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WEAK OBJECT PRONOUN PLACEMENT IN LATER MEDIEVAL
AND EARLY MODERN GREEK

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of The Ohio State University

By
Panayiotis A. Pappas

The Ohio State University
2001

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ABSTRACT

In the language of Later Medieval and Early Modern Greek texts the position of weak object pronouns seems to vary freely between preverbal and postverbal placement. Although this phenomenon has been investigated before, this study is the first time that a detailed catalogue of the data is provided. Furthermore, the evidence is analyzed and evaluated not only according to the traditional methodology of historical linguistics but also with the use of statistical methods.

The larger database and the use of an innovative methodology cast a new light on the pattern of variation. The results of this research both challenge previous descriptions of the phenomenon and reveal information about certain types of constructions (such as the imperative and infinitival constructions) which had not been investigated in depth before. Moreover, the analysis presented here exposes the effect of certain intralinguistic as well as extralinguistic parameters on the placement of the pronouns. In particular, it is demonstrated that οὐ /u/ 'not' and ἄν οὐ /an u/ 'if not' have opposite effects on the position of the pronoun (postverbal and preverbal placement respectively), and that 'pronoun doubling' constructions with the adjective ὁλος /olos/ 'all', favor preverbal pronouns in contrast with the general pattern for these constructions. On the other hand, it is shown that metrical requirements dictate the position of the pronoun when the verb is preceded by a subject or a temporal expression, and that the Cypriot chronicles are markedly different with respect to pronoun placement.

On the basis of this in-depth examination of the phenomenon it is shown why
previous analyses which employ the mechanism of 'verb-movement' cannot capture the full range of the data. Instead it is proposed here that the variation is in fact complex because it represents a change in progress from Early Medieval to Early Modern Greek.

Finally, it is argued that the results of this study indicate that the weak object pronouns of LMG are affix-like rather than word-like in nature, and that the present analysis raises some crucial questions concerning recent proposals about 'grammaticalization', Kroch's claim that the contexts of syntactic change are abstract, and the scope of generalizations in synchronic analyses.
πάντα ρέι, οὐδὲν δὲ μένει

Heracleitus (Fr. 20)
ACKNOWLEDGMENTS

To professor Brian Joseph, who patiently and diligently read through several drafts of this thesis providing references, pointing out problems, and offering possible solutions, who has led me by the example of his own work, I will never be able to fully express my gratitude.

I would also like to thank professors Don Winford and Carl Pollard—the members of my dissertation committee—for their helpful comments, as well as professor Keith Johnson, who helped me better understand the results of the statistical analysis. In addition, professors Peter Mackridge and Geoffrey Horrocks were more than willing to communicate via e-mail, and provided me with some very important information and encouragement. Much of this research was conducted under a National Science Foundation fellowship, a Foreign Language and Areal Studies fellowship or the OSU Presidential fellowship, all of which I appreciate greatly.

Thanks also go to Steve Hartman Keiser and Jennifer Muller for their support as fellow ABDs, the Changelings reading group for providing a forum to test new ideas, and the OSU Linguistics Department for promoting graduate student scholarship in all possible ways. Finally, I thank my parents and the rest of my family on both sides of the Atlantic for their emotional and financial support, especially during my tour of duty with the Hellenic Navy; and Robin, whose relentless quest for knowledge is a constant source of inspiration.
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CHAPTER 1

INTRODUCTION

The language of popular Greek literature of the late Byzantine period (12\textsuperscript{th}-16\textsuperscript{th} century) displays an ordering phenomenon that can only be described as confounding. The weak pronominal forms that serve as arguments to a verb must be adjacent to it, but may appear either before it or after it, as shown in examples (1) and (2).

(1) πᾶλε σᾶς λαλῶ
   παλε sas lalo
   again you–IO pl WP say–1sg Pres

   ‘Again I say to you’ (Moreas, 715).

(2) πᾶλιν λέγω σᾶς
   palin lego sas
   again say–1sg Pres you–IO pl WP

   ‘Again I say to you’ (Digenēs, 1750).

The present study is a re-evaluation of this phenomenon that challenges not only the analyses that have been proposed so far, but also some important aspects of the description of the facts. Up until the last ten years or so, this phenomenon was noticed mainly by those working on critical editions of manuscripts, and they only offered descriptive lists for the
particular text at hand. In 1989, Antonio Rollo published an article which took a closer look at the phenomenon and noted certain similarities between the variation in Later Medieval Greek (hence LMG) and what has become known as the Tobler-Mussafia 'Law' in the Romance languages. In 1990, a brief description of the facts and a tentative proposal to account for them appeared in Horrocks' survey of clitic position in the history of Greek. It was, however, Mackridge's (1993, 1995) work that brought the phenomenon to prominence by providing a detailed examination of the variation and proposing a set of 'rules' to account for it. Since then, Mackridge's description of the phenomenon has been accepted as the standard.

The factual challenges put forward here arise from the use of a different methodology which combines the traditional belief that 'every attestation counts' with the use of statistical tools to determine which patterns of variation are significant. The crucial change in perspective is that although the belief in the validity of under-represented constructions is not totally abandoned, it is also acknowledged that the evidence in texts represents linguistic performance—not linguistic competence—and may include ungrammatical or less-than-grammatical constructions (recognizing that grammaticality is not necessarily a binary phenomenon). Arriving at an accurate description is thus a delicate exercise in weighing the relative importance of various observations; the researcher's intuition and the power of statistical analysis, in the ideal case, work together to provide the most illuminating results.

Furthermore, this research goes beyond the work of Mackridge in that it presents the facts for non-finite forms (the gerund and the infinitive), as well as for the imperative; these verb-forms are only briefly mentioned in his work. In addition, several subparts to the general problem of weak pronoun placement, which had up to now puzzled researchers, are explained in a principled way that takes into account not only the synchronic data but also the diachronic development of such constructions. Another first for this project is the
serious consideration given to the possibility that metrical requirements may influence the placement of the pronoun, a critical observation since much of the textual evidence comes from poetic texts. Finally, it is shown that, contrary to standard opinion, there is indeed some dialectal difference regarding this phenomenon.

Besides establishing a well-documented description of the facts of pronoun placement variation in LMG texts, which could serve as a credible reference for any future researchers that become interested, this study also provides an assessment of analyses previously proposed as possible explanations for the phenomenon. In doing this it reaches beyond the narrow realm of explanations proposed strictly for LMG, and examines viable accounts that have been put forward for other languages which display a similar variation in weak pronoun placement, most notably in Old Romance languages (Old French, Old Spanish, Old Italian). Most of these attempts have been framed within the GB program of research into Universal Grammar and depend crucially on the mechanism of 'verb-movement'.

However, none of these approaches can explain the entire pattern of variation. The discussion provided here shows clearly that although these analyses can account for the basic facts, they break down in the face of complex variation, and either propose ad hoc solutions or diminish the importance of some exceptions to the predictions that they make. Moreover, the key problematic aspects of the variation are identified and it is shown that the very nature of the problem is such that they cannot be explained in the ways promoted so far. On the basis of evidence from the 17th century, where a clear distinction can be seen between pronoun placement in poetry and pronoun placement in prose, it is argued that the stability of the pattern of variation is the result of a stylistic effect which formalized a pattern of ongoing change. Thus, it is further argued that, although this phenomenon is perplexing from a synchronic perspective, it can be accounted for diachronically.
The account developed here takes into consideration the fact that weak pronouns in the Koiné and Early Medieval Greek period appear rather systematically after the head of the phrase (noun or verb) and proposes that the change to preverbal placement evident in LMG began when a particular preverbal marker was re-interpreted as the head of the verbal phrase. The spread of the innovative pattern is explained as a gradual process based upon the linear order relationships between certain elements and the verb. Once preverbal pronoun placement was established in this core group of contexts, the spread may have halted for a period (as evidenced in the data from Cyprus) but eventually came to cover all instances of finite (non-imperative) verb-forms. As a result of this ongoing change, grammars emerged in which there is no generalization that captures all the facts about weak object pronoun placement in LMG, an unexpected and significant conclusion.

The thesis concludes with a discussion of the theoretical implications of this study. It is argued that the data presented here and their analysis provide further evidence that the commonly made three-way distinction among ‘word’, ‘clitic’ and ‘affix’ is uninformative and that a bipartite categorization of ‘word’ vs. ‘affix’ (albeit with atypical members in each category) provides better insight into the subtleties of the morphosyntactic continuum. Furthermore, it is argued that under this analysis a change from typical to atypical affix is suggested for the period of Medieval Greek, providing yet another counterexample to the ‘unidirectionality’ hypothesis of recent ‘grammaticalization’ proposals. In addition, it is demonstrated that the change from postverbal to preverbal pronoun placement in Later Medieval and Early Modern Greek provides a robust counterexample Kroch’s claim that the contexts involved in syntactic change are abstract. Finally, the fact that there is no generalization that covers LMG pronoun placement is discussed from the synchronic perspective, and some thoughts are offered about the possibility of writing grammars with less-than-perfect generalizations.
Before delving into the particulars of this project, a note about the style of the thesis is in order. The potential readers of this work may have various interests and, thus, different backgrounds. Some may read it out of a simple interest in the Greek language, others may approach it as a study of language change, while others still may be interested in the particulars of the variationist analysis or the more general morphosyntactic issues. The aim of the expository style is to be accessible to those with little or no training in the technical aspects of the analysis, while at the same time providing a detailed description of the facts for the satisfaction of the more technically-oriented readers. The result is a compromise with a number of clarifications which may seem redundant to some, as well as a level of technical discussion and terminology that may present difficulty for others; it is my hope, though, that this compromise will prove successful in helping the thesis reach a wider audience.
CHAPTER 2

PRELIMINARIES TO THE STUDY OF PRONOUN PLACEMENT IN LMG

As stated in the introduction, the main focus of this study is the variation in the placement of weak object pronouns in Later Medieval Greek. The term 'weak pronouns' is used here to refer to a system of forms associated with a corresponding system of personal pronouns. These forms are referred to as 'weak' due the fact that they do not carry independent stress as the full pronouns do, but are rather always phonologically dependent to an adjacent word (either preceding or following). Forms like these are usually referred to as 'clitics' (as is indeed the case for most of the literature on this specific set of forms), but the term is avoided here, at least in the description of the phenomenon, because it is not theory-neutral. Instead, 'clitic' has been used in the literature as a theoretical term which means that for many readers its use would lead them to expect a certain pattern of behavior for these elements. However, the various uses of the term in the literature are many times discordant with each other, a fact that has deprived the term of any meaning and has rendered it a point of confusion instead of illumination (cf. Zwicky 1994). The term 'weak pronoun', on the other hand, does not carry such theoretical baggage, and appears to be the best term to employ for the description of the variation.
The weak pronouns used in the corpus of texts as objects of the verb are presented in Table 2.1.

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<td>/μας/</td>
<td>/σας/</td>
<td>/των/</td>
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Table 2.1: Forms of the weak pronouns in Later Medieval Greek texts.

Direct objects in LMG usually appear in the accusative, although there are certain verbs (ἐπιθυμοῦμαι /επιθυμομε/ 'I remember', διάφέρω /διαφερω/ 'I differ', ἐντρέπομαι /ентрепоме/ 'I am ashamed') that took a direct object in the genitive case in Ancient and

---

1 Glosses are given in broad phonemic transcription.
2 According to Jannaris (1968: §538, 561), these variants were created by analogy to the feminine accusative plural forms of the definite article. According to him the change of Ancient Greek τῆς to τᾶς is due to the influence of the merger of nominative and accusative plural (–ης and –ας, respectively) and took place near the end of the Early Medieval Greek period. He ascribes the emergence and domination of τᾶς to paradigm leveling in the feminine of the definite article where the vowel /i/ was present in four of the six forms.
3 These are the most commonly found forms. However, in Cypriot and Cretan texts one can also find τοῦτο /τουτο/ for feminine genitive singular and τότε /τοτε/ for the accusative plural in all genders. Also, in some texts τῶς /τως/ is found for the genitive plural of the 3rd person.
Hellenistic Greek, and do so to some extent in LMG as well. (In Standard Modern Greek these verbs take objects in the accusative which has become the default direct object case, via an accusative-for-genitive change that had already begun in Medieval times—cf. Jannaris 1968: §1242-1299). Indirect objects, which appeared in the dative case in Ancient Greek appear either in the genitive or the accusative in LMG⁴. (In Standard Modern Greek only genitive forms are accepted as indirect objects, although in the north-eastern dialects the accusative is used as well—cf. Newton 1972, Browning 1983). Thus it is safe to say that in Later Medieval Greek the forms μοῦ, σωῦ, τοῦ-τῆς-τοῦ, τῶν are genitive in form, but function as both direct and indirect object (henceforth DO and IO), while the forms μέ, σέ, τῶν-τῆς-τό are accusative in form but function both as DO and IO also. Finally, the plural form τοὺς is accusative in form but functions as a DO, IO or as a possessive pronoun (PS).

The full pronouns which are associated with the forms in Table 2.1 were rare in use, and were employed mainly for emphasis (Jannaris 1968: §525 ff.). They can be seen in Table 2.2.

⁴ Although they are extremely rare, a few examples of the dative case are found in the corpus, mostly μοῦ /mi/ (1st sg) and σου /sil/ (2nd sg).
The system of full personal pronouns developed in the Early Medieval Greek stages with the extension of /e/ from 1st sg, to 2nd sg (οὐ /σά/ in Hellenistic Greek), then to 2nd pl, and finally to 1st pl (replacing older forms such as οἷ /ἐβί / ἔμοι / ἐμοί, ἡμῖν /αῖμας/ 2nd pl acc, ήμῖν /άμιας/ 1st pl acc—Horrocks 1997: 126-127). In addition, the weak forms of the third person are a creation belonging entirely to this period; the full forms had alternants without /i/ (e.g. ἄτον /ατον/) from which—it is usually claimed (cf. Browning 1983, 9)

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<td>αὐτός, αὐτή, αὐτό</td>
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<td>Acc</td>
<td>ἐμέ(να)</td>
<td>ἐσέ(να)</td>
<td>αὐτόν-αὐτήν-αὐτό</td>
</tr>
<tr>
<td></td>
<td>/ἐμε(να)/</td>
<td>/ἐσε(να)/</td>
<td>/ατον/-/ατιν/-/ατα/</td>
</tr>
<tr>
<td>Gen</td>
<td>ἐμοῦ</td>
<td>ἐσοῦ</td>
<td>αὐτοῦ-αὐτής-αὐτοῦ</td>
</tr>
<tr>
<td></td>
<td>/ἐμο/</td>
<td>/ἐσο/</td>
<td>/ατο/-/ατισ/-/ατυ/</td>
</tr>
<tr>
<td><strong>Plural</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nom</td>
<td>ἐμεῖς</td>
<td>ἐσεῖς</td>
<td>αὐτοῖ-αὐταί-αὐτά</td>
</tr>
<tr>
<td></td>
<td>/ἐμεσ/</td>
<td>/ἐσεσ/</td>
<td>/ατι/-/ατε/-/ατα/</td>
</tr>
<tr>
<td>Acc</td>
<td>ἐμᾶς</td>
<td>ἐσᾶς</td>
<td>αὐτοῦς-αὐτῆς/ας-αὐτά</td>
</tr>
<tr>
<td></td>
<td>/ἐμας/</td>
<td>/ἐσας/</td>
<td>/ατας/-/ατες/-/ατα/</td>
</tr>
<tr>
<td>Gen</td>
<td>ἐμῶν</td>
<td>ἐσῶν</td>
<td>αὐτῶν</td>
</tr>
<tr>
<td></td>
<td>/ἐμον/</td>
<td>/ἐσον/</td>
<td>/ατον/</td>
</tr>
</tbody>
</table>

Table 2.2: Forms of the full pronouns in Medieval Greek (cf. Browning 1983: 62-3).
Horrocks 1997)—the weak pronouns developed via aphaeresis of pretonic initial vowels, a general phonological change of the time. According to Dressler (1966: 57) this hypothesis is untainable because, in his research of the relevant textual evidence, aphaeresis is common with prepositions and relative pronouns but not with the third person pronouns. Joseph (forthcoming) further points out that aphaeresis with initial /a/ was sporadic and considers the Koiné and Ancient Greek pronominal usages of the article τόν—a carryover from its Homeric usage and Indo-European origin—and the emergence of third person relative pronoun τό as the key factors in the development of the weak pronoun system for the third person of personal pronouns.

2.1. Summary of the placement of unstressed elements throughout the history of Greek.

The position of unstressed elements (traditionally referred to as ‘enclitics’, or, for the past 30 years or so, as ‘clitics’) in the clause has been extensively researched for Ancient Greek (Homeric and Classical), as interest was generated by the statement of the well known ‘law’ of Wackernagel (1892) that in the Indo-European languages clitic elements occupied the second position in a clause. Horrocks (1990) considers the position of clitic elements in Greek from a diachronic perspective, stating that these elements have moved from second position in the earliest attested Greek (9th-6th century BC, ex. (1)), to a ‘mixed’ situation in Classical Greek (5th-3rd century BC) where clitics show both an affinity for second position and a tendency to attach to the head constituents that select them as arguments (ex. (2) and (3)).

Later research has shown that this position does not always have to be the second word position but can also be the second daughter (cf. Halpern 1996 for a discussion of this issue).
During the Koiné and Early Medieval Greek period (2nd c. BC-10th c. AD, cf. ex. (4)) “most clitic pronouns follow immediately after the verbs or nouns that govern them …” (Horrocks 1990: 44). In Later Medieval Greek the situation becomes bifurcated: in noun-phrases the pronouns are almost categorically placed after the noun (ex. (5)), while in verb-phrases they appear mostly before the verb (ex. (6)), yet the number of cases in which the pronouns appear after the verb is by no means negligible (ex. (7)).

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6 When the noun is preceded by an adjective the pronoun may appear after the adjective and before the noun, a pattern that Horrocks views as a residual of the 'clitic second' tendency transferred to the phrasal level.
‘the wine of which you wrote me’ (P. Oxy. 1220—from Horrocks 1990: 44).

They search for their mates’ (Katalogia, 708).

‘Again I say to you’ (Moreas, 715).

‘Again I say to you’ (Digenēs, 1750).

---

7 WP stands for ‘weak pronoun’; these are identified as such for Later Medieval Greek and Standard Modern Greek.
Finally, in Standard Modern Greek the position of pronouns in verb-phrases becomes fixed as pronouns appear before the verb (ex. (8)) except when the verb is of imperative (ex. (9)), or gerund form (ex. (10)).

(8) μας μιλα
    mas milo
    we–IO pl WP talk–3sg Pres

'S/He is talking to us.'

(9) μιλα μας
    mila mas
    talk–2sg Impv we–IO pl WP

'Talk to us!'

(10) μιλωντας μας
     milondas mas
     talk–Gerund we–IO pl WP

'Talking to us …'

2.2. Weak object pronoun placement in Later Medieval Greek texts.

This section provides an initial description of the facts concerning the position of weak pronouns that serve as objects in Later Medieval Greek texts. The first observation that can be made, even after a quick examination, is that the pronouns must appear adjacent

1 The polytonic orthographic system of Greek will be used throughout of the thesis for the sake of consistency.
to the verb. There are a few counterexamples to this (ex. (11)) but they are considered to be archaistic formulations, reflecting the freer position of pronouns in earlier periods of the language (cf. Mackridge 1993).

(11) καὶ μὲ ὁ νοῦς ἔσεβασεν
    κε με ο νυς ἐσενασεν
    and I–DO sg WP the mind–Nom sg put–3sg Past

‘And my mind put me …’ (Thrēnos, 1000).

Second, if both the direct and the indirect object of the verb have been pronominalized, the indirect object pronoun precedes the direct object pronoun (ex. (12))

(12) ωσαν οε το ἀφηγουμαι
    οσαν σε το αφιγυμε
    as you–IO sg WP it–DO sg WP narrate–1sg Pres

‘As I am narrating it to you’ (Moreas, 630).

The position, however, of the pronouns with respect to the verb (preverbal or postverbal) is not fixed, and at first glance seems to be unconstrained. For example, in sentences (13) and (14) the pronouns are preverbal and postverbal respectively despite the fact that the syntactic environment and even the content of the clauses are the same.

(13) ὁ δουξ τους ἀποδέχθηκεν
    ο δuks tus aπoδεcxθiken
    the duke–Nom sg they–DO sg WP receive–3sg Past

‘The duke received them …’ (Phlōrios, 304).
The same is true for examples (6) and (7) in the previous section.

Despite this first impression, however, some strong tendencies for the placement of these pronouns can be detected. These were first pointed out\(^9\) by Mackridge (1993, 1995) who recognized the fact that the placement of the pronoun is influenced by the nature of the element which immediately precedes the verb–pronoun (or pronoun–verb) complex.\(^{10}\) In fact, Mackridge’s account is accepted as the standard for understanding this phenomenon (cf. Philippaki-Warburton (1995), Janse (1994, 1998), Janssen (1998)), so in a sense it falls under the rubric of general knowledge concerning the placement of the pronouns.

2.2.1. Mackridge’s account.

In two papers (1993, 1995) Mackridge presents a detailed look at weak pronoun (which he calls ‘clitic pronoun’) placement in the *Digenês* text (plus a few examples from other texts), and successfully shows that this position is not a ‘free for all’ as was previously assumed\(^{11}\). Instead, he demonstrates that there is a strong correspondence

\(^9\) More than a century ago, the Tobler-Mussafia ‘law’ (1886) sought to explain a similar pattern of variation in the pronoun placement of Early Romance languages by looking at the nature of the element immediately preceding the verb-pronoun (or pronoun–verb) complex. Rollo (1989) noticed the similarity and attempted to bring the law to bear on Later Medieval Greek, but he takes most of his data from the Cypriot chronicles, which, as will be demonstrated in chapter 6, differ from the other LMG texts. As has been already stated, Horrocks (1990) also noticed the variation and attempted an explanation; his attempt, however, was in the context of examining the diachrony of ‘clitic’ position, and was not as thorough as Mackridge’s. Finally, this phenomenon was also noticed by Joseph (1978/1990), and briefly discussed by van Gemert (1980).

\(^{10}\) From this point on and for the sake of brevity I will refer to the pronoun–verb or verb–pronoun complex as (verb) complex.

\(^{11}\) As evidence for this assumption, Mackridge notes that editors have felt free to emend pronoun position to fit metrical or content requirements.
between what immediately precedes the verb complex and the position of the weak pronoun. He identifies these correspondences as lists of environments which enter into rule formulations as parameters determining the placement of the pronoun.

These rules are as follows:

1. The order V + P is more or less obligatory:
   a) when the verb-phrase \text{[sic]}\^{12} stands at the beginning of a clause or follows immediately after a coordinating conjunction (και /kei/ ‘and’, οὔδέί /uđel, μηδέ /mîdel/ ‘neither’, η /hi/ ‘or’, ἀλλά /aļla/, μά /ma/, ἀμί /ami/ ‘but’),
   b) when the verb-phrase comes immediately after one of the following:
      the complementizer ὅτι /oti/ ‘that’,
      the causal conjunction διότι /dîoti/ ‘because’,
      the conditional conjunction εἰ /ei/ ‘if’,
      the negative adverb οὐκ /u(k)/ ‘not’,
   c) when the verb-phrase is preceded by an object with the same referent as that of the clitic pronoun (i.e., when the pronoun is resumptive or doubling).\^{14}

2. The order P + V is more or less obligatory:
   when the verb-phrase comes immediately after one of the following:
   the final conjunction ἵνα /hina/ ‘in order to, to’,
   the particles νά /na/ ‘to, in order to’, ὡς /ws/ ‘let’, θά /tha/ ‘future marker’,
   the negative adverbs μή /mi/, μηδέν /mîden/, δέν /den/, οὔδέν /uđen/ ‘not’,

\^{12}In Mackridge’s work the term ‘verb-phrase’ refers to the verb–pronoun complex, and not to VP as it usually does in syntactic theory.
\^{13}The velar stop is retained only before vowels and becomes a velar fricative if in Classical Greek the vowel was aspirated.
\^{14}According to Haberland and van der Auwera (1993) ‘doubling’ and ‘resumptive’ clitics (pronouns) are not the same. They reserve the term ‘resumptive’ for those pronouns that appear in relativized clauses representing the antecedent, and use ‘doubling’ for the situation that Mackridge describes. I will follow their practice and use the term ‘doubling’ only.
all interrogative pronouns and adverbs (τις /tis/, ποιος /pios/ 'who', ἰντα /inda/ 'what', πως /pos/ 'how', διατι/γιατι /dijati/jati/ [also causal] 'why' που /pu/ 'where', πόσος /posos/ 'how much'),
the complementizer πως /pos/ 'that',
all temporal and comparative conjunctions (δντανιδντας /otan/ /onde/ /ondas/ 'when', ἐπι /epi/ 'when', ἐπότε /opote/ 'when', πρωτο /protu/ 'before', πριν /prin/ 'before', ἀφοῦ/ἀφότου/ἀφών /afu/ /afotu/ /afon/ 'since', ἄμα /amal/ 'when', ὡς /os/ 'when, as', καθὼς /kathos/ 'as', ὡσάν /osan/ 'when, as', ὁσάν /san/ 'when, as'),
the conditional conjunctions ἀν /anl/, ἔαν /ean/ 'if',
all relative pronouns (δπου /opu/, δπου /opu/, που /pu/ 'which', ὥς /os/, τόν /ton/ 'who', [etc.], ὧςος /osos/ 'which amount', ὧςτις/ὅποιος/ὅτις /ostis/ /opios/ /itis/ 'whoever').
3. The order P + V is almost obligatory when some semantically emphasized word or phrase (non-temporal adverb, object, or subject, or object complement) precedes the verb-phrase.
4. The order P + V is normal:
when the subject precedes the verb-phrase.
5. The position of the clitic pronoun before or after the verb is relatively free, when a temporal adverb precedes the verb-phrase.

Mackridge's conclusions have been faithfully reproduced here, in the hope that the questions raised about them will resonate with the reader. The first question concerns his use of terms such as 'more or less obligatory', 'almost obligatory', 'normal' and 'relatively free' word order in the formulation of his rules. What is the difference between these terms? Can these differences be quantified? Mackridge mentions statistics a number of times but does not supply the reader with any numerical values for his counts. More importantly, if these differences can indeed be confirmed, what are the underlying
structural explanations for them? That is, what are the reasons for this variation? According to Mackridge (1993: 329) the explanation is two-fold. Part of the placement pattern can be explained in "purely syntactical terms": "there are certain words or classes of words that are followed by V + P ... while there are others that are followed by P + V." But how can a descriptive list such as his rules be a "purely syntactical" explanation? One wonders whether it is possible to state a generalization that covers all these separate words and word classes in a principled way, instead of simply listing them. Most linguists would expect the former, but if the latter proves true, then that in itself is interesting and important. Even, if it is so, however, there should be an explanation why it is this set of words that is associated with preverbal pronoun placement and not another. In essence, Mackridge's rules are mostly stipulative, and do not help us understand the variation.

The other part of the placement pattern is explained as "cases where the pronoun precedes the verb because some constituent is placed before the verb-phrase for reasons of emphasis." Indeed, Mackridge attributes great significance to semantically emphasized elements 'attracting' the pronouns to their position. In fact, he maintains that the distinction among rules (3), (4), and (5) is based on the fact that preverbal objects are more emphatic than preverbal subjects which in turn are more emphatic than preverbal temporal adverbs. However, he does not go into detail about the nature of emphasis or the mechanism of 'attraction'. Given the weight that both of these terms are given in the exposition it is unfortunate that they are not explained more fully.

These questions show that despite Mackridge's contribution, the phenomenon of weak object pronoun placement variation in Later Medieval Greek has not been thoroughly explained. If anything, it has been simply adequately described. In the subsequent chapters empirical confirmation of this description will be sought, and once the facts have been disclosed in detail an explanation for them will be provided. First though, I will describe the methodological basis of this study.
CHAPTER 3

METHODOLOGY

The first of the questions raised in chapter 2, challenging the vagueness of terms such as ‘almost free word order’, ‘more or less obligatory word order’, etc., is in essence a question about methodology, an issue central to this thesis. What is the best way to account for syntactic phenomena of an earlier stage of a language where the evidence comes overwhelmingly¹ from documents such as texts? This is a very pointed question if considered carefully, for texts give us examples of language usage, whereas the traditional way of analyzing syntactic structures is to test our intuitions (Chomsky 1965, 1995), especially about ungrammatical sentences, which are rarely available from texts in the typical case. It would seem then impossible to work in historical syntax within the generative framework, without finding some method of deducing competence by observing performance. Sometimes we are helped in this respect by grammarians of the period who describe the language of their time. For example, Browning (1983: 52-53) reports on the observations of the Atticist lexicographer Phrynichus and his comments on the ‘errors’ of his students who were using Koiné constructions and vocabulary instead of the Classical ones. In Early Modern Greek we even find grammars of the spoken language (e.g., the 1555 grammar of Sofianos (Papadopoulos 1977), or the early 17th century grammars of

¹ We also have to allow that the current stage of a language can provide information about its past, especially via the comparative method or internal reconstruction.
Germano (1622, in Pernod 1907) and Portius (1638, in Meyer 1889). However, there are no contemporary descriptions of the Later Medieval Greek (i.e., before 1550) stage of the language (Joseph 1978/1990: 4). So this is a case where only the texts can provide information about the language.

However, deducing grammaticality judgements from textual evidence is not an easy task. As Lightfoot (1979: 5) has stated:

Usually [in diachronic syntax] one has no knowledge of ungrammatical ‘sentences’, except in the rare instances where a contemporary grammarian may report that certain forms and constructions are not used; one is thus in the position of a child acquiring its first language, who hears sentences being uttered but does not know whether certain other hypothetical sentences are not uttered because they would be grammatically deviant in some principled way or because they have not occurred in his experience as a function of chance.

Lightfoot offers two methodological suggestions that may help overcome this inherent problem in the collection of data for diachronic syntax. The first one is that one must examine as many texts as possible covering as many genres as possible, in order to make sure that what we are describing is not the grammar of a particular individual or of a single literary style. Lightfoot’s second suggestion is that the “… linguist [must be] prepared to use his own intuitions where obvious generalizations can be made” (1979: 6). What he means by this is that even in cases when certain constructions are not attested, we should not immediately assume that they are ungrammatical, but question ourselves if their non-occurrence is simply a matter of chance. One of course has to be very cautious—not everyone’s intuitions about earlier stages will be the same, or even valid.

Another method to remedy the paucity of negative data in diachronic syntax is offered by Joseph (1978/1990: 2): “when there is sufficient attestation, textual evidence
allows for the use of statistical counts in making judgements of acceptability. This is especially so when a diachronic change is reflected in a significant variation in the ratio of the use of one surface configuration to another”. This is precisely the goal of variationist studies, a program spear-headed by Labov (1963) in order to understand how sociolinguistic variation may lead to linguistic change. The methodology of this program was originally employed in studies of phonological and morpho-phonological variation, and has without doubt contributed greatly to the field of linguistics; and since the work of Kroch (1982/1989) it has also been employed in understanding syntactic variation and syntactic change. The basic assumption as stated by Taylor (1994: 19) is that there is “... a fairly direct connection between grammar and usage such that the organization of the grammar is reflected in the patterns of usage.” The word ‘reflected’ is used because, while general usage will follow the syntactic rules of the grammar, there will also be tokens of usage that do not. One has to ask then, what the import of such non-conforming examples is, especially when their relative numbers are small.

The first and most obvious answer would be that we do not expect the grammars that we construct for past stages of a language to have the same descriptive adequacy as contemporary grammars should have. After all we are examining data of language usage, not of linguistic intuitions. Thus we can explain rare counterexamples to otherwise regular patterns as simple slips of attention. There is also, however, a parallel that can be drawn between diachronic and synchronic syntactic studies if we consider the possibility that the deviations come from an area of the grammar that is undergoing change (i.e., from postverbal placement of the pronoun to preverbal placement). It is a possibility that the ongoing change creates a certain level of uncertainty within the speaker/writer. Linguistic intuitions of uncertainty are not uncommon in synchronic syntax either. In fact there is ample evidence concerning ‘question mark’2 judgements of grammaticality where there is

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2 Syntacticians traditionally mark ungrammatical sentences with a star (*), whereas generally accepted sentences are left unmarked. When they want to indicate that they are not sure what the grammaticality
hesitation about the well-formedness of a construction or maybe even disagreement about the well-formedness of the construction between different speakers. In general, if such counterexamples in the texts are rare and do not form significant patterns, they can be set aside without much consideration, essentially being treated as curiosities, much as 'question mark' constructions are treated in synchronic syntax.

Admittedly it is much harder to dismiss evidence that turns up in historical research, because we are always operating under the insecurity that there are other, linguistically non-related reasons for the rarity of a pattern in a corpus. More important, perhaps, is the recognition that, except in rare cases, everything that occurs in a text is a possible utterance (or construction) and thus cannot simply be dismissed. As a result, the historical syntactician is obliged to look at every rare pattern carefully, and to decide whether or not it should be accounted for as part of the grammar.

