I present here the results of a quantitative analysis of weak object pronoun placement in Later Medieval Greek. The description that I provide concurs, in large part, with the conclusions of Mackridge (1993), but also introduces some new complexities and disproves certain previous assumptions. On the basis of these results, I evaluate the latest proposal that seeks to account for this pattern (Condoravdi & Kiparsky 2001) and demonstrate that, despite its advantages, this new account is founded on a controversial assumption, and it also fails to answer some of the more interesting questions raised by the data. I propose an alternative approach, which treats the variation as the result of analogical change.

Keywords: Medieval Greek, clitics, weak pronouns, language variation, morphosyntactic change

1. Introduction

In the lively debate about the nature and behavior of Greek weak pronouns, there has been relatively little said about the status of these elements during the period of Later Medieval Greek (LMG). Up until now, only two descriptions of the facts have existed, those of Mackridge (1993, 1995) and Rollo (1989). There are several factors that have made the collection of data difficult. The first is undoubtedly the fact that the number of texts from this period that are written in the vernacular is quite limited, especially when one considers the abundance of sources that exist for other periods of the language. Second, determining what exactly should be considered “the vernacular of the time” is a challenging task as well. Finally, the majority of texts that have been published with
the appropriate philological care are poetic texts, which further compounds
the problem of identifying the spoken pattern. It may even be said that given
these difficulties, the analysis of weak pronouns in Medieval Greek could not
yield sufficiently valid results that address interesting enough questions to war-
rant the efforts of such an investigation. However, the recent article of Con-
doravdi & Kiparsky (2001), hereafter C&K, clearly demonstrates that a solid
understanding of weak pronoun behavior in Medieval Greek may provide key
insights about the development of functional projections in the history of the
language as well as illuminate the development of those varieties of the lan-
guage that differ with respect to this parameter. My goal here is to provide a
detailed description of the phenomenon informed by a statistical analysis of
the variation. Once this has been achieved, I evaluate C&K’s proposal and ar-
gue that the observed pattern is best analyzed as a transitional phase during a
process of analogical change.

1.1 Theoretical approach and methodology of data collection

As has been noted in the existing literature, the weak object pronouns of LMG
always appear immediately next to the verb that selects them, but whether their
position will be preverbal or postverbal is not easily predictable, as can be seen
in examples (1) and (2) which constitute a near-minimal pair.¹

(1) palē sas lalo
    again you.io.pl.wp say.1sg.pres
    “Again I say to you” (Moreas 715)

(2) palin leyo sas
    again say.1sg.pres you.io.pl.wp
    “Again I say to you” (Digenēs 1750)

In both Pappas (2001) and (2004), I treated the data of pronoun placement
as a case of linguistic variation and thus amenable to a variationist analysis
along the lines of those conducted in sociolinguistic studies and especially the
model established by Kroch (1982/1989) for quantitative studies where the data
source is a limited number of texts. This approach requires one to establish the
nature of the variable, that of its variants, and the factor groups (and their fac-
tors) that affect the variation. The variable in this case is “weak object pronoun
placement”, and the variants are “preverbal position” [WP–V] and “postverbal
position” [V–WP]. Identifying the factor groups involved, however, is slightly
more complicated. The descriptions provided by both Mackridge and Rollo
indicate that the nature of the element that immediately precedes the verb-pronoun (or pronoun-verb) complex affects the placement of the weak object pronoun; this then is our first factor group (immediately preceding element). The factors that it comprises would be the specific elements that Mackridge highlights, and which have been summarized in C&K. As in Pappas (2001, 2004), I begin with this list and use the results of the statistical analysis to confirm which factors have a significant effect on the variation and to group them into salient categories before investigating if there exists an overarching structural or other parameter (or set of parameters) that explains the variation. In addition, the fact that both Mackridge and Rollo focus on the pattern of pronoun placement associated with finite verb forms only (indicative, subjunctive, and imperative in Mackridge’s case, indicative and subjunctive for Rollo) implies that type of verb form should also be considered as a factor group. LMG has both finite and non-finite forms. For the finite category, I adopt Philippaki-Warburton & Spyropoulos’s (2004) observation for Standard Modern Greek (SMG), that morphologically the mood system differentiates between imperative and non-imperative forms only, since the subjunctive is expressed by the *na* construction. Preliminary results from my investigation into the variation (Pappas 2002) showed that, pace Mackridge, imperative and non-imperative constructions in LMG differ with respect to pronoun placement, so the two are treated as separate factors here. The non-finite forms include gerunds, participles, and the infinitive. Since the number of available tokens varies greatly among these different forms, they are discussed separately as finite (non-imperative), imperative, and non-finite.

These are the linguistic parameters that affect the variation. Regarding the non-linguistic factors, there are not, unfortunately, sufficient data for one to draw firm conclusions. For example, the manuscript tradition makes it close to impossible to estimate the chronology of a text except in the broadest of terms (cf. Appendix). For the texts in this database, one can only draw a distinction between texts composed prior to the 14th century and those composed after that time, while the question of the difference between the date of composition and the date of a manuscript is another troublesome issue. The information about the geographical provenance of the texts is somewhat more reliable, but initial investigations demonstrated that there is no dialectal variation, except for texts written in Cypriot Greek. This issue too is dealt with separately, in §2.4, since there are only two Cypriot documents used in the database (there are three available in total). The final non-linguistic factor concerns the poetic nature of the non-Cypriot texts and the metrical scheme that characterizes all
but one of them. As it turns out, the meter does have a subtle interactive effect, which can only be touched upon in this discussion. Interested readers are referred to Pappas (2001, 2004). The design of the variationist analysis is summarized in Table 1.

