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Wackernagel's Law in Fifth-Century Greek

by

David Michael Goldstein

A dissertation submitted in partial satisfaction of the

requirements for the degree of

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in

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in the

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University of California, Berkeley

Committee in charge:

Professor Andrew Garrett, Co-Chair  
Professor Donald Mastronarde, Co-Chair  
Professor Mark Griffith  
Professor Line Mikkelsen

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# Abstract

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by

David Michael Goldstein

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This dissertation investigates the distribution of the pronominal clitics and the modal particle  $\alpha\nu$  in fifth-century Greek (more specifically in Herodotus, the tragedians, and Aristophanes), which is typically assumed to be governed by Wackernagel's Law. It argues for a prosody-dominant model of clitic distribution, according to which the position of a clitic is conditioned primarily by prosodic domain, and only secondarily by syntactic domain: clitics typically select for a host at the left edge of an intonational phrase. From here I then pursue the deeper question of what factors are responsible for the mapping of a constituent (or sub-constituent) onto an intonational phrase. I examine preposed phrases, participial phrases, and infinitival clauses, to present a dossier of the pragmatic and semantic meanings that induce intonational-phrase coding, and in turn shape clitic distribution.

## Acknowledgements

There are not many places where one could write a dissertation like this, devoted as it is to both philology and linguistics. I am thus profoundly grateful to my committee for giving me the opportunity to explore this topic. I have enjoyed writing this dissertation more than any other part of graduate school. To my co-chairs, Andrew Garrett and Donald Mastrorarde, I owe the largest debt of gratitude. I could not begin to record how much I have learned from them. Their high standards of scholarship have provided me with a model for my own work. They have saved me from countless blunders, in particular those of impetuous youth. Mark Griffith always offered insightful comments, especially on metrics and the language of Greek drama, and provided dearly appreciated encouragement along the way. Line Mikkelsen taught me syntax. Without her instruction, I could not have written this dissertation. Indeed, without her inspiring courses, I probably would not have wanted to. The collective critical acumen that oversaw this project has improved its every page. I could not have hoped for a better committee.

I owe a special debt of gratitude also to Mark Hale, whose Indo-European course at the LSA Institute I was able to attend this past summer. He has spent many hours listening to my ideas about Wackernagel's Law and Indo-European syntax, most of which he disagreed with. But his challenging stance forced me to review my analyses at every step of the way, and they are the stronger for it.

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While writing this dissertation, those around me learned more about clitics than they ever wanted to. At Berkeley, Athena Kirk, Joel Rygorsky, and Felipe Rojas provided me with a circle of friendship that I will miss dearly. After ten years in the same place (more or less), it is especially difficult to imagine not going to school with Felipe Rojas anymore. Outside of Berkeley, I am especially grateful to Dieter Gunkel, not only for reading so many chapters, but also for countless phone conversations about IE linguistics over the years. He and Felipe have always made the study of *Altphilologie* so exciting. *Auf München!*

I dedicate this work to the memory of my brother Eric, who would have wondered why I wrote it.

In Memoriam

Eric Marvin Goldstein

31 May 1981 - 23 August 2002

न हि प्रपश्यामि ममापनुद्याद् यच्छोकमुच्छोषणमिन्द्रियाणाम्

अवाप्य भूमावसपत्नमृद्धं राज्यं सुरारणामपि चाधिपत्यम्

श्रीमद्भगवद्गीता २.८<sup>1</sup>

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<sup>1</sup> 'For I do not see what could remove the sorrow drying up my senses, even if I acquired on earth an unrivaled, prosperous kingdom, as well as the power of the gods.'

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*Suffice it to say, the study of Greek syntax would always have imposed itself on me as a duty, but take away its spiritual, its artistic content, and it would cease to be for me the meadow of asphodel it has been for years. It would lack the purple glow that lights up the arid plain of grammar until it becomes the Elysian fields of art.<sup>2</sup>*

## Chapter 1

### Introduction

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Word order in Ancient Greek is often said to be “free,” as the elements of a sentence can be arranged in seemingly any order. In stark contrast to this general freedom, there is a set of lexical items subject to special constraints. These include enclitics (e.g. pronominal clitics) and “postpositives” (e.g. discourse markers such as μέν, δέ, γάρ), whose position in the clause is more restricted, in that they tend to occur second (host-clitic relationships are marked by ‘=,’ and the relevant clitic is in boldface type):

- (1.1) χρητῆρες=**οἱ** ἀριθμὸν ἕξ χρύσειοι ἀνακέαται. Hdt. 1.14.6  
‘Six golden craters have been dedicated by him.’
- (1.2) εἰx=**ἄν**=τι γίνηται τοῖς ἐργόνοισι τοῖς ἐν τοῖ αὐτοῖ ἔργοι... IG 5.2.6<sup>3</sup>  
‘If anything happens among the workers that are on the same job...’

In (1.1) the dative pronoun οἱ falls directly after the first word of the sentence, χρητῆρες. In (1.2), the modal particle ἄν is found in the same position. Here there is actually a further clitic, the form τι, which follows directly thereafter. In cases like this in which multiple clitics stack up in second position, I will describe them all as in second position.<sup>4</sup>

The tendency of certain enclitics and postpositives to assume second position within a clause is generally known as Wackernagel’s Law. In 1892, Wackernagel published his seminal monograph on the topic, which would ultimately become the founding document of what we now call Wackernagel’s Law. His observations were based on archaic Indo-European languages (Sanskrit, Avestan, Greek, Latin, Gothic, etc.), and

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<sup>2</sup> Gildersleeve (1903: 5).

<sup>3</sup> From Buck (1955: 201).

<sup>4</sup> This is a simplifying assumption, which I rely on to avoid the issue of the internal structure of clitic chains. Whether or not this is a valid assumption can only be determined with further investigation into clitic chains. Whatever the results of such a study, I cannot see at this point how they would affect the analysis here.



his law is one of the few syntactic generalizations that can be made for archaic Indo-European and the proto-language (see Watkins 1964). Since then similar behavior has been found in many languages throughout the world, such as Luiseño (Uto-Aztecan; Southern California) and Ngiyambaa (Pama-Nyungen; New South Wales, Australia); see Kaisse (1985) for a review.

I would like to make three things clear regarding the term and phenomenon known as Wackernagel’s Law. The label *Wackernagel’s Law* is an honorary designation for a descriptive generalization about the surface position of certain enclitics and postpositives. It is not a “law” in the sense of a prescriptive linguistic convention (as some that I have talked to believe). Despite Wackernagel’s own use of the term *Gesetz* in the title of his article, he often refers to second-position behavior as a *Tendenz*. Indeed, Eduard Fraenkel later referred to Wackernagel’s “Law” as a *Beobachtung*, which in my view is the most accurate description of the accomplishment of the 1892 article.

Second, in my view, Wackernagel’s Law as a linguistic “law” has no explanatory power. That is to say, I do not believe that a clitic is ever in second position *because of* Wackernagel’s Law. For one, there can be and are many “second” positions within a clause for different types of clitics to fall into, as first established by Hale (1987). In Greek, for instance, the pronominal clitic  $\mu\upsilon\upsilon$  and the discourse marker  $\gamma\acute{\alpha}\rho$  can both legitimately be described as “second”-position items, but exhibit considerably different distributional patterns. So it is not fitting to speak of Wackernagel’s Law as though there were only one unified “law” that positioned clitics in one uniform second-position within the clause. But more importantly, Wackernagel’s Law is to my mind only an epiphenomenon that falls out from deeper patterns of organization in the language (Fortson 2009: 3-4 makes this point nicely in reference to metrical laws). In this sense, this dissertation is not about Wackernagel’s Law per se: it is about the underlying factors that give rise to the empirical phenomena assumed to be governed by “Wackernagel’s Law.”

## 1 The Value of Counterexamples

Perhaps the best way to understand the mechanisms behind Wackernagel’s Law is through cases in which it appears to be violated:

(1.3) τούτους μὲν δὴ τοὺς βασιλέας ὧδε-~~ἄν~~ ὀρθῶς κατὰ γλῶσσαν τὴν σφετέρην  
Ἕλληνας καλέοιεν.

These kings, the Greeks would rightly call thus in their own language.’

Hdt. 6.98.18

(1.4) ἄνευ γὰρ δὴ μάγου οὐ-~~σφι~~ νόμος ἐστὶ θυσίας ποιέεσθαι.

‘For, without a magus, it is not licit for them to perform sacrifices.’

Hdt. 1.132.15

In (1.3), the object noun phrase  $\tau\acute{\omicron}\tau\omicron\upsilon\varsigma \mu\acute{\epsilon}\nu \delta\eta \tau\omicron\upsilon\varsigma \beta\alpha\sigma\iota\lambda\acute{\epsilon}\alpha\varsigma$  precedes the host of  $\acute{\alpha}\nu$ . In (1.4), the preposition phrase  $\acute{\alpha}\nu\epsilon\upsilon \gamma\acute{\alpha}\rho \delta\eta \mu\acute{\alpha}\gamma\omicron\upsilon$  likewise precedes the host of  $\sigma\phi\iota$ . Both examples give rise to surface violations of Wackernagel’s Law, in that it is not entirely clear how the position of  $\acute{\alpha}\nu$  or  $\sigma\phi\iota$  can be characterized as “second.” Ultimately, I will demonstrate that there is in fact nothing exceptional about the position of either clitic.

Examples like (1.3) and (1.4) raise two questions, which are the central foci of this dissertation:

1. What mechanism is responsible for the appearance of a clitic outside of canonical second position?
2. How does the meaning of a sentence with a non-canonically positioned clitic differ (if at all) from one with a canonically-positioned clitic?

These two questions, while prompted by counterexamples like (1.3) and (1.4), strike at the heart of second-position phenomena in Greek. For to answer question one is essentially to provide a framework that will account for both the canonical cases, as well as any and all counterexamples. Parts I and II (comprising chapters one through five) are devoted to this endeavor, that is, to answering the question, “where does the clitic go?” By contrast, part III (chapters six through nine), investigates the differences in meaning between canonical cases like (1.1) and (1.2) and non-canonical cases like (1.3) and (1.4).

Before laying out the framework of the dissertation in more detail, I would like to delineate the scope of this project. My investigation is limited to the distribution of the pronominal clitics, which I list in the following table, and the modal particle  $\acute{\alpha}\nu$ :

	<b>1s</b>	<b>2s</b>	<b>3s</b>	<b>3d</b>	<b>3p</b>
<b>Gen.</b>	$\mu\omicron\upsilon, \mu\epsilon\omicron, \mu\epsilon\upsilon$	$\sigma\omicron\upsilon, \sigma\epsilon\upsilon, \sigma\epsilon\omicron$			$\sigma\phi\epsilon\omega\upsilon\upsilon$
<b>Dat.</b>	$\mu\omicron\iota$	$\sigma\omicron\iota, \tau\omicron\iota$	$\omicron\iota$		$\sigma\phi\iota\sigma\iota(\nu), \sigma\phi\iota(\nu)$
<b>Acc.</b>	$\mu\epsilon$	$\sigma\epsilon$	$\mu\iota\nu, \nu\iota\nu$	$\sigma\phi\omega$	$\sigma\phi\epsilon\alpha, \sigma\phi\epsilon, \sigma\phi\alpha\varsigma$

My study focuses on these two sets of second-position items because they exhibit similar distributional patterns, and thus appear to be subject to (roughly) the same generalization. Other second-position items such as  $\mu\acute{\epsilon}\nu$  and  $\delta\acute{\epsilon}$  will obey slightly different generalizations. To refer to both the pronominal argument clitics and the modal particle  $\acute{\alpha}\nu$ , I will use the umbrella term *clausal clitics*. (On the designation of  $\acute{\alpha}\nu$  as a clitic and not a postpositive, see chapter three.)

I have imposed a further restriction on the scope of this study, in that I have not systematically investigated pronominal clitics that mark possession (on this phenomenon in Sanskrit, see Hale 1987: 81-87), such as the following:

- (1.5) φάναι-δέ-οἱ ἀδελφεὴν ἐν Λιβύῃ πεπραῖσθαι ὑπὸ τῶν αὐτῶν Φοινίκων ὑπ' ὧν  
καὶ αὐτὴ ἐπρήθη.  
'She said that her sister had been sold in Libya by the same Phoenicians by  
whom she herself had also been sold.'2.56.11

The distribution and semantics of these forms raise their own issues, and thus demand separate treatment.

The data for my investigation are provided by the following corpora:

1. The complete text of Herodotus (ca. 185,044 words).  
ca. 480 tokens of ᾗν.  
ca. 2400 tokens of pronominal clitics.
2. The non-fragmentary Athenian tragedies (ca. 236,898 words).  
ca. 1,534 tokens of ᾗν.  
ca. 2100 tokens of pronominal clitics.
3. The non-fragmentary plays of Aristophanes (ca. 103, 262 words).  
ca. 654 tokens of ᾗν.  
ca. 1290 tokens of pronominal clitics.

Searches for examples were conducted via the online Thesaurus Linguae Graecae (tlg.uci.edu). The citation number for all examples is thus according to the TLG texts. I have not, however, relied exclusively on their texts. In many cases, I have deleted the punctuation of their texts, in particular in cases where it biases a particular prosodic or morphosyntactic parsing of a sentence. (The punctuation of modern classical texts is in any event too often beholden to the conventions of the editor's native language.) Second, I have also excluded clitics whose existence or position is due to emendation. When manuscript readings were at issue, I have consulted other editions.

## 2 Part I: Foundations

The first part of this dissertation is devoted to a detailed introduction of the phenomenon and the theoretical framework in which it will be handled. Chapter two reviews the literature on Wackernagel's Law beginning with the forerunners of Wackernagel (1892) and ending with the most recent attempts within generative grammar to handle second-position clisis. As mentioned above, Wackernagel's Law is found in many languages of the world, and the literature on the topic is accordingly vast. My survey will focus particularly on Greek and Sanskrit, as the latter is typologically very similar to the former.

Chapter three looks more specifically at basic questions of prosody pertaining to clitics. While the term *prosody* in Classical scholarship typically refers to the study of poetic meter, I should point out that I do not use it in that sense. Instead, I use the term

*prosody* to refer to phonological elements longer than a single segment (i.e., vowels and consonants), as well as suprasegmental elements like intonation, accentuation, rhythm, etc. For an overview of the theoretical difficulties presented by the notion “prosody” see Fox (2000: 1-9); on prosodic phonology and structure specifically, see Fox (2000: 330-365). In this chapter, I also introduce a framework for discussing prosodic units, namely the Prosodic Hierarchy.

### **3 Part II: The Distribution of Clausal Clitics**

In part two, we come to the heart of the matter, and embark on an exploration of the mechanisms behind clitic placement. I begin chapter four by proposing a new generalization to account for the distribution of clausal clitics. I argue that the distribution of clausal clitics results from the interaction of syntax and prosody, with the latter conditioning factor dominant. In pre-theoretical terms, a clausal clitic will occupy the left edge of an intonational phrase as early as it can within a clause. I demonstrate in detail how a syntax-only or a predominately syntactic account offers less coverage of the data than a prosody-dominant one. I argue also that the standard assumptions about the syntax-phonology interface cannot be maintained in the face of the Greek data.

The arguments for prosody are not limited simply to those against syntax. In chapter five, I adduce evidence from tragic and comic metrical texts to further substantiate the prosody-dominant account. This is perhaps the first systematic investigation of clitic distribution in poetic fifth-century poetic texts. It has always been well known that the data here misbehave to an extent not attested in prose texts, but thus far there are no detailed accounts of the misbehavior, nor any proposals to handle the distribution.

### **4 Part III: Prosodic Phrasing and Meaning**

Understanding the distributional patterns of clausal clitics is not simply an end in itself. Rather, it reorients the discussion on clitic position, and provides a framework for using clitic position as a way to diagnose fine-grained meaning. For the question is no longer one of why a clitic does or does not show up in second position, which is in many ways a dead end. The question is instead: how is a sentence prosodically (and morphosyntactically) encoded, and which intonational phrase does the clitic occupy? The systematic variation that we find in the prosodic (and morphosyntactic) coding of a sentence is driven by differences in meaning, and is reflected in clitic position. Thus, what we get is a new dimension to clitic placement: it is not simply a diagnostic of syntactic and prosodic structure, but also one of semantic and pragmatic meaning. As modern readers of Greek texts, at a remove of over two millennia, we can thus use clitics to extract meaning that we would otherwise only be able to guess at.

To illustrate the diagnostic power of clitic position, I investigate the phenomenon of preposing in chapters seven and eight. Preposing is the placement of a constituent or sub-constituent before the host of a second-position clitic, as illustrated in examples

(1.3) and (1.4). I argue that preposed material is pragmatically marked, and that preposing serves discourse-pragmatic functions.

In chapter eight, I investigate the following clitic alternation vis-à-vis participial phrases:

*Exclusion from Participial Phrase*

- (1.6) γνώμη γὰρ τοιαύτη χρεώμενος ἐπιτροπέυοι=ᾶν ἀμωμήτως τοῦ πλήθους.  
 ‘Because he uses excellent judgment, he would administer the masses without fault.’ 3.82.8

*Inclusion in Participial Phrase*

- (1.7) ἔχων=δ’=ᾶν ταύτην ἠγόραζε οὔτε δορυφόρων ἐπομένων οὔτε ἄλλου οὐδενός.  
 ‘Wearing this [= Greek attire] he used to hang out in the agora with neither spearmen nor anyone else attending him.’ 4.78.21

I argue that the alternation in clitic position, that is, whether the clitic is included in or excluded from the participial phrase, is conditioned by the semantics of the participial phrase. If the participial phrase is characterized by a clause-level operator (i.e., *when, if, although*, etc.), I argue that it is coded as an intonational phrase, presumably just as its clausal equivalent with a finite verb would be. Such participial phrases will only admit a second-position clitic if it is selected for by an element within the participial phrase. By contrast, if the participial phrase bears only verb phrase-level semantics, then there is no such requirement. This analysis also provides an account of the multiple-ᾶν construction in prose, as well as identifies a hitherto unidentified construction in Greek, that of the co-verb participial phrase.

In chapter nine, I explore the variation that clitics exhibit in relation to infinitival clauses, as in the following pair:

- (1.8) ταῦτα ἀκούσας ὁ Καμβύσης ἔφη ψεύδεσθαι=σφραεας καὶ ὡς ψευδομένους θανάτῳ ἐζημίῳ.  
 ‘When he<sub>i</sub> heard these things, Cambyses<sub>i</sub> said that they<sub>k</sub> [= Egyptians] were lying and on the ground that they were lying he<sub>i</sub> punished (them<sub>k</sub>) with death.’ 3.27.13

- (1.9) ὁ δὲ ἄλλο μὲν οὐδὲν ἀμείβεται τὸν πατέρα, ἔφη=δέ=μιν ἱρὴν ζημίην ὀφείλειν τῷ θεῷ ἐωυτῷ ἐς λόγους ἀπικόμενον.  
 ‘And he<sub>i</sub> [= Lykophron] offers no other answer to his father<sub>k</sub> [= Periandros, his father], but he<sub>i</sub> said he<sub>k</sub> owed a sacred fine to the god, since he<sub>k</sub> spoke to him<sub>i</sub>.’ 3.52.22

The first example presents the canonical situation: the pronoun σφραεας is semantically interpreted with the embedded predicate ψεύδεσθαι, and accordingly surfaces second within that domain. In the second example, this does not happen, however, as here we

find the pronoun  $\mu\nu$  is hosted by the matrix verb. I argue that this alternation is conditioned by the lexical semantics of the matrix verb. Thus in (1.7),  $\varphi\eta\mu\acute{\iota}$  is used as in its locutionary sense to report a proposition. By contrast in (1.8), it is used as a declarative: with his utterance (or rather, speech act), Lykophron imposed on his father a fine. The verb  $\xi\varphi\eta$  does not encode the reporting of a proposition, so much as the creation of a new state of affairs (namely Periandros' being fined). In this sense,  $\varphi\eta\mu\acute{\iota}$  behaves as a manipulation verb, and thus what we find in (1.8) is exactly what we expect. Chapter ten closes the dissertation with a summary review of the claims, as well as a prospectus of future work that needs to be done on this topic.

## 5 Clitic Position as Reading Tool

Before proceeding to chapter two, I want to highlight the broad value of study of Wackernagel's Law, which is often assumed to be a topic of narrow philological or linguistic concern. To be sure, the phenomenon does raise many interesting questions in this direction, and most studies of the topic are focused on this aspect of the phenomenon. But there is far more to be gleaned from clitic position. For as the summary of Part III above makes clear, alternations in clitic distribution are systematic and conditioned by the semantic and pragmatic meaning of the sentence. What this means is that we can use clitic position as a reading tool to diagnose meanings that would otherwise be either inaccessible or only the product of guesswork. Thus clitic distribution can inform us not only about the Greek language in general, but also about Greek texts in particular. This point might sound obvious (and indeed I think ultimately it is), but it is one that has been acknowledged and appreciated by only the tiniest fraction of scholars. Readers who are interested specifically in this aspect of the argument should jump directly to Part III, as the rest of Part I and all of Part II are devoted more to the issue of where a clausal clitic can and does occur, and not why.

## Chapter 2

### Previous Approaches to Wackernagel's Law

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The present chapter reviews the history of scholarship on Wackernagel's Law, beginning with the foundational paper in this domain, Wackernagel (1892). From here, I sketch the trajectory of the subsequent scholarship (at least as it pertains to Greek, and languages typologically similar to Greek, such as Sanskrit<sup>5</sup>), and highlight issues that will be of especial importance for my own study.

By and large, Wackernagel's Law has been widely accepted. As such the scholarship since his seminal 1892 article has focused to a considerable extent on the question of how one explains the counterexamples. On the theoretical side, the question that has most occupied scholars (and here mainly linguists) is how one situates second-position effects in a theoretical framework. That is, if we accept Wackernagel's Law, what in grammar is responsible for second-position behavior? By far, the most common answer to this question has been syntax, presumably on the assumption that word order is the domain of syntactic operation. Others have argued that it is phonology that is responsible for second-position effects, in that clitic position is sensitive to the phonological features (e.g. intonation or pitch patterns) of a sentence.

While I will ultimately argue that clitic distribution in fifth-century Greek is prosodically conditioned, it is not the case that syntax is irrelevant. Clitic distribution emerges from the interaction of both syntax and phonology. That is to say, one cannot predict the correct distribution of clausal clitics without reference to both syntactic as well as prosodic domains. Thus the question as far as Greek is concerned is how exactly these two components interact to yield the observed patterns.

The bulk of the discussion below will explore syntactic and phonological explanations, but it needs to be borne in mind that other theories have been proposed—e.g. Anderson (1992: 210-223, 2005, 2006); Miller and Sag (1997); and Spencer (2000) all argue that the morphological component (specifically phrase-level morphology) is responsible for clitic distribution. Since such an analysis has not been proposed for the Greek data (or a language with similar clitic behavior), I have not considered this possibility below.

The layout of this chapter is as follows. Section one reviews the foundational text in the literature on second-position clitics, Wackernagel (1892), as well as other early literature that has ceased (undeservedly) to play a role in contemporary discussions of second-position clitics. My goal here is not to review all of Wackernagel's claims, but only

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<sup>5</sup> One exception is Veksina (2008), which I encountered too late to take into consideration. She offers an extensive overview of Wackernagel's Law from an Indo-European perspective, with particular attention to Old Russian data and contemporary Russian scholarship.

those that are most relevant for our discussion here. Section two considers another seminal article, that of Fraenkel (1933), one of his *Kolon und Satz* articles, in which he used the idea of a *Kolon* (which in contemporary terms corresponds to the intonational phrase) to explain exceptions to Wackernagel’s Law. As we will see, Fraenkel’s work is the point of departure for my own analysis. Section three reviews briefly the work of Marc Janse, whose analysis bears similarity to that of Fraenkel. Section four examines three analyses of second-position phenomena carried out under a generative framework; the first is that of Taylor (1990), the second that of Hale (2007), and the last that of Kiparsky and Condoravdi (2001) and (2004). Section five reviews the work that J.N. Adams has done on Latin and his attempt to introduce pragmatic concepts into discussions of second-position phenomena. In section six, I offer brief concluding remarks.

## 1 Wackernagel (1892) and Before

The history of Wackernagel’s Law (= WL) begins with the majestic Wackernagel 1892. It is in this article that Wackernagel demonstrated at length the robust proclivity of certain words to occupy second position in their clause. He concentrated above all on the distribution of the pronominal clitics (Wackernagel 1892: 333-366, 406-412), and since then they have accordingly been considered second-position items par excellence.

It is only rarely noted that Wackernagel (1892) is not the first time that second-position effects were observed. Indeed, Wackernagel himself had already discussed the topic in his (1879) article. Wackernagel (1892: 342, 402) notes several works that had proposed second-position generalizations, whether in Greek, as Bergaigne (1877), or Indo-Iranian, as Delbrück (1878) and Bartholomae (1886: 1-32). Wackernagel (1926: 46) actually attributes discovery of his eponymous law to Delbrück (1878).<sup>6</sup> Delbrück (1900: 49) also lists Delbrück (1878: 47-48) as the first reference in its bibliography on second-position clitics.

### 1.1 Wackernagel (1892) and Prosody

One aspect of Wackernagel (1892) that stands in need of clarification is the extent to which Wackernagel himself portrayed his Law as prosodically conditioned. The modern secondary literature often ascribes to his work a belief in the prosodic basis of second-position phenomena (cf. Anderson 1993: 70; Fraser 2001: 153<sup>7</sup>). To some extent, this is true. Wackernagel (1892: 351; cf. p. 354) unquestionably thinks that the enclitic status

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<sup>6</sup> Meier-Brügger et al. (2003: 248) in fact refer to it as the Delbrück-Wackernagel Law, which is perhaps more correct but certainly less conventional. For Delbrück’s contributions see Kritsch (1997) [*non vidē*].

<sup>7</sup> I find nothing in Wackernagel (1892) that supports the strength of the following description, however. Fraser (2001: 140): “yet their [= second-position clitics, DMG] placing in P2 is canonically attributed solely to phonetic factors – most influentially by Wackernagel (1892).” Remarkably Fraser does not reference specific page numbers from Wackernagel (1892). Likewise, Taylor (1990: 33) refers to “...Wackernagel’s unchallenged claim that clitics in HG appear after the first post-pausal word of a sentence.” I do not understand what “post-pausal” is supposed to mean here, nor why she did not simply say “...after the first word...”



of a word was responsible for its second-position behavior. Elsewhere he speaks of the *Drang* of the first word of a clause as responsible for clitic placement (1892: 336): “Einzig der Drang nach dem Satzanfang kann die Stellung des  $\mu\nu$  erklären.” At (1892: 406), he writes: “die Stelle unmittelbar hinter dem ersten Wort des Satzes mit Tonschwäche verbunden sei.” Moreover, he repeatedly observes mismatches between clitic position and syntax or semantics, e.g. (1892: 337). For instance, he notes the intrusion of a clitic within an article-noun word group, or a preposition-noun word group (1892: 345, 360). He also notes a phenomenon that nowadays is called clitic-climbing, whereby a clitic is found in a clause in which it is not interpreted or syntactically governed (1892: 358-359; 362-363 with possessor-clitics).

In spite of these remarks, Wackernagel shows no awareness of prosodic constituency when it comes to first-position hosts. In the previous chapter, I claimed that second-position clitics occur second after the first prosodic word, which sometimes means the first accented lexical word, and at other times means an accented lexical word plus a potential cluster of either proclitics or enclitics (or both). At the time of Wackernagel (1892), this formulation had not been made, and it seems that Wackernagel himself thought of second position in essentially graphic terms, as the second graphic unit in a clause.

Many counterexamples arise in the face of a graphic definition of second position. As a result, Wackernagel often hedges and describes a clitic “in second or as good as second position” (e.g. Wackernagel 1892: 336, 337, 374; Adams 1994: 108<sup>s</sup> laments this imprecision). He seems to have (implicitly at least) understood that the second-position generalization still held even when something was not quite in absolute (graphic) second position, as at one point (1892: 343) he says that he will treat second and almost-second as the same.

In my view, it is difficult to attribute to Wackernagel any sort of explicit prosodic analysis, but we may be justified in deducing one. For he is well aware that clitics can split up (what he assumes are) syntactic constituents, such as sequences of article plus noun. In such scenarios, the clitic is not semantically interpreted with respect to the surrounding constituents, nor is there any syntactic reason for it to be there. And if syntax is what puts related lexical items together, and something like a clitic pronoun shows up amidst unrelated elements, then what puts it there is not syntax.

What is interesting is that, if one looks beyond Wackernagel (1892), one finds far more explicit formulations on the prosodic underpinning of second-position phenomena, as in the following: “Die Enklitika wird von dem am stärksten betonten Worte, und das ist das erste im Satze, wie von einem Magnet angezogen” (Delbrück 1878: 48). I doubt that anyone today would accept this formulation as it stands; perhaps one might be more inclined to believe a modified version, in which pitch is highest at the beginning of a

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<sup>s</sup> I do not fully support the criticism that he registers here regarding second position within a *Kolon*, however.

clause, and that it is this feature to which the clitic is attracted (see e.g. Gussenhoven 2004 for just such a perceptual account, as well as the discussion in chapter five).

And even more interesting is the following claim:

Da es aber nicht wohl angeht, für die Stellung der Partikeln einen anderen Grund zu suchen, als für die Stellung der Pronomina, so berechtigen die oben angeführten Beispiele zu dem allgemeinen Schlusse, dass die Enklitika ihre Stellung nicht einem syntaktischen, sondern einem rhythmisch-musikalischen Grunde verdanken. Delbrück 1900: 51<sup>9</sup>

In my view, this is the most accurate (if vague: how exactly were enclitics *rhythmisch-musikalisch* organized?) description of Wackernagel's Law in Greek that I have found. (It is perhaps worth noting that I have nowhere found this passage quoted or referenced in any discussion of second-position phenomena in Greek; Bennet 1987: 271 cites the passage in relation to clitic distribution in Common Slavic.) As we will see below, even Fraenkel, who also offers a prosodic account of second-position clitic, does not offer so explicit a formulation. Unfortunately, Delbrück does not explicate on these points, nor does he explain what exactly the 'rhythmical-musical' nature of the law means for second position. In any event, it seems that while Wackernagel did have some belief in the prosodic basis of second-position phenomena, he never presented the phenomena in the same terms as Delbrück.

## 1.2 Diachronic Weakening?

Wackernagel (1892) is more concerned to set out the broad empirical basis of his *Stellungsgesetz*, and less so with the counterexamples (which he was nevertheless well aware of). While he did not formulate any specific or over-arching analysis for the disobedient data, he did occasionally rely on diachrony to handle them. One way that he did this was to claim that the second-position rule weakened over time, e.g. (1892: 363, 370). For instance, at (1892: 352), he quotes second-position statistics for Herodotus, which are considerably lower than those for Homer. He attributes this weakness to diachrony: an "old" rule of second-position (which is thought to be more robust at the Homeric and Proto-Greek stages) is giving way to "new" rules.

This notion of a weaker fifth-century Wackernagel's Law has been picked up and disseminated by later scholars:<sup>10</sup> see e.g. Howorth (1955: 93); Dover (1960: 15-19); Fraser

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<sup>9</sup> Cf. Delbrück and Brugmann (1900: 56). Brugmann (1904: 682) adds: "Wenn das erste Wort wie ein Magnet die Enklitika an sich zog, so muss es nicht nur überhaupt 'betont', sondern ganz besonders hervorragend betont gewesen sein." Meier-Brügger et al. (2001: 231) is a strange and not entirely satisfactory description of Wackernagel's Law.

<sup>10</sup> Despite belief in the weakening of Wackernagel's Law over time, no one to my knowledge has attempted to lay out specifically how it weakened, or to make the argument that instead of one second-position generalization (as in Homer), there were many sub-generalizations or sub-regularities that had arisen over time. If one could demonstrate the existence of such a scenario, this would be a powerful challenge to my own account.

(2001: 164-166); and Taylor (1990: 30, 131-133), whose ideas are discussed further in section four below. In my investigation of Herodotus, the tragedians, and Aristophanes, I would by contrast assert that the second-position “rule” is as robust as ever, and that there is no fifth-century tapering.<sup>11</sup> It is simply that the nature of the “rule” is not evident from the Homeric evidence.

What then of Wackernagel’s statistics and his comparison between Homer and Herodotus? The lower numbers that Wackernagel observed for Herodotus I would attribute to two factors. First, given that he lacked the notion of a prosodic word, he may have counted as exceptional examples that I would not (e.g. sequences of καί-noun-clitic). Second, Wackernagel had no real systematic way of dealing with counterexamples. As such, these were simply counted as counterexamples pure and simple.

For me, however, surface counterexamples can still be considered well behaved if they abide by an underlying second-position principle. For instance, clause-initial “preposed” noun phrases might knock a clitic out of clause-second position: but, as I will show (see chapters eight and nine), it is still second within an intonational unit, exactly as in canonical examples. As such, the differences in the surface position of the clitic are due not to diachronic weakening of the Law, but rather to differences in sentence-organization and pragmatic meaning, as well as the various prosodic differences among speech-genres (e.g. historical narrative vs. oratory), which can lead to non-canonical clitic placement (see Rijksbaron 1997: 12 for a similar outlook). In short, the counterexamples that Wackernagel observed were only epiphenomenal, and thus do not signal a weakening of second-position placement.

On this same point, I would like to call attention to, and reject, the notion that Greek sentence-phonology undergoes a shift by the fifth century, and that this is what lies behind Wackernagel’s statistics. For instance, Schwyzer noted the possibility of a change in *Satzmelodie*, which Fraser (2001: 165<sup>12</sup>) appears to accept. If this were true (as I could certainly be wrong in arguing against such a change), evidence aside from clitics would be needed to secure the point.

One serious problem with the belief in a diachronic attenuation of Wackernagel’s Law into fifth-century Greek is that clitic distribution in Greek tragedy and comedy bears more similarity to that of the Vedic mantras than Homer does (see further chapter five).

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<sup>11</sup> The diachronic aspect of Wackernagel’s Law deserves close attention, although that topic will not be the focus of this dissertation, with the exception of some passing remarks. In general, the obsolescence of Wackernagel’s Law in Greek is due to the fact that many of the second-position clitics themselves die off. In the case of the pronominal clitics, which are preserved, there is a much greater tendency for them to be hosted either by their governing verb or noun. See further Condoravdi and Kiparsky (2001) and (2004).

<sup>12</sup> He remarks in fn. 165: “Cf. the *Satzmelodie*” of Schwyzer (1950). It appears that this term is only used by Schwyzer at (1950: 691 and 698). For one, it is not listed in the *Sachregister*. Moreover, at Schwyzer (1950: 698) under the heading *Musikalische Formung des Satzes*, there is reference only to Brugmann’s Greek grammar, and the following note by Debrunner: “Schwyzer gedachte offenbar diesen Abschnitt nicht zu arbeiten.”

As such, I would claim that Greek tragedy and comedy offer a more archaic portrait of Wackernagel’s Law than Homer.

This is, I acknowledge, counterintuitive: Homer’s poems were composed centuries before Greek comedies and tragedies, and one would therefore assume a priori that the former would reflect an earlier state of affairs. And in most respects it does. But, as will be demonstrated in chapters eight through ten, variation in clitic position is conditioned by discourse patterns. And if the Homeric poet does not exploit these patterns, then his language will show a more uniform pattern of clitic distribution. In terms of discourse, communicative, and rhetorical patterns, Greek tragedy and comedy bear more similarity to the Vedic mantras than Homer does, in that they are all (by and large) non-narrative. It is entirely possible that, even though the patterns found in tragedy and comedy do not occur in Homer, they nevertheless could have.

### 1.3 Preferential Hosts

To explain other counterexamples, Wackernagel (1892) occasionally relies on the idea of the “preferential host.” A preferential host is a host that has the power to lure a second-position clitic from second position into its own orbit. Prominent examples include the relative pronoun (see e.g. Wackernagel 1892: 335; Krisch 1990: 68-69, esp. n. 13; Adams 1994: 144-147), interrogative pronouns, negators, clausal conjunctions and complementizers, and imperatives (see the list drawn up for Latin in Adams 1994: 154-155; also generally Clackson 2007: 170-171). So for instance, the following line from Homer:

(2.1) ἐπεὶ οὖ=μιν οἴομαι οὐδὲ πεπύσθαι  
 λυγρῆς ἀγγελίης, ὅτι οἱ φίλος ὤλεθ’ ἑταῖρος  
 ‘since I don’t think that he has even heard  
 (the) sad news, that his close friend has died.’ *Il.* 17.641-642

Here Wackernagel claims that μιν is attracted out of second position, which would place it after ἐπεὶ, to select οὖ as a host.<sup>13</sup>

Those who endorse this type of analysis cite facts from surface string-frequency such as the following. Of 479 tokens of ἄν in Herodotus,<sup>14</sup> 166 (35%) are hosted either by a relative pronoun directly (117 tokens<sup>15</sup>) or by a relative pronoun followed by a clitic (49 tokens). The second most frequent host is the negator, with 68 tokens (14%). From

<sup>13</sup> As will be made clear in the next chapter, I would not consider this a counterexample: ἐπεὶ is proclitic and μιν is thus hosted in second position by (ἐπεὶ,=οὖ)<sub>ω</sub>.

<sup>14</sup> There are 490 tokens in the *TLG* text of Hdt. 11 of these were excluded on textual grounds: 1.75.25, 1.191.20, 3.104.3, 3.127.14, 7.203.12, 7.233.8, 8.19.3, 8.22.18, 8.111.15, 9.94.12, 9.109.9. Included in my count of relative pronouns were forms in the paradigm of ὅς, forms of the definite article functioning as a relative pronoun, and relatives such as ἄκότεροι (9.48.22). I say more on why I counted this way and the problems of trying to count tokens of relative pronouns below.

<sup>15</sup> Hdt. 4.62.14 was included in this group.

this it is concluded that there is a special, i.e. uniquely cohesive, relationship between the relative pronoun and  $\check{\nu}$ , and that cases in which the clitic fails to occur in second position and is instead hosted by the relative pronoun can be explained as due to attraction to that host.

This analysis is problematic on several fronts (and ultimately unnecessary as an explanatory mechanism). But before detailing the problems, I would like to note that collocation frequency does play a role in clitic distribution—just not the one that it is claimed to play. Where it affects things is in clitic ordering: for instance, we occasionally find  $\delta\varsigma \check{\nu} \delta\acute{\epsilon}$  (e.g. Hdt. 1.138.5, 7.8.48) instead of the expected  $\delta\varsigma \delta' \check{\nu}$  (e.g. Hdt. 2.65.21). I interpret this pattern as arising from the autonomous status of the string  $\delta\varsigma \check{\nu}$ , as has happened in various other cases of function word+ $\check{\nu}$ , and this effect I attribute to the collocation-frequency of  $\delta\varsigma \check{\nu}$ .

Otherwise, the preferential-host claim suffers on several fronts. First of all, it is nebulous in the extreme. With the relative pronoun, for instance, is  $\check{\nu}$  supposed to have a special relationship with all word-forms of the relative pronoun or just a specific one? We can ask this same question from another vantage: namely, how abstract is a preferential-host relationship? For instance, the two examples of relative+ $\check{\nu}$ + $\delta\acute{\epsilon}$  occur specifically with  $\delta\varsigma$ : this is unsurprising, given that this is the most frequent form of the relative pronoun in Herodotus. We also find  $\check{\nu}$  frequently after complementizers (48 tokens in Herodotus), which have various lexical instantiations (e.g.  $\acute{\omega}\varsigma$ ,  $\acute{\iota}\nu\alpha$ ,  $\acute{\epsilon}\pi\epsilon\acute{\iota}$ ), but nevertheless belong to the same restricted lexical class. Could we say that  $\check{\nu}$  has a special relationship with an abstract complementizer class as well? How does the frequent presence of a clitic after a relative pronoun (say,  $\pi\epsilon\rho$ ) affect the relationship between the relative and  $\check{\nu}$ ? And what about hosts that bear a semantic or syntactic relationship with a clitic—say, that between verbs and object pronominal clitics. Are verbs also to be considered preferential hosts, even if there is no particular high-frequency verb+object clitic collocation?

This type of analysis suffers also from a decidedly ad hoc quality. Recourse is made to the analysis only when the second-position account fails. At a fundamental level, it also contradicts the notion of a second-position clitic: for second-position clitics are those whose position is determined by some clause-level mechanism (whatever it is) without regard to the lexical category of the host. Of course, Greek clitics will eventually lose this type of behavior and select hosts on the basis of lexical category; e.g. clitic pronouns in some dialects will select verbs as hosts (see Condoravdi and Kiparsky 2001, 2004). So while breakdown of second-position is required diachronically (however that may be exactly), I see no evidence of this in the fifth century.

In my view, the biggest problem with the preferential-host concept for fifth-century Greek is that it is simply unnecessary. Despite claims to the contrary, there is no case (in Herodotus, at least) where the position of a clitic is better explained with reference to a preferential host. Moreover, the collocation frequencies that we observe are epiphenomena better explained otherwise: second-position clitics frequently follow

relative pronouns, negators, etc., because this class of words frequently occurs in clause-initial position at the edge of an intonational phrase.

Before moving on, I should mention a second type of preferential-host analysis. This one is based not on collocation frequency, and makes no reference to host-bias of a particular word-form or lexical class. Rather, it maintains that clitics can select for a contextually-prominent host (see e.g. Fraser 2001: 140, 151; Dik 2007). The most famous example of this type of analysis comes from the episode of Candaules and Gyges in book one of Herodotus (for further analysis of this sentence and its context, see chapter six):

(2.2) καὶ ἡ γυνή ἐπορᾶι-μιν ἐξιόντα.  
'And his wife, she sees him leaving.' 1.10.2

This is the point at which Candaules' wife witnesses the voyeur Gyges trying to steal out of the room. The claim is that μιν, which is manifestly not in second position, occurs after and lends prominence to ἐπορᾶι, which is a word of crucial narrative importance.

There are aspects of this account that seem true (it is hard to evaluate it because it has never been presented in any detail), but ultimately I would again claim that this is an epiphenomenon. That is to say, the narrative importance of ἐπορᾶι causes it to be positioned where it is (which I will claim is a position of relative salience, namely the left edge of an intonational phrase). And the position of the clitic falls out from that fact. Crucially, it does not have anything to do with ἐπορᾶι specifically.

#### 1.4 Second Position is not a Linguistic Category

Before moving on to consider Fraenkel's analysis, it is worthwhile to forecast a point that will be made later on in this chapter. There are several scholars who operate with a very literal notion of second position, that is, the second graphic word within a clause. Wackernagel himself appears to have had this very notion of second position. Research since his foundational article has shown, first, that second position is not the equivalent of the second word on the page. A precise definition of what constitutes first and second position is provided in the next chapter.

A second development has been the recognition that second-position effects are only epiphenomenal. Another way of putting this is to say that second position is not a linguistic category (the way that, say, subject can be a category). I cannot imagine that anyone would contend that in speaking speakers tally the positions of words within a sentence (whatever that would mean), and place clitics accordingly. For one thing, if this were true, it would be absolutely incomprehensible as to why second position (as opposed to third or fourth, and so on) would be so important.

In short, elements surface in second position not because they are positioned specifically in a category or slot labeled *second*, but because they follow some element that (for whatever reason) is considered the first of a particular domain (whether that domain be syntactic, prosodic, or morphological). As I will show for Greek, the canonical clause-second configuration of clitics is only a default behavior: given the right circumstances, it is possible to create several “second” positions within a clause.

## 2 Saving Second: Fraenkel and *Kolon* Theory

The fundamental truth of the Wackernagel’s Law is almost universally accepted,<sup>16</sup> not only for Greek but for archaic Indo-European and PIE generally. As Watkins (1964: 1036) famously stated: “one of the few generally accepted syntactic statements about IE is Wackernagel’s Law, that enclitics originally occupied the second position in the sentence.”<sup>17</sup> Nevertheless, from the beginning it was clear that there are counterexamples (e.g. Wackernagel 1892: *passim*; Delbrück 1900: 54-56). Indeed, since the work of Wackernagel and Delbrück, a good deal of the research on Wackernagel’s Law has been devoted to understanding the nature of the exceptions. In many ways, the exceptions to Wackernagel’s Law are the most interesting, because they are the most informative, as I will demonstrate for Greek.

One of the first serious attempts to deal with the counterexamples to Wackernagel’s Law is that of Eduard Fraenkel in his “Kolon und Satz, II” (which was first published in 1933, and later republished in his 1964 *Kleine Beiträge*; below I cite the article in its 1964 version as Fraenkel 1964a; Fraenkel 1964b refers to the “Nachträge zu ‘Kolon und Satz,’” which was first published in the 1964 *Kleine Beiträge*). This work fell within a broader research program that Fraenkel was engaged with from 1932 to 1968, in which he attempted to show how (and why) Greek (and Latin) utterances were segregated into prosodic constituents that he referred to as *Kola* (<  $\kappa\omega\lambda\omicron\nu$ <sup>18</sup> ‘limb’).<sup>19</sup>

His first work in this vein, the 1932 “Kolon und Satz, I,” investigated the following phenomenon in Latin elegiac poetry (and Horace’s *Epodes*): at the end of a distich, enjambment is not supposed to occur, and yet it does. What Fraenkel noticed was that the offending morphosyntactic material in these cases was of the following types:

1. parallel phrases
2. ablative absolute
3. participial phrase

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<sup>16</sup> One notable exception is the work of Agbayani and Golston (2009), one of whose claims is that “second position is first position.” As they focus on a set of clitics that differs from my own, I will not present their analysis here.

<sup>17</sup> As will become clear, I do not think that Wackernagel’s Law is a statement about morphosyntax, but rather one about prosodic structure. While I will only argue for this claim for Greek, I suspect that a similar analysis could be carried out for Latin and Sanskrit.

<sup>18</sup> It is later translated into Latin as *membrum*. For a review of the ancient sources on  $\kappa\omega\lambda\omicron\nu$  and *membrum*, see Habinek (1985: 21-41).

<sup>19</sup> Useful reviews of Fraenkel’s *Kolon*-work can be had from Laughton (1970) and Habinek (1985: 4-17).

4. heavy subject or object
5. heavy preposition phrase

The pattern that Fraenkel observed in Roman elegy was confirmed in Horace's *Epodes*. He argued that the above morphosyntactic units all belonged to the prosodic category *Kolon*. The reason why one finds these units enjambed after the end of a distich was that they were themselves characterized by a prosodic break, so that it was a natural place for them to occur in the metrical template.

## 2.1 Fraenkel's Generalization

In "Kolon und Satz, II," Fraenkel took up the topic of Wackernagel's Law and the position  $\check{\nu}$ . He argued that  $\check{\nu}$  will either occur second within its clause or second within its *Kolon*:

Für den genannten Sprachbereich nämlich gilt ausnahmslos die Regel dass  $\check{\nu}$ , wofern es nicht unmittelbar neben das Verbum tritt, dessen Modalität es verdeutlicht, die zweite (beziehungsweise dritte) Stelle des Satzes einnimmt oder die entsprechende Stelle eines in sich geschlossenes Kolons.

Fraenkel (1964a: 94)<sup>20</sup>

Armed with this second category (the *Kolon*), Fraenkel was now able to give further strength to the validity of Wackernagel's Law by arguing that when  $\check{\nu}$  was not second in its morphosyntactic clause, it was still second within another domain, namely the *Kolon*.

The basis for his analysis is the observation that Wackernagel-clitics in Greek occur not in sentence-second position, but in clause-second position. For instance, in conditional sentences with  $\check{\nu}$ , the particle occurs second in its clause, not second within the sentence as a whole:

(2.3) εἰ γάρ τις προθείη πᾶσι ἀνθρώποισι ἐκλέξασθαι κελεύων νόμους τοὺς καλλίστους ἐκ τῶν πάντων νόμων, διασκεψάμενοι- $\check{\alpha}\nu$  ἐλοίατο ἕκαστοι τοὺς ἑωυτῶν.

‘For if someone were to put it before all men, commanding them to choose the best laws of all laws, each would, after consideration, choose their own.’

Hdt. 3.38.5

Starting from here, Fraenkel observed that clitic behavior exhibited a similar pattern with other units, such as absolute participial phrases (from 1964a: 94-95):<sup>21</sup>

<sup>20</sup> Janse (1993: 22) offers a similar generalization: “(quasi-)enclitics are either placed after the word on which they depend syntactically or they are placed after the first word of the sentence or a segment thereof, particularly if this word is a subordinating particle or if it is focalised.”

<sup>21</sup> Wackernagel (1892: 371) was well aware that a participle could behave like a subordinate clause and accordingly defer a clitic, but this idea is not developed at any length.



- (2.4) Ἀθηναίων δὲ τὸ αὐτὸ τοῦτο παθόντων | διπλασίαν=ἄν τὴν δύναμιν  
 εἰκάζεσθαι ἀπὸ τῆς φανεραῆς ὄψεως τῆς πόλεως ἢ ἔστιν.  
 ‘If Athens were to suffer the same thing, its power would seem double from  
 the outward appearance of the city than what it (actually) is.’ Thuc. 1.10.2

(2.4) not only patterns with (2.3) in terms of clitic placement, but also in terms of semantics: both the participial phrase and the lexical protasis encode conditional semantics. Fraenkel identified both of these units as *Kola*. He reasoned that when other sub-clausal units (such as noun phrases, adverbs, or prepositional phrases) lead to the displacement of a clitic, then those units too should be prosodically coded as *Kola* and have clause-like features. Thus essentially what Fraenkel was doing was exploring the syntax-phonology interface; that is, laying out what morphosyntactic units were encoded as *Kola* in which environments.

Fraenkel identified several morphosyntactic units that can defer a second-position clitic, which turned out to be strikingly similar to those drawn up for Latin in *Kolon und Satz*.<sup>22</sup>

- (2.5) 1. Absolute participial phrase (1964a: 94-95)  
 2. Participial phrase (1964a: 95-97)  
 3. Prepositional phrase (1964a: 98-101)  
 4. Embedded infinitive clause (1964a: 101-103)

Fraenkel also attempted to identify certain pragmatic conditions under which a constituent could form a *Kolon*. He demonstrated at length the ability of parallel and contrastive units (which are of various morphosyntactic character—nouns, adverbs, participial phrases) to form *Kola* (1964a: 103-115). The pragmatic functions of sub-clausal *Kola* (or, in my framework, intonational phrases) are taken up again in the next section, and analyzed in detail in chapters eight through ten.

Outside of any particular claim within his *Kolon* model, Fraenkel’s work is a major step forward not least for its demonstration that non-canonical clitic position is not due to the movement or displacement of the clitic itself (which, lamentably, is an idea that one still encounters on occasion, e.g. Philipakki-Warburton 2007). On the contrary, the

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<sup>22</sup> Laughton (1970: 189) writes: “Like his teacher Friedrich Leo, Fraenkel had an exceptionally strong sense of the unity of Graeco-Roman culture, and he would expect as a matter of course to find in classical Greek prose the same linguistic habits of phrasing and emphasis which he had observed in classical Roman poetry.” We should be cautious in adopting this outlook ourselves, and seeing in Fraenkel’s results a reflection of the unit of Graeco-Roman culture. While I certainly do not wish to argue against the unity to be found in Graeco-Roman culture, it is not an idea that we need to explain why Fraenkel found similar patterns of mappings between morphosyntax and prosody in the two languages. In fact, I would venture that similar mappings can be found in many languages throughout the world; therefore, it seems to me more likely that the patterns arose independently within the two languages. That said, the idea of the borrowing of prosodic patterns is a very interesting one, which to my knowledge has received almost no attention.

clitic is always lodged in second position, and when it surfaces in some apparently non-canonical position, this is due to the fact that other units have been placed in front of its host.

For as much of an advance as Fraenkel’s study was, his generalization is open to criticism on several fronts. The first is that it is far from elegant. He made no attempt to establish the conditions under which ἄν would show up second in the clause, the *Kolon*, or directly after the verb. It is also not clear why ἄν should be attracted to these positions. An additional worry is that Fraenkel needs reference to three different domains (clause, *Kolon*, verb) from two different categories (morphosyntactic, phonological) to get the distribution right. And even with all this at his disposal, the empirical coverage of his generalization is still limited, as it cannot handle metrical data (but, to be fair, Fraenkel never attempted to deal with this data). In the next chapter, I present my own analysis of second-position phenomena, which is indebted to, but simpler than, Fraenkel’s formulation.

## 2.2 Fraenkel and Pragmatics

To substantiate the correlation between clauses and the sub-clausal units in (2.5), Fraenkel (1964a: 98, 103) argued that in some cases *Kola* have clause-like semantics or pragmatics (in his terms, they are characterized by *Funktionsgleichheit*). As mentioned above, he observed that genitive absolutes can function semantically in much the same way as their finite-clause equivalents (cf. Wackernagel 1892: 371). With prepositional phrases (1964a: 98-100; 1964b: 137) that form *Kola*, Fraenkel claimed that they should resemble subordinate clauses in their semantics (in the above example, ‘|’ is Fraenkel’s marker of a *Kolon*-boundary):

- (2.6) χρή δὲ τοὺς μὲν εὖ πρᾶττοντας τῆς εἰρήνης ἐπιθυμεῖν. ἐν ταύτῃ γὰρ τῇ καταστάσει | πλεῖστον=ἄν-τις χρόνον τὰ παρόντα διαφυλάξειεν.  
 ‘Those who are prosperous need to desire peace: for in this state, one would preserve the status quo for the longest time.’ Isoc. 6.50

Fraenkel (1964a: 100) glosses the prepositional phrase ἐν ταύτῃ γὰρ τῇ καταστάσει with a protasis, “wenn man im Friedenszustand ist...,” whereas above I have presented a literal rendering. The prepositional phrase expresses a protasis or condition, and yet there is no lexical or grammatical indication of this clause-type (i.e., the prototypical εἰ is absent). Instead, this interpretation is induced on the basis of the prosodic encoding of the phrase.

Fraenkel (1964a: 103-111) claimed that *Kola* could also be used to highlight contrastive phrases, as in the following passage between ἄλλως μὲν and νῦν δέ:

- (2.7) ἀμείβεται ὁ Ἄδρηστος “ὦ βασιλεῦ, ἄλλως μὲν | ἔγωγε=ἄν οὐκ ἦια ἐς ἄεθλον τοιονδε. οὔτε γὰρ συμφορῆι τοιῆιδε κεχρημένον οἰκός ἐστι ἐς ὀμήλικας εὖ πρήσσοντας ἰέναι, οὔτε τὸ βούλεσθαι πάρα. πολλαχῆι τε ἂν ἴσχον ἐμεωυτόν.

νῦν δέ | ἐπεῖτε σὺ σπεύδεις καὶ δεῖ τοί χαρίζεσθαι—ὀφείλω γάρ σε ἀμείβεσθαι  
 χρηστοῖσι—ποιέειν εἰμὶ ἕτοιμος ταῦτα. παῖδα τε σόν, τὸν διακελεύεαι  
 φυλάσσειν, ἀπήμονα τοῦ φυλάσσοντος εἵνεκεν προσδόκα τοι ἀπονοστήσειν.  
 ‘Adrastos responds, ‘O king, (were the situation) otherwise, I at least would  
 not enter into such a contest. For it is not suitable for one having  
 experienced such misfortune to go amidst his successful peers, nor do I have  
 the desire (to do so). For many reasons I would have restrained myself.  
 But as it is, since you urge it and I must please you—for I owe you a return  
 of good things—I am ready to do this. And your son, whom you command  
 me to protect, expect him to return unharmed, thanks to his guard.’ 1.42

While there is some truth to Fraenkel’s claim about the contrastive function of *Kola*, this is only a small part of their functional landscape. And in fact, for (2.7) in particular, there is a better way, I believe, to account for the coding of ἄλλως μὲν as a *Kolon*. This is laid out in greater detail in chapters eight and nine.

