant subset within this category.

Leaving perception verbs in (6d-e) and factives in (6f) aside¹, we observe that the epistemic predicates in (6g) may take a *na*-complement, provided the matrix verb is in the present tense; in the case of *nomizo* (‘think’) some propositional operator, such as negation or question may also be required (see (7a)). With verbs of saying (6h), the *na*-complement corresponds to an embedded imperative (see (7b)). Finally, verbs of knowing (6i) acquire a modal (dynamic) reading when they take a *na*-complement (see (7c)):

- (7)
- a. Dhen nomizo *na/oti* efije.
not think-1SG PRT/that left-3SG
‘I don’t think that she left’/ ‘I find it unlikely that she left.’
 - b. Tu ipa *na* fiji / *oti* efije.
him told-3SG PRT leave-3SG/that left-3SG
‘I told him to leave’/ ‘I told him that she had left.’
 - c. Kseri *na/oti* odhiji.
know-3SG PRT/that drive-3SG
‘He knows (how) to drive’, ‘He knows that she drives.’

¹ We leave perception verbs as their complementation pattern is quite complex, and a full discussion would take us too far afield, but see Giannakidou (this issue); for a more descriptive account see Roussou (2006).

The construction in (7a) has a number of distinctive characteristics: first, the embedded verb can be in the past tense; second, the matrix verb has to be in the present tense (–past, –perfective), and preferably in the first person singular (Veloudis 1985, Giannakidou & Quer 1997); third, negation or question in the matrix clause may also be required for the licensing of the *na*-complement. The selection of *na* then is subject to the lexical (epistemic) as well as the inflectional properties of the matrix verb, escorted by an appropriate propositional operator, if necessary. Within this context, the *na*-clause may also carry past tense. The matrix verb in this case is interpreted as the equivalent of an epistemic modal, i.e. ‘according to what I believe/think it must/cannot be the case that...’ (Veloudis 1985, Roussou 1999). Notice that no such reading arises when the complement is introduced by *oti*. Thus epistemic modality derives through the lexical properties of the verb along with the *na*-complement.

The *na*-construction in (7b) has different characteristics, and most importantly does not allow for past tense. In terms of interpretation, it corresponds to an embedded imperative; thus it has the modality associated with imperatives. The *oti*-complement, on the other hand, corresponds to an embedded declarative. Finally, in (7c) the *na*-complement gives rise to a dynamic modal reading (ability), which is absent when *oti* is present; instead *oti* is more compatible with the factive reading of *ksero*. In both (7b) and (7c) the triggered modality is a by-product of the lexical properties of the matrix predicate and the *na*-clause. Of the three classes above, only the *na*-complement that appears with epistemic predicates can be characterized as the equivalent of ‘polarity’ subjunctive, namely the subjunctive that is licensed by an operator that can also license polarity items, such as negation or question (Stowell 1993, Quer 1998; on slightly different formulations see Tsoulas 1994, Brugger & d’Angelo 1995, Manzini 2000). In the other two cases (verbs of saying and knowing), the *na*-complement can be directly associated with the lexical properties of the selecting predicate, and in this respect it is closer to an infinitive.

Let us next turn to the categories of modal (6a) and aspectual (6b) predicates. At a first approximation, the presence of a *na*-complement with aspectuals seems to be rather problematic. While in the cases we have considered so far, there seems to be some sort of modality involved, this is not the case with aspectuals. Furthermore, the embedded predicate is inflectionally restricted not only in terms of tense (–past), but also in terms of aspect (–perfective), as shown in (8):

- (8) a. Arxizo *na* grafo / *grapso / *egrafa / *egrapsa.
begin-1SG PRT write-IMP-/PERF-/wrote-IMP-/PERF-1SG
‘I begin to write.’
- b. Arxisa *na* grafo / *grapso / *egrafa / *egrapsa.
began-1s prt write-IMP/PERF-/ IMP- /PERF-1SG
‘I began to write.’

If *na* is a modal particle (‘subjunctive’) the question is what allows it to appear in this context, where we typically find an infinitive in Romance. At this point of our discussion, it probably becomes obvious that we need to define the modal/‘subjunctive’ character of *na*. I will consider this issue in section 3 (for a semantic approach, see Giannakidou (this issue)).

Consider next modal verbs in (6a) which, just like aspectuals, can only take a *na*-complement. The different modal readings that arise depend on the inflectional properties of the matrix clause, combined with those of the embedded; see the following examples:

- (9) a. O Kostas bori *na* odhiji.
the Kostas can-3SG PRT drive-3SG

- ‘Kostas can (now) drive’, ‘It is possible that Kostas is driving.’
- b. O Kostas bori *na* odhijise.
the Kostas may-3SG PRT drove-3SG
‘It may be the case that Kostas drove.’
- c. O Kostas borese *na* odhijisi.
the Kostas could-3SG PRT drive-3SG
‘Kostas could/was able to drive.’

The modal *bori* in (9a) can be construed as either a dynamic (ability, permission) or an epistemic (possibility) one. Note that both the matrix and the embedded predicates are in the present tense (–perfective). If the embedded predicate becomes +perfective (i.e. *odhijisi*) then the dynamic becomes available. In (9b), the modal remains in the present tense, while the embedded verb inflects for past (+perfective) tense. In this case, only the epistemic reading is possible. Recall that this is indeed the pattern found with the epistemic predicate in (7a) when it takes a *na*-complement. Thus epistemic verbs with *na* and epistemic modals have the same syntactic properties with respect to their tense restrictions. Finally, the modal in (9c) is in the past tense, while the embedded verb is –past (+perfective), and only the dynamic modal reading surfaces. We therefore observe that while modals can only take a *na*-complement, the different readings that arise are morphosyntactically distinguished by the variety of inflectional combinations in the matrix and embedded clauses (see also Iatridou 1990).

Having outlined the basic environment where *na*-complements primarily appear let us next consider which ones qualify for control.

2.2 Control and *na*-complements

Let us start by discussing modals and aspectuals, which can only take a *na*-complement. Consider first the modals in (10) below:

- (10) a. Ta pedhja boresan *na* treksun/*treksi.
the children could-3PL PRT run-3PL/run-3SG
‘The children were able to run.’
- b. Ta pedhja bori *na* etreksan.
the children can-3SG PRT ran-3PL
‘It is possible that the children ran.’

A couple of clarifications are required with respect to (10a-b): recall that past tense on the modal yields dynamic modality, while past tense on the embedded verb yields epistemic modality; thus (10a) converges with a dynamic modal reading, while (10b) with an epistemic one. Furthermore, there is agreement-feature matching between the matrix and the embedded predicate in (10a), and a further agreement with the DP *ta pedhja* in the matrix clause. Agreement mismatch in terms of number for example in the embedded clause (i.e. *treksi*) gives rise to ungrammaticality. The DP *ta pedhja* is thematically interpreted with respect to both predicates: the embedded predicate attributes them the property of running, while the matrix modal the property of having the ability to carry out this event. In this respect then, we have a typical control configuration. In (10b), on the other hand, there is no agreement between the two predicates: the matrix is in the singular, while the embedded in the plural, agreeing with the DP *ta pedhja*. Given the pro-drop character of MG, the DP can be easily understood as a topic (see Philippaki-Warbuton 1979, Iatridou 1993). The construction in (10b) is usually described as an impersonal one; moreover, the DP *ta pedhja* can only be thematically construed with the embedded predicate. The modal, being epistemic, does not attribute a property to the DP, but instead expresses the speaker’s attitude (possibility)

towards the proposition expressed. The epistemic modal then seems to behave like a raising verb, in the sense that it has no external argument, while the dynamic modal behaves like a control one (see Ross (1969) on English modals, Zubizarreta (1982) for a general discussion, and Wurmbrand (2001) for a different view). Bearing in mind that these observations may be restricted to languages like MG where modals have the properties of main verbs and take a full CP complement, we can expect that modals may behave differently in other languages.

The next class to consider is that of aspectuals, as in (11):

- (11) Ta pedhja arxisan na trexun/*trexi.
 the children began-3PL PRT run-3PL/run-3SG
 ‘The children began to run.’

Once again there is obligatory coreference between the matrix and the embedded subject, as manifested by the obligatory agreement-feature matching between the two predicates. The DP is interpreted thematically with respect to both predicates. The agentivity of the DP in relation to the verb *arxisan* can be manifested through the use of an Agent-oriented adverb, such as *epitidhes* (‘on purpose’) in the matrix clause, i.e. (*ta pedhja epitidhes arxisan na trexun* ‘the children/they on purpose began to run’). On these grounds then the construction in (11) is an instance of control (see also Efthimiou 1990). Before we proceed with our discussion of the other predicates, we need to point out that aspectuals may also be characterized as raising predicates.² The ambiguous status of aspectuals as raising and control ones is an old issue (see Perlmutter 1970, Zubizarreta 1982), which has recently been addressed for MG as well by Alexiadou & Anagnostopoulou (2001). Even if this is the case, it still does not affect the validity of our discussion, since what is important for our purposes is the fact that aspectuals are compatible with control.