The database consists of 8,272 tokens of weak object pronoun placement, which were collected from 27 texts considered by most researchers (cf. Joseph 1978/1990, Browning 1983, Beck 1993, Horrocks 1997) to represent the vernacular of the period. Texts were examined in their entirety, except when they were longer than 1500 lines. Each token was coded according to the element that immediately precedes the verb-pronoun complex. The one-way ANOVAs were performed using the JMP 3.2.1 software for Macintosh, after the numeric observations for each text were transformed into scores using the technique known as the arcsin transformation (Woods et al. 1986:220). The tests are designed to analyze the variation among the means of several samples and determine whether the differences are large enough to be significant. In the following graphs, the factors affecting pronoun placement are listed on the x axis, while the y axis measures the score for preverbal or postverbal placement. The height of the diamonds indicates the 95% confidence interval, that is, the range of scores that will contain the mean 95% of the time. The circles on the right hand of each figure represent the results of Tukey-Kramer HSD tests, which determine the significance of the difference between pairs of means. When circles overlap completely or if the angle of their intersection is smaller than ninety degrees, only then is the difference between the two means significant.

| Table 1. Design of the variationist study |
|------------|--------------------------------------|
| variable | weak object pronoun placement |
| variants | preverbal, postverbal |
| linguistic factor groups | immediately preceding element |
| factors | cf. Mackridge (1993) |
| type of verb form | finite (non-imperative) |
| factors | imperative |
| non-linguistic factor groups | non-finite |
| factors | geographic provenance |
| position in metrical scheme | Cypriot |
| factors | non-Cypriot |
| position in metrical scheme | beat-syllable |
| factors | non-beat syllable |
2. Results of the analysis

2.1 Finite verb forms

The results of the analysis in large part confirm the description given by Mackridge’s rules of weak pronoun placement (1993:339–342). However, there are a few discrepancies between the two descriptions that play a crucial role in understanding the phenomenon. As Mackridge observes, postverbal pronoun placement is associated with a verb in clause-initial position (ex. 3), or the presence of any of the following types of elements before the verb: (a) a coordinating conjunction such as ke “and” (ex. 4), (b) the negative uk “not” (ex. 5), (c) the complementizer oti (ex. 6), or (d) a reduplicated object (ex. 7). These patterns of postverbal placement are clearly indicated in Figure 1.

(3) ýelas  
\text{tus}  
ke  
ðjavnis
laugh.2SG.PRES they.DO.PL.WP and pass.2SG.PRES
“You laugh at them and pass by” (Poulologos 304)

(4) ke  exases  
\text{ta}
and lose.2SG.PAST they.DO.PL.WP
“And you lost them” (Poulologos 121)

Figure 1. One-way ANOVA of factors affecting postverbal pronoun placement
(5) *<i>uk emathen to</i>*
<code>NEG learn.3SG.PAST it.DO.SG.WP</code>
“He did not learn it” (*Belisarios* 269)

(6) *θεωρο oti xano se*
<code>see.1SG.PRES that lose.1SG.PRES you.DO.SG.WP</code>
“I see that I am losing you” (*Achilleid* 1697)

(7) *ton zomon ekxei ton*
<code>the juice.DO.SG pour.3SG.PRES it.DO.SG.WP</code>
“The juice, he pours it” (*Ptōkhoprodromos* III 300)

However, Figure 1 also shows that the pattern of postverbal pronoun placement associated with factor *reduplicated object* is not as robust as the patterns associated with the other factors. A closer look into the pattern of variation reveals that a disproportionate amount of preverbal pronouns in reduplicated object constructions involves the use of the adjective *olos* “all” as the reduplicated object (8). Once these are removed from consideration, the pattern of variation is much more uniform, as can be readily seen in Figure 2. I return later to possible explanations for the unique behavior of *olos*.5

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**Figure 2.** One-way ANOVA of factors affecting postverbal pronoun placement, *olos* tokens removed from *red(uplicated) object*
Constructions with preverbal pronouns are much more common. In this case, the corrections to Mackridge’s description suggested by the statistical analysis are more far-reaching. According to Mackridge, there are four levels of preverbal pronoun placement, as summarized in Table 2. There is a large group of various and sundry elements (including the subjunctive, hortative, and negative markers (other than uk), complementizers and wh-expressions) that are associated with near-categorical preverbal placement of pronouns (9). An immediately preceding object or adverb is also associated with preverbal pronoun placement but not as strongly (10). This is also the case for immediately preceding subjects, but the association here is even less strong (11, 12). Finally, according to Mackridge, the variation between preverbal and postverbal pronouns is free when the complex comprising the verb and the pronoun(s) is immediately preceded by a temporal adverb (13, 14).

Table 2. Differentiation in preverbal placement according to Mackridge (1993)

| Level of preverbal placement | Preceding element |
|------------------------------|-------------------|
| Obligatorily preverbal       | subjunctive, hortative and negative markers, complementizers and wh-expressions |
| Almost obligatorily preverbal | object, non-temporal adverb |
| Normally preverbal           | subject |
| Free variation               | temporal adverb |

(8) *oli* *tin iksēvris*

all.DO.SG she.DO.SG.WP know.2SG.PRES

“You know her completely” (Gioustos 184)

(9) *για.να* *να* *κατοθικίσι* in.order.to it.DO.SG.WP avenge.3SG.PRES

“In order to avenge it” (Rimada 84)

(10) *κατο* *τιν* *αποθετι* down she.DO.SG.WP set.3SG.PRES

“He sets her down” (Digenēs 937)

(11) *σπαθειν* *μιαν* *με* *εδοκέν* sword.DO.SG one.DO.SG I.IO.SG.WP give.3SG.PAST

“He hit me once with the sword” (Digenēs 1248)

(12) *η* *γιότονης* *συ* *μ* *ιπασι* the.neighbors.NOM your I.IO.SG.WP tell.3PL.PAST

“My neighbors told me” (Katalogia 102)
(13) to.prosopon.su to ylikin skatafloyise me your.face the sweet.NOM.SG inflame.3SG.PAST I.DO.SG.WP
“Your sweet face has ignited my passion” (Katalogia 118)

(14) toa me diolis
now I.IO.SG.WP give.2SG.PRES
“Now you give me” (Phlōrios 1152)

(15) eftis esusumjazi ton
immediately recognize.3SG.PRES he.DO.SG.WP
“Immediately he recognizes him” (Phlōrios 1415)

The first difference between the present description and that of Mackridge (1993) is that in this case, the category temporal adverb has been expanded to include many more temporal expressions than just the four words identified in his study. More importantly, the category here also includes phrases with a temporal meaning (cf. 16), and the label for this factor is changed to temporal expression. Also, prepositional phrases are included with ‘fronted’ objects and non-temporal adverbs, and the factor is named fronted constituent. Finally, the group of words that is associated with near-categorical preverbal placement is pre-theoretically labeled function word.

Figure 3. One-way ANOVA of factors affecting preverbal pronoun placement
The first clear result from the analysis of the data is that the difference between the effect of subjects and temporal expressions is not statistically significant. The second point, although not obvious in Figure 3, is that the metrical scheme of *politikos dekapentasyllabos*, in which most of the texts are written, has a subtle effect on the pattern of variation. A standard line written to fit this metrical pattern has fifteen syllables and is divided into two hemistichs. The first hemistich has eight syllables, and the second has seven. In each hemistich, there are two clearly felt beats, which are provided by accent placement. In the first hemistich the accent may occur either on the second or fourth syllable and the sixth or eighth syllable, while in the second hemistich the accent may fall either on the tenth or twelfth syllable and, obligatorily, on the fourteenth. A detailed examination of pronoun placement in the case of subjects and temporal expressions shows that in more than 90% of these constructions, changing the placement of the pronoun would adversely affect the metrical scheme of the line, as is illustrated in the third line of example (17). This happens equally for both preverbal and postverbal pronoun constructions. Thus, the larger percentage of preverbal pronouns associated with subjects and temporal expressions is an epiphenomenon of the metrical constraints. The actual pattern of variation that underlies it appears to favor neither of the two placement options.