In later work, Fraenkel (1964b: 134-136) recognized that single words could sometimes defer the appearance of a second-position clitic, be they discourse adverbs, conjunctions, personal pronouns or relative or interrogative pronouns. These posed a problem for his system, as it was harder to demonstrate their clause-like attributes. Indeed, he did not label them *Kola* at all, but rather *Kurzkola* (a term that first shows up in 1964a: 117 n.1). Moreover, there is very little discussion of the pragmatics involved in whether a clause-initial unit like an adverb will form a *Kurzkolon* or not. Later, to handle adverbs that exhibit *Kolon*-like behavior, Fraenkel (1965, 1968) developed the idea of *Auftakt*, ‘upbeat,’ ‘anacrusis.’ This is a term borrowed from music, and shows that Fraenkel was clearly thinking in prosodic or intonational terms. The background to this term is provided in the next section.

I follow Fraenkel in arguing that prosodic phrasing, which clitic placement is sensitive to, is pragmatically conditioned. However, my pragmatic analyses themselves are considerably different, as I am interested in the mechanics of information-flow and not simply the identification of “contrastive” elements in a sentence. Moreover, I will show that we no longer need abide by Fraenkel’s principle that intonational phrases (i.e., *Kola* or *Kurzkola*) need to have sentence-like semantics or pragmatics.

### 2.3 Fraenkel and Prosody

While Fraenkel’s *Kolon* is clearly a prosodic constituent (as we will see below, it corresponds most closely to the intonational phrase, which will be presented in the next chapter), there is very little direct discussion of sentence-level prosody as such. Moreover, Fraenkel exhibits no awareness of the prosodic claims made by Delbrück (1900) or Delbrück (1904), which were quoted above. It is hard to imagine his ignorance on this point. At the same time, it is also hard to understand how he could not have seen a connection between his work and their claims about the prosodic nature of second-position phenomena.

In his 1964 *Nachträge*, however, he mentions with approbation the dissertation of Annemarie Slupski, *Die Stellung des Enklitikon*s* *się* im Polnischen*. She argued that the reflexive pronoun *się* did not have to occupy absolute second-position within the clause, but rather could fall second within a unit that coincided with a breath-group (‘*Atemholen*’) and pause. Fraenkel (1964b: 138) quotes the following:

Ein Satzabschnitt, der in einem Atemzuge gesprochen wird, bildet ein K o l o n, einen Sprachtakt. Das Wort, welches nach der Kolonpause einsetzt, wird betont, mit Ausnahme von den Fällen, in denen dem betonten Wort ein Auftakt vorangeht...Die Beispiele...deuten an, dass das Enklitikon *s i ę* nicht an die absolute zweite Stelle im Satz gebunden ist und trotzdem seinen enklitischen Charakter nicht zu verlieren braucht. Infolgedessen wird es wohl möglich sein das Gesetz der Zweitstellung in der Form zu erweitern, dass das enklitische *s i ę* die nächste schwachbetonte Stelle hinter einem, durch die Betonung hergestellten Wort besetzen kann. Einem betonten Wort geht entweder eine Pause oder ein Auftakt voran, denn die Pause und der Auftakt ist mit einem neuen «Luftholen» verbunden.

Fraenkel (1964b: 138) also reports that the Polish data agree with the Greek in that contrastive constituents and “expanded subjects” also tend to form *Kola* of their own. (For an overview of Polish clitic data generally, see Spencer 1991: 367-374; and for more detail, De Bray 1980; on the placement of *s i ę* in particular, see Janse and Tol 1997.)

## 2.4 Fraenkel and Clitic Pronouns

It is worth asking at this point why Fraenkel limited himself to discussion of *žv*. A natural response to his claims about *žv* is to wonder whether other second-position items, especially the pronominal clitics, behave in a similar way. It is only in the *Nachträge* that Fraenkel mentions other clitics, and here the presentation and outlook is odd. First, the only examples that he quotes are from Herodas (5.12-13, and 5.75-76). Second, he claims (1964b: 132) that, while he cannot adduce an earlier example, he has no doubt that Herodas is in fact preserving an earlier *Sprachgebrauch*.<sup>23</sup> What is perhaps even odder is that he clearly believes that clitic pronouns are diagnostic for Latin (1964a: 123-130).

Throughout this dissertation, I will present numerous cases from Herodotus, where the position of a clitic pronoun offers us just the same information as that of *žv*. In some ways, clitic pronouns are in fact more valuable than *žv*, for the simple reason that a clitic pronoun is selected by (i.e., governable by) more potential items than *žv*—nouns, verbs, and participles can all select for various cases of pronouns. When they do, the

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<sup>23</sup> “Obwohl es mir, vielleicht durch eigene Flüchtigkeit, bisher nicht gelungen ist für gerade diesen Stellungstypen ein älteres Beispiel aufzutreiben, zweifle ich nicht dass hier ein sehr alter Sprachgebrauch vorliegt, and vermute dass Herodas, der ‘es meisterhaft verstanden hat den Leuten «aufs Maul zu schauen»’ hier volkstümlicher Redeweise folgt.”

clitic pronouns (mostly) fall second within the intonational domain in which they are selected. In other words, the underlying mechanism responsible for the distribution of clitic pronouns is the same as that with  $\check{\nu}$ , but it simply exhibits more diversity. The range of facts pertaining to this issue is presented in chapters four and seven.

## 2.5 Further Objections to Fraenkel's Analysis

Any analysis of clitic distribution that makes reference to prosody (especially in prose texts) invites an obvious objection: as discussed in the next chapter, we know practically nothing about sentence-level phonology. Moreover, given that texts could have been uttered in any number of possible ways, one might argue that it is foolhardy to attempt to delimit *Kola* as Fraenkel did.

While these objections cannot be dismissed lightly, ultimately I think they can be answered. First, while we do not have direct access to sentence prosody, we do have various indirect means of diagnosing prosodic features of Greek (e.g., as noted in chapter one, various metrical phenomena, punctuation marks, etc.), and I hope to show in this dissertation that clitic position itself is one such diagnostic. We must also not disregard cross-linguistic evidence: typological comparanda may well be able to tell us something about Greek.

Second, as far as performance is concerned, I think that this criticism is simply misguided. For Fraenkel was not attempting, at least as far as I understand him, to reconstruct any particular performance of a Greek or Latin text. Rather, what he was attempting to do was lay out the semantic and pragmatic conditions associated with certain abstract prosodic templates. These exist at the level of grammar, and as such are independent of any particular performance; see further discussion of this topic in the following chapter. In sum, the pitfalls and gaps involved in prosodic reconstruction of Greek are many and serious, but the situation is not so dire that study of this topic is to be dismissed altogether. Rather, we simply have to be far more careful in how we interpret the paltry evidence available to us.

## 3 Janse on Greek

In a series of articles over the course of a decade, Marc Janse (1990, 1993, 2000: 233) has argued for a prosodic basis to clitic distribution in Greek. His studies have the value of encompassing a much wider range of data than those of Fraenkel. Indeed, it ranges over the Homeric period into Modern Greek.

Janse (1993: 22) offers the following generalization of Wackernagel's Law in Greek according to an examination of the Hellenistic data:

(quasi-)enclitics are either placed after the word on which they depend

syntactically or they are placed after the first word of the sentence or a segment [= intonational phrase, DMG] there-of, particularly if this word is a subordinating particle or if it is focalized.

As this quotation demonstrates, Janse also integrated pragmatic meaning into his account. He claims that there is a robust tendency for focused words to be placed at the left edge of an intonational phrase; clitics follow thereafter, and thus exhibit a robust tendency to have focused hosts.

While I am by and large persuaded by Janse's analyses, there are several problems, or at least limitations, with this study. The first is that they are not corpus analyses; indeed, often it is not clear what sort of a sample he has been working with, or what his generalizations are supposed to cover. The discussions furthermore are not systematic in that it is not clear whether he knows of exceptions to his claims. The basis of his pragmatic judgments is not made explicit, nor is that for his prosodic judgments (although see Janse 1998 on the prosodic divisions of the Homeric hexameter). So when he claims that such-and-such a phrase is the focus of the utterance, it is not clear what the pragmatic judgment is based on, nor what precisely focus is supposed to mean in his framework. (Some of his judgments I agree with; others, such as the idea that complementizers are focused elements, I have a harder time accepting.) Lastly, Janse does not sufficiently distinguish the various classes of second-position clitics. His statement above for instance appears to be intended to cover not only the pronominal clitics, but also particles such as μέν, δέ, and γάρ, as well as ἄν; see further Janse (2000: 234). These two classes differ significantly in their distributional patterns. Moreover, it is not clear how the first part of his formulation should apply to μέν, δέ, and γάρ: for what sort of word are they to depend on syntactically?

#### 4 Generative Accounts of Wackernagel's Law

Since Fraenkel, only sporadic attention has been given to Wackernagel's Law by classical scholars. More systematic and sophisticated work was carried out within the tradition of generative syntax (although only occasionally on Greek data: see the discussion of Taylor 1990 below). Indeed, within generative linguistics, second-position phenomena and Wackernagel's Law have been discussed extensively (see Nevis et al. 1994 for a bibliography), although most of the attention has been focused on Romance pronominal clitics and the Tobler-Mussafia Law. As second-position phenomena differ considerably from language to language, there is no point in attempting to even summarize this literature here. Instead, I will focus my attention on those (generative) syntactic accounts that have been put forth for Greek, or those that have been put forth for languages that are typologically similar to Greek in word order and clitic distribution.

Studies carried out under generative frameworks differ from those of a more philological character in that they are interested in understanding the underlying syntactic structure of clauses and how clitic distribution fits within such a scheme. Through an underlying

syntactic structure and derivation, they aim to derive the surface distributional patterns.

While I have categorized the following analyses as “syntactic,” it needs to be pointed out that with the exception of Taylor (1990), none of them is purely syntactic, in the sense that none of them attempts to account for the distribution of second-position clitic with reference to morphosyntactic constituency or domain alone. The reason why they cannot do this is because, as discussed in the previous chapter, clitics fall second after the first prosodic word, which is not a morphosyntactic constituent. To deal with this aspect of second position, scholars have developed the notion of the “prosodic flip,” which I will outline in greater detail below. The relevant facts concerning the syntax vs. prosody debate for Classical Greek are extensive, and will be presented in chapter four.

#### 4.1 Hale and Sanskrit

As is well known, Sanskrit is genetically related to Greek, and typologically shows very similar patterns of word order and clitic distribution.<sup>24</sup> Beginning with his 1987 Ph.D. dissertation, Mark Hale has attempted to account for second-position facts in Indo-Iranian under a generative-syntactic framework. Over the years, he has refined, expanded, and defended his analysis; see e.g. Hale (1987b), (1996), (2007), and (2008). I will present here the most recent and salient features, especially those that are potentially relevant for an analysis of Greek.

Whereas Fraenkel argued that clitics are positioned second within a prosodic domain, Hale argues that they are positioned second within a syntactic domain. Halpern (1995) has also made passing reference to second-position phenomena in Ancient Greek. Both of these scholars attempt to account for second-position phenomena under a generative-syntactic framework.

Hale’s analysis works under a theory whereby sentences are “derived” in a step-wise process, with various movement processes putting words where they eventually need to surface. As far as pronominal clitics are concerned, we presume that they start (or are “base generated”) in one part of the derivation (specifically the VP, or verb phrase<sup>25</sup>)

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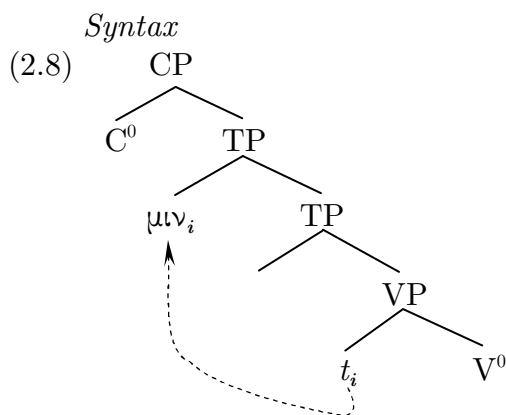
<sup>24</sup> For other work done on second-position clitics in Sanskrit, see Hock (1982), (1989), (1992), and (1996); Krisch (1990), (1997), and (2002); Keydana (2008a), (2008b), (2009). Krisch takes a templatic approach to clitic distribution, but much is unclear: see the criticism of Keydana (2009: 7). Hock also relies on a template, but his is explicitly prosodic in its organization; see Keydana (2009: 9-10) for a critique. Keydana (2009) is a prosody-dominant account, and thus bears a close relationship to my own analysis of the Greek data. I am not yet sure how well his account stand up to the data; consideration of this question would take us too far afield.

<sup>25</sup> I use the following abbreviations in this and subsequent chapters: CP = Complementizer Phrase; TP and TNSP = Tense phrase; IP = Inflectional phrase; VP = Verb Phrase; NP = Noun Phrase. There is for many no distinction between TP, TNSP, and IP. While I myself prefer the label TP, others use IP or TNSP, and still others IP/TP. Superscript 0, as in X<sup>0</sup>, indicates the head of a phrase; so X<sup>0</sup> means ‘the head of XP.’ Spec stands for Specifier; so Spec-XP refers to the specifier position within the phrase XP. (Within X-bar theories of syntax, phrases are comprised of a head, a complement, and a specifier: heads

and then move up, as it were, to a higher position. Specifically, they adjoin to the left edge of TP. If there is material occupying CP (*wh*-words, complementizers, etc.), then such superior items will become the host of the pronoun. If the CP layer is empty, the pronoun undergoes a process known as the “prosodic flip,” which is first described in Garrett (1989: 120) and elaborated upon by Halpern (1995). According to this process, the clitic moves minimally (i.e., one prosodic word) to the right.

I will illustrate Hale’s analysis with clitic pronouns, and not with  $\check{\text{z}}\nu$ . This is because there is a clear assumption regarding the base-generated position of the object pronouns—namely as sisters of  $V^0$ —while the base-generated position of  $\check{\text{z}}\nu$  is less clear, although presumably it would sit somewhere in TP. (Since it is base-generated so high in the clause I suppose one could attempt to argue, as Mark Hale has done in his recent work, that its surface position has nothing to do with Wackernagel’s Law: instead its second-position behavior would simply fall out from assumptions about universal clause structure.)

At this point, if we left our sentence as it is, the pronoun would not surface in the right position. Thus some mechanisms are needed to move the pronoun into the right (i.e., second) position. To handle this movement, Hale (2007), following Halpern (1995) has devised the following movement-scheme. First, the pronoun moves and adjoins to TP. The following tree illustrates this process:



At this point, there are two possibilities. If there is material occupying  $C^0$ , the pronominal clitic will ultimately (during the phonological stage of the derivation) find its host there. If, on the other hand, it is empty, we run into a problem. When the sentence is passed to the phonological component,  $\mu\nu$ , as an enclitic, will attempt to find a host to its left, but none will be present. The “prosodic flip” then moves the clitic one prosodic word to the right. Once this happens, the clitic can then incorporate with a host to its left. We can illustrate this process with the following simple sentence:

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and complements are sisters and together form an intermediate phrase, and the specifier is then a sister of this intermediate phrase.) I am well aware that these technical terms may be off-putting for those unfamiliar with generative grammar. I have done my best here to simplify the discussion and keep such language to a minimum. There is only so much that can be done toward this end, however, and I strongly encourage the reader to consult Adger (2003), which is an exceptionally clear and accessible work.



(2.9) Κροῖσος=δέ=μιν ἐκάθηρε.  
 ‘Croesus purified him.’

1.35.6

The derivation for this sentence will proceed as follows (I assume for ease of exposition that the subject sits in spec-TP<sup>26</sup>; I also omit δέ):

- (2.10) a. *Base-generation*  
 $[_{CP} [_{TP} \text{Κροῖσος} [_{T} [_{VP} [_{V} \text{μιν} \text{ἐκάθηρε}$   
 b. *Clitic Raising* = (2.8)  
 $[_{CP} [_{C} [_{TP} \text{μιν}_i [_{TP} \text{Κροῖσος} [_{T} [_{VP} [_{V} t_i \text{ἐκάθηρε}$   
 c. *Prosodic flip*  
 $\text{μιν} \text{Κροῖσος} \text{ἐκάθηρε} \rightarrow \text{Κροῖσός=μιν} \text{ἐκάθηρε}.$
- 

When the clitic does not surface in second position this is essentially due to the presence of material above CP (as opposed to above C<sup>0</sup>, i.e. spec-CP or adjoined to CP). For instance, Hale assumes a layer of syntax, which I label here XP, above CP. Consider the following sentence:

(2.11) καὶ ἡ γυνὴ ἐπορᾷ=μιν ἐξιόντα.

‘And the wife, she notices him leaving.’

1.10.6

Once we place ἡ γυνή above CP, clitic placement will operate just as above, with the clitic falling one prosodic word to the left edge of TP:

(2.12)  $[_{\text{Conj}} \text{καὶ} [_{XP} \text{ἡ γυνὴ} [_{CP} [_{TP} \text{ἐπορᾷ=μιν} \text{ἐξιόντα}.$

I presume that XP is needed only for arguments; adverbial phrases that are not lexically governed simply adjoin at the relevant level of syntax, which will lead to the deferral of the clitic:

(2.13)  $[_{CP} \text{τετάρτη} \text{δὲ} \text{ἡμέρη} [_{CP} [_{TP} \text{ιδών=μιν} \text{ὁ Περὶανδρος} \text{ἀλουσίησι=τε} \text{καὶ} \text{ἀσιτίησι} \text{συμπεπτωκότα} \text{οἶκτειρε}.$

‘On the fourth day, Periander, seeing that he had fallen into a squalor and hunger, took pity on him.’

3.52.7

Here the phrase τετάρτη δὲ ἡμέρη adjoins to the left edge of CP to project a second CP. Everything else operates the same as far as clitic position goes and thus we end up again with the clitic host one prosodic word from the left edge of TP.

There are some advantages to such an analysis. For one, it has good empirical coverage within prose. Second, it does not rely on any claims about prosody. These advantages aside, this analysis is fraught with difficulties. For one, it cannot handle metrical data.

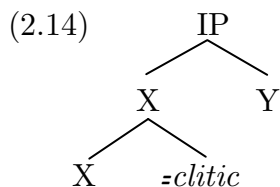
<sup>26</sup> It is otherwise unclear to me where subjects canonically sit in Greek.

Second, even within prose, the data violate its predictions. Lastly, there is a much larger question to contend with, and that is whether Greek, in as much as it is a “free word order” language, can be said to have configurational syntax of the sort posited in this account. To my mind, whether Greek has a base word order is an issue up for debate and in dire need of an adequate analysis. It is thus risky at the outset to assume a configurational underpinning to these languages, when none may exist. See chapter four for further discussion of this issue.

## 4.2 Taylor (1990)

Taylor (1990) is an amphichronic study of the indefinite pronoun  $\tau\iota\varsigma$  and the object pronouns at three stages of Greek: Homeric, Classical, and Koine (specifically New Testament Greek). She is working within the framework of generative syntax used in the 1980s, known as GB, or Government and Binding (the basis of which is Chomsky 1981 and 1986). Taylor (1990: 30, 74) assumes that Homeric Greek is a configurational verb-final language with alternative orders derived by “scrambling rules.” According to her, Classical Greek shifts to VO (i.e., head-initial) word order.

For Homeric Greek, Taylor (1990: 52-53) argues that a second-position clitic is placed after the left-most node immediately dominated by IP:



The layer IP is essentially identical to TP, and thus this analysis bears some similarity to Hale’s. But note that (2.14) differs from Hale’s analysis above in that the clitic falls to the right of the edge of IP, and not the left. Taylor (1990: 54) uses (2.14) to capture cases like the following:

(2.15) [<sub>IP</sub> μάλα- $\tau\iota\varsigma$  θρασυχάρδιος ἔσται.] Il. 10.41  
 ‘Such a person will be quite bold-hearted.’

(2.16) [<sub>CP</sub> ἐπεὶ [<sub>IP</sub> μάλα- $\text{o}\iota$  φίλος ἦεν, ]] Il. 1.381  
 ‘Since he was quite dear to him,’

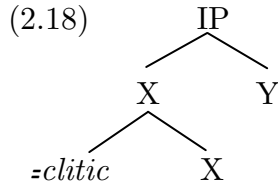
As the bracketing reveals, (2.14) nicely captures cases in which a clitic appears in canonical second position, as (2.15), as well as cases in which a complementizer appears not to count for position, as (2.16).

When material occupies CP, clitics do not always behave as in (2.16), however (from Taylor 1990: 56):

(2.17) τίπτέ=**με** κικλήσκεις Ἀχιλεῦ;  
 ‘Why are you calling me, Achilles?’

*Il.* 11.606

To handle such cases, she proposes that a second-position clitic adjoins either to the left or the right of the first node immediately dominated by IP (see Taylor 1990: 53, 58-59); so in addition to (2.14), the following configuration is also possible:



This is similar to the analysis that Hale proposed for Sanskrit in terms of position. In detail, however, it differs in that the clitic adjoins not to the maximal project IP (or TP) but to the first node immediately dominated by IP or TP. To handle cases of preposing like that in (2.11), she adopts outright Hale’s supra-CP layer of syntax (see Taylor 1990: 60-61).

Thus far, the phonological component has no role to play in clitic placement. Taylor recognizes a need for this when it comes to cases of discontinuous phrases, as the following (from Taylor 1990: 73):

(2.19) πολλοί=**δέ=μιν** ἄνδρες ἴσασιν.  
 ‘Many men know it.’

*Il.* 6.151

Here the pronominal clitic μιν appears in the midst of the constituent πολλοὶ ἄνδρες. As Taylor notes (Taylor 1990: 73, 124), either the noun phrase here is not really a structural constituent or there is some other mechanism at work that enables a clitic to appear inside a constituent. Ultimately she rejects the former possibility in favor of the latter; specifically she concludes that this mechanism is prosodic.

For Classical Greek, Taylor (1990: 30) argues that the same configuration is still at work, although to a lesser degree, as Wackernagel’s Law is not as robust as it is in Homeric Greek. In her corpus, she claims (Taylor 1990: 131) that the clitics she investigates occur in canonical position in Homer 90% of the time, while they do so only 53% of the time in Herodotus, and 42% of the time in Plato. Thus while clitics tend to pile up after a clause-initial host in Homer, in post-Homeric Greek, we find clitics dispersed throughout the clause (from Taylor 1990: 132, ex. 2):

(2.20) νόθοι=**γάρ=τινες** παῖδες=**οἱ** συνέσποντο.  
 ‘For some bastard children were following him.’

Hdt. 8.103

Taylor interprets cases like this as evidence of an increasingly more powerful constraint on the extraction of clitics from their base-generated position. For object pronouns this

means the VP. For  $\tau\iota\varsigma$  in other capacities, the situation is slightly more complex; they do not concern us here, but the details can be found in Taylor (1990: 137).

This analysis suffers from several faults. First, it predicts that when a clitic does not adjoin within an IP, it should appear within the VP. More specifically, it should appear either first or second within the VP, because it can adjoin either to the left or right of the first node immediately dominated by VP. So (2.20) is correctly predicted on the following parsing:

(2.21)  $[_{IP} \text{ νόθοι}=\gamma\acute{\alpha}\rho=\tau\iota\nu\epsilon\varsigma \text{ παῖδ}\acute{\epsilon}\varsigma [_{VP} =\text{o}\acute{\iota} \text{ συνέσποντο.}]]$

Here  $\text{o}\acute{\iota}$  falls at the left edge of VP; for further examples, see Taylor (1990: 146-147). Since Taylor assumes Greek to be an OV language, her analysis predicts the following configurations,  $[_{VP} =\text{clitic NP}_{\text{Object}} \text{ V}]$  or  $[_{NP}_{\text{Object}} =\text{clitic V}]$ . Even with so much machinery (there are now four positions in which a clitic can land), this still does not capture all of the data, as we see from the following example:

(2.22)  $\Delta\alpha\rho\epsilon\acute{\iota}\omicron\varsigma \mu\acute{\epsilon}\nu \delta\acute{\eta}, \delta\omicron\kappa\acute{\epsilon}\iota\nu \acute{\epsilon}\mu\omicron\acute{\iota}, [_{VP} \acute{\alpha}\pi' \omicron\acute{\upsilon}\delta\epsilon\nu\omicron\varsigma \delta\omicron\lambda\epsilon\rho\omicron\upsilon \nu\omicron\omicron\upsilon \acute{\epsilon}\pi\alpha\gamma\gamma\acute{\epsilon}\lambda\lambda\epsilon\tau\acute{o}=\text{o}\acute{\iota} \text{ ταῦτα.}]$   
 ‘Darius, it seems to me, from no deceitful mind, told these things to him.’  
 Hdt. 3.135.3

Here we have two problems. First, the clitic is not at the left edge of VP; second, the configuration of the VP is verb-object, and not object verb. To handle this type of cases, Taylor (1990: 152) proposes first to analyze the adjoined adverbial phrase as follows:

(2.23)  $[_{VP1} \acute{\alpha}\pi' \omicron\acute{\upsilon}\delta\epsilon\nu\omicron\varsigma \delta\omicron\lambda\epsilon\rho\omicron\upsilon \nu\omicron\omicron\upsilon [_{VP2} \acute{\epsilon}\pi\alpha\gamma\gamma\acute{\epsilon}\lambda\lambda\epsilon\tau\acute{o}=\text{o}\acute{\iota} \text{ ταῦτα.}]]$

The assumption here is that adverbs adjoin to the left of VP, and that they do not count for position. This still leaves the problem of the order verb-object within VP2: Taylor handles this by arguing that the change from OV > VO word order is already under way in the fifth century. Similar measures have to be taken for cases like the following:

(2.24)  $\acute{\alpha}\pi\iota\kappa\acute{o}\mu\epsilon\nu\omicron\varsigma \delta\acute{\epsilon} \acute{\epsilon}\varsigma \tau\acute{\alpha}\varsigma \Sigma\acute{\alpha}\rho\delta\iota\varsigma [_{VP} \tau\acute{\eta}\nu \tau\epsilon \mu\acute{\alpha}\chi\eta\nu \kappa\alpha\acute{\iota} \tau\omicron\nu \tau\omicron\upsilon \text{ παιδ}\acute{o}\varsigma \mu\acute{o}\rho\omicron\nu \acute{\epsilon}\sigma\acute{\eta}\mu\eta\nu\acute{\epsilon}=\text{o}\acute{\iota}.]$   
 ‘He arrived in Sardis and told him about the fight and the fate of his son.’  
 Hdt. 1.43

Here Taylor (1990: 153) again assumes a base-generated verb-initial VP, and movement plus adjunction for the object noun phrase:

(2.25)  $[_{VP1} \tau\acute{\eta}\nu \tau\epsilon \mu\acute{\alpha}\chi\eta\nu \kappa\alpha\acute{\iota} \tau\omicron\nu \tau\omicron\upsilon \text{ παιδ}\acute{o}\varsigma \mu\acute{o}\rho\omicron\nu, [_{VP2} \acute{\epsilon}\sigma\acute{\eta}\mu\eta\nu\acute{\epsilon}=\text{o}\acute{\iota} \text{ } t_i]]$

So in addition to clitic position per se, Taylor also has to rely on variation in the base position of the verb within the VP. For her, this is simply the result of two simultaneous changes taking place: the domain of cliticization shifting from IP to VP, and the configuration of the VP going from OV to VO (Taylor 1990: 154, 167; cf. Horrocks 1990 for a similar argument).

I have several objections to this analysis. One, if the proposed changes are really under way, why are they not complete by the time of the New Testament, where you have roughly five hundred years for them to run their course? It is certainly true the tendency increases, but given such a broad span of time, how can we be sure that what we observe is the trajectory of the same change? On a related note, Taylor tacitly assumes a linear-descent relationship between Homeric, Classical, and Koine Greek. These are of course related dialects, but the utterances recorded in these texts are not portraits of one and the same dialect (not to mention register) over time; on this issue see Hoenigswald (1973). In the case of New Testament Greek especially, one has to wrestle with the question of whether Hebrew (Biblical or Mishnaic) or Aramaic is responsible for the change (for a brief overview of New Testament Greek, see Janse 2007b: 646-653, esp. 651-652). This problem is in fact most acute when it comes to the distribution of pronominal objects: for both Aramaic and Hebrew have suffixed pronouns, which are affixed directly to finite verbal forms, and it is entirely conceivable that this pattern is responsible for sequences of verb plus pronominal object clitic in New Testament Greek.

Second, there is no explanatory principle underlying all the proposed mechanisms. What Taylor offers is little more than an advanced redescription of the data. When it comes to her diachronic analysis in particular, this fault seems to result from her assumptions about Greek syntax. According to Taylor, the domain of cliticization for object personal pronouns undergoes a change, namely from IP to VP. The latter category is assumed to be the base-generated locale even in canonical IP placement. Thus for her the change can be characterized as change in extraction, a change in movement. This could be a worthwhile question, but since the absence of movement to IP is considered “normal syntax” (in as much as objects of verbs typically do not adjoin to IP), this is practically trivial under her framework. For speakers are now doing what they were supposed to have been doing all along. (Given this, the motivation to IP under this type of framework seems almost impossible to account for.) Instead, I think the diachronic change really should be seen as follows: why do speakers place clitics in clause-second position at one time, and put them in the VP at another? The answer to this question, whatever it may be, is not simply that one pattern is more “natural” than the other. Under Taylor’s framework, this shift would amount to describing the change as either movement from IP to VP, or as a change in base-generation, from IP to VP. Such an analysis is anathema, however, and thus her framework ultimately distorts the nature of the change.

Third, there is no attempt to account for the semantic or pragmatic meanings associated with the various clitic positions: according to her account, there are just several possible

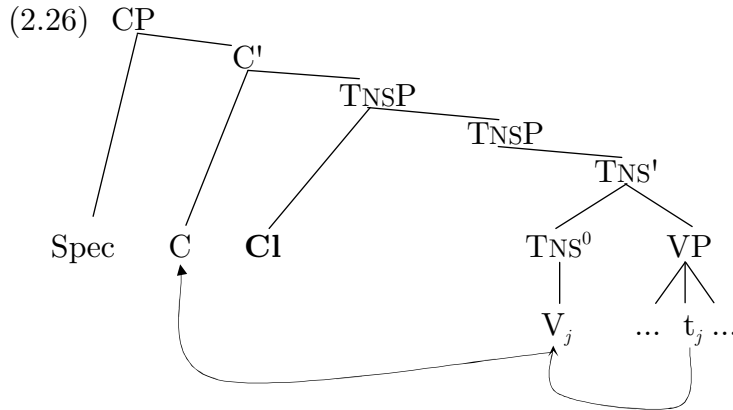
places in which to position a clitic. Taylor (1990: 189) also sees second-position phenomena as part of the broader phenomenon of “scrambling” (i.e. “free word order”) operations in Greek. She cites Nevins (1986: 114), who in a cross-linguistic study tallies up forty-eight languages in which second-position phenomena and “free word order” co-occur. I find this conclusion impossible to accept. For one, “scrambling” (at least in some cases) is motivated by pragmatic and informational factors. The appearance of clitics in clause-second position is not motivated by the same factors. Furthermore, second-position items have a strong tendency to be phonologically deficient; whereas other non-second position items that undergo scrambling do not bear such features.

Lastly, two smaller points. Taylor’s analysis assumes not only that Greek is configurational, but also that it has constituents like IP and VP. As mentioned above in discussing the analysis of Hale, the nature of configurationality in Greek is not yet clear, and any such categories should be argued for and not simply assumed. Finally, how do we know that the differences between Homer and Herodotus are due to syntactic change per se and not to changes in discourse patterns? Simply because clitics show up more often out of second position does not ipso facto mean that there is a syntactic change in progress. Another way of framing this question would be to ask, how do we know that the difference that we observe between Homer and Classical Greek is actually syntactic change?

### **4.3 Condoravdi and Kiparsky (2001) and (2004) on Medieval Greek**

The last generative analysis to consider is that of Condoravdi and Kiparsky (2001) and (2004). This pair of articles is devoted primarily to an analysis of Medieval and Modern Greek, but they do offer a sketch of clitic systems in the Classical and Homeric periods.

They propose (2001: 29) that in the Homeric period clitics left adjoin to CP; they refer to such clitics as  $X^{\max}$  clitics because they adjoin to a maximal projection. Clitics adjoin to CP at this stage of the language because neither TP nor IP is syntactically projected. Instead, there is a composite category VI (on which, see Kiparsky 1996: 172-173). As far as the Classical system is concerned, clitics adjoin to the left edge of TP (which is labeled TNSP in their system; see below in 2.26). Furthermore, they claim (2001: 24-25) that focused elements and negation move to spec-CP, and that the verb can also move to  $C^0$ . When this happens, clitics become postverbal. They also claim (2001: 29) that object clitics are “predominantly postverbal” at this stage. According to their analysis, this happens because the verb moves to  $C^0$ , as illustrated by (2.26). Preposed items move to spec-CP, and yield examples like (2.27)-(2.28):



(2.27) τῶν μὲν δὴ οὐδὲν [<sub>C</sub> προσίετό=μιν.  
 ‘None of them satisfied him.’

1.48.5<sup>27</sup>

(2.28) [<sub>CP</sub> ἐκ τούτου δὲ [<sub>C</sub> μανῆναί=μιν νομίζουσι Σπαρτιῆται.  
 ‘The Spartans think that, because of this, he [= Cleomenes] went insane.’

6.84.14

This analysis raises a few questions. One, why is the verb moving to C<sup>0</sup>? Two, in (2.27), we have two constituents (τῶν and οὐδὲν) preceding the host of μιν: where are they supposed to sit in the above tree? Are they both supposed to fall in spec-CP? Moreover, the syntax-pragmatics interface in their framework is not entirely clear. In (2.27), τῶν μὲν is a topicalized phrase (or what I would call a strong topic: see chapter six), while in (2.28) ἐκ τούτου δὲ is strongly focused (see chapter seven). Though functionally different, are these phrases supposed to occupy the same layer in phrase structure? (This question does not come up for Kiparsky and Condoravdi because they interpret τῶν in 2.27 as focused; μὲν is somewhat oddly labeled a focus marker in their paper.) If this is the case, is spec-CP, then, just a bland landing site with the particular pragmatic meaning assigned at some other point in the derivation?

While this analysis is appealing in its ability to provide a stable generalization of clitic distribution over the course of Greek, it is not a particularly good fit for the data, even with the examples offered in support of it. With the metrical data (for which, see chapter five), it would face even further difficulties.

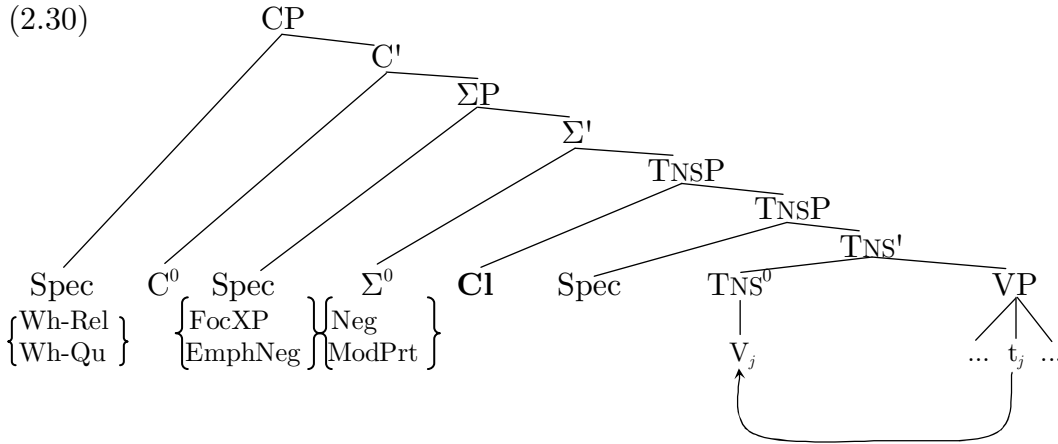
Kiparsky (1996: 172) suggests that the rise of TP/IP may in fact be responsible for the VO surface patterns of Classical and Koine Greek if it is left-headed and hosts the verb. By the time of the Koine, clitics appear at the left edge of VP. Kiparsky (1996: 172) argues that we can accordingly account for clitic distribution in all three stages of Greek by saying that they select for the lowest containing maximal projection:

<sup>27</sup> This passage is incorrectly cited by Condoravdi and Kiparsky (2001: 24) as “Hdt. 2.68.48.”

- (2.29) *Homeric Greek*: [<sub>CP</sub> [<sub>VP</sub> *clitic* ...] ]  
*NT Greek*: [<sub>CP</sub> [<sub>IP</sub> [<sub>VP</sub> *clitic* ...] ] ]

Herodotus would then fall between these two stages, and accordingly a mix of the two patterns.

Lastly, it is worth noting the phrase structure that Condoravdi and Kiparsky propose for medieval Greek, because there are intimations of it already in Herodotus:



While the phrase structure above is not proposed for Classical Greek, there is some evidence for it from Herodotus, in cases like the following:<sup>28</sup>

- (2.31) οὐ γὰρ δὴ ὁ Νεῖλος γε ἐστὶ κατὰ τοῦτον τὸν λόγον ὁ τὴν Ἀσίην οὐρίζων τῆι Λιβύηι. τοῦ Δέλτα δὲ τούτου κατὰ τὸ ὄξυ περιρρήγνυται ὁ Νεῖλος, ὥστε ἐν τῷ μεταξὺ Ἀσίας τε καὶ Λιβύης γίνοιτ' ἄν.  
 'For it is not the Nile, according to this account, that separates Asia from Libya. The Nile is divided at the apex of this delta, with the result that it would be between Asia and Libya.'  
 2.16.11

It is the last clause that is of interest here; for we may have the following phrase structure:

- (2.32) [<sub>C</sub> ὥστε [<sub>ΣP</sub> ἐν τῷ μεταξὺ Ἀσίας τε καὶ Λιβύης [<sub>Σ</sub> [<sub>TP</sub> γίνοιτ' ἄν].

But if the template in (2.30) is relevant, it is not clear why Λιβύης does not host ἄν. Indeed, it seems almost as if ἄν has undergone prosodic flip in the face of a potential host. This question will be considered further in the next chapter.

As far as (2.29) and the historical sketch of Greek is concerned, it is not entirely clear why Homeric Greek lacks TP/IP. For sentences such as the following appear to contain just that:

<sup>28</sup> Cf. 9.72.10.



(2.33) μέλλεις γὰρ ἀφαιρήσεσθαι ἄεθλον.  
'For you intend to rob (me) of (my) prize.'

Il. 23.544

If μέλλεις here is not in  $T^0$ , it is far from clear to me what phrase structure (2.33) has. There is of course a difference in μέλλω+future infinitive construction in Homer and the Classical period. For one, it is less frequent in Homer. For another, it does not always have the semantics of a proximal future. I do not think that these differences should lead us to the conclusion that Homeric Greek lacks a TP projection.

Lastly, I would like to raise two objections that apply to all of the generative analyses presented above. They all work with the assumption that the distribution of clitics in the clause is structure-dependent; that is, given the morphosyntactic configuration of a sentence, it is possible to predict where the clitic will fall. What the above analyses attempt to do is lay out how clitic placement and morphosyntactic structure interact. I make this observation not to dismiss the syntactic analyses above: they may well be correct. My objection lies in the tacit assumption of the claim. If clitic placement is structure-dependent, this is what needs to be demonstrated—not what should be assumed. Furthermore, there is little attempt in the literature to make explicit the nature of pragmatically-conditioned “movement.” Hale has a supra-CP layer for this purpose; Taylor adopts this plus a “scrambling” adjunction operation; Condoravdi and Kiparsky suggest that focused phrases move to spec-CP.

Second, I am troubled by the claim that object clitic pronouns are base-generated in VP. To be sure, there is a range of support that one could evoke in favor of the assumption that a verb and its object bear a close morphosyntactic (not to mention semantic) relationship. This is beyond contention in my view. But I do not think that such an array of arguments leads us to the conclusion that VO or OV ordering exists within the mental grammars of Greek speakers. The language-internal evidence for such a projection and such ordering is slim. The only way to get to this is to assume such a relationship as part of basic cognition or Universal Grammar. Even if this is the case, the language that Greek speakers would have been exposed to when they were learning their language would have included not only sequences of  $V=clitic$ , but other ones as well. That is, the evidence could well have overcome any “natural” relationship or configuration; for discussion along these lines, see Clark (2009: 389-392).

## 5 Adams and the Focused Element

The work of J.N. Adams (1994a, 1994b) on the Latin clitic pronouns and clitic forms of *esse* takes as its starting point Fraenkel’s work on the *Kolon*, but moves in a different direction. Adams is less concerned with the prosodic component of clitic placement, and does not attempt to “*Kolon-ize*” Latin texts into prosodic units, on account of the subjectivity involved in drawing up *Kolon*-boundaries; see Adams (1994b: 151), and the following quotation:

Even when one divides up Latin clauses into cola using Fraenkel's criteria, one is left with masses of unemphatic (unstressed?) pronouns which, on a reasonable colon division, are not placed second in their colon but later. I would maintain that such exceptions to Wackernagel's law are far more extensive and clear-cut than has been realised. Adams (1994b: 110)

As such, Adams is less concerned with arguing for or against prosodic boundaries and instead focuses on the interaction between the pragmatic function of the elements in a sentence and clitic distribution. (For a similar attempt with inscriptional Latin, see Kruschwitz 2004.)

His overarching claim (1994b: 111-112, 155) is that object pronouns gravitate to certain types of hosts, namely focused terms, e.g. a focused host might be an "antithetical term." In some cases, focused hosts may stand at the left edge of a *Kolon*-boundary, but this need not be the case under Adams' framework, and according to him, there are definitely cases where an object clitic pronoun does not in fact occupy such a position (Adams 1994b: 118).

While I think there must be at least some truth to the claim that the position of clitics in Latin is pragmatically-conditioned, Adams' analysis suffers from several problems. First, if he is not going to lay out diagnostics for prosodic units such as the *Kolon*, how does he know whether a clitic sits at a *Kolon* boundary or not? Without knowing that focused hosts do not sit at the edge of a *Kolon* boundary, he is not in a position to claim that they can occur several words into a *Kolon*. Second, it is not clear to me how one distinguishes tonic and clitic pronouns in Latin.<sup>29</sup> So it is quite possible that some of the examples Adams relies on involve not clitics but rather fully tonic items not subject to prosodic (or pragmatic) constraints. Third, there is some confusion in his work as to whether a clitic focuses its host or whether a host, already focused, attracts the clitic:

The pronoun accordingly may be in third or fourth position in the colon or even later. The function of the enclitic could be described as focusing the host, or alternatively, if one puts the matter the other way around, the focus might be said to attract the clitic pronoun regardless of the place of that focus in the colon. The clitic thus leans not necessarily in mechanical fashion on the first word (or constituent) of its colon, but it may gravitate instead to a particularly prominent constituent, which need not (but of course may) be the first word of the colon. Adams (1994b: 112)

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<sup>29</sup> Concerning diachrony, Adams does not acknowledge that the Latin pronouns do not continue the Indo-European pronominal clitics. For in fact they continue the tonic forms, and their second-position behavior is an inner-Latin (or inner-Italic) development. The upshot of this is that this system cannot be set up in direct equation with those of Indo-Iranian and Greek. In its details it may be very similar, but it is a recreation of Wackernagel's Law, just as we have happening in Classical Greek with oblique forms of ἀυτός.

For what one would like to know is whether a focused host was marked with sentence pitch to signal its special pragmatic status, and that this is what attracted the clitic to these hosts. Or, if there was no such marking by sentence-pitch, but rather that the incorporation of the clitic with its host endowed it with greater phonetic substance; see e.g. Janse (1995/1996) for such an idea, as well as Mushin and Simpson (2008: 575), where further literature is cited. Lastly, while it is true that the prosodic parsing of an ancient text is a tricky matter, so often are pragmatic judgments. Adams provides only minimal guidance as to what can and cannot be considered a focused host. All of this said, I hasten to add that Adams' analysis may well be correct; it is simply the case that too little has been spelled out in detail to know whether this is the case.

## 6.0 Looking Ahead

This concludes my overview of the previous literature on Wackernagel's Law. One thing that should have emerged from this survey is just how complex the phenomenon of clitic distribution is—and this in spite of the fact that it is often assumed to be governed by linguistic “law.” The great interest in this phenomenon derives in part from its complexity: for clitics stand at the interface of syntax, phonology, morphology, and pragmatics. As such, second-position clitics can offer us deep insights into many aspects of Greek.

For my own analysis, which I begin to present in chapter four, I take as a starting point Fraenkel's work on the *Kolon*. While his analysis has some faults, and offers considerable opportunity for refinement and extension, it is to my mind still the best analysis of clitic distribution in Greek (even if restricted in scope to ᾗν). Before turning to the distributional facts, it is necessary to review the prosodic features of Greek clitics, as well as to lay out an approach to prosodic constituency. It is to this that we now turn.

## Chapter 3

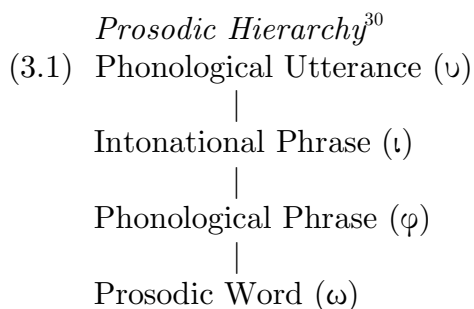
### Prosodic Phonology and the Prosody of Clitics

The present chapter lays the foundations—theoretical and otherwise—for the argument of the remainder of the dissertation, namely that clausal clitics are organized primarily by prosodic domain and only secondarily by syntactic domain. The first thing that we need is a working theory of the prosodic units of language and their organization. This will be covered in Section 1, where the Prosodic Hierarchy is presented. I offer brief descriptive remarks on the units of the Hierarchy that will play a more central role in this investigation, in particular that of the intonational phrase.

Beginning in section two, I discuss whether “postpositives” such as  $\check{\nu}$  differ prosodically from “true” enclitics such as  $\mu\nu$ . I argue that, in terms of their prosodic behavior, these two categories show identical patterns of behavior and that the graphic accent on postpositives may not reflect lexical accent, as is often assumed. In section three, I present an articulated definition of what constitutes first position, in an attempt to lay out explicitly what type of unit a second-position clitic falls second to. Section four explores an issue that is only rarely mentioned in the literature, the fact that some clitics do not have a static prosodic profile: for they can alternate between tonic and atonic behavior. Clitics can alternate in their polarity (i.e., direction of incorporation), sometimes selecting a host to their left, at other times selecting one to their right; this topic is taken up in section five. Section six offers brief concluding remarks.

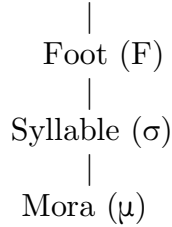
#### 1 The Prosodic Hierarchy

Prosodic phonology is a theory of phonological constituency. Specifically, it posits a prosodic hierarchy that specifies possible phonological constituents and how those constituents may and may not be built up to form larger constituents. These range from units below the morphological word (morae, syllables, feet) to those well above it (the phonological phrase, intonational phrase, and phonological utterance):



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<sup>30</sup> This was initially proposed by Selkirk (1982) and (1986), and further developed by Nespor and Vogel (1982) and (1986) as well as Hayes (1989).



Other versions of the hierarchy have been put forth,<sup>31</sup> and there is debate about whether constituents below the prosodic word should be included. Here I include the lower units as the notion of a foot will play a role in the description of clitic incorporation below.

The hierarchy above is subject to the following stipulations, which are collectively known as the Strict Layer Hypothesis (Nespor and Vogel 1986: 7):

1. A given phonological constituent's immediate subconstituents must be of the category immediately "preceding" (i.e., below) it in the hierarchy—with the exception of the smallest prosodic unit in the hierarchy (Nespor and Vogel 1986:7).
2. Any subconstituents of a given constituent are completely contained within that constituent—that is, overlapping prosodic constituents are not permitted (Nespor and Vogel 1986:7).
3. The final stipulation is simply that a phonological string be exhaustively parsed at every level (Hayes 1990:86).

There is debate in the literature over how strictly these stipulations should be maintained. It is not my goal here to take a stand on this issue (although I suspect that the Greek data bear on it); while below I attempt to explain the prosodic structure involved in clitic incorporation, I do not attempt to make a larger theoretical point about the prosodic hierarchy.

In what follows in this chapter and subsequent ones, parentheses will be used to mark prosodic constituents, and the specific level of the constituent will be indicated with a subscript abbreviation, e.g.  $(\varphi\iota\lambda\tilde{\omega})_{\omega}$ .

## 1.1 The Prosodic Word

Of the above constituents, the prosodic word will correspond most closely to the everyday notion of a "word," by which is usually meant a lexical or morphological word.

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<sup>31</sup> I offer here a traditional prosodic hierarchy as found in e.g. Nespor and Vogel (1986); Selkirk (1986); McCarthy and Prince (1995); Inkelas and Zec (1995). There are variations to be found in the hierarchy; see e.g. that offered by Good (2003: 38). While all languages are assumed to have some sort of prosodic constituency, the specific nature of the hierarchy is thought to vary according to the language in question.

It is, however, possible for a prosodic word to be either larger or smaller than a lexical word (Booij 1996).

For our purposes, there are two observations to make about the prosodic word. First, this is the domain in which lexical stress (i.e., the location of the pitch accent on a word) is assigned. Clitics never affect the location of lexical stress (Steriade 1988: 284) in Greek, although they can trigger a secondary accent (this topic is explored in greater detail in section two). Second, the host of a clausal clitic is the prosodic word, and not a morphological or lexical word. Both of these topics will be taken up in more detail below.

## 1.2 Clitics in the Prosodic Hierarchy

On the cline of wordhood, clitics fall somewhere between affixes and lexical words (see Dixon 2002 for an overview of the concept of a word). With the prosodic hierarchy, it is possible to define clitics more specifically. For clitics are units below the prosodic word, and this deficiency is what causes them to incorporate with a (prosodic word) host. Some clitics, such as the pronouns, we can describe as unfooted phonological material (i.e., material that has not been assigned a phonological foot structure, which is necessary for the assignment of lexical accent).<sup>32</sup> With “postpositives” like ἄν, μέν, δέ, and γάρ, it is less clear how they are to be treated; this issue is taken up in more detail below in section two.<sup>33</sup>

Clitics can incorporate with their hosts to form various types of prosodic constituents. A typology of the interactions is laid out below in section two. How exactly these interactions are to be treated within a hierarchy like (3.1) is subject to debate. Some scholars, such as Devine and Stephens (1994: 285-375), add another layer to the hierarchy, that of the Clitic Group, which lies between the prosodic word and the phonological phrase.<sup>34</sup> Others, such as Booij (1996) and Peperkamp (1997), have rejected the constituent Clitic Group as both unnecessary and unwanted.<sup>35</sup> Booij (1996: 223) explicitly rejects it for Ancient Greek. As this issue does not play in the generalization of clitic distribution argued for here, I leave this question open.

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<sup>32</sup> See Inkelas and Zec (1995: 549 n.3) on this point.

<sup>33</sup> There has been debate about whether these items should be considered clitics. The debate results from a narrow conception of what constitutes a clitic: lack of accentuation is the standard hallmark of clisis. This criterion is inadequate, however, as stressed clitics are known in several languages of the world: see Klavans (1985) and Anderson (1992: 203-204).

<sup>34</sup> This is advocated by Hayes (1989) and Nespor and Vogel (1986).

<sup>35</sup> Peperkamp (1997: 157-211). Her arguments are three: first, the clitic group is unnecessary as the cases claimed to require this unit can otherwise be reanalyzed; second, the clitic group cannot capture asymmetries between proclitics and enclitics; third, it allows no insight into cross-linguistics variation on stress and enclisis. To do this requires a relaxation of the Strict Layer Hypothesis, which would then permit recursion and level-skipping.

### 1.3 The Intonational Phrase

We turn now to the prosodic unit that will play the most significant role throughout this dissertation, that of the intonational phrase.<sup>36</sup> For this, as I will argue, is the domain in which clausal clitics such as the pronouns and  $\check{\nu}$  are positioned. Broadly speaking, intonation is the use of pitch (and possibly other prosodic features such as loudness, tempo, and pause) over a stretch of utterance for non-lexical purposes.<sup>37</sup> There are several ways in which an intonational phrase has been defined. For instance, prosodically, it is said to be the longest stretch of speech to which a single intonation pattern applies (that is, a pattern of high or low pitch-tones). Such a definition is of limited utility when dealing with Ancient Greek, as we have no direct access to such features (on which more below). Accordingly, we will have to rely on other notions. So from a morphosyntactic viewpoint, for instance, the intonational phrase typically corresponds to a simple root clause (Cruttenden 1997: 68-73; Nespor and Vogel 1986: 189):

(3.2) (My sister sells fresh fruit at the market.),<sup>38</sup>

In biclausal sentences, each clause typically corresponds to an intonational phrase:

(3.3) (When at home.), (I like to read.),

(3.4) (Our next door neighbor truly believes), (that black cats bring bad luck.),<sup>39</sup>

Despite these strong cross-linguistic tendencies, the intonational phrase is known to be a variable unit; thus, the same syntactic structure can have different prosodic spell-outs (see Nespor and Vogel 1986: 199-200; Selkirk 2005):<sup>40</sup>

(3.5) (Our next door neighbor truly believes that black cats bring bad luck.),<sup>41</sup>

(3.6) (The big fat ugly beast scared away the children.),<sup>42</sup>

(3.6.1) (The big), (fat), (ugly), (nasty beast), (scared away the

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<sup>36</sup> This is a well-researched prosodic unit, but it is labeled differently by scholars: *intermediate phrase*, Pierrehumbert (1980); *tone unit*, Halliday (1967); *intonation unit*, Chafe (1994); *major phrase*, Devine and Stephens (1994); see Fox (2000) for even more. For an overview, see Chafe (1994: 53-70). The only description of the Greek intonational phrase that I know of is Devine and Stephens (1994: 409-455).

<sup>37</sup> For surveys of intonation, see Cruttenden (1997); Gussenhoven (2004), (2007).

<sup>38</sup> From Nespor and Vogel (1986: 191).

<sup>39</sup> From Nespor and Vogel (1986: 199).

<sup>40</sup> It is thought impossible to predict intonational phrasing: so Cruttenden (1997: 73). See also the famous article by Bolinger (1972).

<sup>41</sup> From Nespor and Vogel (1986: 199).

<sup>42</sup> From Nespor and Vogel (1986: 200).

children.)<sup>43</sup>

Intonational phrases can also correspond to smaller units such as adverbs:<sup>44</sup>

(3.7) (Obviously,) (he knows what he's doing),

In fact, it is possible for an intonational phrase to be as small as a syllable (Cruttenden 1997: 68). As such, there is no ready generalization to make between morphosyntactic structure and prosodic category.<sup>45</sup> Others have tried to define the intonational phrase from a psychological or cognitive perspective, and have posited that the intonational phrase essentially represents what is held in consciousness at the moment of speaking.<sup>46</sup>

While the intonational phrase is widely recognized as a prosodic constituent in many languages of the world, where one begins and one ends is not always clear—even with modern languages. Typically an intonational phrase will be delineated by a change of pitch level or pitch direction; pause; anacrusis; or final-syllable lengthening.<sup>47</sup> But really there is a whole cluster of potential features that can mark off an intonational phrase: breath-group; downtrend (declination in pitch through duration of utterance); slowing of tempo; final lengthening; changes in voice quality; domain of an intonational contour; coincidence with morphosyntactic constituency.<sup>48</sup>

We have of course only very limited access to such features when dealing with a corpus language like Ancient Greek, and in general when trying to discuss sentence-level prosody, we are wise to bear in mind remarks like the following:

Über die in den modernen Sprachen höchst bedeutsame Satzmelodie lässt sich in einer nur schriftlich überlieferten Sprache wie dem Griechischen kaum etwas Sicheres sagen. Bornemann and Risch (1974: 162)

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<sup>43</sup> Ibid.