3.1. Compiling a corpus of texts.

The preceding remarks are general in nature, issues that would be encountered in any historical text-based syntactic study. However, in Later Medieval Greek (indeed, in Medieval Greek in general) we are faced with an additional problem: the influence of the puristic model of Greek that many writers adopted in Post-Classical times and which has been influential in the development of the language up until now. As Joseph (1978/1990: 5) writes:

Because of the overwhelming cultural influence of Classical Greece, Greek writers in Post-Classical times felt compelled to emulate the language and style of the Classical writers. This Atticizing drive resulted in the writing of
many Medieval texts, in what can be called a "learned" style, which were
virtually indistinguishable linguistically from the Greek of over 1,000 years
before their time.

Another potential source of influence on the language of these texts came from the
Romance languages, especially in the period after the conquest of Constantinople by the
crusaders in 1204, and the establishment of Romance-speaking (mainly Italian and French)
feudal lords in Byzantine territory. This concern is mostly voiced about the language of
romantic poetry where many of the themes are common to both the Byzantine and the
Romance literature and where there is speculation about the origin of these poems. Some of
them may be Romance originals translated into Greek, raising the possibility that the
language of these texts may not represent the spoken Greek of the time but, instead, may
show the effects of translation syntax.

It can also be problematic to place these texts chronologically. As I assume is
usually the case with textual evidence from the Middle Ages, there exist several manuscript
traditions and it is not always easy to ascertain which manuscript is closest to the original
writing or the oral tradition upon which a particular work is based. This problem is
compounded by the liberal copying process (so say both Browning (1983) and Horrocks
(1997)) of Byzantine scribes who felt free to 'emend' the texts they were copying
according to their idiom. Joseph (2000a) discusses a similar problem concerning three
infinitival constructions of Medieval Greek, the circumstantial infinitive, the periphrastic
future with θέλω /thaelo/ 'I want' plus infinitive and the periphrastic perfect with έχω /exco/ 'I
have' plus infinitive whose authenticity has been questioned by other scholars. Even
though Joseph shows that these constructions have a "good claim to legitimacy and
authenticity", it is evident that painstaking philological work is required in the collection of
data from Medieval Greek in order to determine which texts can be used as valid
representatives of the spoken language of the time. In the following list I provide the names
of the texts that make up the database as well as the relevant philological information about them that I have compiled from the works of Beck (1993), Browning (1983) and Horrocks (1997); the texts are listed in the rough chronological order of their (estimated) composition. If a text was not included in the database in its entirety, the specific lines examined are indicated in parentheses.

*Basileios Digenēs Akritēs.* This is an epic poem recounting the exploits of the hero Digenēs, a legendary border defender (Akritēs) of the empire who was the son of a Muslim father and a Christian mother (Digenēs: Two-race). Despite the fact that many aspects of the manuscript traditions are disputed, and that there are several questions about the ultimate source and language of the original, it is generally acknowledged that the language of the manuscript of Escorial (15th century) is the earliest extended version of spoken Greek of the Later Medieval Period perhaps reflecting linguistic behavior of the 11th or even 10th century.

*Ptōkhoprodromika.* A collection of satirical poems written in the 12th century, attributed to Theōdoros Prodromos, a member of the Byzantine court who had fallen out of favor (Ptōkho-prodromos: Poor-Prodromos). Not everyone agrees that all the poems have the same author. There is also some dispute as to whether another short poem (100 lines) entitled *Philosophia tou Krasopateros,* and displaying many more modern characteristics should be included in this collection. I did not include it in the database.

*Spaneas.* Another poem of disputed authorship, in which a father advises his son. Most scholars agree it comes to us from the 12th or 13th century.

*Glykas.* Best known for his Chronography, a work in the Koinē, Glykas also penned this largely vernacular poem while he was imprisoned by the emperor Manuel 1st (13th century).

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3 Joseph (1978/1990) also provides an extensive list of primary sources for Medieval and Early Modern Greek. Horrocks (1997) provides detailed analysis about certain texts and genres that are the benchmarks of Medieval Greek literary tradition. Both of these works were extremely helpful in compiling the corpus of this study.
**Poulologos.** An allegorical poem of unknown authorship about a feast of different birds, of unknown authorship. Most scholars agree that it has its origin in Byzantine court (perhaps from Nicæa) and that it was composed in the 14\textsuperscript{th} century.

**Physiologos.** A list of animal descriptions written in the 14\textsuperscript{th} century based on a much larger work written in the Hellenistic Koiné.

**Diēgēsis Paidiophrastos.** Another poem with anthropomorphized animals belonging to the middle of the 14\textsuperscript{th} century, (lines 1-121, 740-1082).

**Diēgēsis Akhilleōs (Achilleid).** Despite the name of its protagonist (Achilles) this work has nothing in common with the Iliad. Rather, its motif is the same as all other romances of the period. It was probably penned in the 14\textsuperscript{th} century.

**Khronikon tou Moreōs.** A chronicle of the conquest of the Moreas province of Peloponnese by the Franks, attributed to a Greek-speaking descendant of the conquerors. The version used in this study was composed, according to most scholars, near the end of the 13\textsuperscript{th} century, (lines 125-1625).

**Historia tou Belisariou.** A poem based on the exploits of a real-life Byzantine general. Several different manuscripts of this work exist; I chose the version given by Bakker and Gemert (1988) as the closest approximation to the original which was probably composed at the beginning of the 15\textsuperscript{th} century.

**Kallimakhos kai Khrysorrhoe.** A story in the chivalric tradition written in verse sometime in the 14\textsuperscript{th} century. Although it bears similarities with similar works from the western romance tradition, scholars are certain that this poem has its ultimate origin in the Byzantine literary tradition, (lines 500-2000).

**Lybistros kai Rhodamné, (lines 1500-3000).** Similar to Kallimakhos kai Khrysorrhoe.
Diēgēsis Apollōniou. This romantic poem is also considered a work of the 14th century. Unlike the two previous ones, however, it is thought to be a translation of an Italian poem that occurred in the western territories of the Byzantine empire.

Phlōrios kai Platziaphlorē (lines 1-1500). Similar to Diēgēsis Apollōniou.

Thrēnos Kōnstantinoupoleōs. An elegy for the fall of Constantinople composed around that time (1453) by someone living in the area.

Thanatikon tēs Rodou. Another elegy recounting the plague that befell the city of Rhodes (1499), composed by native poet Geōrgillas shortly after the event of the plague.

Katalogia. A collection of love songs from the island of Rhodes, compiled before the end of the 15th century.

Phalieros. I have included in my database two works of Marinos Phalieros, a member of the Venetian aristocracy of Crete. They were written during the first half of the 15th century.

Spanos. A quite explicit satire of a Byzantine liturgy, composed during the 15th century. It contains many archaistic elements (which is expected because the ecclesiastical language was highly stylized), though the pronoun placement patterns seem unaffected.

Homilia tou nekrou basilia. A poem in the long tradition of encounters with the dead, Homilia retells the story of a traveller happening upon the remains of a dead king, who warns him about the ephemeral nature of earthly gains. It was probably composed in Crete during the second half of the 15th century.

Apokopos. Another Cretan poem of the 15th century recounting a trip to Hades. This time, though, the reader is advised to enjoy life, for the dead are quickly forgotten.

Khroniko tôn Tokkōn. A chronicle about the Tocco dynasty of Epeiros (North-Western Greece). Written around the beginning of the 15th century, (lines 500-2000).
Diēgēsis tou Aleksandrou. The rhymed version of the Alexander poem, most likely composed in Zakynthos around the beginning of the 16th century, (lines 1-1500).

Depharanas, Tribôlês, Gioustos. All three of these poets are from the Heptanese region (Gioustos and Depharanas from Zakynthos, Tribôlês from Kerkyra (Corfu)). Their works date from the beginning of the 16th century.

Aitōlos. This is a poem from the middle of the 16th century, which does not have a title. According to Bănescu the poem's composer hails from Aitōlia (western Greece), hence the listing.

These are the texts that constitute the database for investigating the position of weak pronouns in Later Medieval Greek and Early Modern Greek. It is obvious that these texts span a rather large time period (roughly five centuries) and were written in different parts of the empire. Most scholars, however, maintain that there is little differentiation within this body of texts, either according to time period, or by geographical origin (cf. Browning 1983, Joseph 1978/1990, Mackridge 1993, Horrocks 1997), especially with respect to the variation of pronoun placement. More significantly, the information about the authors of these texts is lacking in most cases, and what one has to rely on is the educated guessing of philologists. For these reasons the investigation will begin by treating the texts as a single group, as Mackridge himself did.

Unlike Mackridge, however, I have not included the Cypriot texts in this group, for, as I will show in chapter 6, they differ substantially from the other texts with respect to pronoun placement. There are three Cypriot texts from this period. The first one, Assizes, is a text of laws of the period, written in the middle of the 14th century. The other two, Eksēgēsis tēs Glykeias Khōras Kyprou by Makhairas (15th century, sections 175-200 & 300-330), and Diēgēsis Kronikas Kyprou by Boustrōnios (16th century, sections 75-135), are, as the titles indicate, chronicles of events taking place in Cyprus. Boustrōnios'
chronicle starts where Makhairas’ ends. Unfortunately, I only had access to small excerpts from the Assizes, so only the two chronicles were consulted in this study.

For the examination of weak object pronoun placement in Early Modern Greek, the standard editions of the poems of Erôphilê (lines 1-500), Thysia tou Abraam (lines 1-500), and Boskopoula were chosen from the works of the Cretan Renaissance (17th century); in addition, prose texts from Baleta’s Anthologia tês Dēmotikēs Pezografias (Anthology of demotic prose, pages 113-256), also written in the 17th century, were examined. These excerpts are usually two or three pages long, and come from various places of the then Greek-speaking world. Finally, for Early and Middle Medieval Greek, Maas’ (1912) compilation of the rhythmical Acclamations were consulted, since they are believed to be the closest approximation of the vernacular of the time (6th-10th century).

3.2. Accountability and the linguistic variable in morphosyntactic research.

The variationist framework employed in this research was developed as an answer to the problem that the fact of language change over time posed for structural linguistics. Since it is assumed that in order for language to function efficiently it has to have structure, and that structure is equated with homogeneity, the breakdown of structural homogeneity implicit in language change posed the following question: How can languages remain viable while changing? A solution is provided by the ‘variationist’ proposal that

... native-like command of heterogeneous structures is not a matter of multidialectalism or “mere” performance, but is part of unilingual linguistic competence ... in a language serving a complex (i.e., real) community, it is absence of structured heterogeneity that would be dysfunctional.


If language is in essence a heterogeneous system then it is not surprising at all that it remains functional while changing. In the past 40 years or so, a great amount of work has
been invested into showing that there is structure to the variation that is observed in
glanguage, and determining both the intralinguistic (from within the linguistic system) and
extralinguistic (from the social environment) parameters that impose this structure.

The quantitative analysis of variation is built around the notion of a 'variable',
namely the linguistic unit for which there exists variation. The concrete manifestations of
the 'variable' that comprise the whole of the variation are the 'variants'. Thus, in this study,
the 'variable' is 'weak object pronoun placement', whose 'variants' are 'preverbal' and
'postverbal'. Successful variationist studies depend crucially on the correct identification of
the 'variable' and 'variants', and finally on 'accountability', "... perhaps the single most
important methodological maxim for studies of variability" (Winford 1990: 227). What
the principle of 'accountability' requires is that the researcher must be true to his or her data
set, should include all variants of a variable, and when excluding a variant must make this
information explicit and give a reason for the exclusion. Thus, future researchers should be
able to get the same results if they follow the steps of a previous study. In Labov's (1982:
30) words: "all occurrences of a given variant are noted, and where it has been possible to
define the variables as a closed set of variants, all non-occurrences in the relevant
environments." This statement, originally designed for the investigation of morpho-
phonological variation, has faced some criticism as regards syntactic variation and whether it
is in analogous relationship with phonological variation.

The (closed set of) variants of a particular variable were originally construed as
different ways of saying the same thing, and it is not self-evident that this can hold for
syntactic variation the same way that it holds for phonological variation. As Romaine
(1984: 410-11) observes:

The differing semiotic functions of phonological as opposed to syntactic
units are at issue here. The distinction between phonology and syntax
depends upon the acknowledged properties of duality and arbitrariness. The
success of Labovian methods in dealing with phonological variation can be attributed to the arbitrariness of the linguistic sign ... The relationship between the rules of syntax and the meaning of a sentence is by contrast iconic ... In other words, we might say that sentences are not produced as unanalyzed holons, but are interpreted anew on each occasion.

As an example of Romaine’s point consider the following. In the Arvaniti and Joseph (1999, 2000) investigation of voiced stop prenasalization in Modern Greek, there is no question that the prenasalized voiced stop and plain voiced stop variants have the same referent (e.g., both /ambel/ and /obel/ signify ‘vineyard’). The situation however is not so clear with variation at the syntactic level. For instance in Modern Greek both θα /θα/ plus aorist and πρεπει να /prepi na/ plus aorist carry the meaning of ‘inferred certainty’ (Mackridge 1985—cf. example (1) and (2)). The question, however, of whether these two constructions are completely synonymous, and can therefore be used interchangeably, as /ambel/ and /obel/ could be used, cannot be answered without investigating the semantic nuances of each construction. Furthermore, they each might have different syntactic properties.
Makis brought a bail. Giorgos must have spoken to him.

Makis brought a bail. It must be that Giorgos spoke to him.

In order to resolve some of this controversy Romaine (1984:419) offers the following typology in order to distinguish between variables.
The distinction between types 3 and 4 (which have direct relevance to this research) is based, according to Romaine, on two factors. First, type 3 (as seen in the table) is affected by sociolinguistic factors while type 4 is not. Second, variation of type 3 is about the presence or absence of a particular element, while for syntactic variation "a whole construction or arrangement of items which alternates is required."

Similar doubts about the extension of the methodology have also been voiced by Harris (1984), Winford (1984), and Cheshire (1987). They acknowledge that a large part of the problem lies in the inherent difficulty of defining the concept ‘syntactic variable’ in a precise way. In fact Winford (1984) points out that Romaine herself had been inconsistent with the use of her own definition. Despite these apprehensions the three also agree that the concept of the linguistic variable can be extended as an analytical tool beyond the phonological level. Cheshire (1987), however, believes that the extension cannot go further than the morphosyntactic level, while Winford (1993: 142) cautions that “establishing semantic equivalence in such situations requires great care.” The article itself is an example
of such an approach as Winford painstakingly identifies the different strategies that Trinidad Creole employs in the expression of the meanings associated with perfect 'have' in Standard English.

The weak pronouns that are under investigation here appear to be the inhabitants par excellence of morphosyntactic space. However, they do not absolutely conform with Romaine's conditions, as these are stated above: it is not likely that any information will be obtained about the stylistic/social factors that affect the variation, but this is due to the fact that very little of a concrete nature is known about the authors of the texts and the intended audiences. Second, we are not dealing with "the presence or absence of a particular element" as Romaine's classification requires, yet the variation between pre- and post-verbal placement of the weak pronoun is too specific to be classified as a case of variation where "a whole construction or arrangement of items which alternates is required." I believe then that it is safe to assume that this is a case of morphosyntactic variation and that the methodology employed for phonological variables can safely be extended to this study as well.

An additional problem concerning the issue of 'accountability' is defining the 'set of variants'. Many times there are tokens which on the surface seem to belong to the 'set of variants' and therefore to the scope of the study, but in fact do not. The task of distinguishing these tokens is not always an easy or uncontroversial task (see for example Blake 1997, Winford 1992, Rickford et al. 1991 on the correct set of variants for the AAVE copula, and Pappas 1999, 2001 on Early Modern Greek counterfactuals). In the present study of Later Medieval Greek there are three instances of forms which are homophonous with the weak pronouns and may in some circumstances be mistaken for verbal arguments:

1. The possessive pronouns (also weak): Some of the genitive forms of the pronouns (μοῦ, σου, του, τῆς, του, μας, ος, ταιν-τους) also function as possessive pronouns as well (i.e., 'my', 'your', 'his', 'her', 'its', 'our', 'your', 'their'). By Later Medieval Greek
these forms are fixed in post-noun position (Horrocks 1990: 48), and could be interpreted as a verbal argument if they also precede the verb, as in example (3).

(3) εἰς τὴν βουλὴν τοῦ ἔσεβη
in τινι υλιν το ἐσεβί
to the will-Acc sg he-PS sg respect-3sg Past

'He respected his will' (Moreas, 201).

In theory τοῦ could be either a verbal argument of ἔσεβη or a possessive pronoun το βουλὴν. The clue is given by the fact that it does not bear an accent⁴. For if we compare this with example (4), found a few lines above example (3), we see that in this case τοῦ is accented⁵. Thus τοῦ in example (3) can only be a possessive pronoun.

(4) ὁ κόντος τοῦ ἔδωκε
ο κονδος τε ἐδοκε
the-Nom sg count-Nom sg he-IO sg WP give-3sg Past

'The count gave him' (Moreas, 181).

In addition to this distinction, it has also been the case that since the invention of the accent marks in the 3rd century BC, a proparoxytone word (word with the accent three syllables from the end) that is followed by an enclitic is written with a second accent on its final syllable (Smyth 1956: §183c, Kaisse 1982, Warburton 1970). This is also found in Later Medieval Greek texts, distinguishing possessive pronouns from object pronouns in some cases (ex.(5)).

⁴ This, of course, is based on the assumption that written accents, as they appear in the manuscripts, can be taken at face value in interpreting examples. According to Holton (electronic communication—via Mackridge, 11/27/00) "accents are clearly written, at least in the best manuscripts ... enclitics are often joined to the preceding noun or verb ... [and] there are very few ambiguities of the type [mentioned here]". Since I am not examining the manuscripts themselves, however, I remain cautious about what can be inferred from the presence or absence of the accents.

⁵ These accents are not indications of stress, just orthographic indicators about the status of the pronoun. Similarly, in Standard Modern Greek monosyllabic verbs are not written with an accent, even though they are accented phonologically e.g., θα τον δω 'I will see him' not θα τον δω (phonetically [θα τον δα]).
The added accent on δάσκαλόν indicates that the pronoun is enclitic to it.

2. The definite article and relative pronouns. The third person forms (τὸν, τὴν, τό, τοῦ, τῆς, τοῦ, τοῦς, τις—τές—τάς, τά, τῶν—τούς) are also homophonous with the accusative (singular or plural) or genitive (singular or plural) forms of the definite article, while the accusative forms also functioned as relative pronouns in Later Medieval Greek (Horrocks 1997). There is, of course, no confusion between the weak pronouns and the forms of the definite article that are homophonous to them, because as was mentioned above a weak pronoun that is placed after the head that selects it loses its accent marking. On the other hand, a definite article that precedes a noun or adjective does not lose its accent. This method of disambiguation is illustrated in example (6).
‘They fear Belisarius and (also) love him’ (Belisarios, 203).

There is, however, potential for confusion between the weak object pronouns and the relative pronouns, as they can both appear before verbs and be written with an accent. Consider, for example, the following example from Poulologos (267):

(7) τὴν ὀχλησιν τὴν ἐλέην

tin oksiisin tin elxein

the commotion–DO sg ??? have–3pl Past

The question here is whether the second τὴν is a personal pronoun or a relative pronoun. Is the correct translation of the phrase ‘the commotion, they had it’ or ‘the commotion which they had’?

This question, in fact, seems to have been the impetus for Mackridge’s (1993) work concerning the problem of weak pronoun placement in Medieval Greek. Mackridge accurately shows that in phrases such as the one above, the second τὴν can only be a relative pronoun, making the translation ‘the commotion which they had’ the only possible
one. A personal pronoun which is coreferent with a full noun-phrase (otherwise known as a 'doubling pronoun'—Mackridge (1993)) would have to appear postverbally.

(8) τὴν γνώμην ἔχεις τὴν
τιν γνώμην ἔξεις τιν
the opinion-DO sg have-2 sg Present she-DO sg
'the opinion, you have it' (Poulologos, 571).

These are the major issues concerning the identification of appropriate tokens for the study of variation in the placement of weak object pronouns in Later Medieval Greek. Further details about specific tokens will be presented along with the analysis of the major patterns. A final comment regarding 'accountability' concerns the length of the texts used. Ideally, each text would contribute the same number of tokens to the database so that they would all have the same weight in the statistical study. However, given the differences in the length of texts and the fact that the frequency of certain constructions differs according to the genre of writing—for example paraenetic poems have a preponderance of imperative forms—this would be impossible to achieve without limiting the breadth of the research. Admittedly, this is a slight disadvantage for the statistical analysis but it does not compromise it in any serious way.

Based on this methodological approach, the next chapter presents a detailed account of the variation in weak object pronoun placement in Later Medieval Greek texts. In order to facilitate the comparison with Mackridge's account, the analysis follows the general frame of his description, either confirming or disproving his observations.
CHAPTER 4

RESULTS OF THE ANALYSIS

4.1. Raw Data.

Since Mackridge’s rules address the facts of pronoun placement variation for finite, non-imperative verb-forms, this presentation begins with the findings for the same category.¹ In Appendix A, the results of the search are given by text (as these are listed in chapter 3), but here they are listed according to Mackridge’s classification in order to provide a point of comparison.

• When the (verb–pronoun) complex stands at the beginning of a clause the pronoun immediately precedes it 59 times and immediately follows it 719 times.
• When the complex is immediately preceded by a coordinating conjunction the pronoun is placed preverbally 58 times and postverbally 681 times.
• When the complex is immediately preceded by διὰ /dīa/ ‘that’ the pronoun is placed preverbally 8 times and postverbally 30 times.
• When the complex is immediately preceded by διὰ /dīa/ ‘because’ the pronoun is placed preverbally 4 times and postverbally 0 times.
• When the complex is immediately preceded by τὰ /ta/ ‘if’ the pronoun is placed preverbally 0 times and postverbally 1 time.

¹ The results concerning the imperative verb-forms as well as the non-finite ones (infinitive, participial) will be addressed in chapter 5.
• When the complex is immediately preceded by oû(u(k) 'not' the pronoun is placed
preverbally 0 times and postverbally 57 times (although notice the discussion about āv
oû /an u/ 'if not' in chapter 5).
• When the complex is immediately preceded by a reduplicated object, the pronoun
(which doubles it) is placed preverbally 39 times and postverbally 79 times.
• When the complex is immediately preceded by īva /ina/ 'to, in order to' the pronoun is
placed preverbally 24 times and postverbally 0 times.
• When the complex is immediately preceded by vā /na/ 'to, in order to' the pronoun is
placed preverbally 1436 times and postverbally 3 times.
• When the complex is immediately preceded by āś /as/ 'let' the pronoun is placed
preverbally 65 times and postverbally 1 time.
• When the complex is immediately preceded by a negative adverb the pronoun is placed
preverbally 431 times and postverbally 3 times.
• When the complex is immediately preceded by any interrogative pronouns or adverbs
the pronoun is placed preverbally 164 times and postverbally 2 times.
• When the complex is immediately preceded by ūw /pos/ 'that' the pronoun is placed
preverbally 3 times and postverbally 0 times.
• When the complex is immediately preceded by any temporal or comparative conjunction
the pronoun is placed preverbally 237 times and postverbally 1 time.
• When the complex is immediately preceded by āv /an/, or ēāv /ean/ 'if' the pronoun is
placed preverbally 84 times and postverbally 1 time.
• When the complex is immediately preceded by a relative pronoun the weak pronoun is
placed preverbally 275 times and postverbally 3 times.
• When the complex is immediately preceded by a non-temporal adverb the pronoun is
placed preverbally 295 times and postverbally 33 times.
• When the complex is immediately preceded by an object\(^2\) or object complement the pronoun is placed preverbally 357 times and postverbally 21 times.

• When the complex is immediately preceded by a prepositional phrase the pronoun is placed preverbally 246 times and postverbally 36 times.

• When the complex is immediately preceded by the subject the pronoun is placed preverbally 334 times and postverbally 130 times.

• When the complex is immediately preceded by a temporal expression\(^3\) the pronoun is placed preverbally 86 times and postverbally 63 times.

These results are summarized in Table 4.1:

\(^2\) Mackridge also includes subject complements in this subgroup, but this classification seems unjustified as there is no reason to believe that a subject complement's canonical word order would not be before the verb, as it is for the subject itself. Instead I have added fronted prepositional phrases to this subgroup, a category of constituents that Mackridge does not mention in his rules.

\(^3\) Mackridge only discusses the temporal adverbs παλιν /palιn/ 'again', τότε/hote/ 'then', πάντα/panda/ 'always' and εφόσ/efosis/ 'immediately'. In this study, however, the category has been expanded to include all temporal expressions.
<table>
<thead>
<tr>
<th>Preceding element</th>
<th>PRE V</th>
<th>POST V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial</td>
<td>59</td>
<td>719</td>
</tr>
<tr>
<td>Coordinating conj</td>
<td>58</td>
<td>681</td>
</tr>
<tr>
<td>στι ‘that’</td>
<td>8</td>
<td>30</td>
</tr>
<tr>
<td>διότι ‘because’</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>εί ‘if’</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>οὔκ ‘not’</td>
<td>0</td>
<td>57</td>
</tr>
<tr>
<td>Reduplicated object</td>
<td>39</td>
<td>79</td>
</tr>
<tr>
<td>ένα ‘to, in order to’</td>
<td>24</td>
<td>0</td>
</tr>
<tr>
<td>νά ‘to, in order to’</td>
<td>1436</td>
<td>3</td>
</tr>
<tr>
<td>ἂς ‘let’</td>
<td>65</td>
<td>1</td>
</tr>
<tr>
<td>μη, μηδὲν, οὐδὲν, δὲν ‘not’</td>
<td>431</td>
<td>3</td>
</tr>
<tr>
<td>Interrogative pronouns</td>
<td>164</td>
<td>2</td>
</tr>
<tr>
<td>ποσ ‘that’</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Temporal &amp; Comparative conj</td>
<td>237</td>
<td>1</td>
</tr>
<tr>
<td>ἄν, ἐάν ‘if’</td>
<td>84</td>
<td>1</td>
</tr>
<tr>
<td>Relative pronouns</td>
<td>275</td>
<td>3</td>
</tr>
<tr>
<td>Object</td>
<td>357</td>
<td>21</td>
</tr>
<tr>
<td>Adverb (non-temporal)</td>
<td>295</td>
<td>33</td>
</tr>
<tr>
<td>Prepositional Phrase</td>
<td>246</td>
<td>36</td>
</tr>
<tr>
<td>Subject</td>
<td>334</td>
<td>130</td>
</tr>
<tr>
<td>Temporal expression</td>
<td>86</td>
<td>63</td>
</tr>
</tbody>
</table>

Table 4.1: Results of token count based on Mackridge’s categorization.
If we compare these results with Mackridge’s (1993: 340-1) statements in his “Summary of Rules” the first discrepancy that is evident concerns the causal conjunction διότι. While Mackridge asserts that when διότι is immediately followed by the verb complex, the pronoun appears postverbally, the results of this study show that the placement of the pronoun is preverbal. The number of tokens for διότι in this database is extremely small, but Mackridge does not provide us with the number of his tokens which would facilitate the comparison between these findings and his. One possible explanation for this discrepancy may be the fact that Mackridge’s relevant example comes from the Chronicle of Makhairas (14th century) which was written in Cypriot Greek. As will be demonstrated in a later chapter (6), there is a significant difference in LMG between Cypriot Greek and the Greek of other areas with respect to pronoun placement.

Furthermore, in the case of εί, the facts are a bit puzzling. In six of the seven tokens in this database, εί never immediately precedes the verb–pronoun complex, because the contrastive particle δέ [δέ] is interpolated.

4 Mackridge’s findings seem to confirm this observation. Of his three εί examples, two of them (his 5 and 16a) actually have εί δέ while the third (his 6) has εί δέ καί (examples repeated here as (1), (2), and (3) respectively). It is hard to see how these three examples constitute cases in which εί immediately precedes the verb–pronoun complex.

(1) εί δέ σωμβείνει σε

i δέ σιμβέ σε

if though happen–3sg Pres you–IO sg WP

‘If though it happens to you …’ (Spaneas, 209).

* The only token in which εί immediately precedes the complex is Phlòrios (ln. 1013).
(2)  
ει  δε  κρατεις  την  
i δε  κρατις  τιν  
if though  hold–2sg Pres  her–DO sg WP

'if, though, you hold her' (Achilleid, 53).

(3)  
ει  δε  και  αγαπας  την  
i δε  κε  αγαφας  τιν  
if though and  love–2sg pres  her–DO sg WP

'but if you love her' (Digenēs, 282).

Mackridge does notice this interpolation but he claims that it does not affect the rule (1993: 328 fn.1). However, from a logical standpoint it does, since the rule is formulated with the phrase "immediately precede."

Furthermore, if one considers the role that δε plays in the variation, the data show that when the complex is immediately preceded by δε the pronoun is placed postverbally 11 times and preverbally 3 times. More importantly, there is one token in which δε follows the conditional conjunction ἐκ, and the pronoun appears postverbally (cf. example (4)), even though, as Mackridge himself points out, ἐκ is associated with preverbal pronoun placement.

(4)  
ἐκ  δε  εὑρουν  με  
eον  δε  εὑρυν  με  
if though  find–3pl Pres  me–DO sg WP

'if though they find me' (Achilleid, 178).

Thus, Mackridge’s statement that δε does not affect the placement of the pronoun cannot be correct. For this reason, in the next section δε is considered as a factor while ει is not.
4.2. Statistical Analysis of Variation.

Except for the case of διώτι and εί the general pattern of variation discussed by Mackridge is confirmed by the findings listed above. For the environments that he identifies as affecting postverbal placement, there are indeed more tokens in the postverbal column, and for those environments that he identifies as affecting preverbal placement there are more tokens in the preverbal column. Furthermore, there are slight differentiations in the robustness for each pattern that would suggest that there are different levels of variation; for example, when an overt subject immediately precedes the verb–pronoun complex the pronoun is placed preverbally 334 times and postverbally 130, while for an immediately preceding object the respective numbers are 357 and 21. These numbers are different, obviously, but one cannot determine if they are significantly different, and, moreover, the magnitude by which they differ without the use of a statistical analysis.

In the remainder of this chapter I will present the results of comparison tests that I conducted using standard statistical tools in order to determine which of the several patterns of variation are different. In accordance with standard practice for variationist studies I identify in Table 4.2 the 'variable' (the linguistic unit for which there exists variation), the 'variants' (the concrete manifestations of the 'variable' that are in competition), the 'factor groups' (the larger categories affecting the variation) and the individual 'factors' (the particular elements that comprise the 'factor groups').
<table>
<thead>
<tr>
<th>variable</th>
<th>weak object pronoun placement</th>
</tr>
</thead>
<tbody>
<tr>
<td>variants</td>
<td>preverbal</td>
</tr>
<tr>
<td></td>
<td>postverbal</td>
</tr>
<tr>
<td>factor group</td>
<td>immediately preceding element</td>
</tr>
<tr>
<td>factors</td>
<td>initial</td>
</tr>
<tr>
<td></td>
<td>coordinating conjunction</td>
</tr>
<tr>
<td></td>
<td>δέ</td>
</tr>
<tr>
<td></td>
<td>δ'τι</td>
</tr>
<tr>
<td></td>
<td>ού(κ)</td>
</tr>
<tr>
<td></td>
<td>reduplicated object</td>
</tr>
<tr>
<td></td>
<td>νά, ἰνα, ὁς, πος</td>
</tr>
<tr>
<td></td>
<td>negative markers</td>
</tr>
<tr>
<td></td>
<td>ἔν, ἀν</td>
</tr>
<tr>
<td></td>
<td>temporal/comparative conjunctions</td>
</tr>
<tr>
<td></td>
<td>relative pronouns</td>
</tr>
<tr>
<td></td>
<td>interrogative pronouns</td>
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<tr>
<td></td>
<td>object</td>
</tr>
<tr>
<td></td>
<td>adverb (non-temporal)</td>
</tr>
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<td>prepositional phrase</td>
</tr>
<tr>
<td></td>
<td>subject</td>
</tr>
<tr>
<td></td>
<td>temporal expression</td>
</tr>
</tbody>
</table>

Table 4.2: Design of variationist analysis.

The specific statistical tools used here are the ‘one-way ANOVA’ which evaluates if the variation between several factors is significant, and the ‘Tukey-Kramer HSD’, which allows for a comparison between pairs of factors within a group. Both tests were run by the software program JMP version 3.2.1. Once these tests revealed which factors were significant, the GoldVarb version 2.0 program for Macintosh (Rand and Sankoff 1990) was used to determine the probability of a specific factor affecting a preverbal or postverbal

5 The list of factors is essentially the same as the list of environments identified by Mackridge (see Table 4.1), except that some are grouped together due to structural similarities and to facilitate the statistical analysis.
The results are presented in summary here, but the details of these comparisons are available in Appendix B.

The first aspect of the distribution, seen in Table 4.1 above, which was tested was whether Mackridge’s grouping of several environments in a single rule is valid. The rules that present such groupings are:

Rule (1), in which ‘initial’, ‘coordinating conjunction’^7 (rule 1a), ‘doubling pronoun’ (rule 1c) and δτ and ού (rule 1b) are grouped together.

Rule (2), in which a large number of particles, pronouns and conjunctions are grouped together.

Rule (3), in which a fronted non-temporal adverb, object, and object complement are grouped together (because, according to Mackridge, they become emphatic once fronted).

In order for these groupings to be validated two requirements need to be satisfied.

The statistical analysis has to show that the variation between the factors that are grouped together is not significantly different, and second the factors should all belong to a category that would justify the similar behavior. In the following discussion the results of the statistical tests will be presented first and then justification for the groupings will be sought.

