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1 Introduction

Throughout the history of the language, the Greek system of negation is interesting for its complexity, and for its interaction with the independently complex and developing system of modality. This paper cannot go into great depth about all the research that has been done in this area. Instead it will touch on a few aspects, tying certain key articles to matters of current theoretical interest. Considering data from Homeric, Classical and Standard Modern Greek (SMG), it will focus particularly on those areas which benefit from a historical approach.

To give a broad outline of the relevant developments of the language, in the ancient language (comprising Homeric Greek, the result of a long oral tradition, finishing in around the 8th century BC, and Classical Greek, a collection of dialects centring around the language of Athens in the 5th century BC), there are two negators, *ou* and *mē*. The existence of two negators continues through the history of the language: in SMG these are *δen* and *min*. In form the negators at each stage are related, although the relationship of *ou* to *δen* is not straightforward, and will discussed in more detail in section 2. The nature of the meaning of, and relationship between the two negators is one of the most interesting questions and will be discussed in sections 3 and 4. In the final two sections, issues of theoretical interest connected to each of the negators will be investigated, namely negative concord and the expression of negative imperatives.

2 The development of *ou* to *δen:* Jespersen's Cycle at work?

2.1 Introduction

SMG *δen* is clearly functionally equivalent to Ancient Greek *ou*: both are the markers of 'standard' negation, as defined by Payne, namely they both negate declarative main clauses (Payne (1985) 198-201, with further discussion by Miestamo (2007)). In this section I will consider the formal relationship between the two negators. Although the development is fairly transparent in outline, I will argue that previous analyses can be improved through a closer consideration of the data. Although Jespersen's Cycle has been invoked to describe the developments, there are certain important differences between Greek and the other languages which are used as prototypical examples of the cycle.

2.2 The development

In outline, the Classical Greek negator *ou* comes to be replaced by *ouden* (Jannaris (1897) §1796-800). Used in Classical Greek to mean 'nothing', and apparently therefore a negative quantifier, in form *ouden* is made up of the negator itself (*ou*), a particle (*de*), and the neuter form of the word for 'one' (*hen*). It may be found either on its own (1), or strengthening the negator (2).

1. **οὐδὲν** διοίσεις Χαιρεφῶντος τὴν φύσιν
   ūden dioiseis kʰairepʰōntos tēn pʰusin
   OUDEN differ.2.FUT Chairephon.GEN the nature
   'you will not in any way differ in nature from Chairephon'

[1] This chapter has benefitted significantly from several discusssions with those in the negation project, particularly David Willis, Chris Lucas and Sten Vikner. I am also very grateful to Brian Joseph who kindly read a draft and made very useful comments on the work in progress.

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2. **οὐ** γὰρ ὠζυρὲ τούτων ἐπιθυμῶ μανθάνειν **οὐδέν**
ū gar ōsdure tūtōn epit^{h}umō mant^{h}anein ūden
OU PTCL miserable.VOC those.GEN.PL want.1SG learn.INFIN nothing
'You miserable man, I don't want to learn about anything of those'

Aristophanes *Clouds* 656

Incidentally, the above evidence reveals that Classical Greek is a 'negative concord' language, of the type in which a negated verb may be accompanied by a negative indefinite (post-verbally), but where the negative indefinite may function as the sole negative element in the sentence, similar to Italian. To use Haspelmath's terminology, it may be described as a (N)V-NI language (Haspelmath (1997) 201). I will return to the issue of negative concord in section 5 (CROSS-REF).

To return to the development from *ou* to *δεn,* post-classically *ouden* is found more and more regularly as the standard negator (3). The form soon develops through aphaeresis (loss of first unstressed vowel) to *δεn* (4). This is the form of the standard negator in SMG (5).

3. Ἰουδαίους **οὐδεν** ἠδίκησα
iūdaiūs ūden idikisa
Jews.ACC NEG wronged.1SG
'I have not wronged the Jews'

Acts 25.10 (from Jannaris (1897) §1798)

4. **δὲν** ἠξεύρεις… τὸ φῶς τῶν ὀφθαλμῶν μου
δen iksevris to fos ton ofθalmon mu
ΔEN find.2SG.PAST the light the.GEN.PL eyes.GEN.PL me.GEN.SG
'You did not find the light of my eyes'

Digenes Acritas (Escorial manuscript line 859 *TLG*), 12th century

5. **Δεν το έγραψα για σένα**
δen to égrapsa ja séna
ΔEN it write.1SG.PAST for you.ACC
'I did not write it for you'

SMG (from Holton, Mackridge and Philippaki-Warburton (1997) 204)

In spite of the apparent simplicity of this development, a closer analysis reveals that it is more complicated (for further discussion see Landsman (1988) 20-24). As ever in Greek, dating the development is difficult, due to a persistent drive towards Atticism and an almost constant diglossia of the written and spoken language (Horrocks (1997)). This helps to explain how Jannaris can describe *ou* as only becoming obsolete in the nineteenth century (Jannaris (1897)

[2] In addition to a gloss and rough translation, all examples are accompanied by a phonetic transcription. This is meant merely to help the reader, and does not claim to be fully accurate.

§1797) while Horrocks claims that *ouden* starts to replace *ou* from the sixth century on (Horrocks (1997) 208).

A search of the canon of *Thesaurus Linguae Graecae* (*TLG*) reveals that *δen* is regularly found after the ninth century. Unsurprisingly, there appears to have been a period of variation. For example, the *Chronicle of the Morea* (early fourteenth century 'vernacular' verse, see Horrocks (1997) §12.3.3 for description of the text and other linguistic features) has 331 instances of *ouden* and 117 of *ou.* This contrasts to a ratio in the texts of Plato (fifth/fourth century prose) of 1222 examples of *ouden* to 3262 of *ou,* almost exactly the opposite proportion. We may therefore conclude that *ou* is still in use as late as the fourteenth century, although *ouden* is clearly the more common form.

As well as being difficult to date precisely, we may see that the development did not take place at all in some dialects of Greek. For example, in Tsakonian, the negator is *o,* directly from *ou* (Joseph, B. D. (2001) "Language Contact and the Development of Negation in Greek and the Balkan." *Greek Linguistics `99. Proceedings of the 4th International Conference on Greek Linguistics, Nicosia, September 1999.* Thessaloniki: University Studio Press. 350), while in standard Pontic, the negator is *ki* from *ouki* (Horrocks (1997) 312). It would appear that from the variation seen in the medieval texts, some dialects generalised one negator while others generalised another (Io Manolessou, *pers. comm.*).

2.3 Mechanism of the development

Although the exact details of the timing and localisation of the development are not entirely straightforward, we may nonetheless assert that SMG *δen* is the reduced form of *ouden*, which has replaced Ancient Greek *ou* as clausal negator. This has been generally described as an example of Jespersen's Cycle, as a strengthened form of the negator (*ouden*) has developed into the basic form of the negator. For example, Roussou claims that *δen* may be compared with French, where *pas,* originally a positive strengthener to the negator, has developed (in colloquial spoken French at any rate) to carrying the negative force by itself (Roussou (2007) 21). Certainly *δen* appears to continue the 'extra', 'non-negative' elements in the Classical Greek *ouden* (particle *de* + 'one' *hen*). However, the development deserves to be looked at more closely, as various previous analyses may be criticised.

Roberts and Roussou explain the development in terms of their minimalist theory of grammaticalisation and claim that *ouden* moves to a higher position in the clause, from the DP where it modifies the noun, to the CP where it modifies the sentence (Roberts & Roussou (2003) 157-60). They use the following two examples from Classical and post-Classical (Koine) Greek (4th century AD) to exemplify the separate stages in their proposed development (I reproduce their translations):

6. **οὐδεν** αὐτῶν ἀτιμάσεις
   ūden autōn atimaseis
   nothing them.GEN.PL undervalue.2SG
   'You will undervalue none of them'

Plato *Parmenides* 130e

7. ὅτι **[o]ὐδὲν** ἔχωμεν μάρτυρων
   oti ūδen exōmen martiron
   that none.NEUT.ACC.SG have.1.PL witnesses.GEN.PL

'...that we have no witnesses'

1683

Roberts and Roussou argue that in the second example *ouden* has already developed from the negative (adnominal) quantifier they claim is seen in the first example, as it is stranded from its noun. However, these examples are in fact rather problematic. As *ouden* is neuter the translations given are questionable. We would expect to find the masculine *oudena* to express 'not one of them', 'not one witness'. In both of these examples *ouden* instead appears to be functioning adverbially: 'you will not dishonour them (at all)' (with the verb *atimaseis* taking the genitive of the pronoun); 'we do not have (any) witnesses'.

It is true that there are some clear examples of *ouden* functioning as a negative quantifier in the Classical period. For example:

8.	ὁ	δὲ	Ἕλιξος	καὶ	ὁ	Κοιρατάδας	**οὐδὲν**	τούτων
	ho	de	Heliksos	kai	ho	Koiratadas	ūden	tūtōn
	the	PTCL	Helixus	and	the	Coeratadas	N-THING	these.GEN.PL

εἰδότες	ἐβοήθουν
eidotes	eboētʰūn
knowing	hurried

'Helixus and Coeratadas, knowing nothing about what was going on, hurried...'

Xenophon *Hellenica* 1.3.21

Thus, although the examples used by Roberts and Roussou are rather problematic, we might still be able to agree with their account of the development.

However, more problematically still, there are several examples in Classical Greek where *ouden* appears to be adverbial, modifying the verb rather than a noun, as we saw above in example (1), repeated here for ease:

9.	**οὐδὲν**	διοίσεις	Χαιρεφῶντος	τὴν	φύσιν
	ūden	dioiseis	kʰairepʰōntos	tēn	pʰusin
	OUDEN	differ.2.FUT	Chairephon.GEN	the	nature

'you will not in any way differ in nature from Chairephon'

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This use of *ouden* may not be analysed so easily as belonging to a determiner phrase. The fact that *ouden* could already be used adverbially in Classical Greek surely contributed to its development to clausal negator and therefore causes difficulties for the account proposed by Roberts and Roussou.

Furthermore, we may see that there are also some difficulties with describing the development from *ou* to *δen* in terms of Jespersen's Cycle, or at least of comparing the development with that

seen in French. Firstly, it is not clear that in the early stage of the language *oude hen* may be described in the same way as French *ne...pas.*

It is true that the expression *oude hen* is found in Ancient Greek. For example (the reading is guaranteed metrically):

10. σαφὲς	δ’	ἂν	εἶπεν	**οὐδὲ**	**ἕν**—
safes	d	an	eipen	ūde	hen
clear	PART	MODAL PART	said	NEG	one

‘(lit.) the clear (thing) he would say was not one’ (= ‘nothing he said was clear’)

Aristophanes *Frogs* 927

However, it is difficult to ascertain the exact structure of this sentence: is this sentential negation (‘he did not say anything clear’) or constituent negation (‘he said not one clear thing’)? In any case, it is a very restricted construction (only 27 examples in a search of *TLG*).

The evidence that *ouden* developed from a construction where *hen* had a positive meaning is therefore doubtful, unlike in French. Certainly, in Classical Greek *ouden* is already an inherently negative quantifier (Roussou (2007) §2.4). When preceded by the negator this may be used to emphasise the negation, as in example (2) (CROSS-REF) above. In this sense Classical Greek is a language like French, where elements are used to strengthen simple negation. But *ouden* is also used alone as a negative adverb and the only negative element in the sentence already in the early stages of the language, as in example (9) above (CROSS-REF). Word order suggests that it is from this construction that its use as sole negator has developed. Unlike French, as well as several other languages that undergo Jespersen’s Cycle, therefore, we do not end up with a post-verbal negator (cf Haspelmath (1997) §8.2.3.1).

