

The Modern Greek Negator μη(ν)(-) as a Morphological Constellation¹

RICHARD D. JANDA & BRIAN D. JOSEPH
The University of Chicago *The Ohio State University*

Περίληψη

Ένα βασικό πρόβλημα στη γλωσσολογική ανάλυση είναι να αποφασιστεί κανείς αν δυο γλωσσολογικά στοιχεία είναι ίδια ή διαφορετικά. Εδώ εξετάζουμε την κατάσταση με το αρνητικό μόριο *μη* σ'όλους τους τύπους του, ανεξάρτητους και εξηρητημένους, με και χωρίς τελικό *-ν*, δηλαδή *μη*, *μην*, *μην*, *μηνν*. Κατά την ανάλυσή μας, δεν έχει μόνο ένα μόρφημα αλλά ένα "αστερισμό" των συγγενικών τύπων που δείχνουν και ομοιότητες και διαφορές μεταξύ τους. Αυτή η καινούργια θεωρητική συσκευή, ο αστερισμός, έχει σημαντικές συνέπειες για γλωσσολογική θεωρία και μεθοδολογία.

I. Methodological Preliminaries

Perhaps the most fundamental question in linguistic analysis involves deciding, for any two elements under consideration, whether they are the same or are different. This issue is crucial to virtually all areas of investigation in the field. For instance, classical generative phonology is largely driven by decisions about whether forms such as *opaque* and *opac-* (in *opacity*) are similar enough in form and meaning to require that their relationship be expressed formally by a grammar. Similarly, in many syntactic theories, various constructions involving unbounded dependencies (e.g. “*tough*-Movement”, *too/enough* constructions, and *wh*-extractions) have been subsumed under a unified rubric utilizing a single formal mechanism — a rule of “Move-alpha” — since they have all been considered to involve essentially the same reordering of syntactic elements.

Despite the possibility of finding such unifying generalizations, it must be admitted that not all “sames” are really “the same” and that achieving sameness by imposing uniformity of analysis can be problematic. For one thing, it is not always clear where to draw the line in judging sameness for the positing of underlying forms. Do suppletive forms such as *go* and *went* qualify, for instance? They share a [+grave] consonantal onset; there are other alternations in English that involve the presence/absence of a nasal (e.g. *think/thought*); and the *-t* of *went* is clearly identifiable as the past tense marker. Hence, the root forms could be analyzed as not so very different from one another, even though they have no etymological connection.² But what about the highlighted parts of *pol-ar*, *tel-ic cy-cl-e*, and *wheel*, or the onsets in *tw-o*, *tw-ice*, *tw-elve*, *tw-in*, *tw-ine*, *twi-(light)*, *do-zen*, *du-et*, and *do-dekahedron*?

Here, there are not just etymological but also formal and semantic relationships; still, some of the words have entered English via borrowing, so that the formal parallels are less clear, and some of the semantic connections, as between *polar* and *wheel*, or *two* and *twine* (which consists of *two or more* strands of string twisted together), are rather less than compelling. While some linguists have pursued sameness here — see Lightner 1975, 1983 for examples of how these relationships can be expressed — the somewhat tenuous nature of these connections has instead led most analysts to be quite cautious in such cases.

Similarly, despite the parallels among the unbounded dependency constructions noted above, Hukari & Levine 1991 and Pollard & Sag (1994: 6) have pointed out that they also show some significant differences in English (e.g. in degree of unboundedness and in their ability to operate into finite clauses). Such differences, these authors argue, prevent these constructions from being legitimately collapsed into a single syntactic process.

More generally, then, we must ask, if same vs. different is a binary choice, how one can capture sameness in the face of differences? Besides the problems noted above, there are also some seemingly “obvious” connections that, in most theories, cannot easily be reflected in a grammar. For instance, the free form *not* and the bound form *-n't* in English share negative meaning, scope properties, and several features of form (e.g. nasality and an alveolar stop, in that order), but they differ in word versus affix status, as argued convincingly by Zwicky & Pullum 1983. For that reason, they cannot be collapsed, since most theoretical frameworks do not allow explicit relationships between words and affixes to be expressed formally.³ Similarly, Sanskrit reduplication has been claimed by many analysts to involve CV- prefixing, with universal association-principles, or their Optimality-Theoretic equivalent, handling the rest. Yet, there are many differences in template shape (since V-, VV-, VC-, CVV-, CVC-, and CVCV-, all occur in addition to CV-) and placement (some infixal reduplication occurs, though most is prefixal); nonetheless, all types of Sanskrit reduplication follow a constraint of reduplicating only the stop (T) in a sibilant (S) + stop cluster but only the sibilant in a sibilant + resonant (R) cluster, thus yielding T ... ST- vs. S ... SR- (cf. Janda & Joseph 1986). Thus, a Sanskrit reduplication shows both unity (via the formal feature of the ST reduplicative pattern) and diversity (via the differences in template shape and placement).