Verbs of knowing also exhibit control when they take a *na* -complement, as in (12):

- (12) a. O Kostas kseri na odhiji/*odhighun.
 the Kostas know-3SG PRT drive-3SG/drive-3PL
 ‘Kostas knows (how) to drive/*for them to drive.’
 b. O Kostas emathe na odhiji/*odhighun.³
 the Kostas learnt-3SG PRT drive-3SG/drive-3PL
 ‘Kostas learnt (how) to drive/*for them to drive.’

Recall that when a verb of knowing takes a *na*-complement, it acquires a modal (dynamic) reading. It is not surprising then that in this context it behaves exactly like the dynamic modal *boro/bori* in terms of control.

The class of future-referring predicates manifests a more varied pattern with respect to control. As already pointed out in section 1, a volitional like *thelo* (‘want’) allows for either coreference or disjoint reference (cf. (3)). There are two ways to express this behavior: the first is to assume that the empty subject, typically *pro* (given the pro-drop character of MG), can take any reference including that of the matrix subject. This would essentially result in free reference. The other option that has been put forward by Terzi (1992) and more recently Landau (2004) is to assume that when coreference is at stake, it is an instance of control and

² Thanks to one of the reviewers for bringing up this point.

³ Note that *ksero* does not impose any aspectual restrictions on the embedded predicate, while *matheno* (*ematha* in the past tense) does. This is due to the fact that *matheno* ‘learn’ focuses on the process involved in order to acquire an ability; hence the requirement for [–perfective] aspect in the embedded clause.

the null subject is PRO (cf. (13a)); when disjoint reference is at stake, then the subject is *pro* (cf. (13b)) which necessarily obviates given the volitional property of the matrix verb and the ‘subjunctive’ character of *na*. Obviation then is syntactically present although concealed. The two relevant representations below are adapted from Terzi (1992: 85):

- (13) a. O Kostas theli [_{CP} [_C Ø [_{IP} PRO [_I *na* odhijisi]]]]
 b. O Kostas theli [_{CP} [_C *na* odhijisi [_{IP} *pro* [_I *t_{na}* odhijisi]]]]

Note that the two orders do not differ on the surface, although they correspond to different syntactic representations. An auxiliary assumption is that the *na*+V complex has moved to C in (13b), while no such movement has taken place in (13a), thus protecting PRO from government or in more current terms from any other than null Case assignment (on null Case, see Chomsky & Lasnik 1993, Martin 2001; for Greek, Watanabe 1993, Terzi 1997). Since this structure makes certain assumptions about the position of *na*, as well as the representation of null subjects, we will evaluate its merits in section 4 where we discuss control in more detail. Anticipating the discussion, I will argue in favor of a single representation, and attribute the two different readings to free reference.

Predicates like *prospatho* (‘try’) or *kataferno* (‘manage’, ‘succeed’) appear to be less straightforward, as they look like control predicates, but at the same time may allow for disjoint reference as well. Consider the following examples:

- (14) a. O Kostas *prospathise na* dhioristi (o jios tu) stin trapeza.
 the Kostas tried-3SG prt be.appointed-3SG the son his in-the bank
 ‘John tried (for his son) to be appointed in the bank.’
 b. O Kostas *katafere na* fiji o jios tu.
 the Kostas managed-3SG prt leave-3SG (the son his)
 ‘John managed (for his son) to leave.’

In both sentences above there is agreement-feature matching (3rd person singular) between the matrix and the embedded predicate. The embedded one in (14a) is in the non-active voice, but this does not strictly speaking affect the point we want to make here. Matching of agreement features strongly favors a coreference reading between the two subjects. The question then is whether this is an instance of control, as argued for *boro*, *arxizo* and *ksero* above. Maintaining the basic old idea that control involves a bound interpretation (Chomsky 1981, 1982) we expect that, all things being equal, in control cases this would be the only option. If disjoint reference can be derived without basically altering the syntactic structure, then we have coreference which is not an instance of binding. Bearing this clarification in mind, we can pay a closer examination to the data in (14) and note that the embedded subject may be independently lexicalized and be disjoint in reference from the matrix one. In (14), the DP *o jios tu* (‘his son’) can appear in the embedded clause. The availability of disjoint reference, although not strongly preferred, but nevertheless available, argues in favor of a semantico-pragmatic account of the coreference attested and against control.

It is also worth mentioning that data like those in (14) have been invoked as evidence for the absence of syntactic control in the form of PRO in MG; thus Philippaki-Warburton & Catsimali (1999), Spyropoulos & Philippaki-Warburton (2001), Philippaki-Warburton (2004) argue that the embedded subject is always *pro*, given the finite character of the *na*-clause. Obligatory coreference is derived from semantico-pragmatic factors. On the other hand, Terzi (1992: 37-45) argues that verbs like *prospatho* (‘try’) show this dual pattern because they correspond to two lexical items: *Prospatho1* takes a control *na*-complement, while *prospatho2* takes an adjunct *na*-clause and has the interpretation of a causative, i.e. ‘try to

make/bring up a situation such that...’. Presumably the same assumption has to be made for the verb *kataferno* (‘manage’) and the like. Although it is true that these predicates have a causative flavor when the embedded subject is disjoint in reference, it is not so obvious that this reading has to be inherent to the lexical properties of the predicate. In other words, it is not so obvious that we need to postulate two different lexical items, as we will see below.

The third subclass within this category involves predicates that can only be construed as control ones. These are verbs like *tolmo* (‘dare’), *prothimopiume* (‘be willing’), *skopevo* (‘intend’), where the controller is the matrix subject, as shown in (15a), but also verbs like *empodhizo* (‘prevent’), *protrepo* (‘encourage’), *epitrepo* (‘allow’) (i.e. verbs of permission in general) where the controller is the matrix object, as in (15b):

- (15) a. O Kostas *tolmise/prothimopiithike* *na* *fiji* (*o *jios* *tu*).
 the Kostas dared-3SG/was.willing-3SG PRT leave-3SG the son his
 ‘Kostas dared/was willing (*for his son) to leave.’
- b. O Kostas *mas empodhizi/protrepi* *na* *fighume/*fiji*.
 the Kostas us prevent-3SG/encourage-3SG PRT leave-1PL/leave-3SG
 ‘Kostas prevents us from leaving/ encouraged us to leave.’

Note that the verbs that trigger control have an implicit modal reading associated with ability or permission (or absence thereof). In this sense, they share properties with the (dynamic, or more generally root) modals, and just like them, they create a control context.

So far we have identified two groups of control predicates: aspectuals and modals. The latter group also involves verbs of knowing or future-referring ones, which carry some form of root (dynamic) modality. Before we leave this section, it is worth mentioning verbs of mental perception such as *thimame* (‘remember’), which under certain syntactic conditions may also qualify as control ones. Consider the following examples:

- (16) a. *Thimithika* *na* *klidhoso/*klidhosi* *tin* *porta*.
 remembered-1SG PRT lock-1SG/ lock-3SG the door
 ‘I remembered (*for him) to lock the door.’
- b. *Thimame* *na* *klidhoso/*klidhosi* *tin* *porta*.
 remember-1SG PRT lock-1SG/lock-3SG the door
 ‘I remember (*for him) to lock the door.’
- c. *Dhen thimame* *na* *klidhosa/klidhose* *tin* *porta*.
 not remember-1SG PRT locked-1SG/locked-3SG the door
 ‘I don’t remember (him/her) having locked the door.’

Note that the same verb followed by a *na*-complement may behave as either a control, as in (16a&b), or a non-control one, as in (16c). Let us start with (16c): the matrix predicate is in the present tense (and negated), while the embedded clause carries past tense specification. This pattern is reminiscent of the one found with epistemic predicates, once they appear in present tense with a *na*-complement. The question then is if there is some sort of epistemic modality implicated. The answer can be positive: the derived interpretation would be something like ‘According to what I remember, it may or may not be the case that I/he locked the door’. Control is not available, as it is not available with the epistemic predicate in (7a). In (16b) the matrix verb is also in the present tense, but there is no negation;⁴ this seems to be

⁴ According to Quer (1998: 34-35) the verb *remember* in Spanish permits the subjunctive only when matrix negation or question is present. Generally this is not the case in MG. The properties of the polarity-sensitive subjunctive are only shared by the construction in (16c).

a crucial difference, as there is no epistemic reading implicated; furthermore control becomes available. The –past, –perfective specification of the matrix verb in this case gives rise to a habitual or generic reading. The sentence in (16b) also exhibits control, but differs from (16a) with respect to the inflection of the matrix verb, which in this case is +past, +perfective, yielding an episodic reading. In both cases though we get the same lexical entailment in relation to the embedded clause, i.e. ‘If I remembered to lock the door, then I have locked the door’. Crucially, no such entailment pertains in (16c).

