
THE HISTORY OF THE GREEK NEG₂: TWO PARAMETER
RESETS LINKED TO A SYNTACTIC STATUS SHIFT*

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ABSTRACT This paper discusses two shifts that took place in the history of Greek regarding the distribution of the negative polarity negator NEG₂ μη in the transition from Koine to Medieval Greek: (i) the loss of true negative imperatives (the unavailability of NEG₂ with morphological imperatives), and (ii) the loss of NEG₂ from the conditional antecedent. I propose an account according to which both changes relate to a syntactic status shift of NEG₂, one major shift, from specifier to head, and one more subtle shift that relates to the exact location of NEG₂ on the Cinque (1999) hierarchy. The major shift, from specifier to head regarding NEG₂, explains the loss of true negative imperatives by Late Medieval Greek, according to analyses that link the (un)availability of true negative imperatives to negator status (Rivero 1994, Rivero and Terzi 1995, Zeijlstra 2004, 2006). The subtle shift, described as *microelevation* on the Cinque hierarchy, offers an explanation on how NEG₂ eventually became incompatible with the conditional particles and as a result NEG₂ was banned from the conditional antecedent, following a line of reasoning introduced in Roberts (2010) regarding the application of the cartographic approach in explaining grammaticalization paths crosslinguistically.

1 INTRODUCTION

This paper discusses two parameter resets that took place in the history of Greek regarding the distribution of the negative polarity negator NEG₂ μη in the transition from Koine to Medieval Greek: (i) the loss of true negative imperatives (the unavailability of NEG₂ with morphological imperatives), and (ii) the loss of NEG₂ from the conditional antecedent (only NEG₁ is available by the Late Medieval Greek stage). These changes must have taken place at some point during the Early Medieval period—for which there are hardly any vernacular texts available—as by the Late Medieval Greek stage they are complete. I propose an analysis according to which both changes point to a syntactic status shift of NEG₂, one major shift, from

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- c. mi/ *dhen féris ton Jáni!
 NEG2/ *NEG1 bring.PNP.2S the.ACC Jánis.ACC
 ‘Don’t bring John!’ NEGATIVE UNEMBEDDED DIRECTIVE → NEG2
- d. fére ton Jáni!
 bring.IMP.2S the.ACC Jánis.ACC
 ‘Bring John!’ POSITIVE UNEMBEDDED DIRECTIVE

NEG1 serves as the standard negation of the language in the sense of Payne (1985), prototypically the negator of declaratives. NEG1 is symmetric in that nothing differentiates a positive declarative from a negative declarative other than the presence of NEG1 (see Miestamo 2005, Miestamo and van der Auwera 2007 on symmetric negation). NEG2, on the other hand, is the prototypical negator of prohibitives and in Standard Modern Greek it is asymmetric, a point further discussed in the following section, in connection to the (un)availability of true negative imperatives. Regarding their syntactic status, both NEG1 and NEG2 (in its sentential negation function), are heads according to the division of negative markers into phrases and heads (Zanuttini 1991, 1997; see for Modern Greek Giannakidou 1998). Figure 1¹ represents the head status of NEG1 and NEG2 in Standard Modern Greek, along with the relative ordering between the MoodP and the NegP in Standard Modern Greek.

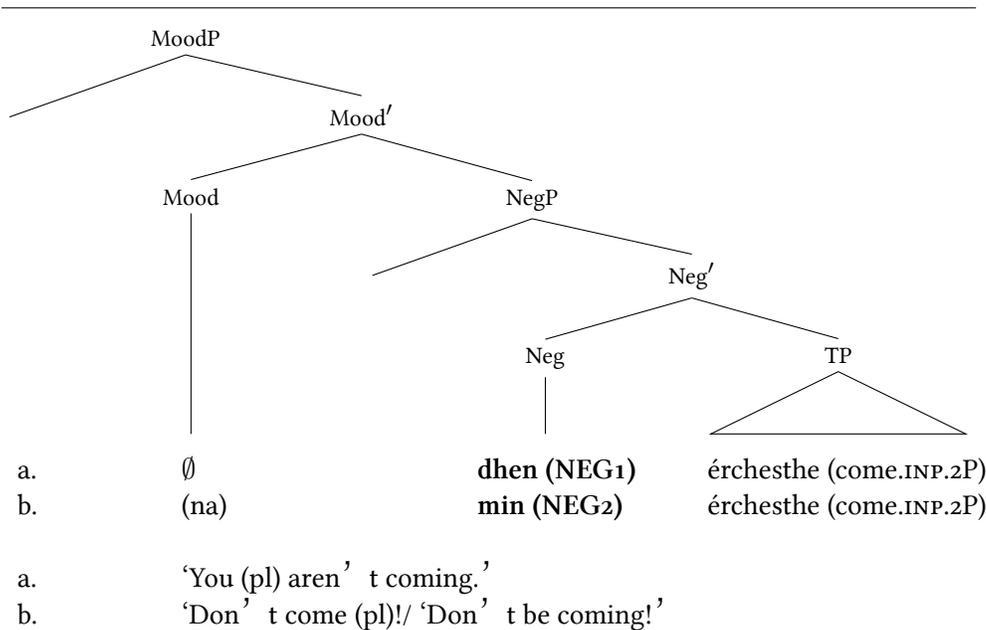


Figure 1: The syntactic status of negators in Standard Modern Greek

1 INP stands for imperfective non past.

Besides its use in prohibition, NEG2 is also the negator of other nonveridical environments, and is a negative polarity item according to the nonveridicality theory of polarity of Giannakidou (1998 *et seq.*): the Greek NEG2 appears only in nonveridical/irrealis environments in functions that are not always negative (Chatzopoulou 2011, 2012). Below is the definition for (non)veridicality from Giannakidou (2006: 589) and table 1² gives a list of some prototypical nonveridical environments next to examples from the English *any*-paradigm, one of the most famous and intensively studied polarity items (Buysens 1959, Klima 1964, Jackendoff 1969, Baker 1970, Ladusaw 1979, Linebarger 1980, 1987, Hoeksema 1986, Zwarts 1986, 1993, van der Wouden 1994, Kas 1993, Dowty 1994, Giannakidou 1994, Zwarts 1995, Giannakidou 1995, 1997, 1998 *et seq.*; see Israel 2011 for extensive bibliography).

- (2) (Non)veridicality for propositional operators (Giannakidou 2006)
 - i. A propositional operator F is veridical iff F_p entails or presupposes that p is true in some individual's epistemic model $M_E(x)$; otherwise F is nonveridical.
 - ii. A nonveridical operator F is antiveridical iff F_p entails that *not* p is true in some individual's epistemic model: $F_p \rightarrow \neg p$ in some $M_E(x)$
- (3) Definition for polarity items: A linguistic expression α is a polarity item iff:
 - i. The distribution of α is limited by sensitivity to some semantic property β of the context of appearance; and
 - ii. β is (non)veridicality.

Gaetone (1971) describes negative polarity items as 'les satellites de la négation', the satellites that revolve around negation. The Greek language, among many other languages (see van der Auwera and Lejeune 2005, van der Auwera 2006), shows that negation itself can be a polarity item, in that the expression of negation in a language can exhibit an allomorph conditioned by the semantic environment in terms of the property of (non)veridicality.³ The Greek NEG2 is one such semantically conditioned allomorph, a lexical element that appears exclusively in nonveridical environments. Representative examples of the uses of NEG2 in the history of Greek that manifest its polarity behavior are given below.

2 In this table no discrimination is made between negative polarity items and free choice items, given that both items are licensed by nonveridicality, although free choice items pose additional restrictions (see Haspelmath 1997, Giannakidou 1998, 2001, 2006).

3 According to van der Auwera and Lejeune's (2005) study 327 languages from a corpus of 495 languages worldwide maintain a negator which is particular to prohibition, while the same negator in these languages can appear in other nonveridical environments as well, see also Honda (1996).

	Semantic environments	Examples with <i>any</i> in English
Antiveridical	Negation <i>without</i> -clause <i>before</i> -clause	Ariel didn't talk to <i>anyone</i> . Phillip entered without <i>anyone</i> noticing him. Ella left before eating <i>anything</i> .
Nonveridical	conditional protasis imperatives interrogatives modal verbs generics downward entail- ing	If you see <i>any</i> wolves, go inside and lock the door. Did you eat <i>any</i> berries? Case She could see <i>anyone</i> from the balcony. <i>Any</i> wolf eats pigs. Few dwarfs brought <i>any</i> diamonds.

Table 1: Prototypical nonveridical environments

(4) HOMERIC (8th c. BC):⁴

ἐξάυδα, μὴ κεῦθε νόω
eksauda, me: keut^he noo:i
speak.PRES.IMP.2S NEG2 hide.IMP.2S mind.DAT

'Speak out, do not hide it in your mind.' directive → NONVERIDICAL

(5) ATTIC GREEK:⁵

μὴ φάθι
me: p^hat^hi
NEG2 speak.IMP.2S

'Do not say (that).'

directive → NONVERIDICAL

(6) KOINE:⁶

μὴ πολλῶν ἐπιθύμει
mi polón epithými
NEG2 many.GEN desire.PRES.IMP.2S

'Do not desire many things.'

directive → NONVERIDICAL

⁴ *Iliad* 1.363.

⁵ Plato, *Gorgias* 501d 9.

⁶ Epictetus, *Dissertationes ab Arriano digestae* 3.9.22.5.

(7) LATE MEDIEVAL:⁷

μή φοβηθῆς τὸν θάνατον παρὰ μητρὸς κατάραν
 mi fovithís ton thánaton pará mitrós katáran
 NEG2 fear.PNP.2S the.ACC death.ACC but mother.GEN curse.ACC

‘Do not fear death, but a mother’s curse.’ directive → NONVERIDICAL

(8) ATTIC GREEK:⁸

εἰ μὴ τις κωλύσει
 e: me: tis ko:lyse:
 if NEG2 someone stop.FUT.IND.3S

‘if someone doesn’t stop (him).’ protasis of conditional → NONVERIDICAL

(9) ATTIC GREEK:^{9,10}

πειρατέον μὴ ἐλλείπειν
 pe:rateon me: elle:pe:n
 try.GDV NEG2 fall-short.PRES.INF

‘I must try my best to be adequate.’
 scope of deontic (irrealis infinitive) → NONVERIDICAL

(10) ATTIC GREEK:¹¹

οὐ ζῶμεν ὡς ἡδιστα μὴ
 u: zo:men ho:s he:dista me:
 NEG1 live.PRES.IND as pleasant.SUPERL NEG2
 λυπούμενοι
 lyru:menoi
 sadden.MP.PRES.PCPL.MASC.NOM

‘Do we not live so happily if we are not saddened?’
 conditional pcpl → NONVERIDICAL

Therefore, it is the notion of (non)veridicality that can capture the full distribution of the Greek negators both with finite, and non-finite verb forms (see Philippaki-Warburton and Spyropoulos 2004 for a previous partially successful attempt to capture the sole factor that regulates negator selection in all Greek). The fact that NEG2 can co-occur with the indicative (see example 8) shows that negator selection in Attic Greek cannot be reduced to mood selection by treating NEG2 as the negator of non-indicatives, although later developments of the language may

⁷ *Digenis Akritis* 2

⁸ Demosthenes, *Philippica* 1 43.6.