The basic problem, then, is that many linguistic phenomena show unity-in-diversity as well as diversity-in-unity. Our solution to this problem is to say that these similarities are not fortuitous, but rather that they should be expressed by a grammar and that, moreover, they can be captured using two constructs already motivated for morphology (cf. Janda & Joseph 1986, Joseph & Janda 1988, and Janda & Joseph 1989, 1992):

- (1) the *constellation*: 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, whereby the identity of the shared formal elements is shown by ...
- (2) a *meta-redundancy-statement*, or “(partial) meta-template”, which equates (or “parses”) all relevant instances of a particular formal configuration.

Moreover, these two constructs are related, in that e.g. morphological constellations are ensembles of word-formational elements (e.g. morphemes) united by meta-templates which express the formal and functional identities shared by a set of distinct morphemes or, alternatively, uncollapsible morphological rules or constraints. The *constellation* and the *meta-template*, we claim, together provide a mechanism that allows a realistic, non-procrustean approach to sameness in linguistic analysis — a recognition of how elements can simultaneously be “same” but also “different” (uncollapsible).

In this paper, we explore the 10 Modern Greek negative markers $\mu\eta(\nu)(-)$ ⁴ since they present the same sort of problem involving unity-in-diversity and diversity-in-unity as the other phenomena noted above and, moreover, admits of a similar solution. In particular, we argue that there are (at least) 10 $\mu\eta(\nu)(-)$'s:⁵ each shows enough similarity with the others to warrant one's wanting to unify them but also shows enough differences from all the others to prevent their being collapsed easily into a single element at some level of analysis. Thus, the 10 $\mu\eta(\nu)(-)$'s of Modern Greek indeed constitute a morphological constellation (in the sense of (1) above). This constellation is of particular interest, since it is even more compelling than most others discussed to date.⁶ In particular, it involves partially shared semantic and syntactic characteristics, as well as phonological similarities, which together that serve to unify (subsets of) the 10 $\mu\eta(\nu)(-)$'s against the background of the differences in form and function that serve to separate them.

II. The 10 Modern Greek Negative Markers / Negators $\mu\eta(\nu)(-)$

The ten $\mu\eta(\nu)(-)$'s which we have so far been able to recognize and justify analytically are listed in (3),⁷ followed by examples and by a brief discussion of the ways in which they are unified and the ways in which they differ from one another:⁸

- (3) a. negator of subjunctive clauses
- b. negator of active participles⁹
- c. pleonastic negator in clausal complements of verbs with negative force (e.g. preventatives)

- d. negator of imperatives and hortatives (i.e. introducer of prohibitives)
- e. introducer of negatively evaluated clausal complements to verbs and nouns of fearing (with variant μήπως, itself with variant pronunciations [mípos / míbos])
- f. introducer of tentative main-clause questions (with variant μήπως (= [mípos / míbos])
- g. independent utterance expressing negative actions (i.e. prohibitions)
- h. negator of lexical items (ones that are not fully verbs)
- i. negator of ellipted (i.e. “understood”) elements
- j. negative combining-element in isolated derivational word-formations

Examples of each manifestation are given in (4), with a rough phonetic transcription below the Greek characters; the order of presentation is keyed to the order in (3):