<sup>44</sup> In fact, all that we need for an intonational phrase is a stressed syllable. For purposes of emphasis, this can happen, although it is rare: see Cruttenden (1997: 68). The potentially short span of an intonational phrase has not been appreciated by classicists. J.N. Adams for one worries that scholars might over “*Kolon-ize*” texts, that is, to segment utterances into *Kolon*-units (which more or less corresponds to the contemporary intonational phrase). This is obviously a very difficult issue, but a priori, given the rhetorical and morphosyntactic complexity of many ancient prose texts, we should expect many intonational phrases per morphosyntactic sentence.

<sup>45</sup> There is some data available on the average length of an intonational phrase: Chafe (1994: 65) reports that in his corpus the average length of an intonational phrase is 4.84 words.

<sup>46</sup> Along these lines, recent research from psycholinguistics, e.g. Wheeldon and Lahiri (1997) and (2002), has argued that the basic unit of speech production is prosodic and not morphosyntactic as is often (tacitly) assumed. Arnon (2009) argues that children learn language from large-sized units (“chunks”) that appear to correspond to prosodic units.

<sup>47</sup> Cruttenden (1997: 35).

<sup>48</sup> Wennerstrom (2001: 30-31). For further definition and characterization of the intonational phrase, see Cruttenden (1997: 68-73); Fox (2000: 298-300); Gussenhoven (2004: 22-23); Nespor and Vogel (1986: 187-193). For Greek specifically, see Devine and Stephens (1994: 412-416; 420-424).



Nevertheless, as we have seen from the discussion, information about prosody is sometimes available from the writing system and from metrical patterns (on the topic of *Satzmelodie* in Greek, see further Brugmann 1913: 665-672; Schwyzer 1934: 386). Occasionally we are fortunate to have the remarks (or more) of an ancient grammarian, or those of scholiasts (see Probert 2006; for ancient remarks on prosodic phrasing in Latin, see Cunningham 1957: 490-505). In some cases, musical notation (what scant remains there are) can also provide information, although this comes from a later date.<sup>49</sup>

The interaction between morphosyntactic structure and intonational phrasing is a challenging issue, about which very little is known at the moment. One assumption crucial to my analysis is that the left edge of CP (= complement phrase) corresponds to the left edge of an intonational phrase (cf. the algorithm of Aissen 1992: 57-61 for Tzotzil). Clausal clitics do not appear above CP (with only certain exceptions to be detailed in the next chapter). Thus clitics serve as a crucial diagnostic of prosodic and syntactic structure. It is true that there is an element of circularity in this reasoning: I am both arguing for a generalization of clitic distribution according to a particular domain, and at the same time using clitics to diagnose that domain. There is no way to remove this circularity. It can only be ameliorated by the fact there is some independent evidence for the domain of clitic position, namely metrical (for which, see chapter five), and pragmatic (see chapters six and seven): the meanings exhibited by preposed phrases are those that we expect, on cross-linguistic grounds, to be coded as intonational phrases.

#### 1.4 Clause-Initial Words and Prosodic Prominence

It has been suggested that in Greek the initial word of a clause (and thus the initial word of the first intonational phrase of a clause, where the clitic is typically housed) is prosodically more prominent than other parts of the sentence; so Dunn (1989: 7); Fraser (2001: 146, 147).<sup>50</sup> It is true that cross-linguistically it is quite common for pitch to be highest at the beginning of an utterance and to decrease over the course of speaking (a phenomenon known as *declination* or *downtrend*). However, this is not necessarily to say that the first element of a Greek clause is strongly “stressed,” i.e. that it is the locus of sentence stress. If this is true, and I really cannot say either way, it is not at all clear to me what sort of evidence will demonstrate this. I would just like to point out that we cannot assume, as I think Fraser may have done, that pragmatic prominence automatically translates into prosodic prominence; he is working under the idea (as many do) that clause-initial position in Greek is pragmatically privileged, and that it was so because of its special opening prosodic prominence. This is of course an intuitive idea with considerable cross-linguistic support, but whether or not it holds for Greek is an open question.

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<sup>49</sup> For the musical fragments, see *DAGM*.

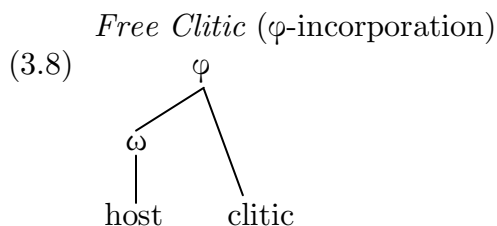
<sup>50</sup> This idea gives rise to claims such as the following from Schwyzer (1950: 691): “Die Stellung am Satzanfang kann das besonders Wichtige in den Vordergrund rücken, die Stellung am Satzende Spannung erzeugen.”

## 1.5 The Status of Intonation in Grammar

Lastly, there are two general points to note concerning the role of intonation in grammar. The first is that the study of prosodic phrasing is not a question of performance but rather of competence (see Chomsky 1965; in Chomsky 1986 these terms are reformulated as e(xternal)-language and i(nternal)-language); cf. Saussure's *parole* vs. *langue*. Searle (1969: 17) and (1979: 178) made this claim in relation to the study of speech acts. For our purposes, it is useful to make this point, because the type of prosodic phrasing that I am discussing below is not that which is subject to the vagaries of a particular occasion. On the contrary, I presume that prosodic phrasing is part of the conventional knowledge of language that a speaker acquires over time. As such, in attempting to establish prosodic phrasing in Ancient Greek, I am actually claiming very little about any actual or particular performance of the text, and more instead about the conventions that governed communication and the mapping between syntax and prosody. The function of prosody has been investigated in some detail in living languages; see Hirschberg (2002) for summaries and bibliography.

## 2 Prosodic Incorporation of Clitics

Cross-linguistically, clitics interact prosodically with their hosts in different ways. Anderson (2005) offers the following typology,<sup>51</sup> according to which they are assumed to incorporate in one of four ways. The first is known as a free clitic or prosodic-phrase incorporation:



This relationship is exemplified by Standard Italian, where enclisis does not interact with stress assignment:<sup>52</sup>

(3.9) *pórta* ‘bring<sub>IMPV</sub>’

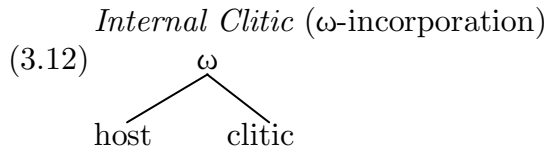
(3.10) *pórta=mi* ‘bring<sub>IMPV</sub>=me’

(3.11) *pórta=me=lo* ‘bring<sub>IMPV</sub>=me=it’

The second type is that of the internal clitic, or prosodic-word incorporation:

<sup>51</sup> As laid out by Anderson (2005: 46). As Anderson notes, it is not yet clear if all of these formal possibilities exist. For a typology with only three members, see Peperkamp (1997: 177-178).

<sup>52</sup> All Italian data are from Peperkamp (1997: 177).



In this type, enclitics cause a complete recalculation of accent. The Lucanian dialect is of this type, as we see from the following data:

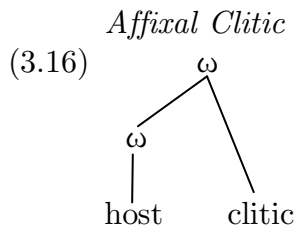
(3.13) *vinnə* ‘sell<sub>IMPV</sub>’

(3.14) *vənni=llə* ‘sell<sub>IMPV</sub>=it’

(3.15) *vinnə=mi=llə* ‘sell<sub>IMPV</sub>=me=it’

In (3.13)-(3.15), stress is positioned on the penultimate syllable regardless of how many clitics follow the host.

The third type is the affixal clitic, which is also known as prosodic-word adjunction:



Affixal clitics adjoin to their host prosodic words to recursively form a prosodic word structure. Enclitics in the Neapolitan dialect are of this type:

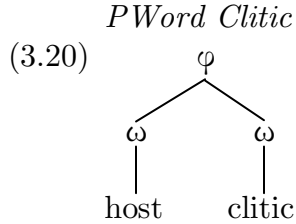
(3.17) *cóntə* ‘tell<sub>IMPV</sub>’

(3.18) *cónta=lə* ‘tell<sub>IMPV</sub>=it’

(3.19) *cónta=tí=llə* ‘tell<sub>IMPV</sub>=you<sub>REFL</sub>=it’

A single clitic does not recalibrate stress, as we see from (3.18). When two clitics are present, however, an additional stress is assigned to the penultimate syllable, as in (3.19). This is the accentual pattern that Greek follows in the presence of an enclitic; this issue is taken up in the next section.

The last possibility is that of the prosodic word clitic:



In this type, the clitic has prosodic-word status when it enters into a post-lexical relationship with its host. This pattern is not known from Italian, and has often not been recognized in the literature. For prosodic deficiency is typically assumed to be a definitional property of clitics. Nevertheless, Anderson (1992: 204) cites the evidence of Tagalog, where clitics (both pronominal and adverbial/particle-like) are stressed and do not appear to differ in their prosodic properties from other words. On the basis of such evidence he argues that prosodic deficiency is neither a necessary nor sufficient condition for second-position behavior.<sup>53</sup>

## 2.1 Clitic Incorporation in Greek

To return to Greek, graphically unaccented clitics behave as affixal clitics and pattern with the Neapolitan data cited above. That is, the addition of enclitics to the right edge of a prosodic word does not affect the position of the lexical accent. The basic accentual patterns for the interaction of graphically-unaccented clitics and their hosts are as follows (see Smyth §183; Devine and Stephens 1994: 370):

*Oxytone*

(3.21) δός+μοι → δός=μοι

*Perispomenon*

(3.22) φιλῶ+σε → φιλῶ=σε

*Paroxytone*

(3.23) φίλος+μου → φίλος=μου

*Oxytone+Disyllabic Clitic*

(3.24) καλόν+ἔστι → καλόν=ἔστι

*Perispomenon+Disyllabic Clitic*

(3.25) τιμῶν+τινων → τιμῶν=τινων

A lexical acute accent can occur at most three syllables from the right edge of a prosodic word (thus the Law of Limitation). Lexical circumflex accents can occur at most two syllables from the right edge. When clitics incorporate with their hosts, additional syllables are added to the end of the word, which in some cases can lead to

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<sup>53</sup> See Klavans (1985) and Anderson (1992: 203-204) for discussion and examples.

violation of the Law of Limitation. To repair this situation, secondary accents are created on the final syllable of the lexical word, as we see here:

*Proparoxytone*

$$(3.26) \text{ ἄνθρωπος+τις} \rightarrow \text{ἄνθρωπός=τις}$$

*Properispomenon*<sup>54</sup>

$$(3.27) \text{ σῶσον+με} \rightarrow \text{σῶσόν=με}$$

*Proparoxytone+Disyllabic Clitic*

$$(3.28) \text{ ἄνθρωπος+τινες} \rightarrow \text{ἄνθρωποί=τινες}$$

*Paroxytone+Disyllabic Clitic*

$$(3.29) \text{ φίλοι+τινες} \rightarrow \text{φίλοι=τινές}$$

$$(3.30) \text{ φίλοι+τινων} \rightarrow \text{φίλοι=τινῶν}$$

*Properispomenon+Disyllabic Clitic*

$$(3.31) \text{ παῖδες+τινες} \rightarrow \text{παῖδές=τινες}$$

There are peculiarities within these facts that have yet to be adequately explained; one might wonder with (3.25) why an accent was not triggered as the circumflex is normally not licit at such a distance from the right edge. For an attempt to account for the clitic-induced accentuation facts, see Steriade (1988). All that matters for our purposes, however, is the observation that lexically-assigned accent is never altered under clitic incorporation, i.e. the Lucanian pattern is never found:

$$(3.32) \text{ ἄνθρωπος=τις} \rightarrow \text{*ἄνθρώπος=τις}$$

In other words, clitics never cause the lexical accent to be repositioned.<sup>55</sup>

With graphically-accented clitics such as ἄν, the situation is different, as these items never trigger a secondary accent in incorporation:

*Proparoxytone*

$$(3.33) \text{ ἄνθρωπος+γάρ} \rightarrow \text{ἄνθρωπος=γάρ}$$

*Properispomenon*

$$(3.34) \text{ σῶσον+μέν} \rightarrow \text{σῶσον=μέν}$$

<sup>54</sup> This pattern is subject to the constraint that the final syllable not end in a consonant cluster: see Probert (2006: 70).

<sup>55</sup> This is a deliberately simplistic account of host-clitic interaction in Greek. There are well known peculiarities, such as the lexical accent of disyllabic clitics (e.g. ποτέ) that emerges in certain prosodic environments. These issues would take us too far afield here. To my knowledge, the best discussion of the data and issues remains Allen (1973).

Had these been graphically unaccented clitics, we would have expected the appearance of another lexical accent. These clitics thus pattern either like the Standard Italian type (as a so-called free clitic), or as a so-called Pword clitic (type IV from above).

When you have two clitics, and the first of them is graphically accented, but the second is not, the following pattern emerges:

$$(3.35) \text{σῶσον+μέν+μιν} \rightarrow \text{σῶσον=μέν=μιν}$$

There is no accentual modification to the host, and the non-interactive behavior of μέν now extends to μιν, which also has no effect on the host. It is difficult to tell what is going on prosodically here. One possibility is that the chain =μέν=μιν really has no effect on its host, just like Standard Italian clitic chains. Another possibility, and one that I find slightly more plausible, is that in this type of scenario, μέν actually becomes an accented clitic host. My preference for this scenario is rooted in the following practice. When multiple clitics occur in succession, each one but the last is accented:

$$(3.36) \text{εἶ=πού=τίς=τινα ἴδοι ἐχθρόν...} \quad \text{Thuc. 4.47}$$

Thus in addition to the patterns of interaction witnessed by (3.26)-(3.31), there is another principle that dictates accentuation within clitic chains. It is this principle that would give us =μέν=μιν. So essentially the accentuation on μέν could be overdetermined in this environment. One problem with this is that the prosodic reality of (3.36) has been questioned over the past few decades.<sup>56</sup> A sequence of so many high tones has been impugned as implausible, given that nowhere else in the language can you find such strings. This argument is not cogent, however, because it is too literal an interpretation of the diacritics. The successive acute marks on clitic chains need not reflect a high tone on each item, but only a constancy of tone across the chain. That is, pitch does not start to fall until the very last clitic; prior to that, it maintains a stable level. Thus the graphic practice behind (3.36) differs from that of (3.26-3.31), in that the acute and its absence are being used to represent pitch levels over the course of several syllables, and not intrinsic lexical accent.

## 2.2 The Prosodic Behavior of “Postpositives”

Classical scholarship seemingly without exception divides second-position items into two categories, clitics and postpositives.<sup>57</sup> The distinction reflects a graphic practice. Some second-position items, e.g. ἄν, bear a graphic accent, while others, e.g. μιν, do not. The latter are considered true clitics, while the former are called postpositives.<sup>58</sup> Most

<sup>56</sup> See Probert (2003: §297) for references.

<sup>57</sup> E.g. Frankel (1933); Dover (1960); Dik (1995) and (2007). From Wackernagel (1892: 377), it appears that this term is due to Krüger.

<sup>58</sup> Note that neither Chandler (1881) nor Probert (2003) include ἄν in their lists of enclitics; they do, however, list  $\chi\epsilon(\nu)$ .

scholars attribute linguistic reality to this graphic practice, and thus believe that items like  $\check{\nu}$  are tonic. (And since clitics are defined as unaccented lexical items, postpositives cannot be true clitics.<sup>59</sup>) Some have been troubled by the fact that postpositives exhibit distributional patterns that are remarkably similar to those of clitics.<sup>60</sup> Accordingly, some (including Wackernagel himself) use the term *quasi-enclitic* for postpositives.<sup>61</sup>

One solution here is to say that, indeed, there are two types of clitics in Greek, the affixal type, which is prosodically deficient and lacks a lexical accent, and the prosodic-word type, which is not prosodically deficient and bears a lexical accent. To handle the shared second-position distribution common to both, one could invoke the idea that there are two types of clisis, phonological and syntactic (so Devine and Stephens 1994: 303, 352).<sup>62</sup> I am aware of no full-scale account that lays out the difference between syntactic and phonological clitics, but I presume one prediction of this account is that syntactic clitics, since they are prosodically independent, should behave prosodically like lexically-accented words (with the exception of their second-position constraint). As far as Greek is concerned, this prediction is not borne out by the available data.

### 2.3 Some Graphic Accents do not Reflect Lexical Accents

In this section, I present evidence to support the claim that the graphic accentuation found on otherwise cliticoid items does not represent the same prosodic feature (a lexical H tone) that it does for non-clitic lexical items. Several of the observations have been made several times already, but they have yet to have had much impact on the literature on Wackernagel's Law.

Before doing this, it is worth considering briefly what the system of written Greek accents was designed to capture.<sup>63</sup> The standard assumption is that the diacritics mark

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<sup>59</sup> E.g. Devine and Stephens (1994: 354): “[N]ot all postpositives are enclitic.” See also the literature debating the status of  $\mu\acute{\epsilon}\nu$ ,  $\delta\acute{\epsilon}$ , and  $\gamma\acute{\alpha}\rho$ : Vendryes (1904: 107); Devine and Stephens (1994: 354-355); Probert (2006: 131 n. 9) also cites ancient testimony.

<sup>60</sup> Cf. Fortson (2010: 161) in his discussion of Wackernagel's Law: “Some particles, such as Greek *gár* ‘for’ and Vedic *hi* ‘for’, have a lexical stress but behave syntactically like true clitics, and will be considered together with them in the following discussion.” While I do not agree entirely with this statement, its general point is well taken. (First, I have reservations about interpreting graphic accents as sure signs of lexical accent, as I lay out below; second, I would not characterize the similar behavior of pronominal clitics and  $\gamma\acute{\alpha}\rho$  as syntactic, in the sense of due to syntactic operation; third, this claim is only true to an extent, as the behavior of the two groups of clitics diverge in fifth-century metrical texts.)

<sup>61</sup> This term goes back to Wackernagel (1892: 371), so far as I know. Collinge (1985: 217) refers to  $\check{\nu}$  as a “semi-clitic,” but offers no definition of the category and does not cite Wackernagel. Hajdú (1989) uses the term throughout. As far as sentence-distribution is concerned, Wackernagel (ibid.) understood that quasi-enclitics sought second position as consistently as other “true” clitics. Taylor (1990: 119) notes the distributional identity of clitics and particles, but also notes (1990: 121) that the two groups begin to diverge over time. For a discussion of the difference between  $\check{\nu}$  and  $\kappa\epsilon(\nu)$ , see Wackernagel (1892: 378-381).

<sup>62</sup> Devine and Stephens further subdivide phonological clisis into rhythmic and appositive clisis, but I confess that the basis for this distinction is not clear to me.

<sup>63</sup> The invention of the Greek accentuation system is attributed (Arcadius 186.4) to Aristophanes of Byzantium (257 BCE - 185-180 BCE), and thus dates back only to the Hellenistic period; see Laum

lexically-assigned pitch levels, i.e. accents (Allen 1973: 249). Even if we accept this (as nearly everyone does), there is still a question of how many tone accents there were, and what exactly the acute, grave, and circumflex diacritics are supposed to represent.

It is clear that the graphic accents do not signal word-level prosody exclusively, as there are cases where it reflects sentence-level prosody.<sup>64</sup> Consider for example the inability of the interrogative pronoun τίς to become grave: this convention suggests the rising pitch of the utterance, and not just that of the interrogative pronoun. Furthermore, in papyri, accent marks are not found above every word, but rather appear to signal prominence within a larger prosodic domain (e.g. metrical colon): for an overview in the Bacchylides papyrus, see Nagy (2000), whose general argument I do not, however, find cogent.

Likewise, the lowering of a word-final acute within continuous speech, and its preservation at the right edge of an intonational phrase (i.e., before a pause).<sup>65</sup> Both of these conventions reflect sentence-level pitch features. Lastly, note the retraction of accent of the forms ἐγώ and ἐμοί when in combination with the “focus” particle γε:

$$(3.37) \text{ ἐγῶ=γε} \rightarrow \underline{\xi}\gamma\omega\gamma\epsilon$$

$$(3.38) \text{ ἐμοί=γε} \rightarrow \underline{\xi}\mu\omicron\iota\gamma\epsilon$$

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(1928); Pfeiffer (1968: 181); Dickey (2006: 5, 92-94). According to Arcadius (ibid.), Aristophanes invented the system because knowledge of the prosodic features of earlier stages of Greek was being lost. But little is known otherwise about his understanding of prosody or what he was attempting to capture with his diacritic signs, especially when it comes to matters of clisis. Even if we accept that the system of graphic accentuation should be attributed to Aristophanes, there is much that remains unclear. For one, the practice of graphic accentuation changed over time: for instance, papyri, when they are accented, are not accented the way that our modern printed editions are. Indeed, the latter owe more to the conventions of medieval Byzantine scholars than to the Alexandrians. All of this is simply to say that it is not always clear what exactly within the system of graphic accentuation we should be attributing to Aristophanes. Furthermore, accentology, especially when it came to Homeric Greek, was a debated issue among ancient grammarians: consider e.g. περὶ τῆς ὁμηρικῆς προσωδίας of Tyrannio/Diocles (see Dickey 2006: 85, with further references). In a similar vein, we also have to acknowledge that scribes do not always accent their texts in the same way (see e.g. West 2000 for a consideration of some of the variants in Homer). So it appears that there were indeed differences of opinion on what should be accented and how. For discussion of accentuation as a scribal and scholarly practice, see Reynolds and Wilson (1991); Wackernagel (1893), (1914a), (1914b).

<sup>64</sup> Pfeiffer (1968: 181) is eager to emphasize the difference between punctuation and accentuation, and that the former is attested much earlier than the latter (excluding Mycenaean and Cypriot material, punctuation is first attested ca. 700 BCE, in the hexametric inscription from Ischia). His point is well taken, to be sure, but I am not sure ultimately that the divide between punctuation and accentuation *per se* is all that great. For it seems to me that what you have over time is the extension of diacritic marks to smaller and smaller prosodic units, from the paragraphos (which marks a multi-utterance constituent) to the acute, grave, and circumflex (which mark word-level domains). If this is true, then all Greek diacritic marks could be arranged along a continuum.

<sup>65</sup> Dickey (2006: 123) notes that, in grammatical treatises, words under discussion also do not become grave in continuous speech. I presume that this corresponds to the prosody that we find with forms put in quotation marks in contemporary English and other modern languages.



This retraction also suggests sentence phonology: as contrast elements, it is the first syllables of ἔγωγε and ἔμοιγε that were most prominent, and this led to a repositioning of the lexical stress. Thus in this case, it appears that the accent reflects the sentence accent as determined by discourse/information structure. A similar phenomenon has also targeted the adjective ἀληθῆς ‘true’ (neut. nom.-acc.), from which is derived the discourse marker ἄληθεος ‘really?’ (*LSJ*, s.v. ἀληθής III.2 and Ammonius, ed. Nickau 26). The earlier form is ἀληθέος and the latter form I presume to be the result of question-initial rising pitch that centered on the initial syllable, leading to retraction; but see further Brugmann (1904: 682 n.1).

A last point to consider is the stage of Greek that the accents are meant to capture. They are thought to have been developed around 200 BCE. One wonders what basis the creators had for projecting their accents back to the classical and Homeric periods. This is not to undermine their judgments, but only to raise the issue that prosodic patterns change over time, and what was true for the Homeric period may not always have been true for the classical period and Hellenistic period. When it comes to postpositives in particular, it may have been the case that they are diachronically but not synchronically accurate (i.e., perhaps at one time ἄν was accented, but by the fifth century it no longer was). We know that such a situation exists with πόλεως, for instance, where the accent reflects a stage before the word underwent quantitative metathesis (i.e., earlier πόληος).

First, Lupaş (1972: 174) and Probert (2003: 133-142; 2006: 69 n. 35) have suggested that the graphic accent of certain proclitics, such as prepositions, is only “conventional”<sup>66</sup> and not linguistically real, as we see from the following example (see further Chandler 1881: 255):

$$(3.39) \acute{\alpha}\pi\acute{o} \rightarrow \acute{\alpha}\pi' \text{ (not } *ἄ\pi') / \_ \#V-$$

When ἄπό occurs before a vowel-initial word, its final vowel, which bears the accent, deletes: the accent, however, is not retracted onto the remaining syllable of the preposition.

We can compare this behavior to that of vowel-final oxytone words, where the accent moves one syllable to the left when the accent-bearing final vowel is deleted (see Smyth §174):

$$(3.40) \text{πολλ}\acute{\alpha} \acute{\epsilon}\pi\alpha\theta\omicron\nu \rightarrow \text{π}\acute{o}\lambda\lambda' \acute{\epsilon}\pi\alpha\theta\omicron\nu$$

Note also that while the accent of πόλλ’ is now technically word-final, it does not become grave, as we would expect in an ordinary case of an oxytone followed by a prosodic word.

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<sup>66</sup> One would like to know what exactly this is supposed to mean. For if the accents are not linguistically real, by what convention were they added in the first place?

The accent on the particle  $\delta\acute{\epsilon}$  behaves just like that on  $\acute{\alpha}\pi\acute{o}$ : when its vowel is elided, it never throws its accent back on to a preceding host. Moreover, when it is followed by a clitic, it has the following effect:

$$(3.41) \text{ πολλοὶ-}\underline{\delta\acute{\epsilon}}\text{-}\acute{\epsilon}\text{ἴσιν} \rightarrow \text{ πολλοὶ-}\delta'\text{-}\acute{\epsilon}\text{ἴ}\underline{\sigma}\text{ίν}$$

Through the elision of the final vowel of  $\delta\acute{\epsilon}$ , the complex  $\text{πολλοὶ-}\delta'$  now behaves as a paroxytone, with an accent appearing over the final syllable of  $\acute{\epsilon}\text{ἴ}\underline{\sigma}\text{ίν}$  (we would otherwise expect just  $\text{πολλοί-}\acute{\epsilon}\text{ἴσιν}$ ). Alternatively, one could say (as apparently Smyth §187.d does) that the accent on  $\acute{\epsilon}\text{ἴσιν}$  originally belonged to  $\delta\acute{\epsilon}$ . If this is true, it is not clear why the accent is floating rightward, and also why it did not settle on the first syllable of  $\acute{\epsilon}\text{ἴσιν}$ .

Second, we have (extremely limited) evidence from Mycenaean that  $\delta\acute{\epsilon}$  was regarded as a clitic. For the particle is enclosed within a word-division marker with its host (subscript  $\mid$  is a scribal marker of prosodic word boundaries):<sup>67</sup>

$$(3.42) \text{ da-mo-de-mi } \mid \\ \delta\tilde{\alpha}\mu\omicron\varsigma\text{-}\delta\acute{\epsilon}\text{-}\mu\text{ιν} \\ \text{'But the community (says that) she...'} \qquad \text{PY Ep 704.5}$$

Scholars have interpreted this graphic practice as signaling the cohesion of a phrase like  $\delta\tilde{\alpha}\mu\omicron\varsigma\text{-}\delta\acute{\epsilon}\text{-}\mu\text{ιν}$  as one accentual unit (i.e., prosodic word).<sup>68</sup> As far as alphabetic Greek is concerned, manuscripts occasionally offer similar evidence: in some cases, postpositives are written without their accents, and we find sequences like  $\acute{\epsilon}\gamma\acute{\omega} \mu\epsilon\nu$ ,  $\sigma\acute{\upsilon} \delta\epsilon$ , and  $\acute{\alpha}\lambda\lambda\omicron\iota \gamma\alpha\rho$  (see Vendryes 1945: 107; Devine and Stephens 1994: 354-355). I should point out that in some cases of  $\mu\acute{\epsilon}\nu$  and  $\delta\acute{\epsilon}$  we find double accentuation marks; this is done to signal contrast (van Groningen 1940: 51), however, and I interpret it as a reflection of the sentence-level intonational pattern and not evidence for lexical accent or tonicity *per se*.

Third, ancient grammarians did not have a clitic/postpositive distinction and in fact group the latter with the former. Dionysius Thrax, for instance lists  $\mu\acute{\epsilon}\nu$ ,  $\delta\acute{\epsilon}$ , and  $\gamma\acute{\alpha}\rho$  as enclitic (Anecdota Bekker III.1156; scholiast to Dion. Thrax 466.18 Hilgard).<sup>69</sup>

Fourth, evidence for the prosodically-dependent status of postpositives comes from metrical bridges. In the iambic trimeter, for instance, Porson's Bridge<sup>70</sup> forbids a word-break after an initial heavy syllable of the last metron:

<sup>67</sup> See further Bartoněk (2003: 128). Similar punctuation is found with  $-ge$  ( $> \tau\epsilon$ ), as well as proclitics. Remarkably, a similar practice of marking off prosodic (as opposed to lexical) words is found in Hittite, Old Persian, and Lycian texts.

<sup>68</sup> See Woodard (1997: 45); Morpurgo Davies (1986: 267), (1987: 96).

<sup>69</sup> See Devine and Stephens (1994: 354) and Dionysius Thrax 466.18.

/H<sup>˘</sup>H L H

(3.43) βλέπουσ' ἄν αὐγὰς | τᾶμ' ἔκαρποῦτ' ἄν λέχη.  
 '...looking upon the light, she would enjoy my bed.' Eur. *Andr.* 935<sup>71</sup>

A word-boundary is not permissible between the initial H H of the last metron. This is exactly the behavior that we find with pronominal clitics at Porson's Bridge (I forgo translation of the line):

/H<sup>˘</sup>H L H

(3.44) Πηλέως ἀκούσας συμφοράς, ὧς=νιν χθονὸς Eur. *Tro.* 1127

This evidence suggests that ἄν and other such clitics were prosodically incorporated with their hosts just as pronominal clitics were.

While cases like (3.43) and (3.44) are, in my view, a strong indicator of incorporation into a prosodic word, the data are unfortunately not so straightforward. For one, “violations” of Porson's Bridge are not limited exclusively to clitics, as we see from the following case:

| H<sup>˘</sup>H L H

(3.45) ἔξεστ' ἀνάσσειν ὦν ὄδ' ἠγείτ' οἴκοθεν;  
 Soph. *Aj.* 1101<sup>72</sup>

Here the verb ἠγείτ' and the adverb οἴκοθεν stand at Porson's Bridge. The deletion of the final vowel of the verb brings it into closer cohesion with the following adverb. So while one should not go so far as to conclude that οἴκοθεν is a clitic, it is nevertheless clear that two elements at Porson's Bridge share a very tight phonological cohesion, such as that which we would expect to find between host and clitic.

Fifth, further evidence comes from the notation in musical texts. Devine and Stephens (1994: 354-355) note that δέ and τε do not differ in their absolute level of pitch. This already suggests that the accent on δέ is not meant to reflect a lexical high tone. Devine and Stephens point out that there is a difference in pitch when it comes to the *host* of δέ and τε: that of the former exhibits a greater pitch excursion than that of the latter. The graphic accent on δέ may have been due to misperception: given the higher

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<sup>70</sup> On Porson's bridge, see Devine and Stephens (1984); on the behavior of clitic elements around bridges and caesurae, see Devine and Stephens (1978); Devine and Stephens (1994).

<sup>71</sup> See also Eur. *Herac.* 456.

<sup>72</sup> There are textual issues to wrestle with, as one ms. reads ἦγαγ'. The only parallel for a case like (3.45) is Soph. *Phil.* 22, which is not quite the same: see further Jebb ad loc. For a sequence of adverb (οὔτω) plus verb at the bridge, see Eur. *IT* 580. This example is less striking because οὔτω is a function word, and reduction and cohesion are therefore less surprising—although some, notably Diggle's OCT, still consider it corrupt.

pitch excursion on the host of δέ compared to that of τε, speakers (or, rather, listeners) may have perceived higher pitch on the clitic itself.<sup>73</sup>

Ideally, I would be able to exploit comparative data for further insight. Unfortunately, this is not possible, as the etymologies of most postpositives is either disputed or inconclusive. For our purposes, the item of most interest is ᾗν, and its etymology is disputed. Some would trace its history back to κε(ν) (see Reece 2009: 73-78), while others would pair it with the *an* of Gothic and Latin (see Brugmann 1904: 615; Forbes 1958; Lee 1967; Dunkel 1990; for an overview of the differences between the two analyses, see Neuberger-Donath 1977).<sup>74</sup>

An interesting distributional pattern that has not, to my knowledge, been observed is that, generally speaking, it is easier to find etymologies for graphically unaccented clitics, such as the pronouns, γε (see Frisk, s.v.), τε (cf. Lat. *que*, Skt. *ca*, etc.), ῥα, and the recently-rediscovered ταρ (cf. CLuv. *tar*; see Watkins 1995: 150-151, 336; Katz 2007; Yakubovich 2008: 178-182; Reece 2009: 217-230). With graphically-accented clitics like μέν, δέ, γάρ (<γε-ᾗρ), ᾗν, and δή, comparative equations are harder to establish. It may be the case that this latter class has more recently undergone grammaticalization (i.e., reduction to clisis) and as such it still preserves a trace of word-like prosodic properties (whatever those may be exactly). What exactly this difference is supposed to mean is not yet clear, and this line of inquiry cannot be pursued here any further.

Given the above facts of postpositives, I will assume throughout the rest of this dissertation that they are in fact prosodically equivalent to clitics. The term *postpositive* will thus be abandoned. While I firmly believe that this is a more satisfactory analysis, it does create a new problem: why were some clitics assigned graphic accents while others were not? Given the nature of the evidence, I can only offer speculative answers to this question. But I am inclined to think that, just as secondary accents could be created with “true” enclitics, so were they with postpositives: the difference is simply that with postpositives the secondary accent is fixed on the clitic, and not determined by the accentual position of the host. Thus the difference between postpositives and enclitics would not be one of accented versus unaccented per

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<sup>73</sup> In a peculiar note, Ruijgh (1990: 214 n. 4) seems to claim the opposite. He argues that with postpositives (e.g. ᾗν, δέ) the pitch of the host is lower than that of the postpositive. So for instance in the phrase δὸς δὲ χρυσὸν the pitch of δὸς would be lower than that of δὲ. How he is able to determine the relative pitch level is not explained. The idea is at any rate counterintuitive because if the pitch of δὸς is lower than that of δὲ, then that means there is a rise between the two; as such, one should then expect δὸς with an acute.

<sup>74</sup> With ᾗν there is the further question of why it bears an accent while its functionally (near?) equivalent counterpart κε does not. The relationship between these two is complex, and lacks an adequate discussion. I would just say at the moment that I believe that ᾗν is cognate with Gothic and Latin *an*, and that these latter two languages preserve the earlier meaning of the form, that is, ‘or.’ For the change disjunction > irrealis, see Maori (2008). One possible (but indeed speculative) account for why ᾗν bears an accent is that it goes back to its origin as a disjunctive operator: typically there is a rising sentence intonation on such words. I stress that this is only speculation. Under such an account, it also remains to be explained why Latin and Gothic *an* are proclitic (or at least by and large proclitic), while ᾗν is (at least preponderantly) enclitic.

se, but rather the pattern of secondary accentuation that emerges through incorporation. This makes a fair amount of sense, given that postpositives, just like enclitics, have no independent prosodic existence out of the host-clitic relationship.

### 3 What Constitutes First Position?

We turn now from a consideration of how clitics incorporate with their host to consider what sort of hosts they incorporate with. In other words, if (clausal) clitics are said to fall in second position, what exactly counts for first position? This issue was somewhat murky in Wackernagel (1892), and has been so in subsequent treatments as well.<sup>75</sup> If one simply looks at a page of Greek, it will not be difficult to find cases where a second-position clitic is not literally the second graphic word in a clause. However, not all of these ostensible exceptions actually are what they seem.

Throughout this dissertation, first position will mean the first prosodic word of a clause (or, as we will see later, an intonational phrase). When prosodic word and graphic coincide, we end up with canonical second-position behavior:

(3.46) οὕτω=ἄν=ῶν εἶημεν ὑμέτεροι ἀπόγονοι.  
 ‘Thus we would be your descendents.’ 7.150.8

Here οὕτω is a lexical word, a graphic word, and a prosodic word all in one. In other cases, however, there is a mismatch between prosodic word and graphic word, as in the following case, where a second-position clitic is preceded by the sequence preposition+relative pronoun:<sup>76</sup>

(3.47) ...κατ’=ἦν=ἄν πόλιν ἐξενειχθῆι...  
 ‘to whichever city it [= a corpse killed by a crocodile] was carried...’ 2.90.3

The preposition and relative pronoun open the clause, which means that ἄν is the third morphological word in the clause. We might have expected it to be positioned directly after the preposition, as such:

(3.47.1) \*...κατ’=ἄν ἦν πόλιν ἐξενειχθῆι...

But here this does not happen because κατ’ is here proclitic<sup>77</sup> and thus forms a prosodic word with the following relative pronoun. We thus have the following prosodic structure (subscript *p* marks proclitic association):

<sup>75</sup> The formulations for Wackernagel’s Law differ quite a bit, e.g. Woodard (2004: 645) says that WL clitics are positioned after the first “accented word.”

<sup>76</sup> See also 2.66.15, 2.66.17, 2.115.24, 2.90.3, 3.38.12, 3.41.2, 3.82.20, 3.155.20, 4.70.1, 5.111.6.

<sup>77</sup> See Probert (2003: §267) for a list of proclitics; all of the Greek prepositions are listed there. Of course, under certain circumstances, prepositions do not behave as proclitics, e.g. when the preposition functions

$$(3.47.2) (\chi\alpha\tau'_p=\tilde{\eta}\nu)_{\omega}=\tilde{\alpha}\nu$$

So while  $\tilde{\alpha}\nu$  is the third graphic and morphological word in the clause, it falls second to the first prosodic word. Thus (3.47) lines up exactly with (3.46), and there is no violation of Wackernagel's Law. The lesson here is that there is not a one-to-one relationship between graphic (or lexical) words and prosodic words: it is possible, and in fact common, for a prosodic word to be composed of more than one lexical or graphic word.

We find the exact same phenomenon with definite articles, as in the following case:

$$(3.48) \acute{o} \tilde{\eta}\lambda\iota\omicron\varsigma \tilde{\alpha}\nu\dots \qquad 2.26.7$$

While  $\tilde{\alpha}\nu$  appears to be in third position, a closer look at prosodic structure reveals it to be in second position after the first prosodic word, here composed of  $\acute{o}$ <sup>78</sup> and  $\tilde{\eta}\lambda\iota\omicron\varsigma$ .<sup>79</sup>

$$(3.49) (\acute{o}_p=\tilde{\eta}\lambda\iota\omicron\varsigma)_{\omega}=\tilde{\alpha}\nu\dots$$

So again  $\tilde{\alpha}\nu$  selects the first prosodic word of its clause as its host. The notion of a prosodic word thus helps clarify what constitutes first and second positions. It needs to be borne in mind that this is a very powerful notion, however, for it eliminates a host of potential counterexamples. One thus has to exercise care in what one deems a proclitic. For there is the potential for circularity: one can claim that an item is proclitic because of its behavior around second-position clitics, and claim that the second-position clitic is actually second because an item preceding the host is proclitic. (Further complications involving proclitics will be presented in the next section.)

### 3.1 Diagnosing Proclisis

I thus only describe as proclitics items that have been independently verified as such. Lists of proclitics can be found in any of the handbooks, e.g. Chandler (1881); Probert (2003). I cite here just a sampling of the type of evidence that suggests proclisis, and specifically for the definite article. Some evidence comes from punctuation:

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as an adverb. Neither of these is particularly common in Classical Greek. In the Homeric dialect, there is, however, considerable difference in these areas.

<sup>78</sup> On the proclitic status of the definite article, see Allen (1973: 25); Sommerstein (1973: 136-139); Probert (2003: §267(a), §277). In the past, some have tried to claim that the definite article was not proclitic, e.g. Vendryes (1929: 76); there is hardly reason to accept this nowadays. It is only minimally (if at all) bothersome that ancient Greek grammarians only recognize an enclitic, and not a proclitic, prosodic category. (The term *proclitic* originates only with Hermann 1801: 96-101.) For one, simply because they were not explicitly aware of a phenomenon does not entail its non-existence. Second, there is no reason for modern insight to be restricted to their descriptive categories.

<sup>79</sup> In earlier literature, article-noun pairings like this have simply been referred to as a “unit,” e.g. Dover (1960: 16-17) and later Marshall (1987: 10). One failing of this description is that no motivation is offered as to why some items should form “units” and others should not.

(3.50) ἀριστιον : και πασιας : ανευθε-  
 [τε]ν : τει αθηναιαι : απαρχεν  
 ‘Ariston and Pasia dedicated to Athena the primal offering.’ *IG I<sup>3</sup>702*

While the function of these triple-punct markers remains somewhat opaque, it seems reasonably secure that they indicate a prosodic division of some level. This phenomenon is attested broadly among inscriptions (see Threatte 1980: 80). Note also in this inscription that neither και nor the article τει is separated from the subsequent word by a division-marker; this is exactly what we expect as these forms are also thought to be proclitic.

We also have evidence from Porson’s Bridge (here again I forgo translation, this time on account of the corruption):

/ H ~ H L H

(3.51) πικρῶς †ἄν οἴμαί γ’ ἀγγελεῖν† τοῦς<sub>p</sub>=σοῦς λόγους. *Eur. Hel. 448*

Since there is no reason to believe that σοῦς here is enclitic, I interpret this line as evidence of the proclitic status of the article (which is signaled by the subscript *p*).<sup>80</sup> Lastly, evidence comes from assimilation of the final segment of the definite article to the first segment of a following noun (see Sihler 1995: §239.6):

(3.52) τὸν πόλεμον → τὸμ πόλεμον

The assimilation of ν → μ is a word-internal one; but here, given the close prosodic relationship between the article and the noun, it is being carried out across a (morphological) word boundary. A similar phenomenon is at perhaps work in cases like inscriptional τοιλακεδαμονιοις < τοις<sub>p</sub>=λακεδαμονιοις (Sihler 1995: §239.6; for the phrase, see *IG V,1 1562* and *IvO 252*, two Elean inscriptions dated to the 6<sup>th</sup> c. BCE), with loss of σ in an intervocalic cluster σλ (Sihler 1995: §227.2).<sup>81</sup>

I should point out that this is not the standard treatment of these items. In many languages exhibiting second-position effects, there is typically a class of (functional) items that simply do not “count” for position: these are known as null-position elements (see Garrett 1990: 33-34). The standard practice is simply to stipulate for a language which items constitute null-position elements. We cannot do this for Greek, because, as we will see in section 3.2, null-position elements are not always null: sometimes they do not “count” in the calculation of second-position and at other times they do, and behave as first-position hosts.

<sup>80</sup> Similar evidence is available for other proclitics, e.g. οὐκ (*Eur. Phoen. 401*), οὐθ’ (*Eur. Bacc. 187*), and ὦς (*Eur. Phoen. 1172*).

<sup>81</sup> The alternative would be to posit assimilation of σ > λ followed by degemination of λ.

### 3.2 Autonomous Strings

In the vast majority of cases, a prosodic word will correspond either to a lexical word, or to a lexical word plus clitics. In a small handful of cases, we actually find cases of two lexical words behaving as though they were one;<sup>82</sup> that is, they have taken an autonomous word-like status (for this process, which is often referred to as lexicalization,<sup>83</sup> see Chafe 1994: 113; Brinton and Traugott 2005). As Devine and Stephens (1994: 348-349) note, “Common syntagms become fixed phrases and fixed phrases become lexical units.” As such, they serve as hosts of second-position clitics, and do not permit clitics in their midst, as we see with the expression ἴσα πρὸς ἴσα (on which see Dover 1961: 17); the segregation of ταῦτα is to be ignored for the moment:

(3.53) ταῦτα μὲν δὴ (ἴσα=πρὸς=ἴσα)<sub>ω</sub>=σφι γενέσθαι.  
 ‘These things, they were retribution for them.’ 1.2.6<sup>84</sup>

A similar phenomenon is found with the collocation of ὅς and ἄν, which is typically split by δέ to yield ὅς δ’ ἄν (e.g. Hdt. 2.65.21), but occasionally the relative and the modal particle have an autonomous unity and yield ὅς ἄν δέ (e.g. Hdt. 1.138.5, 7.8.48). Devine and Stephens (1994: 348-350) cite further examples, which they deduce on the basis of resolutions; cf. also Hale (1987: 108-109) for cases of complex conjunctions in Avestan, which are paralleled in Greek by e.g. τέωι τρόπωι (Hdt. 2.57.7). The topic of lexicalized hosts is only a tangential one to the main arguments of this dissertation (as empirically it does not occur that often), and will not concern us any further.

### 3.3 “Exceptions” to Wackernagel’s Law

Now that we have an adequate definition of first position, it is possible to state explicitly what is and is not an exception an exception to Wackernagel’s Law. As already stated above, cases of clause-initial sequences of proclitic+host+clitic are not exceptions to “second” position placement because the host material constitutes one prosodic word. I consider exceptions to Wackernagel’s Law to be cases of the following sort (## marks a clause boundary):

*Exceptions to Wackernagel’s Law*  
 (3.54) ##ω<sup>+</sup> ω=cl.

What (3.54) says is that if the host of a second-position clitic is preceded by a minimum of one prosodic word (there may be and certainly are cases where there is more than one

<sup>82</sup> In Hittite, we have examples of two lexical words, e.g. a head noun and a dependent genitive noun, forming one prosodic word: see Melchert (1998).

<sup>83</sup> I avoid this term here because I do not want to raise the issue or make a claim about whether such phrases are actually listed in the mental lexicon as one unit.

<sup>84</sup> We may be dealing with the same phenomenon at 1.215.11 where οὐδὲ γὰρ οὐδέεις may be coded as one prosodic word, i.e. (οὐδὲ γὰρ οὐδέεις)<sub>ω</sub>=σφι. (Other mss. read οὐδὲ γὰρ οὐδέ, but the point would be the same.)



word), then it constitutes an exception to Wackernagel’s Law. In chapters three through six, I explore three systematic patterns of exceptions and attempt to explain why the second-position clitic shows up in an exceptional position. To anticipate I will claim that in a case like (3.54) what we have prosodically is the following:

$$(3.55) \#\#(\omega^+)_i (\omega=cl. \dots)_i$$

The material responsible for the exceptional position of the clitic forms its own intonational phrase (or more than one if you have enough material), and the host of the second-position sits at the left edge of an intonational phrase. Prosodically, then, what we find in (3.55) is no different from what we find in canonical cases, namely:

$$(3.56) \#\#(\omega=cl. \dots)_i$$

Thus, there is nothing exceptional about the position of the clitic in (3.55). Under this analysis, the number of exceptions to Wackernagel’s dwindles to a mere handful.

Lastly, a word about clitic chains, that is, situations in which a prosodic word hosts more than one clitic. I treat all of the clitics in the chain as in “second” position, regardless of their internal order. The order of items within the clitic chain is an understudied (and complex) topic about which little is known. An even less studied topic is that of split enclisis, whereby second-position clitics are dispersed throughout a sentence. This topic is mentioned in chapter five, but has not been systematically investigated.

#### 4 Variable Prosodic Coding

Thus far I have categorized lexical items statically as either proclitics, enclitics, or prosodic words, which is the standard practice in the handbooks.<sup>85</sup> There is ample evidence to impugn such a rigid classification, however: some items behave as proclitics on one occasion and as full prosodic words on another. Take, for instance, the negative οὐ(χ). On some occasions it behaves as a prosodic word and hosts a clitic, as in the following example:

$$(3.57) (\text{οὐ})_{\omega=\sigma\epsilon} \acute{\alpha}\pi\acute{\epsilon}\sigma\tau\epsilon\iota\lambda\epsilon \text{ Ἄρταφρένης ἔμέο πείθεσθαι καὶ πλέειν τῆι ἄν ἐγὼ} \\ \text{κελεύω;} \\ \text{‘Did Artaphrenes not dispatch you to obey and to sail wherever I order?’} \\ \text{5.33.19}$$

At other times, however, it appears as a proclitic and does not directly host a clitic:

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<sup>85</sup> See e.g. the lists in Probert (2003). I think this categorical system is a by-product of the accentuation system itself. For the vast majority of words either bear an accent or do not. Variable patterns such as those exhibited by the pronouns or εἰ are marginal.

(3.58) ...(*οὐκ<sub>p</sub>=ἀναπέσει*)<sub>ω</sub>=*μιν* μεταβουλεύσασθαι.  
 ‘...he will not persuade him to change his mind.’ 1.156.4

The difference in prosodic behavior is reflected graphically: in (3.57), *οὐ* hosts a clitic and is stressed, while in (3.58), *οὐκ* is neither stressed nor hosts the clitic.<sup>86</sup>

The alternation that *οὐκ* exhibits between prosodic word and proclitic is often described as follows: if a clitic follows the negative, it will be stressed, as in cases like (3.58). I should make it clear that, while such a description is empirically true, it is backwards. It is not the presence of the clitic that induces the accent on *οὐκ*(*κ*), but rather that *οὐκ*(*κ*) is stressed for pragmatic/semantic reasons, and its consequent prosodic body makes it a licit clitic host. Broadly speaking, in counterexpectational, asseverative, and clarificatory contexts one would expect stressed negatives. In (3.57), for example, the negative is stressed because the speaker is asking for an answer about an event that he was expecting to happen, but did not (i.e., a counterexpectational scenario). The meaning can be expressed with stress in English: ‘Did Artaphrenes NOT dispatch you to obey and to sail wherever I order?’<sup>87</sup> We will return to this topic in chapter four in relation to the syntax-phonology interface.

This alternation in prosodic coding is not by any means limited to *οὐκ*(*κ*). The same graphic variation is found on the conditional marker *εἰ*; the verbs *εἰμί* and *φημί*; the adverb *ποτέ*; the particle *δή*; and the pronoun *τινες/τινές*. The clitic pronoun *με* perhaps alternated with a stressed *μέ* as well as a prefixed *ἐμέ*, but the evidence for the former is extraordinarily slight, and perhaps ultimately non-existent.<sup>88</sup> Even without graphic indication, we know from metrical evidence that certain items can alternate between full prosodic words and clitics.<sup>89</sup> It is thus not surprising to find clitics sometimes hosted by relative pronouns, the definite article, and *καί*, and at other times not (cf. Whaley 1997: 113 for the semantic effects reflected in the variable prosodic coding of *the*). The variation of these items in relation to second-position clitics will be presented more fully in chapter four.

Thus I assume that certain lexical items can have variable prosodic status. While I have offered some evidence to suggest that the alternation may be semantically/pragmatically-conditioned, more investigation on this front is needed, which will not be undertaken here. It is also not clear how such items are to be handled

<sup>86</sup> We deduce its proclitic status also from its preservation of the word-final stop (-*κ*#). Word-final stops were lost across the board in Greek, but when *οὐκ* adhered (rightward) to its host, its velar stop was no longer word final, and thus not subject to loss; see Sihler (1995: 227).

<sup>87</sup> Alternatively, the negative will bear accentuation when it has clausal scope, and can be paraphrased (in questions) with ‘is it not the case that...?’

<sup>88</sup> See e.g. Corp. Hipp., *De morb. pop.* 7.1.124.1. A TLG search for *μέ* will bring up Eudoxus, *Ars Astr.* col. 22 line 12, but this is an error for the numeric abbreviation *με*’ (= 45).

<sup>89</sup> See Devine and Stephens (1994: 310). There are parallels in Latin and Hittite. For the former, see Adams (1994a: 69); for the latter, see Melchert (1998). I have left out of this discussion another complication, which is that otherwise proclitic words can be coded as intonational phrases. How one distinguishes proclitic from intonational-phrase *καί* is not an easy matter. See chapter 00.

at a theoretical level: are they prosodically underspecified, or are there two different representations of the same item?

## 5 Clitic Polarity

The dynamic status of a clitic is not limited solely to its prosodic status: it extends also to the direction of its association, that is, whether it incorporates to the left or the right. All second-position clitics are almost universally described as enclitics. To my knowledge, the only discussion of the ability of an enclitic to associate rightward is Devine and Stephens (1994: 365-368), who have argued that *ἔν* and the pronominal clitics can associate rightward. There are four types of evidence for the proclitic behavior of enclitics. The strongest evidence (which Devine and Stephens 1994: 368 mention only in passing) comes from resolution bridges, i.e. Ritschl's Law (for a brief description of the phenomenon in Plautus, see Fortson 2009: 7-8), according to which a heavy syllable resolved into two light syllables does not admit a prosodic-word boundary between them, and Porson's Bridge; these are discussed in sections 5.1 and 5.2, respectively. In addition to these two diagnostics, post-caesural clitic placement provides evidence for proclisis, which is discussed in section 5.3. Lastly, there is occasional evidence for proclisis of the pronominal clitics from inscriptional punctuation, which is cited amidst the metrical data. (The diagnostics are thus similar to those used above in section 3.1 for diagnosing proclisis generally.)

The evidence below all suggests that the directionality of clisis may not be an inherent property of individual clitics (as proposed by e.g. Klavans 1995: 98, and implicitly asserted in the standard handbooks of Greek and Latin), but rather determined by a process of language-specific operation Stray Adjunction (so Anderson 1992: 203). What this means is that clitics would simply be regarded as sub-prosodic word orphan elements that need to be incorporated into higher-order prosodic constituents. How clitics were incorporated would vary from language to language and possibly even from clitic to clitic. Booij (1996: 233) has taken this line of reasoning further to suggest that there is no absolute parameter within a language (e.g. 'associate leftward'): rather there is a preferred direction of association, but the alternate direction is also a possibility under certain prosodic circumstances; he explores Dutch data of this sort in Booij (2006: 233-238). While I cannot present a complete analysis here, I believe that the explanation for the Greek data should lie somewhere in this direction. As I note below in section 5.2, in cases of reverse polarity, it is not as if we are dealing with two different lexical items, i.e. an enclitic and a proclitic one. Rather, enclisis is the rule, while proclisis is induced only under certain prosodic conditions. What those prosodic conditions are exactly remains to be worked out.

The moral of this discussion is that, while nearly every scholar assumes that clitics have static directionality, the actual data are more complicated, as there is strong evidence to suggest proclisis in some cases. While I am well aware of these complications, I too will assume throughout this dissertation that the clitics under investigation are in fact enclitics, and stably so. This assumption may lead me astray at times, but given the

difficulties of detecting rightward-association of otherwise enclitics, I see no other viable methodological path.<sup>90</sup>

## 5.1 Resolution-Bridges and Proclisis

The evidence for the claim that  $\check{\nu}$  can associate rightward comes primarily from metrical texts, as in the following (‘ $\sim$ ’ marks a resolution-bridge):

$$(3.59) \quad \begin{array}{c} \text{H} \quad \text{H} \quad \text{L} \quad \text{H}/_1\text{H} \mid \text{L} \sim \text{L} \quad \text{LH}/_2\text{H} \quad \text{H} \quad \text{L} \quad \text{H}/_3 \\ \acute{\alpha}\lambda\lambda' \text{ } \omicron\upsilon\chi \text{ } \acute{\omicron}\mu\omicron\iota\omega\varsigma \mid \check{\alpha}\nu_{p=\acute{\omicron}}\text{-}\acute{\omicron}\text{-}\theta\epsilon\acute{\omicron}\varsigma \text{ } \tau\iota\mu\grave{\eta}\nu \text{ } \acute{\epsilon}\chi\omicron\iota \\ \text{‘But not the same way would god have honor.’} \end{array} \quad \text{Eur. } \textit{Bacc.} \text{ } 192$$

Prima facie, such a parsing seems odd: after all, this looks like a canonical second-position case with  $\check{\nu}$  hosted by the first prosodic word ( $\acute{\alpha}\lambda\lambda'$ - $\omicron\upsilon\chi$ - being proclitic). This alternative parsing would assume a medial caesura as follows:

$$(3.60) \quad \begin{array}{c} \text{ } /_1\text{H} \quad \text{L} \mid \text{L} \quad \text{LH}/_2 \\ \acute{\alpha}\lambda\lambda' \text{ } \omicron\upsilon\chi \text{ } \acute{\omicron}\mu\omicron\iota\omega\varsigma\text{-}\check{\alpha}\nu \mid \acute{\omicron}\text{-}\theta\epsilon\acute{\omicron}\varsigma \text{ } \tau\iota\mu\grave{\eta}\nu \text{ } \acute{\epsilon}\chi\omicron\iota \end{array}$$

The difference between them comes down to where one posits the caesura. In (3.59), the caesura falls after the fifth foot, where it most commonly falls. In (3.60), we have a medial caesura: it is widely accepted, for Euripides at least, that medial caesura only occurs in elided environments.