Finally, it should be mentioned that the fact that the ‘preserved element’ (*δen*) was originally non-negative, which again suggests a similarity between this development and the French one, appears to be purely coincidental: the Ancient Greek *ouden* developed to *δen* by a process of aphairesis that widely affected unstressed initial vowels (Horrocks (1997) 207).

There are thus clear differences between Greek and French. What about other prototypical Jespersen languages? On the basis of the developments in English, Zeijlstra has drawn up certain phases for the development of negation in prototypical Jespersen languages, as laid out in figure 1 (Zeijlstra (2004) 56).

Fig. 1: Phases of the development of negation in Jespersen languages (Zeijlstra)

Phase I	Negation is only expressed by a single negative marker that is attached to the finite verb.
Phase II	The negative marker that is attached to the finite verb becomes phonologically too weak to express negation by itself and a second negative adverb becomes optionally available[3]
Phase III	Sentential negation is obligatorily expressed by the negative marker that is attached to the finite verb and the adverbial negative marker.

[3] Joseph (pers. comm.) points out that several languages have phonologically weak negators, such as Albanian (written in standard Albanian s’) thus throwing some doubt on the validity of this phase.

Phase IV	The negative adverb is the obligatory marker for negation and the use of the negative marker that is attached to the finite verb becomes optional.
Phase V	The negative adverb is the only available negative marker. The negative marker that is attached to the finite verb is no longer available.
Phase VI	The negative marker is available in two forms: it can appear either as negative adverb or as a negative marker that is attached on the finite verb, though sometimes simultaneously.
Phase VII=I	Negation is only expressed by a single negative marker that is attached to the finite verb.

It is perhaps tempting to see Greek as an example of a Jespersen language, with *ou* being used first on its own (phase I), then optionally strengthened by *ouden* (phase II?), with *ouden* finally being used as the only negative marker (phase V), presumably having gone through phases III and IV. However, even ignoring the lack of evidence for the intervening phases, we can see various important differences between the developments in Greek and the developments in English. Firstly we have no evidence that driving force behind the strengthening of *ou* with *ouden* is the phonological weakening of *ou.* Although phonological weakening plays a part in the process from *ou* to *den*, it is only after *ouden* is used as sole negator. (In fact, the role of phonological weakening (as opposed to inflationary effects) in the cycle for other Jespersen languages has been questioned elsewhere (eg. Detges & Waltereit (2002)). Secondly, however plausible its existence, there is no clear evidence for a stage when *ou* was used alone as the negator, and we have no clear evidence that the final negative marker (*δen*) has developed from the strengthening element used to reinforce the negator rather than the free-standing negative adverb. Instead we have the phases of development given in figure 2, each made up of two 'sub-phases', the relative chronology of which is unclear.

Fig. 2: Phases of the development of negation in Greek

Phase I (Classical)	a) Negator (*ou*) is used alone or strengthened by *ouden* b) *ouden* can be used alone as negative adverb
Phase II (Post-classical)	a) *ouden* replaces *ou* as sole negative marker b) aphaeresis affects *ouden* (develops to *den*)

Jespersen's Cycle has been invoked in another description of the development of negation in Greek. Kiparsky and Condoravdi claim that, throughout the history of the language, a distinction is made between 'plain' and 'emphatic' negation, and that the development of the system may be described as several iterations of Jespersen's Cycle (Kiparsky, P & C. Condoravdi. (2006) "Tracking Jespersen's Cycle." *Proceedings of the 2nd International Conference of Modern Greek Dialects and Linguistic Theory*. Ed. M. Janse, Joseph, B.D., Ralli, A. Mytilene: Doukas.). However, we may again see difficulties with their account.

They outline the developments as laid out in figure 3 (a few accents have been corrected and the glosses are mine).

Fig. 3: Developments in plain and emphatic negation in Greek (Kiparsky and Condoravdi)

		PLAIN	EMPHATIC
I	Ancient Greek	οὐ...τι [u...ti]	οὐδὲ...ἕν [ude...hen]

		‘not…anything’	‘not…one’
II	Early medieval Greek	(οὐ)δέν…τι [(u)den…ti] ‘not…anything’	δέν…τίποτε [den…tipote] ‘not…anything at all’
III	Greek dialects	δέν…τίποτε [δen…tipote] ‘not…anything’	δέν…τίποτε [δen…tipote] δέν…πρᾶμα [δen…prama] … ‘not…anything at all/a thing’
IV	Cretan	δέν…πρᾶμα [δen…prama] ‘not…anything’	δέν…δροσά [δen…δrosa] δέν…ἀπαντοχή [δen…apandoxi] … ‘not…a drop/a hope’

We need to consider carefully what Kiparsky and Condoravdi mean by ‘plain’ and ‘emphatic’ negation since they appear to use the terms in different ways over the course of their paper. Since they describe *ou(k)* as a marker of plain negation the following pair of sentences would appear to express what they mean by the terms:

11. John didn’t eat. (= plain negation)
12. John didn’t eat a thing. (= emphatic negation)

However, when explaining the table given above, they assert that it displays the “plain and emphatic versions of ‘nothing’, ‘not any’ of the modern Cretan dialect and three of its antecedent stages” (Kiparsky, P & C. Condoravdi. (2006) “Tracking Jespersen’s Cycle.” *Proceedings of the 2nd International Conference of Modern Greek Dialects and Linguistic Theory*. Ed. M. Janse, Joseph, B.D., Ralli, A. Mytilene: Doukas. 1). Thus the sentences should correspond more to the following English sentences:

13. I didn’t eat anything. (= plain negation)
14. I didn’t eat a crumb. (= emphatic negation)

This is important as it reveals that, whether or not it may be shown that the n-words in Greek versions of example 13 (CROSS-REF) above develop into the n-words in the equivalent of example 14 (CROSS-REF), this is rather different to the parallels cited with, for example, English *not*, and French *ne*, which are sentential negators developed from ‘plain’ examples of ‘nothing’ (English *not* develops from *nawiht*, French *ne* from Latin *nōn*, previously **ne oenum*, see Jespersen (1917) 14-16). We are thus dealing with developments in the quantifier cycle rather than the negator cycle described as the standard Jespersen cycle.

We may then look in more detail at some of the stages outlined above, and will see some problems with the claims made by Kiparsky and Condoravdi. First we may consider the development from stage III to IV. In stage III according to their analysis *δén…típote* is used to express plain nothing, while *δén…práma* is used as emphatic nothing. An example of the second use is given in the following sentence (from Kiparsky, P & C. Condoravdi. (2006) “Tracking Jespersen’s Cycle.” *Proceedings of the 2nd International Conference of Modern Greek Dialects and Linguistic Theory*. Ed. M. Janse, Joseph, B.D., Ralli, A. Mytilene: Doukas. 10):

15. βρίσκει	μιὰν	κοπέλλα…	ποὺ	**δὲν**	ἤξερε	**πρᾶμα**
vríski	mian	kopélla…	pú	δén	íksere	práma
find.3SG	one	girl	who	NEG	knew	thing

‘finds a girl who has no clue’ (Theran, emphatic)

This is the usage expected from the etymology of the ‘strengthening elements’: *típote* consists of the elements *ti* ‘something/anything’ and *pote* ‘ever’, while *práma* was originally a positive noun, meaning ‘thing’.

In stage IV, *δén…práma* is said to have developed to express plain negation, while other items, such as *apandoxi* (‘hope’) and *drosa* (‘drop’) express emphatic negation:

16. Ἐδώκασί σου πρᾶμα; – **Ἀπαντοχή**!
eδókasí su práma apandoxí
give.3.PL.PAST you.DAT thing hope
‘Did they give you anything? Nothing! (‘not a hope!’)’ (Cretan, plain and emphatic)

17. Ἔφαες πρᾶμα; – **Δροσά**!
efaes prama δrosa
eat.2.SG thing dewdrop
‘Did you eat anything? Nothing! (‘not a dewdrop!’)’ (Cretan, plain and emphatic)

However, unfortunately the examples given are not sufficient for the claims about the stages of the development, since they do not come from different periods of the language but rather from different dialects. What we may certainly see from these examples is that *práma* is a weak negative polarity item in Cretan (at the date of the examples), while it appears to be an emphatic negator in Theran. However, no examples are given to show that *práma* is used to express ‘plain nothing’ in Cretan. What these data therefore show is that, in the case of *práma*, a word which is used in one dialect as an emphatic indefinite form is used in another as a weak polarity item. If this dialectal diversity does in fact reflect a diachronic development within one dialect, we have already seen that it is a case of a weakening of the quantifier, rather than an example of Jespersen’s cycle proper, where the original strengthener comes to take over the functions of the negator alone.

2.4 Conclusion

The development of *ou* to *δen* in Greek provides an interesting example of the development of expressions of sentential negation. What originally appears to be a negative quantifier develops into a sentential negator, which in subsequent periods of the language is strengthened by various different elements. The developments have been described in various different accounts as examples of Jespersen’s Cycle, but I have here argued that a closer analysis shows that such a claim is not straightforward. In the case of the examples considered by Kiparsky and Condoravdi, they illustrate developments in quantifiers rather than developments in the expression of sentential negation. That is, we find merely a serial weakening and replacing of the strengthening element. And although the replacement of *ou* by *ouden* shares certain features with Jespersen’s Cycle it does not go through the phases noted for the prototypical languages, and is different in important ways from the developments seen in French and English.

This development will be considered again in section 5.4 (CROSS-REF), where I will argue that the detailed history of the negator is important for understanding its use at various stages, and may indeed account for some of the differences we may note between the modern and ancient stages of the language.

3 The development of *min* from *mē*: a constellational approach?

3.1 Introduction

Formally there are no significant problems in the development of *mē* to *min*. The change in vowel quality occurred in the later Roman or early Byzantine period (Horrocks (1997) 109). The only area of uncertainty is the presence of the [n] (which only occurs in certain phonological/morphological contexts, as we will see in further detail below). One explanation is that it arose by analogy with the ending of *δen* (Janda & Joseph (1999) 347). Whatever the explanation for this element, it is clear that *mē* and *min* are formally closely related.

The more interesting question is the meaning of the negator, and how it changes over time. For this negator we will consider the later period first, since there is a recent article dedicated to the subject. Janda and Joseph have argued that SMG *mi(n)* should be understood as a 'morphological constellation' of 10 different elements rather than a single entity (Janda & Joseph (1999). Some of the data and argumentation are reproduced in Joseph (2002)). By the term 'morphological constellation' they mean a "group of elements which share at least one characteristic property of form but are distinguished by individual idiosyncrasies - of both form and function - that prevent their being collapsed with one another" (Janda & Joseph (1999) 343). In this case, the ten elements are argued to share a common formal core *[mi]* and a functional core relating in some way to negation.

I will argue that, although they make an important point in realising that we should not treat the negator as a monolithic entity, the number of different elements argued for by Janda and Joseph is too large. I will then examine the negator in Ancient Greek and argue that here too we may distinguish more than one use, and that these uses will help to explain the uses found in SMG.