The comparison tests show that of those factors that favor the postverbal placement of the pronoun, namely those included by Mackridge in rule (1), there is no significant

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^6 Choosing which one of the two to measure for is called ‘selecting an application value’. The GoldVarb tables include three probability values:

‘Input probability’ is the probability of a particular application value being realized even if the specified factors are not present.

‘Weight’ is the probability of the application value being realized due to a specific factor. Greater values indicate a greater probability, with 1.00 being the maximum (signifying categorical realization of the application value).

‘Input and Weight’ is the combined effect of ‘input probability’ and ‘weight’ on the probability that the application value will be realized.

In the body of the text I will only present the relevant ‘weight’ values. The full tables are given in Appendix C, at the end of this chapter.

^7 Since the tokens for δε are extremely few and since due to its contrastive function one could suppose that it introduces a clause much like a coordinating conjunction, I have included the δε tokens with the ‘coordinating conjunction’ tokens.
difference between the factors 'initial', 'coordinating conjunction', 'ōti', and 'ōu', but the factor 'doubling pronoun' is significantly different from all of the above (see Appendix B, Figure 4.1).

The GoldVarb analysis (application value: postverbal placement) provides the following results:

<table>
<thead>
<tr>
<th>Factor</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>'ōu'</td>
<td>1.00</td>
</tr>
<tr>
<td>'coordinating conjunction'</td>
<td>0.587</td>
</tr>
<tr>
<td>'initial'</td>
<td>0.482</td>
</tr>
<tr>
<td>'ōti'</td>
<td>0.308</td>
</tr>
<tr>
<td>'reduplicated object'</td>
<td>0.188</td>
</tr>
</tbody>
</table>

Table 4.3: Weight values of factors favoring postverbal pronoun placement.

In the examination of the factors that favor preverbal placement of the pronoun, the one-way ANOVA shows that, within rule (2) there is no significant difference between the individual environments identified as factors by Mackridge (see Figure 4.2 in Appendix B). Similarly in rule (3), factors (non-temporal) 'adverb', 'prepositional phrase' and 'object' are not significantly different from each other (see Figure 4.3 in Appendix B). With these sub-groupings in mind, the factors that favor preverbal placement can be identified as follows:

8 The GoldVarb application does not allow one to enter values in which the variation is categorical as it is for 'ōu' (100% postverbal). It should also be noted that the number of tokens for 'ōti' is too small for a valid statistical comparison; the result, therefore, is merely suggestive.
• 'function word'. This is a cover-term for all the elements listed under Mackridge's second rule (cf. chapter 2 section 2.2.1), namely complementizers, wh-phrases, and markers of various functions.

• 'fronted constituent'. This refers to the constituents listed in Mackridge's third rule, i.e., objects, non-temporal adverbs, and prepositional phrases.

• 'subject'. This factor covers Mackridge's fourth rule.

• 'temporal expression'. This final factor refers, in effect, to Mackridge's fifth rule, but takes into account a wider range of temporal adjuncts than the few adverbs that Mackridge listed (see fn. 3 in this chapter).

The comparison tests for these four factors show that 'function word' is significantly different from the other factors, and so is 'fronted constituent'. Factors 'subject' and 'temporal expression', on the other hand, do not differ significantly from each other, but they are different from 'function word' and 'fronted constituent' (see Figure 4.4).

The GoldVarb analysis (application value: preverbal placement) yields the following probability values.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>'function word'</td>
<td>0.802</td>
</tr>
<tr>
<td>'fronted constituents'</td>
<td>0.139</td>
</tr>
<tr>
<td>'subject'</td>
<td>0.044</td>
</tr>
<tr>
<td>'temporal expression'</td>
<td>0.022</td>
</tr>
</tbody>
</table>

Table 4.4: Weight values of factors favoring preverbal pronoun placement.
4.3. Interpreting the results.

Discovering the category that the factors ‘initial’, ‘coordinating conjunction’, ὅτι, and ὦ ὑ all belong to is slightly complicated. The factor ‘coordinating conjunction’ may fall under the rubric of ‘initial’ if we assume that as conjunctions they link clauses without belonging to either one of them, thus leaving the following verb in clause-initial position. With respect to ὅτι, Mackridge (1993) mentions that it shows a pattern of “incomplete subordination”, functioning more as a link between clauses rather than the first element of a subordinate clause. This position about Medieval and Early Modern Greek ὅτι is also supported by Jannaris (1968: §2031-2032) who maintains that

... very frequently the indirect discourse, though opening with the infinitive or by ὅτι (ὡς) passes suddenly to the direct discourse ... In this popular mode of direct discourse, it is very common to indicate the dependence of the verbatim clause by placing before it the conjunction ὅτι, which then seems redundant ... and corresponds to our modern colon (:) ...

Thus it seems reasonable that the cases in which the complex is immediately preceded by the conjunction ὅτι also fall under the rubric of ‘initial’.

If it can also be shown that the cases involving ὦ ὑ should be subsumed under the category of ‘initial’, this would provide a generalization for the entirety of Mackridge's first rule, a much desired result. One avenue that seems promising takes into consideration the claim by both Mackridge (1993, 1995) and Horrocks (1990) that ὦ ὑ is not an independent word but rather a ‘proclitic’ whose phonological host is the verb.⁹ If this is true, then the placement of the pronoun when the complex is immediately preceded by ὦ ὑ may be an

⁹ Smyth (1956), Jannaris (1968: §97) and West (1982) also support this view for ὦ ὑ in Ancient Greek; thus, its proclitic status may have been maintained into Later Medieval Greek. It must be mentioned here that Mackridge's use of the proclitic status of ὦ ὑ and ἐλ as an explanation for the postverbal placement of the pronoun in their environment is a phonological argument, and leaves one to wonder why Mackridge (1993: 329) characterizes rule (1) as a case “where the placement of the pronoun before or after the verb can be explained in purely syntactic terms”.

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epiphenomenon of the location of the entire string où–verb–pronoun. In particular, if in all ‘ou cases’ this compound was at the beginning of a clause, then we could easily explain this as another instance of the effect of factor ‘initial’. However, the actual tokens involving où show a more complicated pattern. In the majority of these (31 out of 56), the où–verb complex is either at the beginning of the clause, or follows a coordinating conjunction, as in example (5).

(5) Oùk ástoXei to
uk astoxi to
not miss–3sg Pres it–DO sg WP

‘He does not miss it’ (*Achilleid*, 767).

In the other cases, the où–verb complex is preceded by an element of the same clause, but in most of these (18) the specific element is either a subject (cf. example (6)) or a temporal expression, while in the remaining seven we find either object complements or non-temporal adverbs. Why then does the pronoun appear postverbally in all these cases, instead of varying between preverbal and postverbal position? After all, if où is to be considered as prosodically or syntactically attached to the verb, then one would expect that the presence of an object or non-temporal adverb before the où–verb complex would be associated with preverbal pronoun placement. Does this mean that où should not be grouped with all other factors that have just been subsumed by the factor ‘initial’? This question will be addressed in the next chapter.

(6) thi Xe ou kataponei to
nikta u kataponi ton
night–Nom sg not tire–3sg Pres he–DO sg WP

‘... night does not tire him’ (*Lybistros*, 2534).

Moving on to Mackridge’s second rule, the individual factors listed there do not form a natural category. With respect to function, some of these elements introduce
subordinate clauses (e.g. the complementizers δεν ‘when’, ἀν ‘if’), while others (e.g. the
wh-phrases) introduce both subordinate and main clauses, i.e., interrogative sentences.
Furthermore, some elements have very distinct functions but the same pattern of pronoun
placement, while others have very similar functions but a contrasting effect on pronoun
placement. The negative markers exemplify this. On the one hand, μὴ and δὲν are very
distinct from one another, as the former is used in subordinate clauses, gerund constructions
and prohibitives whereas the latter is used only in main clauses. Nevertheless, they are both
associated with preverbal placement. On the other hand, both δὲν and οὗ are used in the
same context (main clauses), yet οὗ, unlike δὲν, is associated with postverbal
placement.
Thus, the reason why the elements listed under ‘function word’ are associated with the
same pattern of pronoun placement cannot be found in their grammatical function.

Nor is it possible to argue that these elements form a natural category based on their
position in a phrase-structure tree. At least under common assumptions in GB,
complementizers occupy the C node, wh-phrases are found in Spec CP while markers (such
as νά and ἀς) head their own functional projections. Understanding why all these elements
are associated with the same pronoun pattern is indeed a difficult task, and it will be
approached from different perspectives in the following chapters.

The constituents listed in rule (3), however, seem to form a natural class. These
elements should normally follow the verb, as the canonical word order in Medieval Greek is
considered to be SVG (Mackridge 1993, Taylor 1994, Horrocks 1997). The fact that they
are all fronted in these constructions where the pronoun appears preverbally may be the
unifying feature that underlies the similarity in pronoun placement, and justifies grouping
these contexts under factor ‘fronted constituent’.

Finally, as with rule (2), the question of whether or not ‘subject’ and ‘temporal
expression’ should be grouped together cannot be addressed at this moment but will be
explored in more detail in chapter 6.
For the moment, it will be enough to say that, at least from a descriptive perspective, the results of the statistical analysis of the variation differ from Mackridge’s initial observations as follows:

- The results show that the ‘reduplicated object’ of the ‘doubling pronoun’ construction does not favor postverbal placement as much as the other factors of Mackridge’s rule (1).
- Contrary to Mackridge’s four-level partition of the factors associated with preverbal placement, the statistical analysis reveals a three-level partition, in which rule (2) (‘function word’) shows the most robust pattern of preverbal placement, rule (3) (‘fronted constituent’) is associated with a less robust pattern, while rules (4) and (5) (‘subject’ and ‘temporal expression’) show a much weaker pattern.

There is one last point about Mackridge’s presentation of the rules that needs to be made and it concerns the language of the statements. Mackridge uses vague terms such as ‘more or less obligatory’ and ‘almost obligatory’, yet there is still the sense that these categories are organized into a hierarchy. For example, he uses the phrase ‘more or less obligatory’ to describe the consistency of the pattern in both rules (1) and rule (2). Thus, even though the two rules deal with different overall placement of the pronoun (postverbal and preverbal, respectively), there is a clear implication that the constraint is equally strong in both cases. It has already been demonstrated, however, that this cannot be true since the factors grouped together by Mackridge under rule (1) have different weights.

The statistical tests whose results were reported above indicate that within the two larger patterns (postverbal and preverbal) there is indeed a certain hierarchy of variation patterns and it can be identified by the respective weight of each factor. However, accepting this hierarchy, and making comparisons between the factors that favor preverbal placement and those which favor postverbal placement may be premature, since the reasons for the
variation have not been investigated in depth. Even though it seems that 'function word' as a factor, for example, effects a stronger pattern of preverbal placement than the factor 'subject', this need not be due to a structural difference between the two. The possible alternative explanations can either be linguistic (e.g. the existence of variation within a particular factor that has not been recognized) or extralinguistic (e.g. a particular factor is weighted differently in texts from a certain geographical area or a certain period). These avenues of investigation will be pursued in the next chapters.
APPENDIX

A. Raw Counts

<table>
<thead>
<tr>
<th>Factor → Text</th>
<th>Initial</th>
<th>Co-ordinating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PRE V</td>
<td>POST V</td>
</tr>
<tr>
<td>Digēnes</td>
<td>1 25 3 69</td>
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<tr>
<td>Ptochōprod.</td>
<td>0 18 0 41</td>
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</tr>
<tr>
<td>Glykas</td>
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<tr>
<td>Spanēas</td>
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<td></td>
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<tr>
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<td></td>
</tr>
<tr>
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<td></td>
</tr>
<tr>
<td>Achilleid</td>
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</tr>
<tr>
<td>Belisarios</td>
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</tr>
<tr>
<td>Thrēnos</td>
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</tr>
<tr>
<td>Poulologos</td>
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<td></td>
</tr>
<tr>
<td>Paidiophr.</td>
<td>0 20 0 16</td>
<td></td>
</tr>
<tr>
<td>Physiologos</td>
<td>0 11 1 19</td>
<td></td>
</tr>
<tr>
<td>Spanos</td>
<td>1 22 2 7</td>
<td></td>
</tr>
<tr>
<td>Aitōlos</td>
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<td></td>
</tr>
<tr>
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</tr>
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<td>Depharanas</td>
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<td>Katalogia</td>
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</tr>
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<td>TOTAL</td>
<td>59 719 58 681</td>
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</tr>
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</table>

Table 4.5: Raw counts of pronoun placement for factors ‘initial’ and ‘co-ordinating conjunction’.

54
<table>
<thead>
<tr>
<th>Factor→</th>
<th>διότι</th>
<th>PRE V</th>
<th>POST V</th>
<th>δτι</th>
<th>PRE V</th>
<th>POST V</th>
</tr>
</thead>
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<tr>
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Table 4.6: Raw counts of pronoun placement for factors 'διότι' and 'δτι'.
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<tr>
<th>Factor→</th>
<th>oů(k)</th>
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<th>PRE V</th>
<th>òē</th>
<th>POST V</th>
<th>Red. Object</th>
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<td>3</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Katalogia</td>
<td>12</td>
<td>0</td>
<td>16</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

| TOTAL | 237 | 1 | 84 | 1 | 3 | 0 |

Table 4.10: Raw counts of pronoun placement for factors 'temporal/comparative conjunction' 'ἐκατ', ἄν', 'πόσ'.

59
Table 4.11: Raw counts of pronoun placement for factors ‘object’, ‘prepositional phrase’, and ‘non-temporal adverb’.
<table>
<thead>
<tr>
<th>Factor→</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text↓</td>
</tr>
<tr>
<td>PRE V</td>
</tr>
<tr>
<td>Digenës</td>
</tr>
<tr>
<td>Ptochoprod.</td>
</tr>
<tr>
<td>Glykas</td>
</tr>
<tr>
<td>Spaneas</td>
</tr>
<tr>
<td>Kallimakhos</td>
</tr>
<tr>
<td>Lybistros</td>
</tr>
<tr>
<td>Achilleid</td>
</tr>
<tr>
<td>Belisarios</td>
</tr>
<tr>
<td>Thrënos</td>
</tr>
<tr>
<td>Poulologos</td>
</tr>
<tr>
<td>Paidiophr.</td>
</tr>
<tr>
<td>Physiologos</td>
</tr>
<tr>
<td>Spanos</td>
</tr>
<tr>
<td>Aitôlos</td>
</tr>
<tr>
<td>Moreas</td>
</tr>
<tr>
<td>Tokkoi</td>
</tr>
<tr>
<td>Rimada</td>
</tr>
<tr>
<td>Gioustos</td>
</tr>
<tr>
<td>Depharanas</td>
</tr>
<tr>
<td>Tribôles</td>
</tr>
<tr>
<td>Phalieros</td>
</tr>
<tr>
<td>Homilia</td>
</tr>
<tr>
<td>Apokopos</td>
</tr>
<tr>
<td>Apollônios</td>
</tr>
<tr>
<td>Phlôrios</td>
</tr>
<tr>
<td>Rhodos</td>
</tr>
<tr>
<td>Katalogia</td>
</tr>
</tbody>
</table>

**TOTAL** | **334** | **130** | **86** | **63**

Table 4.12: Raw counts of pronoun placement for factors ‘subject’, and ‘temporal expression’.

61
B. Results of the JMP 3.2.1: one-way ANOVA and Tukey-Kramer test

Since the number of observations varies greatly from text to text, the only way the ANOVA can be successfully carried out is if these observations are transformed into scores that show normal distribution and have constant variance. To do this I calculated the percentage that each one of these observations (e.g. # postverbal) constitutes over the total amount (# postverbal+ # preverbal) and then took the \textit{arcsin} value of that percentage value. This is standard practice in statistics, and the transformation is known as the \textit{arcsin transformation} (Woods et al. 1983:220). In this fashion a score ranging from 0 to 1.57... was entered for each text; if a particular construction did not occur at all in the text, that entry was left blank. These then are the numerical values for which a one-way ANOVA was carried out.

In the graphs the $x$ axis lists the factors which are compared while the $y$ axis runs from 0 to 1.57 (the arcsin score). The dark squares represent where a particular text scores; larger squares indicate a score for multiple texts. According to the JMP software manual, the diamond-shaped figures are a schematic representation of the mean and standard error for each sample group. The line across the diamond represent the mean of the sample group, while the height of the diamond represents the 95% interval of confidence for each group.

The tables labeled Tukey-Kramer HSD are the results of a test sized for all differences among means. If the number in a cell is positive that means that the difference between the two factors that make up the cell is significant.
Figure 4.1: Factors associated with postverbal placement in Mackridge’s rule (1).

Table 4.13: Comparisons for all pairs in Mackridge’s rule (1) using Tukey-Kramer HSD, $q^* = 2.77529$.

<table>
<thead>
<tr>
<th>Abs(Dif)-LSD</th>
<th>ôû</th>
<th>initial</th>
<th>coordinating</th>
<th>ôτı</th>
<th>red. obj.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ôû</td>
<td>-0.41719</td>
<td>-0.0748</td>
<td>-0.06699</td>
<td>-0.01793</td>
<td>0.703763</td>
</tr>
<tr>
<td>initial</td>
<td>-0.0748</td>
<td>-0.34712</td>
<td>-0.33931</td>
<td>-0.29454</td>
<td>0.431116</td>
</tr>
<tr>
<td>coordinating</td>
<td>-0.06699</td>
<td>-0.33931</td>
<td>-0.34712</td>
<td>-0.30235</td>
<td>0.423302</td>
</tr>
<tr>
<td>ôτı</td>
<td>-0.01793</td>
<td>-0.29454</td>
<td>-0.30235</td>
<td>-0.44249</td>
<td>0.277857</td>
</tr>
<tr>
<td>red. obj.</td>
<td>0.703763</td>
<td>0.431116</td>
<td>0.423302</td>
<td>0.277857</td>
<td>-0.35399</td>
</tr>
</tbody>
</table>

Positive values show pairs of means that are significantly different.
Figure 4.2: Factors grouped together in Mackridge's rule (2).

Table 4.14: Comparisons for all pairs in Mackridge's rule (2) using Tukey-Kramer HSD, $q^* = 2.77005$.

<table>
<thead>
<tr>
<th>Abs(Dif)-LSD</th>
<th>$vá·ás$</th>
<th>Tem.conj</th>
<th>negation</th>
<th>Q.prn</th>
<th>Relt.prn</th>
</tr>
</thead>
<tbody>
<tr>
<td>$vá·ás$</td>
<td>-0.09423</td>
<td>-0.08945</td>
<td>-0.08352</td>
<td>-0.08259</td>
<td>-0.03577</td>
</tr>
<tr>
<td>Tem.conj</td>
<td>-0.08945</td>
<td>-0.0961</td>
<td>-0.09018</td>
<td>-0.08922</td>
<td>-0.04241</td>
</tr>
<tr>
<td>negation</td>
<td>-0.08352</td>
<td>-0.09018</td>
<td>-0.09423</td>
<td>-0.0933</td>
<td>-0.04648</td>
</tr>
<tr>
<td>Q.prn</td>
<td>-0.08259</td>
<td>-0.08922</td>
<td>-0.0933</td>
<td>-0.10019</td>
<td>-0.0534</td>
</tr>
<tr>
<td>Relt.prn</td>
<td>-0.03577</td>
<td>-0.04241</td>
<td>-0.04648</td>
<td>-0.0534</td>
<td>-0.09808</td>
</tr>
</tbody>
</table>

Positive values show pairs of means that are significantly different.
Figure 4.3: Factors grouped together in Mackridge’s rule (3).

Table 4.15: Comparisons for all pairs in Mackridge’s rule (3) using Tukey-Kramer HSD, $q^* = 2.39245$. 

<table>
<thead>
<tr>
<th>Abs(Dif)-LSD</th>
<th>object</th>
<th>prphrase</th>
<th>adverb</th>
</tr>
</thead>
<tbody>
<tr>
<td>object</td>
<td>-0.24733</td>
<td>-0.05604</td>
<td>-0.04395</td>
</tr>
<tr>
<td>prphrase</td>
<td>-0.05604</td>
<td>-0.25742</td>
<td>-0.24544</td>
</tr>
<tr>
<td>adverb</td>
<td>-0.04395</td>
<td>-0.24544</td>
<td>-0.24733</td>
</tr>
</tbody>
</table>

Positive values show pairs of means that are significantly different.
Figure 4.4: Comparing Mackridge’s rules (2), (3), (4), & (5).

Table 4.16: Comparisons for all pairs in rule comparison, using Tukey-Kramer HSD, $q^* = 2.61276$.
C. GoldVarb Tables

The following list provides an explanation for the various column titles:

Under ‘Group’ the factor groups are listed, and within these the individual factors that are believed to influence the distribution of the data (listed under ‘Factor’).

‘Input probability’ is the probability of a particular construction occurring even if the specified factors are not present.

‘Weight’ is the probability of the construction occurring due to a specific factor.

‘Input and Weight’ is the combined effect of the last two on the probability that the construction will occur.

‘Applications’ is the number of occurrences of the construction under analysis.

‘Expected’ is the predicted number of occurrences of the construction under analysis.

‘Error’ is the value that indicates the discrepancy between the predictions of the model and the actual occurrences.

‘Chi-square per cell’ is a measure of the independence of the factors and should be less than 1.5 for the model to have a good fit.

‘Log likelihood’ is a number that gives us a way of comparing models; the greater the number (i.e. the smaller the negative number) the better the model.

‘Stepwise Regression Analysis’ refers to a series of tests run by the program in order to determine which factor groups effect the variation significantly.
### Table 4.17: GoldVarb test for factors associated with postverbal placement (Mackridge's rule 1).

<table>
<thead>
<tr>
<th>Group</th>
<th>Factor</th>
<th>Weight</th>
<th>App/Total</th>
<th>Input&amp;Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>preceding elem.</td>
<td>oτ</td>
<td>0.312</td>
<td>0.79</td>
<td>0.79</td>
</tr>
<tr>
<td></td>
<td>coordinating</td>
<td>0.591</td>
<td>0.92</td>
<td>0.92</td>
</tr>
<tr>
<td></td>
<td>initial</td>
<td>0.475</td>
<td>0.89</td>
<td>0.89</td>
</tr>
<tr>
<td></td>
<td>redup. obj</td>
<td>0.191</td>
<td>0.66</td>
<td>0.66</td>
</tr>
<tr>
<td>Cell</td>
<td>coordinating</td>
<td>726</td>
<td>670</td>
<td>669.968</td>
</tr>
<tr>
<td></td>
<td>redup. obj</td>
<td>115</td>
<td>76</td>
<td>76.023</td>
</tr>
<tr>
<td></td>
<td>initial</td>
<td>739</td>
<td>652</td>
<td>651.992</td>
</tr>
<tr>
<td></td>
<td>oτ</td>
<td>38</td>
<td>30</td>
<td>30.005</td>
</tr>
</tbody>
</table>

Total Chi-square = 0.0000, Chi-square/cell = 0.0000, Log likelihood = -561.942

### Table 4.18: GoldVarb test for factors associated with preverbal placement (Mackridge's rules 2, 3, 4 & 5).

<table>
<thead>
<tr>
<th>Group</th>
<th>Factor</th>
<th>Weight</th>
<th>App/Total</th>
<th>Input&amp;Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>preceding elem.</td>
<td>function word</td>
<td>0.802</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>fronted const</td>
<td>0.139</td>
<td>0.91</td>
<td>0.91</td>
</tr>
<tr>
<td></td>
<td>subject</td>
<td>0.044</td>
<td>0.75</td>
<td>0.75</td>
</tr>
<tr>
<td></td>
<td>Temp exp</td>
<td>0.022</td>
<td>0.59</td>
<td>0.59</td>
</tr>
<tr>
<td>Cell</td>
<td>Total</td>
<td>143</td>
<td>85</td>
<td>85.002</td>
</tr>
<tr>
<td></td>
<td>Temp exp.</td>
<td>439</td>
<td>329</td>
<td>329.009</td>
</tr>
<tr>
<td></td>
<td>subject</td>
<td>967</td>
<td>882</td>
<td>881.995</td>
</tr>
<tr>
<td></td>
<td>fronted const</td>
<td>2614</td>
<td>2604</td>
<td>2603.988</td>
</tr>
<tr>
<td></td>
<td>function word</td>
<td>2604</td>
<td>2604</td>
<td>2603.988</td>
</tr>
</tbody>
</table>

Total Chi-square = 0.0000, Chi-square/cell = 0.0000, Log likelihood = -697.174
CHAPTER 5

INTRALINGUISTIC PARAMETERS

The previous chapter provided a detailed and coherent description of the facts about weak object pronoun placement. In this chapter the pattern of variation is examined more closely and a number of intralinguistic parameters that are supposed to affect the placement of the pronoun are considered. Indeed, some such effects are confirmed and possible explanations for these interactions are put forward. On the other hand, it is demonstrated that emphasis does not play a role in the variation as was previously thought. In the last section the facts about pronoun placement with non-finite forms—an issue that has not been examined in depth up until now—are revealed.

5.1. The distinction between où(κ) and ṽ où(κ).

As was mentioned at the end of chapter 4, it sometimes happens that the pattern of variation associated with a specific factor can be further analyzed according to various parameters. The pattern of variation associated with the negative adverb où is a striking example of such a case, in which the results of the analysis may vary significantly if one is not careful during the collection of tokens. In fact the statement in chapter 4 that "when où immediately precedes the verb complex the pronoun is placed postverbally 56 out of 56 times" is misleading, because the pattern of variation is not so clear at first glance. On the contrary, où is the only environment for which there is published disagreement about the
facts concerning the variation in pronoun placement. Horrocks (1990), while examining the placement of 'clitics' throughout the history of Greek, wrote the following concerning οù and weak pronoun placement in Later Medieval Greek:

... the clitic was naturally drawn to second position within that complex¹, in accordance with the pattern we have seen many times already. This also tends to happen with the negative οù, which must similarly have been felt to "belong" to the verb in a particularly close way, both phonologically and semantically.

Horrocks does not make an explicit statement about the placement of the weak object pronoun in this context, yet one reasonable way to interpret the quote above is that he is identifying οù as one of the environments in which weak pronouns are placed in preverbal position. This is also evident from the example that he offers:

(1)  ἀν  οù  τòn  εἰπῶ
    an  u  ton  ipe
    if  NEG he-IO sg WP say-1sg Pres

'If I do not say to him' (*Ptokhoprodromos, III 43—Horrocks' (28)).

On the other hand, Mackridge (1993:340), in his rule 1(b) makes the claim that "when the verb-phrase² comes immediately after ... the negative adverb οù the order V+P is more or less obligatory", as in example (2).

(2)  οùκ  ἐμαθῶν  το
    uk  emathen  to
    NEG learn-3sg Past  it-DO sg WP

'He did not learn it' (*Belisarios, 269).

---

¹ By 'complex' Horrocks refers to the string complementizer (or negative marker)—verb, and not the weak pronoun—verb string as I do in this thesis.

² As noted in chapter 2, fn. 11, Mackridge uses the term 'verb-phrase' to refer to the weak pronoun—verb complex.
What makes it especially difficult to assess the two contradictory statements is that the example offered by Horrocks is precisely the type of construction that Mackridge (1993: 329) identifies as the only instance where the preverbal order is allowed:

where où coexists with ἀν in the same clause, the pronoun is placed before the verb:

(3) ἀν  οù  τò  ἐπάρη
οτ  ὑ  το  ἐπορί
if not it-DO sg WP take-3sg Pres

‘If he does not take it’ (Πούκχοπροδρόμος, IV 514—Mackridge’s (19)).

This discrepancy in the literature was first noticed in Pappas (1997) but was not commented on due to the small amount of data available at the time. The expanded database available now, however, allows for a comparison between où and ἀν  οù. The results are listed in Appendix A, Table 5.2, and show that, when où precedes the verb–pronoun complex, the pronoun is placed postverbally 56 out of 56 times, but, when ἀν  οù precedes the complex the pronoun is placed preverbally 19 out of 21 times (cf. example (4) for one of the two irregular tokens). Clearly then, Mackridge’s evaluation was correct on both points.1

(4) ἀν  οùκ  εἰπῶ  το
οτ  οκ  ἵπο  το
if not say-1sg Pres it-DO sg WP

‘If I do not say it’ (Πουλολογος, 316).

Although Mackridge’s description is correct, his explanation of the interaction is hard to follow. Indeed, it is difficult to interpret the word ‘coexists’ in any theoretically meaningful way. For instance, does Mackridge use it as a synonym for ‘when ἀν precedes οù’ i.e., for the case at hand? Or does he also mean ‘when οù precedes ἀν’?, a case that is
not of any interest to us since it is covered by Mackridge’s second rule, as was seen in chapter 4.

It seems that the most reasonable interpretation of Mackridge’s statement is that he assumes that when àn and ou ‘coexist’, i.e., when they are placed side by side before the verb–pronoun complex, there is some type of formal conflict between the two affecting environments, which is resolved by postulating a rule-precedence hierarchy in which the àn rule overrides the ou rule. Indeed, in his other article, which is essentially the Greek version of the (1993) treatise, Mackridge (1995:912) refers to “conflict” between rules 1(b) and 2: “Σὲ περιπτώσεις ὅπου συγκρούονται οἱ κανόνες (1β) καὶ 2 ...”. The verb συγκρούονται literally means to ‘collide’, thus validating the interpretation I offer of his (1993) term ‘coexist’. Even this interpretation, however, runs into two problems.

First, both rules require that the affecting environment be immediately before the verb pronoun complex, so that in the àn ou cases there really is no formal conflict between the two rules, since àn does not immediately precede the verb complex. Accordingly, the àn rule cannot override the ou rule.

The second problem, is that even if the rules were to be reformulated in order to accommodate cases like this one, there would be a problem in the case of the negative marker ou μη (’u mi’) where the pronoun is always placed preverbally (see Appendix A, Table 5.2, and examples (5), (6)).

(5)  ou μη σê βαρεθô
      u mi se varetho

not you–DO sg WP be bored–1sg Pres

‘(so that) I am not bored with you’ (Poulologos, 366).

---

3 In Horrocks's defense, however, he was examining the position of clitics in the entire history of Greek, and it may be that he was misled by the example he cited, or just the tokens with àn in general.

4 Jannaris (1968: §1827-1828) puts forth the argument that μη in this case is a “corruption” of μήν, a conjunction expressing “confident expectation” and that “copiers [after 300 A.D] ... mistook it for another negative intended to strengthen ou, and so changed it to the classical and familiar μη.”

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As seen in chapter 2, Mackridge (1993: 340—rule 2) also identifies μη as an environment associated with preverbal pronoun placement. Thus, what we have here is two cases where ου, a factor associated with postverbal pronoun placement is either preceded or followed (immediately) by an environment associated with preverbal pronoun placement (αν and μη). In both cases the result is preverbal placement of the pronoun. Trying to sort this out with rule-precedence arguments would fail since it would have to be posited that in one case it is the environment closest to the verb that takes precedence (as in ου μη), while in another case it is the factor furthest from the verb that wins out (as in αν ου). Clearly this is not a desirable way to construct the grammar.

As was discussed in chapter 4, both Mackridge and Horrocks (1990) believe ου to be a clitic attached to the verb. There it was mentioned that if this were indeed so, the only explanation for the categorical postverbal placement of pronouns when the complex is immediately preceded by ου is that the compound ου-verb-pronoun appear immediately after factors that favor postverbal placement, such as ‘initial’, ‘coordinating conjunction’ and so forth. However, we saw that the pronoun appears postverbally even when the compound ου-verb-pronoun follows elements associated with preverbal placement such as subjects, object complements, and temporal expressions; this fact would seem to contradict the hypothesis that the position of the weak object pronoun is affected by the clitic status of ου.

With this observation in mind, it is quite surprising that, when the conditional conjunction (εδαν precedes the compound ου-verb-pronoun, the pronoun appears

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[5] In addition, both Smyth (1956) and West (1982) characterize ου as a proclitic in Ancient Greek.
preverbally between οù and the verb. The explanation to this problem may be found in the proclitic nature of (δ)άν (Jannaris, 1968: §97d), if we assume that it procliticizes to οù, thus forming a unit that needs no phonological host. In fact Jannaris (1968: §99, 1827) mentions the ability of οù to "annex enclitics" and form stressed forms; this may be a case in which the annexed form is proclitic. As a result of this, δάν οù would be considered as another function word (the negative counterpart of δάν) and the preverbal pronoun placement would be canonical.

The following example (7), found in the poem of Glykas, one of the earliest attestations of ‘vernacular’ Greek, indicates that there may have been some uncertainty as to what the host of οù was in this situation.

(7) δάν οè οùκ ἔξκαλλουσιν

αν σε uk ἐκκαλεσίν

if you-DO sg WP not cast out-3pl Pres

"... if they do not get you out ..." (Glykas, 229).

In this case the weak pronoun does not appear next to the verb; instead the negative adverb οùκ is interpolated. It is reasonable to hypothesize that in this instance οù procliticizes to the verb and that the pronoun appears before the extended verb. Since this is an early attestation it may be indicative of a transitional phase, in which the constraint that the pronoun be adjacent to the verb was not absolute, and therefore, a different ordering of these phonologically dependent elements (weak pronoun, οù) was possible. The existence of all three possibilities (δάν-οù-pronoun-verb as in ex. (3), δάν-οù-verb-pronoun, as in ex. (4), and δάν-pronoun-οù-verb, as in ex. (7)) in a total of twenty two tokens is indeed suggestive of great fluidity in the ordering possibilities of these elements.

