

# *Polarity Items in Modern Greek: their distribution and interpretation\**

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## 1 Introduction

The aim of this paper is to provide an account of the properties of Polarity Items in Modern Greek (MG) in terms of the syntactic contexts they occur in as well as in terms of their contribution to the logical/semantic interpretation of these contexts. To this end, we present an account of negation in the language which is largely based on the claim that the syntactic realisation of negation is not exclusively associated with the presence of a functional NEG head. We suggest that the possibility of distinct structural properties of negative elements is closely related to differences in the inflectional properties of the clause as well as inherent syntactic features on functional heads, e.g. Complementisers. We distinguish between two types of PIs in terms of licensing requirements and interpretation possibilities. Finally, we discuss the interaction between *wh*- and focus-operators and PIs in terms of the syntactic and semantic consequences it gives rise to. In this respect, we introduce the notion of temporal specificity as a combination of aspectual and tense properties. We argue that the difference between temporally specific and non-specific contexts interacts with the logical interpretation of Existential Polarity Items (EPIs) with regard to the notion of presupposition.

## 2 Some preliminary remarks on Tense and Negation

In Modern Greek (MG) there are three negative elements: *dhen*, *min* and *ohi*. To a first approximation, their distribution is as follows: *ohi* is the anaphoric negator and is also used in cases of contrastive focussing of a constituent (cf. (1a&b)).

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*Dhen* appears with indicative clauses, as in (2a), and *min* appears with non-indicative ones, as in (2b):

- (1) a. Dhiavasa ohi ta vivlia alla ta periodhika.  
read-1s no the-acc books but the magazines  
"I read not the books but the magazines."
- b. Iksera ohi oti ton-antipathun alla...  
knew-1s no that him-dislike-3p but...  
"I knew not that they disliked him, but..."
- (2) a. Dhen tha figho.  
not will leave-1s  
"I will not go"
- b. Na min fighis.  
sub. not leave-2s  
"You shouldn't go/Don't go."
- c. Efhome na mi fighi.  
hope-1s sub. not leave-3s  
"I hope that he will not leave."

As the anaphoric negator does not appear to interact with inflection, being a constituent negator, we will concentrate on the differences between the other two negators which encode sentence negation.

With regard to the examples in (2a-c) it could be argued that any difference in the distribution of *dhen* and *min* could be interpreted as a difference associated with the +/-deictic tense properties of the clause. This suggestion indicates an underlying correlation between +/-deictic tense and the presence vs absence of the particle *na*. This correlation seems plausible for a number of reasons. First, *na* appears in non-indicative clauses while indicative mood never involves the use of this particle. Secondly, indicative mood is a prerequisite for the availability of deictic tense specification. In other words, subjunctive and imperative clauses cannot denote deictic Tense. It could thus be argued that the negator *dhen* occurs in clauses specified for deictic tense features while *mi* occurs in clauses which are specified for non-deictic tense.

However, this assumption is problematic because it suggests a one-to-one correspondence between tense specification and the negator used. As shown by the examples in (3), the negator *dhen* can appear in clauses where tense is non-deictic:

- (3) a. An dhen efavghe noris, tha evlepe ton Yani.  
if not leave-imperf. early will see-imperf. the Yani  
"If he didn't leave early, he would see Yani."
- b. Dhen tha pighena pote s'afto to meros.  
not will go-imperf. ever to this the place  
"I would never go to this place."

Negative conditionals, as in (3a), and negatives in which the verbal complex is formed by the future particle + the imperfect (equivalent to the Romance *conditionnel*), as in (3b), involve the use of the negator *dhen*.

As for the properties of the particle *na* and its correlation with [-deictic] tense features, it appears that, to a large extent, this correlation is correct. In embedded *na*-clauses the verbal complex is marked for Aspect, perfective or imperfective, and Agreement whereas there is no morphological Tense:

- (4) Apofasisa na min-o/ men-o/\*e-min-a (sto palio mu spiti)  
decided-1s sub. stay-perf-1s/ stay-imp-1s/ past-stay-1s  
"I decided to stay in my old house."

In constructions such as the one in (4), the embedded clause has a status similar to that of an infinitival clause with regard to its Tense-dependent properties<sup>1</sup>. However, there are a few cases of *na*-clauses which appear to fall outside the correlation with [-deictic] tense. In examples such as the ones in (5) and (6), the verb in the embedded *na*-clause can be morphologically marked for Tense:

- (5) Apokiete na efighe (xtes/\*tin proighumeni mera).  
is-impossible sub. left-3s (yesterday/\*the previous day)  
"It is impossible that he left yesterday/the day before."
- (6) Bori/Prepi na efighe (xtes/\*tin proighumeni mera).  
may/must sub. left-3s (yesterday/the previous day)  
"He may/must have left yesterday/the previous day."

In (5) and (6) the embedded verb bears deictic tense specification. That there is deixis in the *na*-clause becomes clear in view of the possibility of occurrence of a deictic adverbial, namely 'yesterday', and the impossibility of occurrence of an

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<sup>1</sup>MG has no uninflected infinitives, i.e. agreement and aspect are always part of the verbal morphology.

anchored adverbial, namely 'the previous day' where the latter is intended to mean 'yesterday' (Smith (1978))<sup>2</sup>. Note that the possibility of deictic tense specification within a *na*-clause is restricted to a class of verbs which have the following two properties: first, they are 'impersonal', i.e. the subject is a null expletive and secondly, they cannot bear [+past] tense morphology. We suggest that these properties indicate a structural difference between embedded *na*-clauses which fail to bear Tense features (cf. (4)), and the ones in (5) and (6): in (4), the *na*-clause is a complement of the verb while in (5) and (6), there is a single clause which includes an expletive-argument chain. Thus, the *na*-clause is the external argument coindexed with an expletive *pro* in subject position. Given that the well-formedness of the proposition presupposes Tense specification and that the matrix verb cannot be Tense-marked, the [+deictic] features on the embedded verb are accounted for. Nevertheless, these examples constitute counterevidence to the suggestion that verbs in *na*-clauses are necessarily incompatible with deictic tense specification.

Note moreover, that there are cases in which the verbal morphology can either be that associated with indicative clauses or with that of the non-indicatives. The relevant examples come from conditionals in which the verbal form can be specified for (perfective) aspect and agreement but not tense<sup>3</sup>:

- (7) a. An (dhen) efighe ...  
if left-3s  
"If he left ..."
- b. An (dhen/\*mi) fighi ...  
if leave-perf-3s  
"If he leaves ..."

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<sup>2</sup>Anchored adverbials are assumed to be linked to previously established Reference Time while deictic adverbials are linked to Speech Time. The latter is what is usually referred to as deictic tense.

<sup>3</sup>Any verbal form consisting of the root in perfective Aspect and Agreement only is ungrammatical in indicative clauses unless it is preceded by the future marker *tha* :

- (i) a. \*figh-o / tha figho  
leave-perf.-1s / will leave-perf.-1s  
"I will leave."
- b. fevgh-o  
leave-imp.-1s  
"I am leaving/I leave."

