

ANASTASIA GIANNAKIDOU

NEGATIVE . . . CONCORD?*

ABSTRACT. The main claim of this paper is that a general theory of negative concord (NC) should allow for the possibility of NC involving scoping of a universal quantifier above negation. I propose that Greek NC instantiates this option. Greek n-words will be analyzed as polarity sensitive universal quantifiers which need negation in order to be licensed, but must raise above negation in order to yield the scoping $\forall\neg$. This gives the correct interpretation of NC structures as general negative statements. The effect is achieved by application of QR, and the account is fully compositional, as only sentence negation is the vehicle of logical negation \neg . Greek n-words are also compared to n-words in Romance, Slavic, and Hungarian. This analysis, if correct, has two important consequences. First, the analysis will provide a strong argument for retaining QR in the syntax-semantics mapping: we need it in order to interpret NC. Second, by employing a mechanism which is present in the grammar for the scope of quantifiers anyway, we have a simpler theory which makes NC look less anomalous; appeal to a mechanism invoked just to account for NC, as in the “negative absorption” tradition, is thus rendered unnecessary.

1. INTRODUCTION: THE COMPLEX PROBLEM OF NEGATIVE CONCORD

Negative concord (NC) is observed in many languages, e.g., Romance, Slavic, Greek, Hungarian, Nonstandard English, West Flemish, Afrikaans, and has received a lot of attention in the generative and pre-generative literature. In the earlier literature labels like Jespersen’s (1917) *double*

* Various forms of this analysis were presented in colloquia at the Universities of Tübingen, Tilburg, Thessaloniki, and Leiden, at the workshop on negation and polarity organized at the University of Salford, and at the 23rd GLOW Colloquium in the Basque Country; I would like to thank the audiences of these events for their useful feedback, especially Peter Ackema, Norbert Corver, Marcel den Dikken, Carmen Dobrovie-Sorin, Nomi Erteschik-Shir, Norbert Hornstein, Idan Landau, Gertjan Postma, Johan Rooryck, Paul Rowlett, Arnim von Stechow and Wolfgang Sternefeld; thanks also to Yoryia Agouraki for discussions on the data. I am also grateful to Francis Corblin, Bill Ladusaw, Pierre Larrivé, Victor Manfredi, Adam Przepiórkowski, Genoveva Puskás, Manfred Sailer, Anna Szablocsi, Lucia Tovena, and the two NLLT reviewers for detailed comments and most helpful discussion. Finally, I owe a great debt to Jason Merchant for extensive detailed comments and suggestions on this manuscript, which lead to considerable improvements in both content and form. While working on the final stages of this research, I had the generous support of the Royal Dutch Academy of Sciences (KNAW), which is hereby gratefully acknowledged.



attraction, Labov's (1972) *negative attraction rule*, and Klima's (1964) *neg-incorporation* are used. Generally, we talk about 'negative concord' in situations where negation is interpreted just once although it seems to be expressed more than once in the clause. Some examples are given below (see among others Labov 1972, Ladusaw 1992, 1994, van der Wouden and Zwarts 1993, Bosque 1980, Laka 1990 for Basque and Spanish; Zanuttini 1991, Longobardi 1991, Acquaviva 1993, 1995, 1997, and Tovena 1996 for Italian; Quer 1993 for Catalan; Szabolcsi 1981, Tóth 1999, Puskas 1998 for Hungarian; Giannakidou 1997, 1998, 2000b for Greek; Haegeman 1995 and den Besten 1986 for West Flemish and Afrikaans; Hoeksema 1997 for Middle Dutch; Progovac 1988, 1994 for Serbian/Croatian; Brown 1996 for Russian; Przepiórkowski and Kupść 1997, 1998, Blaszcak 1999, and Richter and Sailer 1998 for Polish).

- | | | |
|-------|--|------------------|
| (1)a. | Gianni *(non) ha visto niente.
<i>John not have.3sg seen n-thing</i>
John didn't see anything. | Italian |
| b. | *(No) he dit res.
<i>not have.1sg said n-thing</i>
I didn't say anything. | Catalan |
| c. | Balázs *(nem) látott semmit.
<i>Balázs not saw.3sg n-thing</i>
Balázs didn't see anything. | Hungarian |
| d. | Milan *(ne) vidi nista.
<i>Milan not see.3sg n-thing</i>
Milan cannot see anything. | Serbian/Croatian |
| e. | Janek *(nie) pomaga nikomu.
<i>Janek not help.3sg n-person</i>
Janek doesn't help anybody. | Polish |
| f. | *(Dhen) ipa TIPOTA.
<i>not said.1sg n-thing</i>
I didn't say anything. | Greek |

The sentences in (1) exemplify the variety of NC known as *negative concord proper* (after den Besten 1986): they contain sentential negative

markers (NM), which contribute logical negation \neg , and the so-called n-words (Laka 1990). Upper-case letters in the Greek n-word in (1f) indicate that it is pronounced emphatically. Emphatic accent is a distinctive feature of NC patterns in other languages too, e.g., Hungarian (see especially Puskás 1998). As shown in the examples above, the co-occurrence of the NM is obligatory.¹

Given that n-words can provide negative fragment answers, as illustrated in (2) for Greek, one might assume that negation is expressed twice in the sentences in (1). It is in this sense that these sentences exemplify negative ‘concord’.

- (2) Q: *Ti idhes?*
what saw.2sg
 What did you see?
 A: *TIPOTA.*
 Nothing.

Because of the fairly heterogeneous nature of n-words, it is impossible to provide a definition of them less general than saying that “n-words occur in NC structures and can be associated with negative meaning”. The proper semantic characterization of n-words is an essential ingredient of any analysis of NC. The label “negative concord”, however, preempts a characterization of them as negative.

The NM may be ‘light’, as in the examples in (1), or ‘heavy’. The characterization ‘light’ refers to NMs which are usually argued to be heads (see Pollock 1989, and especially Zanuttini 1991, 1997). Romance, Slavic, Greek, and Nonstandard English exemplify NC proper with a light NM. ‘Heavy’ NMs, on the other hand, are, according to most accounts, XPs analyzed as specifiers of NegP (Pollock 1989, Belletti 1990, Bayer 1990, Zanuttini 1991, 1997; see also Merchant 2000). Quebecois French, Bavarian, and Afrikaans exhibit NC with a heavy NM, as we see in the

¹ There are additional factors here concerning the surface position of n-words. While preverbal n-words exclude the NM in Italian, Spanish, and Portuguese, postverbal ones require its presence. In Greek, Hungarian, and Slavic such a constraint is not operative and the NM is obligatorily present regardless of the position of the n-word (see Giannakidou 1997, 1998 and the works cited there). Both patterns are attested in Catalan, as a preverbal n-word optionally allows the NM, whereas a postverbal one requires it (Quer 1993).

examples below (from Vinet 1998, Bayer 1990 and den Besten 1986, respectively):

- (3)a. J' ai pas vu personne. Quebecois
I have.1sg not seen n-person
 I haven't seen anybody.
- b. Ich bin froh, dass ich keine Rede nicht haldehn
I be.1sg glad that I no talk not hold
 brauch. Bavarian
must.1sg
 I'm glad I don't have to give a talk.
- c. Hulle het nooit gesing nie. Afrikaans
they have n-ever sung not
 They have never sung.

Mixed cases are also possible. West Flemish forms one such case where light *and* heavy NMs combine with n-words (for details, see Haegeman 1995).

Another variety of NC involves co-occurrence of two (or possibly more) n-words without a NM. This variety is known as *negative spread* (again, after den Besten 1986). We find it marginally in languages that typically do not exemplify NC (like Dutch and German), or it may co-exist with NC proper. It seems that almost none of the NC languages that have been thoroughly studied in the literature makes exclusive use of negative spread.²

² French may be a possible exception to this generalization. The French NM *ne* does not convey logical negation, this is done by *pas*. *Pas* and n-words cannot co-occur, but two (or more) n-words with *ne* are fine:

- (i) * Marie n'a pas rien dit.
Mary didn't say anything.
- (ii) Personne n'a rien dit.
Nobody said anything.

- (4)a. Je hebt NOOIT GEEN tijd voor mij. Dutch
not have.2sg n-ever n- time for me
 You never have time for me.
- b. Hier hilft KEINER KEINEM. German
here help.3sg n-person n-person
 No one helps anyone here.
- c. Nessuno ha letto niente. Italian
n-person have.3sg read n-thing
 Nobody read anything.

Greek, Hungarian, and the Slavic languages do not exhibit negative spread. This is illustrated in the examples below (the Polish and Hungarian examples are from Przepiórkowski and Kupść 1998 and Puskás 1998, respectively); for the same point in other Slavic languages see Progovac 1988, 1994, Brown 1996):

- (5) KANENAS *(dhen) ipe TIPOTA. Greek
n-person not said.3sg n-thing
 Nobody said anything.
- (6) Nikt *(nie) uderzył nigogo. Polish
n-person not hit.3sg n-person
 Nobody hit anybody.
- (7) Balázs *(nem) beszélt senkivel semmiről. Hungarian
Balázs not spoke.3sg n-person n-thing
 Balázs didn't talk about anything with anybody.

So the presence of the NM in Greek, Polish, and Hungarian is obligatory even when more than one n-word occurs in a sentence. The number of French n-words have been treated in the literature as negative quantifiers (Corblin 1996, Larrivé 1995, among others), and as quantificational elements with the force of *zero* N (Déprez 1997). In any case, they appear to be quantificational. Note that sentences like (ii) are ambiguous between a NC and a double negation reading (see a recent posting in the Linguist list 10.1799 by Misako Kitamoto (1999) with statistics on this ambiguity based on a sample of 26 speakers). We will return briefly to the significance of this fact in Section 3. I should mention here that the availability of double negation readings, as well as the exclusion of *pas* with French n-words seriously question the viability of non-negative analyses of those n-words (Rowlett 1998; Corblin and Tovena 1999).

n-words that may occur is unlimited, as illustrated in the Greek sentence below which contains four n-words (see the abovementioned literature for the same point in other languages):

- (8) KANENAS *(dhen) ipe POTE TIPOTA se KANENAN.
n-person not said.3sg n-ever n-thing to n-person
 Nobody ever said anything to anybody.

Following the terminology in Giannakidou (1997, 1998), I will call varieties of NC that require the obligatory presence of the NM *strict* NC varieties. There is no a priori reason to believe that the two types of NC are subject to constraints of the same nature (as Hoeksema 1997 also points out). Arguably, negative spread may be handled in terms of branching negative quantifiers, as hypothesized in van Benthem (1983). I will not consider negative spread in any detail here, as it is not available in the language of primary focus, Greek, concentrating instead on strict NC varieties.

From the semantic point of view, the existence of NC poses an obvious puzzle: if we have more than one occurrence of negation in a clause, why do we end up interpreting only a single negation? We do not want to give up compositionality as the principle of semantic interpretation, nor do we wish to argue that languages with NC are less ‘logical’ than languages without it.³

Of course, the extent to which NC constitutes a problem for compositionality depends on whether we take n-words to be negative or not. We will see below that (a) languages with unambiguously negative n-words do *not* exhibit NC, and (b) there is actually no conclusive evidence that n-words in NC are inherently negative. Note, in this connection, that n-words need not be morphologically negative either, as observed in the relevant literature (see, among others, Laka 1990, Quer 1993, Déprez 1997, Giannakidou 1997, Rowlett 1998). Italian *niente*, *nessuno*, and Serbian/Croatian *nista* bear negative morphology but their Catalan, French, and Greek counterparts do not, or do so but not consistently. Catalan, for instance, has *res* ‘n-thing’, but *ningú* ‘n-person’, and French and Greek n-words lack negative morphology altogether. Negative morphology is clearly not a prerequisite for n-word status.

³ Although there is a clear divide between languages that employ NC as a rule, and languages that do not, we should note that the availability of NC cannot be handled in terms of a \pm NC parameter. Even languages that do not have it as a rule may allow it occasionally, as we saw. With this precaution, statements like “a language has NC” or “a language does not have NC” should be taken to mean “a language employs NC as a rule” or “a language does not do so”. On this point, see also Acquaviva (1993).

In this paper I focus on Greek NC patterns and show that these patterns do not actually involve ‘concord’ of negative elements. A compositional analysis of NC can be given if we assume that negation is expressed only by the NM and that n-words are universal quantifiers; a variant of this idea was actually proposed in passing in Szabolcsi’s (1981) discussion of Hungarian n-words. The discussion proceeds as follows. In Section 2 I discuss negative dependencies in Greek. Two types of such dependencies will be identified, one ‘weak’ dependency involving existential n-words, where no issue of concord arises, and one ‘strong’ quantificational dependency involving NC. The goal will be to distinguish the two varieties in terms of their distribution, syntax, and semantics. In Section 3 I discuss the status of n-words based on previous proposals in the literature: the NEG-criterion and the indefinites approach. These approaches, where n-words are negative quantifiers or non-quantificational indefinites, will be examined and shown to give the wrong results; cross-linguistic data will also be discussed in this connection. Then I present an alternative analysis of Greek NC n-words as universal quantifiers. Evidence that this is the correct hypothesis will be provided from a number of sources, including locality and parallelisms between the scope and binding possibilities of n-words and universal quantifiers (Section 4). Having reached the conclusion that n-words are polarity sensitive universal quantifiers, I spell out the details of a compositional account of NC in Section 5. For the proper interpretation of the structures as universal negative statements, n-words must be interpreted in a position higher than negation at LF. To achieve this result, n-words must undergo QR. Certain consequences of the proposed account concerning the absence of *de re* and *de dicto* ambiguities with intensional verbs will also be presented. Finally, the pragmatics of NC are addressed in Section 6, where it is proposed that NC structures are discourse partitioned into topic and focus, and n-words provide the topics. Overt n-word preposing will be analyzed as syntactic topicalization.

2. TWO PATTERNS OF NEGATIVE DEPENDENCIES IN GREEK

The starting point of the analysis of NC I will propose in this paper is the thesis that NC is nothing more than a subcase of negative polarity. The earlier advocate of this thesis is Ladusaw (1992) (see also Acquaviva 1993), but a detailed justification of it in a general theory about polarity sensitivity is provided in Giannakidou (1997, 1998, 1999), which is the theory I assume here.

Details omitted, I argued that polarity sensitivity is a form of semantic dependency between polarity items (PIs) and context. PIs are *sensitive*

expressions in that they are dependent on some property of the context for their proper interpretation.

(9) DEFINITION 1 (Polarity item)

A linguistic expression α is a polarity term iff:

- (i) The distribution of α is limited by sensitivity to some semantic property β of the context of appearance; *and*
- (ii) β is (non)veridicality.

Hence, according to definition 1, the limited distribution of PIs is the result of their semantic dependency on the property of (non)veridicality. Semantic dependency can be conceptualized as a positive or as a negative relation between PIs and the licensing property β . Positively, R can be regarded as an attraction relation, and negatively, as an avoidance relation, reflecting some kind of incompatibility between the PI and β . In the former case we speak of licensing, in the latter about anti-licensing.

- (10) *Licensing:* R (α , β)
Anti-licensing: \neg R (α , β)

Licensing is a *must* relation, but anti-licensing reflects a *must not* relation. We can say, for instance, that *any students* is licensed in (11a), with only the interpretation in (11d) because there is a positive relation between *any students* and (non-veridical) negation. By contrast, *some students* in (11b) is anti-licensed; it cannot be interpreted inside the scope of negation, but only outside of it as in (11c). This is the assumption underlying the standard analysis of *some* as a positive PI:

- (11)a. Margo didn't see any students.
 b. Margo didn't see some students.
 c. $\exists x$ [**student**(x) \wedge \neg **saw** (Margo, x)]
 d. $\neg \exists x$ [**student** (x) \wedge **saw** (Margo, x)]

The idea of negative conditions on PIs goes back to Ladusaw (1979), and Progovac (1988, 1994). Though the *some* example might make us think that licensing and anti-licensing simply map onto scope conditions, this is actually not the case: licensing and anti-licensing defined as in (10) should be understood as semantic, and not necessarily syntactic conditions. The

syntactic mapping of the semantic conditions is an independent factor, as will become clear in Section 5.

2.1. *Distinct Distribution of n-words*

Greek has two paradigms of n-words, illustrated in (12); the English glosses here should be taken as suggestive only:

(12)	kanenas/KANENAS	'anyone, anybody/no-one, nobody'
	kanenas N/KANENAS N	'any N/no N'
	tipota/TIPOTA	'anything/nothing'
	pote/POTE	'ever/never'
	puthena/PUTHENA	'anywhere/nowhere'

Upper-case letters indicate emphatic accent. This accent is not related to focus for reasons that have been discussed elsewhere (Giannakidou 1997, and 1998, pp. 227–231; see, however, Tsimpli and Roussou 1996 for a focus-based account). Likewise, Puskás (1998) argues that the emphatic accent on Hungarian n-words cannot be reduced to focus either. In Puskás's terms, "This stress [i.e., the accent observed in Hungarian n-words] cannot be assimilated with the stress assigned in FP which has strong emphatic or identificational reading. Therefore it cannot be argued that Hungarian negative phrases carry [+f]" (Puskás 1998, p. 199). Szabolcsi (1981, pp. 530–532) also observes that Hungarian n-words, on a par with universal quantifiers, "may not fill the F-position".