The obvious question that arises is the following: what is the relevant factor that not only allows for the *na*-complement to appear, but furthermore contributes to control? While in the case of the predicates we have considered so far, we can identify a relevant modal reading, this may not be so straightforward in the case of *remember* in (16a&b). As a matter of fact, (16b) is an easier case to handle, given that the verbal inflection (–past, –perfective) can in any case create a modalized reading, i.e. ‘Whenever it is the case that *x*, I remember to do *y*’. However, this is not so in (16a) where +perfective aspect in combination with +past gives rise to a specificity effect in terms of temporal reference. At this point, I will follow Pesetsky’s (1991) discussion concerning the licensing of *to*-infinitives and control in the same context. As already mentioned, the verb *thimame* (‘remember’) denotes a mental state; following a different categorization, it belongs to the class of implicatives (see the discussion on its lexical entailment when *na*, or English *to* for that matter, is present). According to Pesetsky, this semantic property of implicatives can be syntactically expressed as a contentful *to* infinitival marker (*to**). This *to** has both tense and modal properties: it binds the event argument of the embedded predicate (in the sense of Kratzer 1989/1995) and has the same distribution as the modal *should*.⁵ The ‘should’ character of the embedded clause has already been mentioned above. I will then assume for present purposes that this rather tentative solution is on the right track, in the sense that the *na*-complement in the context of *thimame* can be compatible with some version of modality. It is also consistent with the fact that once negation appears in the matrix clause, as in (16c), it transfers modality to the matrix predicate, thus removing the lexical entailment effect as well, and creating an epistemic reading similar to the one attested in (7a).

To summarize, in the present section I have considered the distribution of *na*-complements and have tried to identify the control contexts. With respect to the latter, it was shown that control may be directly linked to the lexical properties of the selecting predicates (e.g. true modals, aspectuals), may be derived through the combination of the lexical properties of the selecting predicate along with *na* (e.g. verbs of knowing, some future referring predicates), or finally may arise through the combination of the lexical and inflectional properties of the matrix predicate along with *na*. The discussion of the three relevant cases probably suffices to show that control cannot just be considered the result of lexical semantic properties but appears to be sensitive to syntactic conditions as well.⁶

Having discussed the basic data, I will next turn to the properties of *na* in the clause structure and how it interacts with the subject in general and in control in particular.

3. The particle *na* and (non-) control

3.1 The nature of *na*

The status and the position of *na* in the clause structure has been a controversial issue in the relevant literature. There are basically two main approaches: according to the first one, *na* is

⁵ Pesetsky (1991) suggests a similar analysis for factive infinitives as well, and also draws on the correlations between English infinitives and the Romance subjunctive found after the relevant class of predicates (see Quer 1998).

⁶ On the role of selection in control, see also Culicover & Jackendoff (2006), Rooryck (2007).

the head of a MoodP (Philippaki-Warburton 1992, 1998, Tsimpli 1990, Terzi 1992) or a ModalP (Rivero 1994), situated in the upper inflectional domain, i.e. immediately below C. According to the second approach, *na* is a complementizer, like *an* ('if') and *oti* ('that'), thus situated in C (Agouraki 1991, Tsoulas 1993). The first approach is based on the assumption that *na* is the marker of the subjunctive. This is supported by the fact that *na* can also occur in matrix clauses; the idea then is that embedded *na*-clauses are introduced by a null C. The second analysis is based on the fact that *na* is in complementary distribution with the other complementizers. On the other hand, Roussou (2000) argues that *na* can be analyzed as both a mood particle and a complementizer: it merges in M and then raises to an Operator (Op) position, which is responsible for clause-typing. M is a low C head, while Op is a higher C. These two heads roughly correspond to Rizzi's (1997) Fin and Force respectively. The relevant structure is given in (17) below:

(17) [Op *na* [M t_{na} [I ...]]]

The above structure captures the complementary distribution of *na* with the other complementizers, such as *oti* and *an* which are argued to occur in Op, as well as with the 'future' particle *tha*, which is also analyzed as an element of the M type (along the lines of Rivero (1994); for a different view see Philippaki-Warburton (1992, 1998); for a detailed analysis of *tha* see Tsangalidis (1999)).

The association of *na* with the left periphery is related to the fact that it precedes clitics, as well as negation. *Na*-clauses differ from all other clauses in that they select the negator *min*, as opposed to *dhen*. The order we find is as follows:

(18) (Thelo) *na min* to dhis.
 want-1SG PRT not it see-2SG
 'I want you not to see it', 'You shouldn't see it.'

Assuming that clitics are inflectional elements situated in the I domain (see Sportiche 1996, Manzini & Savoia 2004, 2007, among others), we expect that not only *na* but also *min* will occupy a higher position, outside this domain. On these grounds, NegP is taken to appear in the left periphery, supported by the fact that *min* is sensitive to mood/modality.⁷ Roussou (2000) further argues that when *min* is present, *na* directly merges in Op, since *min* can lexicalize both M and Neg. The relevant structure is given in (19) below. Note that the standard assumption is that the verb in MG is in I (see Philippaki-Warburton 1998); the notation 'CL' is used as a label indicating the position of the clitic. The exact properties of this position (or positions) are not relevant to the present discussion:

(19) a. [Op *na* [Neg *min* [M t_{min} [CL to [I dhis ...]]]]]
 b. [Op (*oti*) [Neg *dhen* [M *tha* [CL to [I dhis ...]]]]]

As the structure in (19a) shows, *min* shares the modal character of *na* and *tha*. Since *na* is also lexically specified for Operator properties, it can directly merge in a higher position when *min* is present and be associated with M via *min* in Neg.

⁷ Imperatives cannot be negated in MG. In this case the non-imperative form is used, with or without *na* (cf. **mi fije* vs. (*na*) *mi fjis* 'don't leave!'). The modal character of *mi(n)* is also manifested by the fact that it can occur in prohibitions, i.e. *mi!* = 'don't!'. The negator *dhen* has no such properties.

Leaving the details of this analysis aside, what is worth bearing in mind is that *na* can be construed as an element that appears in the left periphery and is associated with modality. The modal reading is evident in matrix contexts (cf. (1)). However, not all embedded contexts can be associated with modality. This is clearly the case of *na*-complements to aspectuals for example.⁸ In this case the event described by the *na*-clause is contemporaneous with that of the matrix (cf. (8)). In other cases, any kind of modality is contributed by the matrix predicate in association with *na*, and/or other elements in the matrix clause (e.g. negation, question, inflection). Moreover, while matrix *na*-clauses can be rather easily assimilated to Romance subjunctives, the situation in complement clauses is rather mixed. Most of *na*-complements translate as infinitives; only a subset of them (clearly with epistemics) seems to require licensing by a propositional operator, as is the case with polarity-sensitive subjunctive. At least morphosyntactically then, it is rather difficult to identify a ‘subjunctive’ mood in MG. If the element *na* cannot be identified with subjunctive morphology, then the wider distribution of *na*-complements compared to Romance subjunctives is expected. This is indeed the case, since *na*-clauses subsume the properties of both Romance subjunctives and infinitives.

The particle *na* then must have a property that allows it to appear in non-modalized complements as well. A better understanding of *na* can perhaps come from a quite different context. More precisely, *na* is also found in presentational/deictic contexts, as shown in the following examples:

- (20) *Na* o Kostas!
 PRT the Kostas
 ‘There is Kostas!’

Christidis (1985, 1990) argues that the two types of *na*, namely the ‘subjunctive’ and the ‘presentational’ are synchronically related (see also Veloudis (2001); for a different view see Joseph (1981, 1994)). In other words, there is a single lexical item ‘NA’, which has different uses. According to Christidis (1985), presentational *na* can also be used to introduce a sentence, as in the following example:

- (21) *Na* sou po!
 PRT you tell-1SG
 ‘Let me tell you.’

In (21) *na* has the reading “hey/come here, I want to tell you something”. The different readings of *na* relate to different types of deixis. In particular, *na* with a nominal complement involves deixis to an object in the outside world (the ‘exophoric’ reading). On the other hand, *na* with a clausal complement involves anaphoric reference in relation to the properties of the sentence, such as speech time, the speaker, etc. (the ‘endophoric’ reading).

Another difference between the two instances of *na* has to do with the fact that the presentational one is stressed, while the modal one isn’t. Note that *na* in (21) is stressed and in this respect it (also) acquires a presentational reading. Christidis (1985, 1990) attributes this difference to the fact that modal *na* is the clitic⁹ variant of presentational *na*. If this is correct, then the deictic character of *na* in (21) can be simply derived by the emphatic stress it

⁸ The same also holds for perception verbs. The *na*-complement in this case is associated with direct perception (see Veloudis 2001).

⁹ For Philippaki-Warbuton & Spyropoulos (1999), modal particles have an intermediate status between clitics and affixes.

bears. It is interesting to note that a similar situation regarding the clitic vs. non-clitic status of *na* is attested with the accusative (and genitive) definite article in Greek, which is morphologically non-distinct from object clitics, as shown in the singular accusative paradigm in (22a):

- (22) a. *ton* (masc.), *tin* (fem), *to* (neut.)
 b. *Idha ton/TON fititi.*
 saw-1SG the student
 ‘I saw the/THE student.’
 c. *Ton idha.*
 him saw-1SG
 ‘I saw him.’