⁹ Plato, *Symposium* 196d 6.

¹⁰ The Attic Greek gerundive is a kind of verbal adjective with inherent deontic modality semantics.

¹¹ Euripides, *Fragmenta Antiope*s 14.5, cf. also Kambitsis (1972) and Kannicht (2004).

justify such a claim, as has been made for Modern Greek in Joseph and Philippaki-Warburton (1987) and Giannakidou (1998). But even in later stages this partition is epiphenomenal. Mood selection and negator selection indeed have a common source, yet they do not always have a one to one relation (Chatzopoulou and Giannakidou 2011, Chatzopoulou 2012). They are different species of polarity items and cannot be collapsed according to the Greek data in any stage, most prominently due to the non-negative uses of NEG2, which can appear with indicative mood (understood as the mood of unembedded assertions) even in Standard Modern Greek.

2.2 *The non-negative functions of NEG2: question particle and complementizer*

The Greek NEG2 maintains two non-negative functions: as a complementizer introducing clauses selected by verbs of fear and the like (*timendi* predicates), and as an optional question particle (cf. also Joseph and Janda's 1999 approach on the Modern Greek NEG2 as a morphological constellation). Both environments qualify as nonveridical according to the (non)veridicality theory of Giannakidou (1998 *et seq.*). These uses are among the diachronically persistent functions of NEG2. Examples follow.

(11) KOINE:¹²

μη πάντες ἀπόστολοι; μη πάντες προφήται;
 mi pántes apóstoli? mi pántes prophíte?
 NEG2 all apostles.NOM NEG2 all prophets.NOM

‘Are all apostles? Are all prophets?’ (Translation by Senior *et al.* 1990)

NEG2 as QUESTION PARTICLE

(12) 18th c. AD:¹³

Μην είδατε τον άντρα μου τον Λούκα
 min ídhate ton ándra mu ton Lúka
 NEG2 see.PP.2P the.ACC husband.ACC my the.ACC Lukas.ACC

Καλιακούδα;

Kaljakúdha

Kaljakudhas.ACC

‘Did you happen to see my husband, Lukas Kaliakudas?’

NEG2 as QUESTION PARTICLE

¹² Novum Testamentum, *Ad Corinthios* I 12.29.1–30.2.

¹³ Fauriel (1824–1825), 1.118.

(13) ATTIC GREEK:¹⁴

δέδοικα μὴ τάναντία πράττοντες φανῶμεν
 dedoika me: tanantia prattontes p^hano:men
 fear.PRES.IND.1S NEG2 the.opposite do.PRES.PCPL.NOM seem.SUBJ.1P

‘I fear that we may seem to have pursued the opposite’

NEG2 with *TIMENDI* PREDICATE

(14) LATE MEDIEVAL:¹⁵

δέδοικα μὴ φονευθῶ πρὸ ὥρας
 dhédhika mi fonefthó pro óras
 fear.PRP.IND.1S NEG2 be.killed.PNP.1S before time

‘I fear that I may be killed prior to my time.’

NEG2 with *TIMENDI* PREDICATE

(15) STANDARD MODERN GREEK:

Ο Γιάννης φοβάται μὴν αρρωστήσει
 o Jánis fováte min arostísi
 the Janis fear.INP.3S NEG2 get.sick.PNP.3S

‘John is afraid that he may get sick.’

NEG2 with *TIMENDI* PREDICATE

Loss of negativity and structural elevation to the C position, as is the case in these functions of the Greek NEG2, is a crosslinguistically attested development (Heine and Kuteva 2002: 216, Aldridge 2011, van Gelderen 2011: 295, 331–337). However, in Greek both these functions of NEG2 go as far back as Homeric Greek (8th c. BC) and we can only assume that the directionality of the development was from negator to complementizer and not the other way around. This point is further discussed in section 3.2.1 in connection to the Cinque (1999) hierarchy of functional projections and its use in the description of language change.

(16) HOMERIC (8th c. BC):¹⁶

μὴ πού τινα δυσμενέων φάσθ’ ἔμμεναι ἀνδρῶν;
 me: pu: tina dysmeneo:n p^hast^h emmenai andro:n
 NEG2 maybe someone enemy.GEN.PL say.2P be.INF man.GEN.PL

‘Do you think he could be an enemy?’

NEG2 as QUESTION PARTICLE

14 Isocrates, *Archidamus* 51.1–2.

15 *Ptohoprodromos* I. 273.

16 *Odyssea* 6.200.

(17) HOMERIC (8th c. BC):¹⁷

ἀμφιτρομέω καὶ δείδια μή τι
 amphitromeo: kai de:dia me: ti
 tremble.PRES.IND.1S and fear.PRES.IND.1S NEG2 something
 πάθησιν
 pat^hε:isin
 suffer.AOR.SUBJ.3P

‘I tremble and fear lest something happens to them.’

NEG2 with *TIMENDI* PREDICATE

The Greek NEG2 is an element of remarkable persistence, the defining property of which is not negativity, but nonveridicality, as it is the notion that unites all the functions of NEG2 synchronically and diachronically. NEG1 on the other hand was renewed by the Late Medieval Greek stage, in that the Classical and Hellenistic Greek NEG1 *u:(k^[h])* was gradually replaced by NEG1 *udhén*, a former indefinite (etymologically: NEG1.even.one, cf. Roussou 2007, Rijksbaron 2012). As a result, NEG1 in Greek underwent one complete Jespersen’s Cycle in the sense of Chatzopoulou (2012, 2013) for Jespersen’s Cycle, as the semantic bleaching and structural elevation of intensified predicate negation to plain propositional. NEG2 also reached a similar stage, in which NEG2 *mi* was frequently replaced by NEG2 *midhen*, a former NPI indefinite (etymologically: NEG2.even.one), but this change was interrupted and NEG2 *mi* persisted in function and form (for the most part) until Standard Modern Greek. Below are examples of NEG2 *midhen* in Late Medieval Greek, which would not make it to Standard Modern Greek in this function.

(18) LATE MEDIEVAL:¹⁸

Αὐτόθε στέκου, Μαξιμού, ὧδε μηδέν περάσεις
 aftóthe stéku Maksimú, ódhe midhén perásis
 there stand.IMP.2S Maksimou.VOC here NEG2 pass.PNP.2S

‘Stay there, Maximu, do not come here.’

NEG2 *MIDHEN*

(19) LATE MEDIEVAL:¹⁹

ποτέ μηδέν οκνήσετε, μη νύκταν μηδέ μέραν
 poté midhén oknísete mi níktan midhé méran
 never NEG2 be.idle.PNP.2P NEG2 night NEG2-either day

‘Never be idle, neither night nor day.’

NEG2 *MIDHEN*

¹⁷ *Odyssea* 4.820.

¹⁸ *Digenis Akritis* 1530.

¹⁹ *Digenis Akritis* 488.

Chatzopoulou (2012) links the reason of the persistence of NEG₂ *mi* to its two non-negative functions (as question particle and complementizer introducing *verba timendi* complements), which being non-negative did not experience the renewal pressures predicted by Jespersen’s cycle. These uses may also have had an effect on the grammaticalization stage that NEG₂ had reached in Late Medieval Greek and relate to the explanation for the eventual ban of NEG₂ from the conditional protasis discussed in section 3.2.

Table 2 presents the diachrony of both NEG₁ and NEG₂ from the reconstructed Proto-Indo-European forms (cf. Fowler 1896, Moorhouse 1959, Joseph 2002, Fortson 2010) until Standard Modern Greek.²⁰

	NEG ₁	vs.	NEG ₂
Proto-Indo-European	<i>u:(k^[k])</i>	vs.	<i>me:</i>
Homeric Greek	<i>u:(k^[k])</i>	vs.	<i>me:</i>
Classical Greek	<i>u(k)</i>	vs.	<i>mi</i>
Late Medieval Greek	<i>u(k)</i> and <i>(u)dhén</i>	vs.	<i>mi</i> and <i>mindhén</i>
Modern Greek	<i>dne(n)</i>	vs.	<i>mi(n)</i>

Table 2: The two negator contrast from Proto-Indo-European to Standard Modern Greek.

Although the Greek NEG₂ has remained stable in terms of negative polarity behavior and in a number of its functions (most prominently its C related functions), the exact distribution of NEG₂ has not remained the same. In the transition from Late Koine to Medieval Greek the language system itself had undergone alterations (severe reduction of the non-finite system: extinction of Classical and Koine Greek infinitival forms and shrinking of the participial paradigm, see Joseph [1978] 1990, Horrocks 2010), which resulted in a repartition of labor between NEG₁ and NEG₂ by the Late Medieval Greek stage.

3 PARAMETER RESETS BY LATE MEDIEVAL GREEK

There are two basic changes in the distribution of NEG₂ by the Late Medieval Greek stage that this paper aims to explain: (i) NEG₂ can no longer negate morphological imperatives, and (ii) NEG₂ is no longer licensed in the conditional

²⁰ An etymology for NEG₁ *o>u(k) /u:(k)/* has been proposed since Cowgill (1960), considered also in Chantraine (1968-80), and supported more recently in Beekes (1995, 2010) and Joseph (2005), that NEG₁ *o>u(k) /u:(k)/* comes from a pre-Greek phrase **ne oiu kwid* with the original meaning ‘not ever in my life’ from **ne* (Proto-Indo-European NEG₁), **oiu* (‘life, age’) and **kwid* (‘something’), see also van Gelderen (2011: 300).

protasis. The explanation I propose points to two syntactic status shifts of NEG2: one major shift from specifier to head, a change which is not unexpected, according to the van Gelderen (2004) Head Preference Principle of syntactic change, which accounts for the first reset, and one more subtle shift of NEG2, described as *microelevation* on the Cinque (1999) hierarchy of functional projections, which accounts for the second change.

On parametrical variation and resetting, I follow the lexical approach known as the Borer-Chomsky Conjecture, after Borer (1984) and Chomsky (1995), which is a term coined in Baker (2008) and formulated as follows: “All parameters of variation are attributable to differences in features of particular items (e.g. the functional heads) in the lexicon” (Baker 2008: 353). It is shown that these developments in the distribution of NEG2 by the Late Medieval Greek stage imply changes in its status that qualify as parameter and micro-parameter resets.

3.1 Loss of True Negative Imperatives

The availability of negative morphological imperatives, referred to as true negative imperatives or simply prohibitives, is a parameter according to which languages can vary (Joseph and Philippaki-Warbuton 1987, Zanuttini 1991, 1997, Rivero 1994, Rivero and Terzi 1995, Tomić 1999, Han 2000, 2001, Zeijlstra 2004, 2006, 2007). In the history of Greek, true negative imperatives were available both in Attic Greek (20) and in Hellenistic Koine (21), while surrogate forms through the subjunctive were also productive.²¹

(20) ATTIC GREEK:²²

μη φάθι
me: p^hat^hi
NEG2 speak.IMP.2S

‘Don’t speak (Say ‘no’).’

TRUE NEGATIVE IMPERATIVE

(21) KOINE GREEK:²³

μη πολλῶν ἐπιθύμει
mi polón epithými
NEG2 many.GEN desire.PRES.IMP.2S

‘Do not desire many things.’