6 In Pappas (2000, 2001a), I suggested that οù encilitizes to δάν in these cases. Both hypotheses yield the same result—a new morphological unit that can carry stress—but this one is more consistent with what is already known about the status of οù and δάν in Ancient Greek.
An alternative to the 'av procliticizes to ou' explanation is that ou procliticizes to the pronoun-verb complex, instead of forming a morphological unit with av. Although this proposition is logically possible, it cannot explain why the pronoun still appears postverbally when the compound ou-verb-pronoun is preceded by an element which is associated with preverbal placement, e.g. a subject or an object.

However, if one accepts that both the weak pronoun and the negative adverb ou are competing for verb adjacency then it is possible to explain this curious pattern as follows.

First let's assume these two constraints:

1. If unstressed, ou must procliticize to the verb appearing adjacent to it.
2. Pronouns must appear adjacent to the verb, though they can be placed postverbally or preverbally.

If these assumptions are granted, then:

1. When ou is preceded by a content word (subject, adverb, etc.) it must attach immediately to the left of the verb. Since the weak pronouns also have a requirement of adjacency they occupy the position immediately to the right of the verb, thus the order ou-verb-pronoun.

2. If ou forms a morphological unit with another element (e.g. av, μη) then this unit is stressed and functions as an independent word, in which case the weak pronoun appears preverbally, yielding av ou-pronoun-verb.

One of the advantages of this analysis is that it provides justification for the fact that ou is the only factor showing 100% postverbal pronoun placement. Another advantage is that it also allows for a coherent account of the disappearance of ou from the language, which up until now is supposed to have happened due to competition from the negative marker δέν.\(^7\) The facts revealed above, however, indicate that an equally important factor may have been the constraint that ou had to appear in the position immediately to the left of

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\(^7\) cf. Jannaris (1968).
the verb, a position which was eventually (in Early Modern Greek) co-opted by weak object pronouns. This is by no means to be construed as an assertion that speakers had no other alternative. Obviously, the constraint that où had to appear immediately to the left of the verb could just as easily have been eliminated, or the weak object pronouns could not have taken over the left-adjacent position to the verb. The fact is that in an investigation of textual evidence scholars rarely get to examine the full-fledged variation that is present in a language, as those who study synchronic phenomena are able to. It must be assumed that there was a much richer pattern of variation, which, for reasons that we may never uncover, was filtered down to the level of variation that can be observed in the texts.

Nonetheless, an interesting point of comparison concerning the analysis presented above comes from the facts of the Greek dialect of Pontic, which was spoken in several pockets along the southern coast of the Black Sea. Two of its major varieties are oenountiaka, a western variety which shows the effects of dialect contact with Standard Modern Greek (cf. Kontosopoulos 1981), and trapezontiaka, an eastern variety spoken in the vicinity of Trabzond. The variety of trapezontiaka has retained use of the negative adverb oûk (in the form of'κι or'κ) and shows robust postverbal placement of the weak object pronoun even after the future marker θά (cf. Oikonomidës (1958), example (8)).

(8) θά       'παίρ'       δέεν
       θα       per       aten
Fut marker        take-1sg pres       she-DO sg WP
'I will take her ...' (Oikonomidës 1958: 408).
The oenountiaka variety on the other hand, has also retained the negative marker οὐκ, alongside with the borrowing of δὲν from SMG, and shows variation in pronoun placement which is very similar⁸ to the pattern of variation for LMG (Oikonomidēs 1958: 3, 413). This shows that, with respect to pronoun placement and the negative adverb οὐ, the path from Later Medieval Greek to Standard Modern Greek was not an inevitable one, but one of the many possibilities available.

5.2. Differentiation within the factor ‘reduplicated object’.

A similar situation exists with the pattern of variation associated with the ‘doubling pronoun’ construction. This is a construction in which the object of the verb has a coreferent weak pronoun. The weak pronoun can corefer either with a direct object (example (9)) or with an indirect object (example (10)).

(9) τὸ διάδημαν παίρνει τὸ
to diádēman pārni to
the crown–DO sg takes–3 Pres sg it–DO sg WP

‘The crown, he takes it’ (Belisarios, 42).

(10) τοὺς τριακοσίους ἀφῆνω σας
tus triakosius afínō sas
the three hundred–DO pl leave–1 Pres sg you–IO pl WP
ἀπὸ ἐνὸς φαρίου
apo enos farīu
from one–Gen sg horse–Gen sg

‘To the three-hundred, I leave you each a horse’ (Digenēs, 1759).

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⁸ Unfortunately, I could not find any examples with both Κη and a weak pronoun.
In those cases where there is both an indirect and a direct object ('ditransitive' constructions) only one of the two has a corefering pronoun, and that is the direct object, as in example (11)—although the number of tokens is too small to provide any real indication.

(11) ὅλα ἀφηγηθην της τα
ολα ασιγιθι τις τα
all–DO pl narrate–1sg Past she–IO sg WP they–DO pl WP

‘All things, I narrated them to her’ (Lybistros, 847).

The first matter to raise concern in this construction is that there is the possibility that the ‘doubling pronoun’ is part of a ‘ditransitive’ construction where both objects appear in pronominal form (as in example (11) above). One has to wonder whether the position of the other weak pronoun is affected by the placement of the ‘doubling pronoun’. Take for example the following construction:

(12) το ποσον γραφω σας το
το ποσον γραφο σασ το
the amount–DO sg write–1 Pres sg you–IO pl WP it–DO sg WP

‘The amount, I write it to you’ (Thrēnos, 777).

In this example there is a direct object (το ποσον), the pronoun that ‘doubles’ it (το) and an indirect object which appears in pronominal form (σας). Both pronouns are placed postverbally, presumably according to Mackridge’s rule (1c), although he does not discuss this particular case and there is no reason why the pronoun σας cannot appear before the verb.⁹

An examination of the entire database reveals that there are not many tokens of this type of construction; in fact there are only six of them and in all six the ‘doubling pronoun’ repeats the information of the direct object. Furthermore, in three of the examples both
pronouns appear postverbally, while in the other three the pronouns appear preverbally.

Thus the third logical possibility in which the two pronouns are split on either side of the verb does not come up in the database.

One interesting fact that does arise from these constructions is that all three situations in which the pronouns appear preverbally involve the adjective ὅλος /olos/ "all" (cf. example (13)), which was the element immediately preceding the verb complex.\(^{11}\)

(13) τες χώρες μοι ὅλογυρα ὅλες τες ἀφανίζει
tes xores mu ologyra oles tes afaniz
the-countries-my all around all-DO pl they-DO pl WP destroy-3sg Pres
'My countries all around, all he destroys them' (Rimada, 1308).

Isolating for this factor reveals the following: Of the 118 tokens of the 'doubling pronoun' construction there are 38 in which the element immediately preceding is a form of the adjective ὅλος. Of these 38, 24 show preverbal placement and 14 postverbal placement. If we exclude these tokens from the category, there are 65 examples with postverbal placement and 15 examples showing preverbal placement. This new pattern of variation, as it turns out is not significantly different from the patterns of variation for the other factors identified under rule(1),\(^{12}\) as can be seen in Appendix B, Figure 5.2.

A new GoldVarb analysis of the factors in Rule (1) yields the following weight values:

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\(^9\) It should be noted, however, that such constructions in which the two pronouns are split on either side of the verb (e.g. IO-verb-DO), have been documented in Joseph (1978/1990) for LMG and in Janse (1998) for Cappadocian.

\(^{10}\) This alternative can actually be further divided into four other possibilities, but that is not necessary in this case.

\(^{11}\) According to Mackridge (1985) ὅλος exhibits some idiosyncrasies in SMG as well, since it is the only adjective that ἔχει to be doubled by a pronoun.

\(^{12}\) I excluded ὅμοι from this run because of the discussion in the first section of this chapter.
Table 5.1: Weight values for factors favoring postverbal placement after δλος correction.

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>'initial'</td>
<td>0.464</td>
</tr>
<tr>
<td>'coordinating conjunction'</td>
<td>0.568</td>
</tr>
<tr>
<td>'ο Tι'</td>
<td>0.293</td>
</tr>
<tr>
<td>'reduplicated object'</td>
<td>0.332</td>
</tr>
</tbody>
</table>

It is only natural to wonder why the adjective δλος should be associated with a pattern of pronoun placement that is the inverse of what is expected for the 'doubling pronoun' construction in general. One possibility comes from the fact that the same adjective could take a weak pronoun as an argument in a partitive construction. Thus one finds in the corpus examples such as the following:

(14) δλος τους την γρικούσι
   οι ι τυς τιν γρικούσι
   all–Nom sg they–PS pl WP she–DO pl WP listen–3pl Pres

'all of them hear it' (Rimada, 642).

In this case it is evident, not only from the accent markings, but also from the context, that τους is not an argument of the verb but of the adjective with a partitive sense. However, in a sentence like example (15):
we know that the weak pronoun is an argument of the adjective and give the translation
‘and he defeated them all’ (Rimada, 322) only because there is no accent on τους. The
alternative interpretation, though, namely that τους is an argument of the verb, with a
translation ‘and all, he defeated them’ is also possible. In fact, there is no reason to believe
that this type of construction would be any clearer for listeners of LMG, the only
disambiguating factor being the constraint that ‘doubling pronouns’ must follow the verb.
It seems likely, then, that in sentences such as these, τους may have become ambiguous. It
could be either a partitive pronoun qualifying the adjective or an argument of the verb.

The crucial aspect of this ambiguity is that the partitive pronoun is of the same
gender, number and case as the adjective, as indeed would have been the case for a weak
object pronoun. Thus, the shift to ‘doubling pronoun’ constructions with δλους in which
the pronoun is placed preverbally was most probably based on a four-part analogy,
essentially a process in which the speaker/hearer extracted a pattern of matching
gender/number/case marking in both the adjective and the pronoun based on the ambiguity
between partitive and ‘doubling pronoun’ constructions, as in Figure 5.1:

<table>
<thead>
<tr>
<th>δλους</th>
<th>τους</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>δλην</td>
<td>Χ</td>
</tr>
<tr>
<td>Χ</td>
<td>τήν</td>
</tr>
</tbody>
</table>

Figure 5.1: Four-part analogy schema for the change in pronoun placement in δλους
constructions.
This yielded constructions such as (15) above and

\[ \text{\textit{Kt}^V TnV f|^€Up€lS} \]

\[ \text{all-DO sg she-DO sg WP know-2sg Pres} \]

'you know her completely' (Gioustos, 184).

In chapter 8, this hypothesis will be integrated with the overall analysis given for the pattern of pronoun placement.

5.3. The effect of emphasis on pronoun placement.

Emphasis is another intralinguistic factor that Mackridge identifies as affecting the variation of pronoun placement. For him, the difference in pronoun placement between 'object/adverb', 'subject', and 'temporal expression' is based on the fact that these elements are differently emphasized. His reasoning is as follows: the canonical word order of Later Medieval Greek is SVO, where the subject is covert more often than not. Thus, when an object (or adverb) is fronted as in ex. (17), it receives special emphasis which allows it to 'attract' the pronoun to the preverbal position. Subjects are in a canonical position when they precede the verb and this “... does not necessarily result in its being specially emphasized” (Mackridge 1993: 320), which results in a less robust pattern of preverbal placement associated with immediately preceding subjects. Finally, temporal expressions (example (18)) “… are not normally emphatic in themselves, but tend instead to place emphasis on the following verb ...” (ibid: 322), which according to Mackridge weakens the preverbal placement pattern even more.

\[ \text{\textit{mandaton ton efoka}} \]

\[ \text{message-DO sg he-IO sg WP give-1sg Past} \]

'I gave him a message' (Poulologos, 576).
Again you break them up' (Poulologos, 395).

This line of reasoning is problematic in several ways. To begin with, the argument is circular. While Mackridge asserts that it is the emphasized status of fronted objects that 'attracts' the pronoun to the preverbal position at the beginning of his analysis, he then interprets the fact of 'freer' placement in the case of temporal expressions as an indication that they are not as emphatic as fronted objects, thus explaining the difference in pronoun placement between 'temporal expression' and 'object'. Second, in order for the 'attraction' mechanism to work, the 'attracting' element (whether subject, object, or adverb) would have to be a phonological host for the pronoun, which is impossible. As was mentioned in chapter 2, the verb is the only available phonological host for the pronoun, and it is difficult to justify how another element which does not bind the pronoun would affect its position. In a similar vein Wanner (1981b: 200) criticizes the use of the term 'attraction' by prescriptivist grammarians in Portuguese as an explanation of variation between preverbal and postverbal placement of 'clitic' pronouns. Wanner writes:

Attributing proclisis to the presence of particular words is satisfactory only in a framework which does not recognize linguistic structure beyond the level of abstractness of the word, i.e., the typical prescriptive grammar tradition; in addition, it is a confusion of cause and effect.

Finally, if emphasis does indeed 'attract' the pronoun to the preverbal position, full pronoun subjects should be associated with categorical preverbal placement of the weak pronoun. This is the expectation, because, as in any (so-called) 'empty subject' or 'pro-drop' language, full pronoun subjects in Medieval Greek should be an indication that there

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13 The necessity of this can be seen in Halpern's (1996) treatment of Bulgarian clitics, in which he assumes that they are uniformly enclitic, despite evidence (Ewen 1979) that they may be at times proclitic.
is emphasis placed on the subject—see Haberland and van der Auwera (1993). However, the comparison test between pronoun placement when the immediately preceding subject is a full pronoun, as opposed to a noun-phrase, shows that the two patterns are not significantly different (cf. Figure 5.4 and example (19)), as we would have expected under Mackridge’s hypothesis that emphasis is associated with preverbal placement.

(19) ἀλλος φιλεῖ τὴν ἀγαπῶ

another-Nom sg kiss-3sg Pres Rel prn-Acc sg love-1sg Pres

κ’ ἐγὼ στερεύγομαι τὴν

kj ego stereugome tin

and I-Nom sg to be deprived-1sg Pres she-DO sg WP

‘Another man kisses the one I love and I am deprived of her’ (Katalogia, 434).

Thus, the emphatic status of the element preceding the verb complex does not seem to affect the placement of the pronoun.

5.4. The effect of discourse constraints on pronoun placement.

The possibility that discourse constraints may affect the placement of the pronoun, especially in cases where a subject immediately precedes the verb–pronoun complex has been brought up by Janse in two papers (1994, 1998). There Janse claims that in Cappadocian Greek (which also shows variation between preverbal and postverbal pronoun placement) the pronoun is placed preverbally if the subject (especially subject pronouns) “constitute the information focus of the respective utterances, since they carry new information” (cf. example (20), taken from Janse 1998).
(20) tis t álakse
who–Nom sg it–DO pl WP change–3sg Past
oyo d álaksa
I–Nom sg (EMPHATIC) it–DO pl WP change–1sg Past

‘—Who changed them?
—I changed them’

However, Janse does not show that being the ‘information focus’ of an utterance is
the necessary and sufficient condition for preverbal placement, since he does not discuss
examples with subject pronouns (or nominal subjects for that matter) and postverbal object
pronoun placement to show that in these cases the subject is not the ‘information focus’ of
the utterance. Furthermore, it can be shown that in the LMG texts this distinction does not
affect the placement of the pronoun; the two passages below come from the same text and
have the same interpretation with respect to the ‘focus–topic’ distinction, yet the pronoun is
placed postverbally in one and preverbally in the other.

(21) ókáποτ’ ἀπεσώσασιν, ἠλθαν εἰς τὸ Μοντόριον.
okapot apesosasin ilthan is to montorion
sometime finish–3pl Past come–3pl Past to the Montorion–Acc sg
ó δοὺς τοὺς ἀποδέχθηκεν
o dukts tus apodoxthikèn

the duke–Nom sg they–DO sg WP receive–3sg Past

‘In time they finished [their journey], the came to Montorion. /

The duke received them …’ (Phlórios, 303-304).

85
Nevertheless, this distinction between a ‘focus’ and a ‘topic’ reading could prove useful when examining preverbal objects. As Androulakis (1998) points out, in Standard Modern Greek a preposed object with a ‘focus reading’ is distinguished by an object that is a ‘topic’ by the fact that in the latter case a ‘doubling pronoun’ is used.

However, it is not certain that this was the case for LMG as well. In fact, without the necessary prosodic information (i.e., information about sentence stress), this distinction

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between topic and focus is hard to confirm based on the surrounding context alone. Take for example the following two clauses that appear one after the other in the poem *Thrēnos tēs Kōstantinoupoleōs*:

(25) έγινηκε 'Αντίχριστος, τὸν κόσμον σακτανίζει

became antichrist the world-DO sg bedevils-3sg Pres

τὸ γένος τὸ Ρωμαικὸν ἐκαταδουλώσεν τὸ

the race the Roman-DO sg enslave-3sg Past it-DO sg WP

"He became the antichrist, he bedevils the world, the Roman race, he enslaved it" (*Thrēnos*, 601-2).

There do not seem to be any contextual factors that would make the two objects τὸν κόσμον, and τὸ γένος τὸ Ρωμαικὸν different with respect to the 'focus-topic' distinction. Such examples are not rare in the corpus and suggest that, although there is good reason to believe that the distinction between 'focus' and 'topic' is the reason for the use (or not) of a 'doubling pronoun' in SMG, the same claim cannot be made for LMG.
5.5. Non-finite forms of the verb.

It is reasonable to investigate whether or not the status of the verb-form (finite or non-finite) plays a role in the placement of pronouns in Later Medieval Greek as this has been accepted as the determining factor in Standard Modern Greek (cf. Joseph 1978/1990, Mackridge 1985). There the pronouns appear preverbally (cf. (26) and (27)), except when the verb is a gerund, or an imperative in which case they appear postverbally:

(26) Tον εἶδα
ton iđa
he-DO sg WP see-1sg past
'I saw him.'

(27) Tον Ἄντωνην, Tον εἶδα
ton adoni ton iđa
the Anthony-DO sg he-DO sg WP see-1sg past
'Anthony, I saw him.'

(28a) βλέποντας to
vlepondos to
see-Gerund it-DO sg WP
'Seeing it,...'

(28b) Ἐνὶ βλέποντας to
mi vlepodas to
not see-Gerund it-DO sg WP
'Not seeing it ...'

Joseph (1978/1990, 1983a), and Nevis & Joseph (1993) mention that the past passive participle may have a weak pronoun argument in some rare cases. The example they cite is

δεχόμενος to
dekomenos to
accept-Past Pass Prcle Nom sg it-DO sg WP
'Accepting it'.
I did not encounter any such examples in my research of the LMG texts.
The fact that the imperative verb-form in SMG, and the clearly non-finite gerund show the same pattern of postverbal pronoun placement, coupled with the observation that the imperative is morphologically marked only for number has been interpreted as an indication that in SMG the imperative is a non-finite form (Joseph 1978/1990, 1983a, 1985, Mackridge 1985, Joseph & Warburton 1987, Horrocks 1990, Nevis & Joseph 1993).

In Later Medieval Greek, on the other hand, there are three clearly non-finite forms, the participle (present active or perfect passive), the gerund and the infinitive. In the next sections the pattern of pronoun placement associated with each of these forms will be examined in detail.

5.5.1. Participles.

5.5.1.1. Present Active Participles. These forms show marking for gender, number, and case as in Ancient Greek. There are only nine examples of pronoun placement with a present active participle, most of them from Piōkhoprodromos. Some examples are given below.

(30) ἀτίμως μοι λαλοῦσα
deeceitfully I–IO sg WP speak–Pres Act Prcle

'speaking to me deceitfully' (Piōkhoprodromos, A 155).
(31) ταύτα μοι προσοπούσα
   ταύτα μι προσιπούσα
   this-DO pl I-IO sg WP tell-Pres Act Prcle

'Telling me these things' (*Ptôkhoprodromos*, I 198).

(32) καὶ συνβαθιζοῦσαν με
    κέ σινβιθίζουσαν με
    and sink-Pres Act Prcle I-DO sg WP

'And sinking me' (*Ptôkhoprodromos*, IV 243).

(33) καὶ σώον σῇ φυλάττων
    κέ σον σέ φιλατόν
    and safe-Acc sg you-DO sg WP keep-Pres Act Prcle

'and keeping you safe' (*Glykas*, 341).

(34) τὸν καταφλέξαντά σε
    τόν καταφλέξαντα σε
    the-Acc sg burn thoroughly-Pres Act Prcle you-DO sg WP

'The one who burnt you thoroughly' (*Achilleid*, 1410).

It is generally accepted (Horrocks 1997:78) that the use of the present active participle in *Ptôkhoprodromos* is an archaizing aspect of his mixed language, and as such I will not be concerned with the relationship between these forms and pronoun placement.

5.5.1.2. Perfect Passive Participles. These are forms in -μένος, mostly used as adjectives or as complements of the verb ἔχω /ἔχω/ 'I have' in the perfect periphrasis (or its past form ἔχα /ἐχα/ 'I had' in the pluperfect periphrasis—cf. Horrocks 1997: 304). There are only four instances of these constructions with a pronoun, and in all of them the pronoun is placed before the ἔχω form, as in example (35).
‘They had placed them in a clever place’ (Rimada, 834).

Despite what seems here as an obvious incorporation of the perfect passive participle arguments by the έχω form (otherwise known as ‘argument composition’ or ‘clitic climbing’), it is not necessary that the two forms be adjacent. This can be seen in example (36) where the adverb δῶ can be interpolated between the έχω form and the participle.

(36) τὰ μῦχει δῶ γραμμένα
    ta moxi do gramme na
    Rel pm I–IO sg+have–3sg Pres here–Adverb write–Perf Pass Prcle

‘which he has written to me here’ (Rimada, 716).

5.5.2. Gerunds.

These forms, although clearly derived from the above-mentioned present active participles, show no gender, number, or case agreement. Instead they vary between a form with final (ς) and one without it. The final (ς) is most likely due to analogical spreading, either from the masculine nominative singular or from the adverbial (ς) (see Horrocks 1997: 229). There are several constructions of a gerund with a weak pronoun argument; they are all found in later texts (15th and early 16th century) and in all of them the pronoun appears postverbally as in (37) and (38):
'I, looking at you' (Rhodos, 211).

'T and giving him' (Tribolês I, 275).

The unfortunate gap in the data is that there are no instances of a negated gerund (μη + gerund) with a weak object pronoun. Such examples would provide crucial information concerning the interaction between the finiteness of the verb-form and pronoun placement (with putative examples such as *ἐγὼ μη θυρώντα σε indicating that the non-finite verb-forms have postverbal pronouns only). Although no firm conclusion can be reached in their absence, it is my intuition that postverbal pronouns may have been the only option in this context.

5.5.3. Infinitives.

The infinitive of Later Medieval Greek appears in two types of constructions:
5.5.3.1. Articular infinitive. In this construction an infinitive marked by a definite article can be used either as the complement of a preposition or a verb (39), as a clause with a final sense (40) or as a nominalized adjunct (41) (cf. Horrocks 1997: 98, 280).

16 This term is used here as a descriptive term in order to capture the fact that in all of these uses the infinitive is marked by a definite article. However, only constructions as in (40) seem to be directly linked to the 'articular infinitive' of Classic Greek. See Joseph (1978/1990, chp. 2, 1983a) for more details on the history of the Greek infinitive.
17 This particular construction has also been labeled 'absolutive infinitive' (Hesseling 1892), and 'temporal infinitive' (Mihevc-Gabroveć 1973).
(39) els  to  ευεργετήσαι  σοι
is  to  everyetise  si
towards-preposition  the-Acc  sg  benefit-Infin  you-IO  sg  WP
‘towards benefiting you’ (Spanos, 690).

(40) ἠρξατο  τοῦ  γελάν  με
irkato  tu  gelan  me
begin-3sg  Past  the-Gen  sg  laugh-Infin  I-DO  sg  WP
‘He began to make fun of me’ (Ptihnprodromos, 1 190).

(41) χρόνον  ...  ἀνάλωσα  ...  τοῦ  εὑρέιν  σε
chronon  ...  analosa  ...  tu  evrin  se
time  ...  I  spent  ...  the-Gen  sg  find-Infin  you-DO  sg  WP
‘I spent [much] time in order to find you’ (Spanos, 606).

(42) Το  λεειν  τα
to  ielin  ta
the-Acc  sg  see-Infin  it-DO  pl  WP
“Upon seeing them” (Digenês, 785).

In all of these uses the pronoun is always placed postverbally.

5.5.3.2. Infinitive as the complement of a verb. Despite facing competition from finite complementation constructions (Joseph 1978/1990, Browning 1983, Joseph 1983a, Horrocks 1997) an infinitival complement is still a possibility in the texts of Later Medieval Greek. Most of these appear in the periphrases of the future tense (θελω ‘I want’ + infinitive, ex.(43)), the conditional (ἠθελα ‘I wanted’ + infinitive, ex. (44)) and the
pluperfect\textsuperscript{18} (ἐξέχα ‘I had’ + infinitive) (ex. (45)), but there are also some examples of a standard infinitival complement (ex. (46)).

(43) θέλεις μὲ κοπιάσειν  
θελεσ με kopiasin  
want–2sg Pres I–DO sg WP tire–Infin  
‘Will you tire me?’ (Digenēs, 1390).

(44) δόταν ἤθελες δοξασθῆν  
ὕτασ iθελες δοξασθίν  
when want–2sg Past glorify–Pass Infin  
‘When you would be glorified’ (Digenēs, 252).

(45) ἂν τὸχα ξεύρειν  
an toxa ksevrin  
if it–Acc sg. + have–1sg Past know–Infin  
‘If I had known it’ (Katalogia, 321).

(46) οὐ τολμᾶς ὑβρίζειν με  
οσι τολμαις ivrizin me  
you–Nom sg dare–2sg Pres insult–Infin I–DO sg WP  
‘You dare to insult me?’ (Poulologos, 99).

Mackridge (1993: 338) only discusses the cases of θέλω and ἤθελα periphrases for which he states that “the future and volitive construction θέλω + infinitive is quite straightforward as long as one bears in mind that the pronoun attaches itself to θέλω rather than to the infinitive.” What Mackridge overlooks in this assumption, however, is that, since the pronouns must appear adjacent to the verb that selects them as arguments, attachment to θέλω implies incorporation of the semantic arguments of the infinitival form.

\textsuperscript{18}According to Joseph (1983a: 64, 2000a), Horrocks (1997: 304) the present perfect periphrasis with the present tense of εξέχα ‘I have’ was modelled on the pluperfect form at a much later time.
as syntactic arguments of the \( \theta\varepsilon\lambda\omega \) form (which Joseph 1978/1990 describes via the optional application of 'clause union'). And although this may be a possibility for the future constructions (as it was for the \( \varepsilon\chi\omega \) + passive participle periphrases) there is no evidence that it also occurs in volitive constructions. Perhaps, though, Mackridge's mention of "future and volitive construction" is merely a way to avoid the controversy over the meaning of these \( \theta\varepsilon\lambda\omega \) + infinitive constructions.

Nonetheless, according to this assumption, the contrast between (47) and (48) is explained, as follows: in (47) the pronoun attaches to \( \theta\varepsilon\lambda\varepsilon\iota \), and is then 'attracted' to the preverbal position by the relative pronoun \( \dot{o}pou \) (according to his rule 2). On the other hand, in (48) the pronoun once again attaches to \( \theta\varepsilon\lambda\varepsilon\iota \), but this time it appears postverbally, because the complex follows immediately after the negative adverb \( \dot{o}u \) (Mackridge's rule 1b).

(47) \( \dot{o}pou \) \( m\varepsilon \) \( \theta\varepsilon\lambda\varepsilon\iota \) \( \tau\alpha\rho\varepsiloni \)

\( opu \) \( me \) \( \theta\varepsiloni \) \( pari \)

that–Comp me–DO sg WP want–3sg Pres take–Infin

'those will take me' \((Digen\varepsilon, 1769)\).

(48) \( \dot{o}u \) \( \theta\varepsilon\lambda\varepsilon\iota \) \( \tau\varepsilon\varsigma \) \( \pi\omicron\mu\varepsilon\iota\nu\varepsiloni \)

\( u \) \( \theta\varepsiloni \) \( tes \) \( pomini \)

not want–3sg Pres it–DO pl WP suffer–Infin

'He will not suffer them' \((Rimada, 1016)\).

The question of which of the two verbs is the host of the pronoun is important; for if Mackridge is correct that the \( \theta\varepsilon\lambda\omega \) form is always the host, then these constructions will have nothing to contribute to our discussion of weak pronoun placement and non-finite verb-forms.
One problematic aspect of Mackridge’s analysis concerns the accentuation of the pronoun. If Mackridge is correct that the pronoun attaches to the θέλω form, then in those cases in which it appears postverbally, the pronoun should be enclitic to the θέλω form. And if this is true, then one would expect that when the pronoun appears after a three-syllable form of θέλω (such as ἱθελα) the rule of secondary stress should take effect, adding an accent to the last syllable of the verb (see chapter 3, section 2).

This prediction, however, is not borne out in the case of θέλω periphrastic constructions, as can be seen in example (49), in which we see that the pronoun does not affect secondary stress on ἱθελα.

(49) ος μήμυμενα καὶ κώπωμα
os mirmika ke konora
like ant-Acc sg and mosquito-Acc sg
ἱθελα τὸν συντρίψειν
iθela ton sindripsin
want-1sg Past he-DO sg WP crush-Infin

"Like an ant and a mosquito I would have crushed him" (Achilleid, 1696).

The fact that in these circumstances, the pronoun does not pattern as an enclitic would casts doubt on Mackridge’s statement that the pronoun always attaches itself to the θέλω form. Another argument against Mackridge’s implicit assumption that θέλω future periphrases always involve ‘argument incorporation’ is that the infinitive can in some cases

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There is one other example from Kallimakhos, line 651, in which a secondary accent appears:

λαβέν γυναίκα ἱθελέ με
take-Infin. woman-DO sg iθela me

This is a troubling example, however. First of all, it seems to have a volitional meaning—Pichard (1956) translates it as “voulait m’épouser”—and this makes the separation between the Infinitive and its object pronoun surprising. Moreover, the infinitive is in the first hemistich while the rest of the VP is in the second hemistich (see chapter 6 for more details about the meter of the poetry). Thus, this construction is extraordinary for a variety of reasons, and basing conclusions on it is not very wise.
be preposed, as in example (50); such 'freedom of movement' is considered as evidence against 'argument incorporation' (cf. Abeille & Godard 1996).

(50) εὑρεῖν \(\tau\eta\nu\) \(\theta\epsilon\lambda\omega\)

ευρίν \(\tau\in\) \(\theta\epsilon\omega\)

find-Infinitive she-DO sg want-1sg Pres

'I will find her' (Phlōrios, 267).

If this were true, the pronoun in these cases should remain both the semantic and syntactic argument of the infinitive, which in turn means that the pronoun would be 'enclitic'. However, as was mentioned earlier (chapter 2), the pronoun is written with an accent when it appears preverbally (proclitic) and without an accent when it appears postverbally (enclitic), and out of the ten instances of a future periphrasis with a preposed infinitive, eight of them have a written accent on the pronoun. Thus instances such as (50) may be an indication that the pronoun is attached to the \(\theta\epsilon\lambda\omega\) form, and, subsequently, that 'argument incorporation' has taken place, despite the counterevidence provided by the preposed infinitive. The two non-conforming examples are:

(51) ἐγὼ \(\delta\omega\sigmaει\) \(\tau\epsilon\varsigma\) \(\hat{\eta}\theta\epsilon\lambda\alpha\)

ἐγὼ \(\deltaοσι\) \(\tau\epsilon\sigma\) iθελα

I-Nom sg give-Infinitive she-DO pl WP want-1sg Past

'I would have given them' (Rimada, 1270).

(52) χαρίσει \(\tau\omega\nu\) \(\tau\eta\nu\) \(\theta\epsilon\lambda\omega\)

χαρίσι \(\tau\upsilon\) \(\tau\in\) \(\theta\epsilon\omega\)

grant-Infinitive he-IO sg WP she-DO sg WP want-1sg Pres

'I will grant her to him' (Lybistros, 2510).
Example (52) is particularly telling because if one were to adhere to what the written accents indicate, then the IO τού and the DO την do not form a cluster, as the IO attaches to the infinitive and the DO to θελω. This is indeed quite surprising and casts serious doubts as to whether the written accents can be trusted as a guide at this intersection of two highly volatile constructions, weak pronoun placement and the future periphrasis construction.

On the other hand, the data do confirm that, from the perspective of pronoun placement, it seems as though the pronoun is attached to the θελω form as Mackridge has asserted. In Appendix A at the end of the chapter, Table 5.4 presents the results of coding the tokens of θελω periphrasis with a weak object pronoun, according to the character of the immediately preceding element, namely if it is associated with preverbal or postverbal placement, or if it is somewhat neutral towards placement. Thus, ‘postverbal environment’, includes factors such as ‘initial’, ‘coordinating conjunction’, ‘doubling pronoun’, ‘οù’ and so forth; in ‘preverbal placement’ factors ‘function word’ and ‘fronted constituent’ are included, whereas ‘neutral’ (for lack of a better term) includes ‘subject’ and ‘temporal expression’. As the table shows, in θελω periphrases with a ‘postverbal environment’ the pronoun is placed between θελω and the infinitive 42 out of 44 times; in ‘preverbal environments’ the pronoun appears to the left of θελω 35 out of 39 times, while in ‘neutral environments’ there are 8 post-θελω tokens and four pre-θελω tokens.