3.2 Examples in SMG

The 10 different elements argued for by Janda and Joseph are described and exemplified as follows (Janda & Joseph (1999) 344-47; I have reproduced their terminology):

a. negator of subjunctive clauses

18. μπορεί να **μην** έχουν κομηθεί
borí na min éxun kimiθí
can.3SG SUBJ MI have.3PL slept
'It is possible that they haven't gone to bed yet'

19. ας **μην** έρθει τώρα ο Γιάννις
as min érθi tóra o jánis
SUBJ MI come.3SG now the John.NOM
'Let John not come now' or 'John should not come now'

b. negator of active participles

20. **μην** έχοντας ιδέα για όλα αυτά, ο Γιάννις την
min éxondas iδéa ja óla aftá, o jánis tin
MI have.ACC.PPl idea.ACC about all these the John.NOM her.ACC

παντρέυτηκε

pandréftike
married.3SG

'Not having any idea about all these things, John married her'

c. pleonastic negator in clausal complements of verbs with negative force (e.g. preventatives)

21. φοβάμαι να **μην** έρθει
fováme na min érθi
fear.1SG SUBJ MI come.3SG
'I am afraid that he may come' (NOT 'I am afraid he may not come')

22. δε σε εμποδίζω να **μην** μιλάς
δε se emboδízo na min milás
NEG you.ACC prevent.1SG SUBJ MI speak.2SG
'I do not prevent you from speaking' (NOT 'I do not prevent you from not speaking')

d. negator of imperatives and hortatives (i.e. introducer of prohibitives)

23. **μην** το πετάξεις
min to petáksis!
MI it.ACC throw.2SG
'Don't throw it out!'

24. **μην** ξεχνάμε πως ο Γιάννις είναι ακόμα έκει
min ksexnáme pos o jánis íne akóma ekí
MI forget.1PL that the John.NOM is.3SG still there
'Let's not forget that John is still there!'

e. introducer of negatively evaluated clausal complements to verbs and nouns of fearing (with variant [mípos/míbos])

25. το έσκασε από φόβο **μην** τον χτυπήσουν
to éskase apó fóvo min ton xtipísun
it.ACC burst.3SG from fear.ACC MI him.ACC beat.3PL
'He ran off for fear that they might beat him'

26. φοβάμαι **μην / μήπως** έρθει
fováme min / mípos érθi
fear.1SG MI come.3SG
'I fear that he might come'

f. introducer of tentative main-clause questions (with variant [mípos/míbos])

27. **μην/μήπως** είδες το παιδί;
min/mípos íδes to peδí?
MI saw.2SG the child.ACC
'Did you perhaps (happen to) see the child?'

g. independent utterance expressing negative actions (i.e. prohibitions)

28. **μη**!
    mi
    mi
    'Don't!'

h. negator of lexical items (ones that are not fully verbs)

29. γύρισε	δυο	**μη**	εμπορικά	φιλμ	μαζί του
jírise	δjo	mi	emboriká	film	mazí tu
turned.3SG	two	MI	commercial	films.NTR.ACC	with him

    'He shot two non-commercial films with him'

i. negator of ellipted (i.e. "understood") elements

30. παρκαρισμένα	και	**μη**	αφτοκίνητα	ήταν	παντού
parkarizména	ke	mi	aftokínita	ítan	pandú
parked.NTR.PL	and	MI	automobiles.NTR	were	everywhere

    'Parked and unparked cars (i.e. 'cars that are parked and (ones that are) not (parked)') were everywhere'

31. **μη**	τα	χέρια	σου	έξω
mi	ta	xérja	su	ékso
MI	the	hands.ACC	your	outside

    'Don't (put) your hands out!'

j. negative combining-element in isolated derivational word-formations

32. μήτε (míte) 'not even; neither' (cf. ούτε (úte) 'not even; neither')
33. μηδέν (miδén) 'nought; zero'
34. μήπως (mípos) 'lest', 'perhaps' (cf. complementizer (πως (pos) 'that').

Janda and Joseph isolate five different 'formal' features, of which their different elements share a certain subset, as follows:

i. whether a final (assimilating) -n is allowed[4]
ii. whether the element is a bound or a free form
iii. whether the element occurs syntactically in COMP (the complementizer-node)
iv. whether the element occurs primarily with verbs or instead (regularly) with other word-classes
v. whether the element has a semantic force that is strongly negative or instead only weakly so or even only indirectly associated with negativity

The features, and their distribution amongst the ten elements isolated by Janda and Joseph are represented in a table given here as figure 4.

[4] When allowed, this –n appears regularly before vowels (see 19 above CROSS-REF), and variably before nasals and fricatives (it is "generally omitted in fast speech but is possible in more careful articulation" (Janda & Joseph (1999) 347, so that μην μιλάς (as in sentence 22 (CROSS-REF)) above can surface as [mi milás]). It shows various effects before stops (for further information see Janda & Joseph (1999) fn. 10).

Fig. 4: Janda and Joseph: Functional elements and formal features of *min* in SMG

		final n	bound	C^0	pre-verbal	strong
a	subjunctive	+	+	-	+	+
b	participial	±	+	-	+	+
c	pleonastic	+	+	-	+	-
d	imperative	+	+	+	+	+
e	complementiser	+	+	+	+	±
f	interrogative	+	+	+	+	-
g	prohibitive	-	-	+	-	+
h	lexical	-	+	-	-	+
i	elliptical	-	-	±	-	+
j	derivational	±	+	-	-	±

3.3 Discussion of claims for SMG

The methodology used to derive this 'constellation' may be questioned on various levels. We may first ask the status of the 'derivational' uses of *min* (j). While these are clearly developed from the non-derivational use it is not clear that they should be considered as a single type (the fact that two of the 'formal features' may not be stated in this instance would appear to confirm this). In any case, they would appear to have a rather different status from the other uses.

We may then consider the formal differences. It is not in fact clear in what sense the fifth (strength of negation) counts as formal at all. We may also question its use as a diagnostic feature on semantic terms: while it appears straightforward to state that the negative force of an imperative (d) is 'stronger' than that of fear clauses (e) and pleonastic constructions (c), both constructions are common environments in which to find negators cross-linguistically, for example in French *je crains qu'il* ***ne*** *vienne* (now usually known as 'expletive negation', see Rowlett (1998) 27-28). Given that this difference in 'strength' is the only way in which the pleonastic element (c) can be argued to differ from the subjunctive element (a), the distinction between them may therefore be questioned.

Similarly, it is unclear whether the interrogative element (f) may be clearly separated from the imperative element (d), from which it again only differs in the 'strength' of the negative force. The difference between the two types appears clear when considering the translations used by Janda and Joseph ('Don't throw it out' vs 'Did you perhaps (happen to) see the child'). In the interrogative sentence there seems to be no element of negation at all. However, in English too we can use a negative element in such a sentence, for example 'You didn't see the child, did you?'. While this negative element is being questioned, and therefore could be described as weaker, the difference could be explained in pragmatic rather than strictly semantic terms. In any case, this does not appear to be a clear formal criterion for distinguishing between different uses.

Moving on to the other four formal features, while the first (final *-n*) is fairly objective and verifiable, the other three are more questionable. For example, as a one-word construction the 'prohibitive' element (g) is necessarily unbound and not pre-verbal. If we take these features out of the equation, the difference between this and the imperative use (d) is reduced to the presence or absence of final *-n*. Even this difference (and therefore the justification for claiming a separate meaning) may be questioned: given that the prohibitive is necessarily

followed by a phonological pause we do not expect to find the assimilating *–n* as found in the imperative construction as its presence depends on the nature of the following element.

A similar point may be made for the elliptical element (i). Necessarily not bound and not pre-verbal in its surface form, its analysis depends on the theoretical analysis of ellipsis used. Again the lack of final *–n* in this use could be explained if we posited a phonological pause in the place of the ellipsis. It would seem more reasonable to explain elliptical uses of the negator by considering what element precisely has been ellided.

The claim that one or other of the elements resides in the C node depends again on one's theoretical point of view. The structure of the left periphery in SMG is a matter of debate, and several different models have been put forward (for a summary of these models, see Roussou (2000)). It is notable that in each of these models the negator has a different relationship with the complementiser node. Given the unresolved nature of the claims about the complementiser phrase and the relative position of the negator in Greek, Janda and Joseph's claims about the position in C^0 remains rather subjective. It would seem advisable to change this formal feature to whether or not the element is clause-initial.

I therefore conclude that the criteria used by Janda and Joseph to distinguish ten differnet uses for *min* are not secure. I believe that it is not shown conclusively that we should separate the derivational, elliptical, prohibitive, interrogative and pleonastic uses for reasons given above. I have thus reduced the ten uses argued for by Janda and Joseph to five, namely the imperative, complementiser, subjunctive, participial, and lexical uses. (We might query further the distinction between the participial and lexical uses since in both cases this appears to be an instance of 'constituent negation', the difference only depending on the nature of the constituent. However, given the formal difference I have left the two uses separate.)

Given the description of a morphological constellation as a group of elements which are "distinguished by individual idiosyncrasies" it is perhaps more significant for my critique of Janda and Joseph's account that I have argued against the validity of using the features 'bound', 'pre-verbal', and 'strong'. This leaves two formal criteria: the presence or absence of assimilating –n (which I only consider apparent in cases where the negator is followed by another word), and whether or not the element is clause-initial. The table of formal and functional elements may therefore be redrawn as figure 5.

Fig. 5: Functional elements and formal features of *min* in SMG Mark 2

		final –n	clause-initial
a/c	subjunctive/pleonastic	+	-
b	participial	±	-
d/g/f	imperative/prohibitive/questions	+	+
e	complementiser	+	+
h	lexical	-	-

In this account the five uses are no longer distinguished by formal criteria. This throws some doubt on the claim that 'constellation' may be described as being 'morphological'. Nonetheless, I agree with Janda and Joseph in saying that we may distinguish different uses of *min* in SMG, if only on semantic and in some cases syntactic grounds. Furthermore, as we will see, these different uses have interesting counterparts and origins in Ancient Greek.

3.4 The situation in Ancient Greek

Janda and Joseph explain the constellation of uses of *min* that they see in SMG as creations by speakers "out of earlier more unified situations" (Janda & Joseph (1999) 350). However, I will show that each of the uses they observe in SMG *min* has counterparts in Ancient Greek *mē,* and that in fact there are even further uses. These uses may not be mapped across to clear differences in surface form, and there are therefore again no grounds to describe *mē* as a 'morphological constellation'. Even on functional grounds alone it is not desirable to claim that each of these uses necessitates a separate element, so that just as we have seen for SMG I will argue that the distinguishable elements are fewer than Janda and Joseph might claim. Nonetheless, the complexity of the negator deserves to be examined further. Indeed, a comparison between the two stages of the language would appear to help explain the multiplicity of the uses in SMG.

3.5 Uses of *mē* which correlate to uses of *min*

We may begin with those uses of the negators in Ancient Greek which correlate to those in SMG, as laid out in figure 6.

Fig. 6: Uses of the negator in Ancient Greek with their counterparts in SMG

a	negator of subjunctive clauses	a1. *mē* is found in final clauses (introduced by complementiser *hina*, the ultimate origin for the SMG subjunctive marker *na*) a2. *mē* is also found in wishes, though these are expressed by the optative or indicative in Ancient Greek
b	negator of active participles	both *mē* and *ou* are found negating participles (for more on their distribution, see 3.6 below CROSS REF)
c	pleonastic negator in clausal complements of verbs with negative force	also found in Ancient Greek
d	negator of imperatives and hortatives	also found in Ancient Greek
e	introducer of negatively evaluated clausal complements to verbs and nouns of fearing	also found in Ancient Greek
f	introducer of tentative main-clause questions	also found in Ancient Greek
g	independent utterance expressing negative actions (ie prohibitions)	also found in Ancient Greek (rare)
h	negator of lexical items	also found in Ancient Greek, but may also be negated with *ou* (see 3.6 below)
i	negator of understood elements ellipted	also found in Ancient Greek
j	negative combining-element in isolated derivational word-formations	more common than in SMG, in Ancient Greek, a quick search of the standard dictionary revealed at least sixteen of these compound forms. For example, μήτε (mēte) 'and not'; μηδείς (mēdeis) 'no-one'; μήποτε (mēpote) 'never'; μηδαμῶς (mēdamōs) 'in no way'; μήτις (mētis) 'no-one'.