The very same form that appears in (22a) *ton* (masculine, accusative, singular) can take an NP-complement and function as a definite article in (22b) where it can also be stressed for emphatic purposes, or have no complement and function as a clitic, as in (22c), thus occupying a position (CL) in the inflectional domain of the clause; in the latter case it cannot be stressed. Based on this evidence, we can then assume that there is a single element *na* that can take different complements (a nominal vs. a clause), thus giving rise to slightly different interpretations (see also Roberts & Roussou 2003: 110). Emphatic stress may play an additional role in distinguishing between the two readings.

The question then is what sort of feature underlies the two instances of *na*, or to put it differently how ‘deixis’ in the broad sense is encoded syntactically. For Christidis (1985) the relevant notion is that of movement towards a location (‘distance’ for Veloudis (2001)). Abstracting away from details, we can treat *na* as a nominal element that has the property of being ‘locative’. Location is a feature implicated in deictic elements (as well as demonstratives). If we accept the essence of Christidis’ (1985, 1990) as well as Veloudis’ (2001) approaches, then we can partially depart from what has been assumed so far, namely that (clausal) *na* is a mood/modal particle. In present terms, the ‘mood’ characteristic is only secondary, acquired from somewhere else. The obvious candidate is the domain where *na* merges, namely the left periphery, which can be further modified by the selecting predicate in complementation (see also Manzini & Savoia (2007) on Albanian *të*). Under this approach we can also accommodate those *na*-complements that do not appear to have a modal reading, as already pointed out. We can then modify the structure in (17) as follows:

- (23) $[_{Loc} na [C [I \text{ to dhis}]]]$ (where C = ‘M’ and ‘Op’)

Na merges in the C domain, but in its own designated position, Loc, in (23). Under this approach we maintain a single *na*, whose association with mood (and clause-typing) partly derives from the fact that *na* merges in the relevant domain.¹⁰

The presentational reading, on the other hand, arises when *na* takes a DP complement. It is worth pointing out that this latter type of complementation is typical of demonstrative pronouns (under the deictic reading) in MG: cf. *afto/ekino to vivlio* (= this/that the book) ‘this/that book’. Of course *na* differs from demonstratives in other ways. According to Christidis (1990: 5) “it is a highly contextualized expression (usually accompanied by the pointing gesture) which, (a) does not register the distinction between entities and locations, as

¹⁰ The incompatibility of *na* with particle *tha* and the complementizers *oti* and *an* has to be modified under this approach. For a discussion regarding the relation of *na* with *oti* and *an* see Roussou (2008).

demonstrative pronouns and (locative) adverbs do, and (b) it does not register the distinction between ‘proximal’ and ‘distal’, as it is drawn in the case of locative adverbs and demonstrative pronouns. It is the context that establishes the intended (proximal or distal) sense”. Another relevant difference is that *na*, unlike demonstrative pronouns, lacks inflectional properties. As such *na* has no referential content; this property is crucial for its interaction with the embedded subject in clausal complementation.

Treating *na* as a nominal similar to a locative pronoun allows us to draw certain similarities with morphological subjunctive. Note that the morphological subjunctive, such as the one exhibited in Classical Greek, Latin, or the modern Romance languages for example, is realized through the use of a different verbal inflectional paradigm, and more precisely a different agreement paradigm. If agreement on the verb is pronominal (see the discussion below), then certain similarities between the two systems become quite apparent. In both cases, the morpho-syntactic realization of mood resorts on a nominal element. In Classical Greek this was part of the inflectional system. In MG, on the other hand, no such option is available. Instead the relevant mood properties are provided in the C-system in associated with a free morpheme. In the history of Greek then, the realization of mood has been transferred from I to C, through the loss of inflectional morphology and the use of a nominal element that merges in the relevant part of the C domain (see Roberts & Roussou 2003: Chapter 3, Philippaki-Warbuton & Spyropoulos 2004).

Having discussed an alternative syntactic approach to *na*, which builds on earlier semantico-pragmatic analyses, we can next consider the interaction of *na* with the clause it embeds and in particular how it may or may not affect the interpretation of the subject.

3.2. *Na and the subject*

A characteristic property of *na* is that it forms a complex with the verb, which can only be interrupted by negation *min* and the object clitic(s), as shown in (18) above. One way to accommodate this pattern is simply to assume that *na* in this case is a clitic (see Christidis 1985). Note, however, that even if this is the case, *na* is a clitic occurring in the C-system, thus differing from pronominal object clitics, which are associated with I. Related to this point is the fact that the subject in a *na*-clause can only appear in a peripheral position, that is either before *na* or after the verb, as in (24a). No such restriction holds when *oti* is present, as shown in (24b):

- (24) a thelo (o Kostas) *na* *(o Kostas) fiji (o Kostas)
 want-1SG the Kostas PRT the Kostas leave-3SG the Kostas
 ‘I want Kostas to leave.’
- b. nomizo (o Kostas) *oti* (o Kostas) efje (o Kostas)
 think-1SG the Kostas that the Kostas left-3SG the Kostas
 ‘I want Kostas to leave.’

MG, being a pro-drop language, exhibits the typical property of allowing for postverbal subjects. The preverbal subject in (24a) can be interpreted as either Topic or Focus, given that it precedes *na*, which is, according to what we said before, situated in the left periphery. The realization of the subject in its canonical position, namely in relation to I is excluded. The example in (24a) then shows that a lexical subject is indeed possible, but not in a position between *na* and I.

In standard terms, the canonical subject position is due to the Extended Projection Principle (EPP). In Chomsky (1995) the EPP is taken to correspond to a categorial (D) feature, which ensures the presence of a syntactic subject. In Chomsky (2001, 2004), the EPP is treated as a generalized feature that ensures the projection of a specifier (second Merge) in

connection with other functional heads as well. Whether the EPP is a generalized property is not, strictly speaking, relevant for our purposes. Within the present discussion, what counts is the role of the EPP in relation to I. In this case, the EPP closes off the proposition, by saturating all open positions provided by the predicate (the ‘subject-predicate’ structure in the Fregean sense). Structurally, the EPP is satisfied through the projection of a subject position, typically notated as Spec,IP, or as a designated D position projecting independently above I, as argued by Sportiche (1997), Manzini & Savoia (2002), among others. The EPP/D property can be lexicalized as a lexical (non-pronominal) DP, a full pronoun, or a clitic. In some cases it may also receive no lexicalization. The latter option is attested in pro-drop languages, which further exhibit an alternative way of satisfying the EPP, namely through the presence of inflection. In this case, the EPP is satisfied word-internally, as part of the verb in the I head (for a full account see Manzini & Savoia (2002, 2007); also Borer (1986) and Alexiadou & Anagnostopoulou (1998) in relation to null pleonastic subjects). The availability of inflection does not exclude the presence of a lexical subject (or a pronominal/clitic) one in the EPP position; in fact this option is systematically attested in subject clitic languages. Note that inflection corresponds to an argument slot of the predicate, ensuring the thematic interpretation where this is relevant.

Going back to (24), we observe that the canonical subject position in *na*-clauses has to be obligatorily null. The interpretation of the null subject can vary. It can correspond to either a typical *pro* or a PRO subject.¹¹ The latter arises when the *na*-complement is embedded under a certain class of verbs (see section 2), while the former arises in all other contexts. At this point we observe that the interaction of *na* with the subject position is quite tight. On the one hand, *na* ‘blocks’ the lexicalization of a DP in the EPP position; on the other hand, it allows for a range of interpretations regarding the null subject (of the *pro* or PRO type). Assuming that the EPP corresponds to a D position above I (and above object clitics), the configuration that is excluded when *na* is present is given in (25a):

- (25) a. $[_{Loc} na [_C [_D *o Kostas [_I fiji]]]]$
 b. $[(o Kostas) [_{Loc} na [_C [_I fiji (o Kostas)]]]]]$

A preverbal subject in the EPP/D position of I is nevertheless available when *oti* is present (cf. (24b)), which supports the assumption that only *na* interferes with the lexicalization of the embedded subject.

The question that arises next is why *na* has an effect on the EPP property. Perhaps the simplest assumption we could make at this point is the following: *na* itself satisfies the EPP. In other words, *na* is a subject of some sort. Recall that the EPP is essentially a nominal property, encoded as D. Recall also that *na* is a nominal, and more precisely a locative element. Locative pronouns can indeed function as subjects. The case of *there* in English is quite representative:

- (26) a. There is a man in the cellar.
 b. There is John!

¹¹ Raising (A-trace) is a further option. This has already been observed for the case of aspectuals, which can exhibit a double reading. Without getting into the details of raising, I will simply assume that control and raising do not differ structurally and exhibit certain similarities, although the final readings differ (one thematic interpretation in raising, two in control). At this point I follow Hornstein (1999) and Manzini & Roussou (2000) regarding the similarities between the two constructions, independently of the mechanism involved (e.g. Move vs. Attract/Agree).