TRUE NEGATIVE IMPERATIVE

21 The structures, however, were not in free variation; negative aorist subjunctives are described in the literature as preventive, while the characterization ‘prohibitives’ is kept only for negated imperatives. Aspectual considerations were relevant, as it was the aoristic stem that was used for the negated subjunctive (see Goodwin 1889, McKay 1986, more recently Willmott 2010).

22 Plato, *Gorgias* 501d 9.

23 Epictetus, *Dissertationes ab Arriano digestae* 3.9.22.5.

By Late Medieval Greek, such structures are nearly unattested in spoken language and only the surrogate forms are possible, using either the perfective non-past or the imperfective non-past forms of the verb (after the stripping of the verb system from morphological mood marking). The examples below present instances of negative directives formed by combining NEG2 *mi* with the perfective non-past of *fováme* ‘I fear’ in (22), while (23) has an instance of a positive imperative verb form *sópa* ‘silence.IMP.2S’ (meaning that the imperative as a morphological category was available and productive) followed by two negative directives in imperfective non-past. (24) and (25) provide examples from Standard Modern Greek, where we can actually provide negative evidence on the unavailability of true negative imperatives in (24) and the standard way to form a negative directive in (25) through the perfective or imperfective non-past form of the verb and optionally the *να* /*na*/ particle.

(22) LATE MEDIEVAL:²⁴

μη φοβηθῆς τὸν θάνατον παρὰ μητρὸς κατάραν
 mi fovithís ton thánaton pará mitrós katáran
 NEG2 fear.PNP.2S the.ACC death.ACC but mother.GEN curse.ACC

‘Do not fear death, but a mother’s curse.’ TNIs UNAVAILABLE

(23) LATE MEDIEVAL:²⁵

σώπα, μη χολομανῆς, τίποτα μη λυπάσαι
 sópa, mi holomanís típota mi lipase
 silence.AOR.IMP.2S NEG2 be.angry.INP.2S nothing NEG2 be.sad.INP.2S

‘[...] silence, do not be angry and do not be sad for anything.’ TNIs UNAVAILABLE

(24) STANDARD MODERN GREEK:

* Μην έλα
 min éla
 NEG2 come.IMP.2S

‘Don’t come!’ TNIs UNAVAILABLE

(25) STANDARD MODERN GREEK:

(Να) μην έρθεις/έρχεται
 (na) min érthis/érhese
 (SUBJ) NEG2 come.PNP/INP.2S

‘Don’t come/be coming.’ SURROGATE (IM)PERFECTIVE NON-PAST

²⁴ *Digenis Akritis* 2.

²⁵ *Livistros and Rodamne* 543.

Several analyses have been proposed of this parameter of crosslinguistic variation, the (un)availability of true negative imperatives, which is a parameter that can be reset in the diachrony of a single language, as has already been observed in Italian (Zanuttini 1997, Zeijlstra 2006) and Welsh (Willis 2013). The examples below are from Zanuttini (1997) (26a), Zeijlstra (2006) (26b), and Willis (2013) (27).

- (26) a. OLD ITALIAN:
 Ni ti tormenta di questo!
 NEG yourself torment.IMP.2S of this
 ‘Don’t torment yourself with this!’ TRUE NEGATIVE IMPERATIVE
- b. CONTEMPORARY ITALIAN:
 * Non telefona a Gianni!
 NEG cal.IMP.2S to Gianni
 ‘Don’t call Gianni!’ TNIs UNAVAILABLE
- (27) a. MIDDLE WELSH:²⁶
 [...] nac arch dim namyn lloneit y got o uwyt.
 NEG ask.IMP.2S anything except fill the bag of food
 ‘Don’t ask for anything except for the fill of bag of food.’ TRUE
 NEGATIVE IMPERATIVE
- b. CONTEMPORARY WELSH:
 * Dere ddim!
 come.IMP.2S NEG
 ‘Don’t come!’ TNIs UNAVAILABLE

However, in both Italian and Welsh this change co-occurs with a change of the negator (Italian: *ni...* > *non...*, Welsh: *nac...* > *...ddim*), whereas in Greek there was no change in the form of NEG₂ from Koine to Late Medieval Greek (Greek: *mi...* > *mi...*). Yet all three cases relate to Jespersen’s Cycle developments, which for the Greek NEG₂ are not as obvious, and the analysis I propose agrees with those of Zeijlstra (2006) and Willis (2013) in connecting the loss of true negative imperatives to the syntactic status of the negator. I adopt the account of Rivero (1994) and Rivero and Terzi (1995) on the (un)availability of true negative imperatives, generally supported also in Zeijlstra (2004) and further enriched in Zeijlstra (2006), as appropriate for the case of Greek (but see Zanuttini 1991, 1997, Han 2000, 2001, Postma and van der Wurff 2007 for alternative approaches). The analysis of Rivero (1994) and Rivero and Terzi (1995) links the (un)availability of true negative imperatives to the hierarchical structure of functional projections—the locus of the imperative feature, in particular—and the syntactic status of the negative marker according to the division of negative markers to phrases and heads (see Zanuttini 1991, 1997, 2001; cf. also Giannakidou 1998: 52–55 on the unavailability of true negative imperatives in

²⁶ *Pedeir Keinc y Mabinogi* 15.4–5.

Modern Greek and the head status of NEG₂). In languages that form imperatives through V-to-C movement—e.g. Standard Modern Greek and apparently Late Medieval Greek—true negative imperatives cannot emerge, if there is an overt negator of head status that blocks head movement: an effect of the Head Movement Constraint (Travis 1984). A surrogate form is employed instead, whose morphology does not require movement to C, like the Late Medieval Greek perfective non-past or the subjunctive *να* /na/ (former *ἴνα* /ina/) particle that is already base generated in a position higher than negation after the formal restructuring of the mood system in Hellenistic-Roman times (see Lightfoot 1979: 288–294, Chatzopoulou 2012: 179–184).

3.1.1 The phrasal status of NEG₂ in Classical Greek and the shift in Late Medieval Greek

In this section a number of independent facts are provided towards the conclusion that NEG₂ (as well as NEG₁) was syntactically phrasal in Classical Greek. One important point that should be noted is that Attic Greek negators are not clitics, they are not prosodically or syntactically dependent on a host. Attic Greek negators are ‘mobile’ according to the terminology of Dover (1960), in that they have no strictly fixed position in the clause and there is no juxtaposition requirement to the lexical element they negate (finite verb, infinitive, participle, nominal). Focusing mainly on NEG₂, I present here some of the diagnostics, other than the lack of true negative imperatives, in order to avoid circular reasoning. There are four independent facts regarding the behavior of NEG₂ *μή* /mɛ:/ from which we can infer that its syntactic status in Classical Greek (as well as Koine) was phrasal: Attic Greek NEG₂ (a) responds positively to the *why no(t)?* test, introduced as a diagnostic for syntactic status checking in Merchant (2006), (b) takes XP position in other elliptical constructions (relative clauses, disjunctions, conditionals), (c) appears inside the DP as lexical or constituent negation, (d) can be postposed, NEG₂ (and NEG₁) can occasionally follow the verb or verbal form, if the latter is under focus.

(A) *WHY NO(T)?* As shown in Merchant (2006), the *why NEG?* construction is grammatical only in languages where NEG has phrasal status. Given that the Attic Greek wh-item *τί* /ti/ is a phrase (XP), it can only adjoin to other phrases. The wh-item *τί* /ti/ can appear with both NEG₁ and NEG₂ in Attic Greek. The acute accent diacritic on both NEG₁ and NEG₂ in this function, which is not present in their other uses, is an effect of their sentence-final position—a result of a predictable phonological rule—and it does not indicate any change in meaning between the stressed and unstressed forms (see also Probert 2006 on the history of the Greek diacritics).

(28) ATTIC GREEK:

- a. τί μὴν οὐ;
 ti me:n u:
 why/how 2P NEG₁
 ‘So, why not?’ (Euripides, *Rhesus* 706, also cf. Plato, *Respublica* 425c 6.)
- b. Ἀρχοντές εἰσιν, ὥσθ’ ὑπεικτέον τί μὴ;
 ark^hontes e:sin o:st^h hype:kteon ti me:
 rulers are.3P therefore submit.GVD how NEG₂
 ‘They are rulers, so we must submit. How could we not?’ (Sophocles, *Ajax* 668.)

- (29) a. [XP[τί] [XP οὐ]]
 b. [XP[τί] [XP μὴ]]

For the case of the Attic Greek NEG₁ οὐ(κ) /u:(k)/, the *Why no(t)?* test does not really offer evidence on the syntactic status of NEG₁, because the Attic Greek word for ‘no’ was homophonous with NEG₁ οὐ /u:/.²⁷ As noted in Merchant (2006), this test does not apply to cases in which sentential negation is homophonous to the word for ‘no’. However, what is relevant for our discussion is that the *Why no(t)?* test does provide evidence for the phrasal status of the Attic Greek NEG₂ μὴ /me:/, which is the only negator used in the formation of negative imperatives.

(B) NEG₂ IN OTHER ELLIPTICAL CONSTRUCTIONS The phrasal status of Attic Greek NEG₂ is also supported by its presence in elliptical constructions that involve disjunction, elliptical conditionals and relatives clauses (*Whether TP or no(t)?*, cf. Merchant 2006).

(30) ATTIC GREEK:

παρελήλυθα	βουλευσόμενος	πότερον	χρή με
parele:lyt ^h a	bu:leusomenos	poteron	k ^h re: me
come.PAST.1S	decide.FUT.PCPL.MASC.NOM	which-of-the-two	must me
λέγειν	ἢ μὴ		
lege:n	ε: me:		
talk.PRES.INF or NEG ₂			

‘I have come in order to decide whether I should talk or not.’
 (Demosthenes, *Exordia* 19.1–2.)

²⁷ The form of the Attic Greek NEG₁ was οὐκ /uk/ only if it was followed by a vowel. If the negator was followed by a consonant or if it was sentence-final, NEG₁ appeared as οὐ /u:/. Similarly, when it was used as the word for ‘no’, NEG₁ appeared as οὐ /u:/.

(31) ATTIC GREEK:

ἐπερωτῶντας [...] ὅτι τε χρῆ ποιεῖν καὶ ὅτι μή
 epero:to:ntas hoti te k^hre: poie:n kai hoti me:
 ask.PCPL.MASC.PL what and must do.PRES.INF and what NEG2

‘Asking (the gods) both what should be done and what (should) not’
 (Xenophon, *Oeconomicus* 5.19.5–20.1.)

In all the above cases the Classical Greek NEG2 μη /με:/ holds structural positions that can only be described as phrasal. By Late Medieval Greek NEG2 is no longer attested in these functions in vernacular texts, but has been replaced by ὄχι /ókhi/, which is the word for ‘no’ in Standard Modern Greek as well.²⁸ (32) below shows an example containing the negative adverb ὄχι /ókhi/ following the wh-item ὅτι /óti/. The wh-item ὅτι /óti/ functions as a quotative particle in this example, but nevertheless is one of the earliest attestations of the negative adverb of Standard Modern Greek, which replaced both NEG1 and NEG2 in elliptical structures, as shown in examples (33a), (33c) and (33d). (33b) shows how both NEG1 and NEG2 are ungrammatical in the *why no(t)?* structure in Standard Modern Greek.

(32) LATE MEDIEVAL GREEK:²⁹

καὶ τέως ἐγνωρίζεις με; Λέγω τον ὅτι ὄχι.
 ke téos eghnorízis me? Légho ton óti ókhi.
 and previously know.INP.2S me say.INP.1S him that no

‘And do you know me from before? I tell him that no.’