I follow here my previous work in assuming that emphatic n-words are lexically distinct from non-emphatic ones. Emphatic accent, then, is treated as some kind of morphological marking. This is not a 'peculiar-ity' specific to n-words; rather, accent seems to have the same function elsewhere in the grammar of Greek. For instance, accent is employed to distinguish between 'few' *-LIJI-* and 'a few' *-liji-*, and 'too' *-POLI-* and 'very' *-poli-*. The contrasts are visible in the examples below. In (13) the non-emphatic is licensed under *LIJI* but not under *liji*, which is expected given that only *few* licenses non-emphatics. Likewise, (14) illustrates that emphatic accent distinguishes between *very* and *too*. Again, non-emphatic licensing serves as the diagnostic:

- (13)a. *LIJI* fitites ipan tipota.
few students said.3pl n-thing
 Few students said anything.
- b. **liji* fitites ipan tipota.
a few students said. n-thing

- (14)a. Ime POLI kurasmeni ja na miliso me kanenan.
be.1sg too tired for subj talk.1sg with n-person
 I am too tired to talk to anybody.
- b. *Ime poli kurasmeni ja na miliso me kanenan.
be.1sg very tired for subj talk.1sg with n-person

Using suprasegmental features to perform morphological distinctions is a common strategy across languages – for instance, stress is systematically employed (e.g., *pérmit* vs. *permít* for the noun vs. verb distinction in English), and tone. Victor Manfredi (personal communication) informs me that, in the Niger-Congo language family there are numerous examples of functional superstructure whose only overt exponent is ‘tone’ - usually a High tone, which in metrical accounts would most often correspond to a strong prosodic position. Examples include the feature ‘Finite’ (or ‘Tense’) in Yoruba, and the feature ‘Genitive’ in Igbo (both of the Kwa group, spoken in southern Nigeria). For quantifiers in particular, there are recorded instances in southern Igbo where ‘anyone/anything’ and ‘everyone/everything’ are distinguished only by tone.⁴ Though Greek does not employ intonational means for morphological distinctions as extensively as the above languages do, the distinction arising with emphatic accent in n-words and the other two pairs mentioned above should be seen in this light.

Emphatic and non-emphatic n-words must be construed with negation or *xoris* ‘without’ in order to be grammatical, but non-emphatics are also licensed in a broad array of non-negative environments including, *inter alia*, modal verbs, interrogatives, imperatives, and the scope of intensional verbs like *want* and *hope*. Emphatic n-words are ungrammatical in non-negative constructions. The following examples partially illustrate this contrast:

⁴ Victor Manfredi reports that the data with quantifiers are not as robust, but this is probably due to the interference of negation; consider also that more complex semantic structures are involved (more complex than simplex genitives and finiteness).

- (15)a. I Theodora *(dhen) enekrine {kanena/KANENA}
the Theodora not approved.3sg n-
 sxedhio. [negation]
plan
 Theodora didn't approve any plan.
 Theodora approved no plan.
- b. ... *(xoris) na dhi {kanenan/KANENAN}. [without]
without subj see.3sg n-person
 ... without having seen anybody.
- (16) Pijes {pote/*POTE} sto Parisi? [interrogative]
went.2sg n-ever in-the Paris
 Have you ever been to Paris?
- (17) An dhis tin Elena {puthena/*PUTHENA}, na tis
if see.2sg the E. n-where, subj her
 milisis. [conditional]
talk.2sg
 If you see Elena anywhere, talk to her.
- (18) Elpizo na emine {kanena/*KANENA}
hope.1sg subj left.3sg n-
 komati. [strong intensional verb]
piece
 I hope there is a piece left.
- (19) Pare {kanena/*KANENA} milo. [imperative]
take.imp.2sg n- apple
 Take any apple.

The distributional differences enable us to characterize non-emphatics as affective polarity items (APIs) and emphatics as negative polarity items

(NPIs) proper. I give here the relevant definitions, simplifying slightly the ones in Giannakidou (1998):

- (20) DEFINITION 2 (Affective polarity item)
A polarity item α is *affective* iff it is licensed by *nonveridical* operators.
- (21) DEFINITION 3 (Negative polarity item)
An affective polarity item α is a *negative polarity item* iff it is licensed by *antiveridical* operators.

Roughly, an operator is non-veridical iff it does not entail the truth of the proposition it embeds: $[Op p] \not\rightarrow p$ (see also Zwarts 1995). Adverbs like *possibly* and modal verbs are typical non-veridical operators. Other non-veridical environments include negation, non-assertive speech acts (questions, imperatives, exclamatives), the protasis of conditionals, the scope of strong intensional verbs like *want* and *hope*, the future, the habitual, and the restriction of universal quantifiers. APIs are grammatical in all these environments.⁵

Antiveridical operators form a subset of the non-veridical ones. Antiveridical operators are ‘negative’ in that they entail the falsity of the proposition they embed, so $[Op p] \rightarrow \neg p$ holds. Negation and negative quantifiers are prototypical antiveridical operators, as we see in (22). *Without* is also antiveridical:

- (22)a. Paul did not see a snake. \rightarrow It is not the case that Paul saw a snake.
- b. No student saw a snake. \rightarrow It is not the case that the students saw a snake.
- (23) Paul talked without looking at me. \rightarrow It is not the case that Paul looked at me.

Hence negative assertions (with either negation or negative quantifiers) are antiveridical and so are assertions containing *without*. These are the NPI environments par excellence. This is not to say that all NPIs will be licensed in both negative and *without*-clauses. Indeed, it is expected that

⁵ Epistemic and dream/fiction verbs are shown to be veridical in Giannakidou (1998, 1999) and thus do not license APIs. *Any* can also be analyzed as an API along these lines, but for some differences between *any* and nonemphatics see again the works mentioned above.

there may be 'stronger' NPIs licensed only by negation; n-words in Hungarian and Serbian/Croatian are cases in point (Puskás p.c. and Progovac 1994; see also Giannakidou 1988, pp. 160–162). Appeal to antiveridicality allows us to keep negation and *without* together as a natural class in terms of their NPI-licensing potential.

Given that only emphatics can provide successful negative fragment answers, I take it that it is only in these cases that the issue of NC arises.⁶ On top of the distributional differences, syntactic and semantic differences also tease the two paradigms apart. This we see below. From now on, I concentrate on the context of negation.

2.2. Syntactic Differences

The crucial syntactic difference between the two paradigms in (12) concerns locality. The licensing of emphatics appears to be local roughly in the sense of clause-bounded, whereas the licensing of non-emphatics is unbounded (as first observed in Giannakidou and Quer 1995, 1997). Syntactically, therefore, non-emphatic n-words behave on a par with *any* and their licensing is quite unconstrained, whereas emphatic n-words must always be in a local relation to negation. The emphatic pattern is reminiscent of the clause-boundedness observed in NC cross-linguistically (see Longobardi 1991 and Acquaviva 1997 for Italian, Déprez 1997 for French, and Przepiórkowski and Kupść 1997 for Polish, among others). In this paper, I will pursue the idea that the locality involved in NC is the one involved

⁶ Unlike emphatic n-words, non-emphatics cannot be licensed as fragment answers:

- (i) Q: Who did you see?
 A: *Anybody.
 *Kanenan.

Given that the remnants in fragment answers are accented (for reasons that are of no immediate interest here), we can argue that non-emphatics are excluded because they are not accented. Considering that utterances with non-emphatics typically involve pitch accent on negation, we may argue alternatively that ellipsis excludes non-emphatics because the accented negation itself must be deleted. We need to say something else for the exclusion of *anybody*, however, as this item may indeed be accented. Though I will not deal with *any* here, I believe the explanation of why it is unacceptable as a fragment answer must make use of the fact that *any* also obeys what appears to be a linear order c-command constraint: negation must precede it at S-structure (cf. **Anything I didn't say*). Non-emphatics are also subject to I this constraint. If an item is subject to such a constraint then it is only expected that elliptical negation cannot license this item. For more discussion on the role of ellipsis in licensing negative answers see Section 3.1; for discussion of whether the c-command constraint should be stated as an S-structure or as an LF condition see Giannakidou (1998, pp. 235–242) and references therein.

in quantifier scope, and I will further elaborate in sections 4 and 5. The intuition that the locality of NC is to be linked to the clause-boundedness of quantifier scope is also present in Déprez (1997).

The following three differences are indicative of the locality contrast:

(a) Non-emphatics, but not emphatic, are licensed in syntactic islands. The example below illustrates this with a relative clause (but other examples are given in Giannakidou 1998; see also Quer 1993 for a similar observation about Catalan *n*-words):

- (24) Dhen prodhosa mistika [pu eksethesan
not betrayed.1st secrets that exposed.3pl
 {kanenan/*KANENAN}]
n-person
 I didn't reveal secrets that exposed anybody.

In this respect, non-emphatics are like *any*, which is also licensed in islands as we see in the translations.

(b) Only non-emphatics are licensed long-distance. Greek lacks infinitives, but has three types of complement clauses: *oti*, *na*, and *pu* clauses. *Oti* is the indicative nonfactive complementizer and *pu* is the indicative factive one. *Na* introduces subjunctive clauses, but it is not a complementizer (Philippaki-Warbuton 1993 and references therein; for the semantic parameters regulating mood choice, see Giannakidou 1997, 1998). *Na*-domains in Greek usually behave on a par with infinitival and 'restructuring' domains of other languages (Aissen and Perlmutter 1983, Rizzi 1978), which are known to be 'transparent' with respect to certain long distance dependencies (for reasons immaterial here).

Emphatic items are not accepted in indicative complements of negated matrix predicates. NC is possible only in monoclausal domains and *na*-clauses:

- (25) I Ariadhni dhen ipe oti idhe {tipota/*TIPOTA}.
the Ariadne not said.3sg that saw.3sg n-thing
 Ariadne didn't say that she saw anything.
- (26) I Ariadhni dhen theli na dhi
the Ariadne not want.3sg subj see.3sg
 {kanenan/KANENAN}
n-person
 Ariadne doesn't want to see anybody.

Non-emphatics, on the other hand, are generally licensed long-distance. The embedding need not be limited to just one complement clause, as illustrated in the sentence below (from Giannakidou 1998); the translation indicates that the same holds for *any*:

- (27) Dhen ipa oti pistevo oti itheles na me
Not said.1sg that believe.1sg that wanted.2sg subj me
 katigorisise kanenan.
accuse.2sg to n-person
 I didn't say that I thought that you wanted to badmouth me to anybody.

Emphatics are, of course, unacceptable in such cases.

Note that, unlike NC, multiple *wh*-structures are possible through indicative and subjunctive complements alike, a fact which clearly teases NC apart from multiple *wh*-dependencies and casts doubt on approaches that assimilate the two.

- (28)a. Pjos ipe [oti idhe pjon]?
who said.3sg that saw.3sg who
 Who said that he saw who?
- b. Pjos theli [na dhi pjon]?
who want.3sg subj see.3sg who
 Who wants to see who?

For a detailed discussion of the asymmetries between *wh*-movement and NC in Greek, see Giannakidou (1998).

(c) Only emphatics may appear to the left of their licenser. This preposing, which is optional, will be analyzed as topicalization in Section 6.2.

- (29)a. KANENAN dhen idha.
n-person not saw.1sg
 I saw nobody.
- b. *Kanenan dhen idha.

The most plausible hypothesis is, then, that the syntax of NC involves a kind of locally restricted movement whereas the syntax of non-emphatics

does not. This kind of restricted movement is not unknown from the literature: it has exactly the properties usually attributed to the movement operation that assigns scope to quantifiers, namely QR.

2.3. *Semantic Differences*

The crucial semantic fact about the two n-word paradigms is that only non-emphatic n-words are existential quantifiers. Emphatics, on the other hand, do not exhibit characteristics of existentials, but of strong quantificational elements, as evidenced by the tests below. The discussion is based on data from Giannakidou (1997, 1998), and additional material is used to make the contrasts sharper. The conclusion will be that emphatics are universal quantifiers. This conclusion will be further corroborated by the scope parallelism between other universal quantifiers and emphatic n-words examined in Section 4.

2.3.1. *Almost/absolutely Modification*

∀-quantifiers, but not ∃-quantifiers can be modified by *almost/absolutely* (see Dahl 1970 and Horn 1972, and Zanuttini 1991 for application to Italian n-words). We see below that only emphatics admit *almost/absolutely* modification.

(30)a. *Electra was willing to accept {absolutely/almost} something.

b. Electra was willing to accept {absolutely/almost} everything.

(31)a. Dhen idha sxedhon {KANENAN/*kanenan}.

not saw.Isg almost n-person

I saw almost nobody.

b. Dhen idha (apolitos) {KANENAN/*kanenan} (apolitos).

not saw.Isg absolutely n-person absolutely

I saw absolutely nobody.

So, according to this test, emphatics are universal quantifiers and non-emphatics are existential.

It has been a popular strategy in the recent literature to discard the results of the *almost* test as unreliable (see, for example, Horn and Lee 1995, Déprez 1997, Blaszcak 1999). It is observed, for instance, that *almost* can

modify non-universals, e.g., numerals like the ones we see below, as long as they are interpreted as denoting high-values:

- (32)a. Almost two thousand students participated in the demonstrations.
- b. #Almost five students participated in the demonstrations.
- c. Almost five students participated in the faculty meeting.

(Note that the criticism is directed towards *almost* and not *absolutely*; the data with *absolutely* and *apolitos* in (31b) make the point regardless of whether one accepts the *almost* test or not.) Faced with examples like (32), Horn and Lee (1995) propose that the correct generalization is that *almost/absolutely* modify high-scalar values and not necessarily universals. (Universals, of course, are the highest possible values.) In the example (32a), two thousand students is indeed a high value for student participation in a demonstration, but five students certainly is not, hence (32b) is unacceptable; yet the very same number of students counts as a high value in (32c), when we consider participation in faculty meetings, because the scales at hand are pragmatic constructs.

Crucially, *almost* cannot modify low-scale or endpoint existentials:

- (33)a. *Almost exactly one student participated in the faculty meeting.
- b. *Almost one student participated in the faculty meeting.
- c. *Almost a/some student participated in the faculty meeting.
- d. *Almost zero students participated in the faculty meeting.

The fact that low or zero point existentials like (*exactly*) *one*, *a*, *some*, and *zero* are not modifiable by *almost* indicates clearly that the test can still be used to exclude quantifiers with such values. If this is so, then the contrast between emphatics and non-emphatics vis-à-vis the *almost*-test can be restated in weaker terms as a contrast between low-point existentials (non-emphatics) which cannot be modified by *almost*, and high-valued expressions which can indeed be modified by it (emphatics). This alone excludes the possibility of analyzing emphatics as existential indefinites with the force of singular indefinites (as was proposed in Ladusaw 1992 and the works stemming from this tradition), or *zero*-numerals (Déprez 1997).

A reviewer suggests examples like the following as potential counter-arguments to the claim that *almost* modifies high values:

- (34)a. The bus ticket now costs almost one dollar.
 b. He ate almost two pizzas.

But these are not really counter-examples. Note, first, that these sentences have two interpretations. One is the neutral mathematical interpretation of ‘rounding up’ the amount of money to one dollar, and the number of pizzas eaten to two pizzas; the second is an interpretation which licenses an inference (possibly an implicature) that one dollar is an expensive price for a bus ticket, and two pizzas is a lot for one person to eat. The licensing of this inference clearly supports the association of *almost* with high values, and it further suggests that even endpoint-low values can sometimes be interpreted as high if the context allows it; recall the example in (32c). As I said before, this has to do with the well-known fact that scales are pragmatic constructs and thus context sensitive. The ‘rounding up’ reading, on the other hand, relates to the fact that NPs like *one dollar* and *pizza* are divisible into smaller units, i.e., cents and pieces of pizza. *Almost* picks up precisely this inner plurality and rounds it up by modifying the highest value of the sum involved. When the extension is not divisible into smaller units, e.g., with singular indefinites like *a student*, or as in **A bus ticket now costs almost one cent*, *almost* modification is impossible. Hence, sentences like the above are not only harmless, but actually support the claim I make here that *almost* modifies high values.

To conclude, though it is useful to ponder what exactly the *almost* test diagnoses, the fact remains that emphatics admit modifiers that low- and endpoint existential quantifiers do not, hence it is questionable whether emphatic n-words are existentials of this sort. Most significantly, this fact holds not only for Greek n-words, but also for their Slavic, Hungariarn, and Romance counterparts.

2.3.2. *ke*-modification

The second difference concerns *ke*-modification. *Ke* ‘and’ is a modifier of existential quantifiers, and emphatics are incompatible with it. This expression is comparable to Dutch *ook maar*, German *auch nur*. In (35) I illustrate that these items, too, are incompatible with universal quantifiers:

- (35)a. Dhen ipe ke {kati/ *katheti} spudheo.
not said.3sg and something /everything important
 He didn’t say something important.