- (4) a.i. *μπορεί να μην έχουν κοιμηθεί* [borí na *min* éxun kimi í]
 can/3SG SUBJUNC *mi* have/3PL slept
 ‘It is possible that they haven’t gone to bed yet’ (lit., “It can that they have not slept”)
- ii. *ας μην έρθει τώρα ο Γιάννης* [as *min* ér i tóra o jánis]
 SUBJUNC *mi* come/3SG now the-John/NOM
 ‘Let John not come now/John should not come now’
- b. *μην έχοντας ιδέα για όλα αυτά ο Γιάννης την παντρεύτηκε*
min éxondas i éa ja óla aftá, o jánis tin pandréftike
mi have/ACT.PPL idea/ACC about all-these the-John/NOM her/ACC married/3SG
 ‘Not having any idea about all these things, John married her’ (Veloudis 1982:22)
- c.i. *φοβάμαι να μην έρθει* [fováme na *min* éfti] (Veloudis 1982:11)
 fear/1SG SUBJUNC *mi* come/3SG
 ‘I am afraid that he may come’ (‘I am afraid he may not come’)
- ii. *δε σε εμποδίζω να μιλάς* [e se embo ízo na *min* milás]
 NEG you/ACC prevent/1SG SUBJUNC *mi* speak/2SG (Thumb 1964:200)
 ‘I do not prevent you from speaking’ (‘I do not prevent you from not speaking’)
- d.i. *μην το πετάξεις!* [*min* to petáksis]
mi it/ACC throw/2SG
 ‘Don’t throw it out!’
- ii. *μην ξεχνάμε πως ο Γιάννης είναι ακόμα εκεί*
[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!’ (based on Mackridge 1985:299).
- e.i. *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’ (Mackridge 1985:300)
- ii. φοβάμαι *mi* / *μήπως*: έρθει [fováme *min* / *mípos* éθi]
 fear/1SG *mi* come/3SG
 ‘I fear that he might come’ (based on Veloudis 1982:11)
- f. *mi* / *μήπως*: είδες το παιδί; [*min* / *mípos* í es to pe í?]
mi saw/2SG the-child/ACC
 ‘Did you perhaps (happen to) see the child?’
- g. μη! / *μην! [*mi* / *min*] ‘Don’t!’
- h. γύρισε δυο *mi* εμπορικά φιλμ μαζί του
 [jírise jo *mi* emboriká film mazí tu]
 turned/3SG two *mi* commercial-films/NTR.ACC with him
 ‘He shot two non-commercial films with him’ (Veloudis 1982:43)
- i.i. παρκαρισμένα και *mi* αυτοκίνητα 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’ (based on Mackridge 1985:244)
- ii. *mi*: τα χέρια σου έξω [*mi* ta xérja su ékso]
mi the-hands/ACC your outside
 ‘Don’t (put) your hands out!’ (Mackridge 1985:244)
- j. *μήτε* ([míte]) ‘not even; neither’ (cf. ούτε ([úte]) ‘not even; neither’); *μηδέν* ([mi én])
 ‘nought; zero’ (cf. the finite indicative negator δεν ([en])); *μήπως* ([mípos]) ‘lest;
 perhaps’ (cf. complementizer πως ([pos]) ‘that’).

III. A Constellational Approach to the 10 μη(ν)(-)'s

These 10 μη(ν)(-)'s represent a clear and compelling case of a constellation, given that they show some commonalities shared by all of the various instances as well as an interlocking set of other similarities common to some, while at the same time giving evidence of differences between and among them. The net result is that there is no way to reduce all of these manifestations to a single element; the 10 μη(ν)(-)'s illustrated above therefore cannot legitimately be collapsed.

There are two features shared by all ten instances. On a formal level, all share the common phonological “core” of an initial sequence [mi], thus characterizable as // #mi //. On a functional level, all share a semantic core relating to negation (see below for a more precise characterization).

There are, in addition, several further points of similarity regarding which certain subsets of the 10 manifestations show commonalities. It must be kept in mind that, by the same token, therefore, since these further features do not cover all 10 $\mu\eta(\nu)(-)$'s, they likewise serve to differentiate among all 10 or among subsets of them. These features are listed in (5):

- (5) a. whether a final (assimilating) *-n* is allowed
- b. whether the element is a bound or a free form
- c. whether the element occurs syntactically in COMP (the complementizer-node)
- d. whether the element occurs primarily with verbs or instead (regularly) with other word-classes
- e. whether the element has a semantic force that is strongly negative or instead only weakly so or even only indirectly associated with negativity.