(7b) is problematic due to the superficial similarity of the verbal morphology with that used in subjunctives and imperatives and the unexpected choice of the negator used: the negator used in conditionals is *dhen* while in subjunctives and imperatives the negator used is *mi* (cf. (2b&c)). The crucial difference between subjunctives and conditionals, however, is the presence vs absence of the mood marker *na* respectively. In Tsimpli & Roussou (1992) it is argued that the syntactic realisation of the negator *mi* is crucially dependent on this mood marker.

On the basis of the discussion above, we can conclude that the correlation between the negator used and the inflectional properties of the clause does not refer to the [+/-deictic] tense distinction. Instead, we claim that there is a one-to-one correspondence between [+/-indicative] mood and the negators *dhen* and *mi* respectively.

An additional point that needs clarification regards the notion of modality and its interaction with mood. Note that, as the English gloss in (2b) indicates, the interpretation of a matrix *na*-clause is necessarily modal. In the case of (2b) the modality encoded is deontic, as is usually the case with utterances with imperative force. The other context in which a *na*-clause can occur is in matrix interrogatives, as shown in (8a&b)<sup>4</sup>:

- (8) a. Na figho?  
sub. leave-1s  
"Should/May/Must/Can I leave?"
- b. Se pjon na miliso?  
to whom sub. speak-1s  
"To whom should/must/can I speak?"

It appears that all matrix *na*-clauses have a strong modal reading. Note, however, that this is not the case in embedded contexts (see also (4)):

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<sup>4</sup>Matrix interrogatives introduced by the mood marker *na* can also be specified for Tense:

- (i) a. Na efighe?  
sub. left-3s  
"Could it be that he has left?"
- b. Se pjon na milise?  
to whom sub. talked-3s  
"To whom could it be that he talked?"

We assume that in these cases there is interaction between modality and Tense marking as illustrated by the English gloss. In the absence of overt tense morphology (see (8a&b)), the default interpretation encodes futurity as well as the modal reading.

- (9) Zitisa/thelo/elpizo na figho.  
 asked/want/hope-1s sub. leave-1s  
 "I asked/want/hope to leave."

In (9) the embedded clause does not carry any independent modality other than that encoded by the matrix verb. We will thus assume that *na* is a Mood marker which is used in non-indicative clauses and has no inherent modality<sup>5</sup>.

An additional difference between the two negators is shown in their respective positions in (1a&b). Specifically, the negator *dhen* appears as the most peripheral element (before the particle *tha*) in the verbal complex, while *min* appears following the mood particle *na*. For reasons that have to do mainly with the nature of SpecMoodP and the subject position in MG clause structure, we will maintain that, unlike *tha*, *na* is the head of a MoodP.

In Tsimpli and Roussou (1992) we argued that the negators *dhen* and *min* have a different syntactic realisation in the clause structure. In particular, we claim that *dhen* is the head of a NEGP, as has been proposed for negation in a number of other languages (Ouhalla (1990), Zanuttini (1990) among others), while *mi* is the realisation of a negative feature on the functional head Mood. The relevant structures are illustrated in (5) and (6) below for *dhen* and *mi* respectively:

- (10)
- ```

      NEGP
     /  \
  Spec   NEG'
  |      /  \
  Op    NEG  TP ...
       |
      dhen
  
```
- (11)
- ```

      MoodP
     /  \
  Spec   Mood'
  |      /  \
  Mood{,/-neg} TP ...
  |
  na {mi/-0}
  
```

<sup>5</sup>The structural position and the categorial status of *na* are controversial issues (see Agouraki (1990) for a good review of the literature). In particular, it has been argued by Philippaki-Warbuton and Veloudis (1984), Rivero (1987) among others, that *na* is the head of a MoodP. It has also been argued that *na* occupies the same position as *tha*, the modal particle which is also a future tense marker, namely T (Rivero (1992)). Finally, *na*, according to Agouraki (1990), is a Complementiser that selects a +Tense-dependent clause.

In (10) there is a negative Operator in SpecNEGP. The content of this null operator is identified under spec-head agreement with the negative head (Ouhalla (1990), Haegeman & Zanuttini (1991)). As shown in (11), on the other hand, it is the head Mood that is associated with a binary feature specification for negative features. In affirmative *na*-clauses the feature is morphologically null while in negative ones it is realised as *mi*. Notice crucially that in (11) there is no negative operator involved, as this operator would fail to be identified under spec-head agreement; the head in this case is Mood and not NEG.

The necessity for adopting two different representations for the negative elements *dhen* and *mi* becomes evident in the light of extraction phenomena. Consider the following examples:

- (12) a. \*Pos<sub>i</sub> dhen espase ta avgha t<sub>i</sub>?  
           how not broke-3s the eggs  
           "\*How didn't he break the eggs?"
- b. Pos<sub>i</sub> na mi spaso ta avgha t<sub>i</sub>?  
           how sub. not break-1s the eggs  
           "?How shouldn't I break the eggs?"

The unavailability of adjunct extraction in (12a) where the negator chosen is *dhen* is accounted for in terms of a Relativized Minimality violation (Rizzi (1990)): the presence of the null Operator in SpecNEGP blocks antecedent government and an ECP violation arises. However, as the example in (12b) shows, adjunct extraction is allowed when the negator is *mi*. The grammaticality of (12b) is well accommodated under the schema in (11): the lack of a NEGP projection in *na*-clauses and, consequently, the absence of a negative operator allow adjunct movement to take place, so that no ECP violation arises.

The representation in (11) has additional implications for the attested difference in the surface order between the two negators (see (1a&b)). Assuming that the structure of negative indicative clauses is as in (10) the position of *dhen* in a position peripheral to the verbal complex follows. The Neg+T+V order is derived by verb raising to T and Neg successively. In *na*-negatives on the other hand, the *na*+Neg+V order can be derived by verb raising to Tense and Mood where the modal and the negative morphemes coexist. Thus the surface difference in the position of Negation in the two cases is reduced to more fundamental

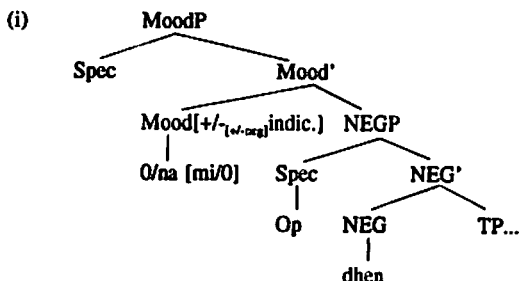
differences in clause structure, namely the mutual exclusiveness of the NEGP and MoodP projections<sup>6</sup>.

One of the implications of the present analysis is that the two possibilities in the syntactic realisation of negation, namely as a head or as a feature on another functional head can both exist in the same language<sup>7</sup>. The crucial point is that, irrespective of its syntactic status, negation is expected to have certain syntactic effects in the sentence; for example, the occurrence of NPIs, i.e. polarity items with the scope of a universal negative quantifier, indicate the presence of negation in the clause.