The motivation for the analysis in (3.59) comes from a constraint on resolution, which occurs above in the sixth syllable, where two light syllables ( $\check{\nu}$  and  $\acute{\omicron}$ ) occupy a heavy position.<sup>91</sup> Resolved heavy syllables are subject to resolution bridges, which means that there should be no (prosodic) word boundary between the two light syllables.<sup>92</sup> Under the analysis in (3.59),  $(\check{\alpha}\nu\text{-}\acute{\omicron}\text{-}\theta\epsilon\acute{\omicron}\varsigma)_{\omega}$  all form one prosodic word. In (3.60), however, the resolved light syllables would be split between two prosodic words with an intervening caesura:  $(\acute{\omicron}\mu\omicron\iota\omega\varsigma\text{-}\check{\alpha}\nu)_{\omega} \mid (\acute{\omicron}\text{-}\theta\epsilon\acute{\omicron}\varsigma)_{\omega}$ .

<sup>90</sup> And I would also add that the existence of rightward-associating enclitics does not present a challenge to the prosody-dominant model of clitic distribution presented in chapters four and five: for the clitic is still selecting a host that occupies the edge of an intonational phrase. The only difference is the direction of association.

<sup>91</sup> Müller (1866); Descroix (1931: 164-167, 187-193); Dodds ad loc., whose description is awkward; West (1982: 86). Cropp and Fick (1985: 29) observe that sixth-syllable resolutions are on the whole more frequent than resolutions in any other position of the line; (3.59) also illustrates the more common subtype (also known as Zielinski’s seventh law) whereby the preceding anceps is filled by a heavy syllable. Cropp and Fick (1985: 44-45, 48) report seventy-three tokens of this type of resolution (where a word-break occurs between the resolved syllables) in the extant plays of Eur., and six in the fragmentary ones. What is unexpected about (3.59) is the nature of the elements in the resolved positions, not the resolution-type itself. For often what one finds in this type of resolution is the definite article followed by μέν, δέ, or τε: in (3.59) we have  $\check{\nu}$  where we would otherwise expect the definite article and the definite article where we would otherwise expect μέν, δέ, or τε.

<sup>92</sup> See also Soph. Fr. 739.1 Radt.

It is possible that further evidence for the proclisis of ἄν can be obtained from comedy, as in the following examples:

H L<sup>˘</sup>L LH/H | H L LL/L H LH

(3.61) οὐκ<sub>p</sub>=ἄν<sub>p</sub>=ἀποδοίην | οὐδ<sub>p</sub>=ἄν<sub>p</sub>=ὀβολὸν οὐδενί  
 ‘I wouldn’t give even an obol to anyone’ Ar., *Nub.* 1250

H L<sup>˘</sup>LLH/H | LLLH/L H L H/

(3.62) ὥστ<sub>p</sub>=ἄν<sub>p</sub>=ἐπάνω μὲν | Προξενίδης ὁ Κομπασεὺς  
 ‘...so that on top Proxenides the braggart...’ Ar., *Av.* 1126

In (3.61), (οὐκ<sub>p</sub>=ἄν<sub>p</sub>=ἀποδοίην)<sub>ω</sub> possibly forms one prosodic word, as does (οὐδ<sub>p</sub>=ἄν<sub>p</sub>=ὀβολὸν)<sub>ω</sub>. Likewise in (3.62), we may have (ὥστ<sub>p</sub>=ἄν<sub>p</sub>=ἐπάνω)<sub>ω</sub>. Evidence from comic trimeters is not as probative, however, as in this genre the “looser” style does not so rigorously obey resolution bridges.

There is evidence also for proclitic personal pronouns, as in the following example where τί and με cohere with ἀπάγεσθε (see also Soph. *Phil.* 501):

/L | L<sup>˘</sup>LLH/

(3.63) καὶ νῦν τί μ’ ἄγετε; | τί<sub>p</sub>=μ’<sub>p</sub>=ἀπάγεσθε; τοῦ χάριν;  
 ‘And now—why do you take me? Why are you leading me away?  
 For what?’ Soph. *Phil.* 1029

Occasionally inscriptional punctuation also suggests proclisis of pronominal clitics (cf. *IG* I<sup>3</sup>699):

(3.64) 2 δεκατεν : αθηναιαι : πολιοχοι  
 1 hierokleidēs : μ’ανεθεκεν : γλαυκιο  
 ‘Hierokleides (son of) Glaukios dedicated me, as a tithe,  
 to Athena Poliokos (city guardian).’ *IG* I<sup>3</sup>775

The triple-punct marker appears to mark off prosodic words. If this is in fact the case, then we can conclude that μ’ is associating rightward with its host, ανεθεκεν.<sup>93</sup>

Devine and Stephens (1994: 365-368) do not mention discourse particles in their discussion of clitic directionality, but there is evidence to suggest the ability of δέ to associate rightward (in section 4.3, I present evidence for the rightward association of μέν and γάρ, as well). It comes not from Porson’s Bridge, but rather resolution bridges:

<sup>93</sup> The presence of *nu*-ephelestikon in ανεθεκεν is entirely mysterious. Its presence would suggest a strong prosodic break between this form and γλαυκιο. But why such a break should occur here, and whether this has anything to do with the rightward association of με are not clear.

L L  $\wedge$  L L H/ H |  
 (3.65) τὸ=δέ=πλέον, ἤλθον Ἀμφιάρεώ γε πρὸς βίαν.  
 ‘What is more, I went in spite of Amphiaereus.’

Eur. *Supp.* 158

The resolution bridge between δέ and πλέον makes it clear that prosodically they belong to the same word. Presumably τό also belongs to this prosodic word, and the proclisis of δέ is in fact triggered by the definite article.

I raise this issue with δέ because I want to make it clear that in a sequence like the following, I consider σφι to be in canonical second position:

(3.66) ἦ=δὲ=Πυθίη=σφι χρᾶι τάδε.  
 ‘The Pythia prophesies to them the following.’

1.66.8

I adopt this analysis under the assumption that (ἦ=δὲ=Πυθίη)<sub>ω</sub> forms one prosodic word.<sup>94</sup> It is possible for the definite article to be coded as a prosodic word; if it were so coded in (3.66), then we would expect the sequence ἦ=δὲ=σφι Πυθίη. It is not clear to me why δέ in (3.66) is put in a position where it undergoes proclisis, but σφι is not. This may have to do with the different selectional requirements of the clitics (e.g. δέ selects for a host at the left edge of the utterance or a prosodic word). Alternatively, it may be the case that δέ is more labile in its ability to undergo proclisis.

### 5.1.1 Violation of Resolution-Bridges?

One objection to the analysis in the preceding section is the suggestion that it is in fact possible to violate resolution-bridges. Dodds, for instance, seems to think that it is not much of a problem, and observes, as others do, that Euripides in his later plays composes under a looser set of metrical constraints compared to earlier tragedians. He cites the following example as a case of a violated bridge-resolution:

H L L L | H  
 (3.67) οὐδὲ πάθος | οὐδὲ ξυμφορὰ θεήλατος  
 ‘no suffering, nor divinely imposed accident’

Eur. *Or.* 2

The two light syllables of H L L of οὐδὲ πάθος exhibit resolution and yet, according to Dodds, belong to two different words. But the proclitic behavior of οὐδέ is unquestionable, and there is thus no bridge violation here, as we are dealing with one prosodic word, i.e. (οὐδὲ=πάθος)<sub>ω</sub>. Further examples cited by Müller (1866), Zieliński (1925), Descroix (1931: 164-167, 187-193), and West (1982: 86) can be handled by the same analysis, that is by treating the resolved material as belonging to a prosodic word.

<sup>94</sup> Abgayani and Golston (forthcoming) have used cases like this to argue that clitic placement in Greek cannot in fact be prosodically conditioned. Their claim that ὁ is prosodically insufficient to host a clitic like δέ (they specifically mention γάρ) is only true in cases where ὁ is in fact proclitic. They do not consider the possibility that ὁ (or other forms of the definite article) can be coded as prosodic words. Moreover, they reveal no awareness of the possibility of induced proclisis.

The “looseness” of later Euripidean composition may lie in allowing both prosodic and lexical words at bridges, as opposed to just the latter. The bridge-constraint is thus prosodically real and a reliable indicator of proclisis.

### 5.1.2 A Quirk

This analysis of (3.59) above is complicated by the following possibility, namely that Euripides could have cast the line as follows:

$$(3.68) \quad \begin{array}{c} \text{H} \quad \text{H} \quad \text{L H/H} \mid \text{L L L H} \quad / \text{H H L H} / \\ \acute{\alpha}\lambda\lambda' \text{ οὐχ} \text{ ὁμοίως} \mid \text{ὄ-θηδός-}\acute{\alpha}\nu \text{ τιμὴν} \text{ ἔχου}$$

Composed thus, the bridge-violation vanishes and ἄν behaves as an enclitic just as we expect it to. Given the possibility of (3.68) it is hard to see why Euripides preferred (3.59). I can suggest two possible motivations for the avoidance of the prosodic structure in (3.68). The first is that there may have been a preference for clitics in resolved environments. Two clitics may have been durationally the shortest possible sequence, and perhaps their total duration was closer to that of an integral heavy syllable than two non-clitic resolved syllables. Alternatively, but along the same lines, there may have been a dispreference for resolving across a morphological boundary (as the resolution would have fallen between the article and the first syllable of the noun), even though ὄ-θηδός behaves as one prosodic word.

## 5.2 Porson’s Bridge and Proclisis

Porson’s Bridge serves as a similar diagnostic for rightward association of enclitic items, as in the following example (for further examples, see Devine and Stephens 1994: 368):

$$(3.69) \quad \begin{array}{c} / \text{H} \sim \text{H L H} / \\ \text{κελαινόχρως} \text{ δὲ} \text{ πάλλεται} \text{ } \mu\omicron\upsilon\text{ } \text{-καρδία.} \\ \text{‘My darkened heart trembles.’}$$

As noted above, Porson’s Bridge forbids a (prosodic) word-break between the first and second syllables of the third metron, when the first syllable is heavy, as the possessive μου is here.<sup>95</sup> Thus we conclude that μου associates rightward with its host καρδία.

While Devine and Stephens (1994: 365-368) do not mention μέν in their discussion of clitic directionality, it too can associate rightward, as Porson’s Bridge again shows:

$$(3.70) \quad \begin{array}{c} / \text{H} \sim \text{H L H} / \\ \acute{\eta}\mu\epsilon\acute{\iota}\varsigma \text{ τοιοῖδ' ἔφουμεν,} \mid \acute{\omega}\varsigma\text{ } \mu\acute{\epsilon}\nu\text{ } \text{-σοὶ} \text{ δοχεῖ,} \\ \mu\acute{\omega}\rho\omicron\iota\text{...}$$

<sup>95</sup> In tragedy and Archilochus, Semonides, and Solon, lexical monosyllables (i.e., monosyllabic content words) never occupy the third anceps: so Devine and Stephens (1984: 6).

‘I was born like this, as you think,  
a fool...’

Soph. *OT* 435-436

Here μέν associates rightward and incorporates with σοί to form μέν-σοί. Rightward association is also possible with γάρ,<sup>96</sup> as we see in the following example:

/ H˘H L H

(3.71) ἦρου τόδ’; αἰσχρόν γ’ εἶπας. | οὐ<sub>p</sub>=γάρ<sub>p</sub>=νῦν ἀκμή;  
 ‘Are you asking this? You’ve said a shameful thing.  
 For is it not the critical moment?’ Eur. *El.* 275<sup>97</sup>

While the motivation for rightward association of enclitics is by and large unknown (although see the next section for a suggestion), in (3.70) and (3.71) the reason for the change in directionality seems reasonably clear. For in both of these examples the enclitic is positioned between a proclitic (on the left) and an orthotonic item (on the right);<sup>98</sup> for proclisis of ὡς note its appearance at Porson’s Bridge at Eur. *Phoen.* 1172. This environment poses a problem for the leftward association: the enclitic cannot take a host on its left, as proclitics are not licit hosts for enclitics. To repair the situation, its polarity is reversed, so that it can associate rightward together with the proclitic.<sup>99</sup> In situations like (3.70)-(3.71), rightward association is a decidedly local phenomenon brought on by the environment surrounding an enclitic. This is exactly what we should expect, given that we do not find true proclitic behavior of μέν and γάρ elsewhere (e.g. clause- or line-initial placement).

### 5.3 Post-Caesural Clitic Placement

<sup>96</sup> There is no evidence for the rightward association of δέ from Porson’s Bridge, but I believe that this gap is accidental. For δέ to scan heavy and thus be under Porson’s Law, it needs to be followed by a word beginning with an initial consonant cluster. δέ is found before word-initial mute+liquid clusters (e.g. Eur. *Supp.* 747), but these do not “make position” as they syllabify together as an onset, as opposed to being split between the coda of the preceding word (in this case δέ) and the onset.

<sup>97</sup> It may be the case that οὐ in this example is not proclitic, but and bears greater pragmatic and prosodic prominence. One possibility is the coding οὐ γάρ<sub>p</sub>=νῦν ἀκμή, according to which γάρ would still be proclitic, but proclisis would not be induced by a preceding proclitic (i.e., in this case οὐ), as we have in (3.70). If this is correct, it is not clear why γάρ is associating rightward. Another possibility is that γάρ is actually enclitic, and the phrase is coded οὐ=γάρ νῦν ἀκμή. This violates Porson’s Bridge, however, and so the question would be whether or not one accepts such a violation.

<sup>98</sup> NB, however, Eur. *Andr.* 230, where the word preceding γάρ, κακῶν, is not a proclitic.

<sup>99</sup> Another possible solution would be for the enclitic to become orthotonic, in which case it would not require a host from either side. I presume that a change in prosodic status (from enclitic to orthotonic word) is a more costly solution than a change in directionality.



The final way of diagnosing proclisis is through post-caesural clitic placement, as we have with σοι in the following example (for further examples see Devine and Stephens 1994: 365-368):

H H L H /H H L H/ L H L L  
 (3.72) οὔτοι καμοῦμαί | σοι<sub>p</sub>-λέγουσα τὰγαθὰ  
 ‘Indeed I will not tire of telling you the good things’ Aesch. *Eum.* 881

The pronoun σοι must be either proclitic, orthotonic, or enclitic. To be enclitic, we have to presuppose either a weak caesura or median diaeresis; Devine and Stephens (1994: 367-368) argue that there is no motivation for such a metrical license in cases like (3.72). The pronoun cannot be orthotonic because it never stands in clause- or verse-initial position. The only possibility left is that the clitic is thus proclitic, and associates rightward with its host λέγουσα.<sup>100</sup> If one accepts proclisis in cases like (3.72), then the existence of post-caesural enclitics, which has been posited in the literature (Descroix 1931: 284-287; West 1980: 83) vanishes.

While I by and large agree that we can use postcaesural positioning to diagnose proclisis, I consider this evidence inferior to that from resolution bridges. My reservation stems from the difficulty of ruling out alternative parsings of a metrical line. With (3.72), for instance, how do we know that we do not have a caesural break after the second position:

H H L H /H H L H/ L H L L  
 (3.73) οὔτοι | καμοῦμαί-σοι (|) λέγουσα τὰγαθὰ  
 ‘Indeed I will not tire of telling you the good things’ Aesch. *Eum.* 881

In addition to a caesura after οὔτοι, we might possibly have a second one just before λέγουσα, which I have put in parentheses. A caesura after οὔτοι is not hard to imagine especially in light of its emphatic/confirmatory force.

Devine and Stephens motivate their claim by arguing that rightward association of enclitics is strongly correlated with rightward syntactic cohesion (i.e., the element governing the clitic is in the right caesural group in the line). So for instance in (3.73), σοι is governed by λέγουσα, and this, according to Devine and Stephens, is what induces the rightward association; (3.59) would also fall into this category. Such a mechanism is not unlike that suggested above for (3.70)-(3.71) in that proclisis is a contextually-induced phenomenon: but rather than being motivated by the push of a preceding proclitic, rightward association for cases like (3.73) would be induced by the pull of a governing syntactic element. This “pull” is only minimal, however: for apparently it can

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<sup>100</sup> There is the further possibility of ambiclis, according to which the clitic would be both proclitic and enclitic at the same time. Devine and Stephens (1994: 766) advance Aesch. *Cho.* 766 as an example of this phenomenon, and seem to believe that it can only happen when the pronoun bears a thematic relationship with words in either caesural group of the line. Ambiclis is so poorly understood, however, that I will not consider this possibility any further.

only alter the polarity of a clitic, and not its actual position. While this is an intuitive idea, enclitics in postcaesural position are not always governed by an element in that same caesural group. In fact, in Devine and Stephens' sample (see 1994: 367), 73.53% of postcaesural clitics cohere with an element in the right caesural group (while 26.47% cohere to the left). The correlation appears to be significant, but is at the same time clearly not a necessary condition to induce proclisis. Furthermore, when we are dealing with discourse particles, and not pronominal clitics, it is not as easy to identify a governing syntactic element, as with γάρ in the following example:

(3.74) Ἀγαμέμνωνος μὲν | γάρ<sub>p</sub>=τύχας ἠπιστάμην  
 'For I learned the fate of Agamemnon' Eur. *Or.* 360

Unless one is prepared to argue that γάρ is here governed by ἠπιστάμην, it is hard to find syntactic motivation for the rightward association of the particle.

#### 5.4 Clause-initial ἄν in Prose

As noted above, without the aid of metrical diagnostics, it is generally very difficult (if not impossible) to ascertain when a clausal clitic like ἄν or a pronoun is proclitic. In Herodotus, I am aware of no such cases, although at the same time I cannot rule out the possibility. In other authors there is clearer evidence of proclisis as we find, for example, clause-initial ἄν in Demosthenes (from Smyth §1764):

(3.75) τί οὖν, ἄν=τις εἶποι, ταῦτα λέγεις ἡμῖν νῦν;  
 'Why then, one would say, do you tell us these things now?' Dem. 1.14

This sentence raises a host of issues, which cannot be given their full due here. The first question is what prosodic status ἄν has here: is it a full lexical word hosting τις; is it proclitic, i.e. ἄν<sub>p</sub>=τις<sub>p</sub>=εἶποι; or is it actually enclitic with no intonational phrase break between the matrix and parenthetical clauses, i.e. τί=οὖν=ἄν=τις εἶποι...?<sup>101</sup>

If one were to assume the first two of these analyses, it would not be clear why ἄν shows up clause-initially, but I will mention two possibilities. The first is that the modal particle ἄν, which we have here, is starting to pattern after the protasis marker ἄν (< εἰ=ἄν), which is of course routinely found clause-initially (and coded as both a proclitic and full prosodic word). Another possibility, which I find even less likely, is that there developed an emphatic version of ἄν that was not clitic but rather a prosodic word. Just as there are clitic and emphatic versions of personal pronouns, so the same may have been the case for ἄν. One immediate problem that such an analysis would face is that there is no discernible emphasis in (3.75)—i.e., it does not appear that the parenthetical clause should be rendered 'one WOULD say.' Lastly, it should be noted that

<sup>101</sup> For similar phenomena, cf. Mastronarde (1993) ad *Phoen.* 557 and Barrett (1964) ad *Hipp.* 1154-1155.

this phenomenon of clause-initial  $\check{\nu}$  is not, to my knowledge, paralleled among the pronominal clitics.

Potentially relevant to this discussion of clause-initial  $\check{\nu}$  is its equation with Latin and Gothic *an* (see the discussion above). Neither the Latin nor Gothic form is enclitic, and, if anything, both are proclitics. They thus line up very nicely with (3.75). The problem is that under this analysis (3.75) would be, on the one hand, an extremely archaic pattern, and, on the other, one that is not attested until Demosthenes—a contrast that strains credulity in my opinion. I suppose it is possible that Latin and Gothic are the innovators here, but I am inclined to doubt this: if all three tokens are reflexes of a word meaning ‘or,’ then you do not expect an enclitic (although of course there are such cases, e.g. Skt. *vā*). Ultimately, I think the question to ask is how enclitic  $\check{\nu}$  in the course of the fourth century starts to pattern either as a proclitic or as a full prosodic word.

## 6 Summing Up

In the preceding sections, I have argued that all clause-level second-position items belong to the category *clitic*, and that the distinction between clitic and postpositive can be laid to rest as unnecessary. I motivated the appearance of graphic accents on certain clitics with reference to style of clitic incorporation. Lastly, I argued that some clitics, contrary to earlier accounts, exhibit dynamic prosodic behavior, both in their ability to behave as clitics and full prosodic words, as well as in their ability to associate leftward or rightward.

## Chapter 4

### A Prosody-Dominant Model of Clausal-Clitic Distribution

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In the previous chapter, I surveyed a range of literature on Wackernagel’s Law over the past century. One of the primary goals of this scholarship has been to induce a generalization that will capture the attested patterns of clitic distribution in Greek. This has led to a debate over whether the domain of second-position clisis is syntactic or prosodic (see Bošković 2001: 7-96 for a detailed review of the approaches taken with second-position clisis in Bosnian/Serbian/Croatian), that is, whether clausal clitics are positioned second within a syntactic domain, or second within a prosodic domain.

While I will argue in this and the next chapter for a prosodic generalization, I want to stress the point that the distribution of second-position clitics (in Greek at any rate) results from the interaction of both syntax and prosody. Any attempt to derive second-position patterns without reference to both syntactic and prosodic domains will fail. A syntactic account needs to make reference to prosody because a clausal clitic falls second after the first prosodic word (see on this point Halpern 1995). A prosodic account needs to make reference to syntax because clausal clitics do not select indiscriminately for an intonational phrase—they select for a particular intonational phrase within their sentence, which is a syntactic, and not a prosodic, constituent. Thus any adequate generalization will have to be two-tiered.

As I see it, then, the debate is not about whether a syntactic generalization or a prosodic generalization is a better fit for the data, but rather which of the two is dominant, and how exactly they interact to produce the attested distributional patterns. It is for this reason that I refer to my own analysis as *prosody-dominant*<sup>102</sup> in contrast to the *syntax-dominant* models that I will critique below. Furthermore, it may not be the case that the entire system of Greek clitics obeys either a prosody-dominant or a syntax-dominant generalization. Given the richness and diversity of clitic behavior, especially within fifth-century Greek, it may well be that speakers have sub-generalizations for certain sets of clitics (or even individual clitics), some of which may be prosodic and

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<sup>102</sup> For other prosody-dominant accounts of second-position clitics, see Aissen (1992) on Tzotzil and Jakaltek; Radanović-Kocić (1996) and Bošković (2001) on Serbo-Croatian, although theoretically his account differs considerably from that argued for here; Chung (2003) on Chamorro; Hock (1992) and (1996) on Sanskrit; Janse (1993) and Taylor (1996) on Ancient Greek. Fraser (2001) belongs in this category as well, even though he does not offer an explicit prosodic model. While Devine and Stephens (1994) do not set out to offer a coherent prosodic model of clitic placement, some of their comments lie in this direction, e.g. (1994: 422): “In Greek...certain structures can remain outside the domain over which second position is computed and consequently may be interpreted as separate major phrases...” For a prosodic account of Germanic V2 phenomena, see Dewey (2006). For a morphological account of the distribution of second-position clitics, see Anderson (2005: 107-126).

some of which may be syntactic. Thus the binary question of “syntax versus prosody” may well be fundamentally misguided. While I think such a split-system could exist in Greek, it is not yet possible to propose such an account, as the distributional patterns of clitics across the language have not yet been sufficiently investigated.

In this chapter,<sup>103</sup> I argue that the following generalization offers the broadest empirical coverage of clitic distribution in fifth-century Greek:<sup>104</sup>

*Distributional Generalization of Clausal Clitics*

- (4.1) Clausal clitics select a host at the left edge of an intonational phrase. Canonically, this is the left edge of the leftmost intonational phrase excluding any preposed material (i.e., embracing the left edge of TP).

In plainer terms, (4.1) says essentially that a clausal clitic is hosted at the left edge of the first intonational phrase in the clause in which it is selected. It is designed to bar the clitic from appearing in pragmatically-marked supra-CP (= complement phrase) domains. As we will see below, however, it does not rule out the possibility that the clitic could surface higher than CP.

I begin in section one by offering a brief overview of Greek syntax, and a proposal for the architecture of the left periphery. I also include here the assumptions that I rely on about the mapping from syntax to phonology. In section two, I present the predictions made by (4.1) and a prosody-dominant analysis, and adduce data that bear out these predictions. In section three, I examine more closely the predictions of a syntax-dominant account, including the principle of “phonology-free syntax.” In section four, I present an alternation that affects dative pronominal clitics, and which could be a case of syntactically-conditioned clitic distribution. Section five brings the chapter to a close with concluding remarks.

## 1 Greek Syntax: Overview and Assumptions

Despite the rich philological literature on Greek syntax and word order, there remains a great deal that is unknown and underinvestigated. Regarding the organization of the clause, the bulk of the pre-generative literature focused on the surface order of the categories subject, object, and verb; for a summary of some of this research see Dik (1995: 259-281). In spite of the attention devoted to this question, whether or not archaic and classical Greek should be classified as verb-final or verb-medial remains

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<sup>103</sup> Some of the arguments in this chapter and the next differ from what was presented in Goldstein (2008b), (2008c), and (2009). Any discrepancies are to be resolved in favor of the present account.

<sup>104</sup> This generalization is meant only to encompass the behavior of  $\zeta\nu$  and the pronominal clitics (excluding possessor clitics). If this generalization underlies the entire system of clitic distribution in fifth-century Greek, then I would expect that other clitics would select for other prosodic domains based on their semantic scope. For instance, a particle like  $\gamma\acute{\alpha}\rho$  one would predict to select for a higher domain, namely the utterance; and the particle  $\gamma\epsilon$  to select for a smaller domain, either the prosodic word or phrase.

disputed (*verb-final*: Kühner-Gerth II.594-596, Devine and Stephens 1994: 382; *verb-medial*: Kieckers 1911, Meier-Brügger 1992: I.112; *uncertain*: Delbrück 1879: 154; see further Dover 1960, Cervin 1990 [*non vidi*]). Among the archaic Indo-European languages, Greek is unique in this aspect: Latin (Bauer 1995; Frischer et al. 1999), Hittite (Luraghi 1990; Hoffner and Melchert 2008: 406), and Vedic Sanskrit (Delbrück 1888) all seem to have a basic verb-final configuration. As a result, the general consensus is that PIE itself was a verb-final language (Delbrück 1879: 154-155; Lehmann 1974; Lehmann 1993; Gamkrelidze and Ivanov 1995; Clackson 2007: 165-171 offers a balanced discussion of the issue; Friedrich 1975 stands out for his reconstruction of a basic SVO order). It is perhaps the case that the situation in Homeric and Classical Greek represents a transitional stage in which the basic verb-final configuration is being lost.

The inability to discover a basic word order for Greek, combined with its propensity for discontinuous constituents, has led many to describe the word order as “free,”<sup>105</sup> and some to conclude that it is in fact a non-configurational language (on this term, see Chomsky 1981 and K. Hale 1983). While Greek word order seems especially “free,” especially in comparison with a language like English, this freedom is not unbounded; so Schwyzer (1950: 691): “Auch die griechische Freiheit der Wortfolge ist nicht unbegrenzt.”<sup>106</sup> In particular, the following words exhibit a strong tendency to show up clause-initially:

*Clause-initial Items*

- (4.2) Interrogative pronouns: τίς, τί  
 Relative pronouns: ὅς, ἧ, ὅ  
 Clausal conjunctions: καί, ἤ  
 Complementizers: ὥς, ἵνα, etc.  
 Clausal negation: οὐ(χ),<sup>107</sup> μή

It was regularities of this sort that led Mark Hale (1987) to treat Sanskrit and Avestan as configurational languages, and to posit processes such as *wh*-movement.

I remain agnostic as to how we are to interpret the regularities in (4.2). While it would be hard to deny that their position is due to syntactic configuration (and furthermore I cannot see why one would want to), I am not sure if we can conclude from this evidence

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<sup>105</sup> Denniston (1952: 8) takes this viewpoint to an extreme: “Except in its cruder forms, Greek word-order cannot be analyzed.” This attitude is to be rejected wholesale.

<sup>106</sup> It is becoming increasingly clear that “free” should be replaced with “pragmatically-conditioned”: see chapters six and seven for evidence in this direction. If this is correct, then Greek word is no more “free” than English; Devine and Stephens (2006: 83) make this point for Latin. The difference is instead one of consequences: with English, deviations from a canonical order can often lead to an ungrammatical sentence; by contrast, with Greek, deviation from a canonical order (if that is even an appropriate term) will lead to a difference in meaning. But this difference is hardly a case of more versus less “freedom.” What we would have in Greek is a configurational system based on grammaticalized pragmatic (or informational) categories, and not on syntactic category or grammatical relation.

<sup>107</sup> See section five of the Appendix for examples of preposed phrases diagnosed with οὐ(χ).

that the entire language was in fact configurational. That is, I am willing to leave open the possibility that configurationality is not categorical, but gradient, and therefore that different languages could exhibit different degrees of configurationality.

As far as syntactic structure goes, I assume CP and TP/IP layers for Greek, though I am not strongly committed to the existence of the latter. The most relevant area of syntactic structure for my investigation is the left periphery, for which I propose the following:<sup>108</sup>

$$(4.3) \left[_{\text{TopP}} \left[_{\text{CP}} \left[_{\text{FocP}} \left[_{\text{TP}} \right. \right. \right. \right. \right.$$

Regarding TopP, I need to clarify that I do not think there is a specific functional projection above CP. Rather, I think that strong topics (the pragmatics of which are laid out in chapter six) can adjoin to CP. As such, a more accurate syntactic representation would be  $\left[_{\text{CP}} \left[_{\text{CP}} \left[_{\text{FocP}} \left[_{\text{TP}} \right. \right. \right. \right. \right.$ , but this has the disadvantage of obscuring the functional nature of the supra-CP layer. My reason for this is that there is not just one TopP “slot”: on the contrary, it seems possible, at least in theory, to adjoin any number of constituents to CP. This is decidedly not the case with strong-focus material (which is discussed in chapter seven), as the Herodotean data suggest that there is only one such layer. Strong-topic (i.e., TopP) phrases differ from strong-focus (i.e., FocP) ones also in that they can adjoin underneath CP (with a configuration  $\left[_{\text{CP}} \left[_{\text{TopP}} \left[_{\text{FocP}} \right. \right. \right. \right.$ ), even though they canonically adjoin above this layer (see 4.27 below for an example). Cf. Rizzi (1997) on these points.

The configuration in (4.3) is not one that has been proposed for Greek before, and differs from most other accounts of the left periphery in archaic Indo-European (for proposals that involve only one preposing slot, see Keydana 2009; Hale 2008). In section 1.2, I present the data and arguments for (4.3), as well as spell out how this structure is prosodically coded.

## 1.1 Mapping from Syntax to Prosody

If there is any topic more neglected than Greek syntax, it is the syntax-phonology interface. As far as prose is concerned, I will be working with essentially only one assumption about the mapping between syntax and phonology, and that is that the left edge of the leftmost prosodic word of a clause, excluding preposed material, will align with the left edge of an intonational phrase (cf. Selkirk 1986, 2005). This will canonically mean that the left edge of the prosodic word occupying Spec-CP will align with the left edge of an intonational phrase, but this need not always be the case (as we see below with example 4.9).

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<sup>108</sup> It is perhaps possible that the layer I have identified as TP should be instead a grammaticalized pragmatic category (corresponding to some type of given information), but this possibility will not be considered any further here.

The following biclausal sentence offers a basic illustration of the mapping between syntax and phonology:

- (4.4) ἐπηγγέλοντο ἐς τὴν Χίον τοῖσι Παίοσι ὅκως=ἄν ὀπίσω ἀπέλθοιεν.  
 ‘They sent an order to Chios for the Paionians, that they come back.’

5.98.21

It is comprised of a matrix clause (ἐπηγγέλοντο ἐς τὴν Χίον τοῖσι Παίοσι), and an embedded clause (ὅκως ἄν ὀπίσω ἀπέλθοιεν), for which I assume the following gross syntactic structure:

- (4.5) [<sub>CP</sub> ἐπηγγέλοντο ἐς τὴν Χίον τοῖσι Παίοσι [<sub>CP</sub> ὅκως=ἄν ὀπίσω ἀπέλθοιεν]].

Under our assumption about the mapping between syntax and phonology, this will yield the following prosodic coding:

- (4.6) (ἐπηγγέλοντο ἐς τὴν Χίον τοῖσι Παίοσι)<sub>i</sub> (ὅκως=ἄν ὀπίσω ἀπέλθοιεν)<sub>i</sub>.

The two left edges of CP provide us with the two left edges of the intonational phrases, and the sentence-final right edge of CP provides us with the final right edge of the intonational phrase. The intonational-phrase boundary at the juncture of the two clauses I assume to be induced by the left edge of the intonational phrase at the onset of the embedded clause. But, as will be clear throughout this dissertation, it is not always clear where the right edge of intonational phrases is, as there are fewer diagnostics for this side of the prosodic unit. Examples (4.5) and (4.6) also illustrate a fundamental difference between syntactic and prosodic structure: the former is hierarchical and involves nesting, while the latter is one of abutting.

I further assume that (4.7) as a whole is coded as an utterance:

- (4.7) ((ἐπηγγέλοντο ἐς τὴν Χίον τοῖσι Παίοσι)<sub>i</sub> (ὅκως=ἄν ὀπίσω ἀπέλθοιεν)<sub>i</sub>)<sub>υ</sub>.

It is possible for an intonational phrase and utterance to be isomorphic, as in the following root clause:

- (4.8) ((Κροῖσος=δέ=μιν ἐκάθηρε.)<sub>i</sub>)<sub>υ</sub>  
 ‘Croesus purified him.’

1.35.6

In cases of clausal conjunctions that occupy a layer of syntax above CP, I assume that the left edge of the conjunction aligns with the left edge of an intonational phrase, as in the following example:

- (4.9) καί=σφραξ ὥς οὐδείς ἐκάλεε, ἐκτρέπονται ἐπ’ Ἀθηγέων.  
 ‘And since no one invited them, they turned toward Athens.’

6.34.10



*Syntactic Representation*

(4.10) [<sub>ConjP</sub> καί=σφραξ [[<sub>CP</sub> ὡς οὐδεὶς ἐκάλεσε], ἐκτρέπονται ἐπ' Ἀθηνέων.]]

*Prosodic Coding*

(4.11) (καί=σφραξ ὡς οὐδεὶς ἐκάλεσε), ἐκτρέπονται ἐπ' Ἀθηνέων.

Here we have a deviation from the canonical situation in which the left edge of CP is coded as the left edge of an intonational phrase; rather the higher layer, ConjP, aligns with the left edge of an intonational phrase.<sup>109</sup> In this case, I do not believe that there was also an intonational phrase break to the left of ὡς, but this could certainly be a possibility in other cases.

As the most important prosodic constituent for this investigation is the intonational phrase, this is the unit that I will be most concerned with; utterances and other prosodic domains will only rarely be indicated. The mapping between syntax and prosody as pertains to preposed phrases is discussed below in section 1.2.4.

## 1.2 The Architecture of the Left Periphery

As noted above, there has been debate in the Greek literature about the structure of the left periphery, that is, how many functional layers to recognize, and where exactly they are to be located with respect to CP. In this section I first flesh out (4.3), and then note earlier efforts.

The template in (4.3) is based on the following observations about what exactly precedes the host of a clausal clitic:

(4.12) α. There is apparently no restriction on the number of strong-topic constituents that can precede the host of a clausal clitic.

β. Strong-topic constituents (generally) occupy a layer of syntax above CP.

γ. Strong-focus material occupies a layer of syntax beneath CP.

### 1.2.1 The Number of Strong Topics

Typically, if there is going to be an adjoined strong topic, there will be only one, as in the following example (for further examples, see chapter six):

(4.13) [<sub>TopP</sub> ἡμεῖς [<sub>CP</sub> οὐκ=ἄν δυνάμεθα οἰκέειν μετὰ τῶν ὑμετερέων γυναικῶν.  
'We, however, would not be able to live with your women.' 4.114.10

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<sup>109</sup> One could argue that the syntactic representation here is inaccurate and that the conjunction actually occupies Spec-CP, in which case we would have a canonical mapping between syntax and prosody.

This certainly need not be the case, however, as we see from examples like the following, where we find multiple preposed strong topics:

- (4.14) [<sub>TOPP</sub> μετὰ δὲ αὖτις [<sub>TOPP</sub> ἀπὸ τῆς δεκάτης ἐς ἑβδόμην [<sub>CP</sub> ἄλλους=**μοι** τάξον  
 δισχιλίους κατὰ τὰς Νινίων καλεομένας πύλας.  
 ‘And then after this, from the tenth to the seventh, station for me two  
 thousand more at the gates they call Ninevite.’ 3.155.24

- (4.15) ὡς δὲ ἀπὸ δείπνου ἐγίνοντο, οἱ μνηστῆρες ἔριν εἶχον ἀμφί τε μουσικῆι  
 καὶ τῶι λεγομένῳ ἐς τὸ μέσον. [<sub>TOPP</sub> προιούσης δὲ τῆς πόσιος [<sub>TOPP</sub> κατέχων  
 πολλὸν τοὺς ἄλλους [<sub>TOPP</sub> ὁ Ἴπποκλείδης [<sub>TP</sub> ἐκέλευσε=**οἱ** τὸν αὐλητὴν  
 αὐλῆσαι ἐμμελείην.  
 ‘When they were done with dinner, the suitors held a competition in music  
 and public speaking. While the drinking was progressing, Hippokleides,  
 who was well in the lead of the others, told the piper to play a dance tune  
 for him.’ 6.129.8

In (4.14), we have two adjoined non-argument phrases, namely μετὰ δὲ αὖτις and ἀπὸ τῆς δεκάτης ἐς ἑβδόμην. In (4.15), we again have two adjoined non-argument phrases, προιούσης δὲ τῆς πόσιος and κατέχων πολλὸν τοὺς ἄλλους, and one preposed argument, ὁ Ἴπποκλείδης. One might suppose on the basis of this latter example that one can have an unlimited number of non-argument preposed phrases, but only one preposed argument phrase. This is not the case, as the following example shows:<sup>110</sup>

- (4.16) καὶ ὁ μὲν ταῦτα ἔλεγε, οἱ δὲ πάρεδροι εἶπαν ὑπολαβόντες: Εὐήνιε, [<sub>XP</sub> ταύτην  
 δίκην [<sub>XP</sub> Ἀπολλωνιῆται [<sub>XP</sub> τῆς ἐκτυφλώσιος [<sub>TP</sub> ἐκτίνουσί=**τοι** κατὰ  
 θεοπρόπια τὰ γενόμενα.  
 ‘And he [= Euenios] said these things, and the ones sitting beside him said  
 in response: Euenios, this restitution, the Apollonians, for the blinding,  
 pay to you according to the oracle.’ 9.94.15<sup>111</sup>

Thus for strong-topic preposing, I conclude that there is no ordained upper limit on the number of preposed phrases.

<sup>110</sup> I am not sure about the pragmatic value of the preposed constituents here so I have labeled them anonymously with ‘XP’: see chapter seven for further discussion of this sentence.

<sup>111</sup> This example is, to be sure, unique, and therefore one should not build an analysis on such tenuous data. I realize also that τοι here could, for some reason, be selecting for the verb as its host, and not in any sort of defensible “second” position.

### 1.2.2 Strong Topics Are Positioned Above CP<sup>112</sup>

Strong topics occupy a position above CP. Following Hale (1987), we can establish this for Greek on the basis of *wh*-words and complementizers. As noted above, *wh*-words canonically occur in sentence-initial position, as illustrated in the following example:

- (4.17) ὦ Πέρσαι, [<sub>CP</sub> τίς=ἄν=μοι τοῦτο ὑμέων ὑποστάς ἐπιτελέσειε σοφίηι καὶ  
μὴ βίηι τε καὶ ὀμίλῳι];  
‘O Persians, who of you would get this done for me with wisdom  
and not a violent gang (lit. ‘both violence and a gang’)? 3.127.11

I assume that τίς here occupies Spec-CP, which is a standard assumption regarding the syntactic location of *wh*-words.

On the basis of this assumption, we can then diagnose material preceding *wh*-words as occupying a supra-CP layer of syntax, as in the following cases (for further examples, see Thomson 1939 and Dik 2007: 136-167<sup>113</sup>):

- (4.18) [<sub>TOPP</sub> τὸ δὲ βῆμα [<sub>CP</sub> τί=σοι χρήσιμον ἔσται]];  
‘The rostrum, what use will you have for it?’ Ar., *Eccl.* 677

I assume that τὸ δὲ βῆμα is above CP, and not that τί is occupying a position lower than expected: if that were the case, one would not expect it to host σοι. It is possible for other clitics to show up amidst material that precedes a *wh*-word, as with δέ in this example, or δῆ and ὦν below:

- (4.19) [<sub>TOPP</sub> ὑμέων=δῆ=ὦν [<sub>CP</sub> τίς=μοι Ὀροίτην ἢ ζώοντα <ἄν> ἀγάγοι ἢ  
ἀποκτείνειε]];  
‘Of you, who would either capture Oroites alive or kill (him) for me?’ 3.127.13<sup>114</sup>

Further justification for believing that material such as ὑμέων sits above CP comes from its marked pragmatic function, which is discussed further in chapter six. It is cross-linguistically common for pragmatically-marked material to sit in a special extra-clausal or “detached” position (see e.g. Herring 1990). While this analysis appears to work here, it does assume that the pragmatic function is due to the syntactic position; it is not

<sup>112</sup> Cf. Devine and Stephens (2006: 35 n. 43) on Latin: “It is quite common in Latin for the Topic in CP to be higher than the complementizer. If the arguments are supposed to raise out of the VP, then the VP layer starts out as a complete structured representation of the event with its thematic arguments, a projection of the lexical structure of the verb into the syntax.”

<sup>113</sup> Dik, however, characterizes the *wh*-word as “deferred,” according to which the *wh*-word occurs farther into the clause not because material has been preposed to its left, but because the *wh*-word itself has been positioned later into the clause.

<sup>114</sup> See also 1.39.4, 1.71.14, 1.88.10, 1.109.5, 3.63.16, 3.73.4

entirely clear if this assumption is actually valid, but I will leave this issue aside for the moment.

Complementizers<sup>115</sup> furnish similar diagnostic evidence for the position of strong topic constituents, as in the following example with *εἰ*:<sup>116</sup>

- (4.20) [[<sub>TOPP</sub> ταῦτα [<sub>CP</sub> εἰ μὲν ἔστι ἀληθές]] οὐκ οἶδα. τὰ δὲ λέγεται γράφω.]  
 ‘These things, if they’re true, I don’t know: I write what’s said.’ 4.195.6

Here *ταῦτα* is proposed within the *εἰ*-clause (whether the *εἰ*-clause itself is adjoined to or a complement of *οἶδα* is not clear to me). As demonstrated in chapter six, the pragmatic function of the pre-*wh* cases and the pre-complementizer cases are the same. On this basis, I assume that these constituents occupy the same syntactic position.

### 1.2.3 Strong Focus Lies Beneath CP

In contrast to the syntactic properties of the strong topic construction described in the preceding two sections, that of strong focus (on which, see chapter seven) is markedly different. For one, there is to my knowledge no certain case of multiple strong focus. Moreover, if we rely on the position of complementizers to diagnose the structure of the left periphery, then we observe that strong focus constituents occupy a layer of syntax *beneath* CP (for a perhaps similar phenomenon in Avestan, see Hale 1987: 38), as in the following examples:

- (4.21) καὶ δὴ οἱ μὲν ἐμάχοντο, ὁ δ’ ἐξενηνηγμένος ἐδυσθανάτεε τε καὶ ἔλεγε πρὸς Ἀρίμνηστον ἄνδρα Πλαταιέα οὐ μέλειν οἱ ὅτι πρὸ τῆς Ἑλλάδος ἀποθνήσκει, ἀλλ’ ὅτι οὐκ ἐχρήσατο τῇ χειρὶ καὶ [<sub>CP</sub> ὅτι [<sub>FocP</sub> οὐδέν [<sub>TP</sub> =ἐστί=οἱ ἀποδεδεγμένον ἔργον ἐωυτοῦ ἄξιον προθυμειμένου ἀποδέξασθαι].  
 ‘When they fought he was having a hard time dying after having been carried away (from the battlefield) and said to Arimnestos a Plataean that he didn’t mind dying on behalf of Hellas, but that he had not used his right hand and that he hadn’t displayed any deed worthy of himself, although he was so eager to display it.’ 9.72.10
- (4.22) [<sub>CP</sub> ὡς δὲ [<sub>FocP</sub> κατὰ ταῦτα [<sub>TP</sub> ἐθέσπιζε=οἱ καὶ πρότερον, οἶχετο μεταξὺ ἀπολιπὼν ὁ Βάττος ἐς τὴν Θήρην].  
 ‘Since she prophesied to him in the same way as before, Battos left in the middle and went back to Thera.’ 4.155.22

<sup>115</sup> Complementizers in Greek include *εἰ*, *ἐπεὶ*, *ἐφ’ ὧι(τε)*, *ἕως*, *ἵνα*, *ὅπως*, *ὅτι*, *πρίν*, *ὡς*, and *ὥστε*, among others: see further Smyth §§2193, 2240, 2369, 2383. Negatives used to introduce complement clauses in e.g. purpose clauses and fear clauses I presume to be complementizers as well.

<sup>116</sup> See also 2.28.18, 2.115.13, 3.71.15, 3.81.8, 3.130.2, 4.195.6, 7.10.36, 8.62.2, 9.27.24.

- (4.23) οἱ γὰρ χρησμολόγοι ταύτηι ταῦτα ἐλάμβανον, [CP ὡς [FocP ἀμφὶ Σαλαμίνα  
[TP δεῖ=σφεας ἐσσωθῆναι ναυμαχίην παρασκευασαμένους.  
'For the oracle-interpreters interpreted this in the following way, that  
engaging in a sea battle around Salamis they must be defeated there.'  
7.142.18
- (4.24) ὁ δὲ εἶπε, “ὦ δέσποτα, ἐάσας με χαριεῖ μάλιστα τὸν θεὸν τῶν Ἑλλήνων, τὸν  
ἐγὼ ἐτίμησα θεῶν μάλιστα, ἐπειρέσθαι πέμψαντα τάσδε τὰς πέδας, [CP εἰ  
[FocP ἐξαπατᾶν τοὺς εὖ ποιεῦντας [TP νόμος=ἐστί=οἱ.”  
'And he said, “O master, you will most please me if you allow me to send  
these chains to the god of the Greeks, whom I honored most of the gods,  
and to ask if to deceive the ones who do good (to him) is his custom.”’  
1.90.9
- (4.25) [CP ἦν μὲν [δὴ] [FocP τὸ χρηστήριον [TP ἀνέλη=μιν βασιλέα εἶναι...  
'If the oracle appoints him to be king...'  
1.13.5
- (4.26) οὐ γὰρ δὴ ὁ Νεῖλός γε ἐστὶ κατὰ τοῦτον τὸν λόγον ὁ τὴν Ἀσίην οὐρίζων τῇ  
Λιβύῃ. τοῦ Δέλτα δὲ τούτου κατὰ τὸ ὄξυ περιρρήγνυται ὁ Νεῖλος, [CP ὥστε  
[FocP ἐν τῷ μεταξὺ Ἀσίας τε καὶ Λιβύης [TP γίνοιτ’=ἄν.  
'For it is not the Nile, according to this account, that separates Asia from  
Libya. The Nile is divided at the apex of this delta, with the result that it  
would be between Asia and Libya.'  
2.16.11<sup>117</sup>

The following example reveals that strong topics (here *πρῶτα*) can adjoin beneath CP, as mentioned above:

- (4.27) οὐ μὲν οὐδὲ λέληθε αὐτούς (εἰ γὰρ τινες καὶ ἄλλοι τὰ Περσέων νόμιμα  
[ὀρθῶς] ἐπιστέαται καὶ Αἰγύπτιοι) [CP ὅτι [TopP πρῶτα=μὲν [FocP νόθον  
[TP οὐ=σφι νόμος ἐστὶ βασιλεῦσαι γνησίου παρεόντος.  
'It has certainly not escaped them—for if anyone knows the customs of the  
Persians it is the Egyptians—that, first, it is not their custom for a  
bastard to be king when there is a legitimate son present.'  
3.2.7

As with cases like (4.18)-(4.20), where the preposed element precedes the CP layer, cases like (4.21)-(4.27) have a marked pragmatic function. A crucial point, however, is that the pragmatic functions are not the same. Simply put, cases like (4.18)-(4.20) do not instantiate the focus of a clause, while those in (4.21)-(4.27) do. This argument is developed in detail in chapters eight and nine.

It is worth noting that the pattern that we find in (4.21)-(4.27) is not attested in my corpus with *wh*-phrases; in other words, *wh*-phrases and preposed focus phrases do not co-occur. I attribute this to the following pragmatic factor: *wh*-phrases are variables for

<sup>117</sup> See also 2.79.7.

focal information, and when present everything else in the question should be non-focal (except in cases of multiple-*wh* questions). As such, one does not expect the presence of strong-focus material in addition to the *wh*-phrase.

If we combine these two patterns, TopP before C, and FocP between C and clitic host, then we end up with the phrase structure in (4.3). In cases of the two preposed elements, we do find the strong topic preceding the strong focus, as the following example illustrates:

- (4.28) [<sub>TopP</sub> ἀνδρὸς γὰρ ἑνὸς τοῦ ἀρίστου] [<sub>C</sub> [<sub>FocP</sub> οὐδὲν [<sub>TP</sub> ἄμεινον=ᾶν φανείη].  
 ‘For compared to one supremely noble man, nothing could seem better.’  
 3.82.7

Of course one could also get this pattern by assuming that TopP and FocP were above CP. What is needed to decisively rule out this possibility is a case like (4.28), but one in which C<sup>0</sup> is occupied with a complementizer. Thus far I have not found such a case, but nevertheless see no reason to believe that such a case should not exist.

### 1.2.3.1 The Case for Subextraction into FocP

In addition to the question of where material in strong focus occurs within the left periphery, there is also the question of what exactly is put there. When it comes to strong topics, we always have phrasal movement: that is, the topicalized unit will always be a syntactic constituent. With strong focus, however, this appears not to be the case. Consider the phrase ἐλάσσονος πόνου in the apodosis of the following example:<sup>118</sup>

- (4.29) εἰ γὰρ τις τὰ ἐξ Ἑλλήνων τείχεά τε καὶ ἔργων ἀπόδεξιν συλλογίσαιτο,  
 ἐλάσσονος πόνου=τε=ᾶν καὶ δαπάνης φανείη ἕόντα τοῦ  
 λαβυρίνθου τούτου.  
 ‘For if someone should reckon up together the walls (built) by the  
 Greeks and (their) display of works, it would clearly be of both LESS toil  
 and (LESS) expense than this labyrinth.’  
 2.148.6

There are minimally two possibilities for analyzing the position of ἐλάσσονος πόνου. The first is that the entire phrase occupies FocP. Under this type of analysis, τε and ᾶν would fall “second” after this initial preposed constituent. The second possibility is that only ἐλάσσονος occupies FocP, and that, because of its preposed location, it can host neither τε nor ᾶν. Since πόνου occupies the left edge of TP (or some other non-preposed layer), it can host both clitics. We can represent these two analyses schematically thus:

<sup>118</sup> One could deny subextraction in Greek by arguing that each lexical word has phrasal status. I leave this possibility aside. For subextraction from a DP, see 1.62.4.

*Analysis One*

(4.30.α)  $[_{CP} [_{FocP}$  ἐλάσσοнос πόνου=τε=ἄν

*Analysis Two*

(4.30.β)  $[_{CP} [_{FocP}$  ἐλάσσοнос  $[_{TP}$  πόνου=τε=ἄν

I favor the second analysis for the following three reasons. First, in other cases of focus preposing, when an entire constituent is under strong focus, no part of it hosts a second-position clitic, as in the following example:

(4.31) διαθέντος δὲ αὐτοῦ μάγος ἀνὴρ παρεστεῶς ἐπαίδει θεογονίην, οἷην δὴ ἐκεῖνοι λέγουσι εἶναι τὴν ἐπαυιδίην.  $[_{FocP}$  ἄνευ γὰρ δὴ μάγου  $[_{TP}$  οὐ=σφι νόμος ἐστὶ θυσίας ποιέεσθαι.  
'Once he [= a sacrificer] has arranged it, a magus stands by and chants a theogony, of exactly the kind they say the chant is. For, without a magus, it is not licit for them to perform sacrifices.' 1.132.15

Working from this pattern, you would expect Analysis Two to obtain for (4.29): in neither case does preposed material host focally-preposed material. Furthermore this expectation also lines up with cases like (4.21)-(4.27), in which material is preposed to a position beneath CP. The upshot of Analysis Two is that we admit into Greek the process known as sub-extraction, that is, the movement of sub-constituents. This does not strike me as a problem; for we know that subextraction occurs elsewhere in Greek, e.g. in hyperbaton (see Devine and Stephens 2000: 1-8).

Second, Analysis One runs into problems with the position of τε. The distribution of ἄν and τε is not the same: generally speaking, the latter is able to occur earlier than the former. With (4.29), if τε is within FocP, one would expect it to occur earlier, namely right after ἐλάσσοнос (i.e., \*ἐλάσσοнос=τε πόνου=ἄν). With Analysis Two, there is a ready explanation for why ἐλάσσοнос does not host τε, which is that it (and it alone) is preposed, and therefore unavailable to host τε.

Lastly, Analysis Two is a more accurate representation of the pragmatic meaning of (4.29) than Analysis One. As detailed in chapter seven, the unexpected piece of information in the apodosis is the adjective ἐλάσσοнос (I have tried to capture this in the translation above by putting it in small caps): it is not ἐλάσσοнос πόνου. In a similar vein, Analysis Two runs into problems with semantic scope: ἐλάσσοнос has scope over both πόνου and δαπάνης, but only ἐλάσσοнос πόνου is preposed. This analysis thus ends up in the awkward position of having to explain why δαπάνης is also not preposed. For Analysis One, this is easily handled: it is not preposed, because it is not pragmatically marked (more specifically, under strong focus). According to my view, focus preposing highlights marked information, and nothing more. And thus informational constituency and morphosyntactic constituency are potentially non-isomorphic.

In spite of these considerations, one could still maintain Analysis One by arguing that there we are dealing with two different types of strong-focus constructions. This is a possibility that I cannot at this time rule out, but nothing that I have seen of the Herodotean data supports such a hypothesis. Another possibility is that we are dealing with some sort of change in progress, where there is a shift in clitic position vis-à-vis strong focus from selecting a host immediately to the right of the focused material, to being hosted at the right edge of the focused material itself. Such a change would not be surprising, but if this is what we have here, it would need further confirmation from diachronic evidence.

There is one piece of evidence that could solidly confirm Analysis Two, but thus far is absent: what I want is a case where an adjective is preposed and also discontinuous with its head noun (i.e., \*ἐλάσσονος φανείη=ἄν πόνου=τε καὶ δαπάνης...). As it stands, in situations of preposed adjectives, speakers align them contiguously with the head noun.