- b. Dhen ipe ke {tipota/*TIPOTA} spudheo.
not said.3sg and n-thing important
 He didn't see anything important.
- c. Wil jij {ook maar iemand/ *iedereen} zien?
want.2sg too prt somebody/ everybody see
 Do you want to see anybody?

Emphatics behave on a par with universal quantifiers as far as *ke*-modification is concerned. Non-emphatics, on the other hand, are well-behaved existentials.

2.3.3. Donkey Anaphora

Like universal quantifiers, emphatics do not license donkey anaphora. This point is extensively discussed in Giannakidou (1997, 1998). I briefly illustrate it here:

- (36) I fitites pu exun {kati₁/ tipota₁} na pun, as
the students that have.3pl something/ n-thing subj say.3pl, let
 to₁ pun tora.
it say.3pl now
 The students that have {something₁/anything₁} to say should
 say it₁ now.
- (37) *I fitites pu dhen exun TIPOTA₁ na pun, as min to₁ pun tora.
 (*The students that have nothing₁ to say, let them not say it₁ now).
- (38) *I fitites pu aghorasan kathe vivlio₁, na to₁ ferun
the students that bought.3pl every book subj it bring.3pl
 mazi tus.
with them
 (*The students that bought every book₁ should bring it₁ with
 them.)

In these examples we see that non-emphatics behave *dynamically*: they can establish anaphoric links from a relative clause just like existential quantifiers. *Any* behaves no different in this respect. Emphatics and universal quantifiers, on the other hand, are *static*: they cannot bind variables outside their scope, as we see in (37) and (38), respectively.

Richter and Sailer (1998) note that Polish n-words behave on a par with emphatics with respect to donkey anaphora, but express reservations for the validity of the test. They argue that negation creates islands for anaphora anyway, and hence also with n-words, for instance:

- (39) *The students that didn't buy any/some book should show it now.

In this sentence, negation binds off the variables contributed by *any book* and *some book* and anaphora is blocked, since there are no discourse referents to be picked by the pronoun in the main clause. Crucially, in these cases we are dealing with negation of a declarative. In a negated directive, however, anaphoric links can indeed be established across negation, as the examples below illustrate with nonemphatics; *any* appears to have a limited ability to do the same:

- (40)a. Don't check any book₁ out from that (Satanic) library; reading it₁ might warp your mind.

- b. Min agorasis kanena vivlio₁; bori na apodixti pro₁
not buy.2sg n- book may subj prove.3sg
 epikindino.
dangerous

Don't buy any book₁; it₁ might prove dangerous.

In the negated imperative (40a), anaphora is enabled across negation and *might* between *any book* and *it*, and the same can be said for (40b) (though in this sentence the bound reading may be not the most salient reading in English). Imagine the context of a dictatorial regime, where some books are forbidden by the government, and whoever buys them runs the risk of going to jail. In this context, (40b) can be felicitously uttered, meaning either 'buying books will prove dangerous' or 'the books that you buy may be dangerous'. The second reading is the one indicated in the indexing in (40b). Emphatics, crucially, do not allow this reading; universal quantifiers do not allow it either:

- (41) Min agorasis KANENA vivlio₁; bori na apodixti pro*₁
not buy.2sg n- book may subj prove.3sg
 epikindino.
dangerous

Buy no books; it might be dangerous (if you buy).

- (42) Min agorasis kathe vivlio₁; bori na apodixti *pro**₁
not buy.2sg every book may subj prove.3sg
 epikindino.
dangerous
 Don't buy every book; it might be dangerous (if you buy them all).

(41) has only the reading where buying books can prove dangerous, and likewise, (42) can only mean 'buying all the books will be dangerous'. Hence, directive negative sentences are indeed static for universal quantifiers and emphatics, but still dynamic for non-emphatics and *any*. The reason for this contrast between declaratives and directives is probably that, unlike with declaratives, discourse referents survive at the time of issuing a directive, and they can be picked up by pronouns. Binding in these cases can be accounted for in terms of modal subordination (Roberts 1989), as the presence of *might* and its Greek counterpart is necessary. Hence, negation and modal operators seem to form a natural class in this respect (see also Groenendijk, Stokhof and Veltman 1996).

Though the discussion above has certainly not exhausted the subtleties and variation arising with phenomena relating to donkey-anaphora, the clear contrasts we witnessed in this subsection allow us to pair emphatics with universal quantifiers, and non-emphatics with existential quantifiers. Most significantly, *n*-words in other languages, e.g., Hungarian, Polish, and possibly other Slavic languages, behave on a par with emphatics (Richter and Sailer 1998, Blaszcak 1999, Puskás p.c).

2.3.4. Use as Predicate Nominals

On a par with universals and unlike non-emphatics and regular existentials, emphatics cannot be used as predicate nominals, as shown in the examples below; this fact was first observed by Giannakidou and Quer (1995):

- (43) Dhen ine {kanenas/*KANENAS} jatros.
Not be.3sg n- doctor
 He is no doctor.
- (44) Frank is {a/*every} student.

Partee (1987) discusses restrictions on the availability of type-shifting to *predicative* (type $\langle e, t \rangle$) interpretations. She argues that type lowering from $\langle \langle e, t \rangle, t \rangle$ to $\langle e, t \rangle$ is not allowed for universals: they must always be assigned the generalized quantifier type $\langle \langle \langle e, t \rangle, t \rangle \rangle$ – the reasons why this is

so are immaterial here. The unacceptability of emphatics in predicate nominal positions indicates that emphatics are interpreted quantificationally and cannot be lowered to the predicate type.

The cross-linguistic picture is a little more complicated. French and Italian n-words, for instance, pattern with emphatics, thus confirming the quantificational pattern. But Richter and Sailer (1998) and Blaszczyk (1999) report that Polish n-words can indeed be used as predicate nominals. The contrast is illustrated below:

(45)a. *Non è nessun dottore.

not is n- doctor

b. *Il n' est aucun docteur.

He not is n- doctor

(46) On nie jest zadnym lekarzem.

he not is n- doctor

He is no doctor.

In Italian and French, just like in Greek, an indefinite NP in combination with negation must be used. Unlike Greek, French, and Italian, but like Polish, n-words in Germanic can also be used as predicate nominals; witness the translation of (46). Moreover, cases like German *Er ist kein Arzt* and Dutch *Hij is geen dokter* 'He is no doctor' provide the only way to express this meaning in these languages, whereas in English there is the less evaluative option of *He is not a doctor*.⁷

What does this variation suggest? The use of n-words as predicate nominals, together with other facts including the availability of split readings with modals (to be examined in Section 5.3), may be taken to argue in favor of a decompositional analysis of negative quantifiers as $\neg\exists$. This has actually been proposed for German and Dutch n-words in Jacobs (1980), von Stechow (1993), and Rullmann (1995). De Swart (1996), however, argues that n-words in Dutch and German are universal negatives. It is not essential for our discussion to decide which analysis is correct; in fact, n-words in Germanic may be truly ambiguous between $\neg\exists$ and $\forall\neg$ readings,

⁷ I should caution here that *He is no doctor* differs from *He is not a doctor*, and likewise the Greek equivalent of the former with the non-emphatic in (43) differs from the Greek counterpart of the latter with a bare NP *Dhen ine jatros*. I characterize this as an evaluative difference and it results, as we see, in a truth-conditional difference: in the case of *He is no doctor* the person in question can still be a doctor, but just not a good one. *He is not a doctor*, on the other hand, is a neutral statement that the person in question does not have property of being a doctor.

in which case both analyses may be correct. What *is* important is the fact that even in languages that do not exhibit NC, sentences with n-words may be interpreted strongly as negative universals, or weakly as existentials under negation.

From the discussion in Section 2.3 we conclude that non-emphatics can be correctly described as existential quantifiers, whereas emphatics share the characteristics of universal quantifiers.⁸ Table 1 lays out the results:

TABLE I
Comparison between Greek n-words and universal and existential quantifiers

<i>Diagnostics</i>	<i>Emphatics</i>	\forall - <i>quantifiers</i>	<i>Nonemphatics</i>	\exists - <i>quantifiers</i>
almost/absolutely	yes	yes	no	no
ke-modification	no	no	yes	yes
donkey anaphora	no	no	yes	yes
predicate nominals	no	no	yes	yes

Based on the parallels summarized in Table 1, it seems plausible to conjecture that the emphatic vs. non-emphatic contrast instantiates the logical distinction we see in (47). Further evidence for the \forall -nature of emphatics will be provided in Section 4 where we consider scope similarities between universal quantifiers and emphatics.

- (47) *Logical representation of general negative statements*
 a. $\forall x[P(x) \rightarrow \neg Q(x)]$ (Universal negation)
 b. $\neg\exists x[P(x) \wedge Q(x)]$ (Existential negation)

The idea is reminiscent of Ladusaw (1994) who suggested that NC may be seen both as a weak (existential) dependency and as a strong (quantifica-

⁸ An objection may arise with the fact that emphatics may be grammatical in the Greek counterpart of the existential-*there* construction:

- (i) Dhen exi {kamia/KAMIA} ghata eki.
Not has n- cat there
 There is no cat here.

Cases like (i) are not really problematic, however, because the existential construction does not present a reliable test for non-universality, or indefiniteness for that matter. Universal quantifiers may indeed appear in existential constructions: *There was every book on the table when the police came in* (see McNally 1992; Ward and Birner 1995 and references therein).

tional) dependency. The two formulae are truth-conditionally equivalent, and the question arises as to where the difference should be located. We return to this question in Section 6.

Crucially, I am not arguing that NC *always* corresponds to universal negation. On the contrary, the two must be kept apart. In a language *without* NC, universal negation arises in statements with negative quantifiers. English, Dutch, and German are such languages. In a language *with* NC, it is possible that universal negation arises with NC; equally possible it is that NC is read as in (47) involving existential negation. The crucial factor in this case will be the number of n-words available in the language and the availability of an existential paradigm under negation. In a language like Greek with existential, non-existential n-words *and* NC the two possibilities are sharply distinguished, and NC necessarily maps onto universal negation. Hungarian, Slavic, and most Romance languages, however, lack the existential paradigm under negation, and consequently obliterate the distinction overtly attested in Greek.⁹ This should be kept in mind when considering the extension of the proposed analysis to languages other than Greek.

2.4. *Pitch Accent and Scope*

In support of the hypothesis that negation with emphatics corresponds to a logical structure like (47a) we should note that in Greek pitch accent marks wide scope in interaction with negation (Giannakidou 1998, pp. 71–73; for other cases of accent disambiguating scope, see Büring 1997). To see this, consider the sentence in (48):

- (48) I Cleo dhen parakoluthise PARAPANO apo tria
 the Cleo not attended.3sg more from three
 mathimata.
 classes
 Cleo didn't attend more than three classes.

The English version of this sentence has two possible readings, depending on whether *more than three classes* scopes over negation or not. The first possibility is illustrated in the LF in (49a): *more than three classes* has

⁹ Occasionally, indefinite paradigms other than n-words can indeed be used under negation in other languages too, e.g., free choice items (whose semantics is considerably more complex than that of the simple existential quantifier under negation). Italian employs also the *alcunché* series (which, however, sounds archaic and is not in regular use, as pointed out to me by Elena Guerzoni, Andrea Bonomi, and Gennaro Chierchia, personal communications).

adjoined to IP, and takes wide scope over negation. (I assume that English negation is just a clitic on Infl.) The second possibility is given in (49b): *more than three classes* is adjoined to VP, below negation.

- (49)a. [IP more than three classes₁ Cleo didn't [VP attend t₁]]]
 b. [IP Cleo didn't [VP more than three classes₁ [VP attend t₁]]]

Under the reading in (49a) we know that there were more than three classes from which Cleo was absent, and we have no idea how many classes she actually attended. Under the reading in (49b), on the other hand, with negation taking wide scope, Cleo attended no more than three classes, and we don't know how many classes Cleo was absent from; there could be three, twenty, or none (if, for instance, only three classes were taught that trimester). Hence, the two readings are true under distinct circumstances.

The Greek sentence, with the accented QP, has only the wide scope QP reading in (49a). Neutral intonation would give us both possibilities. Accent on negation *dhen* permits only the wide scope negation reading in (49b). The disambiguating effect of accent seems more general: it indicates that the element so marked takes wide scope. The point can be further illustrated in the following pair, which involves scope interaction between negation and *kapjon fititi* 'some student':

- (50)a. DHEN idha kapjon fititi.
not saw.1sg some student
 I didn't see any student.
- b. Dhen idha KAPJON fiti.
Not saw.1sg some student
 There was some student that I didn't see.

The sentence (50a) has only the reading in (50a') and the sentence in (50b) can only be interpreted as in (50b'):

(50)a'. $\neg\exists x[\mathbf{student}(x) \wedge \mathbf{saw}(I, x)]$

(50)b'. $\exists x[\mathbf{student}(x) \wedge \neg\mathbf{saw}(I, x)]$

In a context containing, say, 20 students, the reading in (50a') says that none of these 20 students was seen. But under the reading in (50b'), only one student was not seen; the other 19 were indeed seen. This is the positive

polarity *some* reading, which can be brought about by a continuation like ‘namely Paul’, identifying the student that was not seen. So, the positive polarity *some*-reading arises only if we put accent on *kapjon*; if *kapjon* does not have accent, then it is interpreted as the non-emphatic *kanenan* and negation necessarily takes wide scope. (Compare the facts here to the English distinction between *some* and *sm*.)

Hence, emphatic accent, at least under negation, indicates that an element takes wide scope. In the light of this result, it is natural to expect that items like emphatics, which carry inherent accent, take scope over negation. Before I present my own analysis, however, I would like to consider briefly the two other options that have been circulated in the literature: that n-words are indefinites, and that they are negative (universal) quantifiers.

3. THE INTERPRETATION OF NEGATIVE CONCORD AND THE NATURE OF N-WORDS

For a successful account of NC, the proper semantic characterization of n-words is essential, since for the negative marker the conclusion seems obvious: it must contribute negation, because in its absence the sentence is affirmative. The literature on n-words spilled a lot of ink on the question of whether n-words are NPIs or negative quantifiers (see especially Laka 1990, Zanuttini 1991, and Haegeman 1995). In the light of the discussion above there seems no way to avoid the conclusion that n-words *are* NPIs: they are expressions licensed by negation (and other antiveridical operators). In essence, the problem has been whether we should grant negative status to n-words or not.

Two types of strategies have been developed. The first takes n-words to be negative, i.e., negative quantifiers, and postulates an ancillary *absorption* mechanism that allows any number of n-words and the NM to merge into one semantic negation (the NEG-criterion approach; Zanuttini 1991, Haegeman and Zanuttini 1991 and Haegeman 1995; for a slightly different variant formulated in terms of ‘negative void’, see Postma 1995). The idea is roughly illustrated in (51):

- (51) Negative absorption rule
 $[\forall x \neg] [\forall y \neg] [\forall z \neg] \rightarrow [\forall x, y, z] \neg$

This approach extends Higginbotham and May’s (1981) wh-absorption rule to NC and relies crucially on the assumption that NC and multiple wh-dependencies are instances of the same phenomenon which involves a special mechanism in the grammar: absorption.

Alternatively, the thesis that n-words are inherently negative has been dismissed. Instead, it has been argued that in NC negation is expressed only by the sentential particle (overtly or abstractly at LF). N-words, in this view, are indefinites with no quantificational force of their own (Ladusaw 1992, 1994; Acquaviva 1993; Giannakidou 1997; Giannakidou and Quer 1995, 1997). Déprez (1997) offers a variant of this approach; she argues that French n-words are quantifiers with the force of zero, something like *zero N*.¹⁰

It should be obvious by now that both approaches are bound to give unsatisfactory accounts of the Greek facts described so far.

3.1. *Problems with the Hypothesis that n-words are Negative*

The NEG-criterion approach faces two general problems. First, it relies on the characterization of n-words as negative quantifiers. This characterization involves two distinct questions: (a) whether n-words are negative, and (b) whether they are quantificational. We can give a positive answer to the second question without being committed to negativity of n-words, as defended here. The idea that NC may be seen as a quantificational dependency not necessarily dependent on the NEG-criterion (hence not necessarily a negative dependency) is also present in Puskás (1998) regarding Hungarian NC.

The second source of trouble comes from the alleged uniformity between wh-dependencies and NC and the reduction of the latter to the former. It has been emphasized numerous times in the literature that there are significant asymmetries between wh-dependencies and NC (see Acquaviva 1995, 1997, and Giannakidou 1997, 1998 in particular for a detailed discussion of the asymmetries in Greek). I will not repeat the discussion here, but I will take it as established that NC and wh-dependencies are distinct.

Moreover, an objection may be raised regarding negative absorption, given that its role appears to be particular to NC. Ideally, we would prefer a theory whose design is more economical and which employs for the resolution of NC a mechanism already present in the grammar. This would have the welcome result of making NC look less anomalous.