The following are examples of each of these uses.

a. negator of 'subjunctive' clauses (final clauses (a1), and wishes with the optative (a2))

35. ἄγε δὴ σὺ φράσον ἐμοὶ σαφῶς πρὸς τουτονί,
age dē su p^{h}rason emoi sap^{h}ōs pros tutoni
come.2.IMP PTCL you say.2.IMP me.DAT clearly to this

ἵνα **μή** σε βάψω βάμμα Σαρδιανικόν·
hina mē se bapsō bamma sardianikon
so-that MĒ you.ACC dip.1SG.SUBJ dip Sardian

'Come now, answer me clearly on this question, so that I do not dip you in Sardian dip.'

Aristophanes *Acharnians* 110

36. εἰ γὰρ **μὴ** νύμφαι γε θεαὶ Βάκιν ἐξαπάτασκον
ei gar mē nump^{h}ai ge t^{h}eai bakin exapataskon
if PTCL MĒ nymphs PTCL gods Bacis fooled.3.PL
'if only the nymphs had not fooled Bacis'

Aristophanes *Peace* 1070

b. negator of active participles

37. οὐκ ἂν δύναιο **μὴ** καμὼν εὐδαιμονεῖν
ūk an dunaio mē kamōn eudaimonein
OU PTCL can.2.opt MĒ toiling.MASC.NOM be-happy
'you would not be able to be happy if you hadn't toiled'

Xenophon *Anabasis* 1.2.22

c. pleonastic negator in clausal complements of verbs with negative force

38. οὐ φυλάξεσθ' ὅπως **μὴ** . . . δεσπότην εὕρητε;
ū p^{h}ulaxest^{h} hopōs mē ... despotēn heurēte
OU guard.2PL.FUT so-that MĒ master.ACC find.2PL.SUBJ
'Will you not be on your guard lest you find a master?'

Demosthenes *Speeches* 6.25

d. negator of imperatives and hortatives

39. **μή** νυν βαρέως ἄλγει λίαν.
mē nun bareōs algei lian
MĒ now heavily grieve.2SG.IMP too-much
'Do not now grieve heavily too much.'

Aristophanes *Clouds* 715

40. ἀλλὰ **μὴ** δράσῃς ὃ μέλλεις·
alla mē drasēs ho melleis
but MĒ do.2SG.SUBJ what intend.2.SG
'But don't do what you are intending to do.'

Aristophanes *Acharnians* 330

41. ταύταισιν οὖν ὦνδρες παραδόντες τὴν πόλιν
tautaisin ūn ōndres paradontes tēn polin
them.DAT.PL PTCL men.VOC betraying the city

μὴ περιλαλῶμεν,
mē perilalōmen
MĒ discuss.1PL.SUBJ

'So, men, let's not discuss handing over the city to them'

Aristophanes *Ecclesiazusae* 230

e. introducer of negatively evaluated clausal complements to verbs and nouns of fearing

42. δέδοικά σ' ὦ πρεσβῦτα **μὴ** πληγῶν δέει.
dedoika s ō presbuta mē plēgōn deei
fear.1SG you.ACC o old-man.VOC MĒ blows.GEN need.2SG
'I fear, old man, that you will need blows'

Aristophanes *Clouds* 493

43. πρόβαινε, κἀν τῷχλῳ φυλάττεσθαι σφόδρα **μή**
probaine kan tōk^{h}lō p^{h}ulattest^{h}ai sp^{h}rodra mē
go.IMP.2SG even-in the-crowd be-careful.INFIN very-much MĒ

τις λαθών σου περιτράγῃ τὰ χρυσία.
tis lat^{h}ōn su peritragē ta k^{h}rusia
someone secretly you.GEN take.3SG the gold

'Go on, and take a lot of care in the crowd that nobody without your notice purloins the gold'

Aristophanes *Archarnians* 257

f. introducer of tentative main-clause questions

44. **μή** τι νεώτερον ἀγγέλλεις;
mē ti neōteron angellēs
mē any news announce.2.sg
'you're not bringing any bad news, I hope?'

Plato *Protagoras* 310b (from Smyth (1956) 2651)

g. independent utterance expressing negative actions (i.e. prohibitions)

45. Trygaeus: Ἑρμῇ Χάρισιν Ὥραισιν Ἀφροδίτῃ Πόθῳ.
hermē k^{h}arisin hōraisin ap^{h}roditē pot^{h}ō
Hermes.DAT Graces.DAT Horae.DAT Aphrodite.DAT Desire.DAT
Ἄρει δέ;
arē de
Ares.DAT PTCL
Chorus: **μὴ μή.**
mē mē
MĒ MĒ
Trygaeus: μηδ' Ἐνυαλίῳ γε;
mēd enualiō ge
MĒ Enyalius PTCL
Chorus: **μή.**
mē
MĒ

Trygaeus: To Hermes, the Graces, the Horae, Aphrodite, Eros! But, to Ares?
Chorus: No! No!
Trygaeus: Not to Enyalius?
Chorus: No!

Aristophanes *Peace* 454 (cf also *Peace* 927)

h. negator of lexical items

46. ἡ **μὴ** ᾽μπειρία
hē mē mperia
the MĒ experience
'lack of experience'

Aristophanes *Ecclesiazusae* 115

i. negator of understood elements

47. Common phrase εἰ δὲ **μή** (*ei de mē*) 'if not, otherwise'

48. ἔα καὶ ὄνομα τὸ μὲν εὖ κεῖσθαι, τὸ δὲ **μή**,
ea kai onoma to men eu keist^{h}ai, to de mē
allow.2.IMP PTCL name the PTCL well lie.INFIN the PTCL not
'allow that while one name will be appropriate, another will not'

Plato *Cratylus* 432e

3.6 Differences between Ancient Greek and SMG

In addition to the uses of *mē* in Ancient Greek outlined above, which map very closely to those outlined by Janda and Joseph for SMG, there are several other uses which have no counterparts in the modern language, namely in conditional protases and relative clauses, and with infinitives. Ancient Greek also differs from SMG in its use of negators with participles and nouns and is thus arguably less unified rather than more unified as Janda and Joseph argue.

In the protasis of conditional clauses the usual negator in Ancient Greek is *mē* (Smyth (1956) §2702). This contrasts with SMG, where the usual negator is *δen* (Holton, Mackridge and Philippaki-Warburton (1997) 457). For example:

49.	εἰ **μὴ**	βούλεται	Πρωταγόρας	ἀποκρίνεσθαι,	οὗτος	μὲν	ἐρωτάτω,
	ei mē	bouletai	prōtagoras	apokrinest^{h}ai,	houtos	men	erōtatō,
	if MĒ	wants	Protagoras	answer.INFIN,	he	PTCL	ask.3.IMP,

ἐγὼ	δὲ	ἀποκρινοῦμαι,
egō	de	apokrinoumai
I	PTCL	answer.1.FUT

'If Protagoras is not willing to answer, let him put the questions, and I shall answer'

Plato, *Protagoras* 338c7

There are some examples of *ou* used in the context of conditional protases in Ancient Greek. In the majority of instances *ou* appears to be being used as a constituent negator rather than as a sentential negator. Found particularly frequently with verbs of saying, thinking or wanting, 'adherescent οὐ' in Smyth's terms gives the opposite meaning of the verb (Smyth (1956) 2960-692, and see further Landsman (1988) 18). For example:

50.	εἰ δ'	ἀποστῆναι	Ἀθηναίων	**οὐκ**	ἠθελήσαμεν ...,	οὐκ	ἠδικοῦμεν
	ēi d	apostēnai	at^{h}naiōn	ūk	ēt^{h}elēsamen...	ūk	ēdikūmen
	if PTCL	revolt.INFIN	Athenians	OU	want.1.PL	OU	do-wrong.1.PL

'but if we refused to revolt from the Athenians, we were not doing wrong'
NOT 'but if we didn't want to revolt...'

Thucydides *Histories* 3.55

However, there are also examples in conditional protases where *ou* is clearly sentential. Often these are 'quotes' of what could be strongly asserted (Smyth (1956) 2698b). For example:

51.	εἰ,	ὡς	νῦν	φήσει,	**οὐ** παρεσκεύαστο
	ei	hōs	nūn	p^{h}ēsei	ū pareskeuasto
	if	as	now	say.FUT.3.SG OU	made-preparations.3.SG

'if, as he will soon assert, he had not made preparations'

Demosthenes *Speeches* 54.29

There are rather more examples of *ou* in conditional protases in Homer, usually with the indicative. Smyth notes two explanations which have been given for this phenomenon, firstly as a "retention of the original use" of distributing the negators according to mood, and secondly as "οὐ went with the predicate, whereas μή was closely attached to εἰ" (Smyth (1956) 2699a). I have argued elsewhere that in origin *mē* may have been used because of its wider scope, being often used in 'unless' conditionals in Homeric Greek (Willmott (2007) 209-10). Basset has also investigated the opposition between the two negators in conditional protases, concluding that they are used with different 'conditions de verité' (Basset (1989) 57). While the exact difference between them remains rather elusive, what is clear is that the modern language has changed from the ancient language in this respect.

Another difference between the two stages of the language may be found in relative clauses. In Ancient Greek there is a choice of negator. According to Smyth, *ou* is used when the antecedent is definite, and *mē* when it is generic (Smyth (1956) 2705d and g). For example:

52. προσημαίνουσιν	ἅ	τε	χρὴ	ποιεῖν	καὶ	ἃ	**οὐ**	χρή
prosēmainūsin	ha	te	kʳē	poiēn	kai	ha	ū	kʰrē
signify-beforehand.3.PL	REL	PTCL	must	do.INFIN	and	REL	OU	must

'they signify beforehand what must be done, and what must not'

Xenophon *Cyropaedia* 1.6.46

53. ἃ	**μὴ**	οἶδα	οὐδὲ	οἴομαι	εἰδέναι
ha	mē	oida	ūde	oiomai	ēdenai
REL	MĒ	know.1.SG	OU	think	know.INFIN

what I do not know, I do not even think I know

Plato *Apology* 21d.

In SMG, too, relative clauses may be negated with *δen* or *min*, but the 'modality' is made explicit by the presence or absence of *na* (Holton, Mackridge and Philippaki-Warburton (1997) 447).

With the infinitive the usual negator in Ancient Greek is *mē,* the regular exception being in indirect speech, where the infinitive is 'representing' the original indicative (Smyth (1956) 2711-27). For example:

54. εἰκὸς	μέντοι	σοφὸν	ἄνδρα	**μὴ**	λῆρεῖν
ēkos	mentoi	sopʰon	andra	mē	lērein
proper	PTCL	wise	man	MĒ	talk-idly.INFIN

'it is proper for a wise man not to talk idly'

Plato *Theaetetus* 152b

55. ἐμοὶ	δὲ	δοκοῦσιν	οὗτοι	**οὐ**	τὸ	αἴτιον	αἰτιᾶσθαι
emoi	de	dokūsin	hūtoi	ū	to	aition	aitastʰai
me.DAT	PTCL	seem.3.PL	these	OU	the	cause	blame

'I think that these people do not blame the real cause'

Plato *Republic* 329b

As the infinitive is lost from the language during the post-classical period (Horrocks (1997) 4.6; Joseph (1983)), we have no comparable usage in SMG.