When the preceding element is a fronted constituent, the metrical requirements appear to be affecting the position of pronouns, but only postverbal ones. For all but one of the sentences with postverbal pronouns, the metrical scheme would be broken if one were to change the position of the pronoun. On the other hand, Figure 4 demonstrates that the effect of meter on preverbal pronoun placement is not as significant in the case of fronted constituents as it is for subjects and temporal expressions. This strongly suggests that preverbal placement in this context is actually more favored than it first appears, and is quite possibly of the same order as that associated with factor *function word*.

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(16) *xronus peninda* to *vasta*

years fifty it.DO.SG.WP keeps.3SG.PRES

“He keeps it for fifty years” (*Physiologos* 20)

(17) *pa-raf-ta* ton *ti-fló-nun*

9–10–11 12 13–14–15

*pa-raf-ta* *ti-fló-nun* ton

immediately he.DO.SG.WP blind.3PL.PRES

“Immediately, they blind him” (*Belisarios* 443)
These considerations suggest that the true pattern of variation is somewhat simpler than what Mackridge provides. Instead of a five-level distinction in pronoun placement variation, this description suggests a three-level one. The descriptive statements for finite (non-imperative) verb forms are:

1. Postverbal pronouns occur with a clause-initial verb, or if the immediately preceding element is *uk*, the complementizer *oti*, a *coordinating conjunction*, or a *reduplicated object*.
2. Preverbal pronouns are associated with an immediately preceding *function word*, or *fronted constituent*.
3. Pronoun placement is free when the immediately preceding element is a *subject* or a *temporal expression*.

### 2.2 Imperative

According to Mackridge (1993:330), the placement of weak object pronouns in imperative constructions varies in the same way that it does in constructions where the indicative or subjunctive is used: “It must be stressed that Rule 3 is valid as much for the imperative as for finite forms of the verb …” The data examined in Pappas (2001, 2004), however, do not support this claim. Once the
factors with which imperatives cannot occur are removed from consideration, pronoun placement can be examined in three types of environment: postverbal (initial, coordinating conjunction, reduplicated object), preverbal (fronted constituent), and neutral (subject and temporal expression).

As Table 3 shows, preverbal pronoun placement is much more restricted with imperatives. It occurs only with fronted constituents and then at a mere 50 percent (compared with 90 percent for indicative verb forms). Examples (18) and (19) show two postverbal constructions in this context. Even though the number of tokens is rather small, the results show a pattern that is very different from that associated with finite non-imperative constructions.

(18) to kastro ḍotε μu
   the castle.DO.SG give.IMP.PL I.IO.SG.WP
   “Give me the castle” (Rimada 653)

(19) fusato stile mas
    army.DO.SG send.IMP.SG I.IO.SG.WP
    “Send us an army” (Rimada 1314)

2.3 Non-finite verb forms

There are three clearly non-finite verb forms that appear to be part of colloquial LMG: the gerund, the perfect passive participle, and the infinitive (either ‘circumstantial’, or as a complement in future, conditional, and pluperfect periphrases). In gerund and circumstantial infinitive constructions, the pronoun appears postverbally in all instances (cf. 20, 21), while in the others (cf. 22, 23, 24) the position of the pronoun appears to be determined by the element preceding the matrix verb. Table 4 presents the pattern of variation for future and conditional periphrases. As was the case in Table 3, factors are grouped into categories according to the pronoun position that is generally associated with

Table 3. Pronoun placement in imperative constructions

| Preverbal Env | Postverbal Env | Neutral Env |
|---------------|---------------|-------------|
| Pre V | Post V | Pre V | Post V | Pre V | Post V |
| 15 | 17 | 2 | 263 | 8 | 25 |

Table 4. Pronoun placement in future and conditional periphrases

| Preverbal | Postverbal | Neutral |
|-----------|------------|---------|
| Pre V | Post V | Pre V | Post V | Pre V | Post V |
| 44 | 3 | 4 | 37 | 4 | 7 |
them as described in §2.1. For example, preverbal includes the factors function word, fronted constituent, and so forth. The pattern of pronoun placement conforms to the general pattern described there.

(20) εύο θορόντα σε
I.nom.sg look.gerund you.do.sg.wp
“I, looking at you” (Rhodos 211)

(21) το ιδίν τα
the.acc.sg see.infin it.do.pl.wp
“Upon seeing them” (Digenēs 785)

(22) σε τόπο επίτιδιο τα ἵνας νανα
in place clever it.do.pl.wp have.3pl.past place.ppp
“They had placed them in a clever place” (Rimada 834)

(23) θέλει με κοπίασιν
want.2sg.pres I.do.sg.wp tire.infin
“If you tire me?” (Digenēs 1390)

(24) αν τόξα κεύριν
if it.do.sg+have.1sg.past know.infin
“If I had known it” (Katalogia 321)

One notable exception occurs in the Rhodos text, where the pronoun comes after exo (ex. 25). Although this construction is reminiscent of the ‘Kozani’ X0 clitics in the C&K classification, such a conclusion would be premature since all other examples of pronoun placement follow the usual pattern of LMG. The token is most likely an aberration.

(25) ηάξες το τέλεσι
SubjMark have.2sg.pres it.do.sg.wp finish.infin
“If only you had finished it” (Rhodos 454)

2.4 Pronoun placement in Cypriot texts

In the existing literature, the pattern of weak pronoun placement found in Medieval Cypriot texts has been treated as being identical to that found in texts from other areas. Mackridge uses an example from the chronicle of Makhairas as proof that the conjunction διοιτι is associated with postverbal placement, while Rollo (1989) uses many Cypriot examples to support his claims about LMG. Finally, Horrocks (1997:282–289) discusses the emergence of the Cypriot dialect without making reference to this feature.
However, an examination of the two Cypriot chronicles, the one by Makhairas and the other by Boustrônios, shows a pattern of pronoun placement that is different from that found in the other texts. In Medieval Cypriot, preverbal placement is associated only with the factor function word; on the other hand, fronted constituent, temporal expression, and subject are all associated with categorical postverbal placement of pronouns as are the gerund and the imperative. Table 5 presents a comparison of the relevant environments between Cypriot and non-Cypriot texts, and examples (26) and (27) demonstrate postverbal pronoun placement with fronted constituents. Such postverbal pronoun constructions can also be found in the other texts; it is the complete absence of preverbal pronoun constructions in these environments that is noteworthy. The Cypriot chronicles are characterized by a much more distinctive division between preverbal and postverbal pronoun placement, a pattern that is much ‘neater’ than that found in the other texts. However, even here, the category function word includes both wh-expressions and complementizers, which, as discussed below, presents a challenge for purely syntactic analyses. The overall pattern of pronoun placement variation in LMG can be described as in Table 6.