The distribution of these features across the 10 $\mu\eta(\nu)(-)$'s is not at all uniform, however, and this creates a web-like multiple network of similarities and differences which is entirely characteristic of most constellations. Take, for instance, the final (assimilating) *-n*, which, when it is allowed, regularly occurs before vowels (as in (4a) above), variably occurs before nasals and fricatives (where it is generally omitted in fast speech but is possible in more careful articulation, so that the $\mu\eta\nu$ $\mu\lambda\acute{\omicron}\zeta$ of (4cii) can surface as [mi milás]), and shows various effects before stops.¹⁰ This final *-n* is allowed with (4a), (4b), (4c), (4d), (4e), and (4f), but not with any of the others. Similarly, $\mu\eta(\nu)(-)$ is a free form in (4g) above (where, for example, it occurs as the only word in an utterance), and in (4i), but is otherwise a bound element (i.e. in (4a), (4b), (4c), (4d), (4e), (4f), (4h), and (4j) above). Similarly, in (4e), (4f), (4g), and for some instances of (4i) above (e.g. (4i.ii)), $\mu\eta(\nu)(-)$ arguably is syntactically in COMP (i.e., the complementizer position) within its clause, whereas the other manifestations are not. Also, the $\mu\eta(\nu)(-)$'s of (4g), (4h), (4i), and (4j) do not primarily or regularly occur before verbs, whereas the manifestations of $\mu\eta(\nu)(-)$ in (4a), (4b), (4c), (4d), (4e), and (4f) do. Finally, even one common thread running through all ten $\mu\eta(\nu)(-)$'s — namely a connection in some way with semantic negativity — is not uniformly realized. Thus, (4a), (4b), (4d), (4e), (4g), (4h), (4i), and (4j) all show what may be characterized as strongly negative semantic force, while the others are only weakly negative (like the mitigated tentative-question use seen in (4f), which is paraphrasable, quite roughly, as “Is it or is it not the case that ...”), or even

only indirectly associated with negativity (e.g. the pleonastic use in (4c), where the $\mu\eta(\nu)(-)$ adds no overt negative meaning at all, but simply reflects the fact that to fear something is to want it *not* to happen).

These cross-cutting similarities and differences for the various manifestations of the $\mu\eta(\nu)(-)$'s can be displayed most perspicuously in chart form, as in (6):

(6) Similarities and Differences among $\mu\eta(\nu)(-)$'s:

PROPERTY:	<u>/n/-final</u>	<u>bound</u>	<u>strong</u>	<u>C°</u>	<u>pre-V(P)</u>
NEGATOR:					
(a) subjunctive	+	+	+	-	+
(b) participial	±	+	+	-	+
(c) pleonastic	+	+	-	-	+
(d) imperative	+	+	+	+	+
(e) complementizer	+	+	-	+	±
(f) interrogative	+	+	-	+	+
(g) prohibitive	-	-	+	+	-
(h) lexical	-	+	+	-	-
(i) elliptical	-	-	+	±	-
(j) derivational	±	+	±	-	-

The biggest division within the $\mu\eta(\nu)(-)$'s pits one large group of bound instances of $\mu\eta(\nu)(-)$ against another smaller group with free instances of $\mu\eta(\nu)(-)$. The group of $\mu\eta(-)$'s without a final *n* possible vs. another group with the possibility of a final *n* represent another major division — this time a formal one, involving one aspect of their phonological shape. The other features give different groupings for instances of $\mu\eta(\nu)(-)$, such that elements which can be grouped together by one shared feature can also be divided by another. For example, failure to occur in COMP separates the pleonastic negative from other weak semantic negatives, while prohibitive $\mu\eta(\nu)(-)$'s are internally divided by their specifications for presence versus absence of the optional assimilating final *-n* and bound versus free status. Thus, no single generalization is possible for the $\mu\eta(\nu)(-)$'s that can bring together all these various manifestations as a single morpheme.

Nonetheless, there is other evidence for unity as opposed to disunity, beyond just the distribution of the features noted above. In particular, the way in which some of these groupings came about historically is quite telling. That is, there is e.g. diachronic evidence for unity within the $\mu\eta\nu$ -class *sensu stricto* (i.e. those forms in which a final *-n* is a possibility); the *-n* in the $\mu\eta$ -elements arose by analogy with the ending of the other Greek negative marker $\delta\epsilon\nu$ [en], which is used with finite indicative verbs and has an etymologically justified final [-n], deriving from from Ancient Greek $\sigma\upsilon\delta\acute{\epsilon}\nu$ [oudén] ‘not (at all)’ (whereas $\mu\eta(\nu)$ derives from Ancient Greek $\mu\acute{\eta}$). Still, the analogy that changed $\mu\acute{\eta}$ to $\mu\eta(\nu)$ was only a quasi-

generalization, given that it did not extend to all instances of μή and thus led to some divisions within the overall set of realizations of μή.