For all of the strengths of Analysis Two, it does come with one awkward consequence, which is that other examples also follow the pattern of (4.29), whereby a preposed adjective and its head noun are contiguous:

- (4.32) οἱ μὲν ταῦτα ἐπειρώτων, τῶν δὲ μαντηῶν ἀμφοτέρων ἔς τὸ αὐτὸ αἰ γινῶμαι  
 συνέδραμον, προλέγουσαι Κροΐσῳ, ἣν στρατεύηται ἐπὶ Πέρσας, μεγάλην  
 ἀρχήν=μιν καταλύσειν.  
 ‘They asked again, and the judgments of both oracles agreed, saying to  
 Croesus that, if he attacks the Persians, a GREAT empire he will destroy.’  
 1.53.13<sup>119</sup>

This is not always the case, however: note above in (4.21) the separation of οὐδέν from ἔργον, although perhaps the situation is different when a negative is in FocP. To resolve this question definitively, one would have to investigate what sorts of elements tended to be placed after preposed material. Perhaps there is a pragmatic reason for the position of ἀρχήν, which is the same as that which places other clitic-hosting elements after preposed material. Thus what looks like an intention to keep an adjective-noun sequence continuous may be an epiphenomenon of multiple pragmatic operations.

#### 1.2.4 Prosodic Coding of Preposed Constituents

Working from the idea that the left edge of CP will be coded as the left edge of an intonational phrase, I assume that strong topic constituents are coded as intonational

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<sup>119</sup> This is one of the most famous oracular responses in antiquity: see Asheri et al. ad loc. for an overview. It is preserved in metrical form (Ar., *Rhet.* 1407<sup>a</sup>38; Diod. 9.3.1) as Κροῖσος Ἄλυν διαβάς | μεγάλην ἀρχήν καταλύσει. We obviously do not have the clitic anymore, but the left-edge of the adjective falls at the caesura; perhaps there was some sort of prosodic break at its right edge too. Cicero preserves a Latin translation in which the emphasis on the adjective is clearly marked by hyperbaton of *magnam* and *vim*: *Croesus Halyn penetrans | magnam pervertet opum vim*.



phrases (see Aissen 1992 for a similar argument for external topics in Tzotzil). To take example (4.14) from above, I presume that it is coded as follows:

*Syntactic Representation*

- (4.33) [<sub>TopP</sub> μετὰ δὲ αὖτις [<sub>TopP</sub> ἀπὸ τῆς δεκάτης ἐς ἐβδόμη] [<sub>CP</sub> ἄλλους=**μοι** τάξον  
 δισχιλίους κατὰ τὰς Νινίων καλεομένας πύλας.  
 ‘And then after this, from the tenth to the seventh, station for me two  
 thousand more at the gates called Ninevite.’ 3.155.24

*Prosodic Coding*

- (4.34) (μετὰ δὲ αὖτις)<sub>i</sub>, (ἀπὸ τῆς δεκάτης ἐς ἐβδόμη)<sub>i</sub>, (ἄλλους=**μοι** τάξον  
 δισχιλίους)<sub>i</sub>, κατὰ τὰς Νινίων καλεομένας πύλας.

The two preposed phrases, μετὰ δὲ αὖτις and ἀπὸ τῆς δεκάτης ἐς ἐβδόμη, are each coded as intonational phrases, as is the left edge of CP, which means that the host of μοι occupies the left edge of an intonational phrase.

With strong focus, I make the same assumption, namely that preposed material is coded as an intonational phrase:

- (4.35) [<sub>FocP</sub> ἄνευ γὰρ δὴ μάγου] [<sub>TP</sub> οὐ=**σφι** νόμος ἐστὶ θυσίας ποιέεσθαι].  
 ‘For, without a magus, it is not licit for them to perform sacrifices.’ 1.132.15

- (4.35.a) (ἄνευ γὰρ δὴ μάγου)<sub>i</sub>, (οὐ=**σφι** νόμος ἐστὶ θυσίας ποιέεσθαι)<sub>i</sub>.

Again, we see that the clitic is hosted at the left edge of an intonational phrase. The motivation for these assumptions comes primarily from pragmatic meaning: I expect that the pragmatically-marked status of the preposed phrases was signaled prosodically. Furthermore, there is cross-linguistic support for such a mapping between prosody and pragmatics (see e.g. Erteschik-Shir 2007).

There is one exception to this algorithm for coding the left edge of FocP: when a phrase in FocP is preceded by a complementizer, I assume that the left edge of CP, and not Foc P, is coded as an intonational phrase. I illustrate this with (4.22) from above, which I repeat here:

- (4.36) [<sub>CP</sub> ὡς δὲ [<sub>FocP</sub> κατὰ ταῦτα] [<sub>TP</sub> ἐθέσπιζε=**οἱ** καὶ πρότερον, οἶχετο μεταξὺ  
 ἀπολιπὼν ὁ Βάττος ἐς τὴν Θήρην].  
 ‘Since she prophesied to him in the same way as before, Battos left in the  
 middle and went back to Thera.’ 4.155.22

In this type of scenario, I assume that both the complementizer and the focus phrase are coded as one intonational phrase:

(4.36.a) (ὡς δὲ κατὰ ταῦτα)<sub>i</sub> (ἐθέσπιζέ=οἱ καὶ πρότερον)<sub>i</sub> ...

One alternative is to assume that the complementizer and FocP are individually coded as intonational phrases. While I have no direct evidence to counter such a proposal, I nevertheless find it hard to believe that ὡς δέ in (4.36) could have been coded as an intonational phrase. It seems to me more plausible that in cases like (4.36) speakers coded the left edge of CP and the right edge of FocP as an intonational phrase, the result of which is that the complementizer gets pulled into the intonational phrase containing FocP.

Of the two algorithms, I have less confidence in that pertaining to focus preposing. For one, it is quite possible for strong topics and strong focal elements to be coded in different ways (even if both of them are prosodically marked: see e.g. Birner and Ward 1998, who point out the prosodic distinction between topicalization and focus preposing in English). Second, there is metrical data (discussed in the next chapter) which, although very difficult to interpret, could suggest that focus preposed phrases are actually coded thus:

(4.37) (ἄνευ γὰρ δὴ μάγου οὖ=σφι)<sub>i</sub> (νόμος ἐστὶ θυσίας ποιέεσθαι)<sub>i</sub>.

The difference pertains essentially to where the right edge of the intonational phrase falls: with (4.37), it includes the left edge of TP, and results in the clitic being hosted at the *right* edge of an intonational phrase. Such a possibility could then make sense of preposed adjectives, like the following:

(4.38) ...ἦν στρατεύηται ἐπὶ Πέρσας, [<sub>FocP</sub> μεγάλην [<sub>TP</sub> ἀρχήν=μιν καταλύσειν].  
 ‘...if he attacks the Persians, a GREAT empire he will destroy.’ 1.53.13

(4.39) ...ἦν στρατεύηται ἐπὶ Πέρσας, (μεγάλην ἀρχήν=μιν)<sub>i</sub> καταλύσειν.

That there is a prosodic break *after* the clitic host could help explain why, when only the adjective is preposed, there is nevertheless a tendency to place its head noun immediately to the right: prosodically they form a unit, while syntactically and pragmatically they do not.

If this is the case, which at this point simply cannot be determined, then the generalization in (4.1) would have to be altered to include the possibility of hosting at the right edge of an intonational phrase (under certain circumstances), as well as the left. Before moving on, it is worth reiterating a point made in the last chapter, which is that the edge of an intonational phrase should not phonetically be considered tantamount to a pause: there are other phonetic manifestations of intonational-phrase boundaries, such as e.g. vowel duration or changes in pitch contour (i.e., some sort of boundary tone). Furthermore, pause phenomena are diverse and intersect with other phenomena such as those just mentioned.

## 2 Predictions of the Prosody-Dominant Account

The prosody-dominant account advocated here makes the following two central predictions:

- (4.40)  $\alpha$ . The prosodic coding of a clause can affect clitic distribution.
- $\beta$ . Clitic distribution is sensitive to post-lexical phonological processes.

Evidence for (4.40. $\alpha$ ) comes primarily from metrical texts, where we see how clitic distribution is affected when clauses are subjected to the prosodic template of a meter. The evidence for (4.40. $\beta$ ) comes from prose as well as poetry. Here I present only data that offers evidence specifically for a prosodic analysis. I leave to chapters six through nine demonstration of how a prosodic analysis would handle what I consider neutral sentences (i.e., those in which syntactic and prosodic constituents are aligned in such a way that either analysis would work).

### 2.1 Meter Licenses Additional Clitic Hosts

The distribution of clausal clitics in Attic drama is complex; in this section, I present only the patterns most relevant for the question of the domain of cliticization. A more detailed investigation is presented in the next chapter.

In the metrical texts, what we find is the ability of a clitic to occur much farther into the clause than would normally be permitted. Rather than occur at the left edge of an intonational phrase derived from a syntactic boundary, clausal clitics can occur at the left edge of a metrical unit (namely the caesural unit), which is not the product of the mapping between syntax and phonology.

The following examples illustrate the ability of a clitic to be hosted at the left edge of the line, farther into the clause than would canonically be licensed (‘|’ marks the caesura):

#### *Line-initial host*

- (4.41) ὅταν δ' ἴκηται, τηνικαῦτ' ἐγὼ κακὸς  
μηδρῶν=ἄν εἶην | πάνθ' ὅσ' ἄν δηλοῖ θεός.  
‘When he gets here, I would be remiss  
if I didn’t do whatever god indicates.’ Soph. *OT* 76-77

#### *Post-caesural host*

- (4.42) ὁ ξένος ἴν' ὀρθῶς | ἐκμάθητις=μ' ἀπόλεσεν,  
ὁ μιαιρός, ὅς μοι δοῦς τὸ πῶμα κατέκλυσεν.  
‘So you know, it is my guest who destroyed me,  
the abominable one, who by giving me that drink drowned me.’  
Eur. *Cyc.* 676-677

In (4.41), we would have expected ἄν to be hosted in canonical second position after τηρναῦτ': instead it is hosted at the left edge of the metrical line. (4.42) is even more remarkable. In a canonical situation we would expect με to surface after ὁ ξένος. Here, however, it surfaces not only much later into the clause, but also directly at the close of the purpose clause, which is not at all where one would expect it to find it. If anything, it should have surfaced after ἀπώλεσεν. (Indeed, if we were to admit to ὁ ξένος a strong-focus reading, that is where it should canonically have surfaced.) I presume that here the metrical line overrides the normal prosodic coding that would have resulted in prose, and thus creates positions for clausal clitics that are not otherwise licit.

A crucial property of cases like (4.47) and (4.48) is that the material preceding the clitic host does not bear the pragmatic meanings that material preceding the host of a clausal clitic typically bears. In other words, there is no syntactic or pragmatic motivation for the position of the clitic or the prosodic phrasing of the clause: these are both due to the prosodic template of the metrical line.

## 2.2 The Dominance of Prosody: Post-Lexical Phonological Processes

Evidence for prosodic coding in prose is scant to say the least, but every now and again, we are offered a glimpse. The following example is one such case:

- (4.43) οὐκ=ἄν οἶδ' εἰ δυναίμην ἅπαντα ἐν μνήμηι πάλιν λαβεῖν.  
 'I don't know if I could retain everything in memory again.'

Pl. *Tim.* 26<sup>b</sup>4-5

Here the particle ἄν appears in a domain higher than expected:<sup>120</sup> since it is semantically interpreted within the embedded clause, we expect it to surface there (for this principle, see also chapter nine, which is devoted to the distribution of clausal clitics vis-à-vis infinitival clauses), as in the following example:<sup>121</sup>

- (4.44) μηδὲν καινόν, ἦν δ' ἐγώ, ἀλλὰ Φοινικικόν τι, πρότερον μὲν ἤδη πολλαχοῦ γεγονός, ὡς φασιν οἱ ποιηταὶ καὶ πεπείκασιν, ἐφ' ἡμῶν δὲ οὐ γεγονός, οὐδ' οἶδα εἰ<sub>p</sub>=γενόμενον=ἄν, πείσαι δὲ συχνης πειθοῦς.  
 'Nothing unprecedented, I said, but some Phoenician (tale), one that has already occurred before in many places, as the poets say and have persuaded (people to believe), but which in our time has not occurred, and I don't know if it could happen, and (it would) require a lot of persuasion to persuade (people that it could occur).'

Pl., *Rep.* 414<sup>c</sup>7

<sup>120</sup> It is worth noting that this type of prosodic reduction between the matrix and embedded clauses does not happen (at least in Plato) with the complementizer ὅτι. It thus seems that the nature of the embedded clause plays a role in whether prosodic reduction occurs.

<sup>121</sup> Herwerden emended the passage to read οἶδ'-ἄν εἰ, but subsequent editors have not followed him in this decision.

On the basis of (4.44), what we would have expected for (4.43), under either a prosodic or syntactic account, is the following:

(4.45.a) οὐκ οἶδα εἰ<sub>p</sub>=δυναμίην=ᾗν ἅπαντα ἐν μνήμηι πάλιν λαβεῖν.

This would presumably have been coded prosodically as follows:

(4.45.b) (οὐκ οἶδα)<sub>i</sub> (εἰ<sub>p</sub>=δυναμίην=ᾗν ἅπαντα ἐν μνήμηι πάλιν λαβεῖν)<sub>i</sub>.

Thus ᾗν would be hosted by the first prosodic word at the left edge of an intonational phrase, and in the domain in which it is semantically and syntactically interpreted.

But crucially (4.43) was not coded as (4.45.b) with an intonational-phrase boundary between the matrix and embedded clauses. We know this because of the elided vowel in οἶδ': I assume that vowel elision here is phonetically real, and, more importantly, entails the absence of an intonational-phrase break.<sup>122</sup> Compare (4.44), where οἶδα has its final vowel preserved before εἰ, just as we would expect, as I presume that the complementizer here coincides with the left edge of an intonational phrase.

In the absence of a prosodic break between the matrix and embedded clause, ᾗν is positioned at the left edge of the intonational phrase that coincides with the left edge of the matrix clause, to give us the output in (4.43), i.e. (οὐκ=ᾗν οἶδ' εἰ δυναμίην...)<sub>i</sub>. Thus rather than stay put within its proper syntactic domain, ᾗν finds a host at the left edge of an intonational phrase. The pattern in (4.43) is essentially the inverse of the metrical patterns considered above. For instead of having an abundance of intonational-phrase breaks, we now have fewer than we expect.

As for why the boundary between matrix and embedded clause is phonetically reduced here, I would tentatively attribute that to frequency and speech style. It would take us too far afield to flesh out this claim fully, but I would just note in passing the phonetic reduction that one can routinely observe in Mandarin Chinese (*wǒ*) *bù zhī.dào* ('I don't know'; omission of the first-person pronoun *wǒ* is frequent, as well); see also Bybee (2001: 113) for similar observations regarding Spanish *pienso* ('I think'). A similar development must have taken place in the formation of Latin *nescioqu-* compounds. For I presume these arise from an original situation like the following:

(4.46) (*nescio*)<sub>i</sub> (*quis veniat*)<sub>i</sub>  
 'I don't know who's coming.' [Artificial Sentence]

Phonetic reduction between the matrix and embedded clauses ultimately leads to the merger of *nescio* and *quis* into (*nescioquis*)<sub>ω</sub>. This is, to be a sure, a more drastic

<sup>122</sup> This should not be a problematic assumption, unless one is going to entertain the possibility that οἶδ' was pronounced [oidʔ] or [oidʰ], in which case I suppose one could have the right edge of an intonational phrase after οἶδ'. But I know of no evidence in support of such an analysis, and accordingly leave this possibility aside.

change than what we have with  $\text{o}\acute{\upsilon}\chi\text{-}\acute{\alpha}\nu\ \acute{\omega}\delta'$  in (4.43). For the Latin case involves a shift in lexical category whereby *nescio* becomes a nominal morpheme. There is nothing to suggest that in the Greek case we have a concomitant syntactic reduction (i.e., that  $\text{o}\acute{\upsilon}\chi\ \acute{\omega}\delta\alpha\ \epsilon\acute{\iota}$  has become categorically an adverb). Thus this would be a genuine example in which prosodic conditioning outranks syntactic.

### 2.3 Phonology-Free Syntax?

Cases like (4.43) not only challenge syntax-dominant accounts of clitic distribution in Greek, they also challenge a fundamental principle of most syntactic theories, that of “phonology-free syntax”; on the syntax-phonology interface, see generally Selkirk (1984), (2005); Kaisse (1985); Vogel and Kenesei (1990); Golston (1995); Halpern (1995: 44-53); Truckenbrodt (2007). Most theories of language divide language into various components, such as the phonological, morphological, and syntactic (a practice that goes back at least to Morris 1938 within the linguistics literature). The syntactic domain is responsible for the construction of sentences. More specifically, it is held that the syntactic component operates on and manipulates linguistic units without information about their phonological make-up. That is, in the course of a derivation of a sentence, the syntactic component is not aware of, or sensitive to the segmental or supersegmental properties of a lexical item. It is only after the morphosyntactic structure of a sentence is built that it is then handed off to the phonological component, where its phonological properties are “filled in,” as it were. In short, syntax “feeds” phonology (and conversely, phonology interprets syntax). For the prosodic coding of a sentence is created by mapping morphosyntactic constituents onto prosodic ones (see e.g. Fortson 2010: 9-10). While syntactic structure obviously plays a significant role in the prosodic coding of an utterance, it is worth bearing in mind that this is only one of many factors: speaker disposition (surprise, anger, irony), speech situation, as well as the pragmatic (or cognitive) status of constituents can all play crucial roles in how a speaker encodes an utterance prosodically.

One consequence of this step-wise syntax-to-phonology process is that syntax is “phonology free” (see Zwicky and Pullum 1988; Truckenbrot 2007). What this does is to forbid syntactic operations from accessing or being beholden to the phonological properties of syntactic constituents. Intuitively, this makes sense as one would never expect a syntactic generalization of the sort “place all words beginning with [p] in Spec-TP.” Nor would one expect syntactic operations to vary according to a prosodic property such as speech tempo, for instance.

In the vast majority of cases, this principle is unquestionably sound. As a result, its proponents consider it a linguistic universal (see most recently Miller et al. 1997: 67-69; as well as Zwicky and Pullum 1986, 1988). Nevertheless, significant attempts have been made to argue that the relationship between syntax and phonology is neither so neat nor unidirectional (Inkelas and Zec 1990, 1995). Given that second-position clitic phenomena often fall at the intersection of syntax and phonology, they are an especially interesting testing ground for the theory (see Bošković 2001 for an overview).

My intent here is not to argue that the principle of phonology-free syntax is invalid when it comes to Ancient Greek. That would be a far more involved task. At the same time, however, data like that in (4.41)-(4.43) where clitic distribution is conditioned primarily by prosodic features of the clause (namely where an intonational phrase boundary falls), and only secondarily by syntactic domain suggests that the principle may not be unassailable.<sup>123</sup> That said, one could maintain a strict version of the principle and still capture cases like (4.41)-(4.43) in one of two ways (and probably others as well). First, one could simply deny that second-position clisis in Greek is a syntactic phenomenon at all. This would certainly remove the issue, but it seems to me like an unnecessarily drastic move, for, as has been noted above, clitics distribution does make some reference to syntactic domain. Alternatively, one could enrich the operation of the prosodic flip to allow for more possibilities than simply flipping one prosodic word to the right (for instance, it could flip an entire prosodic *phrase* to the right). How one would do this and still maintain a constrained algorithm is not clear to me.

### 3 Predictions of a Syntax-Dominant Account

In the vast majority of cases, there is no way to decide between a prosody-dominant account and a syntax-dominant one: for most sentences, they will make the same predictions. There is however data that allows us to discriminate between the two. In this section, I identify three predictions that syntax-dominant accounts such as that of Hale (2008) make, and show how these predictions are not borne out by the Greek data.<sup>124</sup> The predictions are as follows:

**Prediction A:** Pronominal clitics will not appear above the CP in which they are base generated.

**Prediction B:** Pronominal clitics appear no more than one prosodic word from the left edge of TP.

**Prediction C:** In the presence of any material to the left of TP, prosodic flip should not occur.

Below I test these predictions against the range of data that we find in fifth-century Greek, and demonstrate their failure.

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<sup>123</sup> The arguments of certain other scholars concerning constituent order in Greek present an even greater challenge to the principle of phonology-free syntax. For instance Dik (1995: 269-270) argues that some word order patterns can only be explained with reference to intonation; cf. Dik (1995: 268) on *Satzrhythmus* and its effect on information structure. Loepfe (1940) and his notion of *Senke* fall in a similar direction. See also Weil (1869: 83); Devine and Stephens (2006: 23).

<sup>124</sup> While I have grouped ὅν and the pronominal clitics together under the rubric “clausal clitics” throughout this dissertation, it is probably the case that a generative account would not do this. I have limited my critique to pronominal clitics because here the generative account makes definite predictions. With ὅν, the situation is slightly more complex, as it is not clear where such a particle would enter the derivation (presumably somewhere in TP, but it is not my goal to work out such an analysis here).

### 3.1 Prediction A

For pronominal clitics, the standard assumption is that they originate within the VP, and move up to adjoin to the left edge of TP. Where  $\acute{\alpha}\nu$  is base-generated is open to debate. I presume that it is either in the VP like pronominal clitics or somewhere within TP, in as much as it is a modal marker: this issue is irrelevant for the argument here, however. Once  $\acute{\alpha}\nu$  adjoins to TP, it can either attach prosodically to a prosodic word to its left, or (if no such word is available) undergo prosodic flip. Under either scenario, there is no mechanism that will allow a clitic to appear above CP. Generally speaking, this is exactly what one wants, as clausal clitics canonically do not show up in the higher pragmatically-marked layers of the clause, as illustrated by the following example:

- (4.47) δύναται δὲ κατὰ Ἑλλάδα γλῶσσαν ταῦτα τὰ οὐνόματα, Δαρεῖος ἐρξίης, Ξέρξης ἀρήιος, Ἄρτοξέρξης μέγας ἀρήιος. [TOPP τούτους μὲν δὴ τοὺς βασιλέας] [CP ὤδε= $\acute{\alpha}\nu$  ὀρθῶς κατὰ γλῶσσαν τὴν σφετέρην Ἑλληνες καλέοιεν].  
 ‘These names can be translated into Greek, Darius is ‘achiever,’ Xerxes is ‘warlike,’ and Artaxerxes is ‘very warlike.’ These kings, the Greeks would rightly call thus in their own language.’ 6.98.18

Likewise, in embedded clauses a second-position clitic canonically appears in its base-generated CP, just to the right of the complementizer:

- (4.48) ὦ πάντων ἀνδρῶν ἤδη μάλιστα ἀπ’ ἔργων ἀνοσιωτάτων τὸν βίον κτησάμενε, τί σε ἐγὼ κακὸν ἢ αὐτὸς ἢ τῶν ἐμῶν τίς σε προγόνων ἐργάσατο, ἢ σὲ ἢ τῶν σῶν τινα, ὅτι= $\mu\epsilon$  ἀντ’ ἀνδρὸς ἐποίησας τὸ μηδὲν εἶναι;  
 ‘O you who have made your life from the most wicked deeds among all men, what did I—whether I myself or one of my ancestors—do to you—whether to you or one of your own, that you made me, instead of a man, into a no one?’ 8.106.15

Here  $\mu\epsilon$  shows up just after the complementizer  $\acute{\alpha}\nu$  as predicted.

Prediction A runs into problems in two environments. The first is with the case of clitic climbing presented above:

- (4.49) οὐκ= $\acute{\alpha}\nu$  οἶδ’ εἰ δυνάμην ἅπαντα ἐν μνήμηι πάλιν λαβεῖν.  
 ‘I don’t know if I could retain everything in memory again.’ Pl. *Tim.* 26<sup>b</sup>4-5

As already noted, although  $\acute{\alpha}\nu$  is semantically and morphosyntactically interpreted with the embedded clause, it nevertheless appears second within the matrix clause. This pattern is familiar to English speakers, where the position of *not* in *I don’t think* has



been grammaticalized to precede the (embedded) clause in which it is semantically interpreted (*I don't think* does not mean that one is not or does not think; rather *n't* negates the embedded proposition). So although (4.49) upsets our expectations about where  $\check{\alpha}\nu$  should occur, its position is not on the whole surprising. Nevertheless,  $\check{\alpha}\nu$ -raising has not been grammaticalized in Greek the way negator-raising has been in English, so such an analysis is not to my mind viable for Greek. I should make it clear that I do not believe  $\text{o}\check{\alpha}\chi \text{o}\check{\iota}\delta\alpha$  has in any way become grammaticalized in (4.49): I think the position of  $\check{\alpha}\nu$  results solely from a reduction in the prosodic coding of the matrix clause. This reduction need not occur, and when it does not, then my account would predict that  $\check{\alpha}\nu$  should surface in the embedded clause.

To handle (4.49), a syntax-dominant model would have to posit that with the prosodic reduction  $\text{o}\check{\alpha}\chi \text{o}\check{\iota}\delta\alpha$  comes also a reduction in syntactic category (i.e., desententialization), to the effect that  $\text{o}\check{\alpha}\chi\text{-}\check{\alpha}\nu \text{o}\check{\iota}\delta'$   $\epsilon\check{\iota}$  is essentially a morphologically-complex adverb and not a clause. If this were true then one would expect some semantic difference between reduced and non-reduced instances of  $\text{o}\check{\alpha}\chi \text{o}\check{\iota}\delta\alpha$ . I am not sure if such a case can be made.

Second, it is possible for clausal clitics to appear above CP in the presence of clausal conjunctions, as in the following example:

- (4.50)  $\text{καί}\text{-}\sigma\varphi\epsilon\alpha\varsigma$   $\acute{\omega}\varsigma$   $\text{o}\check{\upsilon}\delta\epsilon\iota\varsigma \acute{\epsilon}\kappa\acute{\alpha}\lambda\epsilon\epsilon$ ,  $\acute{\epsilon}\kappa\tau\acute{\rho}\epsilon\pi\omicron\nu\tau\alpha\iota \acute{\epsilon}\pi' \text{Ἀθηνέων}$ .  
 ‘And since no one invited them, they turned toward Athens.’ 6.34.10

As above, if we assume that  $\text{καί}$  heads a layer of syntax above CP, then  $\sigma\varphi\epsilon\alpha\varsigma$  occurs above CP:

- (4.51) [ $_{\text{ConjP}}$   $\text{καί}\text{-}\sigma\varphi\epsilon\alpha\varsigma$ ] [ $_{\text{CP}}$   $\acute{\omega}\varsigma \text{o}\check{\upsilon}\delta\epsilon\iota\varsigma \acute{\epsilon}\kappa\acute{\alpha}\lambda\epsilon\epsilon$ ,  $\acute{\epsilon}\kappa\tau\acute{\rho}\epsilon\pi\omicron\nu\tau\alpha\iota \acute{\epsilon}\pi' \text{Ἀθηνέων}$ ].

Likewise in the following case:

- (4.52) [ $_{\text{ConjP}}$   $\acute{\alpha}\lambda\lambda\acute{\alpha}\text{-}\mu\omicron\iota$ ] [ $_{\text{CP}}$   $\acute{\tau}\acute{\iota} \text{o}\check{\upsilon} \delta\iota\check{\eta}\lambda\theta\epsilon\varsigma \acute{\alpha}\upsilon\tau\omicron\varsigma \acute{\upsilon}\pi\omicron\theta\acute{\epsilon}\mu\epsilon\nu\acute{\omicron}\varsigma \tau\iota$ ,  $\acute{\iota}\nu\alpha \mu\check{\alpha}\lambda\lambda\omicron\nu \kappa\alpha\tau\alpha\mu\acute{\alpha}\theta\omega$ ;  
 ‘But why do you yourself not go through it with a hypothesis for me, in  
 order that I may understand more?’ Pl. *Parm.* 136<sup>c7</sup>

The syntax-dominant account would need a mechanism that enables a clitic to show up so early in the clause. The problem with this is that the mechanisms needed to derive canonical second-position behavior are designed to rule out phenomena like (4.51) and (4.52): see for instance Taylor (1990:55), who proposes a mechanism to rule out conjunctions as hosts. As I demonstrated above, such cases can be readily handled under a prosody-dominant account with fairly basic assumptions about the syntax-phonology interface.

### 3.2 Prediction B

Within the clause, pronominal clitics move from their base-generated position in VP up to adjoin to the left edge of TP. If C<sup>0</sup> is empty, then they undergo prosodic inversion and surface one prosodic word (and no more) to the right. Under this analysis, the clitic should appear no more than one prosodic word from the left edge of TP (at least in sentences in which TP is occupied, which I presume to be the canonical situation).

This prediction is the one most heavily violated. The bulk of the violations are incurred in metrical texts, where pronominal clitics, as demonstrated in the next chapter, consistently appear further inside the clause than would be predicted by a syntactic analysis (or by Wackernagel's original surface formulation for that matter).

What is crucial about the data presented in chapter five is not just the surface position of the clitic within the clause, but rather the nature of the material that stands to the left of the clitic host. It is characterized by two properties. First, the material preceding a clitic host often does not form a syntactic constituent, as in the following example, which was introduced above:

- (4.53) ὅταν δ' ἴκηται, τηνικαῦτ' ἐγὼ κακὸς  
 μῆ-δρῶν-**ἄν** εἶην | πάνθ' ὅσ' ἄν δηλοῖ θεός  
 'When he gets here, I would be remiss  
 if I didn't do whatever god indicates.' Soph. *OT* 76-77

One cannot group τηνικαῦτ', ἐγὼ, and κακὸς into any defensible morphosyntactic unit. One can thus not treat a case like (4.53) as one of preposing. The following example, also introduced above, presents a slightly different issue:

- (4.54) ὁ ξένος ἴν' ὀρθῶς | ἐκμάθητις-**μ**' ἀπώλεσεν,  
 ὁ μιαρὸς, ὅς μοι δοῦς τὸ πῶμα κατέκλυσεν.  
 'So you know it is my guest who destroyed me,  
 the abominable one, who by giving me that drink drowned me.'  
Eur. *Cyc.* 676-677

Here it is not simply that *με* is too far into the clause but also that its host is in the embedded clause. As laid out in section two above, both of these cases can be handled much better under a prosody-dominant account.

The phenomenon of split enclisis also upsets Prediction B (or at least calls attention to its inadequacy). As it stands, a syntax-dominant account would presumably line up clausal clitics in a chain one prosodic word from the left edge of TP.

- (4.55) οὐκ-**ἄν** μένουσ'=**ἄν** | ἧσυχός=**σ'** ἐν οὐρανῶι  
 αὐταῖς Ἀμύκλαις ἦγαγεν πρὸς Ἴλιον;  
 'Could she not have stayed peacefully in heaven

Here we have two tokens of ἄν after neither of which do we find the pronominal clitic σέ. Here a syntax-dominant account would not only have to account for the position of the pronominal clitic, but also why it does not have the same host as either token of ἄν. One could attempt to preserve the syntactic conditioning of clitic placement by arguing that there is a failure (for whatever reason) of the clitics to move up to second position. Such an analysis would then predict that clitic pronouns would be found in their base-generated positions adjacent to their verbal hosts: but cases like (4.55) do not support such an analysis. In the next chapter, I lay out a scheme that can handle cases like (4.55).

### 3.3 Prediction C

The last prediction pertains to what is supposed to happen once a clitic adjoins to the left edge of TP: if there is material to the left of TP (which is typically materially in the CP layer), then the clitic should simply find a host there to its left. If there is no such material to the left of the clitic, then it should undergo prosodic flip and appear one prosodic word to the right of its initial landing site. Where this analysis runs into problems is with cases like the following that involve sub-CP preposing:

(4.56)  $[_{CP} \text{ ἦν μὲν } [\delta\eta]] [_{FocP} \text{ τὸ χρηστήριον } [_{TP} \text{ ἀνέλημι-μιν βασιλέα εἶναι...}$   
 ‘...if the oracle appoints him to be king...’ 1.13.5

Assuming that ἦν occupies  $C^0$ , τὸ χρηστήριον some layer beneath CP, and ἀνέλημι  $T^0$ , then one would have expected μιν to simply adjoin to χρηστήριον. But instead it appears to have undergone prosodic flip in the face of a perfectly good host. Of course one could work around this problem by putting ἦν and τὸ χρηστήριον above CP, or by coming up with an analysis that would put βασιλέα at the left edge of TP, but these would be ad hoc solutions.

By contrast, (4.56) falls out naturally from the model developed above. I presume the following prosodic coding:

(4.56.a)  $(\text{ἦν μὲν } [\delta\eta] \text{ τὸ χρηστήριον})_i (\text{ἀνέλημι-μιν βασιλέα εἶναι})_i, \dots$

Since χρηστήριον is not at the left edge of an intonational phrase, it cannot host μιν. One might wonder why ἦν, which does occupy the left edge of an intonational phrase, is not a licit host. This is because the intonational phrase contains preposed material, from which a clitic is blocked. (One would expect a clausal clitic to surface in an intonational phrase embracing preposed material only in cases where the clitic was specifically selected for, i.e. governed, by material within the preposed phrase. Here that is not the case as μιν is governed by ἀνέλημι.)

### 3.4 What Clitics Diagnose

The claim that prosody has the upper hand when it comes to clitic distribution has been criticized for denying clitics the ability to diagnose syntactic structure (see e.g. Keydana 2009: 12-13), which they are widely held to do for a variety of languages. This is not actually true, at least in regard to the claims of this dissertation. In the vast majority of cases, prosodic coding and syntactic structure will be isomorphic. Thus clitic position will typically diagnose *both* syntactic and prosodic constituency. It is only in cases where syntactic structure and prosodic structure are not aligned, and a clitic is positioned according to the latter domain, that clitics will diagnose prosodic but not syntactic structure (and even here I do not think we can rule out the possibility that clitics are sensitive to some sort of syntactic constraints).

#### 4 An Alternation among Dative Pronominal Clitics

Dative clitic pronouns exhibit an alternation that no other second-position clitic form exhibits. When the pronoun encodes a possessor argument, it can occur in clause-second position, within the possessed noun phrase (see also 4.8.14):

- (4.57) οἱ-δέ-σφι βόες ἐκ τοῦ ἀγροῦ οὐ παρεγίνοντο ἐν ὥρῃ.  
 ‘Their oxen didn’t arrive in time from the field.’ 1.31.10
- (4.58) αἰ-γάρ-σφι κάμηλοι ἵππων οὐκ ἥσσονες ἐς ταχυτήτά εἰσι.  
 ‘For their camels are not inferior to (their) horses in speed.’ 3.102.19
- (4.59) τὰ-δέ-μοι παθήματα ἐόντα ἀχάριτα μαθήματα γέγονε.  
 ‘My sufferings have been an unwelcome education.’ 1.207.6

When the pronoun is an argument of the verb (i.e., is syntactically governed by the verb), then its tendency is to occur after the first morphosyntactic constituent of the clause (cf. 1.31.12, 1.67.9, 1.146.5, 1.197.1, 1.216.13, 1.216.6, 2.96.1):

- (4.60) καὶ τόδε ἄλλο-σφι ὧδε συμπέπτωκε γίνεσθαι, τὸ Πέρσας μὲν αὐτοὺς λέληθε, ἡμέας μέντοι οὐ.  
 ‘And this other (trait) they happen to have, which has escaped the attention of the Persians themselves, but not of us.’ 1.139.1
- (4.61) ἐν δὲ τούτῳ τῷ χώρῳ-σφι στρατοπεδευόμενοι οἳ τε ἐκ τοῦ ἄστεος στασιῶται ἀπίκοντο...  
 ‘While they were encamped in this area [= Marathon], the rebels from the town arrived...’ 1.62.4
- (4.62) τὰ οὐνόματά-σφι ἐόντα ὅμοια τοῖσι σώμασι καὶ τῇ μεγαλοπρεπείῃ, τελευτῶσι πάντα ἐς τὠτὸ γράμμα, τὸ Δωριέες μὲν σὺν καλέουσι, Ἴωνες δὲ σίγμα.  
 ‘Although they have names which match their physical characteristics and

their status, they all end in the same letter, which the Dorians call “san,”  
and the Ionians “sigma.” 1.139.2<sup>125</sup>

We would otherwise have expected the pronominal clitic to occur somewhere within these clause-initial constituents: in (4.59), for instance, that would mean either after *καί* or *τόδε*. This pattern in (4.60)-(4.62) may also be responsible for the position of *μοι* in the following example:

- (4.63) Ἄρπαγος δὲ ὡς εἶδε με, ἐκέλευε τὴν ταχίστην ἀναλαβόντα τὸ παιδίον οἴχεσθαι φέροντα καὶ θεῖναι ἔνθα θηριωδέστατον εἶη τῶν ὀρέων, φὰς Ἄστυάγεα εἶναι [τὸν ταῦτα ἐπιθέμενόν]=μοι, πόλλ’ ἀπειλήσας εἰ μὴ σφεα ποιήσαιμι.  
‘And Harpagos, when he saw me, said to pick the child up immediately and go off with it and put it where there are the most wild animals in the mountains, saying that it was Astyages who laid this command on me, threatening over and over were I not to do these things.’ 1.111.19

Here it may be the case that *μοι* selects as its host the constituent *τὸν ταῦτα ἐπιθέμενόν*, but the motivation for this positioning is far from clear.

To further complicate matters, the patterns in (4.57)-(4.59) and (4.60)-(4.62) are not without their exceptions. So in the following case, we would have expected the clitic to occur after the noun phrase *ὁ μάγος*, but instead it shows up inside it:

- (4.64) ὁ-δέ=μοι μάγος, τὸν Καμβύσης ἐπίτροπον τῶν οἰκίων ἀπέδεξε, οὗτος ταῦτα ἐνετείλατο, φὰς Σμέρδιν τὸν Κύρου εἶναι τὸν ταῦτα ἐπιθέμενον εἶπαι πρὸς ὑμέας.  
‘The magus, whom Cambyses made steward of the house, he gave me these (orders), saying that it was Smerdis the son of Cyrus who issued the order to say these things to you.’ 3.63.9

In the following example, we would have expected *σφι* after *γάρ* because it functions as a possessor, but instead it occurs only after *τεσσεράκοντά* (and note that this is also not the right edge of the noun phrase, which occurs only with *νέες*):

- (4.65) αἱ μὲν γὰρ τεσσεράκοντά=σφι νέες διεφθάρησαν, αἱ δὲ εἴκοσι αἱ περιεοῦσαι ἦσαν ἄχρηστοι.  
‘For forty of their ships were destroyed, and the surviving twenty were useless.’ 1.166.10

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<sup>125</sup> One could object that *σφι* is possessive here and that the sentence should be rendered: ‘Their names, which match their physical characteristics and their status, all end in the same letter, which the Dorians call ‘san,’ and the Ionians ‘sigma.’’ The participial phrase under this analysis becomes a non-restrictive relative clause instead of a concessive clause. This reading is, to my mind, inferior, because the point of the participial phrase is to contrast the fact that Iranian names match individual characteristics, and yet at the same time all end in the same final segment.

One possibility here is that semantics is playing a role: if the phrase were intended to mean ‘their forty ships,’ perhaps the clitic would have been placed after γάρ. Lastly, in the following two examples, we would have expected the pronoun after the first constituent:

(4.66) τούτους=τε=δή=σφι τοὺς χώρους διδοῖ καὶ τᾶλλα τὰ ὑπέσχετο πάντα ἀπέδωκε.  
 ‘He gave these lands to them and all the rest that he had promised he paid.’  
 2.154.5

(4.67) ἐν=δέ=οἱ χρόνῳ ἐλάσσονι καὶ οὐ πληρώσασα τοὺς δέκα μῆνας ἡ γυνὴ αὕτη  
 τίκει τοῦτον δὴ τὸν Δημάρητον.  
 ‘In insufficient time and without completing the (requisite) ten months this woman bore him [= Ariston] this Demaratos.’  
 6.63.4

In (4.66), we would have expected σφι after the first constituent, τούτους τοὺς χώρους, and in (4.67) οἱ after ἐν χρόνῳ ἐλάσσονι.

While this alternation (if we can, despite the counterexamples, place stock in it) has not to my knowledge been observed in the literature, it is nevertheless entirely unsurprising. Clitic position elsewhere (see chapters eight and nine) is sensitive to the semantics of the sentence, and that a clitic should exhibit an alternation conditioned by its semantic role is thus entirely in line with the overall picture.<sup>126</sup>

How one integrates these patterns within the general model, however, is not yet clear. One possibility (if I may speculate) is to say that dative pronominal clitics have different selectional properties, which depend upon their syntactic and semantic function. So a dative pronominal clitic that is an argument of the verb would select not the first prosodic word of an intonational phrase as its host, but rather the first prosodic phrase. It would still fall second within the domain of the intonational phrase, but would select a higher-category host. By contrast, possessor clitics could select for the same type of host (namely the first prosodic word), but within a smaller domain, presumably the prosodic phrase.

At this point, such an account can only be sketched. For one, it is not clear to me if there is any evidence that could demonstrate the specifically prosodic nature of the distribution in this case. Furthermore, without a more detailed investigation of possessor clitics and the coding of proclitic elements such as the definite article, it would be rash to advance a theory at this point. I am fully aware that this particular case, given the evidence presented above, seems much easier to account for under a syntax-dominant model. This may well be the case.

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<sup>126</sup> I think that it is, however, worth asking the question of why we do not find the *opposite* distributional pattern: that is, why do possessor clitics not occupy the right edge of the possessum noun phrase (i.e., the possessed entity), and clitics that are arguments of the verb occur in NP-second position? I have no answer to this question.

## 5 Conclusions

The preceding account has argued for the dominance of prosodic domain in the distribution of clausal clitics, specifically for the importance of the left edge of the leftmost intonational phrase of a clause excluding any preposed material. While I argue that this generalization can capture more of the data than any previous generalization, it is only a tentative hypothesis. Before a complete generalization (or set of generalizations) can be offered for the fifth-century Greek data, further investigation will be required of the clitic system as a whole. As noted in section four, there is evidence from dative pronominal forms whose distribution may either not be prosodically conditioned, or whose host is not a prosodic word. We turn now to consider the metrical data in greater detail and present further evidence for the prosodic conditioning of clitic distribution.

## Chapter 5

### The Metrical Data

In the preceding chapter, I used data from metrical texts to argue for a prosody-dominant model of clitic organization in fifth-century Greek. In this chapter, I present the metrical data in more detail, discuss how it supports a prosody-dominant account of clitic distribution, and also introduce distributional patterns that remain mysterious. To recap briefly, one of the central predictions of the prosody-dominant analysis is that, if you encode a clause with more intonational phrases than it would otherwise receive in the mapping from phrase structure to phonological form, then a speaker should have available additional locations within the clause (specifically, in the clause to the right of canonical second position) in which to place a clitic. This prediction is borne out by the metrical data. For the metrical template itself enriches the prosodic constituency of a clause by parsing it into constituents (specifically, intonational phrases) that would not arise from phrase structure alone. As a result, clitic distribution is far more variegated than what we find in prose. While in the past this diversity in distributional patterns has been cause for despair, it is on my account a crucial (and predicted) property of the underlying organization of the system.

Below I present two sets of metrically-conditioned distribution patterns from the iambic trimeter and trochaic tetrameter, which I label the left-edge patterns and the right-edge patterns. In the left-edge patterns, the clitic occurs at the left edge of a metrical constituent, while in the right-edge patterns it is hosted at the right edge of a metrical constituent. The left-edge pattern is essentially that of prose: a clitic selects a host at the left edge of a prosodic domain, presumably the intonational phrase, although there is some question on this front. The right-edge cases are considerably more challenging to analyze, and what I present here is only a sketch of some possible analyses.

To my knowledge, there is no general account of clitic distribution in fifth-century drama. Wackernagel (1892) of course relies heavily on metrical texts, but these are primarily Homer and the mantras of the *Rgveda*. Fraenkel (1964)/[1933] is more squarely focused on fifth- and fourth-century prose to the exclusion of poetic texts; Janse (1993) is likewise focused on prose texts. The reason for this bias, so far as I can tell, is twofold. First, many scholars work under the (often tacit) methodological assumption that prose data are the best witness to the syntax of a language, as poetic language is adorned and unusual, and thus not a reliable reflection of the internal workings of the language. (This issue is taken up further in section 5.1.) Second, the distributional patterns of the clausal clitics in fifth-century Greek poetry do not readily submit to surface generalizations, and this has apparently led to despair. But, as I argue below, there are discernible patterns. And as we will see, these patterns, which at first seem to be a *sui generis* phenomenon, in some respects actually recapitulate what



happens in prose. In spite of these advances, what follows is not a complete analysis of clitic distribution in Attic drama. This is such complex terrain that further investigation will be required before that goal can be achieved. My goal in this chapter is primarily to show how the metrical data support a prosody-dominant analysis of clitic distribution in Greek, and secondarily to identify patterns and issues that demand further consideration.

This chapter is structured as follows. Section one presents the left-edge patterns from the iambic trimeter; section two presents the same patterns from the trochaic tetrameter. These patterns are then analyzed together in section three. Section four introduces the right-edge data. In section five, I sketch a possible analysis that would encompass the left-edge, right-edge, and prose data. In section six, I forestall a methodological objection concerning my use of the metrical data. Section seven looks farther out on the metrical horizon to consider clitic distribution in Homer, where, remarkably, the patterns observed in drama are almost entirely absent. Section eight raises in brief two related issues, that of split enclisis, and that of the distribution of γάρ in Menander. Section nine offers concluding remarks. The data for this chapter have been culled from the extant plays of Aeschylus, Sophocles, and Euripides for the iambic trimeter. The examples for the trochaic tetrameter all come from Aristophanes.

## 1 Left-Edge Patterns: The Iambic Trimeter

The iambic trimeter is canonically a twelve-syllable meter with the following schema (Descroix 1931; Maas 1962: 66-71; Snell 1962: 11-15; Halporn et al. 1963: 13-15; Golston and Riad 1990: 136-142; West 1992: 41; for a generative account, see Fabb and Halle 2008: 154-167):

$$\begin{array}{l}
 \textit{Iambic Trimeter} \\
 (5.1) \text{ X}_1 \text{ H}_2 \text{ L}_3 \text{ H}_4 \text{ X}_5 | \text{ H}_6 \text{ L}_7 | \text{ H}_8 \text{ X}_9 \text{ H}_{10} \text{ L}_{11} \text{ H}_{12} \\
 \text{H/L} = \text{heavy/light syllable} \\
 \text{X} = \text{heavy or light syllable} \\
 | = \text{caesura boundary}
 \end{array}$$

The fifth-foot caesura is more common than the seventh; according to West (1982: 40) the latter occurs “about once in every four trimeters.” The caesura can fall after the sixth foot, i.e. the medial caesura, although this is even less common: see Stephan (1980) and Donzelli (1987) for discussion, references, and quantitative data. The two halves of the line (which probably reflect an original penthemimer+lekythion fusion) I will refer to as hemistichs. I exclude here consideration of bridges; see Devine and Stephens (1982) for an extensive treatment. I assume that the prosodic correlate of the metrical line in an iambic trimeter is canonically the intonational phrase. On average an iambic trimeter line contains 4.5 prosodic words (see Golston and Riad 2000), which is roughly what one would expect per intonational phrase (cf. Chafe 1994: 65 reports that the mean length of what he calls *substantive intonation units* is 4.84 words, with the modal length being four words). Furthermore, the line-final anceps position in all likelihood

reflects intonational phrase-final vowel lengthening. Compare the remark of Devine and Stephens (1984: 115): “...the linguistic model for the stichos is the higher level phonological unit corresponding to the syntactic clause (or simple sentence) in normal speech tempo.” In spite of these considerations, there may well be certain instances of the iambic trimeter that do not correlate with an intonational phrase. But the least controversial base hypothesis appears to be a correlation between the metrical line of the iambic trimeter and the intonational phrase.

### 1.1 Distributional Patterns

Clausal clitics can be hosted outside of second position by the first prosodic word of the metrical line or the first metrical word after the caesura.<sup>127</sup> I begin first with the verse-initial type, which is illustrated in the following example:

- Verse-initial host*
- (5.2) ὅταν δ' ἴκηται, τηνικαῦτ' ἐγὼ κακὸς  
 μῆ,=δρῶν=ᾶν εἶην | πάνθ' ὅσ' ᾶν δηλοῖ θεός  
 ‘When he gets here, I would be remiss  
 if I didn’t do whatever god indicates.’ Soph. *OT* 76-77

The matrix clause begins with τηνικαῦτ', directly after which we would in canonical situations expect ᾶν. However, it does not show up until the next line, where it is hosted by the first prosodic word of the verse (μῆ is proclitic, μῆ=δρῶν thus being one prosodic word).

In the second type, the clitic is hosted outside of second position after the first prosodic word of the caesura:

- Post-caesural host*<sup>128</sup>
- (5.3) ματῆν γὰρ ἦβην | ὤδε=γ'=ᾶν κεκτῆμεθα  
 πολλῆν ἐν Ἄργει.  
 ‘In vain would we possess so big an army in Argos...’ Eur. *Heracl.* 282

Here we canonically expect ᾶν to be hosted by the clause-initial adverb ματῆν and to occur just after γὰρ. It falls neither here nor after the following noun ἦβην. Instead, it is hosted by the first word after the caesura, ὤδε.

One could counter the claim that the meter in (5.2) and (5.3) licenses a non-second position host for ᾶν by arguing that the prosodic coding of the clauses results from syntactic configuration. So with (5.2) one could claim that, for non-metrical reasons,

<sup>127</sup> This pattern has also been observed in the *Rgveda* (e.g. RV 1.165.12cd, 6.27.7ab). See Hale (1987: 79-80), Hock (1992: 46-50) for discussion. Whether the Sanskrit patterns are driven by the same mechanism as the Greek data is not yet clear. If it turns out that they are, it is an open question as to how one should interpret such a Graeco-Indic equation.

<sup>128</sup> See also Eur. *Alc.* 662.

the string *τηνικαῦτ' ἐγὼ κακός* was coded as an intonational phrase, i.e. (*τηνικαῦτ' ἐγὼ κακός*)<sub>i</sub>. Since the beginning of the next line coincides with the left edge of an intonational phrase, the clitic falls exactly where one expects it. In my view, such an objection exhibits little chance of success because I see no ostensible syntactic or pragmatic motivation for the coding of *τηνικαῦτ' ἐγὼ κακός* as an intonational phrase. As will be demonstrated in chapters six and seven, such a unit bears no resemblance to the preposed phrases that we find in prose. For one, it contains three constituents (namely *τηνικαῦτ'*, *ἐγὼ*, and *κακός*), and there is no parallel for one preposed phrase with three constituents. One could of course postulate three individual preposed phrases. But such an extreme move would run into at least two problems. The first is that the pragmatic meaning behind such triple-preposing would be far from clear. (There is one case of this type known from prose, however, which I cited above in chapter four, example (4.15); see chapter seven for a discussion of its pragmatics.) Indeed, it is hard to see how any of the three constituents here could bear marked pragmatic meaning. The second is that one would presumably have to presuppose that each constituent was coded as an intonational phrase, which is both unlikely and, in the case of *τηνικαῦτ' ἐγὼ*, impossible. One could try to avoid this latter problem by claiming that all three preposed phrases for some reason form only one intonational phrase. The only motivation that I can envision for such an analysis would be the ability of the metrical template to bleach (i.e., override) the prosodic encoding that one would expect on the basis of phrase structure. There is evidence for such a phenomenon (see section 5.0 below), but whether or not it would happen in this particular scenario is not clear. To advance such an analysis for this case, one would first have to specify what the pragmatic function (or functions) of the preposed material is.

My analysis relies crucially on the claim that the material preceding a metrically-induced host (i.e., *τηνικαῦτ' ἐγὼ κακός*) is neither preposed nor pragmatically-marked, and that verse-initial hosts are licensed on the basis of the prosodic coding that results from the metrical template itself. It is not always easy to decide when the material preceding the host owes its position to pragmatic meaning or not. I have selected (5.2) and (5.3) as clear cases in which such an alternative analysis would not offer much hope.

We observe the same ability of a verse-initial prosodic word to host a pronominal clitic outside of canonical second position:

*Verse-initial host*

- (5.4) τὸ χρῆ νιν ἐξέσωιζεν, οὐδ' εἶα πατήρ  
 Ζεύς=νιν κακῶς δρᾶν οὔτ' ἔμ' οὔθ' Ἥραν ποτέ.  
 'Fate was keeping him alive, and father Zeus  
 allowed neither me nor Hera to harm him.'

Eur. *Heracl.* 828-829<sup>129</sup>

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<sup>129</sup> See also Eur. *Alc.* 404-405.

Here the pronoun *νιν* in the second line is hosted verse-initially; in a canonical situation we would have expected it to be hosted by the first word of its clause, namely *οὐδ’*. In the following example, again involving *νιν*, the pronoun surfaces well into the adjoined *ἡνίκα*-clause:

*Post-caesural host*

- (5.5) Κρέων δὲ Μεγάρων τῆσδε γίγνεται πατήρ,  
 ἦν πάντες ὕμεναίοισι Καδμεῖοί ποτε  
 λωτῶι συνηλάαξαν ἡνίκα’ εἰς ἐμοῦς  
 δόμους ὁ κλεινὸς | Ἡρακλῆς=*νιν* ἤγετο.  
 ‘Creon became (the) father of this Megara,  
 whom all Cadmaeans at her wedding once  
 escorted with pipe music, when the famous  
 Heracles brought her into my house.’

Eur. *Heracl.* 9-12

In both (5.4) and (5.5), it does not seem viable to analyze the material preceding the clitic host as in any way preposed (or at least they do not bear the pragmatic values associated with preposed strings in non-metrical speech). It is worth stressing that in (5.2)-(5.5), the pronoun is not hosted by the verb. There has been a tendency in the literature to assert that when the clitic is not placed second in the clause, then there is the “option” to place it after the verb. As we will see below in section 3.1, there are cases when the lexical category of the host appears to be relevant for clitic placement, but the situation is more complex than a generalization of the type “if not second, then post verbal.”

## 2 Left-Edge Patterns: The Trochaic Tetrameter

The left-edge distributional patterns that we observed above with the iambic trimeter are also found in the trochaic tetrameter. The trochaic tetrameter is a canonically fifteen-syllable line (Halporn et al. 1963: 15-16; Maas 1962: 66-71; Snell 1962: 16; West 1982: 40):

*Trochaic Tetrameter*

- (5.6) H<sub>1</sub> L<sub>2</sub> H<sub>3</sub> X<sub>4</sub> H<sub>5</sub> L<sub>6</sub> H<sub>7</sub> X<sub>8</sub> | H<sub>9</sub> L<sub>10</sub> H<sub>11</sub> X<sub>12</sub> H<sub>13</sub> L<sub>14</sub> H<sub>15</sub>

A diaeresis typically falls after the eighth syllable, which thus reveals the compound (ditrochee+lekythion) formation of the line. I will again refer to the two halves of the verse as hemistichs. I leave aside discussion of bridges here. As the trochaic tetrameter is a longer verse than the iambic trimeter, there is some question here as to how metrical constituent and prosodic constituent correlate, but I will for the present assume the verse line canonically correlates with an intonational phrase.

## 2.1 The Distributional Patterns

The following cases exhibit the same left-edge patterns that we observed above in the iambic trimeter:

*Verse-initial host*<sup>130</sup>

- (5.7) οὐχ ἀπάντων, οὐχ ἀπάντων. ἀλλ' ἐγὼ λέγων ὁδὶ  
πολλ'=**ἄν** ἀποφύγαιμι' ἐκείνους ἔσθ' ἃ κἀδικουμένους.  
'Not for all of them, not for all of them. In fact, I here and now  
could show that in many ways it is they who are being wronged.'  
Ar. *Ach.* 313-314

*Post-caesural host*

- (5.8) ὡς ἐγὼ βάλλων ἐκεῖνον | οὐκ=**ἄν** ἐμπλήμην λίθοις.  
'As I can't get my fill of striking him with stones.'  
Ar. *Ach.* 236

In (5.8), one could object that βάλλων ἐκεῖνον would have been coded as an intonational phrase, and that this pattern could equally have been found in prose. But as I demonstrate in chapter eight, complement (i.e. supplementary) participial phrases canonically admit second-position clitics, so this is in fact not a pattern that we would expect to find in prose.

The same patterns are found with pronominal clitics:

*Verse-initial host*

- (5.9) ὅτε τῶν ἐμαυτοῦ γ' ἔνεκα νυνὶ χρημάτων  
ἔλκω=**σε** κλητεύσοντα.  
'...when I am dragging you to witness a summons  
on account of my own money.'  
Ar. *Nub.* 1217-1218

I have not yet found an example of a post-diaeresis case with a pronominal clitic in the trochaic tetrameter; I presume that this is only an accidental gap in the data.