### Table 5. Pronoun placement in Cypriot vs. non-Cypriot texts

| Factor          | Cypriot | non-Cypriot |
|-----------------|---------|-------------|
|                 | PRE V   | POST V      | PRE V | POST V |
| fronted constituent | 1      | 14          | 898   | 90     |
| subject         | 0      | 23          | 334   | 130    |
| temporal adverb | 1      | 7           | 86    | 63     |

### Table 6. Summary of pronoun placement variation in LMG texts

| Text      | V-form | Pron                     | Preceding element                     |
|-----------|--------|--------------------------|---------------------------------------|
|           |        | Post V                   | initial, uk, red. object               |
| finite    | Pre V  | function word, fronted constituent |
|           | Free   | subject, temp. expression |
| Non-Cypriot imperative | Post V | initial, red. object, subject, temp. expression |
|           | Free   | fronted constituent      |
| non-finite | Post V | n/a (always)             |
| finite    | Post V | function word            |
|           |        | initial, red. object, subject, temp. expression, fronted constituent |
| Cypriot   | imperative | Post V | n/a (always) |
|           | non-finite | Post V | n/a (always) |
(26) διὰ τοῦτο παρακαλῶ σέ
for this beg.1sg.pres you.do.sg.wp
“For this reason I beg you” (Makhairas 83)

(27) ἀπὸ πάνω ἐκσωτόσαν τοὺς
from above kill.3sg.past he.do.pl.wp
“They killed them from above” (Makhairas 317)

2.5 The stability of the pattern of variation

The final descriptive claim I challenge here is that the pattern of pronoun placement remained stable between the 11th and 17th centuries (Mackridge 1993). Although this certainly appears to be the case in the available texts, it is important to remember that all of these belong to the same genre, that of popular poetry. It is not inconceivable then, that the stability of the pattern is genre-specific and does not reflect the situation in the vernacular. Unfortunately, there are no prose writings from this period that would allow such a comparison (the Spanos text, although in prose, follows the style of a liturgy). Both prose and poetic texts become available in 17th-century Crete, and when we compare the pattern of pronoun placement in these two styles, we find some significant differences. When the two patterns are further compared to a 15th-century text, such as the poems of Phalieros which was also composed in Crete, we see that pronoun placement in poetic texts still retains the overall LMG pattern, while in the language of the prose documents, the preverbal pattern is well-established. As can be seen in Table 7, the difference is particularly evident for factor initial. I hypothesize that this stylistic variation has a much earlier origin, perhaps as early as the 13th century. I return to this issue in §4, during the discussion of a possible account for the variation.

| Text style | Prose | Poetry | Phalieros (15th c.) |
|------------|-------|--------|---------------------|
| Factor     | Pre-V | Post-V | Pre-V | Post-V | Pre-V | Post-V |
| Initial    | 91    | 29     | 15    | 73     | 23    | 54     |
| Red Obj    | 8     | 1      | 1     | 1      | 3     | 1      |
| Fct word   | 245   | 5      | 155   | 0      | 274   | 6      |
| Frnt constituent | 25 | 1 | 32 | 3 | 47 | 6 |
| Subject    | 24    | 3      | 12    | 4      | 33    | 2      |
| Temp       | 6     | 3      | 2     | 0      | 14    | 4      |
| Impv       | 2     | 11     | 1     | 29     | 7     | 49     |
| Gerund     | 0     | 12     | 0     | 0      | 0     | 3      |
3. Accounting for the variation

Providing a strictly syntactic explanation for this pattern has proven to be a formidable challenge. The proposals that approach the phenomenon from the GB/Minimalist perspective (Philippaki-Warburton 1995, 1998, Horrocks 1997) proceed by explaining postverbal pronoun placement as the result of verb movement over the pronouns. Preverbal pronouns occur, according to these accounts, when the verb either lacks motivation to move, or is barred from moving by an intervening element (e.g., negation in Philippaki-Warburton 1998). Unfortunately, such accounts have several weaknesses. As C&K (pp. 7–8) remark of one account: “The set of licensors [for verb movement] includes both functional heads … and complementizers, as well as heads of non-functional projections… It would be a strange syntactic licensing requirement that could be satisfied by so disparate a set of licensors.” To give a concrete example, in Philippaki-Warburton’s (1998) analysis, both the indicative and the imperative forms must move in front of the pronoun, because an affix (which is zero in the case of the indicative) triggers V-movement. Movement is barred by negative markers and θa, which explains why there are no negated imperatives, and why pronoun placement is preverbal in these contexts. In order to explain why negated indicatives are possible, Philippaki-Warburton suggests that since the indicative affix is zero, it does not matter (morphologically) whether the verb is raised or not. Obviously, this weakens the initial motivation for movement with the indicative. Moreover, this account predicts that pronouns would be postverbal in the context of wh-expressions, which is not the case.

The most coherent account for the LMG data to date has been the proposal of C&K. They propose that the clause in LMG had the following structure:

\[
[_{CP}{Wh}]_{C} [_{ΣP}{FocXP, EmpNeg}]_{Σ} [_{Σ0}{Neg, Mod}]_{TnsP} [_{TnsP}{Tns0, V}]_{VP}]
\]

In order to account for the facts, C&K treat the weak pronouns as X\text{max} enclitics which undergo the rule of Prosodic Inversion (Halpern 1996). That is, “Clitics prosodically subcategorize for a prosodic host to their left within the same CP” (ibid., p. 6) but “[when] there is no available prosodic host to their left, they encliticize onto the adjacent word on their right” (ibid., p. 7). The difference observed between reduplicated object and olos constructions is explained based on the constituent’s status as topic or focus element, and their stipulation that “Adjoined constituents are not visible for cliticization” (idem). Since reduplicated objects are adjoined to CP or ΣP (a composite inflectional projection comprising NegP, MoodP, and FocusP), when the verb immediately follows
such a constituent, the pronoun has to appear after the verb because there is no valid host to its right. On the other hand, olos can also be a focused element in SpecΣP, which is a position that can host a weak pronoun.