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<sup>6</sup>We have assumed that, in the absence of any morphological evidence, there is no MoodP in indicative clauses. However, it could be argued that MoodP is available in these cases as well, specified as [+indicative], with zero morphological content (Philippaki-Warbuton (1993)). This assumption does not raise any problems for the analysis suggested here: we would have to assume that the Mood category includes an additional specification for the feature [+/-indicative] and that the binary specification for positive and negative features is available only when Mood is [-indicative].

Presumably, additional assumptions will have to be made with regard to the presence of a NEGP in case Mood is [+indicative]. If a negative element needs to be selected in all cases, then a structure where MoodP is higher than NEGP will give the right results:



However, this alternative gives rise to another possibility where *dhen* is also the realisation of a negative feature on an inflectional head, e.g. Tense, in which case the NEGP projection is never available (Manzini, p.c.). This alternative would require the stipulation that the Spec position of this inflectional projection, can, only in some negative clauses, host an Operator responsible for restricting adjunct movement in the examples discussed. In the absence of any independent justification for this alternative, we consider the distinct structural realisation of the two negators a tenable hypothesis.

<sup>7</sup>A similar analysis for the feature-like realisation of negation on a functional head has been proposed by Laka (1990) for Basque, Ouhalla (1992) for Arabic and Brody (1990) for the element *csak* in Hungarian.



Having outlined briefly the analysis we adopt with regard to the realisation of the negative elements *dhen* and *mi* in MG, we will next turn to the case of Polarity items. We will first discuss the conditions that regulate their distribution and then the interpretations they give rise to according to the syntactic contexts in which they occur.

### 3 The distribution of PIs

In the present section we discuss the presence of negation on other functional heads, such as complementisers, and the consequences it has for the licensing of Negative Polarity Items (NPIs). We will then formulate an account of the conditions that license NPIs. Consider the following examples:

(13) He left without eating anything.

- (14) a. He denied that<sub>(N)</sub> anybody left.  
b. \*He denied anything.

Laka (1990) argues that the licensing of the NPI in (14a) is due to the (abstract) negative feature of the Complementiser, in the sense that negative information is carried by C. If it were a property of the negative verb then (14b) would also be grammatical.

In MG, verbs that convey a negative reading fail to license PIs:

- (15) a. \**Arnithike oti dhiavase TIPOTA.*  
denied-3s that read-3s anything  
"He denied that he read anything."  
b. \**Arnithike oti sinevi TIPOTA.*  
denied-3s that happened anything  
"He denied that anything happened."

If Laka's suggestion that it is the negative C that licenses the PI is correct, the ungrammaticality of the MG sentences in (15) remains unaccounted for. We suggest that the difference between (14a) and (15) can be reduced to distinct parameterised properties of the C head: the complementiser *oti* cannot be associated with negative features, while its English counterpart can. The consequences of this parametric difference are syntactically evident in the case of NPIs, as the above examples indicate. The implication of our suggestion is that licensing of NPIs is

exclusively associated with negative features on functional heads. Consequently, the negative information of verbs like *deny* is semantically encoded, yet not realised in terms of c-selectional properties. In other words if the difference between English and MG is the parametric one we suggested above, Laka's claim that there is selection of C by V becomes unnecessary.

We can derive the semantic compatibility of a negative verb with a clause encoding negative features in terms of s-selection, with the crucial implication that we do not expect a one-to-one correspondence between the negative information on a lexical head and its realisation as a syntactic feature on a functional head, in this case C. This is obvious in the MG and English examples involving negative verbs.

Independent evidence for this assumption comes from factivity. Sentences like (16) below, have a factive interpretation in both English and MG which is encoded in the semantics of the verb *regret*:

- (16) *Metaniosa pu efigha.*  
 regretted-1s that left-1s  
 "I regretted *that* I left."

Notice that, in MG, the complementiser used to introduce the complement clause is *pu* and not *oti*. The assumption is that *pu* is specified for the feature [+definite] (Christidis (1986), Roussou (1992)). The presence of this feature has certain syntactic consequences in that argument extraction out of the factive complement is excluded. In English, however, argument extraction is allowed in the same context (cf. the MG example in (17) and its grammatical English translation):

- (17) \**Ti<sub>i</sub> metanioses pu aghorases t<sub>i</sub>?*  
 what regretted-2s that bought-2s  
 "What did you regret that you bought?"

The assumption is that, unlike the MG complementiser *pu*, the English C is not specified for the [+def.] feature (Roussou (1992)). The parameter is therefore defined according to the abstract properties associated with the functional head C in both languages. Notice that, as in the case of complements of negative verbs, the semantics of factive complements cannot be directly linked to the 'factive' verb, as these are invariant crosslinguistically.

An apparent counterexample to our claim that the negative feature is associated exclusively with functional heads is provided by the following MG data:

- (18) a. Nouns: *mi-kapnistis* (non-smoker)  
 b. Adjectives: *mi-paraghozhikos* (non-productive)  
 c. Participles: *mi-kathieromenos* (non-established)  
 d. Adverbs: *mi-apotelesmatika* (non-efficiently)

In all the examples in (18) the negative particle *mi* appears attached to a lexical head. However, it is unlikely that the process involved is a syntactic one for a number of reasons. First, the *mi*+N/Adj/P/Adv combination is to a large extent lexically restricted to those cases where there is no antonym formed via a lexical process of affixation:

- (19) a. *a+veveos* \**mi-veveos* (=uncertain)  
 b. *a+lito* \**mi-lito* (=unsolved)

In (19) the antonym is formed by affixation of the prefix *a-* which bears negative information. Notice crucially that if the process in (19) was syntactic then we should expect that *mi-* affixation would apply to constituents rather than lexical elements. Recall, however, that constituent negation is always expressed by the anaphoric element *ohi* (=no) (cf. example (2) in section 1).

In addition, notice that the presence of NPIs in constructions which involve *mi*-affixation to a lexical category, similar to the ones in (18), leads to ungrammaticality:

- (20) a. \**I mi apotelesmatiki antimetopisi KANENOS provlimatos*  
 the non effective confrontation none-gen problem-gen  
 "The non-effective confrontation of any problem..."  
 b. \**Dhiepistosan ti mi apodhotikotita KANENOS fiti.*  
 realised-3p the non productivity none-gen student-gen  
 "They realised the non-productivity of any student."

The fact that the NPI is not syntactically licensed in these contexts provides further evidence for our claim that the sequence *mi*+lexical category is the result of lexical affixation with no syntactic consequences.