The incomplete nature of the generalization of *-n* over instances of μή is emphasized by several considerations. For one thing, the starting point for *-n* with μη(ν) was presumably the finite nonindicative negator use ((3a) above), since the finite indicative negator δευ was the source of the *-n*; yet, μη(ν) no longer occurs just with finite verbs, due to its use with the active participle (cf. μην έχοντας [min éxondas] ‘not having’ in (4b)). Nor was the *-n* extended so as to cover use with just finite verbs and participles, since negation of the mediopassive participle occurs via *n*-less μη: thus, for the mediopassive verb επισκέπτομαι ([episkeptome]) ‘I visit’, the negated present participle is μη επισκεπτόμενος ([mi_episkeptómenos]) ‘not visiting’, not *μην επισκεπτόμενος ([*min episkeptómenos]).¹¹ Moreover, the pronunciation of μήπως as [míbos] (cf. (3e) above), which for some speakers may in fact be the most usual pronunciation for this word, would suggest an earlier stage in Greek with μήν-πως ([mín-pos]), given the usual derivation of a phonetic voiced stop in Modern Greek from a nasal plus a voiceless stop.¹² Also, it is not just verbs that require the *-n* form, due to the mediopassive participles with their partly nonverbal categorial status (see note 11).

Further evidence of sub-affinity within the *n*-group comes from one way in which there is convergence between the pleonastic μη(ν) in (4ci) and the subjunctive negator μη(ν) that occurs with ‘fear’-complements as in (4a)/(4c), (9eii), specifically, at least in its written form, a sentence like (7):

(7) φοβάμαι να μη(ν) δεχτώ το δώρο [fováme na mi(n) extó to óro]
 fear/1SG SUBJUNC *mi* accept/1SG the-gift/ACC

shows ambiguity between ‘I am afraid that I might accept the gift’ (with pleonastic μη(ν)(-)) and ‘I am afraid not to accept the gift’ (with the subjunctive negator μη(ν)(-) occurring here with the subjunctive complement of φοβάμαι ‘I fear’, as is possible when the subject of main verb φοβάμαι is identical with the complement clause subject.¹³

Finally, even the basic division of the various μη(ν)(-)'s into two groups on formal grounds — into those with no possibility of a final *n* vs. those that can show a final *n* — gives some evidence for the unity which cuts across this formal differentiating feature. In particular, there is an interesting linkage among three elements: the *n*-less independent prohibitive μη (as in (4g)), the *n*-less elliptical negative μη used as a prohibitive (as in (4i.ii)), and the *n*-ful prohibitive marker μη(ν) used with verbs (as in (4d)). When the independent prohibitive-particle is augmented by a verb, and when the elliptical negator used prohibitively

is filled out with a verb, as with e.g. απλώσεις ([aplósis]) ‘you stretch out’ in (8c), then *n*-less μη is replaced by μη(ν), which may have the final *n*:

- (8) a. Μη! (*Μην!) [mi (*min)] ‘Don’t!’
 b. Μη (*Μην) τα χέρια σου έξω [mi (*min) ta xérja su ekso] ‘No hands outside!’
 (i.e. “Don’t (put) your hands outside!”)
 c. Μην (*Μη) απλώσεις τα χέρια έξω [min (*mi) aplósis ta xérja ékso]
 ‘Don’t stretch your hands outside!’

Occasionally also, as noted by Veloudis (1982:28), in what is essentially a speech error but is nonetheless marginally acceptable, *n*-less μη can be used in place of μη(ν) even in contexts where the *-n* is otherwise required :

- (9) ἴνα μη έρχεται κατά πάνω τους [nami érxete katá páno tus]
 SUBJUNC *mi* comes/3SG against them
 ‘He should not come against them’.

Veloudis’ explanation of (9) is instructive, because it hints at the psychological reality of the sameness between the two main formal types of μη(ν)(-), despite the real differences that exist between them:

The phonological difference between *mí* and *mí(n)* is not as clear as that between the other two [negative] particles, *óxi* and *δέ(n)*: when it precedes a verb beginning with a continuous consonant, e.g., *mí(n)* is not normally different in form from *mí*. We can reasonably, therefore, suppose that the slight difference in acceptability [between (9) with *mi* for expected *min* and the impossible use of *óxi*] is due to the fact that *mi* in the latter can easily be confused with, and be understood as, the *mí* version of the particle *mí(n)*.