## 3 Analysis of the Left-Edge Data

The left-edge patterns of the iambic trimeter and trochaic tetrameter can be explained as an extension of the domain in which clitics are positioned in non-metrical contexts. For in prose contexts, clitics select for a host at the left edge of an intonational phrase. In metrical contexts, clitics have the option of selecting for a host at the left edge of the verse, which presumably corresponds prosodically to the left edge of an intonational phrase. In this way, the metrical template creates more left edges of intonational phrases within a clause than would exist in a non-metrical environment, and poets have the option of locating a clitic in these additional locations. I say “option” because it is

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<sup>130</sup> See also *Ach.* 796.

at this point entirely mysterious as to what motivates the appearance of a clitic in a metrically-conditioned position as opposed to a more canonical one.

This analysis is weakened by one problem, a solution for which is not yet clear to me. Above (section 1.0), I assumed that a metrical line of an iambic trimeter corresponds prosodically to the intonational phrase. If that is the case, then each hemistich presumably corresponds to a prosodic phrase. And thus what we have with the post-caesural cases is hosting at the left edge of a prosodic phrase, and not the left edge of an intonational phrase.

There are at least three possible solutions to this issue. The first is that the lines with post-caesural clitic hosts are prosodically non-canonical, in that there is an intonational-phrase break at the caesura. This would mean that the ability to position a clitic after a post-caesural is not available in every line, but only in certain ones. If this is true, it is not yet apparent what is responsible for the non-canonical prosodic coding. The second and third possibilities are similar, in that they both involve the idea that the clitic selects for a lower level prosodic domain. It is possible that the clitics simply do select for a host within the prosodic phrase and not the intonational phrase. Or it may be the case that it is not a lower-level prosodic domain that they select for, but rather a fine-grained prosodic property, specifically that of pitch. This idea is sketched out in more detail below in section 5.2. Whichever one of these analyses bears the closest relationship to the truth, in each case clitic distribution would still be prosodically conditioned.

Lastly, a note on quantitative data. Some of the issues raised here could perhaps be illuminated by considering the frequency of the patterns. Taking an exact count of the number of metrically-licensed cases is difficult because the vast bulk of the data admit more than one interpretation (i.e., one could analyze cases of metrically-licensed clitic position as due to preposing). There are very few cases like those presented above in which alternative analyses seem unlikely. It may not be possible to take any meaningful count of the data until we know more about word order in Attic drama more broadly.

#### 4 Right-Edge Patterns

There is a second set of metrically-conditioned distributional patterns. While this second set would appear to involve essentially the same phenomenon as observed in section two with the left-edge cases (i.e., the metrical template licenses hosts for clitics that would not otherwise be licensed), it is not entirely clear how one should interpret these data. The pattern can be described simply: a clitic is hosted outside of second position at the right edge of a hemistich as opposed to the left, as illustrated in the following examples:

*Verse-final host*

(5.12) ὦ δυστάλαινα, τοιάδ' ἄνδρα χρήσιμον  
 φωνεῖν, ἃ πρόσθεν | οὔτος οὐκ<sub>p</sub>=ἔτλη=ποτ'=**ἄν**.

‘Wretched me! What things a noble man  
says, which he never would have dared (say) before.’ Soph. *Aj.* 411

Here ἄν occurs in a very unusual place, being the last word in its clause. While we would not have expected it to occur directly after the relative pronoun (as this would have entailed a non-referential reading), it still should not have been positioned any farther back than after πρόσθεν.

*Verse-final host*

- (5.13) κακῶς ἀκούειν | οὐ μέλει θανόντι=**μοι**.  
‘A bad reputation will not concern me once I am dead.’ Eur. *Alc.* 726

*Verse-Final host*

- (5.14) εἰσελκύσας γάρ μ’ εἰς τὸ βουλευτήριον  
διέβαλλε καὶ ψευδῆ κατεγλώττιζέ=**μου**  
‘For he dragged me into the Council,  
slandered me and slobbered me with lies...’ Ar., *Ach.* 379-380

*Pre-caesural host*<sup>131</sup>

- (5.15) καὶ τίς τόδ’ ἐξίκοιτ’=**ἄν** | ἀγγέλων τάχος;  
‘And what messenger could arrive that quickly?’ Aesch. *Ag.* 280

*Pre-caesural host*

- (5.16) ἤδη δ’ ὑπερβαίνοντα γεῖσα τειχέων  
βάλλει κεραυνῶι Ζεὺς=**νιν**. | ἐκτύπησε δὲ  
χθῶν, ὥστε δεῖσαι πάντας.  
‘Just as he is scaling the parapet of the walls  
Zeus strikes him with a thunderbolt. The earth  
resounded, so as to scare everyone.’ Eur. *Phoen.* 1180-1182

Likewise from the trochaic tetrameter:

*Verse-final host*

- (5.17) ...οἷσιν ἢ πόλις πρὸ τοῦ  
οὐδὲ φαρμακοῖσιν | εἰκῆι ῥαιδίως ἐχρήσατ’=**ἄν**.  
‘whom formerly the city  
would not readily have relied on, not even as scapegoats.’ Ar. *Ra.* 733<sup>132</sup>

<sup>131</sup> See also Eur. *Alc.* 1049.

<sup>132</sup> See also *Ach.* 709.

- Pre-diaeresis host*
- (5.18) ἀλλ' ἥδιον ἄν  
 δικίδιον σμικρὸν φάγοιμ'=**ἄν** | ἐν λοπάδι πεπνιγμένον.  
 'But I would rather eat a little lawsuit baked in a casserole.'  
Ar., *Ves.* 510-511

And from the “Euripidean” (iambic dimeter plus ithyphallic):

- Pre-diaeresis host*
- (5.19) καὶ νῆ Δί' ἄλλα γ' ἐστί=**μου** | κόβαλα παιδὸς ὄντος.  
 'And by Zeus I had more tricks as a child.'  
Ar., *Eq.* 417

The right-edge cases differ crucially from the left-edge set in that they are characterized by a further property: there is a strong tendency for the verb to host the clitic in this scenario. In itself, it is not in the least surprising that the clitic should be hosted by the verb, given the dependency relationship between the verb and pronominal arguments, and the semantic connection between the verb and ἄν. But what is unexpected is that the distribution of the clitic is apparently governed by two constraints: the first that it be hosted at the right edge of a metrical constituent, and the second that it be hosted by its verb. Notice that when a clitic is hosted by a verb at the right edge of a hemistich, the verb is not always in clause-final position, as with e.g. (5.19).

To further complicate matters, one cannot simply set up a dual-constraint generalization whereby the clitic can (under unknown circumstances) be positioned at the right edge of a hemistich provided that it is hosted by the verb. For there are cases when the clitic is positioned at the right edge of a hemistich, but not hosted by the verb:

- (5.20) μαρέντ'; ἐπεὶ τίς | σωφρονῶν τλαίη τάδ'=**ἄν**;  
 'Did he go insane? For what sane man would dare (to do) that?'  
Eur. *Hel.* 97

Unless one is going to entertain the idea that τάδ' is enclitic (i.e., τλαίη-τάδ'-ἄν), here ἄν occurs at the right of the line and is not hosted by the verb. If examples like this one are worth anything, then it might be the case that verbal hosting in cases like (5.12)-(5.19) is only epiphenomenal: that is, that poets independently want to put verbs in right-edge locations, and also want clitics hosted in right-edge locations.

#### 4.1 Right-Edge Patterns from Prose

Though rare (and not attested in Herodotus), there is some evidence for right-edge patterning in prose texts, as in the following example:

- (5.21) ...ὥς δὲ νῦν ἔχετε, (οὐδὲ διδόντων τῶν καιρῶν Ἀμφίπολιν δέξασθαι  
 δύναισθ'=**ἄν**), ἀπηρητημένοι καὶ ταῖς παρασκευαῖς καὶ ταῖς γνώμας.  
 '...as you are now, you would not be able to take over Amphipolis even if



the opportunity presented itself, having been cut off in both preparations and planning.’ Dem. 4.12.6<sup>133</sup>

One could attempt to argue here that οὐδὲ διδόντων τῶν καιρῶν forms its own intonational phrase (in as much as it bears conditional semantics: see further chapter eight for the prosodic coding of participial phrases), and that Ἀμφίπολιν δέξασθαι is preposed material. But one runs into the problem of finding pragmatic justification. In particular, one would also have to wrestle with the fact that VP-preposing is unattested in Herodotus (at least as far as the evidence from clitic distribution shows).

## 5 Analysis One

In this section, I sketch the first of two possible analyses for capturing the left- and right-edge distributional patterns observed above. The first possibility involves altering the assumption about the correlation between metrical constituency and prosodic constituency. Above I mentioned that the most likely prosodic correlate of the metrical line was the intonational phrase. If, however, we were able to correlate the hemistich, and not the line, with the intonational phrase (with the line then upgraded to the utterance), then the metrical patterns would recapitulate the prose patterns as follows<sup>134</sup>:

<b>Prose</b>		<b>Poetry</b>
(5.22) Left-edge host of ι	≈	Hemistich <sub>1</sub> -initial
Left-edge host of ι	≈	Hemistich <sub>2</sub> -initial
Right-edge host of ι	≈	Hemistich <sub>1</sub> -final
Right-edge host of ι	≈	Hemistich <sub>2</sub> -final

Schematically we can represent this as follows:

$$(5.23) \quad \overbrace{((\omega_{\text{first}}=\text{clitic} \dots \omega_{\text{last}}=\text{clitic})_i)}^{\text{HEMISTICH 1}} \mid \overbrace{((\omega_{\text{first}}=\text{clitic} \dots \omega_{\text{last}}=\text{clitic})_i)_v}^{\text{HEMISTICH 2}}$$

Under this analysis, the difference between the metrical data and the prose data would lie only in the source of the prosodic coding that licenses clausal-clitic hosts. In prose, those units would be the outcome of the mapping between morphosyntax and phonology. In poetry, however, they are created by the melody of the metrical template itself.<sup>135</sup>

<sup>133</sup> See also Dem. 9.18.1. Further examples are available from Demosthenes; my search was brief and limited to the *Olynthiacs* and *Philippics*. For a recent analysis of Wackernagel’s Law in Demosthenes, see Phillips (2008).

<sup>134</sup> These would only be norms, however, and not invariable patterns. For instance a hemistich can behave as an utterance in e.g. *antilabe*.

<sup>135</sup> For a consideration of the effect of melody in the hexameter, see O’Neill (1939). My claim here, that the prosodic overlay of the metrical template creates more distributional possibilities for a clitic, finds a parallel in Polish clitic data: see e.g. Spencer (1991: 368).

The success of this analysis hangs on the ability to correlate the hemistich with the intonational phrase. This is an extremely difficult question, since we have only very crude ways of diagnosing the phonetic properties of the metrical line. A second issue that this analysis raises is the question of whether all four possible positions (in addition to second position) are all available in any given line. My inclination at this point is to say no, but far more research is required on this front.

There is the distinct possibility that the possible positions for a clitic in any given line are relative to the lexical items in the clause and the relation of the clause to the meter (i.e., where in the line, or lines, the clause sits). If this is the case, it may not make sense to try to offer broad-scale generalizations, as clitic distribution would be determined on a clause-by-clause basis. For while a scheme like that in (5.23) may encompass all of the possible locations where a clitic can fall when it lies outside of second position, it does not tell us where a given clitic will occur in a given line.

It may be that the position of a clitic within any given line can only be determined with reference to the prosodic shape of the lexical items in the clause and how these are organized both among themselves and in relation to the meter. If this were the case, then there would be no overarching generalization for clitic distribution (such as, select for a host standing at the left edge of an intonational phrase). For each clause would have its own internal grammar for clitic distribution, and this grammar might not be the same from one clause to the next, or even for the same clause located within a different portion of the meter. If there is any truth to this idea, the prosodic essence of the system would run much deeper than I am currently arguing for. For presumably clitic distribution would be sensitive not only to prosodic properties within the line but also the prosodic shapes of the other words in the clause. It may also be the case that the poets have a preference for locating clitics in specific positions within the meter (i.e., not simply hosting them at the left edge of a metrical constituent, but a bias for or against a specific location in the meter, such as position seven). For some initial studies that examine the relationship between the prosodic shape of lexical items and their position in the trimeter, see Fraser (2002); Baechle (2007), with the review of Butterfield (2008); Gunkel (2010).

One of the problems with the above analysis (and this is not unrelated to the issue just discussed) is that it seems too permissive. If on average an iambic-trimeter line has only 4.5 prosodic words, and the scheme above in (5.23) lays out four possible places within the line (not to mention that of canonical second position) where a clitic can be hosted, then one might almost claim that clitic distribution in metrical texts is random. So, again, what we need is some way to know what for any given line is a possible (or preferred) position for a clitic when not in second position.

## 5.1 The Caesura

Analysis one above rests on the assumption that the hemistich and caesura are phonetically real entities, and in particular that the former is prosodically similar to an intonational phrase. Unfortunately, the phonetic reality of the caesura is a heavily debated question, and it is not clear what phonetic correlates one can equate with the caesura. The modern debate begins with Sturtevant (1924) and Bassett (1925), who essentially deny the notion of the caesura. For counterarguments, see Todd (1942). The nature of the arguments and various theories of what a caesura is need not be reviewed here. I will only reiterate what seem to me sound and convincing reasons for the prosodic reality of the caesura.<sup>136</sup>

Amidst all the uncertainty, there are at least two things that seem certain. First, it need not be the case that every line have a caesura (so Maas 1962: 69). Second, it need not be the case that every caesura exhibit the same phonetic properties. The most common (and least controversial) definition of a caesura runs as follows: “a place in the verse where word-end occurs more than casually” (West 1982: 192; cf. Maas 1962: 32-36). Beyond this, there is and has been much to debate.<sup>137</sup>

Perhaps the most contentious point of debate concerns the equation of the caesura with a pause (of whatever duration). This is especially unfortunate for my purposes, as the equation of the caesura with a pause would be reasonably good evidence for the presence of an intonational-phrase boundary. On pauses in the tragic trimeter, see Denniston 1936a and 1936b, Griffith 1977; compare Schein 1979: 7 n. 7 who denies emphatically that a caesura is tantamount to a pause.

In spite of this uncertainty, one significant fact in favor of some prosodic boundary at the caesura is that proclitics are avoided at caesural boundaries (Allen 1973: 26; West 1982: 26). Proclitics incorporate prosodically with their rightward hosts to form prosodic words. The boundary between two hemistichs of a line is presumably substantial enough that it does not permit the close phonetic cohesion that characterizes the proclitic-host relationship. While this is a significant property of the caesura, it does not provide unequivocal evidence for the equation of the hemistich with the intonational phrase. For we could also accommodate this fact if we correlate the hemistich with the prosodic phrase (i.e., a lower prosodic unit).

A second property in favor of the phonetic reality of the caesura comes from resolution patterns. Resolution is a phenomenon whereby a heavy metrical position is filled by

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<sup>136</sup> Anthon (1842: 61) went so far as to declare: “One of the greatest beauties in a tragic trimeter is the caesura.” Unfortunately, he does not demonstrate the truth of his claim. His claim may be worth pursuing, if possible—prosody and silence-manipulation unquestionably play crucial roles in aesthetic production and perception.

<sup>137</sup> For ancient testimony on the caesura (which is very messy), see Bassett (1919); for Hephaestion in particular, see van Ophuijsen (1987). The first modern treatment of the caesura is Hermann (1816). For recent investigations, see Spaltenstein and Bianchi (2004).

two light syllables. It occurs most commonly in positions 1, 2, 6, and 8; for statistics on Aeschylus and Sophocles, see Schein (1979: 77-84), as well as Devine and Stephens (1984: 96-99). If we return to our scheme from (5.1) above, we see where these fall in relation to the metrical line as a whole (the positions where resolution is common are in bold face):

$$(5.24) \mathbf{X}_1 \mathbf{H}_2 L_3 H_4 X_5 | \mathbf{H}_6 L_7 | \mathbf{H}_8 X_9 H_{10} L_{11} X_{12}$$

The bold-face positions occur either at the beginning of the line (positions one and two), or after a caesura: in the sixth position with a penthemimeral caesura, and in the eighth position with a hephthemimeral. I presume that this occurs for durational reasons: two light syllables take more time to produce than one heavy one (West 1982: 20). For whatever reason, this was permitted at the beginning of the colon (i.e., hemistich), but not later on; this tendency for the initial syllables of a metrical line to exhibit more freedom and for the treatment of later syllables to become more fixed later on is known from other meters, e.g. the dactylic hexameter (the fifth and sixth feet are only rarely anything but H L L H H), and the “Aeolic base” of Aeolic meters. It is not clear to me what exactly one should conclude from (5.24), but it does lend weight to the phonetic reality of the caesura.

One argument against the equation of the hemistich with the intonational phrase comes from the phenomenon of *brevis in longo* (i.e., a light syllable in a heavy position). Such lengthening is permitted at the end of a metrical line, but not before a caesura; see e.g. Maas (1962: 33). Verse-final *brevis in longo* is thought to be permitted by the pause that falls between one line and the next. The reasoning then goes that if *brevis in longo* is illicit, then there must not be a pause, and hemistich one is therefore not to be equated with an intonational phrase. But there is little reason to think that pause and final-lengthening (which is essentially what *brevis in longo* is) are so interdependent: one can presumably have a pause without increasing the weight of a phrase-final, or line-final, syllable. The phenomenon of pause is not categorical, but gradient, with different types and durations of pauses occurring in different contexts.<sup>138</sup> Furthermore, it is not clear if the absence of pause absolutely rules out the possibility of an intonational phrase. The caesura could be characterized by some other phonetic property, such as a boundary tone.

## 5.2 Analysis Two

Analysis two, which is not necessarily incompatible with analysis one, attempts to account for clitic distribution with reference to a more fine-grained phonetic feature, specifically pitch prominence. Rather than framing the generalization in terms of

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<sup>138</sup> This is a point that was recognized already in antiquity, in the work of the grammarian Nicanor, who devised diacritic marks for eight types of pauses: see Blank (1983). (It may be the case that Nicanor’s typology involved not just pause duration, but pause duration plus boundary tones.)

prosodic constituent, we could frame it in terms of phonetic feature, and claim that clitic distribution is conditioned by pitch prominence within the metrical line.

Over the course of an utterance, it is cross-linguistically common for pitch to decline. This phenomenon is known as downtrend and has been reconstructed for Greek; see Devine and Stephens (1991). Under this assumption, pitch is going to be at its absolute highest on the first high tone of an utterance, and will then drop off throughout unaccented syllable(s) until the next high tone. So even if pitch is not highest on the first high tone, presumably the pitch span at this part of the utterance is highest.

If we assume such a pattern of downtrend for Greek, then it is not surprising that clitics follow a host positioned at the left boundary of an intonational phrase, where one assumes a high pitch-level. This behavior of clitics has functional motivation: it is thought to be easier to perceive atonic and low tone items such as clitics in an environment of a broad pitch span (Gussenhoven 2004).

This could account for the left-edge patterns, but would not cover the right-edge patterns. To account for these, we would have to postulate a reversal of pitch (known as uptrend or upstep) at the right edge of a hemistich. The phenomenon of uptrend has long been suspected in Greek on account of the following graphic conventions (see further Chandler §905-906):

1. κοίμησις: within an intonational phrase, word-final acute (i.e., H tone) becomes grave (i.e., L tone).
2. At the end of an intonational phrase (or pre-pausally), an acute (i.e., H tone) is preserved.

The following example illustrates this second convention:

(5.25) κοῦ δῆτα, εἴποι-τις-ᾗν, ταῦτα ἀνασιμοῦται;  
‘Where then, one might ask, are these being consumed?’ Hdt. 3.6.6

If there were not an intonational-phrase boundary between ᾗν (H) and ταῦτα, it would have been accented ᾗν (L). Thus the preservation of the acute on ᾗν is thought to reflect a high boundary-tone (i.e., H%) vel sim. at the right edge of the intonational phrase (Trubetzkoy 1969: 238; Sturtevant 1940; Allen 1973: 245-248; Allen 1987; for upstep in German, see Truckenbrodt 2002 and forthcoming). The convention of accentuation in (5.25) is extremely valuable, as it reflects not word-prosody, as the graphic system usually does, but rather phrasal prosody.

The problem with extending the idea of upstep to the hemistich is that word-final oxytones are not preserved, at least in modern editions of texts, pre-caesurally or line-finally. So in the following example both αὐτός and ἐγώ have final grave accents, and not final acute accents:

(5.26) τοιγάρ νιν αὐτὸς | ἐκ δόμων ὤιστρησ' ἐγὼ  
'I have myself stung them from their homes'

Eur. *Bacc.* 32

This example, which can be paralleled again and again in modern editions, is not as straightforward as it at first seems. For if we consult medieval manuscripts, as well as editions of Greek texts before ca. 1850, we find considerable variation in the practice of scribes and editors in this regard (for brief mention of this issue, see Chandler §906; Donald Mastronarde, p.c., also informs me of this variation among mss.). One will, for instance, find final oxytones at line-end accentuated as acute, which I presume reflects preservation of H tone. The details of this variation need not concern us here: all that matters is that in some cases, scribes felt that there was a rise in pitch, and that they represented it accordingly. Figuring out the conditions under which they do and do not preserve a colon-final acute may not be possible. I will mention just three difficulties. The first is that we do not know what the scribes thought they had to represent, i.e. to what extent clause-level prosodic information was supposed to be represented graphically. Second, I presume that pitch perception varied among scribes, and that this variation was due not only to the perceptual faculties of the individual scribe, but also to the way in which he interacted with the master text, whether he was simply reading it, or whether it was being read to him. Lastly, there is a diachronic angle to wrestle with: it may have been the case that scribal practice changed over time in this respect. How one would disentangle these various factors I do not know.

If Greek clitics were organized according to pitch prominence, they would bear considerable resemblance to the situation in Bosnian/Serbian/Croatian. Yu (in press) argues that clitic position is sensitive to pitch prominence. There may also be a parallel in Latin. If we follow the analysis of Adams (1994) and accept that clitics are attracted to the focused item in a clause, and that focused items are marked with greater pitch prominence, then here again clitics are seeking out pitch prominence. Under this type of analysis, the following question arises: does the pitch prominence that attracts clitics result solely from the metrical rhythm, or is pitch prominence in some cases pragmatically motivated? In other words, are the words that host non-canonically positioned clitics pragmatically marked in any way? I am inclined at this point to say no, and to claim that the pitch prominence would result from metrical rhythm, but this question requires a devoted study.

These are two possible, but quite speculative ways in which one could account for the left- and right-edge distributional patterns.<sup>139</sup> It should be clear from my discussion

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<sup>139</sup> I mention here for the sake of thoroughness an additional possibility. Hale (1987: 78-79) argues that when a Sanskrit pronominal object clitic is hosted outside of clause-second position by its governing verb (or preverb), this is an archaism. On his account, before there was a second-position generalization in Indo-Iranian (i.e., Wackernagel's Law), object pronominal clitics were hosted by their governing heads. Such a claim raises the possibility that we have a similar phenomenon in the right-edge cases, which, as noted above, exhibit a strong tendency to be hosted by the verb. While conceivable, the idea does not offer much promise. For one, it faces an immediate problem with *žv*: it is completely out of the question

above how much further work is required in this area. In the next section, I present another possibility, which I find less plausible, but may at some level be playing a role.

## 6 The Dominance of Syntax?

In the preceding four sections, I have stressed the relevance of prosodic factors (whatever those may be precisely) in clitic distribution. Despite this, it appears that there is evidence that also points in the opposite direction, that is, for the dominance of syntactic conditioning. Consider the following example:

- (5.27) σὺ δ' εἶ-με λυπήσεις τι, | τῆς διακόνου  
 πρώτης ἀνατείνας τὸ σκέλει διαμηριῶ  
 τὴν Ἴριν αὐτήν, ὥστε θαυμάζειν ὅπως  
 οὕτω γέρων ὦν στύομαι τριέμβολον.  
 ‘And you, if (you) annoy me at all, spreading the servant  
 girl’s legs first I’ll fuck<sup>140</sup> her (so) thoroughly,  
 Iris herself, that she’ll be amazed that,  
 though an old man, I get hard like a triple-ram.’ Ar. *Av.* 1253-1254

On the assumption that εἶ occupies C<sup>0</sup>, then σὺ is preposed above CP. But if this is the case, we do not have the standard prosodic coding of a preposed phrase, as there is no intonational break between δ' and εἶ as we would expect (the elision of the vowel of δέ I interpret as evidence for the absence of an intonational break). Without an intonational-phrase boundary between δ' and εἶ, με is not hosted at the left edge of an intonational phrase, nor is hosted at the left or right edge of a hemistich.

If we were to ignore issues of prosody altogether, however, (5.27) would not be in the least bit problematic. One could very easily postulate that με has adjoined to the left edge of TP, and that since εἶ occupies C<sup>0</sup>, it does not undergo prosodic flip, but merely selects the complementizer as its prosodic host. σὺ would be in a pragmatically-marked supra-CP layer of syntax.

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that the modal particle as such might have existed at some pre-Wackernagel’s Law stage. For on all appearances ἔν as a modal particle is not that old (even if you equate Greek ἔν with Latin and Gothic *an* and reconstruct such a form for PIE, you could not reconstruct it as a modal particle per se), while a pre-Wackernagel’s Law stage of Greek (or Proto-Greek or whatever we would be dealing with language-wise) would be of much greater antiquity. (And, furthermore, what is the governing head of a modal particle supposed to be?) We of course do not run into this problem with the pronominal clitics, and what one could do would be to set up an analogical process whereby ἔν in time came to pattern after the pronominal clitics. But such an analysis is worrying, because we would have a feature of extremely deep antiquity (namely, position of clitics by a mechanism antedating Wackernagel’s Law) appearing for the first time only in the fifth century. All these objections aside, there remains the simple fact that labeling a subset of examples as archaisms solves nothing, as it sidesteps any attempt to account for the conditions under which the phenomenon occurs.

<sup>140</sup> I assume that διαμηρίζω is a low-register verb.

Thus a case like (5.27) is only problematic for a prosodic account, and seems to suggest that the contribution of metrical template can actually cut both ways. It can license hosts that would not otherwise be licensed in a non-metrical setting, and it can also override the prosodic coding that we would expect in a non-metrical setting. It is not clear to me how one handles a situation like this; the only possibility that even occurs to me is to see if  $\sigma\acute{\upsilon}$  is actually proclitic here and not preposed (i.e.,  $\sigma\acute{\upsilon}_p=\delta'_p=\epsilon\acute{\iota}...$ ), but that does not seem very likely to me, especially since (5.27) is not an isolated case:

(5.28)  $\tilde{\eta}$   $\pi\acute{\alpha}\nu\upsilon$   $\gamma\epsilon\rho\acute{\omicron}\nu\tau\iota\omicron\nu$  |  $\acute{\iota}\sigma\omega\varsigma$   $\nu\epsilon\nu\acute{\omicron}\mu\iota\acute{\alpha}\varsigma=\mu\epsilon$   $\sigma\acute{\upsilon}$ ;  
 ‘Or perhaps you think I’m too old?’ Ar., *Ach.* 993

Again this is the sort of example that could be handled easily in a non-metrical environment, by supposing that  $\tilde{\eta}$   $\pi\acute{\alpha}\nu\upsilon$   $\gamma\epsilon\rho\acute{\omicron}\nu\tau\iota\omicron\nu$  and  $\acute{\iota}\sigma\omega\varsigma$  were each coded as intonational phrases, i.e. if we simply set up  $(\tilde{\eta}$   $\pi\acute{\alpha}\nu\upsilon$   $\gamma\epsilon\rho\acute{\omicron}\nu\tau\iota\omicron\nu)_i$   $(\acute{\iota}\sigma\omega\varsigma)_i$   $(\nu\epsilon\nu\acute{\omicron}\mu\iota\acute{\alpha}\varsigma=\mu\epsilon$   $\sigma\acute{\upsilon})_i$  vel sim. But such a prosodic parsing does not seem likely in the face of the metrical template.

## 6.1 The Status of Poetic Grammar

My argument in favor of the dominance of prosody in clitic distribution (in particular that presented in section two) is based on the method of leveraging distributional patterns unique to metrical texts for insight into the organization of clitics in Greek as a whole. This has not been the standard practice among previous scholars. For many, the poetic data have either been ignored, or segregated for their excessively artistic quality, and considered uninformative for syntactic structure more generally. Representative of this latter attitude is the remark of Wackernagel (1892: 341), where he notes that the second-position tendency of  $\nu\iota\nu$  is not as robust in Pindar and the tragedians (in comparison with Homer) “wegen der grössern Künstlichkeit ihrer Wortstellung.” Following this line of thought, one could object to the analysis in sections three and five by arguing that the distributional patterns of clitics in drama belong to their own system, their own grammar; and furthermore that this separate grammar bears little relationship to that of prose.

Such an outlook *prima facie* has the advantage of freeing us from the expectation that clitics should follow any sort of second-position generalization. The problem is that it is too permissive to be of any real use or to afford any insight. For under a strong version of this view, one would essentially be allowing anything to happen, an “anything goes” grammar.<sup>141</sup> But it is emphatically not the case that *anything* can happen as far as clitic distribution in Greek drama is concerned: for instance, we never find a clitic in clause-initial position. Thus there are at least some constraints on distribution. But perhaps even more problematic is that the notion of a *sui generis* poetic grammar is a slippery

<sup>141</sup> Wells (1985: 45) reports that the Old High German poet Otfrid von Weissenburg sacrifices grammaticality to rhyme in his *Evangelienbuch*. I find this hard to fathom, the idea that poetic grammar is a grammar that tolerates what would otherwise be ungrammatical utterances. Surely it has to be the case that “ungrammaticality” is constrained to certain facets of speech production.



slope. For once we admit a discrete grammar for poetry, are we then to set one up for spontaneous spoken language (see Miller and Weinart 1998 on this prospect), another for written language, and another for the language of religious practice, and perhaps another for military and courtroom language?

A more profitable method in my view is the following. Since there are constraints on poetic language, then our goal should be to discover what exactly those constraints are and to evaluate their relationship to the patterns found in non-metrical texts. And given that the grammatical patterns characteristic of metrical texts have to come from somewhere, to my mind their most likely source will be the non-metrical grammar of the poet. Thus I would agree with e.g. Watkins (1995: 5-6), who presents poetic grammar as standing in an oblique relationship with non-poetic grammar. This methodological assumption then predicts that clitic distribution in Greek drama should ultimately be a metrically-motivated extension of the usage patterns of the non-metrical language. In other words, the system of clitic distribution in poetry should in some way correspond to the distributional patterns of clitics attested in prose, and any differences between the two should result directly from the metrical and compositional nature of the verse.

## 7 The Homeric Hexameter

The distributional patterns presented above do not, generally speaking, occur in Homer. At least once, however, clitic placement deviates from its canonical distribution; the following is the most often cited example:

- (5.29) ὦς οἳ γ' ἐμμεμαῶτε νέκυν φέρον ἐκ πολέμοιο  
 νῆας ἔπι γλαφυράς, ἐπὶ δὲ πτόλεμος τέτατό=σφιν  
 ἄγριος ἦῦτε πῦρ.  
 'Thus they were quickly carrying the corpses from the battle  
 toward the hollow ships, but against them had been stretched  
 strife fierce like fire.' *Il.* 17.735-737

Here we would have expected σφιν after ἐπὶ δέ. Instead we find it hosted at verse end; for discussion, see Munro (1891: 337); Wackernagel (1892: 343); Delbrück (1900: 54).

It is difficult to assign a cause to the position of σφιν here. I am unable to detect any special pragmatic meaning in ἐπὶ δὲ πτόλεμος that might have caused the deferral. One could attempt to align the position of σφιν with the fifth-century cases of verse-final placement exhibited above, and argue that what we have here forecasts fifth-century developments. In my view, there is too little evidence to support this claim. If the development of the fifth-century system were really under way, one would expect it to show up slightly more often. But with only one example we cannot rule out the possibility that some other mechanism is at work—for instance, an impulse to position pronominal clitics after verbs.

Putting (5.29) aside, then, the question becomes: why do the fifth-century patterns not exist in Homer? One answer is that it is simply a matter of chronology and change: the fifth-century metrical patterns only come into existence in the post-Homeric period. This would accord with the views of Wackernagel (1892) and Taylor (1990) that Wackernagel’s Law undergoes a weakening from the Homeric period to the fifth century. (For a discussion of their views, see chapter two) As I stated in chapter two, I do not think there is any reason to see the fifth-century data as a “weakening” of Wackernagel’s Law. If anything, it is an extension of a basic underlying mechanism.

The diachronic explanation runs into problems again when we consider the Sanskrit data. In the earliest attested Sanskrit, that of the Ṛgvedic mantras, we find metrically-conditioned cases of clitic distribution (see above fn. 129). In short, clitics can occur either second within the clause or second within the *pāda* (= metrical line). Thus what we find in the *Ṛgveda* bears more of a resemblance to fifth-century tragedy and comedy than to Homer; cf. the remarks of Taylor (1990: 174). By contrast, the routine second-position distribution that we find in Homer is matched by a slightly later stage of Sanskrit, that of Vedic prose, where violations of second-position placement are rare.

To return to Greek, why is it that the patterns we find in Greek tragedy and comedy, if only arising in the post-Homeric period, resemble those of the earliest stages of Sanskrit? There are two possibilities. One is that the similarities between the *Ṛgveda* and fifth-century dramatic poetry are independent of one another. The other is that what we find in fifth-century poetry did not develop in the post-Homeric period, but was already present in the earliest stages of Greek, and simply did not emerge in Homer.

This question will require further investigation that cannot be undertaken here. Since this is an open question, it is worth going beyond diachrony to consider why the patterns of tragedy and comedy did not appear in Homer. There are at least three other explanations to consider: those of meter, dialect, and discourse.

In terms of meter, it may have been the case that the melody of the Homeric hexameter, for whatever reason, did not offer the necessary prosodic features to license the clitic-distribution patterns found in the iambic trimeter and trochaic tetrameter. This explanation runs into some trouble from Herodotus of all places, because there we actually have an example from a dedicatory inscription (on a tripod in the sanctuary of Ismenian Apollo in Thebes) where the hexameter appears to license clitic placement:

(5.30) Σκαῖος πυγμαχέων-**με** | ἐκηβόλωι Ἀπόλλωνι  
 νικήσας ἀνέθηχε τειν | περικαλλῆς ἄγαλμα.  
 ‘Pugilist Skaios dedicated me, a beautiful ornament,  
 to you, far-shooting Apollo after he won.’ 5.60.3

It appears that the position of *με* is licensed by its pre-caesural location (we would canonically expect it just after *Σκαῖος*). If this is the case, it needs to be explained why metrically-conditioned clitic placement is appearing in a dedicatory inscription in

Herodotus, when the same phenomenon does not occur in Homer (although Herodotus 5.60 claims that Skaïos was a contemporary of Oedipus, so the inscription is perhaps rather old). Given that this is a lone example, the position of  $\mu\epsilon$  is of course amenable to other interpretations. For one, it is possible that  $\Sigma\kappa\alpha\tilde{\iota}\omicron\varsigma$  is preposed; but I detect no pragmatic motivation for such a view (unless  $\Sigma\kappa\alpha\tilde{\iota}\omicron\varsigma$  was meant to be read in some sort of prosodically dramatic way, e.g. in the manner of an announcement). Another possibility is that  $\mu\epsilon$  has been positioned after the first constituent of the clause; that the subject is comprised of a name plus function appositional phrase may be relevant here.

This Herodotean quirk aside, another aspect of meter may be responsible for the absence of the fifth-century patterns: that is, it may simply have been easier to position monosyllables in a hexameter than in an iambic trimeter (or other meters). If this is true, we would need to devise an algorithm that could estimate the difficulty that certain syllable shapes and clitics present for each of the various meters. Work along this line has been attempted by Baechle (2007), but much remains to be done.

One pressing question along these lines is to what extent clitic placement is sensitive to metrical units in choral lyric. Aristotle (*Poetics* 4.1449<sup>a</sup>24-26) famously remarked that the iambic trimeter, of all meters, is closest to ordinary speech. The rhythm of the trochaic tetrameter is fundamentally the same (West 1982: 40; Golston and Riad 2005: 88). So it may be something about these meters in particular that allows for metrically-licensed clitic placement. But if we were to find similar distribution patterns in lyric passages, then we would know that the phenomenon was not restricted to conversational meters. To speculate briefly, my expectation is that we will find metrically-licensed clitic distribution in choral lyric, given that it is attested in the *Ṛgveda*, as noted by Hock (1996), and the similarity of Vedic and Greek lyric meters (Meillet 1923; West 1973a, 1973b, 1974; Nagy 1974).

A second possibility is that dialect is responsible for the differences. That is, for whatever reason, the dialect of Homeric epic simply did not license the distributional patterns available in Attic. We know that dialects vary in the organization of clitic chains, for instance; see e.g. Wackernagel (1892: 344, 369). If there is some truth to this analysis, it could well be the case, again, that the clitic distribution-patterns within the Homeric poems represent an innovation, and that the Attic-drama patterns are actually the more conservative, despite being attested later.

There are two, perhaps related, explanations to consider. The first is that of discourse. It may well be that the Homeric poems could exhibit the behavior found in Attic drama, but that there was simply no need. That is, if non-canonical clitic distribution is conditioned by discourse pragmatics (as I argue in chapters eight and nine), then you would only expect to find such distribution patterns where you have those particular discourse-constructions. The problem with this idea is that the metrically-conditioned examples discussed above are *not* motivated by discourse-pragmatic considerations. While discourse-constructions may thus not be relevant, it is possible that performance

is. It may be the case that it is not so much the metrical template itself that leads to metrically-conditioned clitic-distribution patterns, but rather the way in which it was performed. But here much is unclear, as well: for one wonders what in spoken iambic trimeters would license the above distributional patterns that was absent in the performance (or music?<sup>142</sup>) of Homeric hexameters.<sup>143</sup>

## 8.0 The Issue of Split Enclisis

In this section and the next, I present two issues that are relevant for discussion of the metrical data, but are either too poorly understood (as with split enclisis), or simply farther afield (as with the distribution of γάρ in Menander, discussed in the next section).

In canonical situations, one expects clitics to stack up after the first prosodic word of their clause to form a clitic chain, as in the following example from Herodotus:

- (5.31) καὶ νῦν, εἴ φοβερὸν τι ἐνωρῶμεν, πᾶν=ᾗν=σοι προεφράζομεν.  
 ‘Even now, if we had noticed anything frightful, we would be telling you everything in advance.’ 1.120.31

In metrical texts, however, instead of stacking up near the beginning of the clause, clausal clitics can be distributed throughout the line (a phenomenon that I refer to as *split enclisis*). When they do so, they are hosted in either the left-edge or right-edge metrical positions described above:

- (5.32) οὐκ οἶδ’ Ὀδυσσεῦ. πᾶν=δέ=σοι δρώημεν=ᾗν.  
 ‘I don’t know, Odysseus. We would do everything for you.’ Eur. *Cyc.* 132

- (5.33) εἰ γὰρ ἦσθ’ ἄπαις ἔτι,  
 συγγνώστ’=ᾗν ἦν=σοι | τοῦδ’ ἐρασθῆναι λέχους.  
 ‘For if you were still childless,  
 it would be forgiveable for you to desire this marriage.’ Eur. *Med.* 490-491

In the following example, we have split enclisis with multiple-ᾗν. Since multiple instances of ᾗν never attach to the same host, nearly every constituent in the first line hosts a clitic:

<sup>142</sup> On Greek music generally, see West (1992); Hagel and Harrauer (2005); for Homeric and hexametric singing and music, see West (1981); West (1986); Danek (1989); Hagel (1994); Danek and Hagel (1995); for a recent description of the Homeric hexameter, see West (1997). For intonational phrasing in the Homeric hexameter, see Janse (1998).

<sup>143</sup> On the performance context of ancient epics generally, see Jensen (2005); for Homer specifically, see Collins (2001).

- (5.34) οὐκ-ᾶν μένουσ'-ᾶν | ἥσυχός-σ' ἐν οὐρανῶι  
 αὐταῖς Ἀμύκλαις ἤγαγεν πρὸς Ἴλιον;  
 ‘Could she not have stayed peacefully in heaven  
 and brought you along with Amyclae to Ilion?’ Eur. *Tro.* 985-986

In (5.32)-(5.34), what we see are cases in which clitic-stacking is avoided and instead the clitic surfaces at either edge of a hemistich. It is also worth observing that in the multiple-ᾶν construction, it is possible for both items to be hosted at the edge of a hemistich outside of second position:

- (5.35) εἰ δ' Ὀρφέως μοι γλῶσσα καὶ μέλος παρῆν  
 ὥστ' ἢ κόρην Δήμητρος ἢ κείνης πόσιν  
 ὕμνοισι κηλήσαντά σ' ἐξ Ἄιδου λαβεῖν,  
 κατῆλθον ᾶν, καί μ' οὐθ' ὁ Πλούτωνος κύων  
 οὐθ' οὐπι κώπηι | ψυχοπομπός-ᾶν Χάρων  
 ἔσχ'-ᾶν, πρὶν ἐς φῶς σὸν καταστῆσαι βίον.  
 ‘If I had the language and song of Orpheus,  
 so as to charm either the daughter of Demeter  
 or her husband with hymns and get you out of  
 Hades, I would have descended, and neither Pluto’s dog  
 nor Charon the soul-conductor at the helm would  
 have kept me from setting your life into the light.’ Eur. *Alc.* 361-362

While examples like these support the reality of four non-canonical metrically-licensed positions in the meter, practically everything else about this phenomenon is shrouded in mystery. I cannot discern any generalizations as to where the clitics will fall when they disperse. It is also not clear whether all four non-canonical positions are available for any one given line. The following four logically possible scenarios are all attested:

Pattern	Description
1. ᾶν-pronoun	Clitic Chain (canonical)
2. ᾶν...pronoun	Split Enclisis
3. pronoun-ᾶν	Clitic Reversal
4. pronoun...ᾶν	Split Reversal

Pattern three (clitic reversal) is decidedly less common than the other patterns, and the only one that is found exclusively in poetry. I presume that the motivation for split enclisis comes from the metrical template, but how exactly is far from clear.

## 8.2 Excursus on γάρ in Menander

There is further evidence for the reality of metrically-licensed clitic hosts, which comes from a slightly out of the way source, namely the distribution of the particle γάρ in Menander. One significant difference between the clausal clitics and γάρ is that the

latter can occur earlier in the sentence than the former. In cases with preposed phrases, for instance, it can occur amidst the preposed phrase, whereas a clausal clitic cannot, as illustrated by the following example:

- (5.36) διαθέντος δὲ αὐτοῦ μάγος ἀνὴρ παρεστεῶς ἐπαείδει θεογονίην, οἴην δὴ ἐκεῖνοι λέγουσι εἶναι τὴν ἐπαιδὴν. ((ἄνευ=γάρ=δὴ μάγου), (οὐ=σφι νόμος ἐστὶ θυσίας ποιέεσθαι)),<sub>v</sub>.  
 ‘Once he [= a sacrificer] has arranged it, a magus stands by and chants a theogony, of exactly the kind they say the chant is. For, without a magus, it is not licit for them to perform sacrifices.’ 1.132.15

On the basis of such cases, I presume that γάρ selects for the first prosodic word at the left edge of an utterance (as opposed to an intonational phrase), although this generalization is only tentative.

In drama, the metrically-conditioned patterns observed earlier in this section and in section one for the clausal clitics do not obtain for γάρ. Remarkably, however, when we look to Menander, we suddenly do find the patterns characteristic of clausal clitics in fifth-century drama:

*Verse-initial host*

- (5.37) ἔξειμι ἔχουσα· κλαυμυρίζεται, τάλαν,  
 πάλαι=γάρ. οὐκ οἶδ’ ὅ τι κακὸν πέπονθέ μοι.  
 ‘I will take it out. For it has been crying, poor thing,  
 for a long time. I don’t know what harm it’s suffered at my hands.’  
*Epit.* 853-855

*Pre-caesural host*

- (5.38) εἰ καὶ σφόδρ’ εὐπορεῖ=γάρ, | ἀβεβαίως τρυφᾷ.  
 ‘For even if he is quite rich, his luxurious life is unstable.’ *Geo. fr.* 2.4

*Verse-final host*

- (5.39) ποδαποῦ; διαφέρει | τῷ μαγείρῳ τοῦτο=γάρ.  
 ‘From where? For this makes a difference to the cook.’ *Fr.* 397.2

*Post-caesural host*

- (5.40) νῦν ἀληθινὸν  
 εἰς πέλαγος αὐτὸν | ἐμβαλεῖς=γάρ πραγμάτων,  
 οὐ Λιβυκὸν οὐδ’ Αἰγαῖον...  
 ‘Now you will throw yourself into a true  
 sea of troubles, neither Libyan nor Aegean...’ *Fr.* 59.5-7

These data are remarkable, and do not suggest a ready explanation. Is this change in distribution due to analogy, whereby Menander (or speakers generally?) begin to pattern the position of γάρ after the clausal clitics? If so, this is somewhat surprising, for one

expects the distinction in position between γάρ and the clausal clitics because of their differing semantics, in particular their different scopal properties. γάρ has “external” semantics in that it forms a semantic link between the sentence in which it occurs and a preceding utterance. The clausal clitics have decidedly “internal” semantics by comparison. Given this, has the meaning of γάρ changed such that it no longer has the same semantic (and specifically scopal) properties it did in the fifth century? It is not possible to pursue these questions any further here. But even without answers to these questions, the data above are extremely valuable for lending further support to the reality of the metrical-licensed clitic hosting.

## 9 Conclusion

I have argued that the metrical data, at least as far as the left-edge patterns are concerned, provide clear evidence for the prosodic-conditioning of clitic distribution. Beyond that, it seems that there is further evidence for metrically-conditioned clitic distribution, but there are several outstanding questions. I have attempted to bring together as wide an array of data as possible to bear on this question, and to outline as many viable analyses as I have been able to conceive. Despite this, it must be recognized that the distribution of clitics in Attic drama is a very complex, even mysterious phenomenon, which requires considerably more research. We are now at the point where we may not be able to progress any further in our knowledge of clitic distribution until we know more about the organization of non-clitic items in metrical texts.

## Chapter 6

### Preposing I: Strong-Topic Constructions

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Thus far, I have been primarily concerned with describing and explaining the distributional patterns of clausal clitics in fifth-century Greek. In chapter four I argued in particular for the following syntactic configuration of the left periphery:

$$(6.1) \left[_{\text{TopP}} \left[_{\text{CP}} \left[_{\text{FocP}} \left[_{\text{TP}} \right. \right. \right. \right. \right. \right. \right.$$

I did not, however, lay out the pragmatic functions that TopP and FocP serve, and it is to this task that the present and following chapters are devoted. As the presence of either TopP or FocP in a sentence causes a clausal clitic to surface outside of canonical second position, we can frame the question of these two chapters broadly as follows: how does the meaning of a sentence with a non-canonically positioned clitic differ from that of its canonical counterpart?

In the following examples, a clausal-clitic host is preceded by one constituent, which thus causes the clitic to occur outside of canonical second position. I will describe such phrases as *preposed* and the general construction will be known as *preposing*.<sup>144</sup>

#### *Preposed Noun Phrase*

- (6.2) ταῦτα μὲν κατὰ τὰς δίκας ἐποίηε, (τάδε δὲ ἄλλα)<sub>i</sub> ἐκεκοσμέατο=οἱ.  
‘He was doing these things in the cases, and the following regulations had also been prepared by him.’ 1.100.6

#### *Preposed Prepositional Phrase*

- (6.3) (πρὸς ὧν δὴ τοῦτο τὸ κήρυγμα)<sub>i</sub> οὔτε=τίς=οἱ διαλέγεσθαι οὔτε οἰκίοισι δέκεσθαι ἤθελε.  
‘In the face of this proclamation, no one wanted to talk with him or to receive him in their homes.’ 3.52.4

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<sup>144</sup> There is an excess of terminology in the literature to describe this type of surface construction, including *linking*, *fronting*, *topicalization*, and *left-dislocation*. (Although among studies of English, *left-dislocation* typically refers to sentences like *my father, he’s Armenian*, where an anaphor in the main clause, here *he*, resumes the left-dislocated element; this use of the term appears to have appeared first in Ross 1967.) Dik (1995) and (2007), working within the framework of Simon Dik’s Functional Grammar, uses the term *Theme*. The various labels are sometimes synonymous, although they tend to come with the theoretical baggage of the tradition in which they were developed. I use the term *preposing* without theoretical commitment as to whether there is actually constituent “movement” at some level. *Preposing* is used solely to describe surface patterns in which one or more prosodic words that are morphosyntactically sub-clausal precede the host of a clausal clitic.



*Preposed Adverbial Phrase*

- (6.4) παρῆσαν δὲ μετὰ τοῦτο οἱ Λυδοὶ φέροντες τὸν νεκρόν. (ὄπισθε=δὲ)<sub>i</sub> εἵπετό=οἱ  
ὁ φονεύς.  
'The Lydians showed up after this with the corpse. From behind, the  
murderer was following him.'

1.45.2

According to the assumptions laid out in chapter four, constituents preceding the host of a clausal clitic are assumed to be encoded as an intonational phrase. We can thus frame the question of this chapter and the next as follows: why are some phrases (or sub-phrases) placed at the beginning of a clause and coded as an intonational phrase, while others are not? What semantic and pragmatic properties characterize the material in these intonational phrases? In answering these questions, I focus on how preposed phrases function in their communicative context, that is, how syntactic structure and prosodic coding are used for pragmatic ends.

In addition to the cases like (6.2)-(6.4), in which we have a single major preposed constituent, two further morphosyntactic patterns will be included in this investigation. The first involves the preposing of a sub-constituent, a process known as *subextraction* (on which, see Devine and Stephens 2000: 1-8) or *left-branch extraction*.<sup>145</sup>

*Subextraction*

- (6.5) εἰ γὰρ τις τὰ ἐξ Ἑλλήνων τείχεά τε καὶ ἔργων ἀπόδεξιν συλλογίσαιτο,  
(ἐλάσσονος)<sub>i</sub> πόνου=τε=ᾶν καὶ δαπάνης φανείη ἐόντα τοῦ λαβυρίνθου τούτου.  
'For if someone should list the walls (built) by the Greeks and display of  
works, it would clearly be of both LESS toil and expense than this labyrinth.'

2.148.6

The second pattern involves an iteration of one of the above patterns to produce multiple preposed constituents, as in the following example:

*Multiple Preposed Constituents*

- (6.6) (ἄνδρὸς γὰρ ἑνὸς τοῦ ἀρίστου)<sub>i</sub> (οὐδέν)<sub>i</sub> ἄμεινον=ᾶν φανείη.  
'Than one noble man nothing could seem better.'

3.82.7

Here the noun phrases ἄνδρὸς γὰρ ἑνὸς τοῦ ἀρίστου and οὐδέν, which together do not form a constituent, precede the host of ᾶν, ἄμεινον. As laid out in chapter four, I assume that each constituent preceding the host of a clausal clitic occupies its own intonational phrase. As this construction cannot be discussed until all single-constituent preposing cases have been considered, it is taken up in the next chapter after following discussion of the strong-focus construction.

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<sup>145</sup> Classical Greek appears to have no trouble violating the Left Branch Condition formulated by Ross (1967): see Devine and Stephens (1999: 5).

A distinction is made in the literature between left-dislocation that is lexical and non-lexical. In the former, the dislocated element is an argument of the verb (or an argument of some other element of the sentence), and thus there is a syntactic dependency between the preposed phrase and some element in the sentence, as in (6.2) where τᾶδε ἄλλα is the subject of ἐκεχοσμέατο. In the second type of dislocation, the dislocated element is not an argument of the verb (nor of some other element in the sentence), and is not syntactically dependent on another item in the sentence. We have an example of this type in (6.3), where πρὸς-ᾧν=δὴ τοῦτο τὸ κήρυγμα is not lexically governed by any element to the right of the clitic host. It has been claimed for English that lexical left-dislocation is a more restrictive phenomenon than non-lexical (Birner and Ward 1998: 31-32)<sup>146</sup>. If this is also true for Greek, it is not immediately apparent. Given the challenges intrinsic to pragmatic analyses of ancient texts, it may not even be possible to recover such fine-grained pragmatic constraints. This distinction will not play a role in subsequent discussion, but I leave open the possibility that it may be relevant.

The central claim of this chapter and the next is that the morphosyntactic structure and concomitant prosodic encoding of phrases are conditioned by the distribution of information in discourse. In particular, preposing serves the following functions:<sup>147</sup>

<i>Functional Landscape of Preposed Phrases</i>	
(6.7) 1. Marking set-membership	
2. Introducing new subjects	<b>Strong-Topic Constructions</b>
3. Topic resumption	
4. Topic conclusion	
5. Counterassertive information	
6. Exhaustive readings	<b>Strong-Focus Constructions</b>
7. Presupposition cancelling	

The upper tier, which I refer to collectively as strong-topic constructions (or simply strong topics), is discussed in the present chapter. (What I label strong topics corresponds roughly to what is elsewhere called *topicalization* or *Y-movement*: see e.g. Givón 1990: 739-798; Givón 2001b: 225-226; 253-286; Devine and Stephens 2006: 7 with

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<sup>146</sup> It is also worth noting that English and Greek differ in terms of left-periphery structures in that the latter lacks Left Dislocation constructions, in which a preposed construction is coindexed with an anaphoric pronoun within the nuclear clause, e.g. *Gallstones, you have them out and they're out* (from Birner and Ward 1998: 93). Some of the functions that Greek accomplishes with preposing, English does with Left Dislocation.

<sup>147</sup> Compare the similar framework of Devine and Stephens (2006: 14-17). For them (2006: 14, 16), topic and focus are not mutually exclusive, since a strong topic can be contrastively focused. I disagree entirely with this outlook. Topic and focus are mutually exclusive, in as much as the latter instantiates the focus of an utterance, while the former does not. Simply because a strong topic is “contrastively focused” (i.e., highlighted in contrast) does not therefore make it the focus of an utterance: it simply endows it with contrastive semantic/pragmatic meaning. Their claim thus seems to rest on a tacit assumption that contrast and focus are somehow equivalent. Under the analysis here, topic and focus (of whatever strength) are distinct informational categories.

n. 10). The lower tier, which I refer to collectively as strong-focus constructions (or simply strong focus), is presented in the next chapter. I have no doubt that the dossier in (6.7) will, upon consideration of more data, require refinement and expansion. It is only a first attempt, and the categories have been constructed almost exclusively on the basis of Herodotean data. If there is any truth to the broader claim of this chapter, then the rich clitic lexicon of Greek is a blessing for textual interpretation: for it affords us fine-grained readings of sentences that would otherwise not be available.<sup>148</sup>

Section one lays the foundation for this chapter and the next by introducing information structure and the specific categories of information-status that I work with here. This is followed by a brief sketch of studies that treat information structure and Greek more broadly, a fast-growing area of research. In section two, I present the first of the discourse functions listed above, that of the set-membership construction. Sections three, four, and five then present in the order above the functions of introducing a new subject, topic resumption, and topic conclusion. Sections six and seven treat functions that are less well understood (and accordingly have not been listed in 6.6 above), namely that of subject-discontinuity and that of verb-preposing. Section eight considers the question of whether preposing can be used to create narrative suspense. Section nine moves in a different direction and observes that in clauses with preposed strong topics, the focus of the clause occurs immediately after the preposed phrase. Section ten closes the chapter with brief concluding remarks and looks forward to chapter seven.