In order to illustrate the syntactic role of negative heads and negative features in MG, some basic properties of MG PIs need to be discussed. In MG

there are two different types of PIs<sup>8</sup>. Their differences lie in the interpretation they give rise to as well as the domains in which they can be licensed. For ease of reference we will refer to the two possible readings as the negative (NPI) and the existential (EPI) reading. In general, NPIs have to be licensed by negation (either NEG or a functional head with negative features), while EPIs can be licensed in negatives, non-indicative clauses (e.g. subjunctives, imperatives, gerunds), 'if'-clauses (conditionals and interrogatives) and clauses with a modal interpretation<sup>9</sup>. Alternatively, the differences between EPIs and NPIs can be understood in the following way: the syntactic contexts in which EPIs can occur form a superset of those in which NPIs can occur. Illustrative examples are provided in (21):

- (21) a. An dhis kanena/\*KANENA...  
if see-2s anybody/nobody  
"If you see anyone..."
- b. Efaghes tipota/\*TIPOTA?  
ate-2s anything/nothing  
"Did you eat anything?"
- c. Dhen idha kanena/KANENA.  
not saw-1s anybody/nobody  
"I didn't see anyone."

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<sup>8</sup>There is a third possibility of occurrence of the element *kanis* which appears to have radically different properties from the PI's discussed in this paper. This third possibility is illustrated by the following example:

- (i) Afti tin istoria tin dhiavazi kanis efharista.  
this-acc the story her-read-3s one with pleasure  
"One reads this story with pleasure."

Despite the morphological identity of the subject pronoun in (i) with the PI *kanis*, the only possible reading the former can have is that of a pronoun with arbitrary interpretation. Moreover, these [arb] features can only be associated with a subject in restricted contexts, namely generic/gnomic sentences. It thus seems that the element *kanis* in examples like (i) is neither an existential nor a universal/negative quantifier but a pronoun with arbitrary reference. Given its restricted occurrence the licensing of this pronoun presumably depends on temporal and aspectual features which are standardly assumed to characterise generic/gnomic constructions. Admittedly, the morphological identity of this pronoun and the PI requires further justification which, however, is beyond the scope of this paper.

<sup>9</sup>Note that, apart from negative clauses, all the other contexts in which EPI's can be licensed share a common property, namely a non-specific temporal interpretation (see section 5 for the notion of non-specificity in time reference).

- d. Mi feris kanena/KANENA mazi su.  
not bring-2s anyone/nobody with you  
"Don't bring anyone with you."

NPIs, (indicated with capital letters), unlike EPIs, have certain common properties with focus-phrases. In particular, both NPIs and focus-XP's bear focal stress; also, both can be focus-moved to SpecFP:

- (22) a. To YANI idha.  
the John saw-1s  
"I saw JOHN."  
b. KANENA dhen idha.  
nobody not saw-1s  
"I saw nobody."  
c. KANENA mi dhis.  
nobody not see-2s  
"Don't see anyone."

Haegeman and Zanuttini (1991) suggest that NPIs are licensed under spec-head agreement with a negative head (Haegeman & Zanuttini, op.cit., p.244):

(23) The Neg-Criterion:

- a. Each Neg  $X^0$  must be in a Spec-head relation with a Negative Operator;  
b. Each Negative operator must be in a Spec-head relation with a Neg  $X^0$ .

In MG, however, there are cases where the NEG-Criterion is satisfied and yet the sentence is ungrammatical:

- (24) \*TIPOTA dhen apofasise oti tha fai.  
nothing not decided-3s that will eat-3s  
"She didn't decide that she will eat anything."

Suppose that in (24) the NPI has moved to SpecNEGP where it is licensed under Spec-head agreement with the negative head *dhen*. We have seen that NPIs in MG

can move like ordinary focus-phrases and that they can move from an embedded object position to the matrix SpecFP as shown by (25):

- (25) TIPOTA dhe thelo na fao.  
 nothing not want-1s sub eat-1s  
 "I don't want to eat anything."

Notice that the only difference between (24) and (25) is that in the former the embedded clause is tensed (an *oti*-clause) while in the latter there is a *na*-clause which lacks Tense features. We can therefore conclude that the Neg-Criterion is insufficient with regard to the above data. The ungrammaticality of (24) is, in fact, subsumed under the general restriction on argument extraction out of embedded tensed clauses to an operator position of a matrix negative clause (Tsimpli & Roussou (1992)). Given that the movement of NPIs exhibits certain similarities with operator-movement in general, it follows that constructions such as the one in (24) are excluded on the basis that they give rise to an ill-formed dependency. (25), on the other hand, is predicted to be well-formed due to the fact that the embedded clause lacks tense features. Again, as in similar cases of operator-movement, the result is grammatical.

The parallelism of NPI-movement and wh- and focus movement however, breaks down in cases such as those in (26)<sup>10</sup>:

- (26) a. \*TIPOTA mu ipe oti dhe tha fai.  
 nothing me-said-3s that not will eat-3s  
 "She told me that she will not eat anything."  
 b. ??TIPOTA apofasisa na mi fao.  
 nothing decided-1s sub. not eat-1s  
 "I decided not to eat anything."

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<sup>10</sup>Focus and wh-movement in similar constructions do not give rise to ungrammaticality:

- (i) a. To YANI ipa oti dhen tha dho.  
 the Yani said-1s that not will see-1s  
 "It is Yani that I said that I won't see."  
 b. Pjon ipes oti dhen tha dhis?  
 whom said-2s that not will see-2s  
 "Who did you say that you won't see?"

According to the analysis suggested in Tsimpli & Roussou (1992), argument extraction in these cases is well-formed in that the Operator in SpecNEGP of the embedded clause does not give rise to a strong island configuration. This is exactly parallel to matrix negative clauses, e.g. 'Who didn't you see?', where the operator is irrelevant to argument extraction.

It seems that the restriction involved in (26) has to do with the fact that the extracted element is an NPI which, in this configuration, appears outside the clause which includes the negative element that licenses it. (26b) is less deviant than (26a) due to the tenseless nature of the embedded clause which, in all cases of operator movement, gives rise to weaker violations.

We suggest that the distribution of NPIs is subject to the following two conditions:

### (27) Licensing of NPIs

An NPI is licensed iff

- (i) it is in mutual m-command with negation (at LF), and
- (ii) it is specified for the [+f] feature

Condition (27i) basically requires that the scope domains of the NPI and the negative element that licenses it be identical. The examples in (26) are thus ruled out due to the movement of the NPI to the specFP position of the matrix clause while the scope of negation is restricted to the embedded clause. The consequence of condition (27ii) is that the NPI, like all [+f] XP's, has to raise to SpecFP either overtly or at LF (Tsimpli (forthcoming)). Thus, (24) is excluded by general conditions constraining operator-movement, either wh- or focus-movement. Condition (27ii) is also predicted to exclude NPI-licensing in matrix negatives which involve a clausal argument in subject position<sup>11</sup>:

- (28) \**To oti antimilise se KANENA dhen metrise stin proaghoghi tu.*  
the that talked back to anyone not counted to-the promotion his  
'That he talked back to noone didn't count towards his promotion.'

In (28) the NPI fails to be licensed inside the subject clause. According to (27ii), the LF representation requires movement of the NPI to the matrix SpecFP. However, this possibility is not available given that extraction, in (28), gives rise to an island violation, hence the ungrammaticality.