Let us consider now the alleged negativity of n-words. Languages *without* NC, e.g., German, Dutch, and English (West Germanic), have n-words that are indeed negative quantifiers. There are two standard dia-

¹⁰ A third type of approach can also be distinguished based on the idea that n-words are underspecified (van der Wouden and Zwarts 1993). Underspecification allows partial characterization of n-words as negative quantifiers in some cases and existential quantifiers in some others.

gnostics. First, these n-words contribute negative meaning in the absence of the NM, as we see in (52a). Second, when they co-occur, or when they co-occur with a NM, only double negative readings arise as we see in (52b,c):

- (52)a. Heeft Frank niemand gezien? Dutch
have.3sg Frank nobody seen
 Is it true that Frank saw nobody?
- b. Frank heeft niet niemand gezien.
Frank have.3sg not nobody seen
 It is not the case that Frank didn't see anybody.
 #Frank didn't see anybody.
- c. Niemand zei niets. Iedereen had iets te
nobody said.3sg nothing everybody had something to
 vertellen.
say
 It is not the case that nobody said anything. Everybody had
 something to say.

In the above sentences *niemand* and its English counterpart are interpreted as negative quantifiers. The same can be said for *niets* 'nothing'. I give here the version with \forall without implying that this is the only option; negative quantifier construals can also admit $\neg\exists$ readings (if this is how we choose to interpret n-words as predicate nominals, for example).

- (53)a. $\llbracket \text{niemand} \rrbracket = \lambda P \forall x [\text{person}(x) \rightarrow \neg P(x)]$
- b. $\llbracket \text{nobody} \rrbracket = \lambda P \forall x [\text{person}(x) \rightarrow \neg P(x)]$
- c. $\llbracket \text{niets} \rrbracket = \lambda P \forall x [\text{thing}(x) \rightarrow \neg P(x)]$

So negative quantifiers in West Germanic are inherently negative n-words. Crucially, languages with such n-words do *not* exhibit NC. Sentences like (52b,c) are unambiguously double negatives. The question now becomes: are n-words in NC languages identical to their counterparts in non-NC languages?

The most popular alleged piece of evidence for the negativity of n-words comes from the fact that n-words can occur in fragment answers

with negative readings. Recall (2), repeated here (see also Zanuttini 1991 for Italian):

- (54) Q: Ti idhes?
what saw.2g
 What did you see?

A: TIPOTA.
 Nothing.

There are two further cases which might indicate that n-words contribute negative meaning: (a) coordinations (disjunctions, and possibly also conjunctions), and (b) some apparently equative structures which are interpreted as superlative-like comparatives. I provide here the Greek examples but similar facts have been documented for Romance (Zanuttini 1991) and Slavic (Przepiórkowski and Kupść 1998):

- (55) Thelo na pandrefto ton Petro i KANENAN (alo).
want.1sg subj marry.1sg the Peter or n-person (else)
 I want to marry either Peter or nobody (else).

- (56) O Petros ine toso psilos oso KANENAS (alos) stin
the Peter is as tall as n-person (else) in-the
 taksi tu.
class his
 Peter is taller than anybody else in his class.

In the above sentences, it seems that emphatics are interpreted negatively in the absence of overt negation. This, however, is a by-product of the fact that we are dealing with ellipsis. If we were to spell out full structures, the presence of negation would be indispensable, as indicated below for (54), (55) and (56) respectively; strike-through indicates elided material.¹¹

¹¹ As regards fragment answers in particular, consider that bare NP remnants of minimizers can also be used, as *leksi* 'word' in (i):

- (i) Q: What happened? Did he say anything all night?
 A: LEKSI!
word
 Not a word!

- (54') A: TIPOTA [~~dhen idha~~].
n-thing not saw.Isg
- (55') ... i KANENAN [~~dhen thelo — na — pandrefto~~].
or n-person not want.Isg subj marry.Isg
- (56') ... oso KANENAS alos stin taksi tu [~~dhen ine~~].
as n-person else in-the class his not is

Further evidence that we are dealing with clausal ellipsis is provided by the fact that in the coordination example in (57) the preposition *me* 'with' cannot be omitted; this is in agreement with other cases of moved remnants under ellipsis, such as in gapping and sluicing, since Greek does not allow preposition stranding (see Merchant to appear a) for the correlation between preposition stranding and the possibility to omit prepositions under ellipsis. On the other hand, DPs *can* be coordinated under prepositions in general, as in (58); thanks to Jason Merchant for suggesting this diagnostic:

- (57) Thelo na miliso me ton Petro {i/ke} *(me)
want.Isg subj. talk.Isg with the Peter {or/and} with
 KANENAN (alo)
n-person (else)
 I want to talk to Peter {or/and} nobody (else).
- (58) Milisa me ton Petro {i/ke} ti Maria.
talked.Isg with the Peter or/and the Mary
 I talked to Peter or/and Mary.

Likewise, prepositions must be retained with fragment answers: *Me pjon milises?* 'Who did you talk to?' admits *ME KANENAN*. '(To) nobody' as an answer, with the obligatory presence of the preposition 'me'. Whatever the mechanism of resolving ellipsis may be, we have to say that the negative meaning in the cases we are considering arises not as an inherent contribution of the emphatics, but rather as the result of their being associated with negation at the level at which ellipsis is resolved.

It would be quite far-fetched to invoke inherent negative meaning for *leksi* 'word' here. Rather, the ability of *leksi* to serve as a felicitous fragment answer with negative meaning arises as a result of the fact that the minimizer is always construed with negation.

Consider further that items with inherent negative meaning, like *udhis* ‘nobody’ and *udhen* ‘nothing’, are *not* construed with negation. *Udhis*, *udhen* are remnants from ancient Greek with very limited use in the modern language. They are negative quantifiers, and, as we see in (59), cannot co-occur with negation.

- (59) Udhen neoteron (*dhen) exomen.
nothing new not have.1pl
 We don’t have any new developments.

Sentences like (59) belong to a formal register, but when appropriate, they do not allow negation. The absence of NC in ancient Greek is parallel to the absence of NC in English, German, and Dutch, and due apparently to the fact that a negative quantifier paradigm of n-words is employed in these languages.

It appears, therefore, that there is no substantial evidence that n-words are negative quantifiers. Furthermore, a number of asymmetries between true negative quantifiers and n-words support the stronger conclusion: that n-words are *not* negative quantifiers.

First, unlike West Germanic n-words, n-words in NC languages are used in non-negative contexts without contributing negation, as illustrated below in the examples from Catalan, Spanish, and Italian (Quer 1993, Laka 1990 and Acquaviva 1997, respectively):

- (60)a. Li diràs res? Catalan
him/her tell.fut.2sg n-thing
 Will you tell him/her anything?
- b. Si aneu enlloc, digueu- m’ho.
if go.2pl n-where, tell.imp.2pl me
 If you go anywhere, let me know.
- c. Tothom qui vulgui res, que m’ho digui.
everybody who want.3sg n-thing, that me tell.3sg
 Everyone who wants something, should let me know.
- (61)a. Perdimos la esperanza de econtrar ninguna salida. Spanish
lost.1pl the hope to find n- exit
 We lost hope of finding some way out.

- b. Todo aquel que tenga nada que decir ...
all who that have.3sg n-thing that say
 Everyone who has anything to say ...

(62)a. È venuto nessuno? Italian
have.3sg come n-person
 Has anyone come?

- b. È l'idea più stupida che abbia mai avuto
be.3sg the idea more stupid that have.subj.3sg ever had
 nessuno.
n-person
 It's the dumbest idea I have ever had.

In the above sentences, n-words are unable to contribute negation by themselves. Instead, they are interpreted merely as existential quantifiers.

Second, unlike West Germanic and Romance n-words, n-words in strict NC languages (Greek, Hungarian, and Slavic) are not licit in non-negative contexts. We saw the relevant Greek facts in Section 2. Here, I illustrate this point with interrogatives:

- (63)a. *Da li Milan voli nitkoga? Serbian/Croatian
that Q Milan love.3sg n-person
- b. *Nikto zvonil? Russian
n-person called.3sg
- c. *Olvasott Mária semmit? Hungarian
read.past.3sg Maria n-thing
- d. *Idhes KANENAN? Greek
saw.2sg n-person

Greek, Hungarian, and Slavic n-words are ungrammatical without negation. This implies that they are unable to contribute negation on their own, as West Germanic n-words do, despite the fact that their morphological make up seems to have a negative component (at least in Slavic, but the negative morphology may just be the marking of the polarity dependency to negation). If n-words in strict NC were like the West Germanic ones,

we would expect them to be fine in questions and to contribute negative meaning, contrary to fact.

Third, n-words in NC languages do not give rise to double negation readings:

- (64) KANENAS dhen ipe TIPOTA. Greek
n-person not said n-thing
 Nobody said anything.
 # It is not the case that nobody said anything.

The native speaker's intuition is that, unlike (52b,c), the sentence (64) is true in a situation where there has been complete silence. The sentence does not have a double negative reading, as we would expect under the hypothesis that the n-words are negative.

In some NC languages, however, double negation readings may marginally arise with n-words, e.g., in Italian with *nessun NP + nessun NP* combinations (see Acquaviva 1995), in Spanish, in Quebecois (Vinet 1998), and to a very limited extent in Hungarian (see Puskás 1998, where it is emphasized that not all speakers accept the marginal double negation readings). In French, we observe a pattern of systematic ambiguity. French sentences with more than one n-word are typically ambiguous between a NC and a double negation reading. Corblin (1996) and Larrivée (1995) deal with this problem by arguing that the negative value of French n-words can either be parasitic on a previous negation (NC reading) or can be introduced as an independent negative value (double negation reading). In any case, French n-words may be granted negative quantifier status as one possible interpretation because they systematically give rise to both NC and double negative readings.

Crucially, in the other languages mentioned above, the availability of double negation readings is not systematic but marginal, and in Greek and Slavic NC, as I mentioned, double negative readings never arise. The variation clearly suggests that n-words do not form a semantically uniform class across languages, and it makes it plausible to argue that, at least in languages where double negation readings arise, n-words may be ambiguous between a negative and a non-negative meaning. Note also that the double negation readings exhibit special intonation, which might indicate underlyingly distinct structures (see Puskás 1998 and Vinet 1998).

I conclude that Greek n-words in NC are not negative quantifiers. The conclusion seems to carry over to (at least) certain Slavic languages and Hungarian. For extensive discussion of why Polish n-words are not negative, see Blaszcak (1999).

3.2. *Problems with the Indefinites Approach*

Greek NC, as we saw, exhibits the characteristics of a quantificational dependency, so the indefinite account for emphatic n-words seems to fail right from the start. Yet, the quantificational variability we just observed with Romance n-words ('negative' under negation, but existential otherwise) makes it appealing to analyze these n-words as Heimian indefinites which typically exhibit such variability. In fact, French n-words would be prime candidates for such an analysis.

The indefinites approach was initiated in Ladusaw (1992, 1994) and was further developed in, among others, Acquaviva (1993), Giannakidou and Quer (1995, 1997), Piñar (1996), Giannakidou (1997), Déprez (1997), Richter and Sailer (1998), and Blaszczak (1999). The idea is that n-words are open formulae with no quantificational force of their own (Kamp 1981; Heim 1982). Like indefinites, n-words contribute a free variable (to be bound by the appropriate operator), and a predicative condition on that variable:

- (65) $[[\text{enas fititis}]] = \mathbf{student}(x)$
 $[[\text{KANENAS fititis}]] = \mathbf{student}(x)$

N-words differ from regular indefinites in that they come with a binding requirement (*roofing* in Ladusaw's terminology) which must be met at the sentence level. N-words must be bound by a non-veridical or antiveridical operator, and can never be bound via text-level existential closure (see especially Giannakidou 1997). Binding takes place in tripartite structures of the form in (66), either in the restriction, or in the scope of the operator:

- (66) $\text{NONV/ANTIV } Op_x [\text{restriction } \dots X \dots] [\text{scope } \dots X \dots]$

By assuming that n-words denote open formulae with no inherent quantificational force, the indefinites approach seems to offer an easy solution to the problem of NC: n-words do not contribute negation, only the NM does. This, however, turns out to be too easy a solution.

The most obvious problem is that not all n-words exhibit quantificational variability. Emphatics, which are only licit under negation and antiveridical operators, are never interpreted as existentials. In fact, as we saw in the previous subsection, in contexts favoring this interpretation emphatics are ungrammatical (interrogatives, conditionals, restriction of \forall , etc). As far as I know, n-words in Slavic and Hungarian NC are similar to the Greek ones in that they do not exhibit quantificational variability either. We also saw in Section 2.1 that there are n-words which are indeed interpreted existentially, i.e., non-emphatics, but these are interpreted *only*

existentially, and hence there is no variability. These facts constrain considerably the empirical scope of the indefinites analysis: though it could provide the basis for a theory about some Romance languages, it cannot be proposed as a theory of n-words and NC in Greek, Hungarian or Slavic.

Yet even regarding Romance, an obvious question arises: why is it that the quantificational variability is manifested the way it is? Under standard assumptions, indefinites acquire the quantificational force of the operator that binds them. Where does the \forall -force come from when n-words are construed with negation? Negation alone can surely not provide \forall . Given that $\forall\neg$ and $\neg\exists$ are truth conditionally equivalent, it makes more sense to say there is actually no quantificational variability involved in Romance n-words and that they contribute \exists in all the contexts they occur in. Under negation, $\neg\exists$ will give the negative meaning. In a non-negative context, the existential import of \exists will be preserved.

Richter and Sailer (1998) take word order constraints like Linebarger's (1987) immediate scope constraint to be evidence for the indefinite status of n-words. I should emphasize here that there is no a priori connection between the immediate scope constraint and n-words being indefinites. Grammaticality failure in intervention phenomena may be seen as licensing (i.e., lexical semantic) failure, and it is not necessarily a diagnostic for *binding* failure. The two can be collapsed only if we take licensing to necessarily involve binding, as is done in the indefinites approach. But if we do this, we build a circular argument in favor of this approach. We stipulate first that n-words come with a requirement on binding, and then we take failure of binding in intervention phenomena to be diagnostic of the binding requirement.¹² This is, clearly, no argument.

Last but not least, the indefinites approach cannot handle the issue of locality arising in NC. If n-words were indefinites, it is surprising that the observed locality constraints are found, as indefinites are generally thought to have 'unbounded' scope. We saw in Section 2.2, however, that NC *is* subject to severe locality constraints; this fact holds not only for Greek but cross-linguistically. In some cases, e.g., in Polish, the locality constraint is very strict: NC is excluded from non-monoclausal domains, even if these domains are subjunctive-like or infinitival. The analysis of

¹² I talk about stipulation here because the claim that n-words come with a requirement for binding does not really bring us closer to understanding the sensitivity issue, i.e., the question of how the lexical semantics of PIs is linked to their limited distribution. In the theory I assume here, sensitivity is a lexical semantic dependency between PIs and context (see Section 2.1 and especially Giannakidou 1998 where sensitivity features are postulated as a lexical component of PIs). I return to this point in Section 5, where I argue that the sensitivity feature of emphatics is that they can only combine with antiveridical (negative) predications.

n-words as indefinites predicts that n-words will be licensed unboundedly as long as they remain in the scope of the licensing operator. Though this is true, as we saw, of existential n-words under negation, e.g., *any* and non-emphatics, it is clearly not true of emphatics and n-words in Greek, Slavic, and most of Romance.

I conclude that the non-quantificational approach to NC cannot provide the basis for an account of Greek NC. I will not pass judgment on the viability of the approach regarding the larger cross-linguistic picture, yet it is highly unlikely that the indefinite analysis can be reconciled with the absence of quantificational variability and the locality globally observed in NC. Locality, especially, provides a strong indication that we are dealing with a quantificational dependency, which is what I examine next.

4. N-WORDS AS UNIVERSAL QUANTIFIERS: EVIDENCE FROM SCOPE CONSTRAINTS

In Section 2 we reviewed four diagnostics which enabled us to advance the hypothesis that Greek n-words in NC are universal quantifiers. In this section, we examine scope parallelisms between n-words and universal quantifiers which further support this hypothesis. The locality involved in NC, namely clause-boundedness, will be shown to be identical to the locality in quantificational dependencies with QR.

Recall first that NC is not licensed long-distance, with the exception of restructuring *na*-domains:

- (67)a. *O Pavlos dhen ipe [oti idhe KANENAN].
the Paul not said.3sg that saw.3sg n-person
 (Paul didn't say he saw anybody.)
- b. *Dhen lipame [pu pligosa KANENAN].
not be-sorry.1sg that hurt.1sg n-person
 (I don't regret that I hurt anybody.)
- c. O Pavlos dhen theli [na dhi KANENAN].
the Paul not want.3sg subj see.3sg n-person
 Paul doesn't want to see anybody.

Occasionally, emphatics may be licensed in the indicative complements of epistemic neg-raising verbs, for instance in the *oti* complement of *pistevo* 'believe':

- (68) Dhen pistevo [oti idhes KANENAN].
not believe.1sg that saw.2sg n-person
 I don't believe you saw anybody.