Although this proposal manages to account for more facts than any other proposal before it, it is based on an incorrect assumption about the nature of LMG weak object pronouns. There is no evidence in the texts that the pronouns are enclitics which can attach to any prosodic host to their left. On the contrary, all evidence indicates that the host of the pronoun is always the verb. First, when a sequence of two vowels develops between a preverbal object pronoun and a verb, it gives rise to sandhi phenomena as can be seen in example (28) where mu and exi are written as one word, moxi. In LMG as in SMG, there is no sandhi interaction between a possessive pronoun and a following vowel-initial word, presumably because the pronoun forms a phonological unit with its noun host. That is, we never find o ðáskalós meðoksasθi “my teacher was glorified”. Therefore, examples such as (29) demonstrate that the pronoun forms a phonological unit with the verb and not the noun.

(28) ta moxi ðo γramena
which 1.IO.SG+have.3SG.PRES here.ADV write.PPP
“Which he has written to me here” (Rimada 716)

(29) ute filiman meðoke
neither kiss me.IO.SG+give.3SG.PAST
“She neither kissed me …” (Digenēs 166)

Second, a proparoxytone noun that is followed by a preverbal object pronoun does not show secondary stress as it does when the pronoun is possessive (cf. ex. 30 and 31). If object pronouns are enclitics, as C&K assume they are, then one has to ask why the operation of the secondary stress rule is not reflected in the orthography, i.e., why is the sentence in (31) not written síselón ton epetaksa?

(30) ton ðáskalón tis leyi
the teacher.IO.SG she.PS.SG say.3SG.PRES
“She tells her teacher …” (Apollônios 334)

(31) síselon tôn epetaksa
with.saddle he.DO.SG throw.3SG.PAST
“I threw him [off his horse] together with his saddle” (Lybistros 2047)

Finally, a subtler but equally convincing argument comes from metrical considerations. Recall that each hemistich has to have two clearly felt beats.
If weak pronouns procliticize to the verb, then the following line (ex. 32) has two beats, on the second and sixth syllables as prescribed. If the pronoun is enclitic, then the hemistich has three beats, on the second, fourth, and sixth syllables, a rhythmic pattern that does not otherwise occur in this dataset.

(32) i érotës ton eyénisan
    i érotës ton eyénisan
    the cupid.nom.pl he.do.sg give.birth.3pl.past
    “The cupids gave birth to him” (Achilleid 1113)

Given these considerations, it is much more probable that in LMG — just as in SMG — preverbal pronouns are proclitic to the verb and not enclitic to the preceding element. This position is also the one taken by Joseph (1978/1990), Horrocks (1990, 1997), Philippaki-Warburton (1995, 1998), and Mackridge (1993, 1995, 2000). If one were still to follow Halpern’s (1996:63) analysis, LMG pronouns should be treated as non-directional clitics for which the second clause of the Prosodic Inversion Rule applies: “For a simple (non-directional) CL[itic], attach the clitic to the ω [phonological word], composed of syntactically adjacent material, with which it shares the greatest number of dominating syntactic nodes, respecting the syntactic order.” This rule, however, predicts preverbal pronouns in clause-initial position, and thus must be rejected.

Beyond the problems with this assumption, C&K’s account faces some other serious challenges as well. Their claim that the distinction between focus and topic readings can account for variation between preverbal and postverbal pronouns respectively does not seem to be empirically true. Examples (33) and (34) show that, even when two constructions with olôs have the same reading (in this case focus), pronoun placement can still vary. Mackridge (2000:137) states that there does not seem to be any straightforward explanation to account for the pattern of variation with olôs.

(33) tes.xores.mu oloyira olôs tes afanizi
    my.countries all.around all.do she.do.pl destroy.3sg.pres
    “My countries all around, all he destroys them” (Rimada 1308)

(34) ta esintixame ola
    what we.encountered all.do.pl
    afiyîthi tis ta
    narrate.3sg.past she.io.sg it.do.pl.wp
    “What we encountered, he narrated it all to her” (Lybistros 1847)
Similarly, the authors claim that the topic-focus distinction can explain the variation in the context of preverbal subjects, a proposal also made by Janse (1998) for Cappadocian. These “would host a clitic if they are in the specifier position of a functional projection [i.e., focus], and not if they are adjoined [i.e., topic]” (C&K, p. 25). However, this distinction does not seem to have an effect in LMG texts. In the following two examples, both subjects are topics, yet the pronoun is placed preverbally in the first and postverbally in the second.

(35) ὃκαποτ ἀπεσοσάσιν ἰλθαν ἵστο κοντόριον
sometimes they.finished they.came to the Montorion
ο δοξος τος ἀποδέξθεκεν
the duke.nom.sg he.do.pl.wp receive.3sg.past
“In time they finished [their journey], they arrived in Montorion. / The duke received them” (Phlōrios 303–304)

(36) καβαλίκευν ἀρχόντες ἵππυν στο παλατί
they.ride the.lords they.go to the palace
ϛτο βασίλειος ἐδέσθην τος
and the king.nom receive.3sg.past he.do.pl.wp
“The lords ride, they go to the palace, / and the king received them” (Phlōrios 938–939)

Next, in order to explain the variation in pronoun placement associated with temporal adverbs, C&K suggest that this may be linked to the status of certain temporal adverbs in SMG as $X^0$ (à la Alexiadou 1994), which would mean that they could be placed either within $\Sigma P$ and thus be able to host clitic pronouns, or be adjoined to the same node, in which case the pronouns would appear postverbally. They admit, however, that the list of $X^0$ temporal adverbs in SMG and the list of temporal adverbs that Mackridge identifies are not coextensive, so they attempt to draw the tenuous connection that all involved elements are “one-word temporal adverbs” (C&K, p. 25). In the results of this analysis, however, it is clear that all temporal expressions, whether words or phrases, are equally associated with preverbal and postverbal pronouns (cf. ex. 16).

Another challenge to C&K’s account is posed by the difference in pronoun placement between $\text{uk}$ “if” and $\text{an uk}$ “if not”. According to Mackridge (1993) and Pappas (2001, 2004), the former is associated with postverbal placement while the latter is associated with preverbal placement, as can be seen in Table 8. C&K suggest that $\text{uk}$ “triggers V-to-C movement” so that the verb moves over the pronoun. They do not, however, explain why the same does not apply when $\text{uk}$ is preceded by $\text{an}$. Perhaps this problem could be avoided by treating $\text{an uk}$...
as a separate lexical item that heads NegP. This, however, does not seem to be desirable, since there do exist a couple of examples where an object pronoun appears between an and uk (cf. 37).