There is one aspect of the pragmatic meaning of these sentences that I have not systematically investigated, which is that of discourse particles (such as μέν, δέ, γε, δή, and οὐν). This is a practical constraint, as the study of particle interaction and prosodic phrasing will require a separate study. Very few scholars have attempted to describe the nature of prosodic phrasing in Greek, and this must be our first task. It is not yet clear to me how serious the omission of discourse particles is. So far as I can tell at the moment, the particles enhance and enrich the pragmatic meanings as opposed to canceling or drastically modifying them. In particular, one question that needs to be answered is whether there are constraints on which particles can appear in preposed phrases (i.e., precede clausal clitics) and which cannot; and furthermore, if the clitics that can appear in preposed phrases are sensitive to the pragmatic meaning of the phrase.

## 1 Information Structure

Prosodic phrasing results from the interaction of syntactic structure with information structure (Kadmon 1991: 264). Information structure, as the name suggests, refers to the way in which information is structured or “packaged” (for the term, see Chafe 1976;

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<sup>148</sup> Furthermore, the argument and analyses in this chapter also bear on the nascent issue of the culture-phonology interface (on which see Graf and Munson 2009): for according to my analysis it is impossible to account for clitic distribution without reference to prosodic phrasing, and it is impossible to account for prosodic phrasing without reference to discourse, information structure, and culture. While I am sure that this is a fruitful and fascinating area of investigation, no more can be said on this topic here.

cf. Givón 1979a: xiv)) in the context of a discourse. Cross-linguistically, information status is typically signaled with one (or more) of the three following resources (Givón 2001: 247): intonation (e.g. pitch excursions), word order, and morphology (e.g. discourse particles).

The literature in this field is chaotic. For one, there is an excess of terminology and frameworks. Note the different terms, concepts, and assumptions of e.g. Gundel (1998); Erteschik-Shir (2007); and Krifka (2007). It is not always clear how the different terms from each framework line up. And worse yet, the same term does not always have the same meaning from one author to the next.

Despite the excess and confusion, there is at least one set of categories that is taken as basic and almost universally assumed. This is the distinction between given information and new information. Given information is information that has already been evoked in a discourse, or information that a speaker brings to a discourse, or that which is salient in the physical or cultural context.<sup>149</sup> Broadly speaking, it is the presupposed common ground within a discourse. New information, by contrast, is non-presupposed information. The notion of common ground is one of both considerable complexity and importance, as it encompasses not only the common ground of the discourse (i.e., what has been communicated), but also cultural common ground, that provided by the physical setting of a discourse, and that which the speakers share between themselves in their relationship.

Given information is often labeled the *topic* of a sentence, while new information is often described as the *focus* (in other frameworks, these two categories are known as *theme* and *rheme* or *topic* and *comment*). To illustrate these concepts, it is common practice to use a question-answer pair:

- (6.8) A: What did John do?  
B: [He]<sub>Top</sub> [washed the dishes.]<sub>Foc</sub>

In (6.8), A presupposes several pieces of information—that there is a person John, and that B can identify the John that he has in mind, as well as the fact that he did something. In B’s response, the referring expression *John* has been reduced to the pronoun *he* (topical information, like predictable information generally, is often subject to phonetic and morphological diminution). We can think of the answer that B provides as filling in the variable of an open proposition.

**Presupposed:** John  $x$ ,  $x \in \{\text{actions}\}$   
**New:**  $x = \text{washed the dishes}$

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<sup>149</sup> Prince (1981) offers four categories for given and new information, according to whether it is given or new for the speaker or hearer. Within the narrative text of Herodotus, when I refer to new information that will essentially mean “new” to the hearer. Likewise for old information.

Thus the focus fills in the variable, the desired and expected piece of information. This classification is thus based upon the cognitive status of referents in the speaker's or receiver's consciousness (Chafe 1994: 72). According to the given-new contract of Haviland and Clark (1977), there is an implicit agreement in communication that speakers signal what is given and what is new; see also Halliday (1973). We thus expect information status to have significant effects on utterances, whether in prosody, morphology, or word order.

While most frameworks take topic and focus (given and new, theme and rheme, etc.) as the basic informational categories, these are usually insufficient for exhaustively parsing the information structure of complex sentences embedded in an actual cultural and discursal environment. Here one needs a third category, that of accommodated information, which is essentially new information that the speaker nevertheless expects his audience to receive as though it were part of the common ground; in other words, it is new information that is not asserted. Thus in subsequent chapters, I assume the following informational categories:

### *3 Informational Categories*

1. *presupposed*: the common ground.
2. *asserted*: new, focal information.
3. *accommodated*: new material that the speakers expects his audience to take for granted; thus, neither asserted nor presupposed information.

These categories and the question-answer method of diagnosing information structure are useful, but they are not without their shortcomings, especially when applying them to data from an ancient language. For one, they are notoriously difficult to define explicitly (see Prince 1998 on this point). Second, the question-and-answer method will not get one very far in a text that is as pragmatically complex and informationally rich as that of Herodotus, where it is often not clear what the topic and focus constituents are. It is not entirely clear how to analyze information structure once one gets beyond anemic examples like (6.7). This is why there is a crucial need for textual analysis: when we have such little material to work with, from which we are moreover at such a far remove, both chronologically and culturally, detailed textual analysis is absolutely essential.

To an extent, these problems are mitigated by the scope of my endeavor. For I am analyzing essentially only one constructional type. Preposed constituents do not instantiate basic informational categories like "given" or "new": their pragmatic functions are more detailed, and thus more restrictive. As a result, it is easier to capture their pragmatic functions and informational status. Moreover, the analyses in this and the subsequent chapter are not embedded in any particular theory of information structure. One reason for this is that it is not yet clear that there is an adequate theory of information structure available. Further, and more importantly, my aim is only to demonstrate that clitic position can be used to diagnose information structure and

pragmatic meaning in a text, and to enumerate the specific categories that it can diagnose.

## 1.1 Greek Word Order and Information Structure

Above I mentioned that word-order manipulation is one of the resources available to speakers in the packaging of information. It is conventional to preface any statement about Greek word order with an acknowledgement of how little we know about the topic. The *locus classicus* for how little we know about Greek word order is Dionysius of Halicarnassus, *De Comp.* §5; a modern example is found in Dover (1960: 1-2). Nevertheless, in recent years significant progress has been made, as scholars have moved away from attempting to account for word order in terms of categories of grammatical relation like subject, object, and verb, and instead tried to explain the variation that we find with information-structure categories; in this vein, see e.g. Weil (1869/1978); Loepfe (1940); Frisk (1933); Dover (1960), (1985); Dik (2005), (2007); Fraser (2002); Matic (2003); Loudová (2007); Haug (2008); Spevak (2008); Viti (2008), (forthcoming). Those working within this framework have been eager to demonstrate that Greek word order is not as “free” as has been traditionally claimed, as surface word-order is conditioned by information structure. To take one example of such an approach, Dik (1995) and (2007) argue for the following template:

(6.9) Theme—[Topic—Focus—Verb—Remainder]—Tail

The bracketed categories constitute the basic informational constituents, and form the core of the clause. Under this type of schema, preposed constituents would correlate with Themes, which Dik actually says very little about, since her focus is on the core of the clause from Topic to Remainder. The merits of this template will not be considered here; for a full review, see Goldstein (2008).

While it is rarely acknowledged, there is (some) ancient support for this type of analysis. For instance, Demetrius, *De Elocutione* §199 appears to be working with categories like topic (τὸ περὶ οὗ, lit. ‘the about which’) and focus (ὃ τοῦτό ἐστιν, lit. ‘(that) which is this’). In his analysis of Thuc. 1.24.1, he notes that the topic precedes the focus. It appears that we are to infer from this remark that this is the unmarked pattern of arrangement.

While this approach has much to recommend it, much also remains unclear. For instance, despite claims that have been made elsewhere, we are still not at a point where we can explain the organization of phrases in a sentence according to a general principle or principles. For instance, Headlam and later scholars have claimed that Greek word order is essentially governed by a principle of “newsworthiness” with the most “important” or “emphatic” being placed earlier and the less worthy later (Thomson 1939:

147). It is not even clear if such broad, decontextual statements are possible at all.<sup>150</sup> For instance, in English and Hungarian speakers general prefer to order presupposed information before new information, but this is certainly not always the case, and it has been suggested that informational-focus constituents can stand anywhere (see Kiss 1998: 259, with further references).<sup>151</sup> In many verb-final languages such as Korean and Kaluli, it is common for the unmarked focus position to occur just before the verb (Van Valin and LaPolla 1997: 209).

At the same time, however, there appears to be a typological correlation between rigidity of surface word order and rigidity of information structure; see e.g. Van (Valin and LaPolla 1997: 213). For instance, in English, one can assign narrow focus to any constituent in the following sentences (from Van Valin and LaPolla 1997: 219):

- (6.10) JOHN didn't talk to Mary (Bill did).  
      John didn't TALK to Mary (he sent her an e-mail).  
      John didn't talk to MARY (he talked to Susan).

One cannot get the pragmatic effects by reorganizing the order of the words. Thus, focal assignment is free, but word order is not. By contrast, if we compare languages with freer word order, such as Italian, we see that the focus must be located in a particular domain of the sentence. So we have the opposite scenario: free word order, but restricted focal assignment. It may be that Greek behaves like Italian in having so-called free word order, but more rigid information-structuring principles.

A second question that looms over this literature is the relationship between informational categories and syntactic structure (see Erteschik-Shir 2007: 80-153; 213-216). One assumes that word-order manipulation for the purposes of informational packaging is a linguistic universal. If this is the case, it is entirely trivial that Greek shows such effects. Nonetheless, those working in this vein have claimed that, since Greek word order is “pragmatically conditioned,” there is essentially no room for syntax (Dik 2005: 279-281). This is a complex and unexplored topic, which cannot be pursued fully here, although it will be discussed more in chapter seven. So while this chapter contributes to the literature on pragmatics and surface constituent order, it is not meant to support any particular set of claims about Greek word order.

## 2 The Set-Membership Construction

Each of the preposing constructions presented in this chapter shares the following defining characteristic: the preposed phrase does not instantiate the focus of the utterance. (By contrast, the next chapter examines preposing constructions in which

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<sup>150</sup> If there is any truth to the “newsworthiness” principle, then it is also not clear why this does not apply in pragmatically marked structures (i.e., TopP and FocP), where non-focal material precedes focal.

<sup>151</sup> Moreover, as Whaley (1997: 101) notes, different parts of texts (e.g. beginning of text, versus the end), as well as different genres, can have very different discourse functions. And these may well have their own information-ordering principles.

the preposed phrase does instantiate the focus of the utterance.) In the first, and most common, of these strong-topic constructions, a phrase is preposed to signal its membership in a contextually-established and contextually-relevant set. This function can be further divided into two sub-types, that of an explicitly-evoked set, and that of an inferred set.

Both sub-types can be clearly illustrated by examples from English. In the following example, a set is explicitly evoked in the discourse (from Prince 1997: 7):

*Explicitly-evoked set*

- (6.11) ‘She had an idea for a project. She’s going to use three groups of mice. **One**<sub>i</sub>, she’ll feed **them**<sub>i</sub> mouse chow, just the regular stuff they make for mice. **Another**<sub>i</sub>, she’ll feed **them**<sub>i</sub> veggies. **And the third**, she’ll feed junk food.’

The set {3 groups of mice} is explicitly established in the first sentence. In the next two sentences, the preposed nouns (*one* and *another*) each instantiate a member of this set. The preposed element is said to be “backward-looking” in that it links back to the preceding discourse, a crucial feature of such preposed phrases (see Birner and Ward 1998: 19-24).

In the other sub-type, the anchoring set is not explicitly evoked as in (6.11), but rather inferred (from Prince 1997: 7):

*Inferred set*

- (6.12) ‘This I don’t call cooking, when you go in that refrigerator and get some beans and drop them in a pot. And **TV Dinners**<sub>i</sub>, they go stick **them**<sub>i</sub> in a pot and she says she cooked. This is not cooking.’

The preposed noun phrase *TV Dinners* signals the membership of the referent in a contextually-relevant set. But since there is no explicitly evoked set, the hearer has to pair the preposed entity with a previously-mentioned referent, and construct a set to which they both belong. The set is thus available only by inference. Here the speaker has paired *TV Dinners* and *beans* to infer a set {fast-food home-cooked foods} vel sim. In describing sets, I adopt from Birner and Ward (1998) the terms *trigger* (for the referent serving as the basis of the set), *anchoring set* (for the set itself), and *link* (for the backward-looking referent, the preposed element itself, that instantiates or induces the set, according to whether it is explicit or inferred).

The specific type of set relationship that a link can instantiate with its anchor is known as a *poset* (which is an abbreviation for “partially-ordered set”) or a *restrictive set*. This is an ordering relation that is either reflexive and antisymmetric, or irreflexive and asymmetric (for the details, see Birner and Ward 1998: 17-19). Essentially what this means is that two items in a poset can be related to each other in one of three possible ways in terms of the relative rank within the set: A can represent a lower value than B;



A can represent a higher value than B; or the two can be equally ranked, and thus function as alternative values that are not ordered with respect to one another. The following examples (from Birner and Ward 1998: 18-19) illustrate each of these relationships:

*Lower Value*

- (6.13) A: Do you like this album?  
B: Yeah, this song I really like a lot.

*Higher Value*

- (6.14) A: Have you filled out the Summary Sheet?  
B: Yeah. Both the Summary Sheet and the Recording Sheet I've done.

*Alternate Values*

- (6.15) A: Did you get any more [answers to the crossword]?  
B: No. The cryptogram I can do like this. The crossword puzzle is hard.

In (6.13), the relation “is-a-part-of” orders the set {album parts}, and the preposed *the song* represents a lower value than does the referent of *this album*. In (6.14), *the Summary Sheet and the Recording Sheet* represents a higher value than *the Summary Sheet* within the set {forms}; alternatively, we could say that the latter is a superset of the former. Here the relationship is one of “is-a-member-of.” Lastly, in (6.15), *the cryptogram* and *the crossword puzzle* represent alternate, equally-ranked values within the set {newspaper puzzles}, and are ordered by a “is-a-type-of” relation. An element in a set may be an entity, attribute, event, activity, time, or place. The compass of poset relationships is broad and includes scalar entailment, as well as those of part/whole, entity/attribute, type/subtype, set/subset, and equality. It is worth pointing out that set relations are not inherently “contrastive,” although contrast can certainly arise between a link and an anchor, as detailed below in section 2.3.

## 2.1 Explicit Set Relationships<sup>152</sup>

We find patterns of both explicit and inferred sets in Greek. The only difference is that Greek does not use a left-dislocation pattern, whereby the preposed phrase is resumed by an anaphor in the core of the clause. In the following example, Herodotus is presenting an overview of Darius' provinces, and the tribute that they bring in. At 3.89, he establishes two sets, {provinces} and {tribute amount}:

- (6.16) ἀρχὰς δὲ καὶ φόρων πρόσοδον τὴν ἐπέτειον κατὰ τάδε διείλε.  
'He divided the provinces and the annual revenue of tributes as follows.'

3.89

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<sup>152</sup> See further 1.32.34, 1.100.6, 2.148.14, 3.135.12, 3.90.5, 5.4.2, 5.104.14, 6.44.6.

Over the next several sections, Herodotus proceeds to map region to tribute amount. The constructions that he uses to express this mapping vary, but in one of them he preposes the phrase that refers to the region:

- (6.17) (ἀπὸ Βαβυλῶνος δὲ καὶ τῆς λοιπῆς Ἀσσυρίας), χιλιά=οἱ προσῆιε τάλαντα ἀργυρίου καὶ παῖδες ἑκτομῖαι πεντακόσιοι.  
 ‘From Babylon and the rest of Assyria, thousands of talents of silver came to him and five-hundred castrated boys.’ 3.92.2

Here the adjoined prepositional phrase signifies the source of the tribute; by preposing the phrase, Herodotus signals its membership in the category {provinces}, a set that he has already established as relevant for the discourse. The remainder of the sentence contains the focus of the sentence, namely the amount of tribute. If we look back to (6.11), {provinces} here is analogous to {mice groups} there, as is {tribute} to {food.} This example is also useful for illustrating that strong topics need not necessarily instantiate old information. So here the prepositional phrase ἀπὸ Βαβυλῶνος δὲ καὶ τῆς λοιπῆς Ἀσσυρίας in fact introduces a new referent. What is old, however, is the activation of the set {provinces of Darius}.

The following example follows a similar pattern. Here Herodotus has been tallying Xerxes’ retinue. After reviewing the martial element, he observes:

- (6.18) οὗτος μὲν δὴ τοῦ συνάπαντος τοῦ Ξέρξεω στρατεύματος ἀριθμός. (γυναικῶν δὲ σιτοποιῶν καὶ παλλακῶν καὶ εὐνούχων), οὐδεὶς=ἄν εἴποι ἀτρεκέα ἀριθμόν.  
 ‘This is the number of the entire force of Xerxes. But of women and bread-makers and concubines and eunuchs, no one could say the precise number.’ 7.187.3

The phrase τοῦ συνάπαντος τοῦ Ξέρξεω στρατεύματος refers to Xerxes’ martial forces; that is what Herodotus has been attempting to tally. In the second sentence, he introduces related (in the sense that they accompany Xerxes) but separate (in the sense that they do not belong to his martial forces) groups of people: bread-makers, concubines, and eunuchs. As with (6.17), preposing functions as a cue to the reader to link the preposed phrase with an earlier referent and induce a set relationship, so here the subset of martial forces could be coupled with the subsets bread-makers, concubines, and eunuchs to form a superset {Xerxes’ retinue}.

## 2.2 Inferred Set Relationships

Greek also offers cases of preposed phrases with inferred anchoring sets. In this construction, preposing instructs the audience that the preposed phrase is in a relevant poset relation to some referent that has already been mentioned in the discourse. The audience is expected to construe the preposed referent as an alternate member of a set that is available only by inference, as in the following example:

- (6.19) εἰ Ἀθηναῖοι καταρωδῆσαντες τὸν ἐπιόντα κίνδυνον ἐξέλιπον τὴν σφετέρην, ἢ καὶ μὴ ἐκλιπόντες ἀλλὰ μείναντες ἔδοσαν σφέας αὐτοὺς Ξέρξῃ, (κατὰ τὴν θάλασσαν), οὐδαμοῖ-**ἄν** ἐπειρῶντο ἀντιοῦμενοι βασιλεί.  
 ‘If the Athenians had abandoned their land out of fear of the approaching danger, or if they had not left (their land) but stayed, and given themselves over to Xerxes, no one at all would have attempted to oppose the king on the sea.’ 7.139.6

The phrase κατὰ τὴν θάλασσαν culturally evokes the set {theater of war}. This set contains two elements, ‘by land’ and ‘by sea.’ As a result of this binary set relationship (on which, see below, section 2.3), the apodosis sets the reader up for a comment on what would have occurred on land. This expectation is borne out in the rest of the section where Herodotus goes on to say that the Peloponnesians, even if they had covered the isthmus with walls, would not have been able to resist the Persian fleet. For a further example, see 2.111.11.

### 2.2.1 Framing Expressions

In cases of inferred sets, the preposed phrase often instantiates what is known as a locative topic (which is also referred to as an overt stage topic<sup>153</sup>). Such phrases serve to frame the upcoming proposition, and are characterized by three general characteristics (Kuno 1975; Clark and Clark 1977: 34-35, 245-246). The first is that they typically denote spatio-temporal concepts, such as time, place, and situation. The situational reference can also be discursal: that is, the phrases can be used to signal the place of the proposition within the structure of the discourse. The second characteristic is that these phrases, when not preposed, have a strong tendency to attract focus (on which more below). This possibility is removed when they are preposed. And lastly, these phrases are almost always non-argument, adjoined expressions.

The following example illustrates each of these characteristics:

- (6.20) τοῦτο δὲ ποιήσας ἀπέπλεε. ἀπικόμενος δὲ ἐς τὰ οἰκία συμφορῆι ἐχρᾶτο. (πέμπτη δὲ ἢ ἕκτη ἡμέρη ἀπὸ τούτων), τάδε-**οἱ** συνήνεικε γενέσθαι.  
 ‘Once he [= Polycrates] did this [= cast his seal-ring into the sea] he sailed back. When he got home, he lamented the loss. On the fifth or sixth day from these (events), the following things by chance happened to him.’ 3.42.2

Here the phrase πέμπτη δὲ ἢ ἕκτη ἡμέρη ἀπὸ τούτων links back to the earlier events of sailing back and mourning to induce a set {times}. (It is undoubtedly the case that the set is more fine-grained than {times}, as I assume the speaker must create a context-specific set {times}; it is not yet clear to me how to describe such a fine-grained

<sup>153</sup> For a multi-faceted study of adverbial adjuncts, see Kiss (2009).

representation, however.) The preposed phrase thus situates the upcoming proposition in a temporal context; it could well have been the focus of the utterance if not preposed; and is also an adjunct, and not an argument, of the clause (or perhaps verb phrase).

The following examples again illustrate these features:

- (6.21) τέλος δὲ ὁ Περίανδρος κήρυγμα ἐποιήσατο, ὃς ἂν ἢ οἰκίοισι ὑποδέξῃται μιν ἢ προσδιαλεχθῇ, ἱρὴν ζημίην τοῦτον τῷ Ἀπόλλωνι ὀφείλειν, ὅσῃν δὴ εἶπας. πρὸς ὧν δὴ τοῦτο τὸ κήρυγμα οὔτε τίς οἱ διαλέγεσθαι οὔτε οἰκίοισι δέκεσθαι ἤθελε. πρὸς δὲ οὐδὲ αὐτὸς ἐκεῖνος ἐδικαίου πειρᾶσθαι ἀπειρημένου, ἀλλὰ διακατερέων ἐν τῆσι στοῆσι ἐκαλινδέετο. (τετάρτη δὲ ἡμέρῃ), ἰδών=**μιν** ὁ Περίανδρος ἀλουσίησι=τε καὶ ἀσιτίησι συμπεπτωκότα οἴκτειρε.  
 ‘Finally, Periander issued a proclamation: whoever receives him in their home or talks with him, this man owes a sacred fine to Apollo, having specified whatever quantity it may have been. Because of this proclamation, no one was willing to talk to him or take him in. Moreover, not even he himself considered it right to attempt what was forbidden; he got by hanging around the stoas. On the fourth day, however, Periander, seeing that he had fallen into a squalor and hunger, took pity on him.’  
 3.52.7

- (6.22) ...ὡς Μυκερίνος ἠράσθη τῆς ἑωυτοῦ θυγατρὸς (καὶ ἔπειτα), ἐμίγη=**οἱ** ἀεκούσῃ.  
 ‘...that Mykerinos fell in love with his own daughter, and afterwards, slept with her against her will.’  
 2.131.3

- (6.23) ἡ δὲ Λαδίκη, ἐπεῖτε οἱ ἀρνευμένη οὐδὲν ἐγένετο πρηύτερος ὁ Ἄμασις, εὔχεται ἐν τῷ νόω τῇ Ἀφροδίτῃ, ἣν οἱ ὑπ’ ἐκείνην τὴν νύκτα μιχθῆι ὁ Ἄμασις—τοῦτο γάρ οἱ κακοῦ εἶναι μῆχος—ἄγαλμά οἱ ἀποπέμψειν ἐς Κυρήνην. (μετὰ δὲ τὴν εὐχὴν), αὐτίκα=**οἱ** ἐμίχθη ὁ Ἄμασις.  
 ‘Ladike, when the king became no gentler to her, although she denies it, vows in her mind to Aphrodite, that if Amasis were to sleep with her that night—since this would be a remedy of her trouble—she would send off a statute to Cyrene for her. After the vow, Amasis slept with her straightaway.’  
 2.181.16

In each case, the preposed phrase operates against the background of a previous event (or set of events), which anchors the set by establishing a base time (or place, depending on the members of the set). The preposed constituent then serves to locate the forthcoming proposition within this set. It is worth emphasizing that the preposed phrase here is not “contrastive” (on which more below): that is, the communicative point of (6.20)-(6.23) is not to assert that event *x* happened at time *y*—and not point *z*. Of course, to frame a proposition as occurring at time *y* entails that it did not happen at point *z*. But set-membership preposing is not necessarily motivated by a desire to communicate such an entailment. As demonstrated above, it can serve only to

contextualize an event. For further examples of this construction, see also 1.45.2, 1.130.6, 3.75.9, 3.129.11.

### 2.3 Set-Membership and Contrastive Semantics

As the examples above show, set-membership preposing is not intrinsically contrastive. It is certainly possible to get a contrastive reading, however, in particular when a set has only two members. When the core proposition also has binary semantics, it is easier to achieve such a reading. Both of these characteristics are illustrated in the following example, where Cyrus explicitly establishes a set {times} with two members:

- (6.24) ἐπεῖτε δὲ ἀπὸ δεῖπνου ἦσαν, εἶρετο σφέας ὁ Κῦρος κότερα τὰ τῆι προτεραίηι εἶχον ἢ τὰ παρεόντα σφι εἶη αἰρετώτερα. οἱ δὲ ἔφασαν πολλὸν εἶναι αὐτῶν τὸ μέσον. (τὴν μὲν γὰρ προτέρην ἡμέρην), πάντα=σφι κακὰ ἔχειν, τὴν δὲ τότε παρεοῦσαν πάντα ἀγαθὰ.  
'When they were done with dinner, Cyrus asked them whether what they had the day before or were having now was preferable to them. They said that there was a considerable difference between them. For on the previous day, everything was bad for them; but during the present day, everything is good.' 1.126.4

In the first sentence, Cyrus creates the anchoring set {times} with the phrases τὰ τῆι προτεραίηι and τὰ παρεόντα, to which the preposing of τὴν μὲν γὰρ προτέρην ἡμέρην and τὴν δὲ τότε παρεοῦσαν links the two phrases. Since these are the only two members of the set, and they are linked to propositions with binary semantics, they induce a contrastive reading. Notice that this reading is enhanced by the use of the particles μὲν and δέ in the preposed phrases. In the same way, the core clauses contain the binary propositions πάντα=σφι κακὰ ἔχειν and πάντα ἀγαθὰ.

In the following example, the Amazonian women use a preposed pronominal phrase to highlight differences between themselves and their husbands:

- (6.25) ἐπεὶ δὲ συνῆκαν ἀλλήλων, ἔλεξαν πρὸς τὰς Ἀμαζόνας τάδε οἱ ἄνδρες. “ἡμῖν εἰσὶ μὲν τοκέες, εἰσὶ δὲ κτήσιες. νῦν ὦν μηκέτι πλεῦνα χρόνον ζόην τοιήνδε ἔχωμεν, ἀλλ’ ἀπελθόντες ἐς τὸ πλῆθος διαιτώμεθα. γυναῖκας δὲ ἔξομεν ὑμέας καὶ οὐδαμὰς ἄλλας. αἱ δὲ πρὸς ταῦτα ἔλεξαν τάδε. (ἡμεῖς), οὐκ=ἄν δυναίμεθα οἰκέειν μετὰ τῶν ὑμετερέων γυναικῶν.  
'When they understood one another, the men said the following to the Amazonian women. “We have parents, and property. So let us no longer spend more time in this lifestyle, but let’s go back to the populace and live amidst them. We will take you all as wives and no others.” But they [= the Amazonian women] said as follows to these things. We, however, would not be able to live with your women.’ 4.114.10

Several referents are activated in the men’s speech—their parents; their property; the Amazonian women; other women; as well as the men themselves. The coding of ἡμεῖς is designed to single them out and contrast them specifically with the men in their ability to live amidst city women (cf. ἡμῖν at the beginning of the previous sentence, which is perhaps also preposed). Unlike (6.24), there is no discourse particle following ἡμεῖς; one would otherwise expect ἡμεῖς δέ. The clause οὐκ-ἄν δυνάμεθα οἰκέειν μετὰ τῶν ὑμετερέων γυναικῶν opposes the implicit proposition of the men’s speech that the Amazonian women can live with the women in their culture.

It is possible for contrastive semantics to arise in non-binary contexts, as well, as we see from the following example (the underlined phrases instantiate the set {meats}):

- (6.26) οὔτε τι γὰρ τῶν οἰκηρίων τρίβουσι οὔτε δαπανῶνται, ἀλλὰ καὶ σιτία σφί ἐστι ἱρὰ πεσοόμενα, καὶ κρεῶν βροέων καὶ χηνέων πληθός τι ἐκάστωι γίνεται πολλὸν ἡμέρης ἐκάστης, δίδοται δέ σφι καὶ οἶνος ἀμπέλινος. (ἰχθύων δέ), οὔ-σφι ἔξεστι πάσασθαι.

‘They neither squander nor spend any of their own (private) resources on their living expenses; even their sacred bread is cooked for them, and each one gets a good-sized amount of beef and goose meat every day; even wine from the vine is provided to them. But fish, they aren’t allowed to taste.’

2.37.18

Here beef, goose, and fish all belong to a set {meats}. The contrast semantics in the phrase ἰχθύων δέ arises from the expectation that fish, which also belong to the category of meat, will be mapped onto a similar proposition, but that is pointedly not the case: fish belong to the same category, but are nevertheless subject to different treatment. The degree of contrast thus appears to be conditioned by the relationship between the clauses that the set members are mapped onto (cf. Givón 2001: 225). For further examples, see 1.24.16 (with γάρ), 1.159.9, 1.174.13, 1.191.24, 2.41.2, 4.24.5, 4.75.5 (although this example possibly has a focal reading), 9.71.17.

## 2.4 Motivating Set-Membership Constructions

Now that we have seen how set-membership preposing functions in discourse, it is worthwhile to step back and examine what motivates the use of this construction. In other words, why do speakers care at all about signaling set memberships for their audience?

At a general level, the set-membership construction is crucial to discourse cohesion (on which, see recently Bakker and Wakker 2009). It is a way to simultaneously introduce new referents and situate them within existing information; see Fraenkel (1964a: 100-101) on this point. As such, this is no mere rhetorical device, but rather a device whose utility arises from the nature of communication. As Givón (1984: 262) notes, sentences that contain exclusively new information are very difficult to process, if not incomprehensible. In the set-membership cases above, the preposed element and the

proposition both contain new pieces of information. By distributing the new information into two separate fields of the sentence (namely the preposing domain and the clausal core), the speaker presumably facilitates his audience's processing task. The set-membership construction also contextualizes new information. For the preposed phrase, while containing a new referent, instantiates a discourse-old set. It is thus in this sense discourse-old, and is therefore suitable as a launching point for the remainder of the sentence.

A second motivation for set-membership (and this is not unrelated to the previous point) is that preposed adjuncts,<sup>154</sup> when they are not preposed, have a tendency to attract the focus of the utterance (see Givón 2001b: 230-233). For when such optional elements are present they tend to narrow the scope of an assertion. (When they are absent, typically one expects the verb or verb phrase to be the locus of the assertion.) We can illustrate this tendency with the following example. If we alter (6.23) by placing the preposed phrase at the end, we would end up with the following:

(6.27) \*ἀτύλα-δὲ-οἱ ἐμίχθη ὁ Ἄμασις μετὰ τὴν εὐχὴν.

The prepositional phrase μετὰ τὴν εὐχὴν is now part of the assertion of the sentence, and consequently narrows its scope. The problem is that (6.27) would be felicitous only in a context in which it is already known that Amasis slept with the woman. Where the original version of this sentence occurs in Herodotus' narrative, that is in fact not known. To utter (6.27) in such a context, then, is bad for at least two reasons. One is that it overloads the focal material: on the assumption of one focus per intonational phrase (see Chafe 1994), (6.27) would contain two. As such, it also suffers from a failure to signal to the reader what of the information is old and what is not, a contractual-principle that is thought to govern most discourse (see e.g. Clark and Haviland 1977).

### 3 Introducing New Subjects<sup>155</sup>

Preposing can be used to introduce new referents into the discourse, especially when they occupy subject position. This function of preposing is not used for just any subjects (on this point, see Erteschik-Shir 2007), but more specifically for discourse-new non-inferable subjects (i.e. subjects whose presence cannot be predicted from the preceding narrative).

Prince (1997) has identified a similar function for left-dislocation in English. Left-dislocation is a construction in which a noun is positioned at the left-most edge of the clause, prosodically delimited, and then anaphorically cross-referenced later in the clause, as in the following example (from Prince 1997: 4):

<sup>154</sup> Adjunct phrases are phrases that are not part of a verb's argument structure (i.e. required by the verb). As such they are typically adverbial phrases of one sort or another.

<sup>155</sup> Prince (1997) refers to this phenomenon as "simplifying left-dislocation." I prefer the term used here as it is more descriptively useful, and does not entail an analysis rooted in cognitive simplification.

- (6.28) It's supposed to be such a great deal. **The guy**<sub>i</sub>, when he came over and asked if I wanted a route, **he**<sub>j</sub> made it sound so great. Seven dollars a week for hardly any work. And then you find out the guy told you a bunch of lies.'

Prince refers to this type of dislocation as “simplifying dislocation,” and claims that the left-dislocation of the phrase *the guy* is designed to simplify processing.

Dislocation does this by removing new discourse referents from a syntactic position, namely subject position, that disfavors new entities (Prince 1997: 6); see also Chafe (1994: 116). She claims that, typically, subject position in English is filled with topical, or old, information. There is cross-linguistic motivation for this idea: see for instance the discussion of Ariel (2008: 57ff.) on Du Bois' constraint “Avoid New A,” i.e. avoid new subjects of transitive clauses.

In Greek, preposing can perform this same function (although in a different form, as resumption is not present), as we see in the following example from Herodotus:

- (6.29) (ἄνθρωπος δὲ), οὕτω-ἄν εἴη ἄριστος, εἰ βουλευόμενος μὲν ἀρρωδέοι πᾶν ἐπιλεγόμενος πείσεσθαι χρῆμα, ἐν δὲ τῷ ἔργῳ θρασὺς εἴη.  
 ‘Now a (real) man, would be excellent, if he should feel fear in making his plan, considering that he would suffer everything, and in deed still would be bold.’ 7.49.19

The context is as follows: Artabanos is speaking to Xerxes. Preceding this passage, he had been giving the king advice on the size of the Persian army (Xerxes wonders if it should be larger, Artabanos thinks not). After that, he then utters (6.29) to close his turn in the discussion.

The referent of ἄνθρωπος is entirely new to the discourse. This is not a referential use of ‘man’ here (that is, the phrase is not meant to pick out any particular man in the real world; this is not, however, to deny the possibility that pragmatically oblique reference to Xerxes is intended with ἄνθρωπος); in fact, Artabanos is activating an abstract concept of man. Thus, the ‘man’ is not only a new referent, but it is also one that is non-inferable from the preceding discourse, just as we saw with the example above.<sup>156</sup>

The following example exhibits the same pattern. Herodotus reports that Intaphernes, along with his sons and property, has been seized and imprisoned by Darius. As a result, his wife begins to beseech the king:

- (6.30) (ἡ δὲ γυναῖκα τοῦ Ἰνταφρένεος), (φοιτῶσα ἐπὶ τὰς θύρας τοῦ βασιλέως), κλαίεσκε-ἄν καὶ ὀδυρέσκετο.

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<sup>156</sup> See also 7.213.2, as well as Dover (1961: 17) on Hdt. 1.10.2, where Dover claims that a pause was uttered between the subject and the remainder of the clause.



‘The wife of Intaphrenes, hanging around the doors of the king, used to weep and wail.’ 3.119.12

Once again, the preposed referent is new to the discourse; while one may have inferred that Intaphrenes had a wife (given that he has sons), there has been no previous indication that she will play a role in the narrative. In fact, one hardly expects a woman to take on this role of beseeching the king. One might try to claim that this example actually carries a focal reading; that analysis suffers, however, from the fact that there is a focus elsewhere in the sentence, namely κλαίεσκε.

I adduce the following examples without comment:

(6.31) τῶν δὲ δωδέκα βασιλέων δικαιοσύνηι χρεωμένων, ἀνὰ χρόνον ὡς ἔθυσαν ἐν τῷ ἱρῷ τοῦ Ἥφαιστου. τῇ ὑστάτῃ τῆς ὀρθῆς μελλόντων κατασπείσειν, (ὁ ἀρχιερεὺς), ἐξήνικε=σφι φιάλας χρυσέας τῆσι περ ἐώθεσαν σπένδειν, ἀμαρτῶν τοῦ ἀριθμοῦ, ἕνδεκα δωδέκα ἐοῦσι.

‘Although the twelve kings maintained their just dealing with one another (lit. ‘made use of justice’), until, in the course of time, they sacrificed at the temple of Hephaistos. On the last (day) of the festival, as they were about to pour a libation, the high priest brought out for them golden cups which were customary for libation, but erred in the number, (setting out) eleven cups for the twelve who were present.’ 2.151.3

(6.32) Ἀλεξάνδρου γὰρ ἀεθλεύειν ἐλομένου καὶ καταβάντος ἐπ’ αὐτὸ τοῦτο (οἱ ἀντιθευσόμενοι Ἑλλήνων), ἐξεῖργόν=μιν, φάμενοι οὐ βαρβάρων ἀγωνιστέων εἶναι τὸν ἀγῶνα ἀλλὰ Ἑλλήνων.

‘When Alexander decided to compete and entered the lists, his Greek competitors tried to block him, saying that the contest was not for foreign competitors, but Greek.’ 5.22.7

(6.33) (ἡ δὲ φήμη), διήλθε=σφι ὧδε, ὡς οἱ Ἕλληνες τὴν Μαρδονίου στρατιὴν νικῶιεν ἐν Βοιωτοῖσι μαχόμενοι.

‘The rumor went among them, that the Greeks fought the army of Mardonius in Boeotia and won.’ 9.100.4

On the assumption that we expect “old” or discourse-familiar referents to appear in subject position, then we can perhaps adopt Prince’s explanation for the Greek data.

#### 4 Topic Resumption

Just as it is possible to use preposing to introduce brand-new referents, it can also be used to re-introduce constituents after a digression (see Givón 2001b: 265-266). So for instance in the following example, the coding of ἐπεὶ ὧν signals a transition back to an earlier line of thought:

- (6.34) (ἐπεὶ ὦν)<sub>i</sub> ταύτην=**οἱ** ἐδόκεε ἀποβαλεῖν, ἐποίηε τοιάδε.  
 ‘When, then, he resolved to throw this away, he did the following.’ 3.41.6

This line comes in the midst of the story of Polykrates, after Amasis has advised him to get rid of his most beloved possession. Polykrates takes the advice to heart and then decides to part with a ring. Herodotus interrupts this line of the narrative to describe the ring:

- (6.35) ταῦτα ἐπιλεξάμενος ὁ Πολυκράτης καὶ νόωι λαβῶν ὡς οἱ εὖ ὑπετίθετο Ἄμασις, ἐδίζητο ἐπ’ ὧι ἂν μάλιστα τὴν ψυχὴν ἀσηθείη ἀπολομένωι τῶν χειμηλίων. διζήμενος δὲ εὗρισκε τόδε. ἦν οἱ σφρηγὶς τὴν ἐφόρει χρυσόδετος, σμαράγδου μὲν λίθου ἐοῦσα. ἔργον δὲ ἦν Θεοδώρου τοῦ Τηλεκλέος Σαμίου.  
 ‘When Polykrates read over these things and realized that Amasis’ suggestion was good, he searched for that which among his treasures would most ail his soul to lose. As he searched he found the following. He had a ring that he wore that was set in gold and made of emerald. It was a work of Theodoros the son of Telekles, from Samos.’ 3.41

Immediately after this follows (6.34) and the resumption of the main narrative. The coding of ἐπεὶ ὦν as an intonational phrase marks the shift from the subordinate topic (the description of the ring) back to the main narrative.

It appears that this construction can also be used to reintroduce a referent in subject position. So in the following example, Hippokleides is coded as an intonational phrase:

- (6.36) ὡς δὲ ἀπὸ δείπνου ἐγίνοντο, οἱ μνηστῆρες ἔριν εἶχον ἀμφὶ τε μουσικῆι καὶ τῶι λεγομένωι ἐς τὸ μέσον. (προϊούσης δὲ τῆς πόσιος)<sub>i</sub> (κατέχων πολλὸν τοὺς ἄλλους)<sub>i</sub> (ὁ Ἴπποκλείδης)<sub>i</sub> ἐκέλευσε=**οἱ** τὸν ἀύλητὴν ἀύλησαι ἐμμελείην.  
 ‘When they were done with dinner, the suitors held a competition in music and public speaking. With the drinking progressing, Hippokleides, who was well in the lead of the others, told the flute girl to play a dance tune for him.’ 6.129.8

This is not the first time that Hippokleides is mentioned: at the end of 6.128 he is singled out as one of the foremost suitors of Kleisthenes’ daughter. It seems that the distance between the first mention of his name here and his appearance in (6.36) is enough such that he has to be eased into subject position, as it were. It is not yet clear what the exact discourse conditions are that need to obtain for this kind of subject-reintroduction via preposing to be felicitous.

## 5 Topic Conclusion

Preposed noun phrases can also signal the conclusion of a topic, as in the following example:

(6.37) (θύσῖαι μὲν νυν), αὐταῖ=σφι κατεστάσι.

‘These, then, are the sacrificial rituals they set up.’

4.63.1

Herodotus has been describing the sacrificial customs of the Scythians in 4.62, and (6.37) marks the end of that topic; in 4.64 Herodotus then goes on to describe the martial customs of the Scythians. (6.37 is actually unique because, while it concludes the topic of Scythian sacrificial practice, Herodotus nevertheless adds a further remark after 6.37 about the sacrifice of pigs, which may well be an afterthought comment.)

This construction is characterized by two features. The first is the consistent presence of the particle μὲν in the preposed phrase (and, less often, that of νυν and δῆ), and the presence of δέ in second position of the following sentence. Consider, for instance, the following passage (the relevant discourse particles are underlined):

(6.38) δύναται δὲ κατὰ Ἑλλάδα γλῶσσαν ταῦτα τὰ οὐνόματα, Δαρεῖος ἐρξίης,<sup>157</sup>  
Ξέρξης ἀρήμιος, Ἄρτοξέρξης μέγας ἀρήμιος. (τούτους μὲν δὴ τοὺς βασιλέας),  
ὧδε=ἄν ὀρθῶς κατὰ γλῶσσαν τὴν σφετέρην Ἑλληνας καλέοιεν.<sup>158</sup> οἱ δὲ  
βάρβαροι ὡς ἀπήειραν ἐκ τῆς Δήλου, προσῖσχον πρὸς τὰς νήσους. ἐνθεῦτεν  
δὲ στρατιὴν τε παρελάμβανον καὶ ὁμήρους τῶν νησιωτέων παῖδας ἐλάμβανον.  
‘In Greek these names have meaning, Darius is ‘achiever,’ Xerxes is  
‘warlike,’ and Artaxerxes is ‘very warlike.’ These kings, the Greeks would  
rightly call thus in their own language. When the Persians sailed from  
Delos, they disembarked onto the islands. There they began to assemble  
an army and take hostage children of the islanders.’ 6.98.18<sup>159</sup>

Typically μὲν and δέ link their hosts in some kind of associative relationship, but in a case like (6.38), it is not clear if there is a contrastive relationship here or if the two particles serve different functions. If contrastive, μὲν and δέ could serve to highlight the episode break. But on the other hand, it may be the case that μὲν scopes over the preposed phrase (i.e., the topic-concluding preposed phrase), while the subsequent δέ is merely used as a general sentence connective, and does not bear a pragmatic relationship with the topic-concluding μὲν.

Second, this construction is used to conclude topics (or episodes) that play a subordinate role (which we could perhaps refer to as *sub-topics*). To take (6.37) as illustrative, Herodotus concludes his discussion of Scythian sacrifice, but does not conclude his Scythian ethnography altogether. (6.38) is slightly different in that what is

<sup>157</sup> The Old Persian names are as follows: *dārayavahu*- ‘upholder of good’; *Xšayāršān*- ‘hero among rulers’; *Artaxšacā* ‘he who rules by truth.’

<sup>158</sup> This sentence has previously been misunderstood. Hdt. is not translating the Persian names into Greek. That he is so far from the mark is one clue that this is not his purpose here. Rather, he is saying that these phonological items in Greek itself carry meaning. Thus, the Greek names themselves prognosticate woes for Greece. It is not easy to discern what Greek words his synchronic etymologizing is based on.

<sup>159</sup> This sentence is discussed by Fraenkel (1964a: 112).

concluded is not a structural topic of the discourse per se, but rather a digression in the narrative. Herodotus begins 6.98 by describing the movement of the Persian navy; he mentions that after Datis left Eretria, an earthquake occurred on Delos. Herodotus then interprets this as omen of the ills awaiting Greece, and says in particular that Greece had suffered more in the three generations of Darius, Xerxes, and Artaxerxes than in the twenty generations before Darius. In (6.38) we have both the end of this digression, as well as the return to the superordinate narrative, the movement of the Persian fleet.

The following examples further illustrate this construction, which I present here without comment:

- (6.39) (ταῦτα μὲν δὴ) ἴσα πρὸς ἴσα-σφι γενέσθαι.  
‘These things evened the score for them [= Greeks].’ 1.2.6
- (6.40) (οὗτος μὲν δὴ)<sub>i</sub> πρῶτος-οἱ νομὸς κατεστήκειε.  
‘This was the first district he set up.’ 3.90<sup>160</sup>
- (6.41) (ταῦτα μὲν)<sub>i</sub> ἐς<sub>p</sub> Ἀδρηστόν-οἱ ἐπεποίητο.  
‘These things, he had carried out against Adrastus.’ 5.68.1
- (6.42) (τὰ μὲν χρηστήρια) (ταῦτά-σφι ἐχρήσθη).  
‘These were the prophecies prophesied to them.’ 9.94.1

Working from the two characteristics mentioned above, it seems that we can identify topic-concluding preposing even in the absence of a second-position clitic:

- (6.43) ταῦτα μὲν νυν Πέρσαι τε καὶ Φοίνικες λέγουσι.  
‘These things both the Persians and Phoenicians say.’ 1.5.9
- (6.44) ταῦτα μὲν νυν Κορίνθιοί τε καὶ Λέσβιοι λέγουσι.  
‘Both Corinthians and Lesbians say these things.’ 1.24.32
- (6.45) ταῦτα μὲν νυν τὰ Ἑλληνικὰ μαντήια ἐς τὰ ἀπέπεμψε μαντευσόμενος Κροῖσος.  
‘These are the Greek oracles to which Croesus dispatched men to seek prophecy.’ 1.46.13
- (6.46) ταῦτα μὲν ἐς Δελφοὺς ἀπέπεμψε.  
‘These (offerings) he [= Croesus] sent to Delphi.’ 1.52.1

It is somewhat remarkable that Greek uses preposing to signal the conclusion of a topic (or, perhaps more accurately, subtopic). For in other languages, such as Ute (Uto-Aztec, Numic), Japanese, and Akkadian, this is achieved by *right* dislocation; see Givón (2001: 268). This type of construction is presumably motivated by iconicity, in that the

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<sup>160</sup> I have followed Rosén’s text here.

end of the sentence reflects the end of a discourse topic.<sup>161</sup> It is not yet clear if (6.38)-(6.46) serve other functions beyond that of marking a topic-boundary. One possibility, for instance, is that topic-closing preposing also serves an asseverative function, as though a rhetorical seal of veracity to say, “This is what happened (and nothing else).” If this is the case, this construction would be closely aligned with exhaustive-semantics strong-focus cases presented in the next chapter.

## 6 Subject-Discontinuity

At this point, we move into preposing phenomena whose pragmatic meanings are less clear. The first type involves a preposed subject that is discourse-old; in fact, it is not only discourse-old, but occurs in the previous sentence in some non-subject relation. Perhaps the paradigm example of this phenomenon is the anaphoric *ὁ δὲ* construction, illustrated in the following example:<sup>162</sup>

- (6.47) νοστήσαντος δὲ τοῦ κήρυκος ἐς τὴν Κόρινθον ἦν πρόθυμος πυνθάνεσθαι τὴν ὑποθήκην ὁ Περίανδρος. (ὁ δὲ)<sub>i</sub> οὐδέν=οἱ ἔφη Θρασύβουλον ὑποθέσθαι, θαμάζειν τε αὐτοῦ παρ’ οἷόν μιν ἄνδρα ἀποπέμφει, ὡς παραπλήγᾳ τε καὶ τῶν ἑωυτοῦ σινάμων, ἀπηγεόμενος τὰ περ πρὸς Θρασυβούλου ὁπώπεε.  
 ‘When the herald<sub>i</sub> returned to Corinth, Periander<sub>k</sub> was eager to find out the suggestion. But he<sub>i</sub> said that Thrasyboulos<sub>n</sub> had offered him<sub>i</sub> none, and he<sub>i</sub> was taken aback by the sort of man to whom he<sub>k</sub> had sent him<sub>i</sub>, in as much as he<sub>n</sub> was crazy and a destroyer of his own things, going through<sub>k</sub> what he<sub>i</sub> had witnessed with Thrasyboulos.’ 5.92.ζ.19

Here preposed *ὁ δὲ* resumes τοῦ κήρυκος of the previous sentence, as always happens. Anaphoric *ὁ δὲ* must stand in clause-initial position: conjunctions such as *καί* and *ἀλλά* (as well as complementizers<sup>163</sup>) appear to be strictly forbidden.

We find the same construction with full noun phrases, as well, as in the following example:

<sup>161</sup> This technique is perhaps more common in “oral” societies than those that make greater use of writing. One finds a remarkably similar pattern in lists elsewhere in Herodotus and in Homer; by contrast, one does not find such a coda at the end of lists on inscriptions. I am grateful to Kirk (2011) for these insights. I for one would not label the construction “oral”; if it correlates with oral features, I would think the reason is a deeper one: for instance, it may be the case that in oral societies, asseveration (and evidential?) constructions are more needed and more used. Yet another possibility is that this is a register-phenomenon; see Traugott and Dasher (2001: 194-195) for the idea that episode-marking is a feature of higher-register discourse.

<sup>162</sup> See also 1.159.9, 3.49.2, 5.73.11, 6.3.5, 6.30.2, 6.61.25, 8.134.12. Support for the coding of the anaphoric pronoun as an intonational phrase comes from cases like 1.96.11, where a parenthetic phrase (whose intonational phrase status is assured by the final acute) is positioned directly after the anaphor: *ὁ δὲ δῆ, οἷα μνώμενος ἀρχὴν, ἰθύς τε καὶ δίκαιος ἦν.*

<sup>163</sup> E.g. *ὁ δὲ ἐπεῖτε ἐξηγέρθη καὶ ἑωυτῶι λόγον ἔδωκε, καταρρωδήσας τὸν ὄνειρον ἄγεται μὲν τῶι παιδί γυναιῖα (1.34.9).* See also 1.48.5, 1.98.9, 1.114.4, 2.162.2, 3.36.20, 4.83.8, 6.80.5, 6.118.3, 7.156.1, 8.125.7, 9.88.7. This pattern combined with those mentioned above suggest that *ὁ δὲ* sits where conjunctions do.

(6.48) ὁ δ' αὐτὸν ἐς τὴν νῆα ἐκέλευε ἐσβάντα λέγειν, εἴ τι θέλοι. (ἐνθαῦτα)<sub>i</sub>  
 (ὁ Θεμιστοκλέης)<sub>i</sub> παριζόμενος=οἱ καταλέγει ἐκεῖνά τε πάντα τὰ ἤκουσε  
 Μνησιφίλου, ἔωυτοῦ ποιούμενος, καὶ ἄλλα πολλὰ προστιθείς, ἐς ὃ ἀνέγνωσε  
 χρηζίων ἔκ τε τῆς νεὸς ἐκβῆναι συλλέξαι τε τοὺς στρατηγούς ἐς τὸ  
 συνέδριον.

‘He<sub>i</sub> [= Eurybiades] told him<sub>k</sub> [= Themistocles] to board the ship and tell him<sub>i</sub> if he<sub>k</sub> wanted (to say) something. Thereupon<sup>164</sup> Themistocles<sub>k</sub> sat by him and relayed all the things that he heard from Mnesiphilos, pretending it was his own, and adding many other things, until he persuaded him by entreaty to disembark from the ship and assemble the generals for the conference.’

8.58.6

Here Themistocles has been established in the discourse, and is in fact the object of the preceding sentence (αὐτόν).

While this construction is hardly surprising, it is not easy to identify its pragmatic function or the discourse-conditions under which it occurs. It does not seem that there is any particular sense of contrast, nor does it seem that the subject is supposed to be interpreted as a member of some set. Intuitively, one would expect it to bear some similarity to the topic-resumption construction presented in section four. Another possibility is that cases like (6.47) and (6.48) result from unexpected subject-discontinuity. That is, in both cases, Herodotus believes that his audience would expect the subject of the previous sentence to be maintained in the subsequent sentence. And since there is in fact a subject switch, this is signaled via preposing. But what remains unclear is what creates the expectation that the subject of the previous sentence is going to be maintained into the next. (The theory of Centering may offer some insight into these problems; for a recent overview, see Beaver 2004.)

## 7 Verb-Preposing

Among the data thus far presented, there is a remarkable absence, namely that of preposed verbs. To be sure, verb-preposing does exist, however, as we see from the following example (see Holland 1980: 32-85 for an extensive discussion of verb-initial clauses):

(6.49) καὶ μιν ἀνελόμενον τῆσι αὐτῆσι ἵπποισι ἄλλην Ὀλυμπιάδα κατέλαβε  
 ἀποθανεῖν ὑπὸ τῶν Πεισιστράτου παίδων, οὐκέτι περιόντος αὐτοῦ  
 Πεισιστράτου. (κτείνουσι δὲ)<sub>i</sub> οὗτοι=μιν κατὰ τὸ πρυτανήιον νυκτὸς  
 ὑπέισαντες ἄνδρας.

‘And after he [= Miltiades] won another Olympiad with the same horses,

<sup>164</sup> I assume that ἐνθαῦτα has temporal semantics (and refers to what happened after Eurybiades made his suggestion to Themistocles), and not spatial semantics (and accordingly, it does not mean ‘there,’ in reference to the boat). In fact, I am inclined to believe that ἐνθαῦτα means ‘straightaway’ and marks a very short duration between Eurybiades’ suggestion and Themistocles’ appearance on the ship, but it is not possible to attempt a demonstration of this here.

it befell (him) to die at the hands of the sons of the Peisistratids, although Peisistratus himself was no longer alive. They killed him at the Prytaneion at night, having placed men in ambush.’ 6.103.14

Despite the relative infrequency of this construction, its function, at least in cases like (6.49) is remarkably clear. Cases such as these exemplify what Ward (1990: 751-752) refers to as *scalar affirmation*. What this means is that verb preposing serves two functions. The first is to affirm a proposition that is already present in the discourse. With (6.49), Herodotus has already mentioned that it was Miltiades’ fate to die. Verb-preposing serves not merely to affirm that Miltiades was in fact killed, but also to emphasize that this event has an (unexpectedly?) high position on a scale of killing. Herodotus does just this by adding that Miltiades was killed in a particularly treacherous way, being ambushed near the Prytaneion at night. A more full paraphrase of the final sentence of (6.49) would thus run: ‘Indeed, they didn’t just kill him [low position on the scale ‘kill’], but they killed him at the Prytaneion at night, having placed men in ambush [high position on the scale ‘kill’].’ I have no doubt that the use of the historical present in κτείνουσι contributes to this reading, but it is not clear to me how.

The second example is remarkably similar to the preceding one, and I present it here without comment (for its use in questions, see 7.9.32; Ar. *Nub.* 1186):

(6.50) ...ἐνθαῦτα δὴ θαρσήςσας τὸ τελευταῖον τῶν βυβλίων διδοῖ τῷ γραμματιστῇ, ἐν τῷ ἐγέγραπτο. “βασιλεὺς Δαρεῖος Πέρσησι τοῖσι ἐν Σάρδισι ἐντέλλεται κτείνειν Ὀροίτην.” οἱ δὲ δορυφόροι ὡς ἤκουσαν ταῦτα, σπασάμενοι τοὺς ἀκινάκας (κτείνουσι), παραυτίκα=μιν.  
 ‘...he [= Bagaeus] became emboldened and gave the last of the rolls to the scribe, in which had been written: “King Darius orders the Persians in Sardis to kill Oroetes.” When the spear-bearers heard this, they drew their swords and killed him straightaway.’ 3.128.23

There are hardly any examples of this construction in my corpus, which calls for an explanation. Is verb-preposing simply less useful (or restricted to higher registers) than other types of preposing? Or is the pragmatic meaning achieved by preposing of the verb in examples like (6.49) more often achieved via other means, such as e.g. particles?