The only clear available evidence is that ‘argument incorporation’ happens at least sometimes, i.e., when the pronoun appears to the left of θελω. In the absence of any conclusive evidence concerning the host of pronouns that appear between the θελω form and the infinitive, it seems more straightforward to adopt the idea that all the periphrastic tense constructions involve some type of ‘argument incorporation’ mechanism, but note that this seriously challenges the notion that such mechanisms lead to a strong linear adjacency requirement.
With respect to true complement infinitives, it can be said that these constructions are rare, and appear mostly in texts before the 14th century (Digenês, Piôkhroprodomos, Spaneas, Glykas, Poulologos, Moreas). The specific verbs found with an infinitive complementizer in the corpus are ἀρχίζω /arχizo/ 'I begin', ἔπαιρο)(((w /épairo/ 'I am able to', ἱλητίζω /ilηtizō/ 'I hope', ἀραρα /arára/ 'I dare', and τολμά /tolma/, also 'I dare'.

There are ten examples, and in seven of them the pronoun appears after the infinitive as in example (46) above and (53):

(53) ἤρχατο εὑρεσθαι του irksato efxesthe tu

begin–3sg Past wish–Infin he–IO sg WP

'she began to wish him ...' (Digenês, 810)

However, since these constructions seem to be archaisms (note the use of the '–οθαι' infinitive in (53)) it may be that the pattern of pronoun placement associated with them is also archaic.

The evidence available from the LMG texts does not lead to any clear conclusions about the placement of pronouns that are arguments of non-finite verb-forms. At best, all one can say is that texts from before the 14th century have both a wider range of non-finite forms and variation between preverbal and postverbal pronoun placement in association to them. In texts after the 14th century, if the thorny issue of periphrastic tenses is put aside, the available non-finite verb-forms are gerunds and articular infinitives which are basically semantically equivalent; and the placement of the pronouns in this context is robustly postverbal. When these facts are compared with the situation in SMG (cf. examples 26-29) it is clear that at least the beginning of the partition of weak pronoun placement according to the finiteness of the verb-form is found in 14th century texts. Now that the evidence for the uncontroversially non-finite forms has been established, an examination of pronoun placement with the imperative is in order.
5.5.4. Imperatives.

When the verb is in the imperative form the placement of the weak object pronoun seems to vary in much the same way that it does for the finite verb-forms, the indicative and the subjunctive. Mackridge (1993: 330) is convinced of this as he emphatically states that it must be stressed that Rule 3 is valid as much for the imperative as for finite forms of the verb:

(54) ἀλλα μὲ εἰπὲ

other–Acc pl I–DO sg WP say–2sg Impv

'Tell me something else!' (Digenēs, 670).

(55) τρεῖς ἱγκλωσ ἀπο ἐν τὸ ἱγκλωσ

3 saddle straps I–IO sg WP it–DO sg WP strap on–Impv sg

'Strap it [the horse] for me, three saddle straps!' (Digenēs, 800).

The placement of the pronoun before an imperative is absolutely standard in such circumstances in texts from the twelfth to the fifteenth centuries, irrespective of geographical provenance; it is found not only in the Escorial Digenes Akrites but in Ptochoprodromos, the Chronicle of the Morea, and practically every other text in which the imperative is used.

The textual evidence, however, does not support the characterization "absolutely standard." The relevant data will be discussed presently, but before delving into the details, one must consider how an accurate comparison between the finite forms and the imperative forms can be conducted. First, the environments in which either a finite form or an imperative form could appear need to be separated from the rest. As such, all environments listed in Mackridge’s rule (2) must be excluded since the imperative cannot appear in that

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20 Mackridge only gives the Greek text but I included the broad transcription and translation, for readers not familiar with the language.
context. Next, one must exclude the negative adverb où from rule (1) because the imperative does not have a directly negated form (instead μή plus the subjunctive is used), as well as the conjunction δείκτης. Thus, the environments in which pronoun placement can be compared based on the verb-form are represented by the following factors: ‘initial’, ‘coordinating conjunction’, ‘reduplicated object’, ‘fronted constituent’, ‘subject’, and ‘temporal expression’.

Given the results presented in chapter 4 and earlier in this chapter, factors ‘initial’, ‘coordinating conjunction’, and ‘reduplicated object’ can be subsumed under the factor ‘initial’, yielding the following four categories: ‘initial’, ‘fronted constituent’, ‘subject’, ‘temporal expression’. Cataloguing the data according to these factors reveals that there is a difference between the placement of the pronoun with finite verb-forms on the one hand and imperative verb-forms on the other. Except for factor ‘initial’, however, the number of tokens is small, and comes from a limited amount of texts (for example, only ten texts have imperatives with a ‘fronted constituent’) so the results, which are presented in detail in the appendix, are suggestive, but not conclusive. Nonetheless, the patterns we observe are remarkably different.

For instance, when there is a ‘fronted constituent’ with a finite verb the pronoun appears preverbally 898 out of 988 times. In the case of the imperative, however, this only occurs 15 out of 32 times. Even as a suggestive result, these numbers do not in anyway confirm Mackridge’s intuition that whether the verb is of imperative or indicative (or subjunctive) form does not affect the placement of the pronoun.

Similarly, for the factor ‘subject’ we find no preverbal pronouns if the verb-form is imperative, yet for the finite verb-forms, an immediately preceding subject is associated with

21 Since the imperative in LMG appear only in the 2nd singular and plural forms with rare, highly stylized, and presumably consciously archaic uses of the 3rd singular or plural it would seem appropriate to exclude all non-2nd person forms from the finite verb-form database. It is, however, a reasonable assumption that the person of the form does not affect the placement of the weak object pronoun, and so it is not necessary to do so.
preverbal placement 334 out of 464 times. Finally, for ‘temporal expression’ we have 8 preverbal instances out of 24 when the verb-form is imperative but 86 preverbal instances out of 149 for a finite verb-form.

Thus, although preverbal pronoun placement is possible with imperative verb-forms in LMG, it is extremely restricted, especially when compared to the situation with the indicative and subjunctive on the one hand, and the pattern associated with the gerunds on the other. Contrary to Mackridge’s observation then, the imperative—with respect to weak object pronoun placement—behaves more like the gerund than the finite verb-forms. The reasons for this partition are discussed in chapter 8.

5.6. Conclusion.

In this chapter the variation in weak object pronoun placement was examined in more detail, and it was demonstrated that there are several intralinguistic factors that affect it. The data analysis confirmed Mackridge’s (1993) observation that although où is associated with postverbal pronoun placement, an immediately preceding àv où is associated with preverbal placement. Furthermore, it was shown for the first time that within the factor ‘reduplicated object’, the adjective δλος behaves contrary to the general pattern since one finds pronouns in the preverbal position when δλος is the doubled element. It was also demonstrated that when the verb is of imperative form, pronoun placement is, in general, predominantly postverbal, although there are not enough tokens to conduct a detailed analysis of the pattern of variation. It is, nonetheless, clear that the available data does not confirm Mackridge’s (1993) claim that the imperative shows no difference from the indicative with respect to object pronoun position. On the other hand, it was clearly demonstrated in this chapter that ‘emphasis’ on a preverbal element (e.g. object, subject etc.), and the distinction between a ‘topic’ and a ‘focus’ have no affect on the position of
weak pronouns. In the next chapter, equal consideration will be given to extralinguistic parameters that may play a role in the pattern of pronoun placement.
APPENDIX

A. Raw Counts

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**TOTAL** 19 2 27 0

Table 5.2: Raw counts of pronoun placement in the contexts αν où and ou μν.
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Table 5.3: Raw counts concerning the interaction between the presence of δλος and pronoun placement.
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<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Katalogia</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>44</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 5.4: Raw counts concerning the interaction between θέλω periphrastic constructions and pronoun placement.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PRE V</td>
<td>POST V</td>
<td>PRE V</td>
</tr>
<tr>
<td><strong>Preverb Environ.</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Digenēs</td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Ptôchoprod.</td>
<td>2</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Glykūs</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Spaneas</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Kallimakhos</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Lybistros</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Achilleid</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Belisarios</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Thrēnos</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Poułologos</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Paidiophr.</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Physiologos</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Spanos</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Aitōlos</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Moreas</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Tokkoi</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Rimada</td>
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<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Gioustos</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Dêpharanas</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Tribolēs</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Phalieres</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Homilia</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Apokopos</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Apollonios</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Philōrios</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Rhodos</td>
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<td>0</td>
</tr>
<tr>
<td>Katalogia</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**TOTAL** | 15 | 17 | 2 | 263 | 8 | 25

Table 5.5: Raw counts concerning the interaction between imperative verb-form and pronoun placement.
B. Results of one-way ANOVA

Figure 5.2: Comparing factors in Mackridge's rule (1), excluding tokens with δλος from factor 'reduplicated object'.

Figure 5.3: Graph of ANOVA with δλος tokens included in factor 'reduplicated object'.

108
Abs(Dif)-LSD initial coordinating $\delta_{TL}$ red. object

<table>
<thead>
<tr>
<th></th>
<th>initial</th>
<th>coordinating</th>
<th>$\delta_{TL}$</th>
<th>red. object</th>
</tr>
</thead>
<tbody>
<tr>
<td>initial</td>
<td>-0.36507</td>
<td>-0.35725</td>
<td>-0.3151</td>
<td>-0.14235</td>
</tr>
<tr>
<td>coordinating</td>
<td>-0.35725</td>
<td>-0.36507</td>
<td>-0.32291</td>
<td>-0.15017</td>
</tr>
<tr>
<td>oti</td>
<td>-0.3151</td>
<td>-0.32291</td>
<td>-0.46537</td>
<td>-0.29721</td>
</tr>
<tr>
<td>red. object</td>
<td>-0.14235</td>
<td>-0.15017</td>
<td>-0.29721</td>
<td>-0.38814</td>
</tr>
</tbody>
</table>

Positive values show pairs of means that are significantly different.

Table 5.6: Comparisons for all pairs using Tukey-Kramer HSD (when $\delta_{los}$ is excluded) $q^*=2.61939$.

![Figure 5.4: Comparing pronominal vs. nominal subjects.](image)

Figure 5.4: Comparing pronominal vs. nominal subjects.

Abs(Dif)-LSD pronoun nominal

<table>
<thead>
<tr>
<th></th>
<th>pronoun</th>
<th>nominal</th>
</tr>
</thead>
<tbody>
<tr>
<td>pronoun</td>
<td>-0.31015</td>
<td>-0.20641</td>
</tr>
<tr>
<td>nominal</td>
<td>-0.20641</td>
<td>-0.27202</td>
</tr>
</tbody>
</table>

Positive values show pairs of means that are significantly different.

Table 5.7: Comparisons for all pairs in pronoun vs. nominal subjects using Tukey-Kramer HSD, $q^*=2.01540$. 

109
C. GoldVarb Analysis

<table>
<thead>
<tr>
<th>Group</th>
<th>Factor</th>
<th>Weight</th>
<th>App/Total</th>
<th>Input &amp; Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>preceding elem.</td>
<td>δTl</td>
<td>0.293</td>
<td>0.79</td>
<td>0.79</td>
</tr>
<tr>
<td></td>
<td>coordinating</td>
<td>0.568</td>
<td>0.92</td>
<td>0.92</td>
</tr>
<tr>
<td></td>
<td>initial</td>
<td>0.464</td>
<td>0.89</td>
<td>0.89</td>
</tr>
<tr>
<td></td>
<td>redupl obj.</td>
<td>0.332</td>
<td>0.82</td>
<td>0.82</td>
</tr>
<tr>
<td>Cell</td>
<td>Total</td>
<td>739</td>
<td>681</td>
<td>680.935</td>
</tr>
<tr>
<td>coordinating</td>
<td>App’ns</td>
<td>65</td>
<td>62.018</td>
<td>0.000</td>
</tr>
<tr>
<td>redupl obj.</td>
<td></td>
<td>778</td>
<td>719</td>
<td>719.028</td>
</tr>
<tr>
<td>initial</td>
<td></td>
<td>38</td>
<td>30</td>
<td>30.012</td>
</tr>
</tbody>
</table>

Total Chi-square = 0.0001 Chi-square/cell = 0.0000, Log likelihood = -524.781

Table 5.8: Factors in rule (1)—δλος excluded from 'reduplicated object'.
CHAPTER 6

EXTRALINGUISTIC PARAMETERS

Having considered the intralinguistic parameters that affect the variation in pronoun position in chapter 5, I proceed in chapter 6 with the investigation of the possible effects of extralinguistic parameters. Since most of the texts analyzed in chapters 4 and 5 are works of poetry, the first section focuses on the role of meter and how it interacts with pronoun placement. In the second section, the possibility of dialectal variation is entertained, as this has also been suggested by Mackridge, but contrary to his (and Rollo's 1989) observations, it is demonstrated that the language of the Cypriot texts is different from that of other works.


The texts used for the analysis presented in chapter 5 are all written in verse, with the exception of Spanos, which is a work of prose. The type of verse used in all texts is known as the πολιτικός 'political' verse, which, according to Horrocks (1997: 256) is "the standard accentual metre of oral folk songs, medieval and early modern vernacular poetry, and much learned Byzantine writing." The typical form of this verse, again according to Horrocks (ibid: 257), was:

- eight syllables in the first hemistich before a strong caesura, followed by
- seven syllables in the second. Typically, there are two clearly felt stresses in
each half of the line, usually on the second or fourth, sixth or eighth, tenth or
twelfth, and fourteenth syllables (the last obligatory), giving an iambic
rhythm overall¹.

Although many editors of manuscripts have taken the liberty of emending the texts
to fit the meter (cf. the discussion of emendations by Mackridge 1993), no one has
discussed the effect that these metrical constraints have had on the placement of weak object
pronouns specifically. Mackridge himself briefly mentions that the effect of meter may be
seen in some instances when a subject immediately precedes the verb complex, but does not
go into further detail (1993: 331).

The following discussion, however, will demonstrate that there are certain metrical
requirements which interact with pronoun placement in specific and consistent ways. This
should not be taken however, as evidence that these metrically determined patterns of
pronoun placement are not grammatical, i.e., that the general audience would perceive these
constructions as non-Greek, or, even worse, that they would be unable to parse them. After
all, there are several ways in which the metrical requirements could have been satisfied,
especially in a written tradition where the composer—one would presume—could go back
and alter passages in order to satisfy both grammatical and metrical requirements. Thus, I
assume that, at worst, these constructions would have been perceived as stylized but not
unintelligible². As a consequence, it should be clear that the following discussion of the
effect of meter on pronoun placement is not to be taken as an argument for or against the
grammaticality of certain constructions, but rather as an evaluation of the validity of some of
the statistical patterns which were presented in chapter 4 within the context of another, over­
arching parameter.

¹ However, sixteen-syllable lines are not that unusual.
² It is also probably true that infrequent occurrences of less-than-grammatical constructions would be
accepted within a robustly grammatical context, while a succession of them would indeed prohibit
comprehension.
To begin with, an examination of those instances in which the verb complex is immediately preceded by a subject or a temporal expression show a curious interaction between the metrical requirements of the poem and the placement of the pronoun. In particular, it seems that in the overwhelming majority of cases (almost 90%), if the alternative pronoun placement was chosen (e.g. postverbal instead of preverbal) then the meter would have been affected in one of the two following ways.

1. The seventh syllable would be accented. As can be seen in the formulation given by Horrocks above, this is not preferred. Indeed, from my own examination of the texts it seems to be highly disfavored. In an example such as (1) then, if the pronoun was placed postverbally the accent would fall on the seventh syllable (in bold).

(1) κ’ οἱ Τοῦρ-κοι τὴν ἐ-κό-ψα-σιν τὴν τα-πει-νήν τὴν Πά-τραν

kj i turki tin ekopiasin tin tapinin tin patron

and the Turks she–DO sg cut–3pl Past the humble Patra

altm³ κ’ οἱ Τοῦρ-κοι ἐ-κό-ψα-σεῖν τὴν τὴν τα-πει-νήν τὴν Πά-τραν

‘And the Turks cut her down, the humble (city of) Patra’ (Thrēnos, 86).
Example (2) shows the same for an instance where the pronoun is postverbal.

---

³ This last line presents the alternative (altm) position of the pronoun in order to demonstrate this would result in a violation of the metrical requirements.
The table-master hits the shield with the sword” (Phlōrios, 671).

2. The fourteenth syllable would not be accented. However, an accent on the 14th syllable is obligatory, and in the relevant examples it is clear that the alternative placement of the pronoun would result in the fourteenth syllable not being accented, as in examples (3) and (4).

(3) ὁ τὰ-ξι-διά-ρης θέ-λει μὲ οἱ ἄρ-ρω-στοι ζή-τοῦν μὲ

{o taksiōjaris} thelia me i arosti zitun me

syl] 1 2-3-4-5 6-7 8 9 10-11-12 13-14 15

the traveller wants me the sick ask for me

altm ὁ τὰ-ξι-διά-ρης θέ-λει μὲ οἱ ἄρ-ρω-στοι μὲ ζή-τοῦν

‘The traveller wants me, the sick ask for me’ (Katalogia, 428).
The same is true when the verb complex is preceded by a temporal expression, as can be seen from examples (5) and (6).

(4) πόθος σε κα-τα-πό-νε-σεν, ἀ-γά-πη ἐ-φλό-γι-σέν σε

poθos se katóponesen ágarj eflogisen se

syl 1-2 3 4-5-6-7-8 9-10 12-13-14 15

passion you hurt–3sg Past love inflame–3sg Pst you

altm πόθος σε κα-τα-πό-νε-σεν, ἀ-γά-πη σ’ ἐ-φλό-γι-σέν

‘Passion has hurt you, and love has inflamed you’ (Digenēs, 866).

The same is true when the verb complex is preceded by a temporal expression, as can be seen from examples (5) and (6).

(5) συν-τό-μως φέρ-νοι-σίν τόν

sindomos fœrnusin ton

syl 9-10-11 12-13-14 15

soon bring–3sg Past he–DO sg WP

altm συν-τό-μως τόν φέρ-νοι-σίν

‘Quickly, they bring him’ (Belisarios, 344).

Although there are some examples in which changing the pronoun placement would not affect these metrical constraints, they are by far too few (36 out of 464 for ‘subject’, 14 out of 149 for ‘temporal expression’) to allow one to make any judgement. In addition, these examples are associated with both preverbal and postverbal placement so they cannot provide any clear evidence.
The facts concerning pronoun placement and the factor ‘fronted constituent’ provide a very illuminating point of contrast. Although the cases in which a change in pronoun placement would affect the meter of the poem are still the vast majority, the percentage of instances in which the pronoun could switch position without violating the constraints listed above is double the analogous percentage for ‘subject’ and ‘temporal expression’ (182 out of 884, roughly 21%, vs. 50 out of 449, 11%). The one-way ANOVA test also confirms that preverbal pronoun placement associated with factor ‘fronted constituent’ is not as affected by metrical constraints as is the same for factors ‘subject’ and ‘temporal expression’ (see Appendix B, figure 6.1).

‘Quickly, he blinded him’ (Belisarios, 350).

‘he made him a legate’ (Moreas, 485).
Example (7) is particularly telling because in the *Chronicle of Moreas* there are alternatives to the verb-form ἐποιήσαν which would allow the postverbal placement of the pronoun. One of them is the common form ἐποικεν, which, with a following pronoun gives ἐποικὲν τὸν, a form that would not violate the metrical constraints. The fact that these verb-forms were interchangeable is underscored by one of Alexiou’s (who has published the authoritative edition of *Digenēs Akritēs Escorial*) editorial decisions. In the second hemistich of line 1596, Alexiou emends

(8) τρία κακὰ τῆν ἐποικα

tria kaka tin epika

syl 9-10 11-12 13 14-15-16

three evils-Acc pl she-IO sg WP do-1sg Past

‘I did three evil things to her’ (*Digenēs*, 1596), to

(9) τρία κακὰ ἐποικά τῆν

tria kaka epika tin

for “the purposes of meter”. It appears that what he was trying to achieve here was to have the [e] of ἐποικα immediately follow the [a] of κακὰ so that the two vowels would coalesce into one syllable, thus giving the more canonical fifteen-syllable line. Mackridge (1993: 336) believes this is an erroneous emendation only because it violates his third rule, not because the verb-form is not available. Returning to example (7), the choice of a differently accented form of the verb (i.e., ἐποιήσαν) in order to keep the pronoun preverbal in the context of a ‘fronted constituent’ shows that this constraint is real and not an epiphenomenon of the metrical requirements.
Another instance that shows that preverbal pronoun placement is not subject to these metrical constraints comes from the poem of Belisarios. The following two examples, one the first hemistich of a line (10), the other the second (11), show how the author manipulates the accenting of the verb in order to keep the pronoun preverbal.

(10) πλού-τον πο-λυ τοὺς ἐ-δω-κεν
pluton poli tus εδοκεν
syll 1-2 3-4 5 6-7-8
wealth much–DO sg he–IO pl WP gave–3sg Past
‘He gave them much wealth’ (Belisarios, 245).

(11) πλού-τον πο-λυ ο’ ἐ-δω-κεν
pluton poli s εδοκεν
syll 9-10 11-12 13-14-15
wealth much–DO sg you–IO sg WP gave–3sg Past
‘He gave you much wealth’ (Belisarios, 431).

It is obvious from these two examples that πλού-τον πολυ ἐδωκεν τους was a viable alternative for example (10) and the fact that the author chose against it is very suggestive.

More importantly, a careful examination of the data shows that in all but one of the tokens in which the pronoun is placed postverbally, a change to preverbal placement would violate the metrical constraints, as in example (12):
The above discussion presents strong evidence that the preponderance of preverbal pronoun placement associated with factors ‘subject’ and ‘temporal expression’ is an epiphenomenon of the metrical constraints. This in turn would suggest that the variation between preverbal and postverbal pronoun placement in these contexts is free.

These considerations should be extended to the rest of the data as well, in order to determine whether the variation seen in other contexts is also affected by these metrical constraints. With respect to finite verbs, however, as can be seen in Appendix A of chapter 4, this is really not an issue for the other factors, since the placement of the pronoun in those cases is near categorical, in one direction or the other. The only question that can be raised concerns the effect of ὅλος, which as was demonstrated in chapter 5, section 2, is associated with preverbal ‘doubling pronouns’. It is therefore reasonable to wonder whether this pattern was also affected by metrical constraints.

However, in the case of ὅλος, ten out of the twenty four preverbal instances could not have been affected by the meter (cf. example (13)). This calculates at a percentage of roughly 42%, which is too high to disregard, and thus indicates that metrical constraints did not interact with the effect of ὅλος.

(12) καὶ ἄπω τὴν κά-ψα βλε-πεὶς μὲ
κε ἀπο τὴν κάρσα νιέπις μὲ
syll 1-2 3 4-5 6-7 8
and from the heat see-2sg Pres I–DO sg
altm καὶ ἄπω τὴν κά-ψα μὲ βλε-πεὶς
‘and due to the heat, you see me …’ (Phalieros I, 484).
Metrical constraints, however, seem to interact with pronoun placement in the case of the imperative verb-forms. In particular, an examination of preverbal pronouns in the context of imperative (25 in total), shows that there are only two instances in which the meter would not have been affected (Digenès, 800 and Spaneas, 369 (ex. (14)). On the other hand, there are several instances of postverbal pronouns with imperatives that do not interact with the metrical constraints (ex. (15)):

(14) σύν-το-μα τοῖς τὸ χά-ρι-σε

soon they-IO pl WP it-DO sg WP grant-Impv sg

σύν-το-μα χά-ρι-σε τοῖς το

'Give it to them in timely fashion' (Spaneas, 369).
This evidence provides further support to the claim made at the end of chapter 5 that the pattern of variation in preverbal pronoun placement associated with imperatives is not of the same sort as that found with finite verb-forms.


Since it has been shown that the metrical requirements of the texts play a role in pronoun placement in some instances, it is also reasonable to wonder whether the 'strong caesura', i.e., the rhythmic break between the two hemistichs affects the placement of the pronoun as well. This is especially so since Mackridge (1993: 330, fn. 2), remarks that When a longer adverbial phrase precedes, the pronoun may be placed after the verb ... In such cases metre may play a role: the caesura after the eighth syllable perhaps separates the adverbial phrase from the verb.

Implicit in this line of reasoning is the assumption that pronoun placement may also be prosodically constrained: pronouns cannot appear in 'clause-initial' position because that is also the initial position of an intonational phrase; similarly, the caesura marks the beginning of a new intonational phrase so pronouns should not appear immediately after it.
Accordingly, one would expect weak object pronouns to appear after the verb, if the verb complex is immediately preceded by a caesura.

The database contains 256 instances in which the verb complex appears immediately after the caesura. In 207 of these the pronoun appears postverbally as in example (16), while in 49 it appears preverbally as in example (17).

(16) γάληνίσε, σώνει με ἥ κούραστα μου.

γαληνισε ||§ soni me i kurasja mu

calm–Impv be enough–3sg Pres I–IO sg WP my fatigue–Nom sg

‘Calm down, I am tired enough’ (Phalieros I, 103).

(17) τὸ γένος φυσικά μᾶς κάμνει ν’ ἀγαποῦμε

το γενος fisika || mas kamni nagorumpe

the race naturally we–DO pl WP make–3sg Pres to love

‘The race makes us love naturally’ (Phalieros I, 514).

A closer examination of the data, however, shows that the great majority of postverbal placement is found in environments that already favor this pronoun position (‘initial’, ‘reduplicated object’, ‘imperative’). There are no instances in which the caesura follows after one of the members of the factor category labeled ‘function word’ (e.g. an interrogative pronoun, a negative adverb, etc.). When the caesura follows immediately after a constituent belonging to the factors ‘fronted constituent’, ‘subject’, ‘temporal expression’, preverbal and postverbal placement equally apply (32 vs. 29 respectively), as in examples (18) and (19).

\(^5\) || indicates the caesura.
The lord gave her mercy’ (Apollonios, 570).

‘They judge her a painful decision, to die’ (Phlōrios, 441).

Thus the caesura does not seem to affect the placement of the pronoun in any significant way. As far as the length of the constituent is concerned, this does not seem to affect pronoun placement either, as the existence of constructions such as example (20) indicate:

‘Are you telling me to suppress the desire of my youth?’ (Phaliers I, 56).

More importantly, there is no ruler by which the length of a constituent can be measured and assigned either to the short end or the long one, as there is no scale that can measure the weight of a NP in the so-called ‘Heavy NP’ English construction. This avenue, then, has not much to offer in the way of an explanation.
6.2. Pronoun placement according to chronology and geography.

The fact that variation in a speech community can also be linked to a number of social parameters, such as education, class status, political ideology and the interpersonal networks of individual speakers has been well-established in the past 40 years, and its ramifications for language change have been and are still being explored (Labov 1963, 1994, Fasold 1972, J. Milroy 1992, L. Milroy 1987). Unfortunately, as has been pointed out in chapter 3, in this case there is very little information about the authors of the extant texts to allow a detailed sociolinguistic study of the variation. In many cases all we have are educated guesses based on partial information about the place of origin of a text and the time period in which it was written.

In fact, Mackridge pays little attention to the geographic origin and chronology of texts as important factors in the variation. He claims that “The chief rules remain fairly stable ... throughout the Greek-speaking world between the eleventh and the seventeenth centuries;” (Mackridge 1993: 326) and that “geographical provenance seems to have very little significant effect on the rules” 6 (ibid). Once again, there is no clarification as to which are the “chief rules” or how “fairly stable” is supposed to be interpreted. Nonetheless, Mackridge is not alone in thinking that there is no dialect variation with respect to pronoun placement. Horrocks (1997: 212-214) discusses the formation of dialectal differences in the Medieval Ages but does not mention pronoun placement as one of the dialectal features; and in his discussion of the language of Kornaro’s Ἐρωτόκριτος (late 16th century), Horrocks (ibid: 310) claims that

6 Mackridge however, does mention in passing that there may be “the possibility of geographical variation” (1993: 326).
object pronouns are regularly placed after the verb that governs them unless there is a subordinating conjunction or sentential operator in initial position (i.e., the normal pattern of medieval Greek is preserved ...) [emphasis added].

Determining whether or not the time period in which a text was written is a factor affecting the placement of weak object pronouns may indeed be impossible. The main reason is that the texts have come down to us in manuscripts or printings that were produced many years after the original composition of a work. As a result, there are only approximate dates for the texts, a fact that allows for large scale divisions only. Thus it is accepted that the poems of Digenēs, Pēkhoprodromos, Glykas and Spaneas were composed before the 14th century, while the rest of the works comprising this database originated between the 14th and middle of the 16th century, some of them being easier to date than others. However, the small number of texts of the 'early' period does not make for a valid sample. Therefore, a comparison of texts based on their chronology faces too many methodological problems to be informative.

On the other hand, some interesting comparisons can be made based on the place of origin of the texts and their authors. I begin with a discussion of the facts for Cypriot Greek texts of the Later Medieval period, which have been assumed to show the same pattern of pronoun placement as texts from other regions. Thus, as has already been discussed in chapter 4, Mackridge uses an example from the chronicle of Makhairas to support his claim that "the pronoun is placed postverbally if the verb complex is immediately preceded by the causal conjunction διήτο (διητή 'because')." On the other hand, texts from the other parts of the empire show preverbal pronoun placement associated with διήτο although the number of tokens is too small to judge by. Rollo (1989) makes
claims about Medieval Greek by using examples for the Cypriot texts also; and Horrocks (1997: 282-289) does not mention pronoun placement as a distinguishing feature of the emerging Cypriot dialect either.

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 the other body of texts in several ways. Taking the eight factors identified in chapters 4 and 5 as affecting the placement of the pronoun in the main group of texts one notices the following (metrical requirements are not an issue since both chronicles are written in prose):

<table>
<thead>
<tr>
<th>Text Factor →</th>
<th>Makhairas</th>
<th>Boustrônios</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PRE V</td>
<td>POST V</td>
</tr>
<tr>
<td>'initial'</td>
<td>43</td>
<td>2</td>
</tr>
<tr>
<td>'reduplicated object'</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>'function word'</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>'fronted constituent'</td>
<td>0</td>
<td>23</td>
</tr>
<tr>
<td>'subject'</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>'temporal adverb'</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>'gerund'</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>'imperative'</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>'infinitive'</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Table 6.1: Pronoun placement in the Cypriot Chronicles.**

Furthermore, the excerpt from the *Assizes* that is included in Haletas shows the same pattern, namely a clear-cut distinction in pronoun placement between 'function word', which is associated with categorically preverbal pronouns, and all other factors which are associated with categorical postverbal placement. This is significantly different from the
complex variation pattern seen for the texts from other parts of the empire in the appendix to chapter 4 and it explains why Rollo (1989: 136), who makes reference mostly to the Cypriot texts, claims that for all LMG texts, when a subject immediately precedes the verb complex the pronoun is most likely to be placed postverbally:

Troviamo in-fatti durante questo periodo adoperata l’enclisi nei seguenti casi:
1) quando il verbo era immediatamente preceduto dal soggetto.
2) quando il verbo dipendeva dalla congiunzione dichiarativa e consecutiva διό o dalla causale διότι, e queste gli stavano subito innanzi.

It has already been mentioned in chapter 2, fn. 7 that Rollo’s account suffers from the fact that he has relied on Cypriot texts, which, coupled with the fact that he does not distinguish the role of temporal expressions, led him to include even adverbs in general as associated with postverbal pronoun placement: “4) spesso quando il verbo era preceduto da un avverbio” (ibid: 139).

It should be noted, of course, that the evidence comes from two sources only (albeit these are sizable texts and constitute most of the Medieval Cypriot corpus), and as such it can only be suggestive. However, the pattern of pronoun placement in these texts is so strikingly different, in its clear distinctions, from the pattern seen before, that it would be a mistake not to point it out.

Another major difference in the pattern of variation, which seems to depend on the text’s provenance, involves the greater occurrence of preverbal placement at the beginning of the clause in the Chronicle of Moreas where the pronoun appears preverbally in initial position seventeen out of thirty one times. What is interesting, however, is that thirteen of these tokens are instances of a parenthetical statement oè λαλω or oè λεγω, raising the question whether the metrical constraints are at play in any way in this case, inasmuch as the two verbs differ accentually. Indeed, in ten of these instances the parenthetical comes either
at end of the first hemistich—in which case it is ωε λαλῶ, or at the end of the line—in which case it is ωε λέγω. However, postverbal placement in these cases, namely λέγω ωε and λαλῶ ωε, would be metrically appropriate for the end of the first hemistich and the end of the line respectively, which means that the metrical constraints do not play a role here.

Mackridge mentions the parenthetical statements in Moreas (1993: 333 fn. 2), and believes them to

... indicate the beginnings of the development that was to take place in mainland and western dialects of Greek, namely the placement of the clitic pronoun before all finite verb-forms. The fact that this phenomenon does not seem to be found in more eastern Greek texts (e.g. Cretan) until much later seems to suggest [this].