(33) STANDARD MODERN GREEK:

- a. Γιατί ὄχι;
 Jatí ókhi?
 Why NO
 ‘Why not?’ OKHI NEGATIVE ADVERB
- b. Γιατί *δεν/*μην;
 Jatí *dhen/*min?
 Why NEG1/NEG2
 ‘Why not?’ BOTH NEG1 AND NEG2 UNGRAMMATICAL
- c. Θα πάμε ἢ ὄχι;
 Tha páme i ókhi?
 FUT go.INP.1P or NO
 ‘Will we go or not?’ OKHI NEGATIVE ADVERB

28 The novel form for ‘no’, ὄχι /ókhi/, has been linked to the Classical and Hellenistic Greek emphatic variant of NEG1, οὐχί /uk^hi/ (Andriotis 1983, Rijksbaron 2012), but see Joseph 2001 for unresolved issues on this etymology.

29 Livistros and Rodamne 340.

- d. Κοιτούσαμε ποιος ήρθε και ποιος όχι.
 kitúsame pjos írthe ke pjos ókhi.
 look.IP.1P who come.PP.3S and who NO
 ‘We were looking at who came and who didn’t.’ OKHI NEGATIVE ADVERB

(c) NEG2 INSIDE THE DP The presence of the Attic Greek NEG2 inside the DP as lexical negation means that NEG2 can negate something other than a TP, which constitutes further evidence regarding its phrasal status (Zanutini 2001).³⁰

(34) ATTIC GREEK:³¹

οὐδείς γὰρ τὸ μὴ ἀγαθὸν ἐπαινεῖ
 u:de:s gar to me: agat^hon epaine:
 n-body.MASC.NOM 2P the NEG2 good.ACC praise.PRES.IND.3S

‘no one praises the not good’

The use of NEG2 as lexical negation was lost by the Late Medieval Greek stage,³² but revived in Standard Modern Greek. This was most likely due to external factors, namely the extensive borrowing from French and English during the 20th century (Anastassiadis-Simeonidis 1986, 1994), as a translation of the negative prefixes *non* (French) and *un-/in-* (English) (see Efthimiou 2008). Furthermore, the use of NEG2 as lexical negation in Standard Modern Greek is of a different status than its sentential negation variant, as the two differ not only in syntactic behavior, but also in phonological form (Joseph and Janda 1999): lexical negation in Standard Modern Greek is always *μη* /mi/ independently of context, whereas in its sentential negation function and in its non-negative/expletive functions, NEG2 surfaces as *μη* /mi/, if followed by a consonant other than a stop, and as *μην* /min/ if followed by a vowel or a stop.

(35) STANDARD MODERN GREEK:

- a. ο μη/*μην ἀγαθός
 ο mi/*min aghathós
 the NEG2 naïve
 ‘the non-naïve’

NEG2 MI AS LEXICAL NEGATION

³⁰ In Classical Greek NEG1 also appeared in this use (Gerö 1997). The selection among the two again boils down to nonveridicality, while the presence of NEG2 inside the DP agrees with its status as a polarity item according to the broader notion of nonevaluativity: similarly to interrogatives and imperatives, the DP is an environment that cannot receive a truth value (Chatzopoulou 2012: 58–59). See Brandtler (2012) for the link between evaluativity and polarity, also Aristotle, *De interpretatione* (I.16a.12–18) on the nonevaluativity of nominals.

³¹ Aristotle, *Rhetorica* 1363a 10.

³² There are hardly any evidence in our corpus for NEG2 as lexical negation and it is found only with the remaining participles, not with nouns or adjectives.

- b. Μην/*μη έρθεις
 min/*mi érthis
 NEG₂ come.PNP.2S
 ‘Don’t come!’ NEG₂ MI(N) AS SENTENTIAL NEGATION
- c. Μην/?μη φύγεις
 min/?mi fíghis
 NEG₂ go.PNP.2S
 ‘Don’t come!’ NEG₂ MI(N) AS SENTENTIAL NEGATION
- d. Φοβήθηκα μην/*μη έρθει
 fovíthika min/*mi érthi
 fear.PP.1S NEG₂ come.PNP.3S
 ‘I was afraid that he might come.’ NEG₂ MI(N) AS EXPLETIVE NEGATION

This variation not only in the function, but also in the form of NEG₂ in Standard Modern Greek, is in fact part of the motivation towards the constellational approach proposed for the Modern Greek NEG₂ in Joseph and Janda (1999), according to their definition for the notion of morphological constellation, as ‘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’. In other words, it seems that in Standard Modern Greek NEG₂ can be taken as phrasal in its DP-internal function, but in its sentential negation function NEG₂ is a head (Giannakidou 1998). This, however, was not the case for the NEG₂ of Attic Greek. The Attic Greek NEG₂ also manifests a family of uses, but they are indistinguishable both in terms of form. This consists further evidence that the uses of the Attic Greek NEG₂, either as lexical negation, as sentential negation or as an expletive, share the same phrasal status.

(D) NEGATOR POSTPOSING Although the general tendency is that both NEG₁ and NEG₂ precede the negated category, postposing of the negator, either NEG₁ or NEG₂, in Attic Greek was also possible. In the case of focusing of the verb or verbal form through a Wackernagel clitic like μὲν /men/ or δέ /de/, the negator could appear after the negated category following the clitic. Such clitics have been analyzed as focus particles in Arad and Roussou (1997).

- (36) βουλόμεθα μὲν ἀθάνατοι εἶναι, προαιρούμεθα δὲ οὐ
 bu:lomet^ha men at^hanatoi e:nai proairu:met^ha de u:
 desire.PRES.IND.1P 2P immortal be.PRES.INF intend.PRES.IND.1P 2P NEG₁
 ‘We have the desire of being immortal, but not the intention.’

(on the different meaning of the verbs ‘to desire’ and ‘to intend’)
 (Aristotle, *Magna moralia* 1.17.2.2.)

- (37) ἀρκεῖν ἔοικέ σοι παθεῖν, δρᾶσαι δὲ μή
 arke:n eoike soi pat^he:n dra:sai de me:
 suffice.PRES.INF seem.PRES.3S you.DAT suffer.PRES.INF act.AOR.INF 2P NEG2
 ‘You are, it seems, content to suffer and make no return.’
 (Euripides, *Rhesus* 483.)

This situation contrasts with the data from Late Medieval Greek and Standard Modern Greek, in which both negators are strictly preverbal. Postposing of either negator unavoidably results in ungrammaticality, while there is also a strict juxtaposition requirement between negator and verb form, which only clitics can violate. (38) through (44) contain representative examples with instances of sentential negation from Late Medieval Greek (Late Medieval Greek was a stage of variation and competing forms regarding both NEG₁ and NEG₂, see Chatzopoulou 2012: 225–228) and in (45) to (47) data is provided from Standard Modern Greek, where we can also provide negative evidence. In (45a) and (45b) in particular, it is shown that postposing of negation in Standard Modern Greek or violation of juxtaposition result to ungrammaticality and focusing doesn’t help either.

- (38) LATE MEDIEVAL:³³

αὐτός, ὅταν ἐμάνθανε, ὑπόδησιν οὐκ εἶχεν
 aftós ótan emánthane ipódhisin uk íkhen
 he when study.IP.3S shoes NEG₁ have.IP.3S

‘He, when he was a student, didn’t have shoes.’ NEG₁ οὐ(κ) /u(k)/

- (39) LATE MEDIEVAL:³⁴

Οὐ μᾶς ἀφῆ ἀπὸ τοῦ νῦν ποιεῖν ἀνδραγαθίας
 u mas afí apó tu nín píin andhraghathías
 NEG₁ us.ACC let.INP.3S from the now do.INF brave.deeds

‘He doesn’t allow us from now on to do brave deeds.’ NEG₁ οὐ(κ) /u(k)/
 WITH CLITIC

- (40) LATE MEDIEVAL:³⁵

᾽ὦ μά τον Θεόν, Φιλοπαπού, οὐδὲν εἶμαι ἐγὼ προδότης
 o ma ton Theón Filoparú udhén íme eghó prodhótis
 VOC HOM the God Filopapu.VOC NEG₁ am.INP.1S I traitor

‘By God Filopappu, I am not a traitor.’ NEG₁ οὐδὲν /udhén/

33 *Ptohoprodromos* IV 5.

34 *Digenis Akritis* 1342.

35 *Digenis Akritis* 653.

(41) LATE MEDIEVAL:³⁶

το στέμμα γαρ το χρύσινον ουδέν το επαρεδέχθη
 to stéma ghar to khrísinson udhén to eparedhékthi
 the crown 2P the golden NEG₁ it accept.PP.3S

‘He did not accept the golden crown.’ NEG₁ ουδέν /udhén/ WITH CLITIC

(42) LATE MEDIEVAL:³⁷

τέως γουν δεν εβάστασα να μην τον ερωτήσω
 téos ghun dhen evástasa na min ton erotíso
 any.more thus NEG₁ bear.PP.1S NA NEG₂ him.ACC ask.PNP.1S

‘I could not hold back any longer from asking him.’ NEG₁ δεν /dhen/

(43) LATE MEDIEVAL:³⁸

και σόπα, μη χολομανής
 ke sópa, mi holomanís
 and silence.AOR.IMP.2S NEG₂ be.angry.INP.2S

‘and silence, do not be angry [...]’ NEG₂ μη /mi/

(44) GREEK:³⁹

[...] ουδέν μου εμίλησαν, τινάς μη το καυχάται
 udhén mu emílisán tinás mi to kafkháte
 NEG₁ me.GEN speak.PP.3P anyone NEG₂ it boast.INP.3S

‘They did not speak to me [...], may no one brag on this.’ NEG₂ μη /mi/
 WITH CLITIC

(45) MODERN GREEK:

a. Δεν μιλάς./ *Μιλάς δεν/ *Μιλάς όμως δεν
 Dhen milás./ *Milás dhen/ *Milás ómos dhen
 NEG₁ speak.INP.2S/ *speak.INP.2S NEG₁/ *speak.INP.2S but NEG₁
 ‘You don’t speak (you are not speaking).’

36 CHRONICLE OF MOREAS 107.

37 *Livistros and Rodamne* 61.

38 *Livistros and Rodamne* 543.

39 *Digenis Akritis* 361.

- b. Μη μιλάς./ *Μιλάς μιη/ *Μιλάς όμως
 Mi milás./ *Milás mi/ *Milás ómos
 NEG2 speak.INP.2S/ *speak.INP.2S NEG2/ *speak.INP.2S but NEG2
 μη
 mi

‘Don’t speak!’

(46) MODERN GREEK:

Ο Γιάννης δεν το είπε
 Ο Yánis dhen to ípe
 The Janis NEG1 it-say.AOR.3S NEG1

NEG1 δεν /dhen/ WITH CLITIC

(47) MODERN GREEK:⁴⁰

Μη το λες
 Mi to les.
 NEG2 it-say.PNP.2S NEG2

NEG2 μη /mi/ WITH CLITIC

Based on what we have seen so far and in combination with the reasoning of Rivero (1994) and Rivero and Terzi (1995) the unavailability of true negative imperatives in Late Medieval Greek is readily explained, provided that NEG2 μη /mi/ is now a head in its preverbal prohibitive function. Figure 2 presents the phrasal status of NEG2 in Classical and Koine Greek, while figure 3 shows the head status of NEG2 in Late Medieval Greek.