Independently of the different interpretations that may be assigned to the two constructions, *there* satisfies the EPP. The standard assumption is that *there* is an expletive element that forms a chain (or Agrees in more recent terms) with the NP/DP associate. Whether the notion of an expletive necessarily implies lack of semantic content is rather questionable. Note that *there* has content, which is clearly identified as that of a pronominal locative. What makes it behave like an expletive is precisely its association with the thematic subject. On these grounds, associating *na* with the EPP is nothing new. Unlike *there*, *na* appears in the C-system, and like *there* it is expected to form a chain (Agree) with an associate element. Recall that in languages like MG, the subject is in any case realized word-internally, namely as an inflectional element, and more precisely agreement, attached to the verbal stem. Agreement is also a nominal element. In this case then we have two instances of EPP-satisfaction by two nominal elements, *na* and agreement within the same clause. As in the English case, interpretation requires that these two items are construed as one. In other words, they become parts of the same chain in the sense of Brody (1997). Thus interface interpretation turns the two lexical items into a single occurrence. The chain-formation assumed here is very close to the notion of Agree of Chomsky (2001, 2004) without the postulation of uninterpretable features though (cf. Adger & Ramchand (2005) on *Interpret Once under Agree*), and without the implication of a movement operation. The relevant structure is given in (27):

(27) [_{Loc} *na* [_C [_I *fi*]-*i*_D [_V ...]]]

The two elements *na* and the agreement *-i* jointly determine the interpretation of the subject. The availability of agreement already provides some information regarding this interpretation, which can, however, be affected by the interpretation of *na*. The latter is particularly relevant in control contexts, as we will see in the following section.

To summarize, *na* is a nominal element (Loc) which forms a chain with agreement. This is a general property of *na*-clauses interfering with the lexicalization of the subject, irrespective of whether we are dealing with a control structure or not. We consider control in the following section.

4. Control revisited

4.1. General remarks

The syntactic nature of the controlled subject in *na*-complements has been a controversial issue in the literature: is it a PRO (Terzi 1992, 1997, Iatridou 1993, Watanabe 1993, Varlokosta 1994, Landau 2004), a *pro* (Philippaki-Warburton & Catsimali 1999, Spyropoulos & Philippaki-Warburton & 2001, Philippaki-Warburton 2004) or an A-trace (Kapetangianni & Seely 2007)? Each analysis is based on different assumptions regarding the definition of ‘finiteness’ and the element responsible for the assignment of Case. If the different types of Case (nominative, null) are associated with Tense, then the availability of PRO in Greek control contexts can be possible; if, on the other hand, Case is associated with Agreement, then PRO is not possible, since agreement is always present, thus leaving *pro* as the sole expression of the controlled subject. However, if the embedded subject is *pro*, then there has to be some mechanism that ensures that although pronominal, it is bound by an argument in the matrix clause. The proponents of this analysis attribute the control reading to the lexical semantics of the matrix predicate, therefore favoring a semantic approach to control, at least with respect to languages of the MG type.

On the other hand, the issue of the empty category involved does not arise in more recent approaches where control does not depend on PRO. For example Hornstein (1999, 2003) argues that control reduces to DP-movement through a thematic position, as in (28a)

(see also O’Neil 1997), while Manzini & Roussou (2000) argue that the controller DP is directly merged in its surface position from where it attracts the two theta-roles associated with the corresponding predicates as in (28b) (in the following structures, the label ‘T’ corresponds to the I-notation that has been mainly used so far, without any significant difference):

- (28) a. [John T [_{VP} ~~John~~ tried [_{CP} [_{TP} to [_{VP} ~~John~~ win]]]]]
 b. [John T [_{VP} tried_θ [_{CP} [_{TP} to [_{VP} win_θ]]]]]

Both structures in (28) rely on the assumption that there is no EPP property associated with the non-finite embedded T. Since these structures do not postulate any empty categories of the *pro* or PRO type, they could offer an answer to the problem raised by languages like MG, as far as the nature of the controlled subject is concerned. However, this is only apparent, as the agreement that appears on the embedded verb has to be taken into consideration, especially if we adopt the idea that verbal agreement in MG is an alternative way of satisfying the EPP. Thus an analysis that crucially relies on the absence of an EPP property cannot be readily applied to MG. Moreover, we observe that a lexical subject can be present inside the control *na*-complement, as in (29) below (see Philippaki-Warbuton & Catsimali 1999, Spyropoulos 2007):

- (29) O Janis arxise na kapnizi o idhjios.
 the John started-3SG PRT smoke-3SG the same
 ‘John started (himself) smoking.’

The overt subject is possible to the extent that it appears in a postverbal position (or before *na*) and is an element compatible with a bound reading, such as the pronoun *o idhjios* (see Hornstein & Varlokosta (1993) on its distribution). Thus the obligatory presence of verbal agreement and the optionality of a (specialized) lexical subject show that the absence of EPP effects in control complements has to be properly redefined in the light of the MG data.

In the previous section we provided an account of the interaction between *na* and the lexical subject. Recall that *na* satisfies the EPP (along with inflection), although it allows for a DP subject in a peripheral position due to other interacting factors, such as verbal agreement and/or free word order. Since the EPP effect in MG at least is attributed to *na*, it follows that it is not specific to control complements. What is specific to control though is the bound interpretation that arises as far as the embedded subject is concerned. The question then is how, given the general structure in (27), we can derive control.

Bearing the above general remarks in mind, let us next turn to the implementation of control in MG, setting the scene for an account of control in English as well.

3.2. Control in MG

As already pointed out, a characteristic property of MG is that verbal agreement mediates the expression of the subject and for this reason it cannot be neglected but has to be part of the control dependency. Consider the following examples:

- (30) a. O Kostas bori [*na* fiji].
 the Kostas can-3SG PRT leave-3SG
 ‘Kostas can leave.’
 b. Ine efkolo [*na* fijis/ fiji kanis]
 is easy PRT leave-2SG /-3SG one
 ‘It is easy (for one) to leave.’

- c. O Kostas nomizi *oti* ine efkolo [*na* *fiji*]
 the Kostas think-3SG that is easy PRT leave-3SG
 ‘John think it is easy to leave.’

The sentence in (30a) is a case of obligatory control and, as we can see, the agreement features of the embedded predicate obligatorily match those of the matrix one. (30b) is the typical case of arbitrary reference, which in Greek is expressed either in the form of generic ‘you’ (2nd person singular), or with an obligatorily overt indefinite in subject position (3rd person singular agreement); as expected, in the presence of *na*, the subject *kanis* can only be postverbal (if preverbal it has to precede *na*). Finally, (30c) falls under the case of non-obligatory control and can be construed in two ways: either with coreference between the subject of *fiji* and *nomizi* (given that the features of the two predicates match), or with disjoint reference (i.e. Kostas thinks that it is easy for someone else to leave).

Let us now see how obligatory coreference (control) in (30a) is syntactically encoded. Recall that *na* is a nominal (Loc) element; the pronominal character of verbal agreement in MG makes its categorization in terms of a D feature possible (along with person and number features). The former provides a way of satisfying the EPP in a peripheral clausal position, while the latter satisfies it word-internally. Interpretation requires that the two elements form a single occurrence, under matching (chain formation). The relevant configuration for the embedded clause in (30a) is given in (31):

(31) [_{Loc} *na* [_C [_I *fij-i_D*]]]

Suppose next that this structure is embedded under a control predicate. For control to be available, *na*, as the head of the chain, has to be bound by a matrix argument (DP or the corresponding inflectional element, that is agreement for the subject or a clitic for the object). In other words, there has to be a mechanism that ensures that in this case, the *na*-complement is part of the matrix clause. This gives rise not only to identification of the subject with one of the matrix arguments, but also restricts appropriately the temporal interpretation of the embedded clause.

In order to complete our description, suppose that (31) becomes embedded under a non-control predicate. In this case no bound interpretation arises, and free reference (which includes both coreference and disjoint reference) becomes available. Finally, if (31) is not further embedded but surfaces as a matrix clause, then the reading that arises is the one which is compatible with the features provided by verbal agreement, along with the interpretation assigned to *na*. Note at this point that the internal properties of a *na*-clause remain the same in all three cases. However, the interpretation assigned differs depending on whether there is embedding or not, whether embedding involves a control predicate or not, and so on. Crucially, there are no additional abstract syntactic features involved that would distinguish one reading from the other.

Bearing the above clarifications in mind, let us now turn to the property that gives rise to control. In PRO-approaches control is attributed to PRO itself. At the same time, PRO can only occur in certain environments, so it cannot be seen independently of those. The standard assumption has been to relate control/PRO to the feature content of the embedded Tense. For Iatridou (1993) control *na*-clauses lack Tense, so Case is not available and PRO is licit despite the presence of agreement. Varlokosta (1994) refines this approach and argues that these clauses lack semantic tense. As a result of this property, the matrix and the embedded clauses form a single event (e.g. knowing or beginning or being able of an activity). This is supported by the fact that obligatory control predicates cannot tolerate any independent temporal modification, while non-control ones like *thelo* can have a partly independent

modification, provided it is posterior to the event time of the matrix predicate. In Varlokosta's analysis the two sentences are structurally distinguished, as the latter involves T-to-C movement (see also Terzi 1992, 1997), making *pro* available, while the former has no such movement and therefore it allows for (Caseless) PRO.