As we have seen, active participles are negated with *mē* in SMG. Again, the use in Ancient Greek appears rather different. Firstly, there we also find middle and passive participles which may be negated with *mē*. For example:

56. οἱ	**μὴ**	δυνάμενοι
hoi	mē	dunamenoi
the.MASC.PL	MĒ	can.PTCPL.MASC.PL

‘any who are not able’

Xenophon *Anabasis* 4.5.11 (from Smyth (1956) §2734)

Secondly, in Ancient Greek we may find *ou* and not *mē* negating participles. For example:

57. Φαρνάβαζος, **οὐ** δυνάμενος συμμεῖξαι πρὸς τὸν Ἱπποκράτην
P^{h}arnabazos, ū dunamenos summeixai pros ton Hippokratēn
Pharnabasus, OU can.PART.MASC.SG agree.INFIN to the Hippocrates
‘Pharnabazus, unable to come to terms with Hippocrates’

Xenophon *Hellenica* 1.3.6

The difference is apparently related to uses that *ou* and *mē* have in other constructions. Smyth claims that the negator used with a participle is “*ou* when it states a fact, *mē* when it states a condition” (Smyth (1956) 2728). We could therefore explain this split as a kind of contamination from the constructions that the participle is ‘standing for’. We could rewrite the participle from the first sentence above (51) as a conditional clause (‘if any are not able’), in which case the negator *mē* would be required. The second participle, on the other hand, could be rewritten as a finite causal clause (‘since he was not able’).

Finally we may compare the use of negators with nouns. In SMG, nouns may not be negated with *δεn* but only *min* (or *oxi*) (Thanasis Giannaris, Dimitris Michelioudakis, *pers. comm.*), as we have seen exemplified as the lexical use in example 29 above (CROSS-REF). In contrast, Smyth has shown that both negators negate nouns in Ancient Greek. He claims that generic nouns are negated with *mē,* while non-generic nouns are negated with *ou,* pointing out that here *mē* is more common than *ou,* giving the following examples (Smyth (1956) 2735):

58. ἡ τῶν γεφυρῶν . . . **οὐ** διάλυσις
hē tōn gep^{h}urōn... ū dialusis
the.SG the.GEN.PL bridge.GEN.PL OU destruction
the non-destruction of the bridges

Thucydides *Histories* 1.137

59. ὁ **μὴ** ἰατρός
ho mē iatros
the MĒ doctor
‘A non-doctor’

Plato *Gorgias* 459b

The distribution of negators with nouns therefore compares with their distribution with participles.

These additional uses are summed up in figure 7:

Fig. 7: Differences between Ancient Greek and SMG in uses of *mē*

	clause-initial	notes	SMG

b2	all participles	-	comparable to other constructions eg. relative, conditional. Can use *ou*.	only active negated by *mē*
h	Nouns	-	can use *mē* or *ou* depending on meaning	only *min*
k	conditional protases	-	usually *mē*, though occasionally *ou*.	only *δen*
l	Infinitive	-		infinitive does not survive
m	relative	-	can use *mē* or *ou* for generic vs. specific	*δen/min* depending on *na*

3.7 Discussion of uses in Ancient Greek

Although I have discussed an additional four uses for *mē*, as well as showing that the ten uses of *min* found by Janda and Joseph are also expressed in Ancient Greek, I will again argue that it is unwarranted to claim that all fourteen of these correspond to separate 'elements'. For the same reasons given above I will claim that there is no need to distinguish the derivational, elliptical, prohibitive, interrogative and pleonastic uses.

This then leaves us with nine uses of the negator in Ancient Greek, as summed up in figure 8.

Fig. 8: Uses of *mē* in Ancient Greek

		clause-initial
a1	final clauses	-
b2	all participles	-
d/g/f	imperative/prohibitive/questions	+
a2	wish	+
e	complementiser	+
h	lexical	-
k	conditional protases	-
l	infinitive	?
m	relative	-

In figure 8 I have noted whether or not the element is found clause-initially (the same distinction as drawn in SMG). The status of the infinitive construction is questionable on this count, as it depends whether infinitives are interpreted as belonging to the same clause as the main verb: if not, *mē* could be explained as being clause-initial in this use.

This feature leads me to claim that these nine uses may be grouped into three broad categories. Of the clause-initial uses, it seems plausible to draw a distinction between the complementiser (and possibly infinitive) use and the others (imperative/prohibitive/questions and wishes). In the latter the negator is not only clause-initial but sentence-initial, and appears to be connected with the specific speech act in question (see further section 4 CROSS-REF).

The use of the negator as a complementiser is said to have derived from its use in imperatives. Originally fear clauses and negative purpose clauses are said to have been paratactic (Chantraine (1948) §397, also see Willmott (2007) 156). Some examples of this type of clause in Homer may still be interpreted in this way. For example:

60.	ἀλλ᾽	ἄγε	νῦν	ἐλέαιρε	καὶ	αὐτοῦ	μίμν᾽	ἐπὶ πύργῳ,
	all	age	nun	eleaire	kai	autu	mimn	epi purgō
	but	go.2SG.IMP	now	pity.IMP	and	here	stay	on wall
	μὴ	παῖδ᾽	ὀρφανικὸν		θήῃς		χήρην	τε γυναῖκα
	mē	paid	orp^{h}anikon		t^{h}ēēs		k^{h}ērēn	te gunaika
	MĒ	child	orphan		make.2SG.SUBJ		widow	PTCL wife

‘Wait, take pity and stay here on the wall, so you don’t make an orphan of your child and a widow of your wife’, OR, ‘wait…do not make your child an orphan’

Homer, *Iliad*, 6.432

However, already at this stage of the language we have examples in which the negator can only be interpreted as a complementiser. For example:

61.	αἰεί	μιν	ποτὶ	νῆας	ἀπὸ	στρατόφι	προτιειλεῖν		
	aiē	min	poti	nēas	apo	stratop^{h}i	protiēlēn		
	always	him	against	ships	from	army	press		
	ἐγχει	ἐπαΐσσων,		**μή**	πως	προτὶ	ἄστυ	ἀλύξῃ	
	egk^{h}ei	epaissōn,		mē	pōs	proti	astu	aluxē	
	spear.DAT	rush.PTCPL		MĒ	at-all	to	city	escape.3.SG.SUBJ	

‘keep pressing him against the ships, away from his forces, and rush at him with your spear so he can’t escape back to town.’

Homer, *Iliad*, 10.348

These first two sets of uses are therefore possibly historically related, although the exact details of the development remain obscure.

The remaining uses (i.e. non-clause-initial) may seem to form a rather more nebulous set. Nonetheless, they do share a certain feature, namely that in all of these contexts it is possible (if only rarely in some instances) to find *ou* as well as *mē.* In section 4 (CROSS-REF) I will return to the difference between the two negators in more detail, and will argue that there is a semantic and possibly syntactic difference between the two, in some way connected to the level of ‘irrealis’ in the clause. For the time being, we may note that these uses do share a common feature and are not just ‘the rest’.

We are thus left with three different ‘sets’ of usages of *mē* in Ancient Greek:

α: Speech Act
β: Complementiser
γ: Contrast with *ou*

Just as the different uses distinguished for *min* by Janda and Joseph, these all share certain features. In addition to the negative meaning, we may describe all of them as in some way 'irrealis': in addition to the (γ) category, speech acts are by their nature irrealis, and *mē* is only used as the complementiser of 'modal' subordinate clauses (non-modal complementisers being *hoti* or *hōs*). But although they share similarities there is a clear distinction between the three uses which may be described in semantic or syntactic terms. It therefore seems that *mē* is syntactically and semantically complex just as *min* is.

It will be instructive to compare these three uses with the five I distinguished for SMG. For ease of comparison I have restated the five uses in SMG here in figure 9.

Fig. 9: Uses of *min* in SMG restated

A	Imperative
B	Complementiser
C	Subjunctive
D	Participial
E	Lexical

The first category in SMG (A), would appear to continue the imperative category in Ancient Greek (α) unproblematically. The second (B) again appears to map fairly closely to its Ancient Greek counterpart (β). The third (C) appears to spring from one of the uses where there is a contrast with *ou* (γ), in particular the use in subordinate clauses. This is now rather more 'grammaticalised', and clearly connected with the modality of the clause, as *mē* is always required after *na,* and not possible in other subordinate contexts: there is therefore no longer strictly a choice between the two negators in this context. The fourth (D) and fifth (E) might be best described as 'relics' of the ancient use. Again, however, there is no longer a choice of which negator to use. Instead a usage in ancient Greek which was explicable in semantic terms appears to have been generalised according to syntactic context. The particular origin of *δen* may also be relevant in this context (see section 2.2 CROSS-REF): its development from negative quantifier might explain why it is not used with nouns, and why therefore *min* has been generalised in this use.

3.8 Conclusion

Janda and Joseph distinguish a large number of different uses for *min* in Modern Greek, arguing that they form a 'morphological constellation'. I have argued that the methodology behind their conclusions may be questioned in various important respects. Nevertheless, using syntactic and semantic criteria it is clearly necessary to distinguish more than one use for both *min* and *mē.* I have argued that we can see nine different uses of *mē* in Ancient Greek (which may be grouped into three sets), and five uses of *min* in SMG. I have also argued that a consideration of the complex situation in the ancient language may shed some light on the nature of the different uses and their relationship in the modern language. We now need to consider the meaning of *mē/min* with respect to the other negator.

4 The difference between the two negators

As previously stated, one of the key issues in considering Greek negation is establishing the difference between the two negators, *ou* and *mē* in Ancient Greek, and *δen* and *min* in SMG. Now

we have seen how these develop individually over the course of the language we are in a better position to consider their relative meanings.

An explanation of their meaning might begin by considering their etymology. The two negators are compared with the two negators reconstructed for Proto-Indo-European, namely **ne* and **mē* (Moorhouse (1959) 12). In the proto-language the former is said to have been used to negate statements, and the latter prohibitions. However, while Greek *mē* appears directly cognate with Sanskrit *mā́* and Armenian *mi* and is formally direct descendant from the Proto-Indo-European 'prohibitive' marker **mē*, the etymology of *ou* is more difficult. It is found in several forms:

οὐ (ū) - before a consonsant
οὐκ (ūk) - before an unaspirated vowel
οὐχ (ūk^{h}) - before an aspirated vowel
οὐκι (ūki) – emphatic form

It is thus clearly not a direct descendant of **ne*. However, there is one account which claims that **ne* played a part in the formation of *ou*. Cowgill proposed a phrasal origin for the negator (Cowgill (1960)). On the basis of comparison with Armenian *oč*, he claims that the [k] element is part of the basic form. He then derives this *ouk* from a 'pre-Greek phrase' **ne oiu kwid*, made up of the elements **ne* (negator) + **oiu* ('life, age') + *k^{w}id* ('something'), meaning something like 'not ever in my life'. Joseph supports this etymology, claiming the use of the modern Albanian word *jetë* 'life' in the phrase *përjetë* 'forever' uses the same metaphor (Joseph (2005)). This would apparently be an example of Jespersen's Cycle, where a sentence negator is strengthened and the strengthening element then takes on the negative meaning, with the original negator itself finally dropping out of use.