Emphatic licensing in the complements of epistemic neg-raising verbs is generally very weak, and subject to performativity constraints: person (the embedding predicate must be 1st person singular), and tense constraints (only present tense is acceptable). I will not go into the details here, but I will rely on Giannakidou and Quer (1995, 1997, pp. 106–111) and Giannakidou (1997), where the availability of cases like (68) was linked to the parenthetical uses of neg-raising verbs (for a general discussion of neg-raising, see Horn 1978). The weakness of the effect and the performativity constraints are also attributed to this factor. Sentences like (68) are not real attitude reports (relational and biclausal), but rather constitute monoclausal domains, and *pistevo* 'believe' functions as an adverbial like 'personally'. NC is thus sanctioned by the parenthetical use of the epistemic verb.

Now, if *pistevo* is modified by an adverb, neg-raising is blocked, and so is NC. This happens because adverb modification forces the attitudinal reading.

- (69) Dhen pistevo adhikeoljita oti me apata.
not believe.1sg unreasonably that me cheat.3sg
 I don't believe unreasonably that (s)he is cheating me.
 # I believe unreasonably that (s)he isn't cheating me.

- (70) * Dhen pistevo adhikeoljita oti idhes KANENAN.
not believe.1sg unreasonably that saw.2sg n-person
 (I don't believe unreasonably that you saw anybody.)

Since *adhikeoljita* in (70) is an attitude modifier, *pistevo* cannot be used parenthetically. As a result, NC is not possible; compare this sentence to (68), without the adverb. Non-emphatics are not affected by the presence of the adverb and are uniformly fine (Giannakidou and Quer 1997, pp. 108–109, see also the discussion of other blockers in that work).

Crucially, adverbs exhibit exactly the same blocking effect on quantifier scope. As shown in Farkas and Giannakidou (1996), *para poli* 'very much' prevents *kathe* 'every' from taking scope over *kapjos* 'some' in (71),

although this is possible in (72), without the adverb; “>” reads as “scope over”:

(71)a. *Kapjos kathijitis ithele para poli kathe ipopsifios s’ afti*
some professor wanted.3sg very much every candidate in this
ti lista na vri dhulja.
the list subj find.3sg job
 Some professor wanted very much every candidate on this list
 to find a job.

b. $\exists > \forall$

c. $*\forall > \exists$

(72)a. *Kapjos kathijitis ihele kathe ipopsifios s’ afti ti lista*
some professor wanted.3sg every candidate in this the list
na vri dhulja.
subj find.3sg job
 Sine professor wanted every student on this list to find a job.

b. $\exists > \forall$

c. $\forall > \exists$

Example (72) can be true in a situation in which professors co-vary with students (e.g., if we have excellent recommendation letters for each student candidate). This indicates that *kathe ipopsifios* ‘every candidate’ scopes over the existential *kapjos kathijitis* ‘some professor’. Sentence (71) lacks this reading: only one, very hopeful, professor is involved.

A second important fact concerns the ability of universal quantifiers to take scope beyond the clause they occur in. The general consensus seems to be that, unlike the scope of existentials which is upwards unbounded, the scope of universal quantifiers cannot cross the tensed clause boundary (for relevant discussion see Farkas 1981, Farkas and Giannakidou 1996, Kennedy 1997 and references therein). Some exceptions to this generalization were presented in Farkas and Giannakidou (1996) involving *na*-clauses; the effect can be reproduced in Romance and English with restructuring or infinitival domains.

Farkas and Giannakidou observe that universal quantifiers, i.e., *kathe*, can indeed scope over an indefinite in the main clause as long as they

are located in *na*-complements. If located in *pu* or *oti* complements, *kathe* cannot take wide scope:

(73)a. Kapjos kathijitis frondise kathe fititis s' afti ti lista
some professor made-sure.3sg every student in this the list
 na vri dhulja.
subj find.3sg job
 Some professor made sure that every student in this list will find
 a job.

b. $\exists > \forall$

c. $\forall > \exists$

(74)a. Kapjos fititis lipithike pu kathe kathijitis tis
some student was-sorry.3sg that every professor the
 sxolis apolithike.
department got-fired.3sg

Some student regrets that every professor in the department got
 fired.

b. $\exists > \forall$

c. $*\forall > \exists$

(75)a. Kapjos fititis ipe oti kathe kathijitis tis sxolis
some student said.3sg that every professor the department
 apolithike.
got-fired.3sg

Some student said that every professor in the department got
 fired.

b. $\exists > \forall$

c. $*\forall > \exists$

The *na*-sentence in (73) has a reading in which professors co-vary with students (as in the scenario mentioned above where there are different recommendation letters for each candidate). But the sentences in (74) and

(75) lack this reading, as indicated. Farkas and Giannakidou propose certain semantic constraints to account for what allows for wide scope, not of immediate relevance here. What matters is that we may safely assume that (76) holds:

(76) *Clause-boundedness of universal quantifiers*

The scope of \forall is clause-bounded, except when \forall occurs in an infinitival (or restructuring) domain.

Crucially, (76) applies only to universal quantifiers. The scope of existential quantifiers is, as we know, unlimited: quantificational existentials can scope freely over all types of complement clauses and even islands (a fact which renders QR problematic for these cases; see especially Reinhart 1997 and references therein for extensive discussion). If we consider now the NC facts, i.e., that NC is clause-bounded and possible long-distance only across *na*-complements, we see that (76) successfully describes precisely this state of affairs. NC is clause-bounded in exactly the same way the scope of universal quantifiers is, and it contrasts with existential quantifier dependencies very sharply in this respect.

Consider now cases where emphatics are sanctioned in complex DPs and adjectival phrases:

(77) Dhen perimeno tin afiksi tu gramatos KANENOS.

not wait.1sg the arrival the.gen letter.gen n-person.gen

I will not wait for the arrival of the letter of anyone.

(78) Aftos o tipos dhen ine aksios tis ebistosinis KANENOS.

this the guy not is worthy the.gen trust.gen n-person.gen

This guy is not worthy of anybody's trust.

Similar observations have been made for Italian (Longobardi 1991) and Polish (Przepiórkowski and Kupść 1997, 1998), but it seems that NC through complex NPs, PPs, and adjectival phrases is considerably more restricted in Greek than it is in Italian and Polish. Crucially, we see below that this form of NC is not sanctioned long-distance into an *oti*-complement, but it is into a *na*-complement:

(79) *Dhen ipa oti aftos o tipos ine aksios tis ebistosinis

not said.1sg that this the guy is worthy the.gen trust.gen

KANENOS.

n-person

I didn't say that this guy is not worthy of anybody's trust.

- (80) Dhen thelo na perimeno tin afiksi tu gramatos
not want subj wait.1sg the arrival the.gen letter.gen
 KANENOS.

n-person.gen

I don't want to wait for the arrival of the letter of anyone.

(Non-emphatics are fine in all types of clauses.) Given that NC is not licensed in the clausal complement of N, NC in non-clausal NP-internal elements such as possessors and adjectival phrases confirms the validity of (76) and the intended parallelism between NC and the scope of universal quantifiers. Longobardi (1991) also emphasizes that NC in these cases is allowed only in non-clausal arguments and adjuncts.

Most significantly, the parallelism is confirmed by the fact that universal quantifiers are allowed to scope over indefinites in cases parallel to (77)–(78). This is illustrated in (81).

- (81) Kapjos kathijitis ine aksios tis ebistosinis kathe
some professor is worthy the.gen trust.gen some.gen
 fititi.

student.gen

- (i) For every student *x*, there is some professor *y* who is worthy of *x*'s trust.
 (ii) Some professor *y* is such that *y* is worthy of every student *x*'s trust.

The paraphrase in (i) gives the reading where professors co-vary with students, i.e., where the universal scopes over the existential. This reading becomes salient in a context where it is questioned whether professors are reliable, and the speaker wants to emphasize that they are. Raising of *every* above *some* is allowed, since we remain within the one clause domain required by (76); since May (1977) this raising has been known as 'inverse scope'.

To sum up, the type of locality involved in NC, i.e., (tensed) clause-boundedness, strongly implicates *A'*-movement by QR. Considering in addition the results of the tests in Section 2, I conclude that emphatic *n*-words can be successfully characterized as universal quantifiers.

5. THE COMPOSITIONAL DERIVATION OF STRICT NEGATIVE CONCORD

In this section I give a compositional account of NC based on the conclusion reached above that emphatic n-words are universal quantifiers. Additionally, these universals are sensitive to negative polarity. In the framework of polarity I am assuming, NPI-universals come with a sensitivity requirement that makes them different from non-sensitive universals: unlike these, which can combine with both positive and negative predicates, NPI-universals can only combine with negative (i.e., antiveridical) predicates. Just like in other polarity dependencies that I discuss in Giannakidou (1998), this distinctive feature can be encoded in the grammar as a type difference between non-sensitive universals and their NPI-counterparts.

As NPIs, NPI-universals require the presence of negation for licensing, but they must undergo QR and scope over negation. This movement is motivated by (a) their sensitivity requirement to combine with an antiveridical predicate, and (b) the need to yield the correct interpretation for NC as $\forall\neg$ (which is the only reading NC structures have). NC is thus reduced to a quantifier scope phenomenon, a move considered desirable also in the earlier literature; Szabolcsi (1984, pp. 531–532) implements a similar derivation for Hungarian n-words as universal quantifiers scoping above negation.¹³

Given that the usefulness of QR has been questioned in the recent literature, the analysis proposed here, if correct, will provide a strong argument for retaining QR as a necessary device at the syntax-semantics interface: we need it in order to interpret NC. Additionally, the account will have an important consequence for the definition of the syntactic domain of P1-licensing: it entails that, despite what we might be inclined to believe, this domain does not always correspond to the c-command domain of the licenser.

¹³ Nomi Erteschik-Shir and Idan Landau inform me that Hebrew n-words align with their Greek counterparts with respect to most of the tests discussed so far, including locality, hence they can have analysis similar to the one I propose here for Greek. Additionally, unlike emphatics, Hebrew n-words are morphologically marked as universal quantifiers, a fact supporting further the present analysis. Unfortunately, at this stage I cannot do anything more than simply mention the observations; the investigation of the Hebrew data will have to be left for a future occasion.

5.1. *The Compositionality Puzzle Solved*

To begin with, I lay out some standard assumptions about the phrase structure of Greek. Greek is a *pro*-drop VSO language with verb movement (see, among others, Philippaki-Warbuton 1987, Tsimpli 1990, Alexiadou and Anagnostopoulou 1998). Arguments of the verb are generated within the VP and, if they remain there, the default VSO order emerges. If subjects, objects, or adjuncts appear preverbally, they have undergone topicalization or focus movement. Sentence negation is expressed by the preverbal NMs *dhen* (for indicative clauses) and *min* (for non-indicative clauses), but I focus on *dhen*. NMs are heads of NegP which is located between MoodP and IP (Giannakidou 1997, 1998). Following Alexiadou (1999), I assume that there is no reason to postulate split tense and agreement in Greek.

Consider now the following sentences and their interpretations in (82') and (83'). Since Greek is a VSO language, the orders are natural and quite common. Overt movement of emphatics is also allowed (and is analyzed as a species of topicalization in Section 6.2):

- (82) Dhen irthe KANENAS.
not came.3sg n-person
 Nobody came.
- (83) Dhen ipe o Pavlos TIPOTA.
not said.3sg the Paul n-thing
 Paul said nothing.
- (82') $\forall x[\mathbf{person}(x) \rightarrow \neg \mathbf{came}(x)]$
- (83') $\forall x[\mathbf{thing}(x) \rightarrow \neg \mathbf{said}(\text{Paul}, x)]$

The emphatic quantifier is thus interpreted above negation, resulting in a universal negative statement. Since we are dealing with quantifiers, the obvious way to derive this reading is to assume that KANENAN and TIPOTA undergo QR and scope above negation.

Note that *kathe* 'every' cannot scope over negation from a VP-internal position. This is illustrated below for subject and object positions, respectively. The fact has also been noted in Veloudis (1982) and is also observed with the Hungarian counterpart of 'every', *minden* (Szabolcsi 1981). Beghelli and Stowell (1997) report a similar observation for *every*, but the facts concerning *every* and its interaction with negation are much more subtle in English – *every* can indeed scope over negation in some

cases, marked by special intonation – and therefore not as robust as in Greek and Hungarian (Anna Szabolcsi, personal communication).

- (84) Dhen irthe kathe fititis.
not came.3sg every student
 Not every student came.
- (85)a. $\neg[\forall x[\mathbf{student}(x) \rightarrow \mathbf{came}(x)]]$
 b. $\#\forall x[\mathbf{student}(x) \rightarrow \neg\mathbf{came}(x)]$
- (86) Dhen idhe o Pavlos kathe fititi.
not saw.3sg the Paul every student
 Paul didn't see every student.
- (87)a. $\neg[\forall x[\mathbf{student}(x) \rightarrow \mathbf{saw}(\text{Paul}, x)]]$
 b. $\#\forall x[\mathbf{student}(x) \rightarrow \neg\mathbf{saw}(\text{Paul}, x)]$

Crucially, the (a) readings, with the universal inside the scope of negation, are unavailable with emphatics. Going back to *kathe* and *every*, note that SVO orders, where \forall would be forced to take wide scope because of its surface position, are ungrammatical:

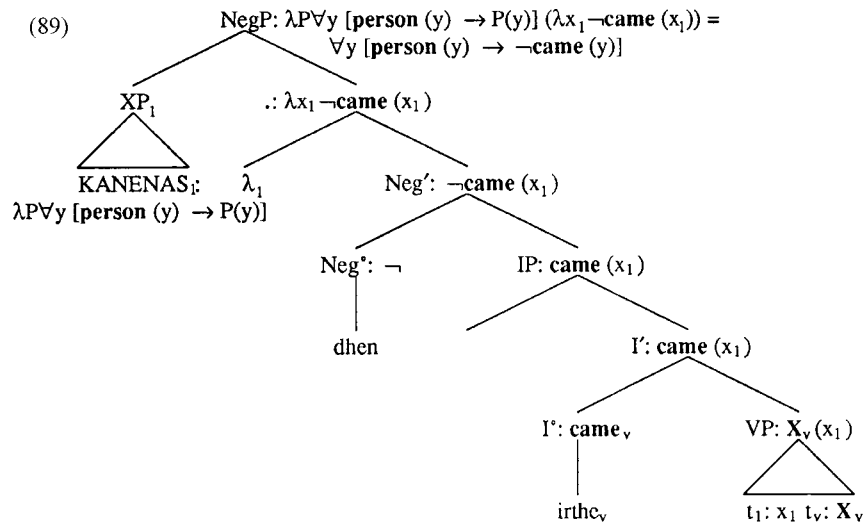
- (88)a. ??Kathe agori dhen efije.
every boy not left.3sg
 (?? Every boy didn't leave.)
- b. ??Kathe agori dhen idha.
every boy not saw.1sg
 I didn't see every boy.

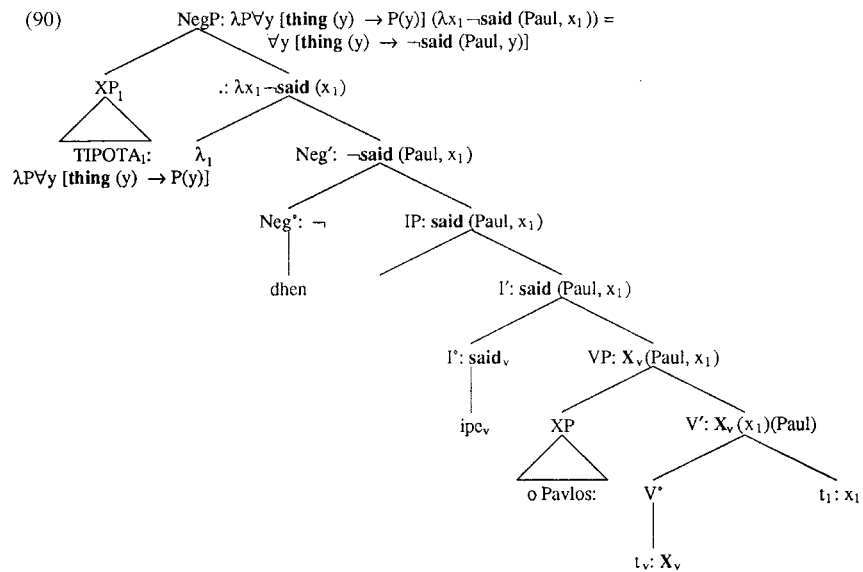
Hence, when negation is present, *kathe* can only be QRed to a position lower than negation, possibly adjoining to VP (for arguments in favor of VP as a possible adjunction site for quantifiers see May 1985 and more recently, Merchant to appear b). It appears, then, that emphatics supply the reading that *kathe* cannot.