Turning now to the properties of EPIs, their distribution appears to be relatively freer; EPIs are licensed as long as there is a c-commanding head specified for appropriate features such as negation, [-indicative] mood, Q/F morpheme, etc. (cf. (21) above). This implies that EPIs can occur in a clause different from that of the licensing head. Consider the following examples:

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<sup>11</sup>Subject clauses in MG are obligatorily introduced by a determiner. This is possibly due to a conspiracy between Case-requirements and definiteness (Roussou (1991)).

- (29) *Dhen dhiLOSE oti tha voithisi kanena/\*KANENA.*  
 not declared-3s that will help-3s anybody  
 "He didn't declare that he will see anybody."
- (30) *Dhen irthe ja na voithisi kanena/\*KANENA.*  
 not come-3s for sub help-3s anybody  
 "He didn't come to help anybody."

In (29) and (30) LF-movement of the PI as required by (27ii) is blocked in a way parallel to (24). Thus, the NPI reading is excluded and the only possible interpretation is that of the EPI. Notice crucially that there is a c-command relation between negation (i.e. the licensing head) and the EPI.

Going back to the feature vs. head status of negation, note that the conditions in (27) do not distinguish between the two possibilities. Therefore, both MG negators as well as other functional heads (e.g. complementisers) specified for negative features can license NPIs, as shown by the following examples:

- (31) a. *Efighe xoris na fai TIPOTA.*  
 left-3s without sub. eat-3s anything  
 "She left without eating anything."
- b. *Teliose ti dhiatrivi tis xoris KAMIA voithia.*  
 finished-3s the thesis hers without no help  
 "She finished her thesis without any help."

In (31) the licensing of the NPI is due to the presence of the negative feature on the functional head *xoris*. In particular, in (31a) the functional head is a (prepositional) complementiser, while in (31b) it is a 'pure' preposition.

Another complementiser which appears to carry negative information in terms of its contribution to truth conditions is *mipos* (*lest*). However, NPIs fail to be licensed within that context, as the contrast between (31) and (32) shows<sup>12</sup>:

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<sup>12</sup>Note that (31) is well-formed with the EPI reading:

(i) *Fovame mipos dhi kanena.*  
 am-afraid lest see-3s anybody  
 "I am afraid lest she sees somebody."

This is due to the presence of the complementiser *mipos* whose properties bear certain similarities with the complementiser *an* (=if) in MG. Thus, the grammaticality of (i) is subsumed under the properties of 'if'-clauses which, as mentioned previously, can invariably license EPI's.



- (32) \*Fovame mipos dhi KANENA.  
 am-afraid lest see-3s anyone  
 "I am afraid lest he see anyone."

The ungrammaticality of (32) is accounted for on the assumption that, unlike *xoris*, the C head is not specified for negative features<sup>13</sup>. This fact provides further evidence for our proposal that negative information encoded in the semantics of a lexical head does not necessarily have syntactic consequences.

In the following section we will provide an analysis of the different interpretations PIs obtain according to the syntactic contexts they appear in.

#### 4 The interpretation of PIs

Having discussed the conditions that regulate the distribution of PIs in MG, we now turn to the different interpretations they give rise to. Recall that the syntactic contexts in which NPIs can be licensed form a proper subset of the ones where EPIs occur. This implies that there is a set of contexts where only EPIs are possible. In these cases the interpretation of the PI is that of an existential quantifier. This is supported by the fact that modification of EPIs cannot involve the presence of an adverbial like *apolitos* (=at all) as this element is compatible with the universal quantifier interpretation. On the other hand, the use of adjectives like *sigekrimeno* ('specific', 'in particular') is allowed as it is compatible with the existential reading:

- (33) a. Dhiavases tipota sigekrimeno/\*apolitos?  
 read-2s anything in particular/at all  
 "Did you read anything in particular/at all?"

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<sup>13</sup>It should be mentioned at this point that the cooccurrence of *xoris* and another negative element is excluded, while this is possible with *mipos*:

- (i) \*Efije xoris na mi mu milisi.  
 left-3s without sub not me-talk-3s  
 "He left without not talking to me."  
 (ii) Fovame mipos dhen mu grapsi.  
 am-afraid-1s lest not me-write-3s  
 "I'm afraid that he might not write to me."

We suggest that the ungrammaticality of (i) is the result of the co-occurrence of two elements encoding sentential negation in the same clause: the negative complementiser *xoris* and the negative element *mi*. (ii) on the other hand is grammatical as the complementiser *mipos* does not have any negative features syntactically realised.

- b. Dhen mu ipe oti dhiavase tipota sigekrimeno/\*apolitos.  
not me-told-3s that read-3s anything in particular/at all  
"He didn't tell me that he read anything in particular/ at all."

Note incidentally that in sentences such as (33) it is possible to replace the PI with a pure existential quantifier and the interpretation remains the same:

- (34) a. Dhiavases kati sigekrimeno/\*apolitos?  
read-2s something in particular/ at all  
"Did you read something in particular/ \*at all?"  
b. Dhen mu ipe oti dhiavase kati sigekrimeno/\*apolitos.  
not me-told-3s that read-3s something in particular/at all  
"He didn't tell me that he read something in particular/\*at all."

We suggest that the representations of the sentences in (33) and (34) are logically equivalent. In other words, the existential quantifier and the EPI appear inside the scope of a question operator (cf. (33a) and (34a)) or negation (cf. (33b) and (34b)):

- (35) a.  $Q \exists x$  [you read  $x$ ]  
b.  $\neg$ [he told me [that  $\exists x$  [he read  $x$ ]]]

The interchangeability of an EPI and a 'pure' existential quantifier is not absolute. A similar pattern arises in English with respect to the following pair:

- (36) a. Has anybody left?  
b. Has somebody left?

(36a&b) differ in that the existential quantifier in (36b) restricts the set of possible referents in the universe of discourse whereas (36a) is neutral with regard to similar contextual or discourse considerations (Robyn Carston p.c.). Note that these differences are not reflected in the truth-conditions of (36a&b). The MG examples in (33) and (34) encode the same differences as (36), in terms of the pragmatic implications of the two existential quantifiers. Nevertheless, there are cases where the logical interpretation of a 'pure' existential quantifier differs from that of an EPI:

- (37) a. Idhes kapjo fititi?  
saw-2s some student  
"Did you see some student?"

- b. *Idhes kanena fititi?*  
 saw-2s any student  
 "Did you see any student?"

Either of the two possible readings illustrated by (38a&b) are available to (37a) whereas only (38b) is available to the EPI reading in (37b):

- (38) a.  $\exists x$  Q [you saw x]  
 b. Q  $\exists x$  [you saw x]

More specifically, the interpretation associated with a 'pure' existential quantifier can presuppose the existence of a possible referent which, therefore, does not interact with the question operator. The EPI, on the other hand, is not amenable to a similar interpretation; (37b) cannot be interpreted as presupposing the existence of a student and the interrogative force associated with the rest of the proposition. It thus seems that the syntactic differences between PIs and 'pure' quantifiers in terms of the stricter licensing conditions that PIs are subject to are necessarily reflected at the level of logical interpretation and truth-conditional values. If this line of reasoning is correct, the implication is that the set of possible interpretations of 'pure' existential quantifiers and EPIs exhibits a subset-superset relation: the former can give rise to ambiguity while the latter are restricted to a single reading defined within the scope of the operator responsible for their licensing.