However, this derivation is not universally accepted. Lehmann states that the origin of *ou* is unknown (Lehmann (1974) 4.3.3), and Landsman claims that it is 'etymologically puzzling' (Landsman (1988) 15). Clackson argues that Greek *ou* and Armenian *oč* must be explained in different ways (Clackson (1994) 158). It should also be noted that there have been other explanations for the [k] element in this form. For example, Ruijgh claims that it has arisen due to a missegmentation between the negator and the modal particle *kán* (seen in Ionic *an*) (Ruijgh (1992), see further Chantraine (1948) §503 and Willmott (2007) 200). Such an explanation for the modal particles would not be possible if the etymology of *ou* proposed by Cowgill was correct.

In spite of the disagreements about the actual etymology of the forms, semantically the two Greek negators are said to preserve the distinction claimed for Proto-Indo-European, namely a negator of statements as against a negator of prohibitions. So, for example, Lehmann says that "despite the difference in surface form, ... the functions of the negative pair correspond closely with those in Sanskrit" (Lehmann (1974) §4.3.3). However, such claims do not correlate with the data: we have already seen that Ancient Greek *mē* does much more than negate imperatives. Thus the continuance of a binary distinction from PIE to Ancient Greek does not mean that the distribution of each negator has stayed the same.

I will argue that the same may be said about the development from Ancient to Modern Greek. This is in spite of the fact that at first glance the distinction may seem to remain rather similar, even if it is not the declarative versus imperative distinction claimed by Lehmann. After all, in

the modern language *min* is found in *na* clauses, and *δen* elsewhere; in Homeric and Classical Greek, *mē* negates imperatives, wishes and purpose clauses, while *ou* negates assertions. We might then conclude that there is little change in the function of the two negators through the history of Greek, and that one negator is used for +modal contexts and one negator for -modal contexts. This indeed is suggested by Zeijlstra, who claims that *δen* is marked as [-IRR] and *min* as [+IRR] (Zeijlstra (2006) 419). However, a closer look at the data will show again that it is not so straightforward.

Firstly, in both Homeric and Classical Greek it is not the case that a particular negator is associated with a particular mood. For example *mē* is used with the future indicative in purpose clauses (Philippaki-Warburton (2004) 794). In Homeric Greek we also find *ou* with the subjunctive (Smyth (1956) 2707a). These uses could lead one to the conclusion that the ±modal semantic environment does not overlap straightforwardly with particular inflectional moods. This would not appear to be overly controversial. It has, for example, often been argued that the indicative may be used with 'modal' meaning, particularly in the future tense (eg. Fleischman (1982); Tsangalidis (1999); Palmer (2000) 105; Willmott (2007) 56-60).

However, there are also environments in Classical Greek which appear to be *semantically* modal in which the 'wrong' negator is found. For example, the negator *ou* is the usual negator of the optative in its potential use in (future unreal) conditional consequents. The negator *ou* is also used in conditional consequents with the indicative in so-called 'counterfactual' conditionals. These two uses of the negator are well established in the grammar books and uncontroversially contradict any claim that *mē* is semantically +modal and *ou* is -modal. It is unsurprising, then, that two recent papers should have argued for a different relationship between the negators and type of modality.

Philippaki-Warburton and Spyropoulos claim that, throughout the history of the language, *mē* (later *min*) is associated with deontic modality and *ou* (later *δen*) is associated with epistemic modality (Philippaki-Warburton (2004)). The distinction between deontic and epistemic modality is of course fundamental in studies of modality, being usually exemplified with English modal verbs:

62.You must hand in work on time or else = Deontic
63.You must be Fran = Epistemic

However, in a recent conference paper I have argued that their claim does not stand (Willmott, J. C. (2009) "Not in the Mood: Modality and Negation in the History of Greek." *29th Annual Meeting of the Department of Linguistics, Thessaloniki.*). In brief, in SMG not all *na* clauses are deontic, *min* is used with gerunds, and *δen* is used in conditional clauses, which are not clearly an epistemic environment. In Classical Greek too, *mē* is also found in some non-deontic circumstances, namely in conditional sentences, with participles with a conditional meaning, and as the complement to certain verbs (eg. verbs of expecting and swearing etc., see Goodwin (1889) §685). In Homeric Greek I showed elsewhere that the optative is used with a 'dynamic' meaning, where it is again negated with *ou* (Willmott (2008)). For example:

64.τὸν	δ᾽	**οὔ**	κε	δύ᾽	ἀνέρε	δήμου	ἀρίστω
ton	d	ū	ke	du	anere	dēmū	aristō
that	PTCL	OU	PTCL	two	men	region	best

ῥηϊδίως ἐπ᾽ ἄμαξαν ἀπ᾽ οὔδεος ὀχλίσσειαν

r^{h}idiōs	ep	amaksan	ap	ūdeos	ok^{h}lisseian
easily	on	wagon	from	floor	lift.OPT.3.PL

οἷοι	νυν	βροτοί	εἰσ᾽
hoioi	nūn	brotoi	eis
as	now	mortals	are

'Two men, the best from the region, would not be able to lift it easily from the floor to the wagon, such as men now are.'

Homer *Iliad* 12.448

The uses of the negators in Homeric Greek may therefore be summed up as in figure 10 (this does not include the use of *mē* as complementiser, discussed in section 3.5 and 3.7 above (CROSS-REF)).

Fig. 10: The uses of the negators in Homeric Greek

Mood	Construction	Negator
Imp/subj	Directives	*mē*
Opt	Wishes	*mē*
Opt/subj/indic	Most conditional antecedents	*mē*
Opt/subj/indic	Purpose clauses	*mē*
Opt/indic	Conditional consequents	*ou*
Opt	Statements of obligation	*ou*
Opt	Statements of ability	*ou*
Indic/subj	Assertions	*ou*

As I pointed out in Willmott, J. C. (2009) "Not in the Mood: Modality and Negation in the History of Greek." *29th Annual Meeting of the Department of Linguistics, Thessaloniki.* , the fine-grained nature of the distribution of the negators bears some similarities to the finely-grained functional category of modality argued for by Cinque. Based on the relative order of a range of different adverbs and other verbal elements in various Romance languages, he proposed a universal hierarchy of functional projections (Cinque (2004)). A subset of this hierarchy is shown in figure 11.

Fig. 11: Model of the IP (Cinque (2004) 133)

$MoodP_{speechact}$ > $MoodP_{evaluative}$ > $MoodP_{evidential}$ > $MoodP_{epistemic}$ > TP(Past) > TP (Future) > $MoodP_{irrealis}$ > $ModP_{alethic}$ >$AspP_{habitual}$ > $AspP_{repetitive(1)}$ > $AspP_{frequentative(I)}$ > $ModP_{volitional}$ > $AspP_{celerative(I)}$ > TP(Anterior) > $AspP_{terminative}$ > $AspP_{continuative}$ $AspP_{retrospective}$ > $AspP_{proximative}$ > $AspP_{durative}$ > $AspP_{generic/progressive}$ > $AspP_{prospective}$ > $ModP_{obligation}$ > $ModP_{permission/ability}$ > $AspP_{completive}$ > VoiceP > $AspP_{celerative(II)}$ > $AspP_{repetitive(II)}$ >$AspP_{frequentative(II)}$

This model of the clause structure has already been related to different negative markers in different Romance dialects (Zanuttini (1997) 101), and would appear to correlate well to the environments for the different negators distinguished above in Homeric Greek. The modality

of imperatives and wishes appears to compare semantically to Cinque's $MoodP_{speechact}$, while statements of obligation appear to compare to his $MoodP_{obligation}$ and statements of dynamic modality could be compared to his $ModP_{permission/ability}$. It is then tempting to correlate the modality of purpose clauses and conditional clauses with another of his types, perhaps $MoodP_{irrealis}$. We may thus redraw the list of uses as in figure 12.

Fig. 12: Uses of the negators in Homeric Greek with Cinque's functional categories

Construction	Negator	Functional category
Directives	*mē*	$MoodP_{speechact}$
Wishes	*mē*	$MoodP_{speechact}$
Purpose clauses	*mē*	$MoodP_{irrealis}$
Most conditional antecedents	*mē*	$MoodP_{irrealis}$
Conditional consequents	*ou*	$MoodP_{irrealis}$
Statements of obligation	*ou*	$ModP_{obligation}$
Statements of ability	*ou*	$ModP_{permission/ability}$

According to this correlation, *mē* negates the types of modality higher in the hierarchy, while *ou* is found lower down. Needless to say, the different uses of *mē* in Homeric Greek do not map onto Cinque's model in a completely straightforward manner. One problem is the use of *mē* in (most) conditional antecedents and *ou* in conditional consequents. Both of these are 'irrealis' contexts and thus have been correlated with Cinque's $MoodP_{irrealis}$ category. The fact that *mē* is found in one context and *ou* in the other, however, suggests either that the choice of negator is not dependent purely on semantic grounds, with syntactic context instead playing some part, or else that there needs to be further division between two different types of 'irrealis' modality.

A detailed consideration of the constructions in which the two negators are found in Homeric Greek thus suggests that the negators may not be differentiated according to any simple division such as declarative versus prohibitive or deontic versus epistemic. The distribution supports Cinque's view of a fine-grained model of modality. It also suggests that each individual negator may be complex, operating at various different positions in the sentence, thus supporting the claims made in section 3 (CROSS-REF), that the negators should not be analysed as monolithic entities.

More work clearly remains to be done on this issue, particularly on how the distribution of the negators changes over the course of the history of the language. For example, it is interesting to note that, one of the first post-classical developments is an encroaching of the domain of *ou* by *mē* (Gildersleeve (1880)), even though *ou* eventually comes to have a wider distribution in SMG (for example in conditional clauses).

5 Negative concord

5.1 Introduction

From the Classical period onwards, Greek is one of several languages which display what is now usually called 'negative concord', and which was discussed in detail by Jespersen as a form of 'double negation' (Jespersen (1917) 62-80, and see Haspelmath (1997) 201-03 for a discussion of why the term 'double negation' is problematic). The topic of negative concord has been of considerable theoretical interest with respect to various modern languages, including Modern Greek. Here I will argue that the particular nature of negative concord in Classical Greek is no less interesting, and may shed some light on the later developments.[5]

5.2 Definition and examples

Negative concord may be briefly described as follows: in sentences with two (or more) apparently negative elements (normally a negator and one or more so-called 'n-words'), they do not 'cancel out' the negative meaning (as in English), but rather, the sentence has a negative meaning. We may see examples of this in Classical Greek in 65 and 66 below (from Smyth (1956) §2760 CROSS-REF), and for Modern Greek in 67 and 68 (adapted from Holton, Mackridge and Philippaki-Warburton (1997) 322 & 421):

65. **οὐ** γάρ με νῦν χέζοντά γ' **οὐδεὶς** ὄψεται.
ū gar me nun k^{h}esdonta g ūdeis opsetai
OU PART me now shitting PART N-PERSON see.3SG.FUT
'Now no-one will see me shitting'

Aristophanes *Ecclesiazusae* 322

66. **οὐ** γὰρ ὠζυρὲ τούτων ἐπιθυμῶ μανθάνειν **οὐδέν**
ū gar ōsdure tūtōn epit^{h}umō mant^{h}anein ūden
OU for miserable.VOC those.GEN.PL want.1SG learn.INFIN N-THING
'You miserable man, I don't want to learn about anything of those'

Aristophanes *Clouds* 656

67. **δε** θέλω **τίποτα**
δe θélō típota
ΔEN want.1SG N-THING
'I didn't say anything'

68. **Κανένα** του βιβλίο **δεν** άξιζε
kanéna tu vivlío δen áksize
N-THING his book.ACC ΔEN value.3SG.PAST
'no book of his was worth anything'

In Classical Greek the n-words appear to be inherently negative, being made up of the negator in compound with another element (eg. *oudeis*, 'no-one'; *ouden*, 'nothing'; *oudepote*, 'never' etc.). In SMG, on the other hand, n-words are formally (positive) indefinite pronouns. As Horrocks

[5] In a recent paper (Willmott (2011) I have argued that the situation is rather different in Homeric Greek. See further there for discussion of the apparently embryonic stage of the construction in that period. Due to the limited amount of data from the earliest period of the language, in this section I will be discussing the evidence from Classical Greek onwards.

has shown, *tipota* derives from Classical Greek *ti* 'something', and *pote* ever, and *kanénas* from Classical Greek *kai* 'and' and *heis* 'one' (Horrocks (1997) 223-4 and 274-5). And indeed, in subjunctive, conditional, and imperative contexts they do not have a negative reading at all. For example (adapted from Holton, Mackridge and Philippaki-Warburton (1997) 321):

69. Ήρθε **κανένας** στο γραφείου μου;
írθe kanénas sto graφíu mu
came KANENAS to-the office my
'Did anyone come to my office?'