In order to illustrate the above pattern, consider the following examples:

- (32) a. O Kostas *kseri/ arxise* *simera* [*na odhiji* (**avrio*)].
 the Kostas know-/started-3SG today PRT drive-3SG tomorrow
 'Kostas knows today (how) to drive (*tomorrow).'
- b. O Kostas *theli* *simera* [*na odhijisi* (*avrio*)].
 the Kostas want-3SG today PRT drive-3SG tomorrow
 'Kostas wants today to drive (tomorrow).'
- c. O Kostas *prospathise* *simera* [*na fiji* (*avrio*)].
 the Kostas tried-3SG today PRT leave-3SG tomorrow
 'Kostas tried (today) to leave (tomorrow).'
- d. O Kostas *pistevi* (*simera*) [*na efije* *i* *Maria* (*xthes*)].
 the Kostas believe-3SG today PRT left-3SG the Mary yesterday
 'Kostas believes (today) that Mary must have left (yesterday).'

The matrix predicate in (32a) is a control one (*kseri, arxise*) and the only temporal modification is the one provided by the matrix clause. The predicate in (32b) is a non-control one, namely the volitional *theli*, and the embedded clause can partially bear independent verbal modification. This is also the case for the predicate *prospathise* in (32c) which, according to our classification, is not a control predicate, in the sense that it does not necessarily give rise to a bound reference of the embedded subject. Finally, the situation is different in (32d) where the matrix predicate is an epistemic one and the *na*-complement bears independent temporal modification (Veloudis 1985, Roussou 1999). This is consistent with the fact that these predicates do not exhibit control.

Landau (2004) further develops the idea of linking Tense with PRO/control, by distinguishing between anaphoric and dependent Tense. The *na*-complement in (32a) is the Control (C-) subjunctive and has anaphoric Tense, while the *na*-complement in (32b-c) is the Free (F-) subjunctive and has dependent Tense (for another implementation of this idea, see Spyropoulos (2007)). Anaphoric Tense is identified with that of the matrix clause, while dependent Tense is constrained by that of the matrix clause. The categorization in terms of features regarding the embedded C and I is as follows (Landau 2004: 840):

- (33) a. C-subjunctive: I = [-T, +Agr], C = [-T]
 b. F-subjunctive: I = [+T, +Agr], C = [+T, +Agr]

The presence of a T feature (with different values) on the embedded C ensures an Agree relation between the two heads, and further Agree with the matrix one where necessary. Given that T and PRO match in distribution, the idea is that anaphoric T goes along with PRO, while dependent T may vary, allowing for either PRO or *pro*. In the latter case, coreference and disjoint reference in (32b-c) correspond to two different configurations: PRO for the case of coreference, *pro* for disjoint reference, exactly as argued by Terzi (1992). In this system then, coreference in both C- and F-subjunctives always involves PRO, in the same way that in movement approaches coreference always involves movement (Hornstein 2003, Kayne 2002, for example). Landau's analysis then takes PRO to be the cornerstone of control. While it treats PRO like any other argument in terms of Case (thus no need for null Case), it still does so at the expense of introducing a rather complex system of features. Due

to space limitations, I will not give the details of his analysis; the reader is referred to Hornstein (2003) for a criticism of Landau's earlier (2000) analysis, and more recently Boeckx & Hornstein (2004).

Although the intuition behind the distinction between anaphoric and dependent Tense appears to be on the right track, the feature mechanism that is used to implement this idea turns out to be unnecessarily complex. By positing different abstract features on the embedded C and I heads, this analysis presupposes the interpretation that will be derived at a later stage, given that in morphological terms both C and I are alike in both cases (i.e. in C- and F-subjunctives). This approach then requires some sort of a look-ahead strategy. On the other hand, it is not so obvious how this system accounts for the subjunctive found with an epistemic predicate, as in (32d), where there is no temporal restriction, and in this respect it resembles the distribution of the indicative.

Be that as it may, the crucial criticism concerns the postulation of abstract features of the type in (33). In the present approach I have argued that *na*-clauses have the same basic derivation/representation throughout: that is *na* merges in a designated (Loc) position in the C domain and satisfies the EPP along with the D feature associated with inflection. So the interpretation of the unrealized subject is partly mediated by agreement, while its final interpretation is dependent on the interpretation of the *na*-clause. The first advantage of this approach, compared to Landau's, is that it does not resort to any 'hidden' abstract features that would distinguish the different readings prior to the embedding of the *na*-clause (or the non-embedding for that matter).¹² This in turn means that the anaphoric vs. dependent reading arises at the next derivational step (or representational link), namely the point where *na* and the matrix predicate meet (and from where *na* reaches the matrix I as well). The second advantage is that it does not require the postulation of empty categories such as PRO or *pro* and therefore it avoids the problems associated with them. Instead the 'null' subject, or more precisely the absence of a lexical subject in a given position, is linked to the presence of *na* in this particular context. This account, as already mentioned, predicts that a lexical subject may be present in some other position, the only requirement being that it be compatible with a bound interpretation in the case of a control complement, cf. *o idhijos* in (29), but not otherwise.

Let us now consider the implementation of control in this system. So far we have argued that *na* and verbal agreement form a chain (feature-matching) for the purposes of interpretation (see (31) above). Control arises when this chain extends to the matrix clause, targeting one of the matrix arguments (or their inflectional realization). As argued by Manzini & Savoia (2007), Manzini (2007) for the Albanian particle *të*, if agreement as an EPP satisfier in the I domain closes off the proposition, *na* has the effect of reopening it. In other words, *na* lacking referential content introduces a variable (and creates an open predicate). At this point, given the right context, it can get bound by another argument, as in the case of control. Adopting the main line of the proposals that link control to Tense, we have the following picture: a control predicate triggers clause-union (a single event), which gives rise to identification of the variable introduced by *na* to with an argument in the matrix clause, through binding. In other words, event composition leads to composition of argument structure as well. If this is correct, the temporal restrictions attested are also secondary. The relevant structure is given below:

(34) (O Kostas_D) bor-i_D na_{Loc} fij-i_D

¹² The same criticism applies to the analysis of Kapetangianni & Seely (2007) according to which control complements have a defective I. Defectiveness is determined syntactically through the absence of abstract features, although morphologically they seem to be present.

kanis. The former case is also straightforward: we have the usual chain between *na* and verbal agreement. Given that 2nd person can be interpreted either specifically (the present hearer), or generically (the hearer in general), both readings arise within the *na*-clause, and ambiguity resolution is subject to discourse conditions. Embedding of the *na*-clause under a predicate like *efkolo* (i.e. *ine efkolo na...*) maintains this ambiguity, as expected. If the matrix clause is interpreted generically, then the generic reading is selected; if not, then the specific reading is selected. (36b) differs as the most embedded predicate is in 3rd person. Again the interpretation of the most embedded subject can vary, depending on whether a generic (for one to leave) or a specific (*o Kostas*, or some other specific *x*) (temporal) interpretation is at stake (see Manzini & Roussou 2000).

To summarize, in the present section I have considered control in MG. The two interacting factors concern the internal structure of *na*-clauses and the lexical properties of the matrix predicate. The bound reading associated with control arises in those contexts where the matrix and the embedded clause are interpreted as a single event; this kind of clause-union makes the embedded predicate (along with its event and temporal structure) dependent on the matrix one for its interpretation. Having considered control in MG, we next turn to how this analysis can extend to English.

5. Control in *to*-infinitives

5.1 *The properties of the infinitival marker to*

The aim of this section is to show the similarities between the two morphemes *na* and *to*, and consider the implications for control. The standard assumption is that *to* is an infinitival marker and as such it is the realization of non-finite I (Chomsky 1977, Pullum 1982). Note, on the other hand, that the distribution of *to* is quite similar to that of *na*: it introduces complement clauses, as in (37a), it appears in matrix clauses (optatives), as in (37b), and it obligatorily follows an overt subject, as in (37c-d) (with or without *for*) vs. (37e):

- (37) a. I forgot *to* lock the door.
 b. *To* be in Paris!
 c. I want him *to* leave.
 d. I arranged for him *to* leave.
 e. *I want *to* Peter leave.

The overt subject in (37c-d) bears accusative case due to the presence of *for* or *want* accordingly. The situation is different in MG, where the embedded subject appears in the nominative and has a freer distribution. In English, on the other hand, word order is fixed, a property which relates to the non pro-drop character of the language along with the absence of morphological case. A further difference has to do with verbal morphology: while the verb in *na*-clauses fully inflects, the verb in *to*-clauses does not inflect, but appears in its stem form. Finally, while only negation and clitics may appear between *na* and V, in English we can find, apart from negation, adverbs (“to completely abandon the case”), but crucially for our purposes no lexical subject.¹⁴

Suppose then that on the basis of its distribution, *to* is very much like *na*. In other words, *to* is also part of the lower C-system (see Roberts & Roussou 2003: Chapter 3). The treatment of *to* as a C-type element is not novel. For example, Rosenbaum (1967: 25) calls *to* a complementizer; Lencho (1992) offers empirical arguments in favor of its C status; Kayne (2000: 297ff) points in this direction based on the similarities between *to* and the Romance

¹⁴ According to Roberts & Roussou (2003) this difference between Greek and English may follow from the fact that V raises to I in Greek but not in English.

prepositional complementizers *de/di*. The next question is whether *to*, like *na*, can also be associated with a designated nominal position and also interact with the EPP. Regarding the latter, it is well known that a lexical subject is excluded in *to*-clauses, unless *for* or an ECM verb is present, as shown in (37c-e) above.