Note that in (33b) although the PI is within the scope of negation it appears inside an embedded tensed clause. Thus, extraction to the highest operator position is blocked, hence the EPI reading. This is crucial with regard to the contrast between (33b) and (39):

- (39) a. *Dhen dhiavasa TIPOTA.*  
 not read-1s anything  
 b. *Dhen dhiavasa tipota.*  
 not read-1s anything  
 "I didn't read anything."

There is a difference in the interpretation of these two sentences, although it may not be readily understood as is the case with examples where the only possible reading is that of the EPI. Note that this difference is neither truth-conditional nor expressible at the level of logical interpretation as shown by (40a&b):

- (40) a.  $\forall x$  -[I read  $x$ ]  
 b. -  $\exists x$ [I read  $x$ ]

Note that (40a&b) are logically equivalent. (40b) is a representation similar to the one in (35b), the only difference being that the EPI in (40b) is in the same clause as negation, while this is not the case in (35b). Note, crucially, that condition (27ii), i.e. the [+f] feature specification, is met only in (39a). We would like to suggest that it is precisely this property that gives rise to the understood difference in the meaning of the two sentences. For this purpose, we will adopt Enç's (1991) theory of specificity. According to Enç, indefinite NP's can be either specific or nonspecific; a quantified NP like *two books* is always indefinite but can be either specific or nonspecific. For example, partitives like '*two of the books*' are specific indefinites because they "refer to groups that are a subgroup of the referent of the NP contained in the partitive, in this case *the books*" (1991: 10). On the other hand, determiners like *many* can either form specific or nonspecific NP's. This is determined by pragmatic factors which specify what counts as 'many', as well as by properties of the head Noun<sup>14</sup>.

Going back to (39a&b), we would like to argue that the specific reading is associated with the NPI, while the nonspecific one is associated with the EPI. The requirement that the NPI bears focal stress as part of its licensing conditions (cf. (27)) is well accommodated under this proposal: focussed NP's are always specific because they are linked to a previously established referent in the discourse. Consequently, nonspecific indefinites cannot be focussed and therefore move to sentence initial position. EPIs, unlike NPIs, can neither bear focal stress nor move to a clause initial position as shown by the example in (41):

- (41) \*Tipota/TIPOTA dhen dhiavasa.  
 anything not read-1s  
 "I didn't read anything."

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<sup>14</sup>Enç (1991) suggests that there are two possible readings, a specific and a nonspecific one, for the following sentence:

(i) I talked to many students.

She argues that contextual information may render either of the two readings infelicitous:

(a) I thought that the best way to determine whether or not this course would be boring was to ask the students who took it last semester. I talked to many students and decided that it was worth a shot.  
 (b) What did I do yesterday? I cleaned my desk, wrote some memos, talked to many students, and graded about twelve papers. (Enç 1991: 17)

The specific reading is the appropriate one in (a), while the nonspecific one is appropriate in (b).

Recall that, at LF, any [+f] XP will have to move to the highest clausal position to satisfy scope requirements. If negation is also raised at LF for similar reasons, it follows that the NPI, a [+f] element, and negation (cf. (40)) enter a configuration where there is mutual m-command. It is due to this configuration that the NPI reading is that of a universal quantifier. Alternatively, it could be argued that the Spec-head configuration leads to the absorption of negative features by the [+f] PI thus giving rise to the interpretation of a universal quantifier<sup>15</sup>. According to Enç's analysis it should be interpreted as specific. EPIs, on the other hand, are not specified for the [+f] feature. Therefore they cannot raise to the position where mutual m-command with negation is obtained. This can be supported by examples which show that a 'pure' existential quantifier cannot bear a [+f] feature in a negative sentence:

- (42) a. \*Dhen idha KAPION.  
not saw-1s somebody
- b. \*KAPION dhen idha.  
somebody not saw-1s  
"I didn't see somebody."

The ungrammaticality of (42) can be accounted for in the following way: negation has scope over the whole clause; if the existential quantifier is focussed it acquires operator status, hence it is forced to raise to a position where there is mutual m-command with negation. However, that will force a reading where the existential quantifier will have to be interpreted as a universal/negative quantifier. As *kapios* is inherently existential this possibility is ruled out.

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<sup>15</sup>If this absorption mechanism is correct, it could be argued that a PI is always an existential quantifier which can be either positively or negatively specified for the [+f] feature. The positive feature specification forces movement to an operator position where Spec-head agreement with a negative head is obtained (Manzini, p.c.). This would lead to the conclusion that an existential quantifier can be negative; however, it appears that this possibility is only available in the case of PI's and not in the case of 'pure' existential quantifiers. In other words, focussing of an existential quantifier in a negative clause, if at all possible, does not render the interpretation of the quantifier negative or universal. If, on the other hand, this is a possibility only available to focussed PI's in negative clauses it could be argued that a PI, *qua* PI, is not inherently specified for the existential or universal quantifier reading; these are the result of the interaction of the presence vs absence of the [+f] feature and the nature of the operator involved, i.e. whether there is negation in the clause or not.

Note, incidentally, that a negative matrix sentence including a (non-focussed) 'pure' existential quantifier is ambiguous unlike its congeneric sentence including an EPI (cf. (39b)):

- (43) a. Dhen idha kapjo fititi.  
not saw-3s some student  
"I didn't see some student."  
b. Dhen idha kanena fititi.  
not saw-1s any student  
"I didn't see any student."
- (44) a.  $\exists x$ ,  $x$  a student, and not [ I saw  $x$  ]  
b. not ( $\exists x$ ,  $x$  a student, and [ I saw  $x$  ])

(44a) is not a possible reading of sentence (43b) where, as discussed above, the PI is necessarily associated with the negative reading. More specifically, (43a) can entail that I may have seen some or many (other) students, whereas (43b) has no such entailment. This is parallel to the situation discussed above with respect to the interrogatives in (37a&b): the logical interpretation of PIs is crucially dependent on the operator that licenses them while quantifiers which are not PIs give rise to alternative readings.

## 5 Polarity items, Wh- and Focus-Operators

Having discussed the distribution and interpretation possibilities of PIs in MG we now turn to syntactic phenomena that involve the co-occurrence of PIs and operators such as wh-and focus-phrases. Recall that EPIs can be licensed in matrix and embedded interrogatives, as shown by the examples in (45a&b):

- (45) a. Idhe o Petros kanena?  
saw-3s the Petros anyone  
"Did Petros see anyone?"  
b. Anarotjeme an idhe o Petros kanena.  
wonder-1s if saw-3s the Petros anyone  
"I wonder if Petros saw anyone."