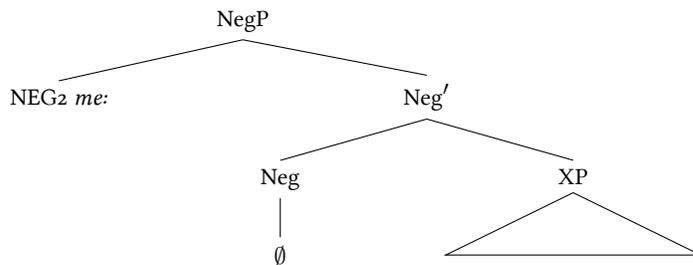


Figure 2: The phrasal status of NEG2 in Classical and Koine Greek

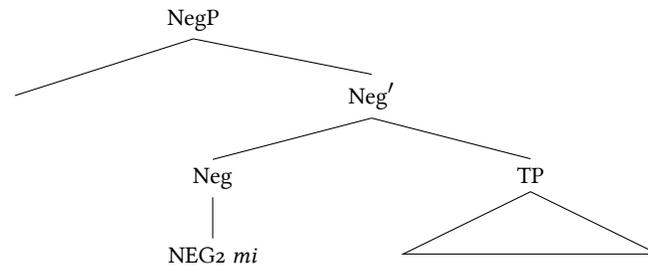


Figure 3: The head status of NEG₂ in Late Medieval Greek

This also generally agrees with Zeijlstra's (2004, 2006) approach and the case of Welsh in Willis 2013, who adopts Zeijlstra's (2006) analysis. Zeijlstra (2006) explicitly links the unavailability of true negative imperatives in a language to the head status of the negator: 'every language that bans TNIs exhibits an overt negative marker X⁰' (Zeijlstra 2006: 405).

3.1.2 The van Gelderen Head Preference Principle, Negative Concord and Feature Economy

The transformation of lexical elements from phrases to heads is a phenomenon with crosslinguistic representation, as shown in van Gelderen (2001, 2004). Among her economy principles of grammaticalization is the Head Preference Principle (Van Gelderen 2004: 11) presented in (48) below.

- (48) HEAD PREFERENCE OR SPEC TO HEAD PRINCIPLE:
Be a head, rather than a phrase

This is a structure-minimizing principle widely attested, as in the case of English auxiliaries, in the development of the demonstrative *that* to complementizer and determiner, the crosslinguistic formation of determiners from pronouns (Heine and Kuteva 2002, Wood 2003), and adverbs to complementizers (see van Gelderen 2011 for a full overview), while it also offers a syntactic explanation for Jespersen's Cycle in general, e.g. *udhén* 'nothing' (phrase in Attic Greek) > *(u)dhen* 'not' (head in Late Medieval Greek and Modern Greek, see Chatzopoulou 2012, 2013). Although in the case of the Greek NEG₂ there was no change in grammatical category or other directly noticeable semantic change, the shift from Classical and Koine Greek NEG₂ to Late Medieval Greek NEG₂ was not solely syntactic. Apart from the retreat of NEG₂ from the conditional protasis, which is discussed in the following section, there is a change in the negative concord variety from non-strict in Classical Greek and Koine to strict negative concord in Late Medieval Greek.

- (49) a. ATTIC GREEK:⁴¹
 Οὔτος μὲν οὐ πέπονθεν οὐδέν
 hu:tos men u: pepont^hen u:den
 he 2P NEG1 suffer.PRES-PERF.3S NEG1-thing
 ‘Nothing happened to him.’ NON-STRICT NEGATIVE CONCORD
- b. ATTIC GREEK:⁴²
 οὐδὲν ὑπ’ ἐμοῦ κακὸν πέπονθεν
 u:den hyp’ emú: kakón pépont^hen
 NEG1-thing by me bad suffer.PRES-PERF.3S
 ‘Nothing bad happened to him by me.’
- c. ATTIC GREEK:⁴³
 οὐδεὶς οὐκ ἔπασχέ τι τὴν ψυχὴν ὑπ’
 ude:s u:k epask^he ti tē:n psyk^hε:n hyp’
 NEG1-body NEG1 feel.PRET.IND.3S something the.ACC soul.ACC by
 ἐκείνου
 eke:nu:
 him.GEN
 ‘There was no one who did not feel something for him.’⁴⁴ (i.e. ‘everyone
 felt something’) DOUBLE NEGATIVE READING
- (50) LATE MEDIEVAL:⁴⁵
 ποτέ μηδέν οκνήσετε, μη νύκταν μηδέ μέραν
 poté midhén oknísete mi níktan midhé méran
 n-time NEG2 be.idle.PNP.2P NEG2 night NEG2-either day
 ‘Never be idle, neither night nor day.’ STRICT NEGATIVE CONCORD

In Attic Greek, as well as in Koine, a negative marker was required if the n-word was postverbal (49a) and dropped if the n-word was preverbal (49b), while the presence of a negator if the n-word was preverbal would result in a double negative reading (49c) (non-strict negative concord).⁴⁶ This is no longer the case by the Late Medieval Greek stage, where a negator is required in any case (50) (strict negative concord).

In Zeijlstra (2006) a compositional analysis is proposed for different kinds of negative concord, according to which the semantic value of the negative marker

41 Aristophanes, *Pax* 1256.

42 Isocrates, *In Call.* 4.5.

43 Xenophon, *Symposium* 2.4.8

44 Translation based on Heinemann (1979).

45 *Digenis Akritis* 488.

46 Agreement between n-word and negator was also necessary: NEG1-words required NEG1 and NEG2-words required a NEG2. See Chatzopoulou 2012 for nonveridical agreement and Attic Greek n-word paradigms.

can vary from one language to another. The negator can be either the categorical expression of negation itself [iNeg] or it can be semantically non-negative [uNeg] in an agreement relationship with a negator that is covert/phonologically empty. The generalization he comes to is that in non-strict negative concord languages the negative marker is semantically negative [iNeg], while in strict negative concord languages the negative marker is semantically non-negative [uNeg]. Following this diagnostic, it can be inferred that NEG₂ in Classical Greek and Koine was [iNeg], while by Late Medieval Greek the semantic value of NEG₂ had switched to [uNeg]. This development also agrees with crosslinguistic tendencies in grammaticalization and syntactic change, in particular the Feature Economy Principle of van Gelderen (2004), which predicts the diachronic transformation of interpretable features to uninterpretable ones. The definition below is from van Gelderen (2008b: 297; see also van Gelderen 2009b: 8).

(51) FEATURE ECONOMY:

Minimize the semantic and interpretable features in the derivation:
semantic > [iF] > [uF]

Zeijlstra (2006) also discusses the connection between the (un)availability of true negative imperatives and negative concord, but always along with considerations of the syntactic status of the negator. In Italian the loss of true negative imperatives also co-occurred with a shift in negative concord variety, but towards the opposite direction, from strict to non-strict. Similar phenomena across languages are not always directly comparable, given the number of the factors that are usually involved. Nevertheless, this change in negative concord pattern in connection to Zeijlstra's approach is one more piece of evidence which points to a more general shift in the status (syntactic and semantic) of the Greek NEG₂ by the Late Medieval stage.

3.2 *The ban of NEG₂ from the conditional antecedent*

One more change that is already settled in Late Medieval Greek and which also points to a subtle shift in the semantic/syntactic status of the Greek NEG₂ μη /mi/, is the fact that the use of NEG₂ in the conditional protasis is no longer productive, neither in its former form μη /mi/, nor in its novel, but temporary, μηδέν /midhén/ variant. This agrees with the situation in Standard Modern Greek, where NEG₂ is impermissible in the conditional antecedent, but it is in contrast with Classical Greek and Koine, a time when NEG₂ was the default negator of conditional antecedents. In ancient Greek (Homeric Greek, Classical Greek and Koine) NEG₁ was also attested in the conditional antecedent, although to a much more limited extent (see also Willmott 2013). This confirms the generalization that NEG₂ is diachronically marked in terms of nonveridicality, and can only appear in nonveridical semantic contexts, while NEG₁ is the unmarked form of standard negation. By the Late Medieval Greek stage only NEG₁ is generally licensed in the conditional protasis,

either as οὐ(κ) /u(k)/, οὐδέν /udhén/ or δεν /dhen/. Examples (52) through (59) contain representative cases of conditionals in Classical and Koine Greek, where both NEG1 and NEG2 are attested, although NEG2 was by far statistically dominant (see table 3), while examples (60) to (63) present the situation in Late Medieval Greek, where the situation is reverse: NEG1 variants are the statistically dominant form of sentential negation in the conditional protasis.

(52) ATTIC GREEK:⁴⁷

εἰ μὴ τις κωλύσει
 e: me: tis ko:lyse:
 if NEG2 someone stop.FUT.IND.3S
 ‘if someone doesn’t stop (him).’

(53) ATTIC GREEK:⁴⁸

ἀναγκάσαι θεοὺς ἂν μὴ θέλωσιν οὐδ’ ἂν εἰς
 anagkasai t^heu:s an me: t^helo:sin u:d an he:s
 force.AOR.INF gods.ACC if NEG2 want.PRES.SUBJ.3P not-even MOD one
 δύναιτ’ ἀνὴρ
 dynait ane:r
 can.PRES.OPT.3S man
 ‘[...] no one (not even one man) can force the gods if they are not willing.’

(54) ATTIC GREEK:⁴⁹

ἐὰν δ’ οὐ φάσκη [...]
 ean d’ u: p^haske:i
 if 2P NEG1 say.PRES.SUBJ.3S
 ‘If he disclaims (it) [...]’.⁵⁰

(55) ATTIC GREEK:⁵¹

εἰ δ’ οὐκ ἀνιᾶσιν οἱ [...] τῷ Μακεδόνι ὑπηρέται
 e: d’ u:k ania:sin hoi to:i Makedoni hype:retai
 if 2P NEG1 remit.PRES.IND.3P the the Macedonian.DAT servants
 [...]

‘If the men who are subservient to the Macedonian king not cease [...]’.⁵²

47 Demosthenes, *Philippica* 1 43.6.

48 Sophocles, *Oedipus rex* 280–281.

49 Lysias, *In Agoratum* 76.3–4.

50 Translation based on Lamp (1930).

51 Demosthenes, *Περὶ τῶν πρὸς Ἀλέξανδρον συνθηκῶν* 17.4.

52 Translation based on Vince and Vince (1926).

(56) KOINE:⁵³

ἐὰν μὴ πυγμῇ νίψωνται τὰς χεῖρας οὐκ
 eán mi pyghmí nípsonte tas híras uk
 if NEG2 fist.DAT wash.AOR.SUBJ.3P the.ACC hands.ACC NEG1
 ἐσθίουσιν
 esthíusin
 eat.PRES.IND.3P

‘[...] if they do not wash their hands, they don’t eat.’