\((37)\) \textit{an se uk ekvalusin}  
\textit{if you.do.sg.wp not cast.out.3pl.pres}  
\textit{“If they do not get you out” (Glykas 229)}

Finally, C&K’s account does not explicitly address the pattern of pronoun placement in the case of the gerund, the circumstantial infinitive, and the imperative. Circumstantial infinitives do not really present a problem, since they can be treated as instances where Prosodic Inversion always takes place. In the case of the gerund, however, their proposal predicts that the pattern of pronoun placement will be the same as with finite forms, and not the categorical postverbal pattern that was the case. This problem could be resolved, perhaps, if C&K incorporated elements of the Philippaki-Warburton & Spyropoulos (2004) account or the Roussou (2000) account, i.e., expanded the ΣP projection to include more positions and separated the location of negatives and modal particles, so that the gerund could move over the clitics — but for morphosyntactic reasons and not due to Prosodic Inversion. When it comes to the imperative, however, none of the above proposals could apply because they predict categorical postverbal pronoun placement, and not the intermediate situation that was presented in §2.2. The facts concerning the imperative pose a serious challenge for any structural explanation that claims to account for the entire pattern of pronoun placement in LMG.

4. Change by analogy

The results of the statistical analysis concerning the variation in pronoun placement observed in LMG reveal a pattern that is very intricate. Even though the statistical tools allow us to discern the major tendencies and identify the effects of particular factors, such as olos, there are still significant aspects of the phenomenon that cannot be captured by generalizations. It is very telling that even C&K’s proposal fails to do so. Their proposal combines a description of

| uk     | an uk |
|--------|-------|
| Postverbal | Preverbal | Postverbal | Preverbal |
| 56      | 0      | 2         | 19       |
the clause in post-Hellenistic Greek with the operation of a well-attested phonological rule (Prosodic Inversion) and accounts for a large portion of the data without the forced classification of wh-elements and complemenizers into one group. It could be said, then, that C&K’s approach represents an innovative and well-constructed attempt to discover the generalization that accounts for weak object pronoun placement in LMG. The fact that they too — even if we grant them the assumption that these elements are enclitics — must leave significant aspects of the phenomenon unaccounted for is indeed striking.

At such a point, one is forced to entertain the possibility that this is a pattern that cannot be captured by a single generalization or even a set of generalizations. Even though this is a surprising conclusion, it is not unprecedented. Other studies have indicated a series of morphosyntactic phenomena that cannot be accounted for by broad-range rules. Instead, studies such as that of Gross (1979), Gropen et al. (1989), Bybee & Slobin (1982), Joseph (1997) have shown that some patterns (e.g., the dative construction in English, the formation of past tense in English, the accent pattern of Greek neuter nouns that end in /i/, and many others) are better explained by “lexically particularized rules” (Joseph 1997), that is, sets of rules that have narrow scope within the grammar.16

If we approach the phenomenon of LMG variation from a similar perspective, the pattern can be viewed as the product of ongoing analogical change. The starting point of the change could be located in Late Hellenistic or Early Medieval Greek where, according to Horrocks (1990), weak pronoun placement in general (i.e., in both noun and verb phrases) was post-head, the result of a reanalysis of Wackernagel’s Law, by which the domain of application changes from the entire clause to the noun or verb phrase. As has been suggested by Veloudis & Philippaki-Warburton (1983), Philippaki-Warburton (1994, 1998), and Philippaki-Warburton & Spyropoulos (2004), during this period, the loss of phonological distinction between the indicative and the subjunctive results in the reinterpretation of the subjunctive marker na as the head of the verb phrase. In Philippaki-Warburton & Spyropoulos’s (2004) terms, the grammaticalization of complementizer ina to modal marker na led to the creation of Mood as a functional category in the clause structure of Medieval Greek, with the indicative affix, the imperative affix, and the marker na as possible heads of the Mood Phrase. Without subscribing to this exact version of the change, I suggest that the first step in the change of pronoun placement did indeed involve the emergence of na as head of the subjunctive. Horrocks’s (1990) version of Wackernagel’s Law is still in operation, except that the head is now the
Medieval Greek weak object pronouns and analogical change

subjunctive marker and not the verb. As a result, weak object pronouns appear before the verb in the string na–WP–V (see Figure 5). The Medieval Pontic documents from the Vazelon collection (also cited by C&K) provide supportive, if not conclusive, evidence for this analysis. There, one finds several tokens of ina–WP–V strings (cf. ex. 38) alongside wh-expression–V–WP constructions, as in example (39). This is an indication that the change to preverbal pronoun placement was a gradual process.

(38) hina to ekhēs
    SubjMark it.do.sg.wp have.2sg.pres
    ‘So that you may have it’ (Vazelon 33, d. 1264)

(39) to hoper diapherei me
    that which belong.3sg.pres I.io.sg.wp
    ‘That which belongs to me’ (Vazelon 86, d. 1272)

The next question is how the change of pronoun placement spread from na constructions to those instances where the verb is preceded by negative markers, complementizers, and wh-expressions. I base my explanation on Kathol’s (2000) proposal for the appearance of verbal morphology on complementizers and fronted wh-expressions in Dutch and German dialects. Kathol argues that a structural explanation for this phenomenon (i.e., verb movement) is not possible, because there is no motivation for collapsing the categories of complementizer and wh-expression. Instead, he proposes that these forms acquire verbal morphology analogically because, in embedded questions, they typically appear in the same position as the verb. Thus, linear relationships and not structural ones are responsible for the spread of the change. I would suggest that a similar process spread preverbal pronoun placement from na subjunctives to other constructions between EMG and LMG. The unifying characteristic of all forms included in function word is that — like na — they typically appear immediately before the verb since the canonical word order of LMG is VSO.

On the other hand, coordinating conjunctions and oti do not have any clause-typing or subordinating properties and so pronoun placement in these

| ina   | yrapsi  | to       |
|-------|---------|----------|
| Comp  | Head    | WP       |
| na    | to      | yrapsi   |
| Head  | WP      | V        |

Figure 5. Schema for the reanalysis of pronoun position with na.
contexts continues to be associated with the clause-initial pattern. Thus, I do not interpret the postverbal placement of the last me in ina me katafθasi ke polemisi me “to challenge me and fight me” (Digenēs line 100, C&K example 47) as the result of ‘coordination of internal ΣPs’ as C&K do, but rather as the result of the surface association of coordinating conjunctions with postverbal pronoun placement.