As argued above, the EPI in these cases is licensed by the Q (or F) morpheme which is an appropriate c-commanding head. Notice, however, that if the interrogative includes a *wh*-phrase the result is deviant:

- (46) a. ??*Pjos idhe kanena?*  
           who-nom saw-3s anyone  
           "Who saw anyone?"
- b. ??*Anarotjeme pjos idhe kanena.*  
           wonder-1s who-nom saw-3s anyone  
           "I wonder who saw anyone."

It has been argued by Progovac (1992) that the only possible reading of a matrix *wh*-interrogative such as the one in (46a) is that of a rhetorical question. More specifically, the interpretation assigned is the one where the *wh*-phrase has a negative reference, i.e. 'nobody saw noone'.

We would like to argue that, everything else being equal, in MG the possibility of a question being interpreted as a rhetorical one is available depending on two interacting factors: the temporal properties of the clause and the compatibility of these temporal properties with a modal interpretation. In particular, in MG, [+past] tense is typically *specific* and not amenable to a modal reading. The verbal morphology in this case consists in the realisation of [+past] tense and [+perfective] aspectual features. In the absence of any elements which can cancel these features denoted by past tense morphology, e.g. temporal adverbials, the default specification is *specific* (cf. Partee (1984)). By 'specific' we mean that the temporal properties of the situation (event, state, etc.) described by the proposition are fixed to a particular specific time (see also fn. 17 below). On the other hand, verbal morphology associated with [-past] tense is generally underspecified for tense in the absence of additional temporal specification provided either sententially or contextually (Tsimplici (1992), Roussou and Tsimplici (in prep.)). The verbal complex in the 'present' tense consists of the root form in the imperfective, while the 'future' tense consists of the particle *tha* and the verb in either the perfective

or imperfective form. This temporal underspecification allows for the possibility of a modal interpretation, not available in the [+past] verbal morphology<sup>16</sup>:

- (47) a. O Petros dhiavase afta ta vivlia efharista.  
the-nom Petros read-3s these the books with-pleasure  
"Petros read these books with pleasure."
- b. O Petros dhiavazi afta ta vivlia efharista.  
the-nom Petros read-3s these the books with-pleasure  
"Petros reads these books with pleasure/  
Petros can/may read these books with pleasure."
- c. O Petros tha dhiavazi afta ta vivlia efharista.  
the Petros will read-imp-2s these the books with-pleasure  
"Petros will be reading these books with pleasure/  
Petros can/may be reading these books with pleasure."

We assume that it is only the [+past] specification that can be interpreted as specific due to the combination of the aspectual, tense and non-modal reading that it encodes<sup>17</sup>.

The contrast between [+past] and [-past] features as indicating the presence vs absence of specificity in the temporal interpretation respectively is shown by

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<sup>16</sup>Though both present and future contexts can give rise to a modal reading, it is only the future imperfective that does so despite the presence of a deictic tense adverbial:

- (i) a. Avrio dhini eksetasis o Petros.  
tomorrow give-3s exams the-nom Petros  
"Tomorrow Petros is taking exams."  
\*Tomorrow, I assume, Petros is taking exams."
- b. Avrio tha dhini eksetasis o Petros.  
tomorrow will give-3s exams the-nom Petros  
"Tomorrow Petros is taking exams. /  
Tomorrow, I assume, Petros is taking exams."

As shown by the English gloss in (ia&b) it is only the future imperfective that remains ambiguous between a modal and a non-modal reading even in the presence of a deictic adverbial.

<sup>17</sup>Note that the interpretation of [+past] morphology in MG cannot be iterative, in contrast with the English past tense:

- (i) O Yanis mu \*aghorase/aghoraze kati kathe mera tis evdhornadhas.  
the Yanis me-bought/was buying something every day the-gen week-2s  
"Yanis bought me something every day of the week."

This is one of the properties that derive the specific reading in [+past] contexts.



examples which involve EPIs. Recall that EPIs have a non-specific interpretation and can occur in a restricted set of contexts which does not include matrix declaratives with specific temporal reference (see section 2). Thus, matrix declaratives which include a verb specified for [+past] tense are predicted to disallow the presence of an EPI while those including a verb in [-past] tense should allow it:

- (48) a. \**Dhiavases tipota ja na apantisis stis erotisis.*  
 read-2s anything and answered-2s to-the questions  
 "You read something to answer the questions."
- b. *Dhiavazis tipota ja na apantas/apantisis stis erotisis.*  
 read-2s anything and answer-2s to-the questions  
 "You must/can read something to answer the questions."
- c. *Tha dhiavazis/dhiavasis tipota ja na apantas/apantisis stis erotisis.*  
 will read-2s anything and will answer-2s to-the questions  
 "You can/must read something to answer the questions."

As shown by the English gloss in (48b&c) the interpretation obtained is modal. What these examples imply is that these non-specific temporal features on the T head belong to the class of appropriate licensing heads for EPIs.

Going back to the issue of rhetorical questions, it follows from the above discussion that a matrix wh-interrogative including an EPI is interpreted as a rhetorical question in case the time reference is non-specific. This is indeed the case with the following examples:

- (49) a. *Pjos dhiavazi tipota kalokerjatika?*  
 who-nom read-3s anything in-the-summer  
 "Who reads anything in the summer?"
- b. *Pjos mu-aghorase emena pote tipota?*  
 who-nom me-bought-3s me ever anything  
 "Who has ever bought anything for me?"

The examples in (49) are perfectly acceptable due to the presence of adverbial elements which render the time reference of the clause non-specific. Note that in (49b), the cancellation of the interpretation of past tense morphology is due to the adverbial PI *pote* which alters the aspectual rather than the tense features; although the morphological specification is that of perfective aspect the interpretation

obtained is iterative, hence non-specific<sup>18</sup>. In view of these restrictions on temporal reference, the impossibility of rescuing the interrogatives in (46) as rhetorical questions falls out.

Progovac (1992) argues that the reason why wh-interrogatives including a PI cannot be assigned an interpretation other than the rhetorical one is due to the presence of the PI which fails to be licensed in the presence of a wh-operator in SpecCP. The reference of the variable that a wh-operator binds, ranges over a set of possibilities including an empty set, in which case the interpretation of the wh-element is that of a negative quantifier. According to Progovac, it is the latter possibility that is the only one available in the presence of a PI, due to the conflicting requirements of the two operators, the Polarity and the wh-operator. As discussed above, however, it appears that the rhetorical reading does not depend exclusively on the interaction of a wh-phrase and an EPI. If this were the case, we would expect this interpretation to be available in examples such as the ones in (46) as well, contrary to fact. Note, moreover, that if EPIs are sensitive to the presence of the Q/F morpheme we expect their presence in matrix and embedded interrogatives to raise no problems. In other words, we do not postulate the presence of a Polarity operator, unlike Progovac's account, or assume that the EPI raises to a higher position; in fact, the second possibility is independently excluded (see section 3).