(57) KOINE:⁵⁴

εἰ μὴ δύναμαι κατορθῶσαί τι αὐτός, οὐ
 i mi dhýname katorthóse ti aftós u
 if NEG2 can.PRES.IND.1S achieve.AOR.INF something myself NEG1
 φθονήσω ἄλλῳ τοῦ ποιῆσαί τι γενναῖον
 fthoníso álo tu píise ti jenéon
 grudge.FUT.IND.1S other.DAT the.GEN do.AOR.INF something brave

‘If I cannot achieve something myself, I will not grudge another his achievement.’⁵⁵

(58) KOINE:⁵⁶

εἰ οὐ κινῆ ἔφ’ οἷς πρότερον [...]
 i u kiní ef’ is próteron
 if NEG1 move.PRES.IND.2S by those.DAT formerly

‘If you are not moved by the same things as formerly [...].’⁵⁷

(59) KOINE:⁵⁸

Ἐὰν οὐκ ἔχῃ τις τοιοῦτον ἀξίωμα [...]
 eán uk échi tis tíuton aksíoma
 if NEG1 have.PRES.SUBJ.3S someone such quality

‘If someone doesn’t have such an (honorable) quality [...].’

53 Novum Testamentum, *Secundum Marcum* 7.3.2–3.

54 Epictetus, *Dissertationes ab Arriano digestae* 1.27.8.4–5.

55 Translation based on Higginson (1890).

56 Epictetus, *Dissertationes ab Arriano digestae* 4.4.46.5–6.

57 Translation based on Higginson (1890).

58 Origenes, *Fragmenta in Psalmos* 19150 118.170.13–14.

(60) LATE MEDIEVAL:⁵⁹

Καλῶς ἦλθες, νεώτερε, ἂν οὐκ εἶσαι προδότης
 Kalós ílthes neótere, an uk íse prodhótis
 well come.PP.2S younger, if NEG1 be.INP.2S traitor

‘Welcome, younger one, if you are not a traitor.’

(61) LATE MEDIEVAL:⁶⁰

εἰ δὲ καὶ οὐ θέλεις νὰ ἐλθης, ἰδοὺ ἐγὼ
 i dhe ke u thélis na elthis, idhú eghó
 if 2P and NEG1 want.INP.2S SUBJ come.PNP.2S here I go.INP.1S
 ὑπαγαίνω
 ipaghéno

‘And if you do not want to come, here I am going.’

(62) LATE MEDIEVAL:⁶¹

καὶ ἂν οὐδὲν ἔλθης τὸ γοργόν, κατέβην ἔχω εἰς Μάγγε
 ke an udhén élthis to ghorghón katévin ékho is Mágge
 and if NEG1 come.PNP.2S the soon, go.PNP.1S fut to Mage

‘And if you do not come soon, I will go to Mage [...]’

(63) LATE MEDIEVAL:⁶²

εἰδέ καὶ δὲν τὸ δέξεται, πάλιν νὰ δευτερώσω
 idhe ke dhen to dhéksete pálin na dhefteróso
 if.2P and NEG1 it accept.INP.3S again NA repeat.PNP.2S

‘if she does not accept it, I will send again.’

Despite some remnants, the use of NEG2 in conditional antecedents is no longer productive by Late Medieval Greek and would not make it to the Standard Modern Greek stage. Table 3 depicts the distribution of NEG1 and NEG2 in the conditional protasis in Classical Greek, Koine and Late Medieval Greek from a general sample of over 1000 negators (NEG1 and NEG2) per stage.

NEG2 μη /mi/ is still found in conditionals during the Late Medieval stage, but to a very limited extent. There is a statistically significant shift in the distribution of NEG1 and NEG2 in the conditional antecedent from Koine to Late Medieval Greek (p -value < 10^{-15}), while the change in negator distribution from Attic Greek to Koine is not statistically significant (p -value = 0.1939).

59 *Digenis Akritis* 651.

60 *Digenis Akritis* 1005

61 *Digenis Akritis* 288

62 *Livistros and Rodamme* 1100.

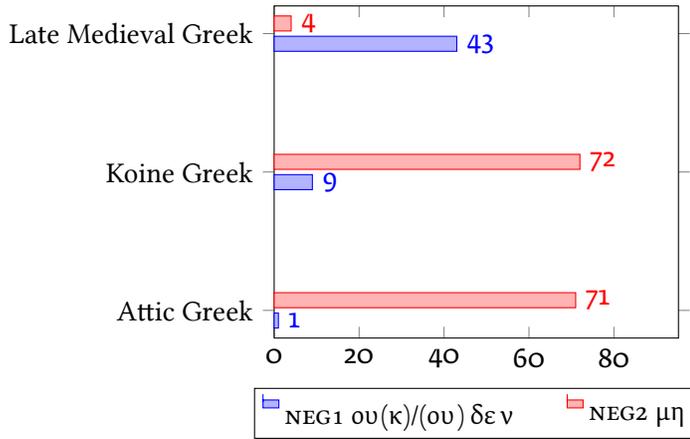


Figure 4: Negator distribution in the conditional protasis in Attic, Koine and Late Medieval Greek

3.2.1 An explanation: upward reanalysis of NEG2 on Cinque’s (1999) hierarchy

The unavailability of NEG2 in the conditional protasis during Late Medieval Greek (although other polarity items are still licensed in that environment) further indicates a repartitioning of labor between NEG1 and NEG2 that must have taken place during the Early Medieval Greek stage. The picture that emerges for the use of NEG2 in Late Medieval Greek—as well as for the stages to follow—is that NEG2 became an element that now more starkly correlates to the C position (see also Giannakidou 2009), in contributing illocutionary force (as in the case of prohibition, interrogation and introducing *verba timendi* complements). The conditional protasis does not offer such a position for NEG2, given that the C position in conditionals is filled by the *άν* /an/, *έάν* /ean/ or the *εί* /i/ conditional particles that now compete with NEG2 for the C position and as a result are in complementary distribution with NEG2. This is a fact that describes the situation in Standard Modern Greek as well. Only NEG1 can appear in the conditional protasis in Standard Modern Greek; NEG2 is ungrammatical.

(64) STANDARD MODERN GREEK:

Αν δεν / *μην έρθει, θα στεναχωρεθώ
 An dhen / *min érthi tha stenakhorethó
 if NEG1 / *NEG2 come.PNP.3S FUT be-sad.PNP.1S

‘If s/he doesn’t come, I will be sad.’

ONLY NEG1 IN THE CONDITIONAL PROTASIS

In the example above we see that the conditional protasis is unable to license the Modern Greek NEG2 *mi(n)*, although it does license the perfective non-past form of

the verb *érthi* ‘come’, which has been analyzed as a negative polarity item in Giannakidou (2009). Therefore the conditional antecedent is still capable of licensing negative polarity items, as would be expected. In addition, although Classical Greek had four basic classes of conditionals (simple condition, contrary-to-fact, future-more-probable, future-less-probable), distinguished also in terms of complementizer selection (*ἄν* /an/, *ἐάν* /ean/ or the *εἰ* /i/, as well as mood and tense considerations in both the antecedent and the consequent, and the presence of the modal *ἄν* /an/, see Beck *et al.* 2012 for a recent formal treatment), no correlation is detected between negator selection and either complementizer selection or class of conditional in Classical Greek or the following stages: NEG2 was the default negator of the conditional protasis in Classical Greek and Koine, and was replaced by NEG1 in this function during the Late Medieval Greek stage.

It is a rare moment in the life of a negative polarity item as old as the NEG2 *μη* /mi/, when the environments that license it have shrunk by one. For NEG2, its retreat from the conditional antecedent, where it has been dominant since Homeric Greek, is a change that co-occurs not only with the loss of true negative imperatives, discussed in the previous section, but also with a major Jespersen’s Cycle stage: a stage of negator renewal. It is during the Late Medieval Greek stage that the replacement of the former NEG1 *u(k)* with NEG1 (*u*)*dhen*, and the former NEG2 *μη* /mi/ with NEG2 *μηδέν* /midhén/ began to be generalized. Although NEG2 replacement did not persist into Standard Modern Greek, as *μηδέν* /midhén/ grammaticalized towards another direction (*μηδέν* /midhén/ in Standard Modern Greek is the word for zero),⁶³ it is plausible to assume a connection between the two shifts and Jespersen’s Cycle processes. This is a point noted also in Willis (2013) for the case of Welsh, in which the loss of true negative imperatives (which he also links to a syntactic status shift of the negator) is simultaneous with a major Jespersen’s Cycle stage (loss of the preverbal negative marker *ni(d)*). Late Medieval Greek, however, was still a stage of variation regarding the forms of NEG1 and NEG2 and it appears that the repartitioning of labor between NEG1 and NEG2 (and thus the loss of NEG2 from the conditional protasis) took place prior to the stabilization of NEG1 *dhen* as the sole permissible negator of conditionals by Early Modern Greek.

Given the complexity of the emerging picture and the fact that we have already established a major shift in the syntactic status of NEG2 from specifier to head, I will be conservative in merely describing this change in the distribution of NEG2, in anticipation of more research in more languages. The description I propose, however, follows a line of reasoning introduced in Roberts (2010), who combines the Roberts and Roussou (2003) perspective on grammaticalization and syntactic change as upward reanalysis with Cinque’s (1999, 2004) discovery, known as the cartographic approach. Roberts (2010) explains a number of identified grammaticalization paths with reference to Cinque’s (1999) hierarchy of functional pro-

63 See Chatzopoulou (2012, to appear) for this kind of grammaticalization as loss of scalar reference and endpoint lexicalization.

jections, among which are Romance futures/conditionals (Benveniste 1968, Pinkster 1987, Hopper and Traugott 1993), perfects to preterits (Vincent 1988), and the development of English modals (Lightfoot 1979, Roberts 1985, Warner 1993, Traugott and Dasher 2002). All these cases can be viewed as the result of upward reanalysis on the Cinque (1999) hierarchy. I propose that the loss of the Greek NEG₂ from the conditional antecedent by Late Medieval Greek can be treated as one more such case that makes sense under the same perspective: the ban of NEG₂ from the conditional antecedent indicates one more subtle shift, which can be captured through the aid of the Cinque (1999) hierarchy of functional projections. The connection between the different uses of NEG₂ and the cartographic approach is first made in Willmott (2008), who also links the function of NEG₂ as a negator of conditional antecedents in Homeric Greek to Mood_{Irrealis} and discusses the explanatory value of the Cinque (1999) hierarchy on different issues that relate to the Greek negators.

Thus, apart from its shift in syntactic status (from phrase to head), NEG₂ appears to have also reanalyzed as relating to a higher position within C in its expanded form. NEG₂ seems to have elevated to a position where it competes with the conditional particle both in Late Medieval Greek (ὄν /an/, ἔάν /ean/ or the εἰ /i/) and in Standard Modern Greek (ὅν /an/). This transition is represented in figure 4 below.