It is indeed more difficult to establish why fronted constituents also became associated with preverbal pronoun placement, while other constituents lagged behind in terms of the development of the change. One possible explanation is that the correlation of preverbal pronouns with such elements as the subjunctive marker na and the negative markers ðen and min led to the generalization that pronouns could be preverbal as long as they were preceded by some element that is salient in the interpretation of the verb phrase, as is the case with complement NPs and PPs, and VP adverbials. Reduplicated objects would not be included in this category since they are not part of the verb’s argument structure. Temporal expressions are usually clausal adjuncts, and subjects are rendered partly redundant by pro, so I suggest that speakers were ambivalent about the significance of such elements, hence the free variation in these environments. It is quite possible that the focus/topic distinction was also instrumental in creating this distinction since fronted constituents are more likely to be focused elements than subjects. It must be emphasized that linear relationships such as the ones I propose are by definition weaker than structural ones, which would explain why the pattern of variation appears to be so fluid at first sight.

In the case of the imperative, the fact that the verb is clause-initial in the vast majority of such constructions most likely led to the reinforcement of the postverbal pattern as canonical, with only slight interference from the preverbal pattern associated with the indicative/subjunctive. The complete absence of any preverbal particles or markers in these constructions would also contribute to their separation from the other finite forms. This is also true for gerunds and circumstantial infinitives.

The operation of lexically particular constraints can be seen in the pattern of pronoun placement associated with both olos and an uk. In the first case, the emergence of a preverbal pronoun construction is probably influenced by the existence of a partitive construction, which involved olos and a possessive pronoun. The two constructions are not easily distinguishable, as example (40) shows. Here, the meaning could be either “all, he conquered them” (re duplicated object), or “he conquered all of them” (partitive), and this ambiguity,
I suggest, led to the reanalysis of object pronoun placement with *olis* as described in Figure 6.

(40)  

\[
\begin{array}{cc}
\text{olis tus} & \text{epatise} \\
\text{Q–PS} & \text{V} \\
\text{vs.} & \\
\text{olin} & \text{ynorizis tin} \\
\text{Q} & \text{V–DO} \\
\end{array}
\]

\[
\begin{array}{cc}
\text{reanalysis} & \\
\text{Q} & \text{DO–V} \\
\text{vs.} & \\
\text{changes to} & \\
\text{olin} & \text{tin ynorizis} \\
\text{Q} & \text{DO–V} \\
\end{array}
\]

**Figure 6.** Schema for the change in pronoun placement in *olis* constructions

Finally, with respect to the variation between *uk* and *an uk*, it was shown in §3.1 that the C&K syntactic account encounters some serious problems. Instead, I propose that pronouns appear postverbally with *uk* because it is proclitic (Smyth 1956, Horrocks 1990, Mackridge 1993) and must appear adjacent to the verb. In the case of *an uk*, the two particles form a phonologically independent unit which no longer requires a host. As a result, the preverbal position is free, and, since the verb is preceded by a function word, the pronoun is placed there.

This diachronic explanation of LMG pronoun placement variation implies that the pattern could not have been a stable one. Even though Mackridge (1993) maintains that the pattern of variation is stable and that his “rules” apply for almost six centuries, the data presented in §2.5 indicate that the pattern was stable only in the genre of poetry and not in prose. I speculate, therefore, that the pattern that we witness in the LMG texts was actually short-lived in the vernacular, but its use did become standard in the slightly more refined style of popular poetic speech. These considerations, however, should not be taken as a dismissal of the language of these texts as artificial and disconnected from the spoken language of its time. Instead, as Joseph (2000:317) says, in arguing for the authenticity of infinitival forms and constructions in Later Medieval Greek: “Since many of these texts were pieces of popular literature, intended for a general audience … it must be assumed that the forms and constructions in them were generally accessible to the audience.” Similarly, I would maintain that the pattern of variation in these texts would have been perceived as different, but not incomprehensible.
5. Conclusion

In the foregoing, I have provided a detailed description of the phenomenon of weak object pronoun placement variation in the available LMG texts. I have also demonstrated that even though the statistical analysis of the pattern can help clarify the overall picture, a syntactic account alone cannot explain the variation. C&K’s proposal, which combines a structural mechanism (adjunction) with a phonological one (Prosodic Inversion), also faces some serious challenges, even if their assumption that the pronouns are enclitics is correct. As an alternative, I have proposed that the observed pattern most likely represents a phase during the change from postverbal pronouns in Hellenistic/Early Medieval Greek (EMG) to the various pronoun placement systems of SMG and other dialects. This transitional pattern, however, was preserved as the standard style in LMG poetic texts. I have also proposed that the variation is best understood as the product of analogical change that spread through different constructions on the basis of linear and not structural relationships, and that the striking patterns associated with the quantifier olôs and the negative marker uk are the result of lexically particularized and not general constraints. There are, of course, several important questions that still need to be answered. In order to confirm or disprove this hypothesis, a more detailed examination of pronoun placement in EMG is required, as well as an analysis of prose documents from LMG, when and if these become available. Finally, an in-depth investigation of pronoun placement in Modern Greek dialects would help us understand the different ways in which the change developed.

Notes

* The line of argumentation developed here in response to Condoradi and Kiparsky and the alternative proposal have their seeds in Pappas (2004), Chapter 6 and 7. Figure 4 has appeared in Panayiotis A. Pappas, (2004), Variation and Morphosyntactic Change in Greek: From clitics to affixes, Palgrave Macmillan, and is reproduced with permission from Palgrave Macmillan, for which I thank them. Various parts of this article were presented at the 2002 Annual Meeting of the LSA, and at the 22nd annual conference for Greek linguistics at Aristotle University of Thessaloniki. The research was partially supported by a Presidential Fellowship from The Ohio State University. I would like to thank Brian Joseph, Don Winford, and Carl Pollard for their helpful comments at different stages of this research, as well as Peter Mackridge and Geoffrey Horrocks. The comments of three anonymous reviewers and of the editor of this volume were very important in producing the final version of the article. I, of course, am solely responsible for any errors.
1. Abbreviations: ACC = accusative, DO = direct object, IMP = imperative, INFIN = infinitive, IO = indirect object, NEG = negative marker, NOM = nominative, PAST = past tense, PL = plural, PPP = past passive participle, PRES = present tense, PS = possessive pronoun, SG = singular, SUBJMARK = subjunctive marker, WP = weak pronoun.