As Haspelmath has shown, it is common for indefinite pronouns that are used in negative contexts to also have other uses (Haspelmath (1997) 8.1., also see his Fig. 4.4 (p. 64) for an implicational map of the functions of indefinite pronouns). It is thus often difficult to determine whether an element is negative and thus that the language has negative concord. In SMG, however, these elements are usually described as n-words (and SMG is thus usually described as a negative concord language) since they can be used in fragmentary answers with negative meaning (Giannakidou (2005) 2, and for further discussion on the use of this context to determine 'negativeness' see Haspelmath (1997) 8.1.2). For example (from Holton, Mackridge and Philippaki-Warburton (1997) 322):

70. Τι θελείς; **Τίποτα**
ti θelís? típota
what want.2SG N-THING
'What do you want? Nothing.'

Before going on to examine the differences between the different stages of the language, it should be noted that, in Classical Greek, negative concord may be found with *mē* as well as *ou*. The negator and negative indefinite pronoun in such cases always share the same negative element (eg. *mē...mē-,* or *ou...ou-*). For example:

71. **μή** νυν πρότερον **μηδεὶς** ὑμῶν ἀντείπῃ
mē nun proteron mēdeis humōn anteipē
MĒ now first no-one of-you contradict.3SG.SUBJ
'Let no-one contradict nor interrupt me'

Aristophanes *Ecclesiazusae* 590

Given that negative concord is generally discussed with reference to an 'assertive' sentential negator and only (as far as I am aware) with reference to *δen* in SMG, I will however only discuss the use of *ou* in negative concord environments in Classical Greek.

5.3 Differences between Classical Greek and Modern Greek

Although both Classical Greek and SMG may be said to display negative concord the construction is rather different in the two periods. Namely, in SMG the n-word must be accompanied by the negator, which may come before or after it (see egs 67 and 68 above CROSS-REF). It is thus described as a Strict NC language, or in Haspelmath's terms an NV-NI language (Giannakidou (2000) 462; Zeijlstra (2006) 411-12; Haspelmath (1997) 201).

In Classical Greek, on **the** other hand, the n-words may stand by themselves and generate a negative reading. For example:

72. οὐδεὶς αὐτῶν ἅψεται
ūdeis autōn hapsetai
N-PERSON them.GENPL touch.3PL.FUT
'no-one will touch them'

Lysias 1.36

Furthermore, negative concord only occurs when the negator is followed by the n-word, as in examples 65, 66 (and 71) above (CROSS-REF), or when there are two (or more) n-words in the sentence (for further examples of several accumulating negatives see Kühner & Gerth (1898) p. 203). For example:

73. καὶ **οὐδενὶ** πώποτε **οὔτε** ἡμεῖς **οὔτε** ἐκεῖνος
kai ūdeni pōpote ūte hēmeis ūte ekeinos
and N-PERSON.DAT ever neither we.NOMPL neither he.NOMSG

δίκην **οὔτε** ἐδικασάμεθα **οὔτε** ἐφύγομεν
dikēn ūte edikasamet^{h}a ūte ep^{h}ugomen
case.ACC neither prosecute.1PL.PAST neither defend.1PL.PAST
'neither we nor he either ever prosecuted or defended a case against anyone'

Lysias 12.4

If the n-word comes first and is followed by a negator (cf. 68 in SMG), a negative concord reading does not result: in this situation the negations cancel each other out (see Smyth (1956) §2760).

Greek is thus a non-strict NC language, in Zeijlstra's terms, or an (N)V-NI language in Haspelmath's terms (Zeijlstra (2006) 411, Haspelmath (1997) 201. (Haspelmath mistakenly claims that Classical Greek *oudeis* is V-NI and only develops to (N)V-NI in New Testament Greek (Haspelmath (1997) 224). Examples such as 65 and 73 above (CROSS-REF) prove otherwise).

Perhaps it is this 'mixed' behaviour which leads Giannakidou to claim that Classical Greek is not an NC language (Giannakidou (2000) 487). In fact Classical Greek patterns like Italian, which *is* usually described as displaying negative concord. For example:

74. Ieri nessuno (*non) ha telefonato
yesterday n-body (*NEG) has called
'Yesterday nobody called'

Greek is therefore interesting as an example of a language which has developed from a non-strict to a strict negative concord language. This is the opposite development to Italian, which was originally strict (for more details and an account of the development, see Zeijlstra (2006) 421). The development in Greek is the more expected direction of development since NV-NI (or strict) is the preferred option cross-linguistically (Haspelmath (1997) 8.2).

5.4 Explaining the construction

The negative concord construction has been explained in many different ways, using many different models. In this section I will show that the historical development of Greek appears to support one model of the phenomenon. However, as I will show in the following section, a closer examination of the evidence casts some doubt on this explanation.

Giannakidou has explained the phenomenon in SMG semantically. She claims that we must generally distinguish between emphatic and non-emphatic n-words, pointing out that in Greek it is only emphatic n-words which are licensed to appear before the negative marker and in fragmentary answers. She argues that emphatic n-words (at least in SMG) are semantically not negative, and claims that they are instead universal quantifiers (Giannakidou (2000) section 2). Even in fragmentary answers (the context in which the negative meaning is said to prove that the n-words are negative) she argues that the they are not really negative, but rather that we should understand them as having a negative element in ellipsis.

However, subsequent scholars have pointed out problems with the 'ellipsis' argument, arguing that the existence of the fragmentary answers prove the negative semantics of the words. They have thus argued that other explanations are needed for the presence of two negative elements resulting in one semantic negation. For example, Zeijlstra has put forward a syntactic explanation of the construction, using a Minimalist framework (Zeijlstra (2004)). In brief he argues that the various different types of negative concord (strict or non-strict) should be described in different ways but in general as an example of 'syntactic agreement'. He distinguishes between negative operators that carry an 'interpretable' negative feature (iNEG) and elements that carry 'uninterpretable' negative features (uNEG).

Zeijlstra's approach may be illustrated with the following sentences from the non-strict language Italian:

75.a. Gianni non ha telefonato a nessuno
b. *Nessuno non ha telefonato
c. Nessuno ha telefonato

The negative operator *non* is said to be iNEG while the n-words (including *nessuno*) are said to be uNEG. In example a) the uNEG feature of *nessuno* is said to be 'checked against' the iNEG feature of *non.* As the negative operator must c-command the n-word it follows that the negative operator must precede the n-word, explaining why example b) is impossible. Of course, the n-words may appear without the negative marker, as in c). In such examples the negative reading of the sentence is explained in the following way: the uNEG feature on *nessuno* is said to trigger an abstract negative operator (without a phonological realisation) which provides the negative force.

In strict NC languages like SMG, however, the negative marker itself is said to carry uNEG rather than iNEG. In these languages the negative force of the sentence is always provided by an abstract operator rather than a phonological realisation. It is this that allows them to have the negators and n-words in either order.

The development of the negators in Greek would appear to support this account. If Classical Greek should be analysed in the same way as Italian, with an 'interpretably negative' negative marker (*ou*) going together with 'uninterpretably negative' n-words such as *oudeis, ouden* etc. we may have an explanation of why SMG is an example of a strict NC language. After all, as described in section 2.2 above, the standard negator is said to derive from an original n-word, which is uNEG in a non-strict language like Classical Greek. Because *δen* has developed from this n-word to the standard negator, we would expect the modern language to be a strict NC language.

5.5 Discussion

Although the theory appears to fit the data well, there are several issues with this analysis. Firstly, the claim that the n-words in Classical Greek are 'uninterpretably negative' and thus in some way 'not negative' might seem to be rather troubling given their transparent relationship to the negator. Just as in English, where the use of transparently negative words such as *nothing* and *never* has been argued to prevent negative concord (Giannakidou (2000) 487, also see Haspelmath (2005) 70 for the general trend), we might expect these to be just as 'interpretably' negative as the negative marker.

Zeijlstra's approach also forces a rather questionable explanation of sentences such as 75 c) above (CROSS-REF) or an equivalent Classical Greek sentence, such as 9 above (CROSS-REF), reproduced here for ease:

76. **οὐδὲν** διοίσεις Χαιρεφῶντος τὴν φύσιν
ūden dioiseis kʰairepʰōntos tēn pʰusin
OUDEN differ.2.FUT Chairephon.GEN the nature
'you will not in any way differ in nature from Chairephon'

Aristophanes *Clouds* 503

As we have seen, the negative force of such sentences is explained by Zeijlstra as being accounted for by an 'abstract negative operator', which allows the uNEG force of the n-word to be 'checked', rather than by anything negative in the word itself. However, the status of these 'abstract negative operators' is doubtful. We might ask why they are only invoked to explain the n-words and not the negators themselves. Proposing their existence to explain why apparently negative elements do not cancel out the negative meaning of the negator is weak without independent evidence of their existence.

Nonetheless, the existence of negative concord in both Italian and Classical Greek shows that negative concord is possible even when n-words belong to the paradigm of negative quantifiers. A claim that negators and n-words 'express their negative quality' in different ways is plausible, for both languages.

Leaving aside the theoretical issues with Zeijlstra's argument, there is further evidence which is problematic for the claim that SMG is a 'strict' negative language because its negative marker is derived from a 'non-negative' n-word. Namely, the data from the period of development from Classical Greek to SMG. It has been shown that the system of 'strict' negative concord like that found in SMG is found already in the twelfth century (Horrocks (1997) 275). But the example used to support this demonstration uses *ou* not *δen*:

77. **τίποτε** **οὐ** λογίζεται
típote u lojízete
N-THING NEG thinks.3SG
'He thinks of nothing'

Digenes Acritas (E), 706

Thus it appears that the appearance of strict negative concord in Greek predates the replacement of *ou* by *δen*. The development from a non-strict to a strict negative concord

language therefore may not be straightforwardly explained in terms of the etymology of the negative marker, and further research is needed to account for the details of the development.

6 Negative imperatives

6.1 Introduction

In the expression of negative commands, Ancient Greek again demonstrates an important difference from SMG. The difference has important ramifications for the interpretation of negative commands and their theoretical explanation, both from a syntactic and a semantic point of view.