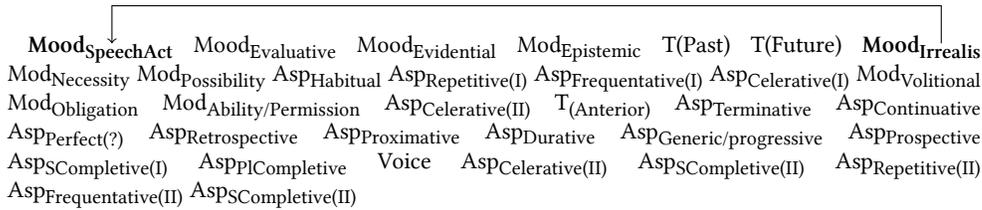


Figure 5: The upward reanalysis of the Greek NEG₂ on Cinque's hierarchy

In Cinque's account the relevant projections are described as Mood, but this position can be seen simply as a higher C position, with which the NEG₂ is now linked, following the diachronic tendency for up-the-tree movement (Roberts and Roussou 2003). The Mood_{Irrealis} is akin to the notion of nonveridicality in its purest form and deprived from all additional connotations, such as speech-act, evaluativity or evidentiality. A movement from Mood_{Irrealis} to Mood_{SpeechAct} has been claimed to be involved in the synchronic derivation of conditionals in general (Danckaert and Haegeman 2012). The relevance of Danckaert and Haegeman's claim with the upward reanalysis of NEG₂ from a position that merely indicates irrealis (in Classical and Koine Greek) to the locus of illocutionary force is clear, if we consider it along with the Roberts and Roussou (2003) perception of grammaticalization as 'loss of movement.' (loss of synchronic movement; the elements get permanently reanalyzed as originating in their former landing site; cf. 'changes from Move to Merge', Roberts and Roussou 2003: 71).

Independent evidence, which may corroborate the case that after some point NEG2 μη /mi/ and the conditional particle compete for the same position on the expanded CP, can be provided from Modern Greek, where both NEG2 μη /mi/ and the conditional particle αν /an/ can appear with the perfective non past form of the verb. In a minimal pair fashion, either one, but not both, can appear in this position. The meaning of course differs.⁶⁴

- (65) Μην/Αν έρθεις./[...]
 Min/an έrthis
 NEG2/if come.PNP.2S
 ‘Don’t come.’/ ‘If you come [...]

Therefore, the loss of NEG2 from the conditional protasis can be represented as the result of its diachronic elevation to a syntactic position in which the conditional particles are already hosted. The prohibitive function of NEG2 was already linked to that position, while the non-negative functions of NEG2, as a particle introducing *yes/no* questions and as complementizer selected by *timendi* predicates, which were discussed in section 2.2, indicate similar developments at an earlier stage. Although for the case of Greek there is no textual evidence from an earlier stage (pre-Greek or proto-Greek) at which the non-negative functions of NEG2 were not present, the semantic bleaching of negative particles and their structural elevation to C positions is not uncommon (Heine and Kuteva 2002: 216, Aldridge 2011, van Gelderen 2011: 295, 331–337). Below are examples of the non-negative uses of NEG2 in different stages of Greek (some examples are repeated here from section 2.2 for completeness).

- (66) 8TH C. BC:⁶⁵
- | | | | | | | |
|-----|-----|------|--------------------|---------------------------------|---------|------------|
| μή | πού | τινα | δυσμενέων | φάσθ’ | ἔμμεναι | ἀνδρῶν; |
| me: | pu: | tina | dysmeneo:n | p ^h ast ^h | emmenai | andro:n |
| | | | NEG2 maybe someone | enemy.GEN.PL say.2P | be.INF | man.GEN.PL |
- ‘Do you think he could be an enemy?’ NEG2 AS QUESTION PARTICLE
- (67) 4TH C. BC:⁶⁶
- | | | | |
|-----|-----|------|---|
| Μή | οὖν | ἐγὼ | ληρῶ; |
| me: | u:n | ego: | lero:? |
| | | | NEG2 thus I speak-nonsense.PRES.IND/SUBJ.1S |
- ‘Am I speaking nonsense?’ NEG2 AS QUESTION PARTICLE

64 For a recent discussion on the different functions of particles in this position, including the Modern Greek NEG2, see Chondrogianni (2011).

65 *Odyssea* 6.200.

66 Plato, *Theaetetus* 163d 7.

(68) 1ST C. AD:⁶⁷

μη πάντες ἀπόστολοι; μη πάντες προφήται;
 mi pántes apóstoli? mi pántes prophíte?
 NEG2 all apostles.NOM NEG2 all prophets.NOM

‘Are all apostles? Are all prophets?’⁶⁸ NEG2 AS QUESTION PARTICLE

(69) 12TH C. AD:⁶⁹

Μη τοῦτος εἶν’ τὸν λέγουσιν ὁ Διγενῆς
 Mi tútos in’ ton léghusin o Dighénis
 NEG2 he is whom call.PRES.IND.3P the.NOM Dighenis.NOM
 Ἀκρίτης;
 Akritis?
 Akritis.NOM

‘Is he the one they call Digenis Akritis?’ NEG2 AS QUESTION PARTICLE

(70) 18TH C. AD:⁷⁰

Μην εἶδατε τὸν ἀντρα μου τὸν Λούκα
 min ídgate ton ándra mu ton Lúka
 NEG2 see.PP.2P the.ACC husband.ACC my the.ACC Lukas.ACC
 Καλιακούδα;
 Kaljakúdha
 Kaljakudhas.ACC

‘Did you happen to see my husband, Lukas Kaliakudas?’
 NEG2 AS QUESTION PARTICLE

(71) 8TH C. BC:⁷¹

ἀμφιτρομέω καὶ δεΐδια μή τι
 amphitromeo: kai de:dia me: ti
 tremble.PRES.IND.1S and fear.PRES.IND.1S NEG2 something
 πάθησιν
 pat^h:isin
 suffer.AOR.SUBJ.3P

‘I tremble and fear lest something happens to them.’
 NEG2 WITH TIMENDI PREDICATE

67 Novum Testamentum, *Ad Corinthios* I 12.29.1–30.2.

68 Translation by Senior *et al.* (1990).

69 *Digenis Akritis* 1216

70 Fauriel (1824–1825), 1.118.

71 *Odyssea* 4.820.

(72) 5TH C. BC:⁷²

ἡμεῖς δέδοικα μὴ τάναντία πράττοντες
 he:me:s dedoika me: tanantia prattontes
 we.NOM fear.PRES.IND.1S NEG2 the.opposite do.PRES.PCPL.NOM
 φανῶμεν
 p^hano:men
 seem.SUBJ.1P

‘I fear that we may seem to have pursued the opposite’

NEG2 WITH *TIMENDI* PREDICATE

(73) 1ST C. AD:⁷³

σὺ [...] τρέμεις, μὴ σοι λείπη τὰ
 sy trémis mi si lípi ta
 you tremble.PRES.IND.2S NEG2 you.DAT lack.PRES.SUBJ.3S the
 ἀναγκαῖα
 anagéa
 necessary

‘You tremble lest you lack the things that are necessary to you.’

NEG2 WITH *TIMENDI* PREDICATE

(74) 12TH C. AD:⁷⁴

δέδοικα μὴ φονευθῶ πρὸ ὥρας
 dhédhika mi fonefthó pro óras
 fear.PRP.IND.1S NEG2 be.killed.PNP.1S before time

‘I fear that I may be killed prior to my time.’ NEG2 WITH *TIMENDI* PREDICATE

(75) STANDARD MODERN GREEK:

Ο Γιάννης φοβάται μὴν αρρωστήσει
 o Jánis fováte min arostísi
 the Janis fear.INP.3S NEG2 get.sick.PNP.3S

‘John is afraid that he may get sick.’

NEG2 WITH *TIMENDI* PREDICATE

Table 4 gives a picture of the distribution of NEG2 in all its different functions in three stages of spoken Greek (Attic Greek, Koine, Late Medieval Greek). Focusing on the functions of NEG2 that bear relevance on our present discussion, we see that it is the non C-related uses of NEG2 that are nearly pushed to extinction in Late Medieval Greek: (i) the use of NEG2 in the conditional protasis (which was replaced

⁷² Isocrates, *Archidamus* 51.1–2.

⁷³ Epictetus, *Dissertationes ab Arriano digestae* 3.26.2.2

⁷⁴ *Ptohoprodromos* I. 273.

by NEG₁), and (ii) the use of NEG₂ as lexical negation.⁷⁵ The prohibitive function of NEG₂ (unembedded directives with finite verb) remains vibrant in all three stages, while the attestation of NEG₂ in purpose/result clauses increases in Late Medieval Greek at the expense of infinitival and participial forms, which are significantly reduced.

75 DP-internal negation is unattested in our corpus for the Late Medieval Greek stage. NEG₂ as lexical negation is found only with a few remaining participial forms. Affixal negation, however, ἀ(v) /a(n)/ in particular, is still productive, e.g. ἀνόρεχτος /anórehtos/ 'not pleasant' (*Digenis Akritis*₃₂₀₃), ἀκληρία /akliría/ 'disinheritance' (*Digenis Akritis*₃₄₂₀).

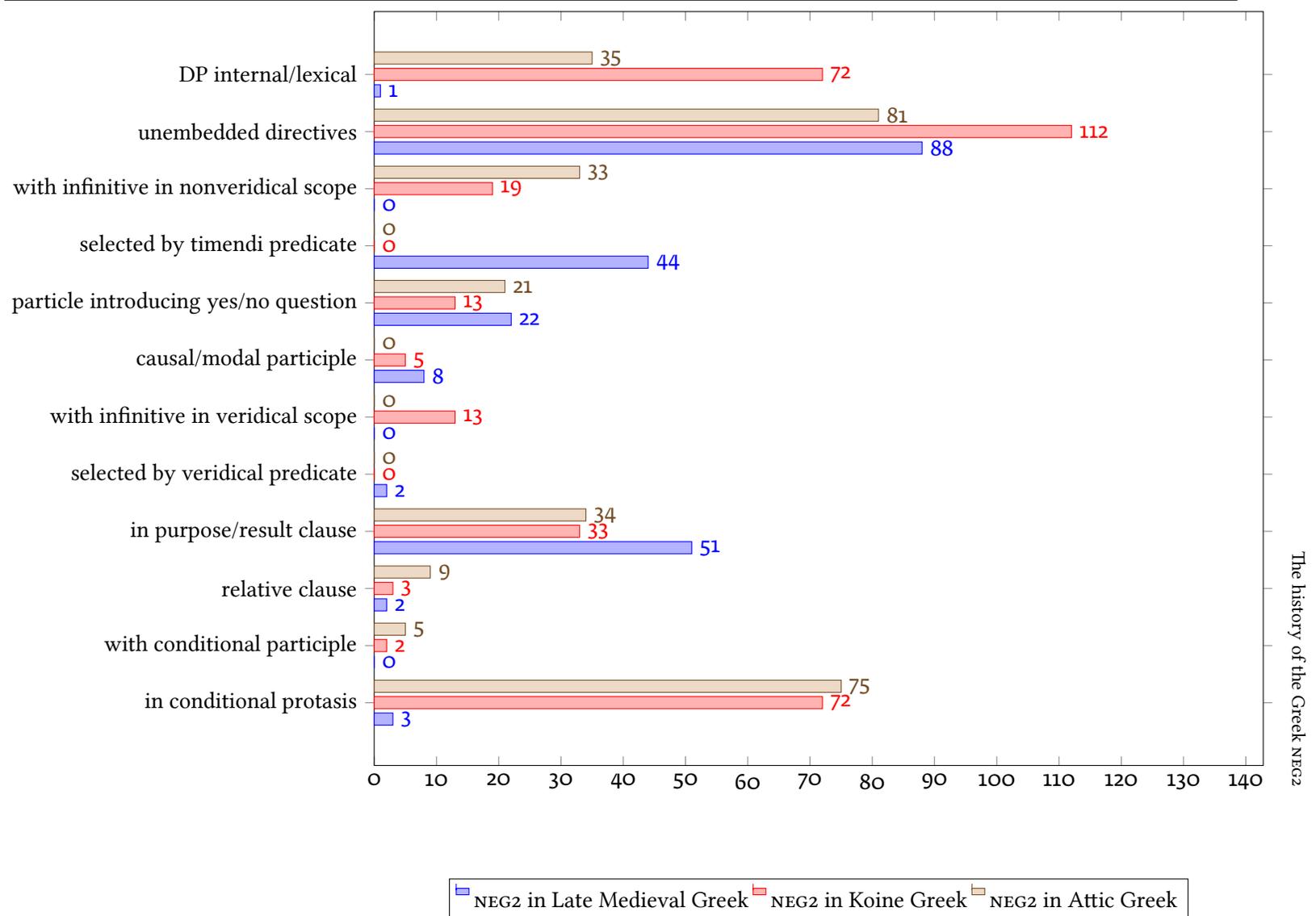


Figure 6: The distribution of NEG2 $\mu\eta$ /mi/ in Attic Greek, in Koine and in Late Medieval