IV. Conclusion — Further Methodological Issues

In sum, μη(ν)(-) shows unity in diversity together with diversity in unity, involving several realizations that are “same” but also “different” and hence constitute a “constellation”. That is, the ten *mi(n)(-)*’s are indeed “the same”, but only in a limited sense — specifically, to the extent that they all share the property of being members of one and the same constellation. Thus, the real generalization to be made here — and hence the real category to be recognized by a grammar — is the overall complex of interrelated, formally similar elements; it is the union of the various μη(ν)(-)’s, rather than the intersection, which is the

preeminent category here, although there also exist, within that union, additional interconnected subgeneralizations which further link the distinct pieces together.

The recognition of constellations leads to an important methodological point: we know that, diachronically, speakers create such constellations out of earlier more unified situations through processes of “diachronic fragmentation” (e.g. German umlaut was once a mechanical, phonetically motivated vowel-fronting triggered by a front vowel in the next syllable; Sanskrit reduplication was once closer to an “ideal” of CV- prefixing as the only template). In the present case, Ancient Greek had only the form μῖ (the source of Modern Greek [mi]), and, though there were different functions associated with this μῖ, there were not the ten different manifestations found in Modern Greek; moreover, not all of the differences evident between and among the Modern Greek manifestations were present in Ancient Greek. We know also that the constellational approach has synchronic validity, as shown by the μῖ(ν)(-) case discussed here. Therefore, we as linguists perhaps ought to pay more attention to what speakers are really doing, in diachrony or wherever, as we try to model their competence(s) in our grammars; in particular, we should perhaps give up the reductionist analytic methods that are driven by some preconceived economy metric.

REFERENCES

- Andriotis, N.: *Επιφωτιστικό λεξικό της κριτικής νεοελληνικής*. Ινστιτούτο Νεοελληνικών Σπουδών του ΑΘΠ (Θεσσαλονίκη).
- Comrie, B. 1978: “On the *go/went* Alternation: A Contribution (?) to the Generative Phonology of English”. Στο T. Ernst & E. Smith (εκδ.), *Lingua Franca* (Bloomington, IN: Indiana University Linguistics Club) 59-63.
- Hukari, T. & R. Levine 1991: “On the Disunity of Unbounded Dependency Constructions”, *Natural Language and Linguistic Theory* 9, 97-144.
- Janda, R. & B. Joseph 1986: “One Rule or Many? Sanskrit Reduplication as Fragmented Affixation”, *Ohio State University Working Papers in Linguistics* 34, 84-107.
- Janda, R. & B. Joseph 1989: “In Further Defense of a Non-Phonological Account for Sanskrit Root-Initial Aspiration Alternations”. Στο *ESCOL '88. Proceedings of the Fifth Eastern States Conference on Linguistics* (Columbus: Department of Linguistics, Ohio State University) 246-260.
- Janda, R. & B. Joseph 1992: “Meta-Templates & the Underlying (Dis-)Unity of Sanskrit Reduplication”. Στο *ESCOL '91. Proceedings of the Eighth Eastern States Conference on Linguistics* (Columbus: Department of Linguistics, Ohio State University) 160-173.
- Janda, R. & B. Joseph, In preparation: “On constellations in morphology: Crosslinguistic Evidence and a Case Study from Modern Greek”.
- Joseph, B. & R. Janda 1988: “The How and Why of Diachronic Morphologization and Demorphologization”. Στο M. Hammond & M. Noonan (εκδ.), *Theoretical Morphology*. (San Diego: Academic Press) 193-210.
- Lightner, T. 1975: “The Role of Derivational Morphology in Generative Grammar”, *Language* 51, 617-638.

- Lightner, T. 1983: *Introduction to English Derivational Morphology*. (Amsterdam: John Benjamins Publishing Co.).
- Mackridge, P. 1985: *The Modern Greek Language*. (Oxford: Oxford University Press).
- Pollard, C. & I. Sag 1994: *Head-Driven Phrase Structure Grammar*. (Chicago: University of Chicago Press).
- Thumb, A. 1964: *A Handbook of the Modern Greek Language. Grammar, Texts, Glossary*. (Chicago: Argonaut, Inc. Publishers).
- Veloudis, I. 1982: *Negation in Modern Greek*. Ph.D. Dissertation, University of Reading.
- Zwicky, A. & G. Pullum 1983: “Cliticization vs. Inflection: English *n't*.” *Language* 59, 502-513.