6.2 SMG: a common pattern

In SMG a morphologically inflected imperative form is used in positive commands. For example (from Holton, Mackridge and Philippaki-Warburton (1997) 411):

78. **Μίλησε** με το Γιάννη γι' αυτό
    mílise me to jánni ji aftó
    speak.2SG.IMP with the John about this
    'Speak with John about this'

However, in negative commands the negative *min* is used not with the imperative but with the normal, indicative form of the verb. The 'subjunctive' particle *na* is optional before *min*. For example (from Holton, Mackridge and Philippaki-Warburton (1997) 420):

79. (να) μην του το **πεις**
    (na) min tu to peis
    (na) MIN him it say.2SG.INDIC
    'You should not tell him/Don't tell him'

The avoidance of the imperative in negative commands is very common cross-linguistically. Most commonly, languages avoid the imperative with the usual negator, instead tending either to use a different negative particle or a different form of the verb (Auwera & Lejeune (2005)). SMG is rather unusual in that it has a different negative particle for prohibitions but still avoids using the imperative.

There has been much work done on the general tendency to avoid negating imperatives from a syntactic point of view. Zeijlstra (2006) offers an explanation for SMG which is connected to his general theories on the 'interpretable' nature of negation (see section 5.4 CROSS-REF). He notices that *min* interacts with 'n-words' differently from *δen*: unlike with *δen* where n-words may come either before or after the negator (the sign of a strict NC language), n-words may only follow, not precede *min* (Zeijlstra (2006) 419). For example:

80. *Thelo KANENAS na **mi** fiji
    want.1SG N-BODY SUBJ MIN leave.3sg
    'I want nobody to leave'

81. Thelo na mi fiji KANENAS
    want.1SG SUBJ MIN leave.3SG N-BODY
    'I want nobody to leave'

Zeijlstra claims on the basis of this behaviour with n-words that *min* carries 'interpretable negative features' (iNEG, see above). It is this feature of *min* that is said to rule out the possibility of 'true negative imperatives' or TNIs in SMG. He claims that the negative force of the interpretably negative negator would negate the illocutionary force of the imperative verb form.

The claim has often been made also from a semantic point of view that in negated commands the negation must lie within the scope of the illocutionary force, and therefore that negative elements may not 'out-scope' imperatives (see for example Han (2001); Horn (1989)). Just as we may describe negated declaratives as positive assertions of a negative proposition, we may describe negated commands as a positive command of a negative proposition. For example:

82. The sun does not shine in July
    = I assert the sun NOT shine in July
83. Don't shout
    = I command that you NOT shout

This analysis partly stems from the interpretation of a command as being made up of deontic modality affecting the proposition. For example:

84. Shout
    ≈ You must shout/It is necessary that you shout

It is certainly the case that in the case of negative commands the negation is within the scope of this obligation rather than without it. For example:

85. Don't shout
    ≈ It is necessary that you NOT shout
    ≠ It is NOT necessary that you shout

The observation that the negation should lie without the scope of the illocutionary force of the sentence is supposed to have syntactic implications too. For example, Zeijlstra claims: "V_{imp} must raise to C^0 and as the negative marker Neg^0 must be attached to V^0 , this negative marker c-commands [IMP]" and "since the negative head adjoins to V_{imp} and V_{imp} must raise to C^0, Op_{IMP} cannot avoid being outscoped by negation" (Zeijlstra (2006)). Zeijlstra therefore comes to the conclusion that "every language with an overt negative marker X^0 that carries [iNEG] bans TNIs" (Zeijlstra (2006) 416). As SMG *min* is shown to be [iNEG], the lack of TNIs in the language is therefore apparently explained.

6.3 Ancient Greek: a problem for the minimalist account

However, the data from Ancient Greek presents some difficulties for this analysis. Just as with *min,* n-words may follow *mē* but may not precede it. So for example:

86. **μή** νυν πρότερον **μηδεὶς** ὑμῶν ἀντείπῃ μηδ' ὑποκρούσῃ,
    mē nun proteron mēdeis humōn anteipē mēd hupokrusē
    MĒ now first no-one of-you contradict.3SG.SUBJ and-not interrupt.3SG.SUBJ
    'Let no-one contradict nor interrupt me'

Aristophanes *Ecclesiazusae* 590

87.* **μηδεὶς** νυν πρότερον **μὴ** ὑμῶν ἀντείπῃ μηδ’ ὑποκρούσῃ
mēdeis nun proteron mē humōn anteipē mēd hupokrusē
no-one now first MĒ of-you contradict and-not interrupt
‘*Let no-one contradict nor interrupt me’

Thus, according to the criterion Zeijlstra used with SMG, in Ancient Greek *mē* must carry iNEG features and we would not expect it to be followed by the imperative in negative commands. This is not problematic for the examples above, as the subjunctive is found. However, elsewhere *mē is* found with the imperative in Ancient Greek. For example:

88. μὴ **θορυβεῖτε**
mē t^{h}orubeite
NEG cause-disturbance.IMP.PRES.2.PL
‘Don’t make a disturbance’

Plato *Apology* 21a

The acceptability of the imperative appears to depend on the aspect of the verb form: present (imperfective) imperatives are possible, while aorist (perfective) ones are not, as detailed in the figure 13.

Fig. 13: Aspect and mood in Ancient Greek commands

Positive	Negative
present imperative	μή + present imperative
aorist imperative	μή + aorist subjunctive

In perfective cases, as in sentence 86 (CROSS-REF) above and in the following from just a few lines before the imperative example in 88 (CROSS-REF), we find the aorist subjunctive.

89. μὴ **θορυβήσητε**
mē t^{h}orubēsēte
NEG cause-disturbance.SUBJ.AOR.2.PL
‘Do not make a disturbance’

Plato *Apology* 20e

If *mē* is ‘interpretably negative’ as its behaviour with n-words suggests, we therefore do not have an explanation of how it can be used with the imperative, apparently out-scoping the illocutionary force of the imperative. These data supports van der Auwera’s argument that the cross-linguistic preference for a dedicated marker for prohibitions stems from something other than the scope argument Auwera (2010) section 3). More work clearly needs to be done on the syntactic status of *mē* in Ancient Greek, and the acceptability of TNIs more generally.

6.4 Semantic explanation of Ancient Greek

Instead of answering the syntactic conundrum, I have considered the semantic nature of the use of the imperative and subjunctive in this construction, trying to eplain why the two different moods interact in this way with the aspectual system (Willmott, J. C. (2010) “The Semantics of Negative Directives in Homeric Greek: A Typological Account.” *La morfologia del*

greco tra tipologia e diacronia. Atti del VII Incontro internazionale di linguistica greca. Ed. Ignazio Putzu, Paulis, Giulio; Nieddu, Gianfranco; Cuzzolin, Pierluigi. Milan: Franco Angeli.).

While previous explanations for this phenomenon have argued that the two constructions differ purely in aspectual terms and that there is no significance to the change of mood (eg McKay (1986)), I argued that the difference in mood suggests that two different constructions ought to be distinguished. I compared languages in which scholars have distinguished what are termed 'preventive' from 'prohibitive' constructions such as Russian, Aleut, Tatar, Even and Armenian, (see (2001)).

Broadly speaking, the 'prohibitive' is used to prohibit *controllable* actions (eg. 'don't paint', 'don't read') while the 'preventive' is used to prevent *uncontrollable* actions (eg. 'don't break the glass', 'don't fall') (Birjulin & Xrakovskij (2001) 34). Putting aside the difficulties of using the language of the Homeric poems as a linguistic database and the fact that it is a very limited selection (only 13 aorist subjunctives in negative commands), I claimed that the constructions match the meanings of the two constructions observed in the other languages, with the aorist subjunctive resembling a preventive marker, and the present imperative a prohibitive marker.

6 of the 13 examples of the aorist subjunctive in negative directives in Homer are found preventing emotions. In Armenian, 'emotive' verbs would normally be prevented with the preventive, and therefore appear to be seen as 'uncontrollable' (Kozintseva (2001) 257). Those which are not found with verbs that may be thought of as more 'controllable' may be described as either cautions/warnings or strong prohibitions, just as the 'preventive' in Armenian (for examples, see the original paper).

The overwhelming majority of the present imperatives (over 80%), on the other hand, are found with controllable verbs. Most of the exceptions to the above tendency are found correcting adverse emotions, just like the prohibitive markers in the languages analysed. There are also a few examples which could be described as strong prescriptions to control the situation, marked with the prohibitive in Armenian etc. Of course, the analysis is extremely subjective. Given the difficulty of ascertaining whether certain actions are really 'controllable' or 'uncontrollable', and given that there is rather an overlap between the two categories where they are grammatically distinguished, it could be said that it would be all too easy to describe the ancient Greek data in a similar way. The inconclusiveness of a semantic analysis is particularly marked for the Homeric data, where there are so few examples of the aorist subjunctive.

However, I pointed out that there is also a non-semantic way of comparing the constructions. In Homeric Greek, the present imperative construction is much more common than the aorist subjunctive one. Out of 167 examples of the second-person negative directive, only 13 of them are in the aorist subjunctive, while the rest are in the present imperative, therefore under 10% of the total (Willmott, J. C. (2010) "The Semantics of Negative Directives in Homeric Greek: A Typological Account." *La morfologia del greco tra tipologia e diacronia. Atti del VII Incontro internazionale di linguistica greca*. Ed. Ignazio Putzu, Paulis, Giulio; Nieddu, Gianfranco; Cuzzolin, Pierluigi. Milan: Franco Angeli. 11ff.). A similar skewing is observed in languages with a prohibitive and preventive distinction. For example, one Russian novel (Goncharov's *Oblomov*) had 126 negative directives, of which 114 (90%) were prohibitive and only 12 preventive (10%). In a selection of Armenian texts, the percentages were 79% prohibitive vs. 21% preventive (Kozintseva (2001) 259). These are similar ratios to that noticed between the aorist subjunctive

and present imperative in Homeric Greek. This more 'objective' comparison therefore supports the semantic analysis.

6.5 Conclusion

The avoidance of the imperative with *min* in Modern Greek reflects a general linguistic tendency, apparently caused by a syntactic interplay between the illocutionary force and the scope of the negator. However, a comparison with Ancient Greek reveals a more complex situation. The acceptability of *mē* with the imperative causes problems for modern analyses, and the choice between imperative and subjunctive in the negative command construction appears to have a semantic basis. There is again more work to be done on the correct analysis of this construction, both in general, and specifically for Greek.

7 Conclusions

In this survey of some of the literature on certain key aspects of negation in Greek I have focussed on those aspects which show that the historical approach helps to explain the synchronic data. For instance understanding SMG *δen* is helped by a consideration of its development from a negative quantifier in Ancient Greek. Similarly, the complex nature of the uses of *min* may be simplified by a comparison with the similarly complex, but importantly different *mē.* And although the SMG avoidance of *min* with the imperative appears entirely unsurprising, a comparison with the ancient period of the language reveals a more complicated situation.

I also hope to have shown that current theoretical advances and a detailed empirical study of the language can mutually illuminate each other. Greek is an (unusual) example of a language which develops from a non-strict to a strict negative concord language. The consideration of the development of the sentential negator in SMG may go some way to explaining why the change might take place. The complex distribution of the negators in both ancient and modern Greek provide support for fine-grained models of modality and approaches to grammatical elements which acknowledge the variety of their uses. Finally, the acceptability of *mē* and an imperative form in Ancient Greek presents troubling evidence for theoretical accounts of the avoidance of negators and imperative forms cross-linguistically.

In sum, the tale of two negators in Greek is one of interesting and complex developments which are belied by the preserved binary distinction and which have important theoretical consequences. In spite of the considerable work done on this area, particularly in Modern Greek, there are significant questions remaining.

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