An obvious question at this point is why ordinary universals cannot scope over negation. Although I will not venture a detailed answer to this question, it seems plausible to handle it by involving a blocking effect, reminiscent of corresponding cases in morphology and phonology

(cf. the *Elsewhere* condition of Kiparsky 1973): a more specific rule or form blocks a more general one, the general one being the ‘elsewhere’ case. Given the Elsewhere condition with its concomitant blocking effect, we may say that ‘ordinary’ universal quantifier in the relevant languages cannot take scope over negation because there is already a more specific universal quantifier that does exactly this. In other words, *kathe* ‘every’ is specified as ‘universal’, whereas KANENAS is specified as ‘universal that scopes over negation’. The second is a more specific instance of the first, so the Elsewhere condition applies, meaning that the first cannot be inserted in environments which fit the description of the second, i.e., environments in which it would scope over negation. This case also parallels other morphological cases in that the special form is more marked as a form than the general one: it must contain a specific n-morpheme, or carry stress which in this paper is indeed treated as a morphological feature. Thanks to Peter Ackema for discussion on these points.

Given that negation precedes the emphatics in the linear order, I take it that the universal-over-negation reading is achieved by QR of emphatics at LF. The proposed LFs for (82) and (83) are (89) and (90), respectively (for the ‘.’ convention see Heim and Kratzer 1998; some irrelevant intermediate steps are suppressed).



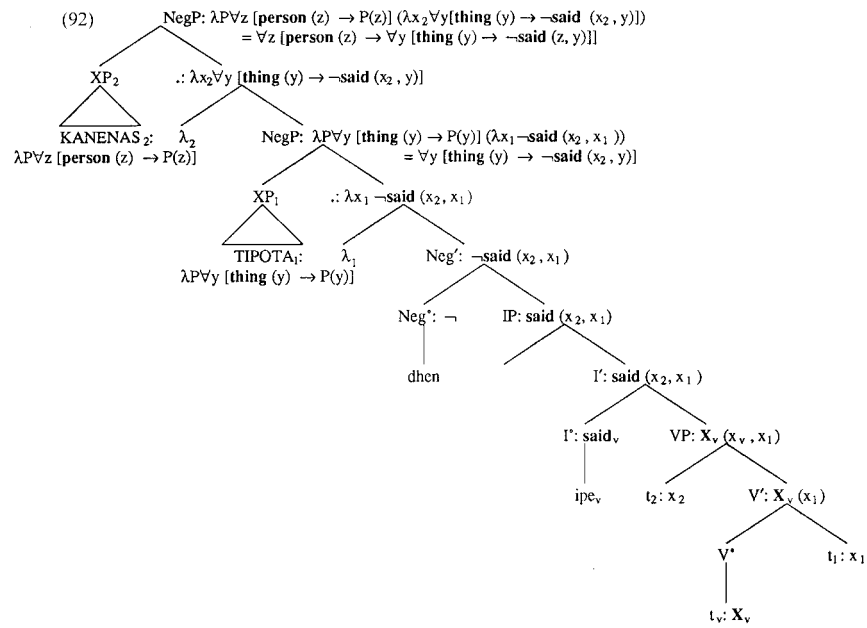


In such configurations, KANENAS and TIPOTA undergo QR past *dhen* and land in [Spec, NegP], though an orthodox implementation of QR as adjunction (May 1985), in this case to NegP (or just IP, if one wishes to analyze *dhen* as a clitic), is equally conceivable. In either case, emphatics are interpreted outside the scope of negation, arriving at the desired logical representations.¹⁴ Nothing specific to NC such as absorption needs to be stipulated to derive the attested interpretation.

Multiple occurrences of emphatics require successive adjunctions to NegP (or multiple specifiers as in Chomsky 1995; I do not believe anything crucial relies on this choice). Recall that no double negation reading arises in these cases. The relevant example is given in (91), where two emphatics occur, but in principle, the number of emphatics allowed is unlimited (recall example (8)):

- (91) Dhen ipc KANENAS TIPOTA
not said.3sg n-person n-thing
 Nobody said anything.

¹⁴ A reviewer asks why we cannot have **Anybody didn't come*, as an extension of the proposed analysis to *any*, given that this item may be seen as a universal quantifier. The answer is that we cannot extend the analysis to *any* because *any* is not a universal quantifier (unlike what was argued in the earlier literature, e.g., Quine 1953) but rather an indefinite. A discussion of this is far beyond the scope of this paper, but for detailed arguments see Giannakidou (1999, 2000a) and Horn (to appear).



First, the object TIPOTA moves to [Spec, NegP], and then the subject KANENAS moves to adjoin to it. The interpretation is generated by the syntax in (92) (the intermediate λ -conversion steps have been omitted). First, λ -abstraction applies to the negative sentence $\neg\text{said}(x_2, x_1)$ provided by the IP combined with Neg^0 , which supplies the negative predicate required for composition with TIPOTA. The resulting sentence $\forall y[\text{thing}(y) \rightarrow \neg\text{said}(x_2, y)]$ is again λ -abstracted over the variable x_2 for composition with KANENAS. The result is the formula $\forall z[\text{person}(z) \rightarrow \forall y [\text{thing}(y) \rightarrow \neg\text{said}(z, y)]]$ which is precisely what the sentence means.

The analysis presented above has one thing in common with the NEG-criterion approach: it proposes movement of the n-word to [Spec, NegP]. Yet, unlike the NEG-criterion, my analysis does not *rely* on the existence of NegP, and can be cast, as I mentioned above, also in terms of adjunction to IP (if one does not want to postulate NegP, for example). Accepting NegP, the motivation of the movement to [Spec, NegP] in my analysis differs substantially from that in the proposals inspired by the NEG-criterion. In these approaches, the n-word moves in order to check its negative feature and undergo absorption. In the account I propose here, n-word movement to [Spec, NegP] is motivated by the sensitivity semantics of the n-word and the correct interpretation of NC. As quantifiers, n-words must move to a scope position which, because of their interpretative requirement (i.e., their status as polarity items which must combine with a negative pre-

dicade), must be higher than negation. The correct interpretation for NC structures thus arises in a compositional way, by invoking a mechanism which is employed in the grammar for the scope of quantifiers anyway, and no recourse to additional processes like absorption is made.

Additionally, this analysis works independently of the syntactic status of the NM (whether it is the head or the specifier of NegP). Hence, unlike accounts based on the NEGcriterion, this proposal captures correctly the fact that NC arises with both X^0 and XP NMs (cf. Section 1), without further adjustments. Finally, given that emphatic accent marks wide scope over negation as noted in Section 2.4, the fact that NPI-universals bear accent is totally consistent with their analysis as wide scope universals proposed here.

5.2. *Dependency and Scope for Polarity Items*

As regards the relation between licensing and scope in polarity, the proposed analysis of NC implies that the former does not necessarily translate into the latter. NPI \forall s need negation in order to be licensed; yet in order to satisfy their sensitivity requirement they must reach a position outside negation. For some instances of NPI-licensing, then, a licensing dependency should be understood as the opposite of the be-in-the-scope-of-the-licenser requirement.

This conclusion might seem surprising at first glance, but in fact it follows from the view of polarity I am assuming. In the theory I proposed in Giannakidou (1997, 1998), the core notions of licensing and anti-licensing are semantic and not syntactic, hence their mapping onto syntactic conditions is not predetermined. In many cases licensing maps indeed onto a be-in-the-scope-of condition (for instance with APIs and minimizers like *not sleep a wink*), and anti-licensing onto an escape-the-scope-of condition. Yet it is not conceptually necessary that a positive semantic dependency will map onto a positive syntactic condition, and negative dependency onto a negative one. The type of syntax involved in licensing and anti-licensing will be almost exclusively determined by the semantic content of polarity items. In the case of NPI- \forall , the quantificational semantics and the licensing requirement that NPI- \forall combine with an antiveridical predicate leave no other option but the escape-the-scope-of-condition.

5.3. *De re and de dicto Ambiguities?*

The account of NC I presented above predicts that emphatics will always be interpreted with wide scope, with respect to negation or other operators that may be present in the clause. We see here that this prediction is borne out: emphatics are always interpreted *de re*.

Consider first a case with an extensional verb like (93a):

- (93)a. #I Cleo dhen idhe KANENA monokero.
the Cleo not saw.3sg n- unicorn
 Cleo saw no unicorns.

b. $\forall x[\mathbf{unicorn}(x) \rightarrow \neg\mathbf{saw}(\text{Cleo}, x)]$

This sentence is odd. The source of oddity is that the emphatic must move above negation, and thus be interpreted as in (93b). But this interpretation is bizarre, since it allows the inference that unicorns exist.

Consider now the equally odd sentence (94a) with an intensional transitive verb.

- (94)a. #I Cleo dhen psaxni KANENA monokero.
the Cleo not seek.3sg n- unicorn
 Cleo seeks no unicorns.

b. $\forall x[\mathbf{unicorn}(x) \rightarrow \neg\mathbf{seek}(\text{Cleo}, x)]$

The oddity of (94a) follows again from the fact that (94b), where the emphatic scopes over negation and the intensional operator, is the only possible interpretation of the sentence. This interpretation yields a *de re* reading for the emphatic which again allows us to infer the existence of unicorns in the actual world.¹⁵

The *de dicto* reading arises, as the only possible reading, with non-emphatics and bare NPs. The following sentences are fine since we are not forced to question the speaker's grasp of the actual world:

- (95)a. I Cleo dhen {idhe/ psaxni} kanena monokero.
the Cleo not saw.3sg/ seek.3sg n- unicorn
 Cleo didn't see any unicorns.
 Cleo isn't looking for any unicorns.

¹⁵ N-words in Polish differ from emphatics in this respect, as noted in Richter and Sailer (1998): they interact scopally with negation and intensional operators. This difference should be linked to the fact that, unlike emphatics, Polish n-words may also appear as predicate nominals. The contrasts suggest that my analysis of emphatics cannot carry over directly to Polish. A parameter to consider here is that Greek also has the option of existential APIs (non-emphatics) under negation, which Polish lacks.

- b. I Cleo dhen {idhe/ psaxni} monokerus.
the Cleo not saw.3sg/ seek.3sg unicorns
 Cleo didn't see unicorns.
 Cleo isn't looking for unicorns.

The contrast between emphatics and non-emphatics/bare plurals we observe is in accordance with the position I defended in Giannakidou (1997, 1998) that non-emphatics are interpreted inside the scope of the licensing operator. Bare NPs, too, are known to take narrow scope with respect to other operators (see Carlson 1977).

Finally, consider construals of emphatics with modal verbs like (96):

- (96) Dhen epitrepete na apolisun KAMIA nosokoma.
not is-allowed subj fire.3pl n- nurse
 They are allowed to fire no nurse.

In construals with negative quantifiers, sentences like the English translation of (96) – and especially their Dutch (*geen*) and German (*kein*) counterparts – are known to give rise to the three readings below (see Jacobs 1980, von Stechow 1993, Rullmann 1995, de Swart 1996):

- (97)a. For each nurse x , one is not allowed to fire x . (*de re*)
 b. What one is allowed to do is not fire any nurses. (*de dicto*)
 c. One is not allowed to fire any nurses. (split)

The three readings are truth-conditionally distinct. The reading in (97b) is rather marginal without the appropriate context. On the *de re* reading, we talk about a particular set of nurses. On the split reading, on the other hand, we do not talk about a particular set of nurses. Sentences with this reading are true if firings are about some nurse or other. The availability of the split reading has been taken to argue in favor a decompositional analysis of negative quantifiers as $\neg\exists$, as in this reading the modal operator is interpreted in between negation and the existential quantifier (but see de Swart 1996 for potential difficulties such accounts face). The details are immaterial here.

What matters is that the Greek sentence in (96) has only one reading: the *de re*. The other two readings, where negation and the intensional operator take wide scope over the quantifier, are excluded. This is precisely what the account of NC I proposed in this paper predicts. (As expected,

bare plural and non-emphatic construals are only interpreted *de dicto* or with the split reading.)

The facts discussed here are important for two reasons. First, they indicate that the narrow scope construal (with respect to negation or the intensional operator), which would provide a *de dicto* reading and thus not impose existence of entities that do not exist, is not an option for emphatics. Second, and more significantly, it is confirmed that emphatics and universal quantifiers belong to the same natural class. Universal quantifiers are known to be associated with existence inferences (see Horn 1997 for discussion), and according to Strawson (1952), the existence inference of universal statements is a presupposition. Crucially, the existential import of universals is preserved even under negation: the following sentence with *kathe* ‘every’ is odd, just like the sentences with emphatics:

- (98)a. # I Cleo dhen idhe kathe monokero.
 the Cleo not saw.3sg every unicorn
 # Cleo did not see every unicorn.

- b. $\neg[\forall x \text{ unicorn}(x) \rightarrow \text{saw}(\text{Cleo}, x)]$

The oddity is observed also in the English translation of the sentence, and it holds for the intensional cases as well. Note that, unlike universals, existential quantifiers do not give rise to existential commitments under negation. The sentence below is fine and can be continued with something like ‘because unicorns don’t exist’:

- (99)a. I Cleo dhen idhe enan monokero.
 the Cleo not saw.3sg a unicorn
 Cleo did not see a unicorn.

- b. $\neg\exists x[\text{unicorn}(x) \wedge \text{saw}(\text{Cleo}, x)]$

I will not go into the issue of why existence inferences arise with universals but not with existentials (or under what conditions they are present with universals see Giannakidou 1999, pp. 401–404 for discussion). For our purposes it suffices to just point out that the similarity between universal quantifiers and emphatics, and the contrast with existentials, is expected under the analysis of emphatics as universals pursued in this paper.

6. THE PRAGMATICS OF NEGATIVE CONCORD

As a final consequence of my account, I would like to briefly consider the pragmatic import of sentences with emphatic *n*-words. It will be pointed out that the analysis of emphatics as universals is consistent with a pragmatic analysis of them as topics.

6.1. *The Pragmatic Non-Uniformity Hypothesis*

Recall the two options:

(100) Dhen agorasa kanena vivlio. Existential negation
not bought.1sg n- book
 I didn't buy any book(s).

(101) Dhen agorasa KANENA vivlio. Universal negation
not bought.1sg n- book
 I bought no book(s).

The two sentences are, of course, truth-conditionally equivalent:

(102)a. $\forall x[\mathbf{book}(x) \rightarrow \neg\mathbf{bought}(I, x)]$

b. $\neg\exists x[\mathbf{book}(x) \wedge \mathbf{bought}(I, x)]$

Since there is no truth-conditional difference, why is it that Greek allows for both options? The difference lies in the pragmatics. Negative sentences with emphatics have a constrained distribution: they cannot be uttered just out of the blue. Those with non-emphatics, however, can be used more freely and pose no requirement on the initial context.

Sentences with emphatics and non-emphatics do not have the same discourse status. Sentences with emphatics are partitioned into topic and comment, and emphatics provide the topic, but sentences with non-emphatics have no such necessary division. Let us call this the Pragmatic Non-Uniformity Hypothesis:

(103) *The Pragmatic Non-Uniformity Hypothesis*

(i) Emphatics are topics in topic/comment structures.

(ii) Non-emphatics are never topics.

The fact that non-emphatics cannot be topics can be made to follow from their semantics (see especially Giannakidou 1998, pp. 69–71 and 236–239). The distinction above can also be cast in terms of the *thetic* vs.

categorical opposition (Kuroda 1992). Negative sentences with emphatics are categorical, but those with non-emphatics arethetic. If we wish to recast the contrast in terms of thethetic vs. categorical distinction (which is basically what was done in Giannakidou 1997), then we have to say that emphatics constitute the logical subjects of categorical negative sentences, whereas non-emphatics do not have this status. In the present paper, however, I will adhere to the more traditional term of 'topic'.

Simplifying somewhat, the notion of topic I assume here is in terms of 'aboutness' and *pragmatic referentiality* (Reinhart 1982; for recent discussions, see also Sgall et al. 1986, Vallduví 1991, and Büring 1996). Roughly, pragmatic referentiality means that the topic should be given in the discourse, it should belong to the background information, i.e., it should be part of what the participants in the conversation take as known. This has often prompted characterizations of topics as *D-linked*, *presuppositional*, *specific*, *partitive*, or *strong* (de Hoop 1992).

Quantifiers can be topics as long as they introduce a set referent (see Kamp and Reyle 1993 and Szabolcsi 1997). Quantifiers may also be syntactically topicalized across languages (Anagnostopoulou 1997, Rizzi 1997), as long as their set referent is indentifiable:

- (104) Kathe dhema to paredhosa ston paralipti tu. Greek
every parcel it delivered.1sg in-the recipient its
 As for every parcel, I delivered it to its recipient.
- (105) Iedereen in de tuin, die kende ik Dutch
everyone in the garden, that knew I
 As for everyone in the garden, I knew them all.
- (106) Tutti i tui libri, li ho rimesso al posto. Italian
all your books, them have.1sg put-back in place
 As for your books, I put them back to their place.

In the above cases, the quantifier phrase is 'rich' in descriptive content: it is either a modifier or additional modifiers are used. The richness of the descriptive content is a prerequisite for quantifier topicalization. As we see below, bare quantifiers cannot be topicalized:

- (107) *Kathena, ton idha. Greek
everybody him saw.1sg

- (108) *Iedereen, die kende ik. Dutch
everybody him know I

The requirement for rich descriptive content is not a mystery if topichood requires givenness. When definite DPs and proper names are used as topics, the topichood requirement is satisfied since these DPs presuppose the existence of their referents and are also associated with uniqueness which further facilitates identification of the referent. Universal quantifiers may indeed imply the existence of their restriction set, as we saw in the previous subsection, but a little more work has to be done to contextually restrict this set and thus identify it.