However, as can be seen in Appendix A of chapter 4, texts from Western Greece (see Table 6.2) that were written much later (almost 3 centuries in some cases) than the Chronicle of Moreas favor postverbal pronoun placement at the beginning of clauses. That information is repeated here in Table 6.3, and argues against the suggestion that what is found in Moreas is the inception of dialect differentiation. In chapter 8, this issue will be approached from a different perspective.

<table>
<thead>
<tr>
<th>Area→ Text</th>
<th>Eastern</th>
<th>Western</th>
<th>Crete</th>
<th>Rhodes</th>
<th>Translations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 6.2: Texts according to geographical area.

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Table 6.3: Pronoun placement in 'western' texts according to factor 'initial'.

One final irregularity in the pattern described so far is observed in some 'western' texts with respect to postverbal pronoun placement associated with the factor 'coordinating conjunction'. As can be seen in Table 6.4 these texts (in bold) do not show the same tendency for postverbal placement as other texts do (Moreas, Tokkoi, and Tribolēs for example).
Table 6.4: Pronoun placement in 'western' texts according to factor 'coordinating conjunction'.

<table>
<thead>
<tr>
<th>Factor Text</th>
<th>Coordinating</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PRE V</td>
<td>POST V</td>
</tr>
<tr>
<td>Aitôlos</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Moreas</td>
<td>1</td>
<td>33</td>
</tr>
<tr>
<td>Tokkoi</td>
<td>1</td>
<td>56</td>
</tr>
<tr>
<td>Rimada</td>
<td>18</td>
<td>47</td>
</tr>
<tr>
<td>Gioustos</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Depharanas</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Tribôlês</td>
<td>4</td>
<td>30</td>
</tr>
<tr>
<td>TOTAL</td>
<td>40</td>
<td>174</td>
</tr>
</tbody>
</table>

As was the case for clause-initial preverbal pronouns in Moreas, meter does not seem to affect this preponderance of preverbal placement after a coordinating conjunction. Since the three longest texts were composed on the island of Zakynthos, it may be that this is an indication of the inception of a dialectal differentiation with respect to pronoun placement in western Greek. Modern Greek dialectal evidence from the 20th century would support the claim that the pronoun placement pattern of Standard Modern Greek (preverbal only in finite forms) had its beginnings in mainland or western Greek, mainly because the eastern dialects (notably Crete, Rhodes, Khios, Mykonos, the Pontic dialects, and, of course, Cypriot—see Pangalos 1955, Kontosopoulos 1981, Drachman 1993, Oikonomidês
1958, Newton 1972) still maintain vestiges of postverbal placement with finite verb-forms. Without any corroborating evidence though, this observation about Zakynthian Greek can only be a suggestion.

6.3. Conclusion.

In this chapter an attempt was made to identify parameters that are not associated with the structure of the language per se, yet still affect the pattern of variation in object pronoun position. There is, unfortunately, limited evidence about the source of many of the documents, which in turn reduces our ability to determine whether or not there is any social meaning encoded in the variation. Nonetheless, it was clearly demonstrated that the metrical requirements of the compositions do affect pronoun placement when the factor preceding the verb complex is either 'subject' or 'temporal expression' or when the verb is in the imperative. Furthermore, it was shown that, contrary to standard opinion, the language of the Cypriot chronicles is significantly different from that of the other LMG texts with respect to pronoun placement. As will be seen in chapters 7 and 8, both of these observations will prove to be significant for reaching a better understanding of the nature of the variation.
APPENDIX

A. Raw counts.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Digenēs</td>
<td>108</td>
<td>16</td>
</tr>
<tr>
<td>Ptochoprod.</td>
<td>25</td>
<td>6</td>
</tr>
<tr>
<td>Glykas</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Spaneas</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Kallimakhos</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Lybistros</td>
<td>36</td>
<td>16</td>
</tr>
<tr>
<td>Achilleid</td>
<td>42</td>
<td>11</td>
</tr>
<tr>
<td>Belisarios</td>
<td>14</td>
<td>8</td>
</tr>
<tr>
<td>Threnos</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>Poulologos</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td>Paidiophr.</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Physiologos</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>Spans</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXCLUDED</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aitōlos</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Moreas</td>
<td>81</td>
<td>29</td>
</tr>
<tr>
<td>Tokkoi</td>
<td>72</td>
<td>24</td>
</tr>
<tr>
<td>Rimada</td>
<td>55</td>
<td>7</td>
</tr>
<tr>
<td>Gioustos</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>Depharanas</td>
<td>14</td>
<td>7</td>
</tr>
<tr>
<td>Tribōlēs</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Phalieros</td>
<td>20</td>
<td>12</td>
</tr>
<tr>
<td>Homilia</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Apokopos</td>
<td>23</td>
<td>5</td>
</tr>
<tr>
<td>Apollônios</td>
<td>28</td>
<td>8</td>
</tr>
<tr>
<td>Phlōrios</td>
<td>56</td>
<td>2</td>
</tr>
<tr>
<td>Rhodos</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Katalogia</td>
<td>31</td>
<td>4</td>
</tr>
<tr>
<td>TOTAL</td>
<td>708</td>
<td>182</td>
</tr>
</tbody>
</table>

Table 6.5: The effects of metrical requirements on preverbal placement for factors ‘fronted constituent’ vs. ‘subject’ and ‘temporal expression’.
B. Results of one-way ANOVA.

Figure 6.1: Comparison of the effect of metrical requirements on ‘fronted constituent’ vs. ‘subject’ and ‘temporal expression’.

<table>
<thead>
<tr>
<th>Abs(Dif)-LSD</th>
<th>subject/temporal</th>
<th>fronted constituent</th>
</tr>
</thead>
<tbody>
<tr>
<td>subj/tem</td>
<td>-0.17879</td>
<td>0.090450</td>
</tr>
<tr>
<td>frnt cns</td>
<td>0.090450</td>
<td>-0.17879</td>
</tr>
</tbody>
</table>

Positive values show pairs of means that are significantly different.

Table 6.6: Comparisons for all pairs in ‘fronted constituent’ vs. ‘subject’ and ‘temporal expression’ using Tukey-Kramer HSD, q* = 2.00860.

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CHAPTER 7

EXISTING EXPLANATIONS FOR THE VARIATION IN PRONOUN PLACEMENT

The previous chapters present in full the complexity of the variation in the placement of weak object pronouns and expose the parameters that affect it. It was shown that it is necessary to partition verb-forms into three categories: finite (indicative and subjunctive), non-finite (participial forms and the infinitive) and imperative. For the non-finite forms the placement of the pronoun is always postverbal, while for the imperative forms the placement of the pronoun is always postverbal if the complex is clause-initial or if it immediately follows a ‘coordinating conjunction’, a ‘subject’ or a ‘reduplicated object’; if a ‘fronted constituent’ or a ‘temporal expression’ immediately precedes the complex though, the pronoun can be either preverbal or postverbal. Finally, when the verb-forms are finite, pronouns are placed postverbally when the complex is ‘clause-initial’, or immediately follows a ‘coordinating conjunction’ or a ‘reduplicated object’; they are placed preverbally when the complex is immediately preceded by a ‘function word’, or a ‘fronted constituent’ (object, non-temporal adverb, prepositional phrase). Finally, the placement is unconstrained when the complex is immediately preceded by a ‘subject’ or a ‘temporal expression’.
7.1. Previous explanations for the LMG facts.

Having provided a summary of the findings in the previous chapters, I will now proceed with an evaluation of previous attempts at explaining the facts about weak object pronoun placement in Later Medieval Greek. Other than Mackridge's two papers (1993 and 1995) there are only two other researchers, Horrocks (1997), and Philippaki-Warburton (1995) that have dealt with the LMG facts specifically. None of these accounts is a complete explanation of the facts, because both researchers chose not to deal fully with the facts about non-finite verb-forms and the imperative. I will show, nonetheless, that there are other aspects of these explanations that are also problematic.

Horrocks' (1990) article is a look at 'clitic' pronoun placement in the entire history of Greek. In the section concerning Later Medieval Greek he gives an account of how the 'clitic' position changed from postverbal to preverbal by linking it to the change of the conjunction ἵνα [ina] to νά [na]:

Evidently as the phonologically and syntactically independent status of νά as a conjunction declined ... it came to be felt more and more as a part of the verbal complex, and as this happened, the clitic was naturally drawn to second position within that complex, in accordance with the pattern that we have seen already (1990: 49-50).

Horrocks thus maintains that the pronouns are still appearing in second position as they did in Classical Greek, with the exception that the domain in which second position is determined has changed from S to VP (or verbal complex). Unfortunately, however, Horrocks' account contains some mistatements about the facts. For example, as seen already in chapter 5, section 1, Horrocks thought that negative οù draws the pronoun to a preverbal position, which is at odds with the present description of the facts, and seems to be the result of not recognizing the effect of the examples with ἄν οù. Furthermore, he states that "cases where the pronoun precedes ... are vastly outnumbered by the examples where
the pronoun follows”, which again is contrary both to Mackridge’s account, and to the
results of this study. Since, however, Horrocks’ explanation has more the air of a
suggestion for further research rather than a conclusive statement, his hypothesis should not
be critiqued too rigorously.

Philippaki-Warburton (1995) bases her analysis on the description of the facts
given by both Horrocks (1990) and Mackridge (1993)—but without recognizing that they
disagree about the facts—and proposes the structure seen in Figure 7.1 for what she calls
Hellenistic Greek (but can only be Later Medieval Greek, since she invokes Mackridge’s
account).

Figure 7.1: Phrase Structure of LMG (Philippaki-Warburton 1995).
In this structure it is assumed that the clitic\(^1\) is adjoined to the Tense-Agreement Phrase. It must be pointed out that MP in this case stands for Mood Phrase and according to Philippaki-Warbuton is occupied either by the Indicative Morpheme (which is non-overt), the subjunctive marker \(\text{vá}\), or the Imperative morpheme.

According to this analysis in a sentence such as (1) the Indicative Morpheme of the second clause, \(\text{ἐπάτησε τόν}\), although it is not overt, occupies the M-node and draws the verb to it, thus putting the verb in initial position; as a consequence the pronoun order is postverbal.

\[
(1) \quad \text{ἐσφαλε, ἐπάτησε τόν}
\]

correct

\[
\text{esfale epatise ton}
\]

the

\[
\text{er}r-3\text{sg Past break-3\text{sg Past he-D}}\text{O s}\text{g WP}
\]

‘... he erred, he broke him (the oath)’ (Moreas, 80).

In the case of an imperative, it is the Imperative morpheme that draws the verb to the M-node, thus making the placement of the pronoun postverbal. When the sentence is negative, on the other hand, the negative marker (e.g., \(\text{δὲν}\)) is assumed to occupy the Neg\(^\circ\) position and to block the movement of the verb to any higher position thus yielding sentences such as (2):

\[
(2) \quad \text{δὲν μᾶς διδι}
\]

correct

\[
\text{den mas didi}
\]

\[
\text{not we-IO pl WP give-3\text{sg Pres}}
\]

‘He does not give us’ (Aitòlòs, 174).

---

\(^{1}\) I will not engage, for the moment, in a discussion about the status of the weak pronouns as ‘clitics’ or ‘affixes’. This issue will be taken up in a later chapter; here I will focus on the problematic aspects of these analyses, even if their assumption that the pronouns are clitics in LMG is granted.
The future marker ῶδε has the same effect of blocking, while the subjunctive marker νά is considered as occupying the M-node and thus the verb cannot move to that position. Finally, with respect to the gerund, Philippaki-Warburton claims that the ending -οντας /οντας/ is not located in the M-node but is a Case feature, which attributes a [-Tens/Agr] value to the gerund. The main motivation for this analysis of the gerund is to capture the fact that the gerund may be negated by the negative marker μή in SMG, something which is not possible for the imperative as the following two examples show.

(3) Μή γνωρίζωντας τήν ἀλήθεια

mi γνωρίζωντας τιν ἀλήθεια

not know-Gerund the truth-DO sg

'Not knowing the truth.'

(4) * Μή κάτσε

mi κάτσε

not sit-Impv

'Don’t sit!'

As a result of this assumption, Philippaki-Warburton has to also postulate that in the absence of [Tens/Agr] features, the ‘clitics’ are not drawn to the adjunction site. This yields postverbal pronoun placement with gerunds as in (5).
There is no mention of the infinitival constructions, presumably because there is no infinitive in SMG, but I assume that for LMG, Philippaki-Warburton would suggest the same explanation.

There are several problems with this account. The most serious ones are:

1. The only motivation for V-movement to the M-node is the presence of the Indicative Morpheme. However, Philippaki-Warburton also claims that in negative declarative sentences the presence of δέν blocks the verb from moving to the M-node, which leaves one to wonder how the verb is marked as indicative in these constructions. If, on the other hand, one claims that the verb and the Indicative Morpheme are linked despite the intervening δέν, then there is really no motivation for the verb to move to the M-node in affirmative constructions. Either way, one of the two conditions has to be stipulated and this is undesirable.

2. This account lacks observational adequacy. This can be seen on several levels. First of all, it predicts the wrong pronoun placement in an indicative sentence with an interrogative pronoun such as τίς, as in example (6):
One would expect that the analysis of this sentence would be identical to that of example (1) with the exception that in this case the interrogative pronoun (a wh-phrase) is occupying the SpecC node. According to Philippaki-Warburton’s account the verb should still move to C yielding τίς παίρνει σέ which is a very rare construction (2 out of 166 tokens, see Table 4.8).

Second, this account is not able to capture the distinction between factors ‘reduplicated object’ and ‘fronted constituent’ with respect to pronoun placement. I assume that both of these cases would require the presence of the constituent in a node higher than C, thus not blocking V-movement to the M-node in any way. Under this assumption Philippaki-Warburton’s account predicts that reduplicated objects and fronted constituents which immediately precede the verb complex should affect the placement of the pronoun in the same way—it should be postverbal—which, as was shown in chapters 4 and 5, is not the case. Reduplicated objects are associated with postverbal placement, fronted constituents with preverbal placement.

Third, it is clear from Philippaki-Warburton’s own analysis that she does not take into account Mackridge’s statement that weak pronouns also appear preverbally when the verb-form is an imperative.
Finally, there is no way in this analysis to allow for the fact that the pronoun can appear either preverbally or postverbally when the complex is immediately preceded by a subject or a temporal expression. For these reasons Philippaki-Warburton’s (1995) account cannot be sustained.

The last proposal is that of Horrocks (1997), according to which there were two different categories of conjunctions and complementizers in Later Medieval Greek: traditional (ὁτι /oti/, διότι /dioti/, and εί /i/), and their modern counterparts which resulted through aphaeresis (ποσ /pos/, ποι /poi/, νά /na/, ἀν /an/). Each of these classes was associated with a different structure. The ‘traditional’ structure is seen in 2(a), and the ‘modern’ one in 2(b). The most notable difference between the two is that the ‘traditional’ structure has a node ConP, headed by enclitic connectives (as these were known for Classical Greek), while the ‘modern’ structure has the node CIP which is the post classical development of ConP and the obligatory position of ‘clitic’ pronouns.

\cite{Smyth.1956} mentions that ἀν (/an], an Attic construction of ἀν) is found as a conditional particle in later Attic writers and Plato. Thus, it is probably not a product of aphaeresis.
According to Horrocks's new assessment, in the case of a traditional complementizer, such as ὅτι, the [V + Cl] complex can remain in the VP, or move to Con. For modern complementizers the verb is obligatorily shifted to Cl in the order Clitic + Verb. Furthermore, if C is empty in either case then [V + Cl] (optionally) or V (obligatorily) will move into that position. Both of these structures would thus yield the Verb–Clitic order when the Verb is initial in a main clause. Further, Horrocks (ibid: 210) asserts that

The presence of a preposed interrogative or focal phrase within CP had the same effect as the presence of an overt complementizer in C, i.e., to force the verb to appear after the clitic pronouns in CIP. Preposed topics, however,

Figure 7.2: Complementizer structures in Medieval Greek (Horrocks 1997—ConP stands for Connective Phrase, and CIP for Clitic Phrase).
were clearly placed outside the clause structure proper (being adjoined, say, to CP), so that the true clause-initial position remained free to accept V, thereby effecting the normal main-clause order (i.e., V+clitic) in these cases.

The first problem with this analysis is the spurious ambiguity in the case of main clauses: it is impossible to know whether such sentences are generated by structure (2a) or (2b). But perhaps this is to be expected in a transitional period such as the one that Horrocks describes. A more serious problem arises, however, when one considers that there is no reason why a phonological change, such as the aphaeresis of initial vowels, would correlate with a new syntactic structure. Especially since the complementizer ȳν which emerged in Ancient Attic and thus is a 'traditional' complementizer is associated with preverbal and not postverbal placement in LMG. In addition, given Horrocks' (1997: 208-9) analysis of να as result of aphaeresis from ἵνα (after an irregular accent shift to ἴαδ), one would expect that ἴνα would indeed belong to the group of 'traditional' complementizers, and would thus be associated with postverbal pronoun placement. However, the tables in Appendix A of chapter 4 show that in all twenty five instances in which ἴνα was used, the pronoun appears preverbally.

Another problem with Horrocks' account arises with his assertion that the distinction between postverbal and preverbal placement is based on whether the element immediately preceding the verb complex is a 'focal phrase' or a 'topic'. However, it was shown in chapter 5 sections 3 and 4, that neither emphasis, nor discourse constraints affect the placement of the pronoun.

Furthermore, Horrocks claims that "The complementizer να [na], however, ultimately came to function as a subjunctive marker, and in this reduced role formed (along

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3 In fact, Mendez-Dosuna (2000) argues that ἴνα was never accented so there could not have been any accent shift.
with negative particles and clitic pronouns) part of a word-like "complex"; I reproduce this structure in Figure 7.3.

![Complex clausal structure of "popular medieval Greek"](image)

**Figure 7.3**: Complex clausal structure of “popular medieval Greek”, (Horrocks 1997: 211).

This is essentially the structure proposed by Philippaki-Warburton (1995); in fact, Horrocks makes reference to Philippaki-Warburton (1990) on which her 1995 article is based. The one crucial difference in Horrocks (1997) is that the position of the CIP is fixed above the S-node, and not adjoined as it is in Figure 7.1. Accordingly, Horrocks (ibid: 212) mentions that “weak pronouns are therefore enclitic on the verb only in the case of imperatives and gerunds, and these remain the only verb-forms still subject to the rule of verb-preposing to C in standard speech.” This clearly clashes with Philippaki-Warburton’s claim that the gerund has to appear below the NegP-node in order to capture

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4 The term 'word-like' would suggest that Horrocks considers these elements to be affixes, as Joseph (1988, 1989, 1990, 2000b) has argued.
the facts presented in examples (3) and (4), and Horrocks does not offer an alternative way of deriving the order Neg-Gerund.

Finally, and beyond the details of his analysis, Horrocks does not provide any real motivation for the existence of the various structures, and does not present any argumentation for the causes of the changes. One has to wonder, especially, why the loss of an initial vowel (as in the aphaeresis he proposes) would be associated with the restructuring of phrase structure. Thus, even Horrocks' latest analysis faces many problems, some of which seem insurmountable.

7.2. Approaches to similar phenomena in other languages.

Variation between preverbal and postverbal placement of weak pronouns is not a phenomenon unique to Later Medieval Greek. In fact, it is the Romance Languages that are best-known for this alternation, described by the Tobler-Mussafia Law (named after its two main contributors Tobler (1889) for Old French, and Mussafia (1898) for Old Italian). According to Wanner (1987: 68) this law “determines pronominal clitic position in Old Romance; it is always next to the verb, and variably before or after it depending on the syntactic context, in particular prohibiting sentence initial clitic pronouns.” In the past decade there have been several proposals, that have sought to account for this phenomenon with a syntactic explanation, mainly in the GB framework. Given the similarity between the LMG data and the description of the TM law it is reasonable to evaluate these proposals in order to determine if they can account for the LMG facts as well.
7.2.1. Weak object pronoun placement in Old Spanish (OSp).

Wanner (1991) addresses the Tobler-Mussafia Law in the case of OSp. He proposes that OSp clitics should be treated as Heads (i.e., belonging to the category N), and that they move from within the VP to a position he calls \( \text{AGR}_{\text{int}} \)—where internal Arguments are checked. The structure he proposes is seen in Figure 7.4.

![Phrase Structure of OSp (Wanner 1991)](image)

Figure 7.4: Phrase Structure of OSp (Wanner 1991).

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5 Wanner (1981a) has also written about the situation in Old Italian (OIt), where the pattern of variation in pronoun placement is quite similar to LMG. One finds postverbal placement when the verb (finite—including imperative) is clause initial, or following certain paratactic conjunctions (e.g., \( e \) ‘and’ or \( ma \) ‘but’, though not \( o \) ‘or’, \( pero \) ‘however’), and when the verb is of non-finite form (infinitive, gerund, absolute participial constructions). He accounts for these facts by proposing that in OIt there were linearization principles that were constrained syntactically: “clitics could not stand after a surface clause boundary”. Furthermore, he notes that the system of clitic placement was ‘mixed’, since the non-finite forms had to be morphosyntactic exceptions while the conjuctions \( e \) and \( ma \) also had to be lexically marked as associated with postverbal placement. In a (1996) article, Wanner suggests that ‘clitic position’ in the Medieval Romance languages can be better understood as a transition phenomenon, as the languages moved from a second position schema of pronoun placement (à la Wackernagel’s Law) to a schema in which the pronoun is attached to the verb.
Subordinate clauses in which the pronoun appears preverbally, are considered to have the Comp position full, usually by a complementizer, which make the position unavailable for V. When some other element immediately precedes the verb complex, however, the preverbal position of the pronoun is not accounted for by a restriction on the movement of V, but by the fact that it intervenes between the verb complex and the \[CP\] boundary.

T[obler]M[ussafia] (as a corollary of its underlying mechanism of V-to-C raising) makes crucial reference to \[CP\]. In the context of \[CP\], only /V–cl/ sequences will be observed. The nonoccurrence of /cl–V/ sequences in given string types in OSP can thus be taken as an indication of the presence of a left-hand CP boundary immediately before the {V, cl} group (p. 336).

Wanner, however, does not provide any account of how a preposed element (e.g., an object) comes to be in that position, and how it prevents V-to-C movement from occurring. Thus, although not explicitly stated, it seems that in this analysis it is the presence of \[CP\] boundary that triggers the movement. Furthermore, he recognizes the fact that when the element immediately preceding the verb complex is a subject, reference to \[CP\] boundary cannot be made.

The placement of the relevant subject NPs to the left of the matrix CP implies discourse dynamic prominence of a topical nature, predicting that only emphasized topical subject NPs would cause this encliticization. But this is not the case; rather the examples show a predilection for nonemphatic topical subject to have this effect, while all focused and many emphasized topical subject combine with expected proclisis ... (p. 342).

In order to account for the facts, Wanner (1991: 343) is forced to postulate “a separate minor process of encliticization in the context of an immediately preceding subject NP”, which he describes as a stylistic operation that is optional.
This account is problematic because neither proposal is independently motivated; instead they both have to be postulated for the specifics of clitic placement. As will be discussed below, Fontana (1993, 1996, 1997) does not believe that OSp variation in clitic placement is reason enough to justify major syntactic mechanisms such as a V-movement. Furthermore, if one can propose an optional stylistic rule for subjects why not also propose an obligatory stylistic rule for V-initial contexts?

Finally, if we were to take this approach with the LMG data we would have to postulate three stylistic rules (one for 'subject', one for 'temporal expressions', and one for 'fronted constituent'). The result of this approach, however, would not be any more illuminating than Mackridge's list.

Fontana (1993, 1996, 1997) presents a different account of the OSp data. Following Taylor (1990), Fontana accepts a three-part classification of morphemes that are usually covered by the label ‘clitic’:

- head-attaching elements which could be considered a subclass of affix.
- phonologically ‘weak’ elements that have the same syntactic distribution as their full counterparts.
- phonologically ‘weak’ elements whose distribution is governed by idiosyncratic operations of phrasal attachment.

The third group is referred to as ‘true clitics’ and is similar to Klavan’s (1982, 1985) term ‘phrasal affixes’.

Next, based on a comparison between the Homeric Greek facts that Taylor had discussed and the facts of Old Spanish, and the observation that weak pronouns in Old Spanish texts did not have to appear adjacent to the verb (i.e., ‘interpolation’ was possible),

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6 This problem is recognized in Wanner (1996: 550).
7 According to Wanner (1991, 1996), though, OSp interpolation was a much more complex phenomenon than indicated in Fontana’s (1993) account.
Fontana argues that the weak pronouns in OSp should be treated as 'true clitics', or, in Klavan's terminology, as 'phrasal affixes'.

Thus, Fontana adopts the position that the OSp weak pronouns are $X^\text{max}$ elements that adjoin to the left periphery of IP, as in Figure 7.5:

```
CP
   
  C'
     
    C
       
      IP
        
         si if =la NP tu non amparas
         
         NP

```

Figure 7.5: OSp weak pronouns as $X^\text{max}$ adjunctions to IP (Fontana 1993).

Fontana accounts for the fact that the weak pronouns can also appear after the verb by describing it as a stylistic epiphenomenon of being a 'Verb-Second' language of the 'symmetric' type, that is a language in which the verb must appear in second position not only in main clauses but also in subordinate clauses, as is the case in Yiddish and Old Icelandic (see Santorini 1994, Thráinsson 1986). This is accounted for in the GB program by proposing that unlike 'asymmetric' V2 languages (German, Dutch) where the verb is assumed to move into C, the verb in symmetric V2 languages moves to I. Fontana goes on to explain the postverbal placement of the pronouns when the verb is clause-initial as...
instances where the verb moves to the complementizer position as a result of an operation called Narrative Inversion. This is a stylistic construction that has been well-noted in Icelandic and Old Icelandic especially. According to Sigurðsson (1990) the function of NI is as follows:

Declarative V1 orders in main clauses are, in general, prompted by strong discourse cohesion ... they cannot initiate the discourse ... For NI, a high degree of subject topicality is important ... Thus in a count I have made in four Icelandic narratives, it turned out that VS[cond] order is more common in main clauses with first- (and second-) person pronoun subjects than in sentences with third-person pronoun subjects, for which in turn, VS[cond] is significantly more frequent than in sentences with full NP subjects.

The movement of V to C has as a consequence the appearance of the 'clitics' in postverbal position, as seen in Figure 7.6:

```
CP
  C'
    C
      IP
        NP =les NP el t Spec VP
        t que lo non farie t
```

Figure 7.6: Narrative Inversion (Fontana 1993: 136).
According to Fontana, the main advantage of this analysis is that V-movement is postulated independently of clitic placement, so one does not need to propose a mechanism simply to account for the Tobler-Mussafia facts, which he considers a minor part of the language.

Although intriguing, this analysis cannot be applied to the data of LMG, because it cannot be shown to be a V2 language. First, in a random sample of 20 consecutive main clauses from fifteen different texts we see that the verb does not have to appear in second position (cf. Table 7.1).

<table>
<thead>
<tr>
<th>Text</th>
<th>INITIAL</th>
<th>SECOND</th>
<th>MEDIAL</th>
<th>FINAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digenēs 1182-1202</td>
<td>6</td>
<td>12</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Ptōkhoprod. 12-39</td>
<td>13</td>
<td>6</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Spaneas 12-29</td>
<td>11</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Lybistros 1635-1670</td>
<td>13</td>
<td>4</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Achilleid 68-91</td>
<td>9</td>
<td>11</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Belisarios 239-258</td>
<td>9</td>
<td>9</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Poulologos 12-45</td>
<td>9</td>
<td>7</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Moreas 1410-1438</td>
<td>4</td>
<td>13</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Tokkoi 1082-1100</td>
<td>9</td>
<td>10</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Rimada 847-864</td>
<td>4</td>
<td>11</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Apokopos 5-26</td>
<td>6</td>
<td>10</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Phlōrios 484-508</td>
<td>9</td>
<td>9</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Apollōn. 607-629</td>
<td>5</td>
<td>10</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Rhodos 10-34</td>
<td>12</td>
<td>6</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Katalogia 9-30</td>
<td>7</td>
<td>11</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>126</strong></td>
<td><strong>133</strong></td>
<td><strong>30</strong></td>
<td><strong>11</strong></td>
</tr>
</tbody>
</table>

Table 7.1: Verb position in LMG.
The results in Table 7.1 show that V-initial is just as likely as V-second. Moreover, it can be shown that instances of verb-initial clauses are not due to Narrative Inversion, as Fontana has demonstrated in the case of OSp. Fontana clearly delineates that the NI construction obeys certain syntactic constraints as well as having the semantic function of maintaining discourse cohesion. These syntactic constraints are the following:

a) Only NI structures are strictly a root phenomenon.  

b) And only in NI must subjects be definite NPs immediately following the tensed verb (Fontana 1993: 107).

Neither of these constraints is obeyed in Later Medieval Greek. In the case of the first constraint what Fontana means is that, in subordinate clauses, where sometimes VI constructions can be found, these are characteristically different from NI (cf. Sigurdsson 1990). The subjects in these subordinate VI s are new information (mostly indefinite NPs), and VI in subordinate clauses exhibits VXS word order whereas in main clauses the order is always VSX (see constraint b). However, in Later Medieval Greek, one can frequently find definite NP subjects in subordinate clauses that are not new information but topics. For example, there is a passage in the Digenēs text where the four brothers of Digenēs’ mother approach the youngest brother to discuss the situation with him. As soon as they are done addressing him, we find

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8 In fact, the constraint is poorly worded, for if taken literally it means that any phenomenon that is restricted to root clauses is a NI structure. This would make V2 in German, and tag-questions in English NI structures, clearly an unwanted conclusion. Rather, the constraint seems to mean “NI structures are only a root phenomenon.” I thank Martin Jansche and Shravan Vasishth for helping me sort out the logical implications of the constraint.
(7) ὡς ἰδεῖν ὃ νεώτερος
ος ἰδεῖν ὃ νεοτέρος

when see-3sg Past the youngster-Nom sg

'When the youngster saw …' (Digenés, 421).

The information provided by the subject here is not new, and, moreover the NP is definite. Similarly, there are several examples in LMG where we find definite NPs immediately following the verb and preserving discourse cohesion in subordinate clauses, something that is not allowed, for instance, in Icelandic.

With respect to the second constraint, consider example (8):

(8) εὑρέθηκεν εἰς τὴν Βλαχίαν αὐτὸς ὁ Μπονιφάτσος
ευρεθεκεν is tin vlaxian aftos o bonifatsos

to be found-3sg Past in Vlachia this Boniface-Nom sg

'This Boniface, he found himself in Vlachia’ (Moreas, 1512).

In this example the verb is in initial position, but the subject does not immediately follow it, and, moreover, the information conveyed by the subject is new. The preceding lines discuss the deeds of a certain Kambanesis, and in this line the topic of discourse switches. It is clear that examples such as (8), which are quite frequent, violate constraint (b). Furthermore, again in the Moreas, we find an example where the subject is not only removed from the verb but it is also an indefinite NP, another violation of constraint (b).
There was there, then, at the time I am writing you about, some great man' (Moreas, 1464).

Similar examples, especially cases where the subject introduces new information, are found in all texts, indicating that NI did not occur in LMG. However, if Narrative Inversion cannot be invoked to explain the presence of V1 declaratives in LMG, then one cannot make the claim that the language is V2 in the same way that Fontana maintains that Yiddish, Icelandic and Old Spanish are. Thus, autonomous V-movement cannot be the explanation for LMG variation in pronoun placement.

Moreover, Fontana (1993: 178 ff.) proposes that the cases in which one finds Subject–Verb–Clitic order are cases in which the subject is left dislocated to a position outside CP with a coindexed 'pro' left as a 'trace' within CP (specifically in Spec IP) to receive Case and have the 0-role discharged by INFL. Although the mechanics of this analysis seem to work, Fontana does not address Wanner's (1991) justified reluctance to 'topicalize' subjects, without demonstrating an accompanying discourse effect. For these reasons it is evident that Fontana's account cannot be transferred over to the LMG facts.
7.2.2. Weak object pronoun placement in Bulgarian and Old French.

Outside OSp, Halpem (1996), within his general discussion of second position clitics, addresses the facts from Bulgarian and Old French in which the clitic pronouns must appear adjacent to the verb, but their position varies between postverbal or preverbal—depending on whether the verb is clause-initial or preceded by some element. Halpem names these forms 'verbal clitics' because they have to appear next to the verb, unlike 'true second position (2P) clitics' which have no such requirement, and claims that these facts can be accounted for if one assumes that "the clitics take VP as their syntactic domain, but like 2P clitics (in some cases) may undergo Prosodic Inversion" (p. 39).

'Prosodic Inversion', according to Halpem, is an essentially phonological operation which reverses a clitic and its adjacent phonological constituent. Its the effects are encoded into the algorithm for Clitic Group (C) formation as follows (Halpem 1996: 63):

Revised algorithm C formation

I. For a D[irection][9] CL[itic], X, which must attach to a ω [phonological word] to its left (respectively right),

   a. if there is such a ω, Y, comprised of material which is syntactically immediately to the left (right) of X, then adjoin X to the right (left) of Y.

   b. else attach X to the right (left) edge of the ω composed of syntactic material immediately to its right (left).

II. For a simple (nondirectional) CL, attach the clitic to the ω, composed of syntactically adjacent material, with which it shares the greatest number of dominating syntactic nodes, respecting the syntactic order.