2. An anonymous reviewer points out that it might be better to begin with a structural generalization and use it to probe the variation and suggests that Horrocks’s (1997) observation that preverbal clitics are associated with either an operator or a focalized element may be a good starting point. However, Horrocks’s account posits the existence of two separate structures for the LMG clause, which are associated with the phonetic make-up of the conjunction that heads them. Thus, clauses that are headed by a conjunction that has not undergone aphaeresis are different from clauses whose conjunction lacks the initial vowel. I find this association between phonology and clause structure hard to motivate, and so I do not subscribe to Horrocks’s generalization. Furthermore, it is shown later on (§3) that focus cannot be used as an explanation for the variation in pronoun placement.

3. The status of the imperative in SMG is not a resolved matter. Some researchers (Joseph 1978/1990, 1983, 1985, Mackridge 1985, Joseph & Warburton 1987, Horrocks 1990, Nevis & Joseph 1993) consider it a non-finite form because it has the same pattern of pronoun placement as the gerund (postverbal), and it is marked morphologically for number only. On the other hand, Rivero & Terzi (1995), Philippaki-Warburton (1998), Roussou (2000), and Philippaki-Warburton & Spyropoulos (2004) argue that the selectional restrictions that the imperative exhibits with respect to time adverbs and subjects demonstrate that it contains features for tense and agreement; in other words it is a finite form. The similarity of pronoun placement between imperative and gerund is treated as an epiphenomenon of verb movement. In LMG, the presence of some third person imperative forms (even though they are archaisms) and the fact that pronoun placement with imperatives is not the same as it is with gerunds are strong indications that the form has not lost its finiteness at this stage of the language — if, indeed, it ever did.

4. Constructions with $uk$ are not very frequent in the database. The total number of tokens is 77, and they demonstrate a very interesting pattern that is discussed in §3. Similarly, two other factors mentioned by Mackridge, the complementizer $oti$ and the conditional marker $i$, were not included in the statistical analysis, because the number of tokens was too small (38 and 7 respectively).

5. An anonymous reviewer points out that, as a quantifier, this adjective qualifies the weak pronoun, and does not serve as a ‘quasi-argument’ as true reduplicated objects do. However, when one considers structural explanations for the variation, this difference between $olos$ and reduplicated objects does become salient.

6. According to Mackridge, the difference in preverbal pronoun placement is due to the different degrees of emphasis that elements such as objects, nouns, and temporal adverbs receive when they precede the verb. This hypothesis is disproved in Pappas (2004:ch. 4).

7. The ‘circumstantial infinitive’ is an extension of the articular infinitive, but functions as a temporal clause and not as a nominal (Joseph 1978/1990, 1983). There are also several
instances of true complement infinitives, but their usage is considered to be an archaic feature (Horrocks 1997). The same can be said of present active participle constructions.

8. This is clear for the *θelo* periphrases only (cf. Pappas 2004). All four pluperfect constructions occur in preverbal environments. As an anonymous reviewer suggests, this pattern can be accounted for if we adopt a proposal such as Kayne (1993) or Wurmbrand (2001) and treat the participle and infinitive complements as small clauses, and gerunds and circumstance infinitives as heads of their own clause.

9. In my examination of non-Cypriot texts, all three tokens of *διοτι* are associated with preverbal placement.

10. There is one other text of ‘popular’ writing from Medieval Cyprus, the *Assizes* which predates the two chronicles, but, unfortunately, I have not been able to find the entire text. The anthology of Baletas (1949) includes a few brief excerpts which show the same pattern of pronoun placement as the chronicles.

11. In fact, the differences are so great that Rollo, who seems to have based his conclusions mainly on Cypriot texts, arrives at distinctly different conclusions from Mackridge, claiming, among other things, that a preceding subject is always associated with postverbal pronouns.

12. I base this estimate on some surprising preverbal pronoun constructions found in the *Chronicle of Moreas*. See Pappas (2004:ch. 5) for more details.

13. One could also include accounts of Modern Cypriot pronoun placement here (Rivero & Terzi 1995, Terzi 1999), since that pattern resembles the LMG facts in many ways.

14. An anonymous reviewer suggests that there may be a difference between an “if not” and an “unless” interpretation. However, all the tokens in my database have the “if not” meaning only. The following example is quite typical of such constructions.

\[
\begin{align*}
\text{(i)} & \quad \text{na iton oðos omatia mu ke fos mu ke zoi mu} \\
& \quad \text{if were street eyes my and light my and life my} \\
& \quad \text{na ton iðun ta omatia mu na estāðin embrosða mu} \\
& \quad \text{to him see the eyes my so.that he.stood before me} \\
& \quad \text{an ou ton εθανατονa as me liðovolusan} \\
& \quad \text{if not him I.killed let me they.stoned} \\
& \quad \text{“If it were a street, my darling, my light, my life /} \\
& \quad \text{so that my eyes could see him, so that he would stand before me /} \\
& \quad \text{if I were not to kill him, would that they stone me to death” (Achilleid 1612–14)}
\end{align*}
\]

15. For example, Philippaki-Warburton (1998) explains preverbal pronouns in LMG imperative constructions as traces of an older mood system in which the imperative morpheme had not yet moved to the left periphery. However, preverbal pronouns with imperatives can be found well into the 17th century and are even mentioned as part of the modern Cretan dialect (Kontosopoulos 1981).
16. See Joseph (1997) for a description of several phenomena from different languages that cannot be ‘neatly’ captured by overarching generalizations.

17. For a discussion of the nature of oti in LMG see Mackridge (1993) and Jannaris (1968).

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Περίληψη

Στο άρθρο αυτό παρουσιάζονται τα αποτελέσματα μιας ποσοτικής ανάλυσης της θέσης των αδύνατων τύπων των προσωπικών αντωνυμιών που λειτουργούν ως αντικείμενα στα ύστερα Μεσαιωνικά Ελληνικά. Η περιγραφή των δεδομένων συμφωνεί, σε γενικό βαθμό, με τα αποτελέσματα του Mackridge (1993), αλλά επίσης προβάλλει ορισμένες νέες περιπλοκές και διαφεύγει ορισμένες προηγούμενες υποθέσεις. Με βάση αυτά τα αποτελέσματα, ελέγχεται η πρόσφατη πρόταση των Κοντοραβδή και Kiparsky (2001), και αποδεικνύεται ότι η εξήγησή που προσφέρουν όχι μόνο βασίζεται σε μια πολύ αμφιλεγόμενη υπόθεση, αλλά επίσης αδυνατεί να απαντήσει σε μερικά από τα πιο ενδιαφέροντα ζητήματα που θέτουν τα δεδομένα. Τέλος, προτείνεται μια εναλλακτική προσέγγιση του θέματος, η οποία ερμηνεύεται τη διαφοροποίηση που παρατηρείται ως το αποτέλεσμα αναλογικής επίδρασης.