Emphatics, as I am arguing, are topics in negative sentences. As such, they may, but do not have to topicalize (since something can be a topic without having to undergo syntactic topicalization; see especially Büring 1996). Because non-emphatics do not have the status of topics, negative sentences with these will pose no requirements on their use and should be available everywhere. For a felicitous use of emphatics, however, givenness must first be established. It is illustrated below that these predictions are borne out (A and B indicate the participants in the conversation).

Context 1.

Background: A: You were shopping all day. Did you buy anything? Clothes? Books? Records?

- B: a. A, oxi. Dhen aghorasa kanena vivlio.
oh no Not bought.1sg n- book
 Oh, no. I didn't buy any books.
- b. #A, oxi. Dhen aghorasa KANENA vivlio.
oh no Not bought.1sg n- book
 #Oh, no. I bought no books.

In the background of this context, no reference to a particular set of books is established. In such a situation, the use of non-emphatic *kanena vivlio* is felicitous, but the use of the emphatic is inappropriate. The contrast is expected under the assumption that emphatics are topics.

Context 2.

Background: A: I remember you told me about those books that you saw at the "Griekse Eiland". You wanted to buy them, right? What happened? Did you buy them after all?

- B: a. A, oxi. Piga ke ta idha, ala dhen aghorasa (telika) kanena vivlio.
Oh, no. I went and looked at them, but I didn't buy any book after all.
- b. A, oxi. Piga ke ta idha, ala dhen aghorasa (telika) KANENA vivlio.
Oh, no. I went and looked at them but I bought no book after all.

Unlike in Context 1, in Context 2, reference to a set of books has been established in the background. This renders the utterance with the emphatic felicitous. As expected, the statement with the emphatic is fine, too.

Context 3.

Background: A: What happened with the meeting? (There is no knowledge about who the participants of the meeting were.)

- B: a. Dhen irthe kanenas fititis.
No student came.
- b. #Dhen irthe KANENAS fititis.
No student came.

With only A's question as the background, the utterance of Bb is infelicitous. Again, a sentence with a non-emphatic is fine. *What happened?* questions are typical triggers ofthetic readings; syntactic constraints rule out the occurrence of *any* here (namely that it must prepose but it cannot).

Context 4.

Background: A: Many of the students promised that they would come to the meeting.

- B: a. Ne, ala dhen irthe telika kanenas fititis.
Yes, but in the end no student came.
- b. Ne, ala dhen irthe telika KANENAS fititis.
Yes, but in the end not a single student came.

With the existence of students established in the background, the emphatic becomes felicitous.

The above contrasts are consonant with the Pragmatic Non-Uniformity Hypothesis, and they are predicted to arise, one way or another, in all languages employing both varieties of negative dependencies. Crucially, the (un)availability of discourse partitioning is independent of the availability of NC. It all depends on whether a language will allow overtly for the two types of negative dependencies. If a language employs a single *n*-word paradigm, odds are that negative sentences in this language will be pragmatically ambiguous. Whether NC will exist is an independent question. If it exists, then NC structures will be pragmatically ambiguous between discourse partitioned and structureless readings. This, I believe, may describe successfully the situation in some Romance and Slavic languages.

In a language like English, *any*-construals are expected to parallel those of non-emphatics. Construals with negative quantifiers, on the other hand, should be pragmatically ambiguous, as both $\neg\exists$ and $\forall\neg$ readings seem to be available with these; but the topic interpretation should be favored given that *no NPs* are more often than not interpreted as $\forall\neg$.

6.2. *Preposed Emphatics as Topicalized Quantifiers*

Emphatic items may appear overtly preceding negation:

- (109) KANENAN dhen idha.
n-person not saw.1sg
 I saw nobody.

Preposing in these cases is always optional. In Giannakidou (1997, 1998) I argued that overt preposing of emphatics is an instance of topicalization, similar to Clitic Left Dislocation (CLLD; observed in Romance, cf. Cinque 1990 and, more recently, Rizzi 1997), but not identical. Syntactic evidence for the topic status of preposed emphatics is provided by the structural similarities between emphatics and topicalized constituents as they arise from the application of the relevant tests (presence of clitics, stacking, long-distance topicalization).¹⁶ I will not repeat the discussion here, but I simply summarize the most important results.

6.2.1. *Clitics*

Argument CLLD involves a dependency between a sentence-initial phrase and a clitic pronoun inside the sentence. (In this, CLLD differs from overt

¹⁶ Although the intonational pattern we observe with preposed emphatics is not the one we find in typical CLLD structures, this does not strike me as a serious obstacle to linking the syntax of topicalization and emphatic preposing. Given that emphatics carry inherent accent as a morphological feature which also indicates their scoping above negation, it does not seem particularly surprising that they retain this feature in a topicalized position.

focus preposing which leaves behind a gap; Tsimpli 1995, Giannakidou 1997.) The clitic, which is obligatory, marks the argument position to which the initial phrase is linked. The dislocated phrase agrees in number and case with the clitic. A typical example is given below:

- (110) Ton Pavlo, ton idha.
the Paul him saw.1sg
 As for Paul, I saw him.

The left dislocated phrase is a topic. Linking to a clitic is expected if clitics are markers of referentiality (see Anagnostopoulou and Giannakidou 1995). Various kinds of DPs may appear in CLLD structures as long as they satisfy the referentiality condition.

As first observed in Philippaki and Veloudis (1984), emphatics may be left dislocated and co-indexed with clitics:

- (111) KANENOS₁ dhen (tu₁) aresi i kakometaxirisi.
n-person.gen not he.gen like.3sg the maltreatment
 Nobody likes being treated badly.
- (112) [KANENAN fititi]₁ dhen (ton₁) idha na erxete stin
n- student not him saw.1sg subj come.3sg on
 ora tu.
time his
 I saw no student arriving on time.
- (113) [KANENA apo ta vivlia]₁ dhen to₁ agorasa telika.
n- from the books not it bought.1sg finally
 I bought none of the books after all.

The presence of the clitic is never obligatory – but in itself, the fact that emphatic preposing allows clitics argues against an assimilation of such structures to focus preposing. The appearance of the clitic is again sensitive to the richness of the descriptive content of the preposed emphatic or the

sentence predicate.¹⁷ As we see in (114), bare emphatics are incompatible with clitics:

- (114) *KANENAN₁ dhen ton₁ idha.
n-person not him saw.1sg
 Nobody I saw.

A parallel is observed in the preposing of Italian n-words. As noted in Rizzi (1997), bare *nessuno* cannot be coindexed with a clitic, but if we enrich its descriptive content and combine it with a relatively ‘heavy’ predicate, clitics become fine; the judgments of the sentences below are from Maria Aloni and Carlo Cecchetto:

- (115) *Nessuno l’ ho visto.
n-person him have.1sg seen
- (116) Nessuno {di loro/ in questo dipartimento} l’ ho visto
n-person of them/ in this department him have.1sg seen
 parlare con Maria.
talk with Maria
 I saw {none of them/no-one in the department} talking to Mary.

6.2.2. Multiple Stacked Topics

Greek allows for stacking of multiple topics in the left peripheral position; emphatic items may also be stacked, as illustrated below. The position of the fronted elements is not fixed:

- (117) {tis Roxanis} to vivlio {tis Roxanis} tis to edhosa.
the Roxanne the book her it gave.1sg
 Lit.: To Roxanne, the book, I gave it to her.
- (118)a. {POTE} i Roxani {POTE} dhen tha eleje kati tetjo.
n-ever the Roxanne not fut said.3sg something such
 Never would Roxanne say something like this.

¹⁷ Of course, what exactly counts as rich descriptive content is not only lexically determined, but depends, to some extent, on the context of use, i.e., how informative the used description may be. Judgments regarding the legitimacy of clitics with emphatics are thus quite subtle.

- b. {KANENAS} ti Roxani {KANENAS} dhen tin idhe na
n-person the Roxanne not her saw.3sg subj
 fevgi.
go.3sg
 Nobody saw Roxanne leaving.
- c. KANENAS TIPOTA dhen mu xrostai pja.
n-person n-thing not me owe.3sg anymore
 Nobody owes me anything anymore.

Note that two or more (adjacent or not) fronted foci are completely unacceptable in Greek (Giannakidou 1998, p. 229), a fact confirming again that emphatic preposing is not focus related. Stacking can be analyzed either as multiple adjunction to IP/TopicP or in terms of recursive Topic phrases, but the details are not important here.

6.2.3. Long-Distance Preposing

CLLD, in Greek as well as in Romance, is not limited to monoclausal domains (see especially Anagnostopoulou 1997). (119) illustrates the standard case with an *oti*-complement and (120) shows that emphatic preposing is also good:

- (119) Tin Elena, su ipa xthes oti tin idha.
the Elena, you told.1sg yesterday that her saw.1sg
 As for Elena, I told you that I saw her yesterday.
- (120) KANENAN su ipa xthes oti dhen idha.
n-person you told.1sg yesterday that not saw.1sg
 I told you that I saw nobody yesterday.

Preposing emphatics out of *na*-complements expected is also possible, as expected. Crucially, examples like (120) indicate that emphatic topicalization and emphatic QR movement may give different results: emphatic topicalization is allowed from *oti*-complements, but as we have seen, QR of the emphatic is not allowed out of these complements. This empirical difference, however, does not contradict the proposal that the emphatic has to undergo QR to scope above negation; it simply suggests that QR and topicalization can apply successively. In (120), KANENAN moves first past the lower negation to satisfy its licensing requirement, and then it moves to the left peripheral position for the purposes of topicalization.

Greek CLLD has been argued to involve base generation of the dislocated XP to an IP adjoined position (Anagnostopoulou 1994, 1997), but, as I note here, emphatic topicalization, even if linked to a clitic, involves *movement* of the emphatic to the left peripheral position. Further evidence for this position is provided by the examples below, which show that, unlike other CLLD-ed constituents which are known to exhibit selective island insensitivity (Cinque 1990), emphatics cannot be topicalized through islands. The contrast is illustrated with an adjunct and a complex NP island:

- (121)a. Ton Pavlo, anastathika otan ton idha.
the Paul, got-excited.1sg when him saw.1sg
 Paul, I got excited when I saw him.
- b. *KANENAN anastathika otan dhen (ton) idha.
n-person got-excited.1sg when not him saw.1sg
- (122)a. Ton Pavlo, i Elena akuse ti fimi oti ton apelian.
the Paul, the Elena heard.3sg the rumor that him fire.3pl
 Paul, Elena heard the rumor that they fired him.
- b. *KANENAN i Elena akuse ti fimi oti dhen (ton) apelian.
n-person the Elena heard the rumor that not him fired.pl

Island sensitivity is expected only if we assume that emphatic topicalization involves movement from the island internal position. As NPIs, emphatics must be licensed by negation, so they have to be base-generated sentence-internally in the local domain of negation. Then, for the resolution of NC, they must leave the syntactic domain of negation and appear above it. This can be achieved by QR, but emphatics may further topicalize if the structure allows it.

7. CONCLUSION

Negative concord (NC), as we saw, is not a uniform phenomenon across languages, but rather is a quite diverse one. This variation makes us expect that the mechanisms that are employed in deriving the interpretation of NC

may be equally diverse. In this context, I argued that in a general theory of NC we must allow the universal-above-negation as a possible interpretative strategy. I proposed that Greek NC instantiates this option. To this end, evidence was provided that Greek n-words in NC are not indefinites or negative quantifiers, but universal quantifiers. This conclusion was supported by various diagnostics, most prominently: the observed locality in NC, donkey-anaphora, exclusion from predicative use, scope parallelisms between NC and universal quantifiers, and the availability of existence inferences under negation with both NC n-words and universal quantifiers.

My main focus has been the description of Greek NC and although data from n-words in other languages were considered I did not venture a precise characterization of these. As stressed numerous times above, we are dealing with very diverse data (especially within Romance), which prevent a uniform characterization of n-words cross-linguistically. Much of the negative evidence I presented, however (viz. that n-words are not negative and that they are not indefinite) was shown to hold for Slavic, Hungarian, and some Romance languages, too. Yet the availability of double negation readings with n-words in some Romance languages (Italian, Spanish, French) indicates that at least in these languages an ambiguity analysis of n-words (between negative and non-negative meanings) may be more appropriate. Note also that these languages are not strict NC languages: the presence of the negative marker is not obligatory in all contexts, which makes it plausible to argue that the negative value may come from the n-word itself. Crucially, in strict NC languages double negation readings are not allowed.

Another important result of this paper is that it questions the viability of the indefinites approach as a general approach to NC. A number of problems with the assumption that n-words are indefinites were pointed out, most prominently: (a) the clause-boundedness of NC, which is not expected if n-words are indefinites but *is* predicted under the assumption that NC is a quantificational phenomenon, and (b) the absence of quantificational variability in the varieties of strict NC. This is not to say, however, that the indefinites approach is of no use. On the contrary, this theory provides a fruitful paradigm for describing unbounded existential dependencies under negation, e.g., dependencies involving items like *any* and non-emphatics.

Let me close by summarizing some specific predictions of the proposed analysis. Greek NC involves universal negation, but of course I do not claim that NC will always correspond to \forall -negation, or vice versa. In a language *without* NC, \forall -negation arises as one of the two possible interpretations (perhaps the most preferred one) with statements with negative

quantifiers. In a language with NC, it is possible that \forall -negation arises *with* NC, but NC may also have the reading of existential negation. The crucial factor will be the number of n-words available in the language and the availability of an existential n-word paradigm under negation. In a language like Greek with existential and non-existential n-words *and* NC, the two possibilities are clearly distinguished and NC maps onto \forall -negation.

REFERENCES

- Acquaviva, Paolo. 1993. *The Logical Form of Negation. A Study of Operator-Variable Structures in Syntax*, Ph.D. Dissertation, Scuola Noimale Superiore, Pisa, published by Garland, 1997.
- Acquaviva, Paolo. 1995. 'Operator Composition and the Licensing of Negative Concord', in Michael Starke, Eric Haeberli and Christopher Laenzlinger (eds.), *Geneva Generative Papers 3/2*, University of Geneva, Geneva, pp. 72–104.
- Acquaviva, Paolo. 1997. 'Negation and Operator Dependencies', unpublished manuscript, University of Venice.
- Aissen, Judith and David Perlmutter. 1983. 'Clause Reduction in Spanish', in David Perlmutter (ed.), *Studies in Relational Grammar 1*, University of Chicago Press, Chicago, pp. 360–403.
- Alexiadou, Artemis. 1999. 'On the Properties of some Greek Word Order Patterns', in Artemis Alexiadou, Geoffrey Horrocks and Melita Stavrou (eds.), *Studies in Greek Syntax*, Kluwer, Dordrecht, pp. 45–67.
- Alexiadou, Artemis and Elena. 1998. 'Parametrizing Agr: Word Order, V-movement and EPP-checking', *Natural Language and Linguistic Theory* **16**, 491–539.
- Anagnostopoulou, Elena. 1994. *Clitic Dependencies in Modern Greek*, unpublished Ph.D. dissertation, University of Salzburg.
- Anagnostopoulou, Elena. 1997. 'Clitic Left Dislocation and Contrastive Left Dislocation', in Elena Anagnostopoulou, Henk van Riemsdijk and Frans Zwarts (eds.), *Materials in Left Dislocation*, John Benjamins, Amsterdam, pp. 151–193.
- Anagnostopoulou, Elena and Anastasia Giannakidou. 1996. 'Clitics and Prominence, or Why Specificity is Not Enough', in Adra Dainora, Rachel Hemphil, Barbara Luka, Barbara Need, and Sheri Pargman (eds.), *Chicago Linguistics Society (CLS) 31*, University of Chicago, Chicago, pp. 132–150.
- Bayer, Josef. 1990. 'What Bavarian Negative Concord Reveals about the Syntactic Structure of Gerinan', in Juan Mascaró and Marina Nespór (eds.), *Grammar in Progress*, Foris, Dordrecht, pp. 13–24.
- Beghelli, Filippo and Tim Stowell. 1997. 'Distributivity and Negation: The Syntax of *each* and *every*', in Anna Szabolcsi (ed.), *Ways of Scope Taking*, Kluwer, Dordrecht, pp. 71–107.
- Belleti, Adrianna. 1990. *Generalized Verb Movement: Aspects of Verb Syntax*, Rosenberg and Sellier, Torino.
- Benthem, Johan van. 1983. 'Five Easy Pieces', in Alice ter Meulen (ed.), *Studies in Model Theoretic Semantics*, Foris Publication, Dordrecht, pp. 1–17.
- Besten, Hans den. 1986. 'Double Negation and the Genesis of Afrikaans', in Pieter Muysken and Norval Smith (eds.), *Substrata versus Universals in Creole Languages*, John Benjamins, Amsterdam, pp. 185–200.