9 Brackets contain explanatory remarks provided by PAP.
Halpern claims that the object pronouns are enclitic in both languages.10 According to him, the pronouns in Bulgarian and Old French should be considered Directional Clitics (direction=left), and the placement facts are accounted for as follows:

(a) \[
\begin{array}{c}
\text{IP} \\
\text{VP} \\
\text{cl} \\
\text{dade=mi=go}
\end{array}
\]

(b) \[
\begin{array}{c}
\text{IP} \\
\text{NP} \\
\text{VP} \\
\text{cl} \\
\text{Tja=mi=go} \\
\text{dade}
\end{array}
\]

Figure 7.7: Pronoun placement in Bulgarian (Halpern 1996).

In Figure 7.7a), there is no \( \omega \) immediately to the left of the DCL. Thus clause (Ia) cannot apply; under clause (Ib) the pronoun is attached to the right edge of the verb 'dade'. In Figure 7.7b), however, there is a \( \omega \), namely 'Tja', to which the pronoun can be adjoined, thus the pronoun appears preverbally.

In LMG, as has been shown earlier, the pronouns are not directional; instead they are always dependent on the verb, both syntactically and phonologically. Under clause II of the algorithm, they should be attached to the \( \omega \) "with which it shares the greatest number of dominating syntactic nodes", presumably the verb. However, this would yield preverbal

---

10 This is not an uncontroversial assumption. Halpern mentions that "they may at times be proclitics (Ewen 1979: 5,6) but it does seem that they are always subject to a constraint which prevents them from being clause-initial". In Old Fr., however, there are some instances of clause-initial 'clitics' (Adams 1987).
pronouns in clause-initial situations (which in this database favor postverbal pronouns) and when a subject immediately precedes the verb (a situation in which postverbal and preverbal pronouns are equally favored). Halpern's Prosodic Inversion as it stands makes the wrong predictions for LMG.

Similarly, the account proposed by Mišeska Tomić (1996: 831) for Bulgarian cannot be transferred to LMG either. Her account assumes that a non-finite verb-form (e.g., imperative) moves into Comp yielding the V + CL order, while finite verb-forms cannot move in this way and are thus regularly associated with CL + V order; nevertheless she also claims that since pronouns in Bulgarian are phonologically enclitic, the order CL + V is not allowed if it leaves the pronoun without a phonological host to its left.

... in Bulgarian, for the most part, such clitics look for phonological attachment to their left. Accordingly, the clitics of the Bulgarian clitic cluster do not as a rule appear clause-initially ...

Once again the fact that LMG clitics are not directional makes such an analysis unattainable.

7.2.3. Weak object pronoun placement in some Modern Greek dialects.

Finally, there is the proposal of Drachman (1994) who considers the structure for Modern Greek dialects which show variation between preverbal and postverbal placement (Khios and Cyclades, according to his set of data). Following the Cardinaletti and Roberts (1991) solution of proposing an extra AgrP node, he proposes the structure seen in Figure 7.8:
According to Drachman, the presence of the 'clitic' in Agr1 is what triggers V-movement to Comp, which then leads to the postverbal placement of the pronoun. Although Drachman briefly addresses several issues concerning GB theory, he does not explain how the CL + V order comes to be in these dialects. In fact he never states how CL comes to be in Agr1—is it base generated or does it move to that position? If it is base-generated in Agr1, then how do we get sequences like θα μας εγράψει /θα μας εγράψει/ 'he'll write to us' (Drachman's example 3a), where we would expect μας θα εγράψει—since θα is usually assumed to be under MP? If CL moves to Agr1, where does it move from, and what are the restrictions to that movement? Perhaps these matters can be solved, though. The one aspect of LMG that would remain problematic for this account (as it seems to be for
any other syntactic account) is the fact that pronouns appear either postverbally or
preverbally in the environment of a subject or temporal expression.

In light of the shortcomings of all these mainly syntactic explanations it may be
legitimately asked whether a prosodic account should be proposed, barring unstressed
object pronouns from initial position. The phenomenon, however, is too complex to yield to
such an analysis. As Wanner (1991: 320) observes, for OSp “Prosody must be
supplemented by lexical and/or syntactic information, since other (fully and near-) identical
and typically unstressed forms do not share the prohibition against initial occurrence ...”.

Similarly, in the LMG texts, there are other forms that attach to verbs, like the
negative adverb où, the subordinating marker νά, the negative adverb δέν etc. Why then are
these not barred from this position? To overcome this problem one would indeed have to
postulate a prosodic rule that has very specific lexical constraints on it, and this is not
desirable.

In addition, this type of explanation which makes reference to the utterance-initial
position, would also have to provide some reason why subjects, object, adverbs, etc. are
sometimes considered parts of the utterance and sometimes not; similarly, this type of
analysis would have to explain why a coordinating conjunction like καί cannot be included
in an utterance, when all other prosodic information, including sandhi rules and placement
with respect to the caesura indicate that it does.

Furthermore, the investigation into the effect of the caesura on pronoun placement
(chapter 6, section 1.2) shows that this prosodic barrier does not overrule syntactic
constraints. If it did, then placement at this important prosodic juncture would be
categorically postverbal, regardless of whether the constituent at the end of the first hemistich
was a subject or an object of the verb in question. The fact that at these junctures, preverbal
placement is as common as postverbal placement is more evidence against a prosodic
explanation of this phenomenon.
7.3. Other general approaches.

Finally, I address the question of whether this phenomenon can be accounted for with a morphological analysis, using the two most prominent proposals, that of Klavans (1982, 1985) and the similar one by Anderson (1992, 1993). In response to Zwicky's (1977) pioneering treatise on clitics, Klavans (1982) provides a unified framework for accounting for the position of clitics across languages. The framework is based on five parameters\(^{11}\) which are:

- **P1**: Clitic identity (marking a clitic as [+clitic]).
- **P2**: Domain of Cliticization (identifying the syntactic node which determines the syntactic position of a clitic).
- **P3**: Initial/Final (identifying which constituent, the first or the last, under P2 is the host of the clitic).
- **P4**: Before/After (referring to the locus of clitic attachment).
- **P5**: Proclitic/Enclitic (identifying if the phonological liaison occurs to the left–enclitic, or to the right–proclitic, of the host word or phrase).

These parameters are slightly adapted in Anderson (1993: 75) as follows:

a. **Scope**: the clitic is located in the scope some syntactic constituent (S, VP, NP, etc.—probably only \(X^{\text{max}}\)) which constitutes its domain.

b. **Anchor**: the clitic is located by reference to the \{FIRST VS. LAST VS. HEAD\} element of a specified sort within the constituent in which it appears.

c. **Orientation**: the clitic \{PREcedes VS. FOLlows\} its anchor.\(^{12}\)

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\(^{11}\) This, in fact, is only true of the (1980) dissertation. Already in the introduction to the revised version of 1982, Klavans limits the set of parameters to three, keeping P3, P4 and P5. The set of five parameters is used here for ease of explication.

\(^{12}\) Proclisis vs. Enclisis, according to Anderson (1992: 203) "refers to the properties (and consequences of a particular language's rule(s) of Stray Adjunction."
The problem that both these analyses encounter with the LMG data is that the Before/After parameter (respectively the \{\textsc{precedes} vs. \textsc{follows}\} in Anderson) cannot be set without extremely detailed information, not only about the finiteness of the verb—as Klavans (1982: 107) does for Mod. Spanish—but also with reference to what immediately precedes the verb complex, encoded in the parameter settings. Not only is it difficult to imagine how this optionality could be written in the parameter settings, it would be impossible to encode it in the lexical entry itself as Klavans (1985: 118) suggests.

Although some analyses that have used this framework have proposed not setting one of the parameters (for instance both Klavans 1985 for Nganhcara, and Taylor 1990 for Ancient Greek leave P4 as Before/After), a similar approach in LMG would require one to leave both P4 and P5 open, and at the same time match the Before value for P4 with a Proclitic value for P5 and an After value for P4 with an Enclitic value for P5. Taken together with the fact that P3 has no applicable value (since the Domain of Cliticization is V), this latest approach would essentially indicate nothing more than ‘preverbal clitics are proclitic, postverbal clitics are enclitic’.

7.4. Conclusion.

In this chapter several proposals that could have an impact on the phenomenon of weak object pronoun variation, either directly or indirectly, were examined. It was shown that none of these analyses can provide a full, principled account of the phenomenon. Moreover, the discussion has highlighted the trouble spots that any account would have to deal with before putting the issue to rest. These are

1. The affinity of the pronoun to phonologically attach to the verb, and thus varying between procliticization and encliticization.
2. The unpredictability of pronoun placement when the complex is immediately preceded by a 'subject' or a 'temporal expression' (and to a lesser extent a 'fronted constituent').

One of the most surprising aspects of this pattern is how stable it seems to have remained over a period of five centuries. In the next chapter, documents from the period after 1550 are examined in an attempt to understand how and when this system began to change.
CHAPTER 8

A DIACHRONIC PERSPECTIVE

In this chapter it is argued, based on the evidence of prose texts from the 17th century, that the stability of the pattern of pronoun placement discussed in the previous chapters is a stylistic effect, and that the 'vernacular' must have advanced to a pattern more similar to that of SMG at a much earlier stage than the existing poems from the Late Byzantine period suggest. Thus, a synchronic account of pronoun placement in LMG may indeed be impossible since there is no clear evidence of what the actual set of facts would be. Still, the phenomenon can be understood if examined from a diachronic perspective; it is proposed here that the complex pattern of variation in weak object pronoun placement in LMG is a result of ongoing analogical change, phases of which became stylized in poetry. The ramifications of such a proposal for the questions raised in previous chapters are also examined.

8.1. Poetry vs. prose in the 17th century.

Appendix A at the end of this chapter presents the findings of the examination of pronoun placement in texts of the second half of the 16th and the 17th century. Unlike the period from the 12th to the first half of the 16th century, in this period there is an adequate number of prose texts from several different areas, as well as poetic texts written in Crete (see chapter 3).
The data from the prose texts show that with finite, non-imperative verb-forms, preverbal placement is near categorical in all contexts (81% for 'initial', 80% for 'reduplicated object', 99% for 'function word', 94% for 'fronted constituent', 92% for 'subject' and 73% for 'temporal expression'). The only exceptions are found in texts written by Cypriot writers, where the pattern of pronoun placement in general matches that seen in the chronicles of Makhairas and Boustrônios (see chapter 6, section 2): the pronoun is placed preverbally when a 'function word' immediately precedes the verb complex, and postverbally when the complex is in clause-initial position.

Gerunds in texts from all areas show categorical postverbal placement, as was noted for LMG texts in chapter 5. What is more, there are two examples of negated gerunds in the texts (one from the Heptanese, the other from Crete, see ex. (1)), and in both of them the pronoun appears postverbally. Thus it seems reasonable to conclude that at least by the early 17th century the object pronoun of a gerund was always placed postverbally without regard to what immediately preceded it.

(1) μὴν ἴδεις ὑπονομήσῃ τὸ

min iksevondas to

not know-Gerund it-DO sg WP

'Not knowing it, …' (Soumakēs, 1646—Kephallonia).

When the verb is in the imperative form, the pronoun is placed postverbally if the verb complex is clause-initial, or immediately follows a coordinating conjunction or a reduplicated object. However, when the imperative is immediately preceded by some other element, there are two instances of a preverbal pronoun, and one instance of a postverbal one. All three examples come from Cretan writers, however, so it is possible that this pattern which was widespread in LMG texts was retained only in this dialect.

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Surprisingly though, the pattern of pronoun placement is very different in the poetic texts. As Table 8.2 in Appendix A shows, in this genre there is no major difference in pronoun placement from the LMG texts (the data from the early 15th century Phalieros are also included in the table for ease of comparison). Since all of the poetic texts of the 17th century were written in Crete, it is only appropriate to compare the evidence in them to the prose texts that also had Cretan authors. The contrast between the two styles (poetry vs. prose) indicates a clear distinction in pronoun placement for finite verb-forms: while postverbal placement is still available, and even preferred for certain syntactic contexts in the poetry, this is not the case for the prose, where, as has been discussed above, a clear preference for preverbal placement can be detected.1

Another major difference in the pattern of pronoun placement in the prose texts can be observed with periphrastic tense constructions. Unlike what is found in the Cretan poems, and in the LMG texts discussed in previous chapters, in the prose texts there is a tendency to place the pronoun between ἔθλω and the infinitive, even in contexts where one would expect the pronoun to appear to the left of ἔθλω, as in examples (3) and (4).

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1 Janssen (1998), however, remarks that in three non-literary documents from the 17th century which she examined, the pattern of pronoun placement does not differ significantly from that found in Thysia tou Abraam. Nonetheless, she does admit that there are robust examples of preverbal pronouns in clause-initial position and in ‘doubling pronoun’ constructions. Since Janssen does not provide the specific numbers, it is difficult to compare her results to the ones presented here.
This pattern is quite striking, especially if Mackridge’s explanation is brought to mind, i.e., that the pronoun is attached to θέλω and placed according to his list of rules. If this is so, then why does the pronoun appear after θέλω when in all other cases the pronoun appears before the verb?

Faced with such stylistic differences one wonders which of the two styles was closest to the vernacular. This is not an easy question to answer, because both the poems and the prose writings are popular in character. Most of the poems in this era are actually theatrical plays, and as such would have been performed at some point or another for a large and diverse audience. The prose writings are either brief histories, or sermon-like pieces that are clearly addressed for a wide audience, as they draw analogies from farming, fishing and other lower-class occupations. Some of them even discuss the matter of writing in a language that everyone can understand, and emphasize the importance of translating the Bible into such a ‘vernacular’. All indications are, then, that both styles were accessible to a
large audience. Nevertheless, given the larger tradition of popular poetry in the Byzantine era, which must have served as the foundation for the Cretan poems of the 17th century, and the fact that the style seen in the prose texts does not have such an obvious base, it is reasonable to conclude that, although accessible to the masses, the language of the poems (at least as far as pronoun placement is concerned) does not truly reflect the spoken language of the time. Instead, it seems to present a compromise between what the spoken norm was and the linguistic framework of the genre the composition aspired to belong to.

Indeed, such a view is also held for Byzantine popular poetry (which is the content of the LMG texts researched in this study). The most noted champions of this view, Elizabeth and Michael Jeffreys (1986: 506) propose the following:

... we should see in the popular poetry of Byzantium the written remains of a tradition of oral poetry. This statement must be very carefully qualified. We think it most unlikely that any of the surviving texts are the verbatim record of creative oral performances, taken down by the methodology of the "oral dictated text" (see Lord 1953)—though in one or two cases this possibility cannot be excluded, as will be discussed later. We believe, on the other hand, that it is almost impossible to explain many features of the language, meter, and style of this genre of poems without assuming that they derive in a fairly direct way from a language, meter, and style developed by oral poets for use in oral poetry. We would suggest, therefore, that Byzantine popular poetry was produced by means which approximate to those of conventional literature, but in a genre most of whose products were orally composed and disseminated. This genre was the only one available to poets who wished to write in a way which would be immediately intelligible to the uneducated majority of their audiences.
Mackridge (1993: 333), on the other hand, claims that the variation in pronoun placement in the LMG texts cannot be ascribed to a literary language ('Kunstsprache'). He offers three arguments:

First, the rules, as I have formulated them, are not only logical, but are followed quite consistently by the versifiers and copyists. Secondly, not only the few prose texts we have (almost all from Cyprus: namely the Assizes and the chronicles of Makhairas and Voustronios) but also the Cypriot dialect spoken in Cyprus today follow broadly the same rules as I have formulated for the medieval verse texts. And, thirdly, we have the corroboration of the Romance languages, in which (a) the position of the weak object pronoun followed an almost identical chronological development to that in Greek, and (b) the medieval situation is almost identical to that in Greek of a similar period.

As far as the first argument is concerned, adherence to reason and descriptive adequacy are the least one would expect from an account; they cannot be held up as arguments for the account's validity, nor can it be asserted that only a spoken language can be described in a logical way. With respect to the second argument, it has already been demonstrated in chapter 6 that the Cypriot texts that Mackridge refers to do not show the same pattern as the verse texts. Furthermore, simply asserting that Modern Cypriot follows "broadly the same rules" does not provide any support for his argument without a closer investigation of how similar or different the rules really are. Finally, the evidence from Medieval Romance languages can be used to corroborate the view that the weak pronoun variation was a stylistic effect just as easily as it can support Mackridge's claim. None of these arguments seems particularly convincing.

Since Mackridge's arguments are not unassailable, and since it is clear that at least in the early 17th century pronoun placement did vary according to the style of the text, one
can only speculate how far back into time this stylistic distinction can be carried. It is conceivable that even the earliest compositions (*Digenes*, for example) were created in the language of a genre and not in the ‘people’s tongue’. In this respect, certain systematic counterexamples to postverbal placement like the $\delta\varepsilon\ \lambda\varepsilon\gamma\omega$ formula in *Moreas* or preverbal pronouns after $\kappa\alpha\iota$ in the *Rimada* (cf. chapter 6, section 2) may not be indications of the inception of a dialectal change in weak pronoun placement but rather manifestations of the controlled mixing of two different styles. Such speculations, however, should not be considered an endorsement of the view that the language of these texts is merely an artifice, disjointed from the spoken language of its time. Instead, as Joseph (2000a: 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”, i.e., at least their passive competence can be tapped. In a similar vein it is maintained here that the main pattern of variation in pronoun placement was indeed a reflection of the ‘vernacular’, if we are to judge from the evidence of Modern Greek and the various regional dialects, but that there was also a number of constructions that the composer had more poetic license with. Such leeway would have been especially available if the spoken language of the period in which this genre was taking form (most likely around the 10th century—cf. Jeffreys 1986) was undergoing change with respect to the placement of pronouns.

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2 Such flexibility can be found in SMG verse as well. In a very popular song of the 1990’s, *Δέν πιστεύω* ‘I don’t believe’, Helenē Dēmou sings: 

δλα στα μέτρα σου καμμένα και ραμμένα εϊχες
all to your measurement cut and tailored you had

‘you had everything according to your standards’.

This line omits the reduplication of δλα by a pronoun (i.e., τά) which is supposed to be obligatory, according to Mackridge (1985, see chapter 5, fn. 11).
8.2. Examining the pattern of variation from a diachronic perspective.

But what were the specifics of this change? What was the starting point, what was the mechanism of the change, and what were the outcomes? In light of the available evidence, perhaps the most plausible account is one in which the placement of weak object pronouns in the language of the Cypriot chronicles is considered as the immediate predecessor of the more complex variation pattern witnessed in the other LMG texts. There are several advantages to such an approach. The first one is that the Cypriot texts are in prose and thus less likely to be affected by stylistic considerations. They provide a 'baseline', as it were, against which to judge other developments. Secondly, due to the Arab or Byzantine-Arab rule from the middle of the 7th century up to 965, and French rule from the middle of the 12th century to 1489, Cyprus was linguistically as well as politically and culturally isolated from the rest of the Byzantium, especially Constantinople—the cultural center of the empire. This isolation would both account for the use of the vernacular in prose writings and lend credence to the proposal that the Cypriot texts may indeed be conservative with respect to weak object pronoun placement. The third advantage of this approach is that the variation of pronoun placement in the Cypriot texts has a much clearer pattern than that of the LMG texts, and, thus is a better prospect for a structural explanation.

Weak object pronoun placement in the Cypriot texts varies as follows: the pronoun appears postverbally in all situations except when the verb complex is immediately preceded by a 'function word', a cover term used in this study to signify a *wh*-phrase, a negative marker other than où, a number of temporal and clausal conjunctions and the marker *vó*. Examples (3) through (8) illustrate this pattern.

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3 At this point in time the island came under the rule of the Venetians until 1571, when the Ottomans took over.
A. Postverbal.

(5) καὶ ἔσφυξε τόν
ke ἐσφυξε ton
and compell-3sg Past he-DO sg WP
‘... and he compelled him ...’ (Makhairas, §313).

(6) Καὶ κεῖνος ἔδωκέ τόν
ke kinos edoken ton
and that one–Nom sg give–3sg Past he–DO sg WP
‘And that one gave him ...’ (Makhairas, §315).

(7) ὁ κυβερνήτης ἐμίηνε τῷ
o kuvernuris eminisen to
The regent–Nom sg at once transmit–3sg Past it–DO sg WP
‘The regent at once sent word ...’ (Makhairas, §313).

(8) κατὰ τὸ παλαιὸν συνήθιν ἔδωκεν τῷ τόν
kata to paleon sinithin edoken tu ton
according to the old custom give–3sg Past he–IO sg WP he–DO sg WP
‘... according to the old custom he gave him to him ...’ (Makhairas, §313).
B. Preverbal.

(9) τὰ χαρτία τὰ τοῦ ἐδωκεν
the papers-DO pl which-Acc pl he-IO sg WP give-3sg Past

'The papers which he gave to him …' (Makhairas, §313).

(10) νὰ τοῦ δῆσουν θάνατο
Subjun. marker he-IO sg WP give-3pl Pres death-DO sg

'… let them give him death.' (Makhairas, §313).

Although this pattern of variation may at first sight seem more amenable to a structural account, none of the analyses presented in chapter 7 can be employed in this case either. For accounts like that of Klavans (1982, 1985), Anderson (1992, 1993), and Halpern (1996) the problematic aspect of strict attachment to the verb and variation between proclisis and enclisis are still present. For the GB accounts that propose an analysis based on 'verb-movement' it could be proposed, à la Wanner (1991), that the weak pronoun cannot be the first realized form after a CP boundary, and that this restriction forces the verb to move to the Comp position. In order to adopt such a view, however, one is obliged to also maintain that preverbal elements such as subjects, adverbs, objects, etc. are extra clausal. This however, implies that in neutral word order the subject is not the first element and predicts that in those dependent clauses which are introduced by a conjunction or a complementizer, a subject should not be able to appear between the conjunction and the verb. In other words, *Comp–S–V.

Contrary to this prediction, however, there are several examples of such an ordering, as can be seen in examples (11) and (12):
since the enemies of the holy cross took over Jerusalem ...

in case the Venetians would make a stir ...

The above analysis highlights another aspect of the pattern of variation that would be problematic for any account based on the structural properties of syntactic trees, as V-movement explanations are prone to do. The difficulty lies in the fact that such accounts require that at least four different categories of elements (wh-phrases, complementizers, modal markers, negators) for which there is ample evidence that they behave differently and should be assigned different positions in a phrase-structure tree, should be treated similarly with respect to pronoun placement. Alternatively, pronoun placement has to be explained as an epiphenomenon of extremely complex structural maneuvers that are for the most part unmotivated. Such attempts, when carried out for the sake of theoretical considerations and

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4 This problem is also recognized by Rivero and Terzi’s (1995) article on Modern Cypriot Greek. Their attempt to solve it is indicative of how vexing this problem is for accounts in the GB/minimalist approach: “Intuitively, the constituent before the clitic is of the type that counts as first position. More technically, the strong feature is licensed because the clitic is contained in the internal domain of an A-bar head made visible in PF via the phonological content in either X∗ or Spec.”
despite the linguistic evidence, have two adverse affects on our understanding of grammar: they multiply abstract categories beyond what is necessary and they shift the focus of complexity onto areas of the grammar that need not be complex.

If, on the other hand, the data is evaluated from a diachronic perspective, the situation is not unprecedented. The long list of disparate elements that are associated with preverbal pronoun placement in the language of the Cypriot chronicles (namely, those elements listed under factor ‘function word’ in this study) can be viewed as the result of an analogical process of change. In fact, if this were a phenomenon of morphophonological variation in which a number of various and sundry environments had—surprisingly—the same effect, analogy would be the ‘prime suspect’ (Hock 1991: 171). Given that all the accounts reviewed in chapter 7 have been unable to provide a synchronic account for the phenomenon, mainly because there is no way to prove complementary distribution, the best (and perhaps only) account is to postulate that the patterns of pronoun placement variation seen in these texts are freeze-frames during the period of an analogical repositioning of weak object pronouns. This type of explanation is not new. It was first proposed by Ramsden\(^5\) (1963: 112-133) for Late Latin and Early Romance. According to Ramsden, in the Late Latin period, preverbal weak pronouns are favored in subordinate clauses due to a rhythmical change in the language. This, he proposes, led to the “… analogical extension of pronoun anteposition on the model of those cases where it was being (or had been) established for rhythmic reasons” (Ramsden 1963: 117). Although this type of explanation has been dismissed by those working in the GB framework—Wanner (1991: 320) describes Ramsden’s proposal as “quite suspect”\(^6\)—it presents itself as the only meaningful way of understanding the variation seen in LMG.

\(^5\) A similar analysis is briefly proposed in Hock (1991: 611-618).

\(^6\) In particular, Wanner was suspicious of Ramsden’s reference to ‘sentence rhythm’ as the cause of the change from postverbal to preverbal. It must be noted, however, that Wanner (1996) adopts a perspective similar to Ramsden’s since he looks for an understanding of the synchronic complexity through a diachronic perspective.

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Any account that refers to analogical change as an explanation needs to establish two things: the model upon which the analogical process was based, and the existing surface similarities that allowed speakers to extend the model to other contexts. The marker υά appears to be the most likely candidate as the source of the change from postverbal to preverbal pronoun placement. Unlike other elements which introduce subordinate clauses, υά is in a sense bound to the verb since only the negative marker μήν and the weak pronouns can appear between it and the verb. Furthermore, as the phonological distinction between the indicative and the subjunctive (and optative) was lost due to regular sound changes, υά seems to assume this role of distinguishing feature and, consequently, also assumes the unique quality of finely shading the mood of the verb into subjunctive, hortative, conditional or even future meanings (cf. Joseph 1981, 1983a, 1985, Horrocks 1995, 1997: 167, 208-211, 230). These two characteristics, especially the second one, could mean that in the υά-verb cluster the head is not the verb but υά. Thus, if one accepts Horrocks’ description of Early Medieval Greek pronoun placement as being mainly post-head (i.e., after nouns and after verbs—see chapter 2) then the preverbal placement of the pronoun when the complex is preceded by υά can be explained as an instance of canonical post-head placement except the head is no longer the verb. This change is also a reflection of Wackernagel’s Law, especially once υά – verb could be a main-clause predicate (see discussion of Nevis and Joseph 1993 in chapter 9). Due to the greater frequency of υά constructions in the language (cf. tables in the appendix of chapter 4) this pattern would have gained prominence rather quickly.

7 cf. Veloudis & Philippaki-Warburton (1983). Philippaki-Warburton (1994) also proposes a similar analysis of υά as a subjunctive marker in Modern Greek. In her account the subjunctive mood is realized as a node in a phrase-structure tree, and that node is filled by υά; that part of her analysis, however, is not assumed here.

8 Horrocks (1990) also believes that the υά constructions were the source of change to preverbal pronoun placement. However, he does not identify υά as a head, only as the initial element in the verbal complex (see chapter 7, section 1).
If one makes the reasonable assumption that the string νό-pronoun-verb was the model that influenced the preverbal placement in other contexts, there remains the question of how it came to be the norm when negative markers, complementizers, and *wh*-expressions immediately preceded the verb complex. One very plausible explanation can be based on Kathol’s (2000) account for the appearance of verbal morphology on complementizers and fronted *wh*-expressions in embedded questions in certain Dutch and German dialects. Consider the following examples highlighted by Kathol (2000: 61-62, 112):

(13) South Hollandic

\[ \text{dat–(t)–e } \text{ze com–(m)–e} \]

that–pl they come–pl

(14) Brabantish

\[ \text{dat–de gullie komt} \]

that–2pl you come–2pl

(15) Bavarian

\[ \text{wenn–st du kumm–st} \]

if–2pl you come–2pl

(16) Colloquial German

a. \[ \text{wenn–ste komm–st} \]

if–2sg come–2sg

b. \[ \text{warum–ste/wann–ste kommst.} \]

why–2sg/when–2sg come–2sg

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Kathol states that these peculiar distributional characteristics, which are—strangely enough—reminiscent of the pattern of pronoun placement in the Cypriot chronicles,\(^9\) cannot be explained via a pure phrase-structure encoding as in a GB approach:

... any attempt to explain inflected complementizers in terms of the mechanisms underlying verb movement fails to extend to those cases in which the special inflection is seen on a clause-initial \(wh\)-phrase, such as in relative and embedded interrogative clauses (Kathol 2000: 63).

Instead, Kathol proposes that the appearance of verbal morphology on the complementizers and \(wh\)-expressions is due to analogical change, and that the link upon which the analogical extension travels is the linear position of the elements in question.

... the emergence of special morphology on complementizers has to be thought of as an analogical process in which the shape alternations seen with verbs in frontal position end up being associated not with particular syntactic categories, but rather with the \textit{linear} position itself ... these shape alternations that originally only made proper sense as part of verbal morphology ... get carried over to other elements occupying the same linear position ... (Kathol 2000: 62-3).

A similar case can be made for the spread of the preverbal pronoun placement between Early and Later Medieval Greek. Since the negative markers \(δέν\) and \(μὴν\) also become attached to the verb, it is most likely that negative constructions were the next step in the change to preverbal placement. From this stage it is foreseeable that the pattern would be generalized to include other elements that were both similar in shape (i.e., short) and typically appeared immediately before the verb. This is the pattern found in the Cypriot chronicles. A further development would have led to the preverbal placement of pronoun

\(^9\) It must be noted, however, that in the German and Dutch examples the verbal morphology appears on the preceding elements. This is not the case in Cypriot where the weak pronouns are attached to the following verb.
when the complex was preceded by 'larger' elements as well. In fact, the preverbal placement of the pronoun in 'reduplicated object' constructions with δλος was probably based not only on the ambiguous status of the pronoun τους as a partitive or an object pronoun but also on the fact that the partitive constructions provided a linear model of preverbal pronoun placement which was then extended to the 'reduplicated object' constructions as well (see chapter 5, section 2). The final step would have been the preverbal placement of pronouns in all situations, even when the verb was clause-initial. It is hypothesized here that the alternation in pronoun position between affirmative and negated main clauses seen in (17) must have played a crucial role in this final extension of preverbal pronoun placement.

(17)  a. δίνω το  b. δεν το δίνω

'I give it.'  'I do not give it.'

At this point, it is reasonable to ask if a synchronic account of weak object pronoun placement in Later Medieval Greek (or some sub-period of this stage) can be provided. After all, as stated in chapter 2, section 3, one of the main goals of this thesis was to arrive at a generalization that would capture the facts, and provide a better insight into the nature of the grammar than Mackridge's list of rules did. However, this attempt has not produced the expected—one might even say desired—result, but not for lack of trying, or of willingness to test a wide range of approaches. Rather, the main difficulty arises from the nature of the data usually involved in historical linguistics: to paraphrase Labov, historical linguists must make the best of imperfect data (since much of the necessary information is oftentimes missing). This has also been the case for this project; the fact that almost all available texts are written in a specific poetic style, which is demonstrably different from the few available prose texts makes it difficult to identify a specific set of linguistic facts with a specific
period in time, and provide a synchronic account. Furthermore, even in the language of the
Cypriot Chronicles, which approximates the above-stated desideratum, the elements
associated with categorical preverbal placement are too diverse to be captured under a
generalization. Even though this conclusion was unexpected, it is, nonetheless, significant,
especially as it correlates with the more general question of what synchronic grammars can
and should account for. This issue will be revisited in chapter 9.

8.2.1. Further implications of the proposal.

There are several aspects of this analysis that need to be explained in further detail.
First, there is the matter of determining the time in which this change began. The lack of a
sufficient amount of 'vernacular' documents from the Early Medieval Greek period will
always present a serious obstacle to such an effort. The one observation that can be made is
that the change must predate the period of the composition of the Acclamations (7th-10th
century) for in them we find the following constructions:

(18) μη με δείρης

mi me diris

not I–DO sg WP beat–2sg Pres

'Do not beat me' (Acclamations, 10: 31).

(19) ο μάρτης οικ διώκει

o martsis se dioiki

the march–Nom sg you–DO sg WP chase–3sg Pres

'March is chasing you' (Acclamations, 10: 15).

According to Horrocks (1997: 256) "These fragments of a more everyday language
are unfortunately neither common nor extensive, but they do serve to confirm that popular
spoken Greek in the early and middle Byzantine periods was developing strongly in the direction of the modern language in terms of grammar and the lexicon.” It is claimed here that weak object pronoun placement was one of these features.

Another issue that needs clarification is the placement of the pronoun that is an argument of a gerund or imperative, for one may ask why the pattern of preverbal placement was not extended to these verb-forms as well. Following Joseph’s (1978/1990, 1983a) generalization that, in SMG, pronoun placement is determined by whether or not the verb-form is finite, one might hypothesize that the status of these verb-forms as non-finite was solidified in LMG before preverbal pronoun placement became categorical for the finite verb-forms, and that postverbal placement with non-finite forms was obligatory. This hypothesis, however, is contradicted by the fact that there are some examples of preverbal pronoun placement with the imperatives and other non-finite forms such as the infinitives and active participles (cf. chapter 5, section 4).