It is the oldest and most stable functions of NEG₂ μη /mi/ that relate to the C position. The constellational approach on the different uses of NEG₂ μη /mi/ of Joseph and Janda (1999) is in a sense applicable to all stages of Greek.⁷⁶ It seems, however, that diachronically the family of uses of NEG₂ μη /mi/ attracts its members to higher structural positions. The loss of infinitives and with them infinitival negation may have further contributed to that, along with the reduction of forms in the participial paradigms (Joseph [1978] 1990, Horrocks 2010). Infinitives as well as participles had been providing positions for NEG₂ lower in the clause, which were no longer available. The substitution of such structures with full CPs necessarily forced NEG₂ to higher syntactic positions. With the exception of remnants of lexical negation NEG₂ μη /mi/ (to be revived in later stages of the language), all other functions of NEG₂ μη /mi/ by Late Medieval Greek contribute illocutionary force of various sorts.⁷⁷ The ban of NEG₂ from the conditional antecedent seems to be the outcome of conspiratorial forces, yet the ordering of projections in Cinque (1999) can give us an idea of anticipated grammaticalization paths and regular tendencies in language change. The undesirability flavor of NEG₂ with *timendi* predicates can be linked to evaluativity, while NEG₂ in its dubitative function (see also Joseph and Janda 1999, Giannakidou 1998) can be linked to Mod_{Epistemic}.

- 76 Although for the case of Attic Greek there was no formal/phonological distinction among the various functions of NEG₂. The constellation in its strict sense, as described in Joseph and Janda (1999), which take into account both form and function, begins to rise during the Medieval Greek stage (see section 3.1.2).
- 77 It should also be noted that the Albanian NEG₂ *mos*, which is also a reflex of the Proto-Indo-European NEG₂ **me*_{H1}, remains the default negator of conditional antecedents, while it also maintains a lexical negation function, although morphologically integrated (Joseph 2002). Examples (i) and (ii) are from Tomić 1999, and (iii) and (iv) are from Joseph (2002).

i. ALBANIAN NEG₁ *NUK* IN DECLARATIVE

Nuk e hapni derën.
NEG₁ it.ACC.CL open.2P door.the

‘You are not opening the door.’

ii. ALBANIAN NEG₂ *MOS* IN PROHIBITION

Mos e hapni derën
NEG₂ it.ACC.CL open.2P door.the

‘Don’t open the door!’

iii. ALBANIAN NEG₂ *MOS* IN CONDITIONAL PROTASIS

në mos gaboj [...]
if NEG₂ err.1S

‘if I am not mistaken [...].’

iv. ALBANIAN NEG₂ *MOS* AS NEGATIVE PREFIX:
mosbarazi ‘inequality’ (*barazi* ‘equality’)

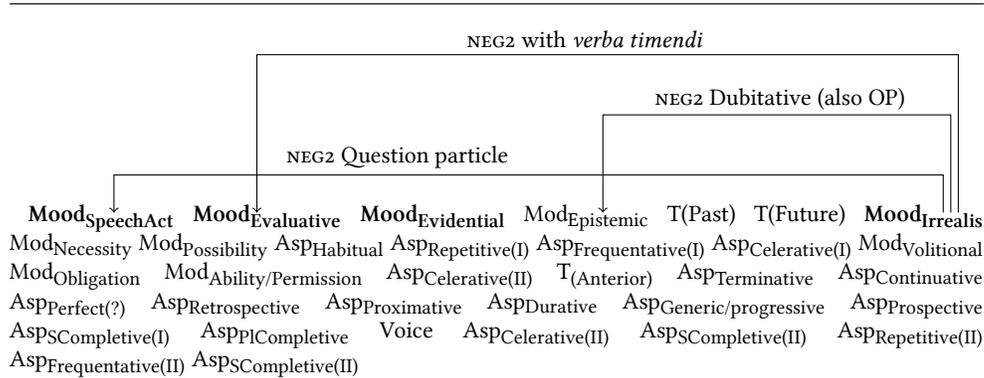


Figure 7: The upward reanalysis of the Greek NEG2 on Cinque’s hierarchy

This account agrees with the terminology proposed in Chatzopoulou (2012, to appear) for regular syntactic change as upward lexical *micromovement* or structural *microelevation*. This viewpoint provides the tools for the description of diachronic change out of which the identification of major diachronic tendencies results. Not all changes are permanent and not all functions of an element elevate at once. But if they do, this is the path they appear to follow. The *micro-* part of ‘micromovement’ refers to the gradualness of the changes described, which is in agreement with outlooks on grammaticalization and language change that highlight the gradual nature of the phenomenon (Lichtenberk 1991, Haspelmath 2001, Hopper and Traugott 2003, Lehmann 2004, Lightfoot 2005). Not all uses of the Greek NEG2 constellation elevate or elevate together, but the tendency in syntactic change is for upward movement even within the fine-grained Cinque hierarchy. Such *micro-*operations have been discussed in Roberts (2010, 2012), as well as Traugott and Trousdale (2010), where a view for language change is supported as involving a number of *micro-*steps that eventually have a *macro* effect after multiple cycles of acquisition. These changes, like parameter and micro-parameter resetting in general, can also be captured through the notion of mismatch across distinct linguistic modules (Sadock 1991, Sadock and Schiller 1993, Sadock 2012), as figure 5 above implies (see further Chatzopoulou 2012: 183–184, 300–301 for a two tier representation model for the description of language change).

4 CONCLUSION

The Greek NEG2 is the oldest living reflex of the reconstructed Proto-Indo-European negator **me_{h1}*, preserved also in the Armenian NEG2 *mi* and the Albanian NEG2 *mos*. Its negative polarity behavior is probably just as old, which is the only thing that would make its presence meaningful. Although NEG2 is stable throughout the history of Greek, its distribution has not remained the same. Two

changes that have occurred by the Late Medieval Greek stage were identified and accounted for: the loss of true negative imperatives and the ban of NEG₂ from the conditional protasis, both interpreted as pointing to a syntactic status shift of NEG₂ in its sentential negation function. These changes were simultaneous with a Jespersen's Cycle stage and were preceded by major developments in the mood and complementation system. The inability of NEG₂ to negate morphological imperatives is among the evidence that indicates its syntactic status shift from Spec,NegP to Neg^o,NegP in Late Medieval Greek. This change was not merely syntactic, as few things are. The subtle transformation of NEG₂ *mi* had further ramifications that relate to its semantic value, from [iNeg] to [uNeg] in Zeijlstra's (2006) terminology, a development which further agrees with the predictions of van Gelderen (2004) on grammaticalization, namely the principle of Feature Economy which anticipates the transformation of semantic and interpretable features into uninterpretable ones. The retreat of NEG₂ from the conditional protasis is again indicative of a fine semantic—or microsyntactic—change in its function. This change was described as microelevation of NEG₂ on the Cinque (1999) hierarchy of functional projections, from a position indicating irrealis to the locus of illocutionary force. These two positions have been argued to be relevant also in the synchronic derivation of conditionals (Danckaert and Haegeman 2012). Linked to that position, NEG₂ is by Late Medieval Greek incompatible with the conditional particle and as a result, the default negator NEG₁ will take its place.

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ABBREVIATIONS 2P 'second position clitic', ACC 'accusative', AOR 'aorist', DAT 'dative', FUT 'future', GDV 'gerundive', GEN 'genitive', IMP 'imperative', IND 'indicative', INF 'infinitive', INP 'imperfective non past', IP 'imperfective past', NOM 'nominative', OPT 'optative', P 'plural', PCPL 'participle', PNP 'perfective non past', PP 'perfective past', PRES 'present', S 'singular', SUB 'subjunctive'

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APPENDIX: TEXTS EXAMINED FOR NEG1 AND NEG2 DISTRIBUTION

Attic Greek (5th–4th century BC)

Aristophanes, *Lysistrata, Ranae* (Aristophanes. *Acharnenses, Equites, Pax, Aves, Lysistrata, Thesmophoriazusae, Ranae, Plutus*: Coulon, V. and M. van Daele. 1967. Aristophane, Paris: Les Belles Lettres)

Euripides, *Alkistes, Hippolytus* (Euripides. Murray, G. 1902. *Euripidis fabulae*. Oxford: Clarendon Press)

Lysias, *In Eratosthenem, In Agoratum, De caede Eratosthenes* (Lysias with an English translation by W.R.M. Lamb, M.A. Cambridge, MA, Harvard University Press; London, William Heinemann 1930)

Plato, *Republica IV* (Plato. *Platonis Opera*, ed. John Burnet. Oxford University Press. 1903)

Koine Greek (1st century bc–1st century AD)

Stabo, *Geographica VI-VIII* (Meineke, A. 1877. *Strabonis geographica*, vol. 1–3. Leipzig: Teubner)

Greek New Testament (synoptic gospels: *Secundum Mattheum, Secundum Marcum, Secundum Lucam, Novum Testamentum Graece cum apparatu critico*. 1956. *curavit* D. Eberhard Nestle, *novis curis elaboravit* D. Erwin Nestle *adiuvante* D. Kurt Aland, 22nd edition, Stuttgart: Wrttembergische Bibelanstalt)

Epictetus, *Dissertationes ab Arriano digestae III* (Schenkl, H. 1916. *Epicteti dissertationes ab Arriano digestae*. Leipzig: Teubner)

Late Medieval Greek (12th–14th century AD)

Digenis Akritis (Escorial manuscript, *Digenis Akritis*. Alexiou, S. 1985. *Vasileios Digenis Akritis kai to Asma tou Armouri*. Athina: Ermis)

Livistros and Rodamne (Vatican version, *Livistros and Rodamni (version b)*. Lendari, T. 2007. *Livistros and Rodamne: The Vatican version*. Athina: MIET)

Imperios and Margarona (*Imberios and Margarona*. E. M. Jeffreys and M. J. Jeffreys. 1983. *Popular literature in Late Byzantium*. London: Variorum Reprints)

Chronicle of Moreas (*Chronicle of Morea*. Kalonaros, P. P. 1940. *To Hronikon tou Moreos*. Athina: Dimitrakos)

Ptoholeon (*Ptoholeon*. Kehagioglou, G. 2011. *Ptoholeon*. Thessaloniki: MIET)