As far as its nominal character is concerned, note that *to* has other uses which categorize it as a preposition, and more precisely a locative one, as in (38a). *To* may also be used to introduce an indirect object, as in (38b):

- (38) a. (I'm going) [_P to [_D the market]].
 b. I gave the book [_P to [_D the student]].
 c. I gave the student the book. (Dative shift)

The *to*-complement in (38b) can alternate with the dative shift construction in (38c). The latter has a more restricted distribution as opposed to the *to*-complement. The presence of *to* in 'datives' is not independent of its locative character, since in both cases we have some notion of location implicated (transfer of possession in datives). On the basis of the above examples we can assume that *to* has a nominal property. Regarding its presence in clausal complementation, Christidis (1985, 1990), based on observations by Bolinger (1975), argues that the two instances of *to* (preposition, infinitival) are actually related and reduce to the same element 'TO', whose basic property is linked to locality (motion towards). Bearing in mind our discussion about *na*, we can link the two uses of *to* under the Loc property.¹⁵ The two instances of *to* are also diachronically supported. Los (1999) argues that the preposition *to* was a substitute for the nominal inflection of the infinitive it introduced, which became obsolete. At the same time, *to*-clauses also replaced some subjunctive ones. Note at this point that this development parallels that of *na*-clauses, which although typically associated with subjunctive mood also replaced infinitival complements after certain predicates (Joseph 1983).

On these grounds, we can also associate *to* with the C domain, arguing that *to* is not in a C head, but projects its own position above C, as in the structure below:

- (39) [_{Loc} to [_C [_I [_V leave]]]]

As in the case of *na*, C can be construed as both M and Op. However, it may be possible that *to* is only associated with M (the lower C), as it has a more restricted distribution in matrix contexts as opposed to *na*. We leave this issue open for the time being, since it requires a more detailed discussion of *to*, which is beyond the scope of the present paper. It is worth pointing out though that within this framework of assumptions, the MG subjunctive (and the Balkan in general) and the English infinitive are more alike than previously thought. Strictly speaking, in morphosyntactic terms the MG *na*-clause is not a subjunctive in the same way that the English *to*-clause is not an infinitive. What these two have in common is the use of a nominal element in the C domain; where they differ is in the use of an inflected (MG) vs. an uninflected (English) verbal form. As we will see below, this parametric difference can account for the wider distribution of control in English.

The structure in (39) correctly predicts the unavailability of a lexical subject between *to* and the verb, i.e. **to John leave*. The element *to* is a locative subject which satisfies the EPP. The advantage of this analysis is that it can account for the absence of an EPP position in *to*-clauses that had to be somehow stipulated in earlier analyses (Castillo, Drury & Grohmann 1999, Manzini & Roussou 2000, Hornstein 2003, Epstein & Seely 2006). In terms of the

¹⁵ See Kayne (2000) for a recent discussion on the similarities between P, C, and D.

present approach, the absence of an EPP effect associated with I follows from the lexicalization parameter that relates to *to*. We deal with the interpretation of the unrealized null subject in the following section.¹⁶

5.2. Control in *to*-complements

As already pointed out, *to*-clauses distribute very much like *na*-clauses. One basic difference between the two has to do with the absence of inflection on the embedded predicate inside the *to*-clause, while in MG the verb always carries inflection. With respect to the interpretation of the unrealised subject in the case of MG, it was argued that *na* and inflection (D) are interpreted as a single element under the chain-formation. Since in English there is no inflection associated with the predicate, thus no D, there is no relevant chain formed. In other words, *to* is the sole EPP satisfier in this case. In this respect, *to* directly associates with the predicate, and more precisely with its thematic slot, without the mediation of inflection. Since *to* lacks referential content and is not referentially restricted by any element within its own clause as in the case of *na*, we expect that it will associate with a matrix argument more easily, as opposed to *na*.

Let us see how this matching with a matrix argument takes place. Recall that Landau (2004) distinguishes between C- and F-subjunctives: the former exhibit obligatory control, while the latter allow for free reference (or for two different derivations/representations in his terms). Presumably the absence of a finite verbal form makes the extension of this distinction unavailable in English. At the same time, Landau (2000, 2004) argues that not all infinitival complements behave alike with respect to control (see also Wurmbrand 2001: Chapter 4). More precisely, he distinguishes between Exhaustive (EC) and Partial Control (PC) complements. In EC the reference of the embedded subject is exhausted by that of a matrix argument (the controller), while in PC its reference is included in that of a matrix argument, as illustrated in (41) (Landau 2004: 833-834):

- (41) We thought that...
- a. The chair preferred to gather at 6.
 - b. Mary wondered whether to apply together for the grant.
 - c. *John managed to gather at 6.
 - d. *Mary is able to apply together for the grant.

The examples in (41a-b) are instances of partial control, triggered by the predicates *prefer* and *wonder*. The predicates *manage* and *be able* in (41c-d) exhibit exhaustive control and are therefore incompatible in this context (indicated by predicates like *gather*, or modifiers like *together*).

According to Landau's analysis, modals, aspectuals and implicatives (e.g. *dare*, *manage*, *forget*, *force*) give rise to EC. On the other hand, desideratives (e.g. *want*, *prefer*, *decide*), interrogatives (*wonder*, *ask*), factives, and propositionals (e.g. *say*, *declare*, *imagine*) yield PC. Notice that modals and aspectuals behave in the same way as in MG: they trigger obligatory (and exhaustive) control. Implicatives include the predicates that we have identified as future-referring and which form a class whose members behave more liberally in MG. Desideratives include volitionals, which are also not control predicates in MG. The latter holds for the class of propositionals as well, which includes verbs of saying or epistemics that again do not give rise to control. Despite the different classifications used by Landau, certain similarities can indeed be found between *na*- and *to*-complements as far as obligatory (exhaustive) control is concerned. Furthermore, EC goes along with anaphoric

¹⁶ For a discussion regarding the incompatibility of *to* with *that* and *if*, see Roussou (2007).

Tense (as in C-subjunctives), while PC goes with dependent Tense (as in F-subjunctives), as in (42) below:

- (42) a. *Yesterday, John was able/managed to solve the problem tomorrow.
 b. Yesterday, John wondered how/hoped to solve the problem tomorrow.

Thus in spite of apparent differences, the picture that emerges is more or less the same (allowing for some variation in terms of some in-between predicates regarding control).

The absence of inflection in English has an effect on the expression of disjoint reference as well. Recall that in MG, disjoint reference is directly expressed by verbal agreement. In English, on the other hand, this is possible to the extent that some other element is present; this is the case of the so-called prepositional complementizer *for*:

- (43) a. John arranged for Mary to leave.
 b. Peter was able (*for Mary) to leave.

The future-referring predicate *prefer* allows for an overt subject, which is licensed by *for* and is realized above *to*. The modal *was able*, on the other hand, does not allow for this option given that it triggers EC. Note that a verb like *try*, may also allow for disjoint reference, although coreference is always favored, in a way similar to MG (examples from Jackendoff & Culicover 2001):

- (44) a. John tried (very hard) (for his kids) to have a better life.
 b. Arlene begged Sue (for Charlie) to leave.

The data in (44) show that there is a varied degree of acceptability regarding the option of disjoint reference within the relevant class of predicates. For Jackendoff & Culicover (2001) and Culicover & Jackendoff (2006), whether control is obligatory or not has to do with the option of selecting different types of complement clauses, subject of course to the semantic properties of the matrix predicate. This part of their analysis is shared by the present proposal as well. However, while control has a semantic component, the idea put forward is that syntax also plays a role in terms of how the EPP is satisfied.

Consider next the realization of the DP subject in the *for to*-clauses. If *to* is C domain, the DP subject in (43a) (and (44)) will have to be in the C domain as well, in a position above *to* (Loc). Let us assume, for the sake of the discussion, that *for* occupies a higher position (perhaps this is a position above the Op head), as in (45) below:

- (45) [John_D prefers [*for* [Mary_D [to_{Loc} [leave]]]]]]

The presence of a D(P) above *to* extends the EPP chain headed by *to*, so that the DP is also included. As a result of this relation, the reference of the variable provided by *to* becomes identified with that of the DP, and therefore the DP *Mary* is interpreted as the embedded subject. The embedded clause is a complete proposition at this point and is then embedded under *for*, making control unavailable, in the sense that the EPP variable of *to* cannot any longer be identified with a matrix argument. In this respect *for* behaves like an obviator.¹⁷

Suppose instead that *for* is not present, as in (46) below:

¹⁷ This discussion naturally raises questions about Exceptional Case Marking (ECM), but we leave this issue aside.