Although the facts of Standard Modern Greek pronoun placement may be best described if the imperative is considered non-finite, non-finiteness is not considered here to have been the cause of postverbal pronoun placement becoming the norm with imperatives and gerunds. Instead, it is claimed that the fact that imperative and gerund constructions predominantly have the verb in clause-initial position gave the postverbal placement pattern much more prominence in these circumstances than this had when the verb-form was indicative or subjunctive. Especially in the case of the imperative, it is equally important that it cannot be negated (cf. chapter 7, ex. (4)). Thus, the lack of a robust preverbal pronoun pattern within imperative and gerund constructions must have led to the division seen in SMG, where pronouns are placed preverbally with the indicative and the subjunctive verb-forms and postverbally with the imperative and the gerund. The added fact that the imperative of SMG shows extremely limited inflection has resulted in a situation that is best described by Joseph’s generalization, which views the imperative as a non-finite form.
Finally, one has to consider the placement of the pronouns when they are arguments of periphrastic tense constructions (mainly the θελω + infinitive future). In chapter 5, it was shown that the pattern of pronoun placement in these situations indicates that the pronoun is syntactically the argument of θελω although semantically it remains the argument of the infinitive. Accordingly, one would expect that as pronoun placement became categorically preverbal, the pronouns would appear invariably to the immediate left of θελω. Contrary to this expectation, however, the data from the prose texts made available at the beginning of this chapter indicate the tendency of the pronoun to appear between θελω and the infinitive even when the construction is immediately preceded by a factor that is otherwise associated with preverbal placement, such as a complementizer or an interrogative pronoun (see examples (3) and (4)).

But these would be counterexamples only if one assumes that there has been no change in the periphrastic tense constructions. However, in the case of the future periphrastic tense (which makes for the vast majority of examples) it has been well documented that it was not stable during the period of Early Modern Greek. Instead, it has been established for over a century now (cf. Psichari 1884, Meillet 1912, Bănescu 1915) that the θελω + infinitive constructions were undergoing a slow but steady change which within two centuries would replace the content word θελω with the function word θέλω. This change is chronicled in full detail in Pappas & Joseph (2001, 2002). For the moment, it will suffice to mention that one of the crucial steps in the change is the reanalysis of the infinitive as a third person singular verb-form (after the regular loss of final -ν-) and the subsequent appearance of person marking on both verb-forms of the periphrasis, which served as a competing variant. This change must have taken place at least by the 14th century for in the Poulologos there is the following example:
Thus, it can be maintained that by the time the authors of the prose texts were writing (17th century) the status of \( \theta\varepsilon\lambda\omega \) as the content (and governing) verb in the periphrastic construction would have been weakened, as a result of all the other variants of the construction in which what used to be an infinitive came to have full finite-verb morphology. This, coupled with the fact that the weak pronoun had always been the semantic argument of the lower verb (i.e., the infinitive), would have led to the perception that pronouns to the left of \( \theta\varepsilon\lambda\omega \) were not adjacent to the verb that selected them, and, consequently the order pronoun-\( \theta\varepsilon\lambda\omega \)-infinitive was disfavored, much like pronoun-\( \theta\varepsilon\alpha\)–verb is not acceptable in Modern Greek. In other words, it is not so much that the pronouns in the prose texts are to the right of \( \theta\varepsilon\lambda\omega \), as it is that they are to the left of the infinitive.

8.3 Conclusion.

The diachronic account provided in this chapter for the phenomenon of weak object pronoun placement variation in LMG texts is not only an attempt to clarify a problematic part of the history of the Greek language and to identify the source and course of the change. It also coherently explains why those who have attempted to provide synchronic accounts of the phenomenon have not been able to account for all the facts, by demonstrating that the key factor affecting pronoun placement was not the phrase-structure relationships of the elements involved—as they have assumed—but rather their linear

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10 For a fuller account of the development of the future periphrasis with \( \theta\varepsilon\lambda\omega \) and the counterfactual periphrasis with \( \theta\varepsilon\alpha\) see Pappas (1999, 2001b).
position with respect to each other. Furthermore, it was shown that this account provides a reasonable analysis not only for the main body of the variation (i.e., that concerning the indicative and subjunctive verb-forms) but also for aspects of the phenomenon that have been considered peripheral up until now, namely the placement of the pronoun with imperatives and gerunds, and in periphrastic constructions. All of these cases can be successfully integrated as the various manifestations of the same process of change which was based on linearly determined models of word order.

11 This is also in accordance with Behaghel's law III: "What belongs together, in a mentalist sense, is placed together;" (in Collinge 1985).
## APPENDIX

### A. Raw Counts.

<table>
<thead>
<tr>
<th>Area→</th>
<th>Crete</th>
<th>Mainland</th>
<th>Heptanese</th>
<th>Cyprus</th>
<th>Unknown</th>
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<tbody>
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<td>PstV</td>
<td>PreV</td>
<td>PstV</td>
<td>PreV</td>
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<td>35</td>
<td>5</td>
<td>32</td>
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<td>3</td>
<td>1</td>
<td>1</td>
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<td>1</td>
<td>12</td>
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<td>0</td>
<td>4</td>
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<tr>
<td>Temp</td>
<td>6</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Impv</td>
<td>2</td>
<td>11</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Gerund</td>
<td>0</td>
<td>12</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

**TOTAL** | 401 | 65 | 190 | 11 | 117 | 29 | 36 | 23 | 57 | 5 |

Table 8.1: Prose texts from the 17th century (from Baletas 1949, v.1: 113-256)

<table>
<thead>
<tr>
<th>Text→</th>
<th>Thysia</th>
<th>Erōphile</th>
<th>Bosphopoula</th>
<th>Phaleros</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor↓</td>
<td>Pre V</td>
<td>Post V</td>
<td>Pre V</td>
<td>Post V</td>
</tr>
<tr>
<td>Initial</td>
<td>4</td>
<td>23</td>
<td>13</td>
<td>9</td>
</tr>
<tr>
<td>Red Obj</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>function word</td>
<td>136</td>
<td>2</td>
<td>89</td>
<td>3</td>
</tr>
<tr>
<td>fronted const</td>
<td>13</td>
<td>0</td>
<td>23</td>
<td>4</td>
</tr>
<tr>
<td>subject</td>
<td>20</td>
<td>2</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Temp adv</td>
<td>6</td>
<td>1</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Impv</td>
<td>4</td>
<td>39</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Gerund</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL** | 184 | 67 | 141 | 27 | 76 | 31 | 218 | 110 |

Table 8.2: Poetic works from the Cretan Renaissance.
CHAPTER 9

THEORETICAL IMPLICATIONS OF THE STUDY

9.1. 'Words' vs. 'clitics' vs. 'affixes'.

Throughout this study the term 'weak pronoun' has been used in a conscious effort to describe the facts without prejudicing the reader as to the nature of these forms. Now that a complete description has been given this question can be considered.

As was made clear in chapter 7, section 1, the researchers that have put forward proposals to account for the facts in Later Medieval Greek have all referred to the weak object pronouns as 'clitics' (or 'clitic object pronouns'). What is lacking though in all of these accounts is any explicit or implicit discussion of what the term 'clitic' signifies for them. Especially puzzling is Horrocks' (1997) proposal of a separate phrasal category CIP, an unprecedented position, since typically in GB approaches, clitics are taken to adjoin to a head (Kayne 1975, Rizzi 1986, Wanner 1991) or to an Xmax category (Fontana 1993, 1996, 1997, Philippaki-Warburton 1995).

The preferable approach is that taken by Fontana 1993 who, as was discussed in chapter 7, section 2, goes through a series of arguments as to why OSp weak pronouns should be treated as 'phrasal affixes'. It must be emphasized, however, that the key fact in his argument is that the pronouns are not necessarily bound to the verb (since interpolation was possible) for, if this were true, they could not, by definition, be 'phrasal affixes'.

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Another way to interpret the possibility of interpolation in OSp is that the weak pronouns do not show "high degree of host selection" and thus according to Zwicky's guidelines (1985, see also Zwicky and Pullum 1983\(^1\)) fulfill one of the requirements for being considered 'clitics' (in that typology).

The same cannot be said of LMG weak pronouns, however. Mackridge (1993) and Horrocks (1990, 1997) and are in agreement with the results of this study that weak object pronouns that are separated from the verb are extremely rare in LMG texts, and in most cases can be shown to be instances of archaic usage. More importantly, the weak pronouns of LMG attach to their governing verb not only syntactically, but also phonologically. From this perspective they behave more like the weak pronouns in Modern Greek and the Modern Romance languages than the weak pronouns of OSp. If they cannot be considered (true) clitics, or phrasal affixes, what are they? The high selectivity of host that they exhibit could lead us to classify them as verbal affixes, a position that is taken for Standard Modern Greek (Joseph 1988, 1989, 1990, 1992, 2000b, 2000c, Halpern 1996), Modern French (Miller & Sag 1997, Halpern 1996), and Modern Spanish (Klavans 1985, Fontana 1993, 1996, 1997). Unlike those languages though, LMG\(^2\) has alternation between preverbal and postverbal placement of the weak pronouns that is not determined by the finiteness of the verb-form (in SMG for example, weak pronouns appear immediately before finite verb-forms, and immediately after non-finite verb-forms, cf. chapter 5 section 5). According to Zwicky (1985: §2.34) elements that exhibit free order with adjacent words

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\(^1\) The two sets of criteria have been combined by Nevis & Joseph (1993) and are as follows:
- a. strict ordering (nonword) vs. relatively free ordering (word).
- b. phonological dependence (nonword) vs. independence (word).
- c. high degree of combinatory selectivity (affix) vs. low degree (nonaffix).
- d. occurrence of gaps in combinatory possibilities (affix) vs. no such gaps (nonaffix).
- e. not manipulatable by the syntax (affix) vs. availability to syntactic operations (nonaffix).
- f. morpho(phono)logical idiosyncrasies (affix) vs. no such idiosyncrasies (nonaffix).
- g. semantic idiosyncrasies (affix) vs. no such idiosyncrasies (nonaffix).
- h. interior position within word (affix) vs. exterior position (nonaffix).

\(^2\) At least some stage of it that can be illustrated by the Cypriot chronicle data.
cannot be affixes and even clitics do not normally show freedom of order with their host. LMG weak pronouns, then, embody a set of contradicting characteristics as far as their morphological classification is concerned.

This problem though may be only a consequence of the attempt to carve up morphosyntactic space into neat categories. In fact, as early as his 1985 article "Clitics and Particles", Zwicky is uncertain that clitics should be elevated to the same categorial status as words and affixes: "clitics are more marked than either inflectional affixes or independent syntactic units (i.e., words)" (1985: §2.6). Zwicky (1994) goes even further, maintaining that "clitic ... is an umbrella term, not a genuine category in grammatical theory. Umbrella terms are names for problems, for phenomena that present "mixed" properties of some kind, not names of theoretical constructs" (1994: xiii).

Following the lead of Zwicky, Joseph (2000b: §2) rejects the term 'clitic' and the accompanying three-way division of morphological/syntactic primitives: 'affix' vs. 'clitic' vs. 'word' as uninformative. Instead he opts for a simple bipartite division of 'affix' vs. 'word' together with the recognition that "there are typical (i.e., "core") and atypical (i.e., "marginal" or "marked") members". The elements usually referred to as 'clitics' could be divided into two categories: atypical words (cf. Zwicky's 'bound words'), and atypical affixes (cf. Klavan's 'phrasal affixes').

If anything is certain, it is that the weak pronouns in LMG are 'atypical'. But are they atypical words or atypical affixes? The answer to this question depends crucially on the characterization of the modal markers và, and ᶜ, and the negative markers ṭ và and ᶜ. For if these are shown to be affixes then the weak pronouns which must appear in between these elements and the verb cannot be words (assuming that 'lexical integrity' is a constraint that even atypical forms cannot violate).

---

3 This refers to a general property of words, according to which a syntactic process cannot refer exclusively to only a part of a word (Spencer 1991).
It can be reasonably argued that these four elements are not word-like in LMG.4 First, they too show high selectivity of host, appearing always before verbs. Furthermore, the linear position of these elements is fixed both with respect to the host (always preverbal) and with respect to each other (νά before μήν, also ἀς before μήν). Next, there is the arbitrary exclusion of δέν as a negator after both νά and ἀς (i.e., *νά δέν) and the fact that none of these elements appears independently (there is no example of "Ας! “Let’s!”).5 Finally, with respect to morphophonological idiosyncrasies there are some tokens of the form νάν in the prose texts found in Baletas, one of which is shown in example (1):

(1) διά νάν τοῦς φουρκίσει

δίο ναν τυς φουρκίσι

in order to subj. marker he-DO pl WP hang-3sg Pres

‘in order to hang them …’ (Sounakēs, 1616—Zakynthos).

The presence of the final -ν- on νάν cannot be explained by any regular synchronic (morpho)phonological alternations, nor can it be motivated from a diachronic perspective; there was never a final -ν- on Ίνα and, indeed, final -ν- was eliminated from the language during the middle Byzantine period (6th-12th century, cf. Joseph 1978/1990, 1983a, Horrocks 1997). However, this observation intersects crucially with the well-known fact (cf. Householder, Kazazis, and Koutsoudas 1964, Joseph 1988, 1989) that for some speakers of Modern Greek the initial /t/ of the 3rd person weak pronoun becomes voiced when preceded by the future marker ἀς or the modal marker νά. Thus νά το ἱκνω /na to kano/ is pronounced [na do kano], although such intervocalic voicing is otherwise

4 The following argumentation follows the line of reasoning used by Joseph (1988, 1990) where the affixal character of these elements in Standard Modern Greek is demonstrated.
5 Both of these arguments, of course, cannot be absolutely substantiated since there is no direct evidence that the sequence νά δέν, for example, was ungrammatical. However, the fact that there are, literally, hundreds of examples of νά μήν and ἀς μήν, but no examples with δέν, should be taken as proof that the latter were not grammatical.
unattested in Greek. The sporadic appearance of final \(-v-\) on the marker \(vd\) may be a written representation of the irregular voicing of the following voiceless consonant,\(^6\) and could be used to support the view that this cluster of preverbal elements manifested morphophonological idiosyncrasies as early as the 17th century.

If these markers were indeed affixes in LMG, the weak pronouns of the same period should also be considered affixes since they appear in-between the verb and the marker. Thus all evidence seems to support the view that weak pronouns in LMG were affixes, albeit atypical ones, since they could appear either immediately to the right of the verb or immediately to the left of it. However, they are not unique. In fact, a very similar atypical affix can be found in Lithuanian. Nevis and Joseph (1993) discuss the reflexive element \(-s(i)-\), which typically appears postverbally at the end of non-prefixed verbs and verbal derivatives, but, when one or more preverbal prefixed elements are attached to verb, the reflexive appears after the first such element. The distribution is illustrated in the examples below (taken from Nevis and Joseph 1993: 95).

<table>
<thead>
<tr>
<th>UNPREFIXED</th>
<th>PREFIXED</th>
</tr>
</thead>
<tbody>
<tr>
<td>mat(\tilde{y})(t)</td>
<td>'to see'</td>
</tr>
<tr>
<td>mat(\tilde{y})(t)-(s)</td>
<td>'to see each other'</td>
</tr>
<tr>
<td>laika(\dot{u})</td>
<td>'I consider'</td>
</tr>
<tr>
<td>laika(\dot{u})-(si)</td>
<td>'I get along'</td>
</tr>
<tr>
<td></td>
<td><strong>One Prefix</strong></td>
</tr>
<tr>
<td>i(\ddot{s})-laika(\dot{u})</td>
<td>'I preserve, withstand'</td>
</tr>
<tr>
<td>i(\ddot{s})-si-laika(\dot{u})</td>
<td>'I hold my stand'</td>
</tr>
<tr>
<td></td>
<td><strong>Two prefixes</strong></td>
</tr>
<tr>
<td>pa-(\ddot{z})(i)ti</td>
<td>'to know (someone)'</td>
</tr>
<tr>
<td>su-si-pa-(\ddot{z})(i)ti</td>
<td>'to become acquainted with'</td>
</tr>
</tbody>
</table>

Table 9.1: Position of reflexive \(-s(i)-\) in Lithuanian.

---

\(^6\) Alternatively one may consider that these irregular spellings of \(vd\) indicate the historical origin of the irregular voicing that has been observed. It could be that linear position similarities between \(\delta v\), \(\mu \nu \delta\), \(\delta\), and \(vd\), lead to the analogical (but sporadic) extension of the final \(-v-\) to the latter two particles, and the series nasal + voiceless stop yielded a voiced stop (also sporadic).

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Nevis and Joseph further demonstrate that this reflexive exhibits high degree of host selection, some unpredictable gaps in its combinatory possibilities, and morphophonological idiosyncrasies; it also does not participate in any syntactic rules separately from the verb. Based on this evidence they conclude that although mobility is highly marked for an affix, Lithuanian reflexive \(-s(i)\) is best treated as such, because the alternative (treating it as a clitic) would require violating 'lexical integrity'; they also propose that \(-s(i)\) is a 'Wackernagel affix' (Nevis and Joseph 1993:97):

An affix-and-word Wackernagel's Law parallel to the clitic-and-sentence and the clitic-and-phrase versions of Wackernagel's Law is actually expected on theoretical grounds ... and on diachronic grounds, given that syntax so often develops into morphology over time ... accordingly, Wackernagelian syntax ought to be able to give rise to Wackernagelian morphology.

Thus, the results of this research into the pattern of pronoun placement variation in LMG texts fit well into a framework with just a two-way division 'word' vs. 'affix' as primary morphological elements. The LMG evidence suggests that such a framework may be better for understanding the subtle differentiations between forms that occupy the morphosyntactic continuum than the three-way division 'word' vs. 'clitic' vs. 'affix'.

Certainly, to the extent that 'clitics' are a marked phenomenon (cf. Zwicky 1985) if the facts can be accounted for with a more restrictive framework, that is to be preferred. LMG therefore, offers another example of a mobile affix, an entity that has rare attestations, but may prove to be more common once the 'umbrella' category of 'clitic' is abandoned.
9.2. The significance of LMG weak object pronouns for the ‘theory’ of grammaticalization.

The proposal put forward in section 1, that the weak object pronoun forms of LMG are best considered atypical affixes (due to their mobility) also bears upon the recent proposals for the existence of such a mechanism of change as ‘grammaticalization’ (also referred to as ‘grammatization’, or even ‘grammatization’), by which lexical items lose their independent phonological and syntactic status, as well as their specific semantic meaning and become more grammatical in nature (cf. Campbell and Janda 2001 for an overview of the different interpretations of the term and related bibliography). In Hopper and Traugott (1993: 132, 135) a subsort of grammaticalization, ‘morphologization’ is defined as “that part of grammaticalization that primarily involves the second and third parts of the cline: lexical item > clitic > affix”, while later they state that “Morphologization involves the creation of a bound morpheme (i.e., an affix) out of an independent word by way of cliticization. The final stage of this process, the uniting of the affix with its stem, is referred to as ‘univerbation’.”

Whether the change discussed here is viewed in the traditional way (i.e., LMG clitic > SMG affix), or according to the proposal in section 1 as LMG mobile affix > SMG affix, it is obvious that it would be considered as an instantiation of the process of morphologization and therefore of the more general process of grammaticalization. As such, the evidence discussed in chapters 4-6, and the analysis of the phenomenon proposed in chapter 8 offer two significant observations.

The first one concerns the hypothesis of ‘unidirectionality’, which according to Hopper and Traugott (1993) means that the process of grammaticalization can only lead from a less grammatical item to a more grammatical item and not vice versa, while Herring (1991: 253) described it as a “linear and irreversible process”. However, several counterexamples to this hypothesis have been identified (some of them by Hopper and Traugott 1993, but see also Joseph and Janda 1988, Campbell 1991, 2001, Janda 1995,
2001, Norde 2001, Ramat 1998), to which the results of this study add yet another one. As was mentioned in chapter 8, Horrocks (1990, see also chapter 2 here) gives a description of Koiné and Early Medieval Greek pronoun placement in which postverbal placement is more or less categorical. As was argued above in section 1, this type of immobility of an element is considered typical behavior for an affix. In fact, in the language of Hopper and Traugott, the reported fixed position of weak object pronouns to the immediate right of the verb could be interpreted as the result of ‘univerbation’, which, according to them, is the final stage of grammaticalization. If this description is indeed accurate, then in the change from Early Medieval Greek to Later Medieval Greek, there is evidence of these elements ‘freeing’ themselves from the postverbal position and, in essence, reversing the process by becoming atypical affixes, after having been completely ‘grammaticalized’. Although the movement is not grand in scale (since we are dealing with affixes in both EMG and LMG), it is still movement away from a well-behaved affix to an atypical one. Since the supporters of grammaticalization and unidirectionality view the difference between words and affixes as a cline, the change from EMG to LMG must be interpreted as a change in the direction of more word-like behavior, which according to their usual claims should not be possible. Thus, depending on the accuracy of Horrock’s description of EMG pronoun placement, the LMG data may provide yet another counterexample to the ‘unidirectionality’ hypothesis.

Furthermore, as Joseph (2001: 166) has argued, positing ‘unidirectionality’ as a constraint on grammaticalization implies that the latter is a separate process of language change:

In particular, a constraint requiring movement only in one direction could be entertained if grammaticalization is a separate and distinct process or mechanism, since other processes or mechanisms or change seem not to be constrained in that way; i.e., other recognized mechanisms of change, especially sound change, analogy, or reanalysis, do not seem to be subject to
a constraint like unidirectionality … if grammaticalization is a process in and of itself, a mechanism of change that is separate and distinct from other mechanisms of change, then it could in principle be subject to a constraint like unidirectionality …

In the same article, however, Joseph, examines two instances of change in the history of Greek, namely the emergence of weak subject pronouns (τος, τη, το, see also chapter 2), and the formation of the future marker θά, and shows that although these two cases may appear on the surface to be typical instantiations of grammaticalization, a closer look reveals a much more complex development, which can be accounted for by reference to already known processes of change. In a similar vein, Joseph 2001 and Pappas and Joseph 2001 argue that grammaticalization is best thought of as an epiphenomenon, a concise way of describing the result of other processes rather than as a separate mechanism of change.

The analysis of the rise of preverbal pronoun placement from Later Medieval to Early Modern Greek further supports this view of grammaticalization as an epiphenomenon. For, on the one hand, the change, when viewed from the perspective of the point of departure and the end point, appears to be a normal case of morphologization in which 'clitic' elements (or atypical affixes) become affixes. The detailed examination of the change, however, given in chapter 8, revealed that the appearance and rise of preverbal pronoun placement can be explained by reference to reanalysis (of the marker νά as the verbal head) and analogical spread of the ensuing word-order pattern according to the linear position of the relevant elements. Crucially, there is no evidence that a change in the character of the weak pronouns (e.g. from atypical to less atypical affixes) preceded the change in their placement. Thus, although the term 'grammaticalization' may be a convenient way to refer to the result of the change, it does not offer any insight into how the change actually took place.
9.3. Kroch's Constant Rate Effect.

In 1989 Anthony Kroch published an overview of a number of cases of syntactic change—including his own re-examination of the emergence of English periphrastic 'do' (Kroch 1982/1989)—in which he challenged the traditional view of language change that "those contexts in which the new form is more common are those in which the form first appears and in which it advances most rapidly" (1989: 199). In particular, Kroch has proposed that in order to gain an accurate understanding of language change, raw frequency data should be modeled by some nonlinear mathematical function:

Given the S-shape of curves of change, we cannot use raw frequency data to give us a single parameter for the rate of increase in the use of the innovative form. This is because at the beginning and end of a linguistic change, the rate of increase is low, while in the middle of a change it is very high. In order to associate such a nonlinear evolution with a single rate, it is necessary to model it with some nonlinear mathematical function. I chose the logistic, as it is the simplest appropriate function and the one commonly used to model cases of competition in other fields. (Kroch 1997: 142).

As a result the S-shaped curve is transformed to a straight line in which the rate of change is encoded as the slope of this line. Thus, if lines representing change in different contexts have the same slope, then this can be taken as proof that the rate of change is the same for all contexts. This has proven to be the case not only for the studies surveyed in Kroch's (1989) article but also in a number of other studies, including, Fontana (1993), Santorini (1994), Taylor (1994), and Pintzuk (1995), and has been labeled by Kroch as the Constant Rate Effect:7 "in all linguistic contexts in which an innovative form is in competition with a conservative one, the use of the innovative form increases over time at the same rate, when this increase is measured on the logistic scale" (Kroch 1997: 140).

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7 Also referred to as 'Uniform Rate Hypothesis' (Pintzuk 1995).
One of the important conclusions of Kroch’s (1982/1989) study of the rise of periphrastic do in English was that its use did not spread from context to context (e.g. from negative declarative to affirmative declarative sentences); instead it was actuated simultaneously in all contexts. On the other hand, it has been argued here that during the rise of preverbal pronoun placement in the history of Greek, this pattern did not appear simultaneously in all contexts, but spread analogically, especially if the data from the Cypriot chronicles is interpreted not simply as a reflection of dialectal differentiation but also as indicative of an early period in the process of change. However, it would be wrong to interpret this finding as a direct contradiction of the CRE, because Kroch’s conclusion is not solely based on the discovery of the effect.

Instead, his claim about the spread of 'do' is based on the evidence provided by Ellegård that ‘do’ appeared simultaneously in all contexts. According to Kroch (1997: 143) it is “… this evidence, in conjunction with the CRE, [that] leads to the conclusion that there is no spread of ‘do’ from context to context” [emphasis added]. The logistic model itself in which the CRE is detected “is neutral between an interpretation under which one context precedes another in time in its adoption of the innovative form and one under which the first context only uses the innovative form more often than the other” (ibid.: 142).

Thus, although the change from postverbal to preverbal pronoun placement in the history of Greek, as analyzed here, differs in essential ways from Kroch’s analysis of the rise of English periphrastic ‘do’, it does not directly contradict the hypothesis of the CRE. Such a challenge could have been mounted only if the data from the LMG texts allowed for a test of the rate of change to be conducted. However, this is not possible, both because the data cannot be accurately dated (cf. chapter 3, section 2) and because almost all of the texts are written in verse, a style that appears to have remained conservative with respect to pronoun placement (cf. chapter 8, section 1).
Nonetheless, the results of this study do present a challenge for the way that Kroch uses the CRE to shed light on the mechanism of syntactic change. As he states in his article (1989: 201):

... our results show that the grammatical analysis that defines the contexts of a change is quite abstract. We see that the set of contexts that change together is not defined by the sharing of a surface property, like the appearance of a particular word or morpheme, but rather by a shared syntactic structure whose existence can only be the product of an abstract grammatical analysis on the part of the speakers.

In the case of periphrastic 'do' the particular abstract grammatical analysis concerns which types of verbs could be raised to INFL; all verbs (conservative structure), or auxiliaries only (innovative structure). According to Kroch it is the competition between these two structures that brings about the pattern of variation in the usage of periphrastic 'do' in the transition from Middle to Modern English.

However, the analysis presented in this study has demonstrated that the variation in weak object pronoun placement in LMG cannot be explained by the type of abstract structural differences that Kroch makes reference to. In chapters 7 and 8 it was shown that all such explanations which have been proposed so far fail to capture the facts, precisely because they refer to the mechanism of 'verb-movement' and the abstract structural relationships that can or cannot license it. Instead, it was argued here that the change to preverbal pronoun placement evident in the history of Greek, although initiated by a change in the abstract analysis of morphemes (i.e., the interpretation of νό as the head of the subjunctive), was spread due to a surface similarity, namely the linear position of the relevant elements, and that this spread took place gradually. Thus the evidence from LMG supports the view that the contexts of a syntactic change can be concrete as well as abstract, an observation that is in direct contrast with Kroch's (1989) proposal.
As a final point, it must be noted that, in the type of studies conducted by Kroch and his students, and also in the one presented here, the patterns revealed by the variationist analysis concern the language of the written texts primarily and not colloquial speech. And although it can be argued that certain texts may approximate the vernacular of a period more than others, textual evidence should not be used as the basis for such strong hypotheses as the CRE. For the act of writing, regardless of subject matter, always involves considerably more care than casual speech. Furthermore, as Janda & Joseph (forthcoming) observe, "the order in which specific changes appear in written language need not reflect the order in which they first appeared in colloquial speech." This point was illustrated in chapter 8 where it was argued that a particular genre of composition (poetry) preserved a pattern of variation for a period of five or more centuries. As a consequence, the results of this study reinforce the point made by Janda & Joseph that "empirical verification of the Uniform Rate Hypothesis [=CRE] will not be forthcoming until students of syntactic change begin to carry out serious long-term investigations of ongoing developments in contemporary colloquial speech."

9.4. Grammars with less-than-perfect generalizations.

For some readers, the most surprising conclusion reached in this thesis may be that there is no generalization that captures the facts about weak object pronoun placement in Later Medieval Greek. In fact, as has been stated already in chapters 2 and 8, the search for such a generalization has been the main driving force behind this project. Despite, however, the vigorous pursuit of this goal, it appears impossible to write a rule that makes appeal to general categories of the grammar and accurately describes the facts. Instead, the diachronic evidence points toward a change from postverbal to preverbal pronoun placement that spread from one class of elements to another, yielding intermediate stages for which no generalization can be stated. Generativists will, of course, ask how it is possible to have a
grammar (or a sub-system of a grammar) without generative rules, and the answer that a part of the grammar may be determined according to a list of lexical items will, most probably, seem theoretically unappealing to them.

Nonetheless, and no matter how unappealing it may seem, such a situation is not unprecedented. Gross (1979: 860) reports on the attempt to construct a transformational-generative grammar of French and states that “... if we compare the syntactic properties of any two lexical items—it is observed that no two lexical items have identical syntactic properties”, while later on (p. 861) he remarks: “We were forced to conclude that we could obtain no generalization without a reasonably complete study of the lexical items of the language and their syntactic uses.” More recently Joseph (1997) examined the nature of generalizations in phonological, morphological and syntactic constructions. He draws from the results of previous work (Neikirk 1996, Kim 1996, Gross 1979, and others) as well as introducing new observations (e.g. the formation of plural for borrowed nouns in English, and the accent pattern of Greek neuter nouns that end in -ία). In all of these cases a close examination of the facts reveals that none of the constructions can be captured with a generalization that is 100% true. Accordingly, Joseph (1997: 150) reaches the conclusion that:

... while linguistic generalizations are important and to some extent reflect linguistic competence, ... we should not be surprised to find behavior that is contradictory to apparent generalizations, not only across speakers but within speakers as well ... the type of information that speakers have access to again and again seems to be facts about particular lexical items ... this lexically particularized knowledge, gives us crucial insights into the nature of what speakers know about their language.
Furthermore, Joseph (ibid: 157) proposes that most generalizations should have “restricted scope” and be “sufficiently localized”, and that this new type of generalizations can be described synchronically by use of the constructs of ‘constellations’ and ‘(partial) meta-templates’, concepts proposed by Joseph and Janda (see Janda & Joseph 1986, 1989, 1992, in preparation, as well as Joseph & Janda 1988, and Joseph & Janda 1999) and defined as follows:

1. The constellation: a group of elements which share at least one characteristic property of form but are distinguished by individual idiosyncracies, both of form and of function, that prevent their being collapsed with one another.

2. The meta-redundancy-statement, or “(partial) meta-template”, which equates (or “parses”) all relevant instances of a particular formal configuration, (Joseph & Janda 1999: 342).

It must be stressed—though it should already be clear—that these considerations do not mean abandoning the search for generalizations. This remains a powerful heuristic tool that has led to better understanding of what constitutes ‘knowledge-of-language’ and will, undoubtedly, continue to do so. The real issue here is our preconceived notions of what a grammar should look like. It has already been mentioned in chapter 3 that the structuralist ideal of homogeneity, which also underlies the generativist program through the use of the concept of ‘idiolect’, is vigorously challenged by the fact that languages change. Weinreich, Labov and Herzog (1968: 101) proposed that in order to solve this paradox, one must “break down the identification of structuredness with homogeneity” and argued that “the possibility of describing orderly differentiation in a language serving a community” is essential for understanding how languages can change without losing any of their communicative efficiency. However, the construct that Weinreich, Labov and Herzog proposed to explain structured heterogeneity, namely the ‘variable rule’, has been proven to
have adequate descriptive power but no explanatory force (cf. Romaine 1981, Dittmar 1996, Fasold 1996). On the other hand, constructs such as the notion of 'constellations' described above provide not only a way of describing orderly differentiation within the language of an individual speaker, but also a model for understanding how speakers are able to treat certain groups of linguistic elements as being 'the same' in some constructions but 'different' in others.

9.5. Conclusion.

The above discussion shows that, although the main focus of this thesis has been the detailed examination of the variation in weak object pronoun placement in Later Medieval Greek, the results of this research have significant implications for hypotheses about morphosyntactic change, like 'unidirectionality' and the 'constant rate effect'. This study also provides more material for consideration in the ongoing debate over the nature of clitics and whether or not they should be considered a separate primary morphological element, and, on a more theoretical level, questions some of the established assumptions about the nature and scope of generalizations. Furthermore, the discussion here together with the analysis in chapter 8 have highlighted the need for an equally thorough examination of weak pronoun placement in Early Medieval Greek, because it appears that many crucial conclusions have hinged on Horrocks' decidedly brief description of the facts. Finally, it must be noted that an exploration of pronoun placement variation in non-standard dialects of Greek (especially the southeastern ones-Khios, Rhodos, Crete, Cyprus) is also needed. For, although some descriptions exist, they are for the most part epigrammatic and quite uninformative, when one considers how complex the pattern of LMG pronoun placement has turned out to be. The full range of facts, however, would prove to be very insightful, because the process of the change will be fully understood only when all of its outcomes are catalogued in detail.
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