Nevertheless, the deviant status of the examples in (46) remains unaccounted for. Given that the licensing requirement of EPIs is always met in interrogatives, an explanation must be sought in relation to the interpretation possibilities associated with EPIs, discussed in the previous section. Note, incidentally, that negative wh-interrogatives including a PI do not give rise to any deviance comparable to the one attested in (46)<sup>19</sup>:

- (48) a. Pjos dhen idhe KANENA?  
           who-nom not saw-3s anyone  
           'Who didn't see anyone?'

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<sup>18</sup>This implies that the deictic features of [+past] morphology in MG are derived by the combination of past tense and perfective aspect. If either of the two sets of features is sententially cancelled or morphologically altered the derived interpretation is non-specific.

<sup>19</sup>In a matrix wh-interrogative the NPI need not bear heavy stress, unlike the other cases discussed so far. This is probably due to the obligatory rising intonation of matrix interrogatives which masks the focal stress of the NPI. Nevertheless, the [+f] feature is assumed to be available in all cases.

- b. Anarotjeme pjos dhën idhe KANENA.  
wonder-1s who-nom not saw-3s anyone  
"I wonder who didn't see anyone."

As shown by the above examples, the presence of the *wh*-phrase does not block licensing of the NPI. Notice, however, that, unlike the examples in (39), in (50) there is only one meaning available for the PI, namely that of the negative quantifier. The presence of the NPI shows that both licensing conditions are met, with NPI raising to adjoin to SpecFP where there is mutual *m*-command with negation. The logical formula is as in (51):

(51) for which  $x$ ,  $\forall y$  - [ $x$  saw  $y$ ]

The question again is: 'why is the EPI reading excluded in these interrogatives?' Recall that the difference in meaning attributed to (39a&b) respectively was accounted for in terms of Enc's theory of specificity. It was argued that the two sentences do not differ in their truth-conditions, as the reading obtained for the quantifier is negative in either case. Given that EPIs can be licensed by negation it follows that the unavailability of the non-specific reading in (50) supports our original conclusion in relation to the examples in (46), namely that we are not dealing with a violation of licensing requirements.

In order to provide an answer to this problem let us consider the properties of 'true' (non-rhetorical) *wh*-questions. A question like 'Who saw John' presupposes that 'some specific entity saw John' and we are asking for the reference of the variable. The range of possible answers includes the empty set, i.e. 'noone'. Recall that, according to the analysis suggested in the previous section the negative universal quantifier is specific. This accounts for the possibility of identifying a *wh*-phrase with the negative quantifier. On the other hand, we accounted for the difference between (39a&b) in terms of the absence vs presence of presupposition respectively.

Going back to the interrogatives in (46), it is clear that the combination of temporal specificity and the *wh*-phrase require the availability of presupposition. This is incompatible with the non-specific interpretation that the EPI has and the interrogative cannot receive an appropriate interpretation. In other words, for the variable to be interpreted there has to be a presupposition on the basis of which the reference, and, hence the truth-values can be assigned. If no presupposition is available, as this is what the presence of an EPI suggests, both the variable and the proposition are questioned. At the truth-conditional level, this leads to uninterpretability. In the case of rhetorical questions like (49), the lack of temporal specificity provides the context with which the EPI reading is compatible. This

results in the *wh*-phrase failing to range over the otherwise possible alternatives and restricts it to the negative value. Note incidentally that this implies that the *wh*-phrase has to be specific regardless of other properties of the clause.

Similarly with examples like (46), yes-no questions with an EPI and a focussed constituent are ungrammatical:

- (52) a.    \**To YANI idhe kanenas?*  
           the-acc Yani saw-3s anyone  
           "\*Is it Yani that anyone saw?"
- b.    *To YANI idhe kapjos?*  
           the-acc Yani saw-3s somebody  
           "Is it Yani that somebody saw?"

As shown by (52b), a yes-no question in MG can include a preposed focus-phrase. However, in this construction the presence of an EPI gives rise to ungrammaticality. Note that there is a difference in the interpretation of a 'pure' yes-no question, i.e. a question which does not include a [+f] element in SpecFP, and a question like (52b): in the former case there is no presupposition involved as the whole proposition is questioned. In the second case, there is a presupposition, namely 'somebody saw someone' and the question is whether the person seen by somebody is John. In this respect, 'true' *wh*-questions and yes-no questions with a focus-phrase are similar. On the other hand, the difference between (46) and (52a) is that in the former the operator binds a variable whose reference ranges over a number of possible references whereas in the latter the operator has identified, fixed reference.

We would like to argue that (52a) is ungrammatical for the same reasons that (46) is, namely the presence of presupposition and the incompatibility of the EPI in such contexts. In other words, if the presence of an operator in an interrogative necessitates the existence of presupposition, it follows that in both cases an EPI fails to receive its non-specific interpretation. The question that remains to be answered is whether the lack of temporal specificity in examples similar to that in (52a) would allow for the presence of an EPI. As shown by (53) this is not the case:

- (53) a.    \**To VIVLIO aghorases pote se kanena?*  
           the-acc book bought-2s ever to anyone  
           "\*Is it the book that you ever bought for anyone?"

- b. \*O PETROS dhiavazi tipota kalokerjatika?  
the-nom Petros read-3s anything in-the-summer  
"Is it Petros that reads anything in the summer?"

Why can't the sentences in (53a&b) be construed as 'rhetorical' questions? We suggest that the answer lies in the difference mentioned above between *wh*-phrases and identification focus. In particular, given that the reference of a *wh*-phrase is not specified and, moreover, can extend to the empty set, the negative reading is available. This possibility is excluded in the case of identification focus as the reference in this case is necessarily fixed. Thus, the ungrammaticality of (53a&b) is not accounted for in terms of syntactic violations, namely violations of the licensing requirements of the EPI, but instead in terms of uninterpretability at a level where the notion of specificity and presupposition are relevant.

## 6 Conclusion

To conclude, we have assumed, following Tsimpli and Roussou (1992) that negation can be realised either as a functional head projecting independently in the clause structure or as a feature on a functional head. Both options are in principle available within a language and are determined by independent properties of the language in question. Furthermore both realisations have syntactic consequences evident in the licensing of PIs. More precisely, we have argued that the conditions that regulate the distribution of NPIs do not involve a *spec-head* agreement configuration contrary to what has been argued by Haegeman & Zanuttini (1991). Instead, the requirement of a mutual *m-command* configuration including the NPI and negation as well as the presence of the [+f] feature on the NPI constitute the licensing conditions of NPIs. Unlike NPIs, the licensing of EPIs has been argued to involve the presence of an appropriate licensing (*c-commanding*) head. Moreover, we argued that the difference in meaning between NPIs and EPIs is a difference between a universal specific quantifier and an existential nonspecific quantifier respectively. Finally, the incompatibility of an EPI with focus and *wh*-operators was argued to stem not from syntactic but from conflicting semantic requirements. The latter involve the notion of specificity in temporal interpretation and its interaction with the notion of presupposition.

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