- (46) a. John dared/was able to leave.
 b. John arranged to leave.

The matrix predicates belong to two difference classes: *dare* gives rise to exhaustive control, while *arrange* to partial control, with the additional option of obviation when *for* is present. According to what we have said so far regarding control predicates in MG, *dared/was able* should give rise to clause-union, so that both the matrix and the embedded clause are interpreted as parts of a single event. No such effect should pertain in (46b) though, given that partial control or disjoint reference may arise. However, as it stands the construction in (46b) can only converge with coreference. The other two readings can only arise if there is something else present in the structure, such as a collective predicate (*gather*), or *for*. In MG, on the other hand, disjoint reference in the equivalent of (46b) is always available, without requiring anything additional in the embedded clause:

- (47) O Kostas kanonise *na* fiji.
 the Kostas arranged-3SG PRT leave-3SG
 ‘Kostas arranged (for himself or someone else) to leave.’

The obvious question then is what is responsible for this parametric difference. It is at this point that the presence of agreement in the *na*-clause and its absence in the *to*-clause accordingly plays a crucial role. To be more precise, disjoint reference in MG is always an option, unless there is something in the structure that would force coreference, as in the case of *na*-clauses embedded under a control predicate, which in turn gives rise to clause-union; in this case coreference is the result of a bound interpretation. In English, on the other hand, in the absence of any mediating agreement, coreference appears to be the only option, unless there is something else in the structure that brings in disjoint reference or partial coreference. Incidentally, as we will see below, this is reminiscent of the effect morphological subjunctive has on volitional complements in Romance: subjunctive forces obviation, while infinitival morphology forces control.

Going back to the example in (46b) then, we observe that in the absence of any other mediating element that would assign reference to the variable provided by *to*, the latter becomes identified with the first available DP in the matrix clause. This allows us to maintain the difference between exhaustive and partial control, as in the former case, clause-union in the sense defined in the present paper is as at stake, while this is not so in the latter. The outcome may look the same but is due to different reasons. As in the case of *na*-complements, we maintain the same status for the *to*-clause (i.e. *to* is a kind of a locative subject), attributing the different interpretations, not to the presence of abstract features relating to Tense and Agreement (cf. Landau 2004), but to the properties of the embedding predicate. If no embedding is available, the *to*-clause converges with a modal interpretation, as in matrix clauses (cf. (37b) above).

The preceding discussion shows that an alternative approach to control may indeed be available. Taking MG as our starting case has allowed us to view control in English as well from a new perspective, by paying particular attention to the properties of *to*. In this context, the postulation of PRO, with the extra technical assumptions it introduces, such as null Case (see Chomsky & Lasnik 1993, Martin 2001, among others) or a feature-matching calculus (Landau 2000, 2004), does not arise. The absence of a subject position related to I in *to*-clauses is derived independently from the lexicalization (feature content) of *to*. Finiteness, in the sense of verbal inflection for tense and agreement, seems to play a role with respect to the interpretation assigned to the unrealised embedded subject, as it makes more options available in MG, as opposed to English. Finally, within this system, we have a way to unify,

to the extent that this is possible, clausal complements which look quite different, such as *na*- and *to*-clauses in MG and English respectively. They are both introduced by a nominal element of some sort that plays the role of an EPP satisfier.

Before we conclude our discussion, it is worth saying a few words with respect to the absence of obviation effects in *na*-complements of volitionals. According to the analysis presented in this paper, volitionals do not give rise to clause-union, and therefore free reference is available (*contra* Terzi 1992, Landau 2004). On the other hand, volitionals in Romance trigger obviation when the *que*-complement is in the subjunctive. The relevant French examples are repeated below:

- (48) a. *Je veux *que* je parte
 I want-1SG that I leave-SUBJ-1SG
 b. Je veux partir.
 I want-1SG leave-INF
 'I want to go.'

The different effect that volitionals have in the two grammars can be attributed to two interacting factors: first, that MG, unlike Romance has no morphological subjunctive, but makes use of a particle. Furthermore, this difference is encoded in the C-system in MG, but in the I-system in Romance. Note that the complementizer *que* is not sensitive to the indicative vs. subjunctive mood.¹⁸ Second, an infinitival complement is available, as in (48b), and if what we mentioned above with respect to English *to*-infinitives somehow extends to the Romance ones (although here there is no particle, but specialized infinitival morphology), then the context for control is independently available (for a competition approach between Romance infinitives and subjunctives, see Farkas 1992, Schlenker 2005).

On the basis of the above, we can offer the following tentative account: suppose that volitionals in Romance fall in the class of restructuring verbs, at least when complemented by an infinitive (Rizzi 1982). As such they trigger clause-union, and control becomes available when the complement is an infinitive. In present terms, the infinitival ending is also nominal, but unlike finite inflection it lacks specification for person and number. In this respect although part of the inflectional system, it seems to share properties with elements such as *na* and *to*, in the sense that it lacks (or has impoverished) referential content. To put it differently, it's more like an uninflected subject clitic. In this respect, its content becomes identified with that of a matrix argument. On the other hand, when the complement is a finite clause headed by *que*, we have an effect similar to *for-to* complements in English. As already mentioned, the complementizer *que* is indifferent to mood selection; however, subjunctive inflection on the embedded verb can account for the modal reading associated with the matrix (volitional) predicate. Unlike the particle *na*, the complementizer *que* does not interfere with the lexicalization of the EPP. Since the embedded inflection cannot form a chain with one of

¹⁸ An anonymous reviewer points out that for Giorgi & Pianesi (2004) *che* in Italian subjunctive clauses (and by extension French *que*) has an abstract feature for mood. In this respect it can be taken to share some property with MG *na*. This would mean that there are two different lexical entries for *che*, or that the same item can optionally bear an additional abstract feature, which in this case would have to be contextually determined. I would like to maintain the idea that *che* has the same properties irrespectively of morphological mood in the I-system. This is compatible with the idea of economy in the lexicon and also restricts the rather arbitrary assignment of features solely for computational purposes. On the empirical side, it allows us to account for the attested differences between the Balkan and Romance languages as the result of lexicalization parameters of the same set of properties.

the matrix arguments (or their inflectional counterparts), the only option is for the embedded subject to acquire a disjoint reading. In other words, *que*, unlike *to* and *na*, does not mediate for the purposes of a bound interpretation.

As pointed out by Ruwet (1984), the obviation effect is uplifted once certain other conditions hold. For example, the less agentive the embedded subject, the more available coreference becomes, as in (49):

- (49) Je veux *que* je puisse partir.
I want-1SG that I can-SUBJ-1SG leave-INF
“I want to be able to leave.”

The presence of a modal in the embedded clause has the effect of allowing for coreference more readily. This is slightly reminiscent of the examples with *thimame* in Greek (16), where coreference may be forced or not depending on how the inflectional properties of the matrix and embedded clause interact with each other. In the case of MG *thimame*, negation along with present tense in the matrix clause brings in an epistemic reading, followed by free reference as far as the embedded subject is concerned, and thus removing the conditions for control.

To summarize: in this section I have considered the distribution of *to*-complements and their similarities with *na*. It was argued that both elements have a nominal feature which subsumes the lexicalization of the EPP. Control arises in those contexts where clause-union is at stake, more or less along the lines of Landau’s (2004) distinction between C-subjunctives and EC infinitives (vs. F-subjunctives and PC infinitives). It was further shown that control has a wider distribution in English, as opposed to MG; this was attributed to the fact that the presence of agreement on the embedded predicate in MG always makes free/disjoint reference available, unless the *na*-clause is embedded under a control predicate. In English, on the other hand, the absence of agreement always favors control, unless some other element (such as *for*) intervenes. It was also shown that in accordance with other analyses, control is a phenomenon that is not sensitive to the +/-finite distinction, but can be sensitive to properties of the C domain. In present terms, control in both MG and English passes through an element in the C domain.

6. Conclusion

The aim of this paper has been twofold: first, to consider the properties of the particle *na* and second, to discuss the role it plays in control phenomena. Following the idea that *na* is a morpheme situated in the left periphery, it was argued that it is a nominal element that interacts with the EPP. More precisely, it behaves like a locative subject and forms a chain with the inflection (agreement) realized on the embedded verb. A similar argument was made for English *to* with the difference that it is the sole EPP satisfier in the absence of verbal inflection. When the *na*-clause is embedded under a control predicate, clause-union takes place forcing an extension of the chain headed by *na* to include the first available matrix argument. Event unification then also leads to argument structure composition. In all other case, the reference of the embedded subject is determined by the embedded inflection. In English, on the other hand, the identification of the variable provided by *to* with a matrix argument is more pervasive, given that there is no inflection in the embedded clause. Disjoint reference is possible to the extent that some other element, such as *for*, becomes available. The present discussion has shown that although *na*- and *to*-clauses have been standardly treated as different species, under the names of ‘subjunctive’ and ‘infinitive’, they turn out to be much more alike once we consider their properties from a novel perspective.

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