¹This paper is part of a sustained study on constellations that we have been conducting for more than a decade (see Janda & Joseph 1986, 1989, 1992, and Joseph & Janda 1988). Our interest in $\mu\eta(\nu)(-)$ began in 1987 with a presentation at the Milwaukee Linguistics Symposium; since then we have presented versions of this paper to audiences at The Ohio State University, The University of Chicago, Georgetown University, and the Third International Conference on Greek Linguistics. We thank the numerous members of those audiences for their comments, which have helped us to clarify our thinking on these matters. A far more extensive and fuller version of this paper is currently in preparation.

²See Comrie 1978 for an analysis, intended to be a humorous overapplication of the principles of generative phonology, by which *go* and *went* can be formally related.

³If *-n't* were a true clitic, and if clitics are handled in the syntactic component (as they are in Zwicky's “Interface Program”), then it would be possible to relate *not* and *-n't* formally; however, Zwicky & Pullum give very persuasive arguments showing that *-n't* is not a clitic in current English, based on their quite reasonable criteria for what distinguishes a word from a clitic from an affix. (There does exist a plausible alternative analysis, though, in which *-n't* is a bound-root form of *not* rather than an affix, parallel to free *man* ([mæn]) vs. bound *-man* [-m n] in *fireman*, etc.)

⁴Since we ultimately (and deliberately) refuse to posit a single basic form for these ten markers, this notation is designed to subsume all its manifestations.

⁵We thus expand on the demonstration by Veloudis 1982 that there are (at least) 2 different $\mu\eta$'s.

⁶See our earlier papers referred to above for details on Sanskrit reduplication and other constellational phenomena, including both Sanskrit aspiration alternations and German umlaut.

⁷Some unification across these ten might well be possible, but we aim first for as broad a characterization as possible. Ultimately, as argued below, any unifying generalizations are balanced by features that distinguish.

⁸Space limitations prevent us from giving a full account for the constellational nature of $\mu\eta(\nu)(-)$ and a full discussion of its implications; see Janda & Joseph (in preparation) for a complete analysis.

⁹Negation of mediopassive participles is best treated as a case of lexical negation, as in (3h), since mediopassive participles are not fully verbs, being (partly) adjectival. See also note 11.

¹⁰In particular, a following voiceless stop becomes voiced, and the nasal may surface as a full consonant, assimilated in place to the stop, though realizations as vowel nasalization, prenasalization on the stop, or as zero all occur, under complex sociolinguistic and geographic conditions (discussed recently, with relevant experimental evidence, in Arvaniti & Joseph (1993/to appear)). For example, $\mu\eta\upsilon\ \xi\epsilon\chi\nu\acute{\alpha}\mu\epsilon$ in (4dii) can surface as [miŋ gzexnáme] or [mi gzexnáme].

¹¹Admittedly, the mediopassive participles are not fully verbal (recall note 9), probably being of mixed categorial status — i.e. they are partly adjectival as well. Still, like verbs, they bear verbal aspect, they can take direct objects, and, for some speakers they can even support weak object pronouns; cf. $\epsilon\pi\iota\sigma\kappa\epsilon\pi\tau\acute{\omicron}\mu\epsilon\nu\acute{\omicron}\varsigma\ \tau\eta\upsilon\ \epsilon\lambda\lambda\acute{\alpha}\delta\alpha$ ([episkeptómenos tin elá a]) ‘(while) visiting Greece’, $\epsilon\pi\iota\sigma\kappa\epsilon\pi\tau\acute{\omicron}\mu\epsilon\nu\acute{\omicron}\varsigma\ \tau\eta\upsilon$ ([episkeptòmenos tin]) ‘(while) visiting it/her’.

¹²Cf. note 10. However, the [b] of [míbos] could simply be the result of influence from the functionally related $\mu\pi\acute{\alpha}\varsigma$ [bas], which has itself been etymologized as from $\mu\eta\acute{\iota}\nu\ \pi\acute{\alpha}\varsigma$ ([mín pas]), or possibly as a borrowing from Albanian *mbasë* (see Andriotis 1983:s.v.).

¹³We are indebted to Amalia Arvaniti for reminding us that, in speech, intonation serves to disambiguate (7).