- Blaszczak, Joanna. 1999. 'The Riddle of n-words in Polish', unpublished manuscript, Humbolt Universität Berlin.
- Bosque, Ignacio. 1980. *Sobre la Negación*, Catedra, Madrid.
- Brown, Sue. 1996. *The Syntax of Negation in Russian*, unpublished Ph.D. dissertation, Indiana University.
- Büring, Daniel. 1996. *The 59th Street Bridge Accent on the Meaning of Topic and Focus*, unpublished Ph.D. dissertation, University of Tübingen.
- Büring, Daniel. 1997. 'The Great Scope Inversion Conspiracy', *Linguistics and Philosophy* 29, 175–194.
- Carlson, Gregory. 1977. *Reference to Kinds in English*, unpublished Ph.D. dissertation, University of California, Irvine.
- Chomsky, Noam: 1995. *The Minimalist Program*, MIT Press, Cambridge.
- Cinque, Guglielmo. 1990. *Types of A'-dependencies*, MIT Press, Cambridge.
- Corblin, Francis. 1996. 'Multiple Negation Processing', *Theoria* 62(3), 214–260.
- Corblin, Francis and Lucia Tovenà. 1999. 'On Multiple Expression of Negation in Romance', unpublished manuscript, University of Paris IV and University of Lille 3.
- Dahl, Östen. 1970. 'Some Notes on Indefinites', *Language* 46, 33–41.
- Déprez, Viviane. 1997. 'A Non-unified Analysis of Negative Concord', in Danielle Forget et al. (eds.), *Negation and Polarity: Syntax and Semantics*, John Benjamins, Amsterdam, pp. 53–75.
- Farkas, Donka F. 1981. 'Quantifier Scopepe and Syntactic Islands', in Roberta Hendrick, Carrie Masek, and Mary Frances Miller (eds.), *Chicago Linguistics Society (CLS) 7*, University of Chicago, Chicago, pp. 59–66.
- Farkas, Donka F. and Anastasia Giannakidou. 1996. 'How Clause-bounded is the Scope of Universals?', in Teresa Galloway and Austin Spence (eds.), *Semantics and Linguistic Theory (SALT) 6*, Cornell University, Ithaca, pp. 35–53.
- Giannakidou, Anastasia. 1997. *The Landscape of Polarity Items*, Ph.D. Dissertation, University of Groningen.
- Giannakidou, Anastasia. 1998. *Polarity Sensitivity as (Non)Veridical Dependency*, John Benjamins, Amsterdam.
- Giannakidou, Anastasia. 1999. 'Affective Dependencies', *Linguistics and Philosophy* 22, 367–421.
- Giannakidou, Anastasia. 2000a. 'The Meaning of Free Choice', unpublished manuscript, University of Groningen.
- Giannakidou, Anastasia. 2000b. 'Negative Concord and the Scope of Universals', in Paul Rowlett (ed.), *Transactions of the Philological Society*, Blackwell, Oxford, pp. 31–57.
- Giannakidou, Anastasia and Josep Quer. 1995. 'Two Mechanisms for the Licensing of Negative Indefinites', in Leslie Gabriele, Debra Hardison and Robert Westmoreland (eds.), *Formal Linguistics Society of Mid-America (FLSM) 6*, Indiana University Linguistics Club (IULC), Bloomington, pp. 103–114.
- Giannakidou, Anastasia and Josep Quer. 1997. 'Long-distance Licensing of Negative Indefinites', in Danielle Forget et al. (eds.), *Negation and Polarity: Syntax and Semantics*, John Benjamins, Amsterdam, pp. 95–113.
- Groenendijk, Jeroen, Martin Stokhof, and Frank Veltman. 1990. 'Coreference and Modality', in Shalom Lappin (ed.), *The Handbook of Contemporary Semantic Theory*, Basil Blackwell, Oxford, pp. 179–213.
- Haegeman, Liliane. 1995. *The Syntax of Negation*, Cambridge University Press, Cambridge.

- Haegeman, Liliane and Raffaella Zanuttini. 1991. 'Negative Heads and the Neg-criterion', *The Linguistic Review* 8, 233–251.
- Heim, Irene. 1982. *The Semantics of Definite and Indefinite NPs*, unpublished Ph.D. dissertation, University of Massachusetts, Amherst.
- Heim, Irene and Angelika Kratzer. 1998. *Semantics in Generative Grammar*. Basil Blackwell, Oxford.
- Higginbotham, James and Robert May. 1981. 'Questions, Quantifiers, and Crossing', *The Linguistic Review* 1, 41–80.
- Hoeksema, Jacob. 1997. 'Negative Concord in Middle Dutch', in Danielle Forget et al. (eds.), *Negation and Polarity: Syntax and Semantics*, John Benjamins, Amsterdam, pp. 139–157.
- Hoop, Helen de. 1992. *Case Configuration and Noun Phrase Interpretation*, unpublished Ph.D. Dissertation, University of Groningen.
- Horn, Laurence. 1972. *On the Semantic Properties of Logical Operators in English*, unpublished Ph.D dissertation, University of California, Los Angeles.
- Horn, Laurence. 1978. 'Remarks on Neg-raising', in Peter Cole (ed.), *Pragmatics, Syntax and Semantics* 9, Academic Press, New York, pp. 129–200.
- Horn, Laurence. 1997. 'All John's Children are as Bald as the King of France: Existential Import and the Geometry of Opposition', in Kora Singer, Randall Eggert and Gregory Anderson (eds.), *Chicago Linguistics Society* 33, University of Chicago, Chicago, pp. 155–179.
- Horn, Laurence. to appear. 'Any and (-)ever. Free Choice and Free Relatives', in Adam Zachary Wyner (eds.), *Proceedings of IATL [Israeli Association for Theoretical Linguistics]* 15.
- Horn, Laurence and Yung-Suk Lee. 1995. 'Diagnosing the Diagnostics', unpublished manuscript, Yale University.
- Jacobs, Joachim. 1980. 'Lexical Decomposition in Montague Grammar', *Linguistics* 3, 121–136.
- Jespersen, Otto. 1917. *Negation in English and Other Languages*, reprinted in *Selected Writings of Otto Jespersen* (1962), George Allen and Unwin, London, pp. 3–151.
- Kamp, Hans. 1981. 'A Theory of Truth and Discourse Representation', in Jeroen Groenendijk, Theo Janssen, and Martin Stokhof (eds.), *Formal Methods in the Study of Language*, Mathematical Center, Amsterdam, pp. 277–322.
- Kamp, Hans and Uwe Reyle. 1993. *From Discourse to Logic*, Kluwer, Dordrecht.
- Kennedy, Christopher. 1997. 'Antecedent Contained Deletion and the Syntax of Quantification', *Linguistic Inquiry* 28, 662–689.
- Kiparsky, Paul. 1973. 'Elsewhere in Phonology', in Stephen Anderson and Paul Kiparsky (eds.), *A Festschrift for Morris Halle*, Holt, Rinehart and Winston, New York, pp. 93–106.
- Kitamoto, Misako. 1999. 'Negation in French', summary of query 10.1587, *Linguist List* 10, 1799.
- Klima, Edward. 1964. 'Negation in English', in Jerry Fodor and Jerold Katz (eds.), *The Structure of Language*, Englewood Cliffs, Prentice Hall, pp. 246–323.
- Kuroda, S-Y. 1992. *Japanese Syntax and Semantics*, Reidel, Dordrecht.
- Labov, William. 1972. 'Negative Attraction and Negative Concord in English Grammar', *Language* 48, 773–818.
- Ladusaw, William A. 1979. *Polarity Sensitivity as Inherent Scope Relations*, unpublished Ph.D. dissertation, University of Texas at Austin.

- Ladusaw, William A. 1992. 'Expressing Negation', in Chris Barker and David Dowty, Mike Harvey and Louise Santelman (eds.), *Semantics and Linguistic Theory (SALT)*, Cornell University Press, Ithaca, pp. 237–259.
- Ladusaw, William A. 1994. 'Thetic and Categorical, Stage and Individual, Weak and Strong', in Mike Harvey and Louise Santelman (eds.), *Semantics and Linguistic Theory (SALT)* 4, Cornell University Press, Ithaca, pp. 220–229.
- Laka, Itziar Murgaza. 1990. *Negation in Syntax: On the Nature of Functional Categories and Projections*, Ph.D. dissertation, MIT.
- Larrivée, Pierre. 1995. 'Quantifieurs Negatifs et Double Negation', in Pierre Larrivée et al. (eds.), *Actes des neuvièmes Journées de Linguistique*, Centre International de Recherche en Aménagement Linguistique, Centre Internationale de Recherche en Aménagement Linguistique, Quebec City, pp. 207–217.
- Linebarger, Marcia. 1987. 'Negative Polarity and Grammatical Representation', *Linguistics and Philosophy* 10, 325–387.
- Longobardi, Giuseppe. 1991. 'In defense of the Correspondence Hypothesis: Island Effects and Parasitic Gap Constructions in Logical Form', in James Huang and Robert May (eds.), *Logical Structure and Linguistic Structure*, Kluwer, Dordrecht, pp. 146–196.
- May, Robert. 1977. *The Grammar of Quantification*, unpublished Ph.D. dissertation, MIT.
- May, Robert. 1985. *Logical Form: Its Structure and Derivation*, MIT Press, Cambridge.
- McNally, Louise. 1992. *An Interpretation of the English Existential Construction*, unpublished Ph.D. dissertation, University of California, Santa Cruz.
- Merchant, Jason. to appear a. *The Syntax of Silence: Sluicing, Islands, and Identity in Ellipsis*, Oxford University Press, Oxford.
- Merchant, Jason. to appear b. 'Antecedent Contained Deletion in Negative Polarity Items', *Syntax*.
- Merchant, Jason. 2000. Why No(t)?', unpublished manuscript, Northwestern University.
- Partee, Barbara. 1987. 'Noun Phrase Interpretation and Type-shifting Principles', in Jeroen Groenendijk et al. (eds.), *Studies in Discourse Representation Theory and the Theory of Generalized Quantifiers*, Foris, Dordrecht, pp. 115–143.
- Piñar, Larrubia Pilar. 1996. *Negative Polarity Licensing and Negative Concord in the Romance Languages*, Unpublished Ph.D. dissertation, University of Arizona.
- Philippaki-Warbuton, Irene. 1985. 'The Theory of Empty Categories and the *pro*-drop Parameter in Modern Greek', *Journal of Linguistics* 23, 289–318.
- Philippaki-Warbuton, Irene. 1993. 'The Subjunctive Mood and the Syntactic Status of the Particle *na* in Modern Greek', *Folia Linguistica* 28(3–4), 297–326.
- Philippaki-Warbuton, Irene and Jannis Veloudis. 1984. 'The Subjunctive in Complement Clauses', in *Studies in Greek Linguistics* 5, University of Thessaloniki Press, Thessaloniki, pp. 87–104.
- Pollock, Jacques Yves. 1989. 'Verb Movement, Universal Grammar and the Structure of IP', *Linguistic Inquiry* 20, 365–424.
- Postma, Gertjan. 1995. *Zero Semantics: A Study on the Syntactic Conception of Quantificational Meaning*, unpublished Ph.D. dissertation, University of Leiden.
- Progovac, Ljiljana. 1988. *A Binding Approach to Polarity Sensitivity*, unpublished Ph.D. dissertation, University of Southern California.
- Progovac, Ljiljana. 1994. *Positive and Negative Polarity: A Binding Approach*, Cambridge University, Cambridge.
- Przepiórkowski, Adam and Anna Kupść. 1997. 'Negative Concord in Polish', *Technical Report 828*, Institute of Computer Science, Polish Academy of Sciences, pp. 211–246.

- Przepiórkowski, Adam and Anna Kupść. 1998. 'Eventuality Negation and Negative Concord in Polish and Italian', in Robert D. Borsley and Adam Przepiórkowski (eds.), *Slavic in HPSG*, CSLI, Stanford University, pp. 211–246.
- Puskás, Genoveva. 1998. 'On the Neg-criterion in Hungarian', *Acta Linguistica Hungarica* **45**, 167–213.
- Quer, Josep. 1993. *The Syntactic Licensing of Negative Items*, MA thesis, Universitat Autònoma de Barcelona.
- Quine, Willard van. 1953. *From a Logical Point of View*, Harvard University Press, Cambridge, Massachusetts.
- Reinhart, Tanya. 1982. 'Pragmatics and Linguistics: An Analysis of Sentence Topics', *Philosophica* **27**, 53–94.
- Reinhart, Tanya. 1997. 'Quantifier Scope: How Labor is Divided between QR and Choice Functions', *Linguistics and Philosophy* **20**, 335–397.
- Richter, Frank and Manfred Sailer. 1998. 'LF Constraints on Expressions of Ty2: An HPSG Analysis of Negative Concord in Polish', in Robert Borsley and Adam Przepiórkowski (eds.), *Slavic in HPSG*, CSLI Stanford University, pp. 247–282.
- Rizzi, Luigi. 1978. 'A Restructuring Rule in Italian', in Samuel Jay Keyser (ed.), *Recent Transformational Studies in European Languages*, MIT Press, Cambridge, Massachusetts, pp. 113–158.
- Rizzi, Luigi. 1997. 'The Fine Structure of the Left Periphery', in Liliane Haegeman (ed.), *The New Comparative Syntax*, Oxford University Press, Oxford, pp. 281–337.
- Roberts, Craige. 1989. *Modal Subordination, Anaphora and Distributivity*, unpublished Ph.D. dissertation, University of Massachusetts, Amherst.
- Rowlett, Paul. 1998. *Sentential Negation in French*, Oxford University Press, Oxford.
- Rullmann, Hotze. 1995. 'Geen Eenheid', *Taalkundige Bulletin* **25**, 194–197.
- Sgall, Peter, Eva Hajicová and J. Panenová. 1986. *The Meaning of the Sentence and Its Pragmatic Aspects*, Reidel, Dordrecht.
- Stechow, Arnim. 1993. 'Die Aufgaben der Syntax', in Arnim von Stechow and Dieter Wunderlich (eds.), *Syntax: An International Handbook of Contemporary Research*, Mouton de Gruyter, Berlin, pp. 1–88.
- Strawson, Peter F. 1952. *Introduction to Logical Theory*, Methuen, London.
- Swart, Henriëtte de. 1996. 'Scope Ambiguities with Negative Quantifiers', in Klaus von Heusinger and Urs Egli (eds.), *Proceedings of the Workshop on Reference and Anaphoric Relations*, Universit"at Konstanz, Konstanz, pp. 145–164.
- Szabolcsi, Anna. 1981. 'The Semantics of Topic/Focus Articulation', in Jeroen Groenendijk, Theo Janssen and Martin Stokhof (eds.), *Formal Methods in the Study of Language*, Mathematical Center, Amsterdam, pp. 513–540.
- Szabolcsi, Anna (ed.). 1997. *Ways of Scope Taking*, Kluwer, Dordrecht.
- Tóth, Ildikó. 1999. 'Negative Polarity Licensing in Hungarian', *Acta Linguistica Hungarica* **46**, 119–142.
- Tovena, Lucia. 1996. *Issues in Polarity Sensitivity*, Ph.D. dissertation, University of Edinburgh. Published 1999 by Garland, New York.
- Tsimpli, Ianthi-Maria. 1990. 'Clause Structure and Word Order in Modern Greek', in John Harris (ed.), *UCL Working Papers in Linguistics 2*, University College London, pp. 226–255.
- Tsimpli, Ianthi-Maria. 1995. 'Focusing in Modern Greek', in É. Katalin Kiss (ed.), *Discourse Configurational Languages*, Oxford University Press, Oxford, pp. 176–206.
- Tsimpli, Ianthi-Maria and Anna Roussou. 1996. 'Negation and Polarity Items in Greek', *The Linguistic Review* **13**, 49–81.

- Vallduví, Enric. 1991. *The Informational Component*, unpublished Ph.D. dissertation, University of Pennsylvania.
- Vinet, Marie-Thérèse. 1998. 'Contrastive Focus, French n-words and Variation', *Canadian Journal of Linguistics* **43**(1), 121–141.
- Veloudis, Ioannis. 1982. *Negation in Modern Greek*, unpublished Ph.D. dissertation, University of Reading.
- Ward, Gregory and Betty Birner. 1995. 'Definiteness and the English Existential', *Language* **71**, 722–742.
- Wouden, Ton van der and Frans Zwarts. 1993. 'A Semantic Analysis of Negative Concord', in Utpal Lahiri and Adam Zachary Wyner (eds.), *Semantics and Linguistic Theory (SALT) 3*, Cornell University, Ithaca, pp. 202–219.
- Zanuttini, Raffaella. 1991. *Syntactic Properties of Sentential Negation: A Comparative Study of Romance Languages*, unpublished Ph.D. dissertation, University of Pennsylvania.
- Zanuttini, Raffaella. 1997. *Negation and Clausal Structure*, Oxford University Press, Oxford.
- Zwarts, Frans. 1995. 'Nonveridical Contexts', *Linguistic Analysis* **25**, 286–312.

Received 16 October 1998

Revised 14 February 2000

University of Groningen
Dutch Linguistics
Postbus 716
NL-9700 AS Groningen
The Netherlands
giannaki@let.rug.nl