While the pragmatic function of (6.49)-(6.50) seems clear, what I do not yet understand is how this function fits in with rest of the dossier of preposing. To my mind, it bears the closest connection to the topic-closing construction discussed above in section five, in that both have an affirmatory character. But even this connection is not particularly strong. It is also not clear why this particular pragmatic function is limited to verbs. I want to make clear also that it is limited to verbs: this construction is not to my knowledge attested with verb phrases.

## 8 Suspense-Preposing?

I consider now the possibility of using preposing as a method of heightening suspense in narrative. This suggestion has been made essentially on the basis of one example, the most famous example of preposing in Herodotus:

- (6.51) ὁ μὲν δὴ ὡς οὐκ ἐδύνατο διαφυγεῖν, ἦν ἕτοιμος. ὁ δὲ Κανδαύλης, ἐπεὶ ἐδόκεε ὦρῃ τῆς κοίτης εἶναι, ἤγαγε τὸν Γύγεα ἐς τὸ οἶκημα. καὶ μετὰ ταῦτα αὐτίκα παρῆν καὶ ἡ γυνή. ἐσελθοῦσαν δὲ καὶ τιθεῖσαν τὰ εἴματα ἐθηεῖτο ὁ Γύγης. ὡς δὲ κατὰ νότου ἐγένετο ἰούσης τῆς γυναικός ἐς τὴν κοίτην, ὑπεκδύς ἐχώρει ἔξω. (καὶ ἡ γυνή), ἐπορᾶι=**μιν** ἐξιόντα.  
'As he was not able to get out, he agreed. Candaules, when the time seemed right to go to bed, brought Gyges into the room. And right after his wife also arrived. Gyges watched her enter and take off her clothes. When she turned her back as she was going to bed, he slipped out. And the wife, she notices him leaving.' 1.10.6<sup>165</sup>

There has been a tendency in the literature to view the preposing of ἡ γυνή here as a dramatic device (e.g. Slings 2002: 63) designed to accentuate the suspense of the sentence; see also Dik (2007: 19); Krisch (1990: 66 n. 4); Ruijgh (1990: 229). While this is not explicitly stated by those who endorse this analysis, I presume that it entails a pause of marked duration after γυνή; for without this feature, I find it hard to see how suspense would be created.

Such an analysis raises issues beyond the scope of this chapter, namely what role preposing plays (if any at all) in narrative (for suspense in narrative, see e.g. Toolan 2001). To claim that preposing in (6.51) is a dramatic device is both intuitively appealing and at the same time completely ad hoc. So far as I am aware, there has been no attempt to motivate this analysis, or provide parallel examples. The following example, for instance, is remarkably similar to that above:

- (6.52) (καὶ ἡ Ἀμεστρίς), πυνθάνεται=**μιν** ἔχουσαν.  
'And Amestris, she finds out that she [= Artaynte] is wearing it [= the mantle that Amestris made for Xerxes].' 9.110.2

Given the similarity between the two examples, one would expect them to fall under the same analysis. And yet the suspense-analysis does not seem a particularly good fit for this example. Xerxes' wife Amestris weaves him a mantle, which he wears while visiting his mistress, Artaynte. Artaynte asks Xerxes for the mantle, and he eventually gives it to her. When Amestris sees Artaynte wearing the mantel, it does, to be sure, impact the narrative, as it confirms suspicions that she had been harboring. But it is not the case that (6.52) represents the anticipated resolution of Xerxes' attempt to keep a

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<sup>165</sup> Slings (2002: 63) attributes the prosodic coding of the subject to the "dramatic climax" of the story and claims that this is what marks the sentence as "literary."



secret. Indeed, it seems from Herodotus' description that Artaynte did not attempt to conceal the mantle (note e.g. the last sentence of 9.109, ἡ δὲ περιχαρῆς ἐοῦσα τῶι δώρῳ ἐφόρεέ τε καὶ ἀγάλλετο.), and accordingly it is hard to imagine Amestris' discovery as bringing with it narrative surprise.

My last worry concerning the suspense-analysis is that there is no clear way to identify preposing specifically as responsible for the suspense. I do not imagine that anyone would want to deny that (6.51) is a suspenseful point in the narrative. But this fact is not a sufficient reason to attribute the source of the suspense to the preposed phrase. The suspenseful quality of the sentence may not be affected either way by preposing.

Despite these objections to the suspense-analysis, (6.51) does not find a ready home in my own dossier of preposing functions. It does not seem quite right to postulate a set-membership construction here, i.e. to claim that the the preposing of ἡ γυνή marks off its membership in the set {Gyges, Candaules' wife}. It is true that we are dealing with semantically contrastive events: Gyges is trying to get out of the room unnoticed, while Candaules' wife does just that. But aside from that, it is hard to see the motivation for setting up the two characters in a set.

I can offer here two possible analyses. The first is that (6.51) is somehow related to the subject-switch cases from the previous section. Notice that Gyges is the subject of the preceding sentence. Much remains unclear on this front. A second possibility is that the preposing in (6.51) is somehow connected to the topic-conclusion construction of section five. For as mentioned above, we are at a significant place in the narrative: the lives of each of the characters, not to mention of the larger world, is considerably impacted by Candaules' wife's noticing Gyges. In this sense, we have not a topic break per se, but rather an episode break. The preposed phrase would then serve to mark this episode boundary. One problem with both of these suggestions is that they do not readily account for the use of a noun phrase (ἡ γυνή) to refer to Candaules' wife, as opposed to a pronominal expression, which one could reasonably expect given such a highly activated referent.

## 9 The Location of Focus in Strong-Topic Constructions

There is one last property of strong-topic constructions to observe, which concerns the location of the focus of the utterance. As mentioned above, strong-topic preposed phrases do not instantiate the focus of an utterance. What is remarkable is that there is a strong tendency for the focus to be the first element of the nuclear clause after the preposed phrase, as the following example illustrates:

(6.53) (γυναικῶν δὲ σιτοποιῶν καὶ παλλακῶν καὶ εὐνούχων), οὐδεὶς-ἄν εἴποι  
ἀτρεκέα ἀριθμόν.

'This is the number of the entire force of Xerxes. But of women and bread-makers and concubines and eunuchs, no one could say the precise number.'

7.187.3

At the beginning of 7.187, Herodotus concludes his survey of Xerxes' army. With (6.53), he shifts his attention to non-martial elements of the king's entourage. Since Herodotus has been discussing the size of Xerxes' force, I would identify εἴποι ἀτρεκέα ἀριθμόν as accommodated information. That leaves οὐδείς, which I would identify as the focus of the nuclear clause.

This position for focus is amply attested in other examples as well (focus constituents are underlined):

- (6.54) εἰ Ἀθηναῖοι καταρωδῆσαντες τὸν ἐπιόντα κίνδυνον ἐξέλιπον τὴν σφετέρην, ἢ καὶ μὴ ἐκλιπόντες ἀλλὰ μείναντες ἔδοσαν σφέας αὐτοὺς Ξέρξῃ, (κατὰ τὴν θάλασσαν), οὐδαμοί-ᾶν ἐπειρῶντο ἀντιούμενοι βασιλεί. 'If the Athenians had abandoned their land out of fear of the approaching danger, or if they had not left (their land) but stayed and given themselves over to Xerxes, no one whatsoever would have attempted to oppose the king on the sea.' 7.139.6
- (6.55) (πέμπτη δὲ ἢ ἕκτη ἡμέρη ἀπὸ τούτων), τάδε=οἱ συνήνεικε γενέσθαι. 'On the fifth or sixth day from these things, the following things by chance happened to him.' 3.42.2
- (6.56) (μετὰ δὲ τὴν εὐχὴν), αὐτίκα=οἱ ἐμίχθη ὁ Ἄμασις. 'After the vow, straightaway Amasis slept with her.' 2.181.16
- (6.57) (ταῦτα μὲν), ἐς=Ἄδρηστόν=οἱ ἐπεποίητο. 'These things, he had carried out against Adrastus.' 5.68.1
- (6.58) (ἡμεῖς), οὐχ-ᾶν δυνάμεθα οἰκέειν μετὰ τῶν ὑμετέρων γυναικῶν. 'We, however, would not be able to live with your women.' 4.114.10
- (6.59) (νῦν δὲ), ἐξ=ἀπροσδοχῆτου=σφι παρέστησαν οἱ Πέρσαι. 'But now, the Persians came upon them unexpectedly.' 1.191.24

When the focus is a branching constituent, it appears that the focal content alone can be positioned first, with the rest of the phrase deferred:

- (6.60) (ἀπὸ Βαβυλῶνος δὲ καὶ τῆς λοιπῆς Ἀσσυρίας), χιλιά=οἱ προσήιε τάλαντα ἀργυρίου καὶ παῖδες ἑκτομίαι πεντακόσιοι. 'From Babylon and the rest of Assyria, thousands of talents of silver came to him and five-hundred castrated boys.' 3.92.2

Here χιλία is positioned first with the result that χιλία τάλαντα ἀργυρίου becomes a discontinuous constituent. On the relationship between discontinuous phrases and focus, see Devine and Stephens (1999: 45-48).

If this pattern can be maintained against further testing and investigation, then it may provide further evidence for the architecture of the left periphery. In chapter four, I proposed the following structure, which I repeat here:

$$(6.61) \left[ \text{TopP} \left[ \text{CP} \left[ \text{FocP} \right. \right. \right. \right.$$

In my earlier discussion, I mentioned only the possibility that strong-focus material could occupy FocP. But it may be the case that FocP is the home not only for strong-focus material, but also for material that is only informationally-focused, and that it is here that e.g. οὐδέεις from (6.53) sits. The difference in focal strength would then be signaled prosodically, i.e. strong-focus items are coded as intonational phrases and subsequently exclude clausal clitics, while information-focus items are not discretely coded as intonational phrases, and accordingly can serve as hosts for clausal clitics.

## 9 Summing Up

This concludes the first half of my survey of preposed phrases. While I am confident that I have delineated the major pragmatic functions of preposing, I would like to issue a few caveats. The first is that I am positive that the descriptions above are incomplete: there is undoubtedly more to be said about the pragmatics of preposed phrases. There is a further issue that it has not been possible to discuss, but which nevertheless looms large: to what extent is preposing obligatory given a certain pragmatic intention, and a certain pragmatic environment? Or is preposing simply “optional”? The answer to this is not yet clear, but I incline towards the belief that neither answer is correct, and that there are rather some contexts in which such constructions are more obligatory, and other contexts in which they are less so. Because of our ignorance on this front, it is at present impossible to offer a predictive account of preposing. One of the issues that would have to be addressed before this question can be adequately addressed is the difference between preposing and other grammatical means of signaling marked information structure. The first comparison that comes to mind is that between preposing and hyperbaton (discontinuous spell-out), whose pragmatic functions (both topical and focal) are described in detail by Devine and Stephens (1999).

## Chapter 7

### Preposing II: Strong-Focus Constructions

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The preceding chapter investigated preposed phrases that do not instantiate the focus of an utterance; in this chapter I present those that do instantiate the focus of the utterance. This sub-type of preposed phrase I refer to as *strong-focus* constructions, because preposing serves to strengthen the focus of an utterance. The following are the pragmatic functions that I argue for (repeated from 6.6 of the preceding chapter for convenience):

#### *Strong-Focus Constructions*

- (7.1) 1. Counterassertion  
2. Exhaustive reading  
3. Presupposition cancelling

At the conclusion of our survey of strong-focus constructions, we will be in a position (in section six) to consider cases in which we find multiple preposed phrases (as thus far the survey has focused predominantly on the preposing of a single constituent or sub-constituent). While certain details of this construction remain unclear, I demonstrate that there is a tendency for strong topics to precede strong-focus phrases.

This chapter is organized as follows. Section one provides a sketch of focal strength. Sections two, three, and four present the functions of counterassertion, exhaustivity, and presupposition, respectively. Section five offers a retrospective comparison of the strong-topic and strong-focus constructions, which serves as a segue for section six, which examines the multiple-preposing construction. Section seven calls attention to a gap in the data, namely the notable absence of verb- and verb-phrase preposing. Section eight looks briefly at the data for metrical texts, to sketch some differences between the preposing that one finds here and in prose. Section nine concludes the chapter.

#### 1 Focal Strength

In the previous chapter, I defined focal information as denoting asserted, non-presuppositional (i.e., “new”) information. Within this category, further distinctions can be made (see e.g. Gundel 1998; Glanzberg 2005; Erteschik-Shir 2007: 27-40; Krifka 2007). In particular, Devine and Stephens (1999: 35-38) draw a distinction between *weak focus* and *strong focus*. Weak focus is the variable-filling focus such as that in (6.7), which I repeat here:

- (7.2) A: What did John do?  
 B: [He]<sub>Top</sub> [washed the dishes.]<sub>Foc</sub>

Strong focus plays this same variable-filling role (since it still instantiates the focus of the utterance), but it has two additional features. One, it evokes a set of contextually-relevant alternatives. Two, it intentionally excludes those contextually-relevant alternatives from the scope of the assertion. Thus, items under strong focus often lay claim to exclusivity. In a similar vein, Dik (1995: 39-45) lays out a typology of what she calls *counter-presuppositional focus*, and Givón (2001: 221-250) lays out one for what he calls *contrastive focus*. And Kiss (1998) argues for a very similar distinction in focal strength, and distinguishes between *informational focus* and *identificational focus*. Hungarian is uniquely well suited to formulation of this distinction as the two types of focal information have distinct morphosyntactic realizations,<sup>166</sup> as we see from the following minimal pair (from Kiss 1998: 247):

- (7.3) *Tegnap este be mutattam Pétert Marinak*  
 last night PERF introduced.I Peter.ACC Mary.DAT  
 ‘Last night I introduced Peter to Mary.’

- (7.4) *Tegnap este Marinak mutattam be Pétert.*  
 ‘It was to Mary that I introduced Peter last night.’

In (7.3), a case of informational focus, *Marinak* (‘Mary’) is in post-verbal position and represents merely non-presupposed information, without the suggestion that the speaker introduced Peter only to her last night. By contrast, in (7.4), a case of identificational focus, *Marinak* precedes the verb *mutattam* and expresses exhaustive identification: among a contextually-relevant set of individuals (whatever that might be), the speaker introduced Peter to Mary and no one else last night.

Each of these approaches agrees on a basic twofold distinction between a focus that simply supplies new information, and one that directly contradicts a hearer’s expectations or presuppositions. Payne (1992: 141) refers to this latter type of focal information as “pragmatically marked” in that it counters previous information in the discourse. It is this latter, pragmatically stronger, focus that I will refer to as *strong focus* in this chapter, and which I will argue is signaled by preposing in Greek (and possibly by other means as well).

## 2 Counterassertion

As noted above, strong focus identifies the focused constituent as a member of a contextually-relevant set of alternatives, and, furthermore, excludes the rest of these alternatives outright. Preposed constituents frequently correlate with this type of

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<sup>166</sup> Whether a similar configuration exists in Greek (i.e. preverbal position bearing strong focus, and post-verbal position weak focus) is not yet clear. This seems to be implied by the framework of Dik (1995) and (2007), however.

informational focus. Herodotus thus uses this construction when making counterassertions, that is, when he wants to assert a piece of information in the face of one already asserted. This overwritten, as it were, piece of information takes two shapes. In the first, the earlier information has been overtly mentioned in the discourse. In the second type, it has not been explicitly mentioned, but is rather assumed by Herodotus to be a part of his audience's beliefs.

For an example of the first type, we turn to the following passage, where Darius' selection of a successor is being described. Herodotus reports that while Xerxes took advantage of advice that Demaratos, erstwhile king of Sparta, had offered, he nevertheless would have succeeded Darius because his wife Atossa held all the power:

(7.5) ἐπεὶ γὰρ καὶ ἐν Σπάρτῃ ἔφη ὁ Δημάρητος ὑποτιθέμενος οὕτω νομίζεσθαι, ἦν οἱ μὲν προγεγονότες ἕως πρὶν ἢ τὸν πατέρα σφέων βασιλεῦσαι, ὁ δὲ βασιλεύοντι ὀψίγονος ἐπιγένηται, τοῦ ἐπιγενομένου τὴν ἔκδεξιν τῆς βασιλείης γίνεσθαι. χρησαμένου δὲ Ξέρξεω τῆι Δημαρήτου ὑποθήκηι, γνοὺς ὁ Δαρεῖος ὡς λέγοι δίκαια βασιλέα μιν ἀπέδεξε. δοκέειν δέ μοι, (καὶ ἄνευ ταύτης τῆς ὑποθήκης), βασιλεῦσαι· ἂν Ξέρξης. ἡ γὰρ Ἄτοσσα εἶχε τὸ πᾶν κράτος. 'Since even in Sparta, Demaratos suggested, it was custom that, if the sons are born before their father becomes king, and one is born later while he is king, the succession of the kingship belongs to the latter born one. Xerxes made use of the advice of Demaratos, and Darius, knowing that he spoke justly, made him king. But it seems to me that, even without this advice, Xerxes would have become king. For Atossa held all the power.'<sup>167</sup> 7.3.18

Demaratos' advice is first presented as the reason for the selection of Xerxes as king. In the penultimate sentence, however, Herodotus rejects this cause, and claims that Xerxes would have become king even without Demaratos' advice. Schematically, we can represent this pattern as follows:

(7.6) **Open Proposition:** Xerxes' became king for reason  $x$ .  
**Assertion:**  $x$  = Demaratos' advice.  
**Counterassertion:**  $x \neq$  Demaratos' advice.

The counterassertion simply denies Demaratos' advice as the cause of Xerxes' ascension. Herodotus does not further specify what the cause is; he only intimates that it has something to do with the power of Atossa (whom we know to be Xerxes' mother).<sup>168</sup> Further evidence for the pragmatic strength of the prepositional phrase comes from "scalar" καί, which signals its unexpected status.

<sup>167</sup> It is possible that ἡ γὰρ Ἄτοσσα is preposed in this sentence, and should accordingly be translated: 'For it was Atossa [as opposed to any of the others who one might otherwise expect to be holding the power] who held all the power.'

<sup>168</sup> For further examples of this type, see 2.11.17, 2.16.11, 6.84.14.

In the second type of counterassertion, Herodotus (or some other speaker) asserts a piece of information that is not explicitly contrary to some other in the discourse, but rather contrary to the projected expectations of the addressee.<sup>169</sup> So in the following example, Herodotus is comparing the Egyptian Labyrinth with the construction projects of the Greek world:

(7.7) εἰ γὰρ τις τὰ ἐξ Ἑλλήνων τείχεά τε καὶ ἔργων ἀπόδεξιν συλλογίσαιτο,  
 (ἐλάσσονος), πόνου=τε=ἄν καὶ δαπάνης φανείη ἐόντα τοῦ λαβυρίνθου τούτου.  
 ‘For if someone should list the walls (built) by the Greeks and display of  
 works, it would clearly be of both LESS toil and LESS expense than this  
 labyrinth.’ 2.148.6

He claims that if one were to add up the toil and expense of all the Greek buildings and compare the numbers with those required for this one Egyptian building, they would be less. The (predicate) adjective ἐλάσσονος is coded as an intonational phrase, which thus causes ἄν to surface in a non-canonical position.

What is the counterassertion in (7.7)? It is true that no one (at least within the world of the discourse) has made a claim to the contrary, namely that the totality of Greek works would require more toil and expense than the Egyptian Labyrinth. But this is actually what one expects, and presumably what Herodotus has imputed to his audience.<sup>170</sup> On general grounds of “common sense,” one hardly expects a single building of the Egyptians to outstrip in costs that of the entire Greek world. We can schematize the informational landscape as follows.

(7.8) **OP:** The walls and works of the Greeks would require  $x$  labor than  
 that of the labyrinth.  
**Projected value:**  $x =$  ‘more’  
**Asserted value:**  $x =$  ‘less’

The protasis of (7.7) evokes the above open proposition, and the expected value of the variable is ‘more,’ but what Herodotus actually asserts is ‘less.’ The coding of ἐλάσσονος as an intonational phrase thus reflects the presence of a competing value for the valuable (the expected value), and, at the same time, excludes it. That we find this pattern in particular in Herodotus’ description of Egypt is exactly what we expect: for here his goal is to impress upon his Greek audience the superior (if not overwhelming) majesty of Egypt.<sup>171</sup>

<sup>169</sup> See further 1.109.9, 1.123.7, 1.156.2, 3.40.3, 3.135.15, 5.72.24, 5.91.4, 7.148.15, 9.90.16.

<sup>170</sup> The behavior of Herodotus here accords with the following description of Prince (1986: 208): “...speakers seem to form their utterances so as to structure the information they are attempting to convey, usually or perhaps always in accordance with their beliefs about the hearer: what s/he is thought to know, what s/he is expected to be thinking about.”

<sup>171</sup> See further the previous discussion of this sentence in chapter four, especially for arguments against the claim that ἐλάσσονος πόνου is the preposed unit.

There are cases in which counterassertive preposing of this second type can be used to signal hostility or impoliteness, as in the following example:

- (7.9) ὁ δὲ εἶπε, “ὦ δέσποτα, ἐάσας με χαριεῖ μάλιστα τὸν θεὸν τῶν Ἑλλήνων, τὸν ἐγὼ ἐτίμησα θεῶν μάλιστα, ἐπειρέσθαι πέμψαντα τάσδε τὰς πέδας, (εἰ ἐξαπατᾶν τοὺς εὖ ποιεῦντας), νόμος=ἐστὶ=οἱ.”  
 ‘And he said, “O master, you will most please me if you allow me to send these chains to the god of the Greeks, whom I honored most of the gods, and to ask (him) if to deceive the ones who do good is his practice.”’ 1.90.9

Here Croesus is speaking to Cyrus, after his downfall. He feels betrayed by Apollo, since he believes the oracle proffered deceitful responses, which led to his downfall. He now wants to ask if it is the god’s custom ἐξαπατᾶν τοὺς εὖ ποιεῦντας: he would ask this question against a general cultural assumption that this is not in fact a custom of the god. Croesus is thus lashing out by questioning a cultural assumption about the behavior of the gods. Croesus’ desire to reproach the god is made explicit in the next section. We thus see the extent to which cultural disposition is involved in the creation of discourse and thus ultimately prosodic phrasing.

It appears that it is also possible for counterassertion to be produced sentence-internally, as in the following example:<sup>172</sup>

- (7.10) (νησος δὲ), οὕτω=ἄν εἶη ἐν ἠπείρῳ.  
 ‘It would thus be an ISLAND on the mainland.’ 9.51.6

Herodotus is relating a plan of the Greeks to go to an “island” if the Persians do not attack. This “island” is actually the area in between a river that flows down from Mount Cithaeron, splits in two (which creates about three furlongs width between them), and then converges again. This effect thus creates the impression of an island. In (7.10) the designation of this area as an island is counterassertive because of the phrase ἐν ἠπείρῳ: for it is a property of islands that they not exist ἐν ἠπείρῳ. This example demonstrates that a focal countervalue need not be present in the discourse at the time of preposing, but can actually occur later.

## 2.1 Cultural Perspective and Counterassertion

As should be clear from the preceding discussion, motivation for counterassertive preposing will typically come from the local circumstances (in particular, the informational context) of the discourse. This is not always the case, however, as in some cases, counterassertion appears to be motivated at a more general level by cultural perspective. In cases like (7.7) and (7.9)-(7.10), cultural perspective is of course present and relevant, but the motivation for preposing comes primarily (if not exclusively) from the information status of the referents within the local context of the discourse.

<sup>172</sup> See also 3.25.18, 7.10.ζ.59.



Consider by contrast the following example, in which Herodotus is comparing Greek and Persian customs of sacrifice. After going through the initial steps of the process, he observes that a Persian magus chants over the sacrificed animal:

- (7.11) διαθέντος δὲ αὐτοῦ μάγος ἀνὴρ παρεστεῶς ἐπαεῖδει θεογονίην, οἷην δὴ ἐκεῖνοι λέγουσι εἶναι τὴν ἐπαοιδήν. (ἄνευ γὰρ δὴ μάγου), οὐ=σφι νόμος ἐστὶ θυσίας ποιέεσθαι.  
 ‘Once he [= a sacrificer] has arranged it, a magus stands by and chants a theogony, of exactly the kind they say the chant is. For, without a magus, it is not licit for them to perform sacrifices.’ 1.132.15

Preceding the phrase ἄνευ γὰρ δὴ μάγου, nothing suggests that a magus must be present for a sacrifice: we only know that for the generic situation that Herodotus describes, one is present. But with the second sentence of (7.11), he makes this explicit. He could have done this with the following sentence, however:

- (7.11.1) οὐ=γὰρ=σφι νόμος ἐστὶ θυσίας ποιέεσθαι ἄνευ δὴ μάγου.

Why then does Herodotus prepose ἄνευ γὰρ δὴ μάγου? As expected, preposing evokes alternatives, but this time not one that is present in the discourse itself. The source of the alternative comes instead from what Herodotus knows of his (Greek) audience—namely that they do not perform sacrifices with a magus (for indeed the magus as a cultural figure does not exist within Greek culture). By preposing ἄνευ γὰρ δὴ μάγου, Herodotus thus takes care to highlight an aspect of Persian culture that differs from that of his imagined audience.

Given that Herodotus takes it upon himself to describe the differences between Greeks and non-Greeks, we should expect to find this type of preposing especially in cultural surveys of non-Greeks. And indeed, we are not disappointed in this expectation:

*Mesopotamian Clothing*

- (7.12) (ἄνευ γὰρ ἐπισήμου), οὐ=σφι νόμος ἐστὶ ἔχειν σκῆπτρον.  
 ‘For, without an emblem, it is not customary for them to have a staff.’ 1.195.9

*Babylonian Public Medicine*

- (7.13) (σιγῆι δὲ παρεξελθεῖν τὸν κάμνοντα), οὐ=σφι ἔξεστι, πρὶν ἂν ἐπείρηται ἦντινα νοῦσον ἔχει.  
 ‘To pass by the sick person, this is not permitted, until one asks what disease he has.’ 1.197.8

*Scythian Slavery*

- (7.14) ἐνιαυτοῦ δὲ περιφερομένου αὐτίς ποιεῦσι τοιόνδε, λαβόντες τῶν λοιπῶν θεραπόντων τοὺς ἐπιτηδεοτάτους, οἱ δὲ εἰσι Σκύθαι ἐγγενέες. οὗτοι γὰρ θεραπεύουσι τοὺς ἂν αὐτὸς ὁ βασιλεὺς κελεύσῃ. (ἀργυρώνητοι δὲ),

οὐκ<sub>p</sub>=εἰσί=σφι θεράποντες.

‘After a year passes, they do such a thing again, selecting the most suitable of the remaining servants who are ethnic Scythians. For all those whom the king commands (to serve), they all serve: purchased slaves they don’t have.’ 4.72.5

In each case, preposing is used to highlight a cultural feature that is absent among the Greeks.

## 2.2 Preposing of Simplex Negator?

It is possible that the negator οὐκ can be preposed to mark negative-polarity focus (on this concept, see Devine and Stephens 2006: 148), as in the following example (see also 3.66.13):

- (7.15) ἐκπεσόντος δὲ ἐς τὴν ψάμμον αὐτοῦ ἐποιέετο σπουδὴν πολλὴν ἐξευρεῖν. (ὡς δὲ οὐκ), ἐφαίνετό=οἱ ὁ δὴν, ἀναστενάξας εἶπε πρὸς τοὺς παραστάτας.  
‘When it fell into the sand, he tried really hard to find it. And when his tooth did NOT appear to him, he shouted and said to the ones standing around him.’ 6.107.17

Here Hippias invests a considerable amount of energy in trying to find his tooth, as indicated by the phrase σπουδὴν πολλήν (as well as the prefix ἐξ- of ἐξευρεῖν?).<sup>173</sup> Given this effort, the expectation is that he would in fact find his tooth. To code this violated expectation it may be the case that οὐκ is here preposed, as depicted in (7.15). The alternative is that οὐκ is simply proclitic and that prosodically the beginning of the second sentence looks something like ὡς<sub>p</sub>=δὲ<sub>p</sub>=οὐκ<sub>p</sub>=ἐφαίνετό=οἱ (and would accordingly involve no preposing). Preposing of negatives is known, however: in section three below I present cases in which we have unambiguous preposing of compound negation phrases. It is not clear how one can use this pattern to interpret cases like (7.15) above.

## 2.3 Preposing, Oracular Language, and the Fall of Croesus

I would like to call attention to one particular case of focal preposing that has a dramatic impact on the narrative (if not history itself). In the following example, Herodotus reports the oracle’s answer to Croesus’ question of whether he should attack Persia:

- (7.16) οἱ μὲν ταῦτα ἐπειρώτων, τῶν δὲ μαντηῶν ἀμφοτέρων ἐς τὸ αὐτὸ αἰ γινῶμαι συνέδραμον, προλέγουσαι Κροίσει, ἣν στρατεύηται ἐπὶ Πέρσας, (μεγάλην), ἀρχήν=μιν καταλύσειν.  
‘They asked again, and the judgments of both oracles agreed, saying to

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<sup>173</sup> That Hippias does not locate his tooth plays a significant role in the narrative, as well: for it is the basis of his prophecy that he and the Persians will not take Marathon.

Croesus that, if he attacks the Persians, a GREAT empire he will destroy.’  
1.53.13

The first thing to observe is that the oracle does not actually answer his question: that is, it does not say directly whether or not he should attack Persia. (The oracle also ignores a second question that Croesus had asked about whether to enlarge his army.) The question that we want to answer is: why does the oracle prepose the adjective *μεγάλην*?

We can begin to answer this question by explaining first what effect the preposing has. The contribution of preposing can be captured with the following paraphrase: ‘It is not simply an empire that you will destroy, but a great one.’ This reading, I would claim, is not available in the non-preposed version; or if it is, it is far less salient (and perhaps could be created only with the addition of certain discourse particles).

What the preposed reading does, then, is to make an assertion against a background in which the destruction of an empire<sup>174</sup> is presupposed. It is this presupposition on the part of the oracle that seems crucial in Croesus’ downfall. For he essentially takes this presupposition as his answer, and identifies the empire whose destruction has been foretold as that of Persia. The fact that the empire will specifically be ‘great’ lends further weight to this interpretation: for the assertion that Croesus’ conquest will indeed be great would have served to confirm his hopes. While we cannot know whether Croesus thought of his empire as great or not, objectively his empire was smaller (geographically, and perhaps militarily as well) than that of Persia. As such, it is reasonable to believe that he would have been more readily identified Persia as a *μεγάλη ἀρχή* than his own Lydia. To understand what the oracle is saying, Croesus would have had to be able to see his own kingdom as *μεγάλη*. We can thus see how preposing allowed (if not encouraged) Croesus to find in the oracle what he wanted, namely assurance that he would destroy Persia.

This is just the sort of communicative behavior that we expect from an oracle. For it was widely acknowledged in antiquity that oracular language differs from “ordinary” language, as the following attests:<sup>175</sup>

(7.17) ὁ ἄναξ, οὗ τὸ μαντεῖόν ἐστι τὸ ἐν Δελφοῖς, οὔτε λέγει οὔτε κρύπτει ἀλλὰ σημαίνει.

‘The lord, to whom belongs the oracle at Delphi, neither speaks nor conceals, but indicates.’

Heraclit. fr. 22 B93 DK

Heraclitus’ remark is exemplified in the oracle’s response to Croesus: it neither lies nor conceals the truth, but states it obliquely and ambiguously. One has to be more careful than usual in the inferences that one draws from this type of language. Thus to

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<sup>174</sup> My analysis relies heavily on the meaning of *ἀρχή* as ‘empire,’ which is the standard interpretation: see Powell, s.v. II.7.

<sup>175</sup> For a recent discussion of oracular language in Herodotus, see Kindt (2006).

understand oracular language one has to operate with a different set of assumptions about communication. From a modern perspective, I would characterize oracular language as pragmatically uncooperative interlocutors, in as much as they flout Gricean maxims of cooperation (for which see Grice 1975).

One could object to this analysis by claiming that the preposing of *μεγάλην* is simply a matter of “stylistic fronting” (on which see recently Holmberg 2006). Under this type of analysis, the preposing of the adjective is designed to elevate the register of speech: the oracle is an august, religious institution and one could accordingly expect its language to be more “formal.” There is no way to rule out this possibility. Moreover, it may not be incompatible with the pragmatic analysis above.<sup>176</sup> In its strongest form, this analysis has the unfortunate drawback of denying a correlation between the oracle’s expression and Croesus’ behavior. This could of course be true, but it does not seem likely.

### 3 Exhaustive, Restrictive, and Scalar Readings

In the previous section, I presented cases where preposed constituents expressed exhaustive readings against the background of contextually-relevant alternatives, which were either explicitly present, or assumed. In this section, I present cases that again express an exhaustive reading but lack an established set of contextually-relevant alternatives. Instead, it seems that this construction is used to pre-emptively exclude all and any possible alternatives.

We often find the exhaustive reading in the presence of universal quantifiers and negators.<sup>177</sup> The prosodic phrasing and clause-initial positioning intensify the operator and exclude any conceivable alternatives:

(7.18) (οὐ γὰρ τὸ συντυχόν), φαίνεται-μοι ἔργον εἶναι.  
‘For it seems to me a work that is not at all common.’ 1.51.12<sup>178</sup>

If we imagine the meaning of *συντυχόν* as if on a scale with higher and lower values of *συντυχόν*-ness, what preposing does here is to deny completely the subject any place on this scale. We thus end up with the meaning ‘at all’ in the English translation. This type of preposing differs crucially from that of the previous section in relationship to alternative values for the focused element. With counterassertive preposing, there is (in one form or another) a competing contextually-relevant value for the focal variable. Counterassertive preposing is used to acknowledge and reject such alternatives. Exhaustive focal constructions work to rule out not just contextually-relevant

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<sup>176</sup> What I have in mind is the possibility that more “formal” registers of discourse were the ones in which speakers were more attuned to signaling information-structure and discourse-cohesion.

<sup>177</sup> See also 3.38.13, 5.65.1.

<sup>178</sup> The article in the expression τὸ συντυχόν is semantically anomalous: despite the article, the collocation appears to have indefinite reference and mean ‘any random thing’ vel sim. Donald Mastronarde draws my attention to the entry for ‘easy’ in Pollux, *Onomasticon* 5.106, where all the words are anarthrous except τὸ συντυχόν.

alternatives, but rather any and all conceivable alternatives. So with (7.18), it is not the case (so far as I can tell) that there is a competing claim (or expectation) that the work was in fact συντυχόν. In fact, the context suggests quite the opposite—that Herodotus himself is identifying the worth as nothing short of excellent, and that this supports the attribution to Theodoros of Samos.

The following example works in a similar way:

- (7.19) ἦ δὲ ὡς εἶδε τὸ παιδίον μέγα τε καὶ εὐειδὲς ἔόν, δακρύσασα καὶ λαβομένη τῶν γουνάτων τοῦ ἀνδρὸς ἐχρήζε (μηδεμιῆι τέχνῃ), ἐκθεῖναί=**μιν**.  
 ‘When she saw that the child was great and beautiful, she begged him, crying and taking hold of her husband’s knees, not—by any means—to expose him.’ 1.112.4<sup>179</sup>

The prosodic coding of μηδεμιῆι τέχνῃ contributes the sense ‘at all.’ Here a cowherd has brought home an exposed baby, which he has been ordered to kill. He reports this to his wife and she responds, as reported in (7.24), by beseeching him not to expose the baby in any way. She is thus attempting to contravene the command her husband was given.

Preposing also induces readings of the sort identified by Kiss as identificational focus. That is, the preposed element is presented as the only way in which the rest of the proposition could be true.<sup>180</sup> So in the following example, the Lydians have agreed to submit to the kingship of Gyges if and only if the oracle appoints him:

- (7.20) (ἦν μὲν [δὴ] τὸ χρηστήριον), ἀνέλι=**μιν** βασιλέα εἶναι...  
 ‘...if the ORACLE appoints him to be king...’ 1.13.5

The preposing of τὸ χρηστήριον signals that no other authority will qualify to designate Gyges king.

The following example is remarkable in that exhaustive reading of the preposed phrase gives rise to a conditional reading. Xerxes is talking to Demaratos, who has been lauding the courage and strength of the Lakedaimonians. Xerxes says that if what Demaratos is saying is true, he should be able to take on twenty of Xerxes’ Persians; he then says:

- (7.21) (καὶ οὕτω μὲν), ὀρθοῖτ’=**ἄν** ὁ λόγος ὁ παρὰ σεῦ εἰρημένος.  
 ‘And this way, the speech you have made would be correct.’ 7.103.10

<sup>179</sup> This example raises the complex question of where exactly clitics should go in relation to embedded infinitival clauses. This issue is discussed at length in chapter nine. The details of my analysis are irrelevant for the moment, as μηδεμιῆι τέχνῃ has to be taken as preposing under any analysis.

<sup>180</sup> See also 1.43.10, 1.53.14, 2.52.4, 2.173.9, 3.52.4, 3.88.14, 7.203.2.

οὕτω refers back to the proposition of the previous sentence, in which Xerxes says that, according to what Demaratos says, he should be able to handle twenty Persians on his own. What (7.21) then says is that if, and only if, this is true, then Demaratos' boasting will be justified. And without this, as Xerxes goes on to say in the passage, Demaratos' claims are little more than idle boasting. What is remarkable about (7.21) is that preposing gives rise to a conditional reading, just as in (7.10) above counterassertive and concessive-clause semantics converged.

The distinction between the counterassertive type described in section two and the present one is not always easy to discern. Since we are dealing with background and implicit information, we have to rely on indirect evidence and intuitions about communicative motivation. The following example illustrates this problem:

- (7.22) (ὡς δὲ κατὰ ταῦτα)<sub>i</sub> ἐθέσπιζέ-**οι** καὶ πρότερον, οἶχετο μεταξὺ ἀπολιπῶν ὁ Βάττος ἐς τὴν Θήρην.  
 'Since she was prophesying to him in the exactly the same way as before, Battos left in the middle and went back to Thera.' 4.155.22

It seems reasonably clear that the prosodic coding of ὡς δὲ κατὰ ταῦτα is meant to convey 'in *exactly* the same way' (suggesting that it is scalar preposing). It is also the case, however, that this answer contravenes Battos' expectations (which suggests counterassertive preposing): for he wants an explanation from the oracle, and what he receives borders on the impossible.

#### 4 Presupposition Cancellation

We move now to considering an effect of preposing that is found only with interrogatives. Typically questions presuppose the existence of an answer:

- (7.23) Who shot JFK?  
*Presupposition:* someone shot JFK.

Preposed *wh*-words and phrases in Greek can be used to cancel this presupposition and form what are known as "queclaratives" or, perhaps more commonly, rhetorical questions (see further Huddleston & Pullum 2002: 879). *Wh*-expressions are normally fronted to the beginning of the clause, where they canonically serve as a host for clausal clitics. Preposed *wh*-expressions by contrast do not serve as hosts.

In the following passage, Herodotus is arguing against a claim that the Nile's flood is the result of melted snow:

- (7.24) ἡ δὲ τρίτη τῶν ὁδῶν πολλὸν ἐπιεικεστάτη ἐοῦσα μάλιστα ἔψευσται. λέγει γὰρ δὴ οὐδ' αὐτὴ οὐδέν, φαμένη τὸν Νεῖλον ῥέειν ἀπὸ τηκομένης χιόνος, ὃς ῥέει μὲν ἐκ Λιβύης διὰ μέσων Αἰθιοπίων, ἐκδιδόει δὲ ἐς Αἴγυπτον.  
 'The third of the explanations, while quite reasonable, is most completely

wrong. For it doesn't even make any sense to claim that the Nile, which flows from Libya through Ethiopia, and issues into Egypt flows from melted snow.' 2.22

In the next sentence, he asks:

(7.25) (κῶς=ῶν=δητα), ῥέοι=ἄν ἀπὸ χιόνος ἀπὸ τῶν θερμοτάτων ῥέων ἐς τὰ ψυχρότερα τὰ πολλά ἐστι;  
 'How, then, could it flow from snow, flowing from the warmest (areas) into the areas that are for the most part cooler?' 2.22.5

Herodotus is not seeking information with this question. Indeed, it appears to presuppose that there is in fact no possible answer to his question. As such, pragmatically it functions as an assertion rather than a question.<sup>181</sup>

The same prosodic configuration and presupposition-neutralization can be found in the following example, where Herodotus is describing the Scythian lifestyle:

(7.26) τοῖσι γὰρ μήτε ἄστεα μήτε τείχεα ἦ ἐκτισμένα, ἀλλὰ φερέοικοι ἐόντες πάντες ἔωσι ἵπποτοξόται, ζῶντες μὴ ἀπ' ἀρότου ἀλλ' ἀπὸ κτηνέων, οἰκήματα τε σφι ἦ ἐπὶ ζευγέων, (κῶς), οὐκ=ἄν εἴησαν οὔτοι ἄμαχοί τε καὶ ἄποροι προσμίσγειν;  
 'For they have established neither towns nor walls, but being nomads they are all horse-archers, living not from agriculture but from flocks, and their dwellings are on their draft animals: (so) how could these (people) not be invincible and unapproachable?' 4.46.14

Once again, the question presumes that the Scythians are in fact ἄμαχοί τε καὶ ἄποροι προσμίσγειν, and accordingly the interrogative is put to use as an assertion.<sup>182</sup>

Presupposition-cancelling in questions can be seen as an extension of the exhaustive focal readings in declarative sentences. Above we saw that preposed focal constituents ruled out alternatives. Questions such as those in (7.25) and (7.26) do the same thing: they exhaustively rule out all possibilities. More specifically, a preposed interrogative phrase denies the existence of a possible truthful value for the variable that it represents.

It is also possible for questions with preposed *wh*-phrases to assume exhaustive readings. Herodotus uses the following two passages to demonstrate the principle that every

<sup>181</sup> See also 2.57.7, although this example is plagued by textual uncertainty. Regarding τίνα δίκην=ἄν at 9.94.6, I am inclined to see τίνα as proclitic, but perhaps a preposing interpretation is defensible.

<sup>182</sup> One could attempt to argue here that κῶς is proclitic and therefore not preposed. The challenge that this analysis would face would be explaining why the form is pragmatically marked and yet prosodically reduced (in as much as it is a proclitic). Thus to argue for proclisis entails arguing against the pragmatic analysis of κῶς presented here, and that seems to me a difficult prospect.

culture thinks its own customs are best. In support of this he relates the following two anecdotes about Darius:

(7.27) Δαρεῖος ἐπὶ τῆς ἐωυτοῦ ἀρχῆς καλέσας Ἑλλήνων τοὺς παρόντας εἶρετο (ἐπὶ<sub>p</sub>-κόσῳι-**ἄν** χρήματι βουλοίατο), τοὺς πατέρας ἀποθνήσκοντας κατασιτέεσθαι. οἱ δὲ ἐπ' οὐδενὶ ἔφασαν (ἔρδειν-**ἄν** τοῦτο),.

‘Darius during his own kingship summoned the Greeks who were present and asked them at what price they would be willing to eat their fathers when they died. They said that they would not do this for any price.’

3.38.13

In Darius’ initial question, ἄν is canonically positioned after the first prosodic word ἐπὶ κόσῳι. Note that in their reply, the Greeks prepose their answer: the phrase ἐπ' οὐδενὶ has been extracted out of the embedded infinitive clause ἔρδειν-ἄν τοῦτο, where we would expect it. The preposing of ἐπ' οὐδενὶ endows the expression with an exhaustive reading, in just the same way as we saw above.

To complete his experiment, Darius then invites some Indians to his court and asks them what it would take for them to follow the Greek custom of burning deceased family members:

(7.28) Δαρεῖος δὲ μετὰ ταῦτα καλέσας Ἰνδῶν τοὺς καλεομένους Καλλατίας, οἱ τοὺς γονέας κατεσθίουσι, εἶρετο, παρόντων τῶν Ἑλλήνων καὶ δι' ἑρμηνέος μανθανόντων τὰ λεγόμενα, (ἐπὶ τίνι χρήματι), (δεξάιατ'-**ἄν** τελευτῶντας τοὺς πατέρας κατακαίειν πυρί),. οἱ δὲ ἀμβώσαντες μέγα εὐφημείειν μιν ἐκέλευον.

‘Darius summoned some of the Indians called Kallatiae, who eat their parents, and asked, while the Greeks were present and understanding through a translator what was being said, for what (amount of) material incentive would they agree to burn their fathers upon a pyre, when they die. They began to shout loudly and told him not to speak like that.’

3.38.17

Darius<sup>183</sup> has changed the *wh*-phrase (from ἐπὶ κόσῳι to ἐπὶ τίνι χρήματι) and also preposed it. With the phrase ἐπὶ τίνι χρήματι, Darius has broadened the scope of his question: he is no longer asking just how much money would be required, but what at all would be necessary to get the Indians to cremate their ancestors. The change appears to be motivated by Darius’ knowledge of Indian customs: he knows that cremation is an anathema to them. Furthermore, by broadening the scope of his inquiry, the point about cultural relativity is made: you can offer the Indians anything, and still they will not yield in their devotion to their customs. The preposing of ἐπὶ τίνι χρήματι is thus interesting because it has both an exhaustive reading (conveying the

<sup>183</sup> I attribute this change to Darius but one does wonder whether it is Herodotus who is manipulating the lexical and prosodic changes to make his point.



meaning ‘what at all’) and also reflects Darius’ intuition that there is nothing that the Indians would accept to cremate their fathers.

The following example is slightly different; the preposing of the question phrase is used to cancel the presupposition, but here it is done out of disdain as opposed to assertiveness:

- (7.29) ὁ δὲ ἐπείρετο (ὅ τι τὸ ἄεθλον), εἵη=σφι κείμενον περὶ ὅτεο ἀγωνίζονται.  
‘He asked what prize was established by them, for which they were competing.’ 8.26.7

Here one of the Persians is asking an Arcadian what the Greeks are doing. The Arcadians tell them that the Greeks are celebrating the Olympic festival, which prompts the question in (7.29). The preposing of ὅ τι τὸ ἄεθλον is unlike the previous examples meant as a real question. The preposing of the interrogative phrase expresses puzzlement because it is based on the assumption that the Greeks do not have much worth competing for. This assumption is confirmed when the Persians are told that the Greeks compete for a wreath crown, and not money.

It is not clear whether preposing is necessary to manipulate the presupposition of a question. In the following example, for instance, the clitic ἄν is canonically positioned, and yet the question seems to be rhetorical:

- (7.30) κῶς=ἄν δυναίατο χίλιοι ἢ καὶ μύριοι ἢ καὶ πενταχισμύριοι, ἐόντες γε ἐλεύθεροι πάντες ὁμοίως καὶ μὴ ὑπ’ ἑνὸς ἀρχόμενοι, στρατῶι τοσῶιδε ἀντιστῆναι;  
‘How could a thousand or even ten thousand or even fifty thousand, all being free and not being ruled by one man, oppose so great an army?’ 7.103.14

Despite the seeming nullification of a presupposition here, Demaratos, to whom this question is addressed, actually attempts to answer it in 7.104. It may be the case, then, that the prosodic phrasing is a cue to the addressee as to whether or not the speaker expects an answer, or thinks that an answer is even possible.

The following example displays an interrogative with a canonically-positioned clitic that is nevertheless not answered:

- (7.31) κῶς=γάρ=ἄν γινώσκει οὐδ’ ἐδιδάχθη οὔτε εἶδε καλὸν οὐδὲν οἰκίηον, ὠθέει τε ἐμπεσῶν τὰ πρήγματα ἄνευ νόου, χειμάρρῳ ποταμῶι εἵκελος;  
‘For how could one know who has neither been taught nor seen anything good for himself, and charging headlong shoves affairs along mindlessly like a stormy river?’ 3.81.10

Megabyzus asks this question in the midst of the debate on the best form of government. Given his perspective, he appears to presuppose that his question cannot in fact be answered. Herodotus moves the narrative onward after this question to report the belief of Darius, so within the narrative no one attempts to answer the question.

#### 4.1 Biased Conditionals

It is possible to manipulate the presupposition underlying protases by coding the complementizer as an intonational phrase. Canonically speakers use protases to suspend belief in a proposition one way or another, as in the following example:

- (7.32) εἰ-δέ-μοι ἀπιστέεις τὰ περὶ τῶν χρημάτων, πέμψον ὅστις τοι πιστότατος  
 τυγχάνει ἐών, τῷ ἐγὼ ἀποδέξω.  
 ‘If you do not believe me about the money, send whoever you happen to  
 trust the most, and I will prove it to him.’ 3.122.21

Here the speaker (Oroetes) does not take a stand either way as to whether his addressee (Polykrates) actually believes or does not believe him.

In cases where the εἰ occupies its own intonational phrase, the protasis does not have the same presupposition structure, as we see in the following example:<sup>184</sup>

- (7.33) ὃ βασιλεῦ, (εἰ-μὲν-δὴ), συμβουλευεαί-μοι προθύμως, δίκαιόν με σοί ἐστι  
 φράζειν τὸ ἄριστον.  
 ‘And he said, “O king, IF you are seriously consulting me, it is right for me  
 to tell you the best (advice).”’ 7.235.2

Here Demaratos, the former Spartan king, is responding to Xerxes’ request for advice on how to defeat the Spartans. In contrast to (7.32), (7.33) does not suspend belief in the protasis: instead, Demaratos expresses doubt as to whether Xerxes’ question is sincere; note also the particle δὴ and the adverb προθύμως, ‘seriously,’ which work to the same effect. Thus the protasis conveys more than a simple suspension of the protasis, which we can paraphrase as ‘if you are seriously consulting me (and I have my doubts that you are).’

Why would Demaratos be skeptical? As a Spartan, he was an erstwhile enemy of Xerxes, and presumably finds it hard to believe that he is now being asked to counsel the king on how to defeat his former countrymen. Xerxes’ brother says in fact that Demaratos may in fact be trying to sabotage him (7.236). Demaratos’ intonational phrasing here may also be a rhetorical device designed to assure Xerxes of his sincerity. The message is, ‘you might not be sincere in asking me, but my response will be sincere.’

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<sup>184</sup> See also 3.145.14.

## 5 Strong Topic and Strong Focus Compared

Having concluded our survey of strong-focus constructions, it is useful at this point to note two general features that distinguish this construction from that of the strong topic. First, the strong-topic preposing is generally held to affect semantic interpretation less than strong-focus preposing. For instance, it serves to manage the presence or absence of referents in discourse, whether in introducing, reintroducing, or concluding them; or in signaling their relationship with other referents in discourse. In this sense, this type of preposing does not advance “common ground” of the discourse; accordingly, they are said to have low *communicative dynamism*; see (Erteschik-Shir 2007:2). By contrast, focal preposing constructions have much more of an impact on semantic interpretation, in that in such constructions you not only assert the preposed phrase, but also typically deny its contextually-relevant alternatives.

Second, strong-topic preposing is more sensitive to discourse context than strong-focus preposing. As outlined in the previous chapter, the various strong-topic constructions each come with a certain set of situational properties that must obtain for the preposing to be felicitous. For example, the set-membership construction requires a salient set-relationship to be either present or inferable. By contrast, strong-focus preposing is far less constrained by context. For instance, even without contextually-relevant alternatives to rule out, one can still use strong-focus preposing to induce exhaustive readings.

### 5.1 Ambiguous Cases

Despite these significant differences between these two constructions, there are cases of preposing in which it is nevertheless difficult to decide whether we are dealing with a strong topic or a strong focus. The ambiguity is especially acute in preposed phrases containing the adjective *ἄλλος*, as with the following example:

- (7.34) ἐπὶ δὲ λόγῳ τοιῶνδε τάδε ὑπίσχομαι, ἐπ’ ὧν στρατηγός τε καὶ ἡγεμῶν τῶν Ἑλλήνων ἔσομαι πρὸς τὸν βάρβαρον. (ἐπ’ ἄλλῳ δὲ λόγῳ)<sub>i</sub> (οὐτ’=ᾧν αὐτὸς ἔλθοιμι)<sub>i</sub> (οὐτ’=ᾧν ἄλλους πέμψαιμι)<sub>i</sub>.  
‘I promise these on the following condition, that I be general and leader of the Greeks against the foreigner. On another condition, I myself would not be willing nor would I send others.’ 7.158.22

The ambiguity here is whether the phrase ἐπ’ ἄλλῳ δὲ λόγῳ is a framing expression of the type introduced in the previous chapter, or whether it should have an exhaustive reading, i.e. ‘on *any* other condition.’ The very same ambiguity is found in the following example, as well (see also 2.47.19):

- (7.35) τὰ δὲ ἄλλα κρέα σιτέονται ἐν τῇ πανσελήνῳ ἐν τῇ ᾧν τὰ ἱρὰ θύωσι. (ἐν ἄλλῃ δὲ ἡμέρῃ)<sub>i</sub> οὐκ=ᾧν ἔτι γευσαίατο.

‘The remaining meat they eat on the night of the full moon whenever they make sacrifice; on another day they would not even taste it.’ 2.47.19

Both the frame-expression reading and the exhaustive reading are possible here. A further possibility is that preposing in cases like (7.35) is overdetermined, in as much as both readings are intended, namely a framing expression with exhaustive semantics.

## 6 Multiple Preposing

Thus far our discussion has been limited to cases of one preposed constituent or less (as in the case of subextraction). As noted in chapters four and six, there are clauses with more than one preposed phrase. While these are perhaps initially surprising, as there has been some suggestion in the literature that you should only find one constituent preceding the host of a clausal clitic, the phenomenon borders on the trivial. For these cases can all be handled with a combination of the pragmatic readings laid out in this chapter and the last. Consider for instance the following example:

- (7.36) (μετὰ δὲ αὐτίς)<sub>i</sub>, (ἀπὸ τῆς δεκάτης ἐς ἑβδόμην)<sub>i</sub>, ἄλλους=**μοι** τάξον δισχιλίους κατὰ τὰς Νινίων καλεομένας πύλας.  
 ‘And then after this, from the tenth to the seventh, station for me two thousand more at the gates called Ninevite.’ 3.155.24

Here both μετὰ δὲ αὐτίς and ἀπὸ τῆς δεκάτης ἐς ἑβδόμην are frame-setting adjuncts. One can also find adjoined phrases following preposed phrases, as in the following example, where the relative ὅστις γε σύνεσιν ἔχει follows the preposed phrase οὔτε στρατὸν τοῦτον:

- (7.37) Ξέρξης δὲ πρὸς ταῦτα ἀμείβετο τοῖσιδε. “δαιμόνιε ἀνδρῶν, κοῖα ταῦτα λέγεις εἶναι δύο μοι πολεμιώτατα; κότερά τοι ὁ πεζὸς μεμπτὸς κατὰ πλῆθος ἐστὶ καὶ τὸ Ἑλληνικὸν στράτευμα φαίνεται πολλαπλήσιον ἔσεσθαι τοῦ ἡμετέρου, ἢ τὸ ναυτικὸν τὸ ἡμέτερον λείψεσθαι τοῦ ἐκείνων, ἢ καὶ συναμφότερα ταῦτα; εἰ γάρ τοι ταύτη φαίνεται ἐνδεέστερα εἶναι τὰ ἡμέτερα πρήγματα, στρατοῦ ἂν ἄλλου τις τὴν ταχίστην ἄγερσιν ποιέοιτο.” ὁ δ’ ἀμείβετο λέγων (ᾧ βασιλεῦ), (οὔτε στρατὸν τοῦτον)<sub>i</sub>, (ὅστις γε σύνεσιν ἔχει)<sub>i</sub>, μέμφοιτ’=**ἄν** οὔτε τῶν νεῶν τὸ πλῆθος<sup>185</sup>.  
 ‘Xerxes responded to this with the following. “Are you crazy? What are these things that you call my two greatest enemies? Is the land army insufficient, and does the Greek army seem as though it will be many times bigger than ours? Or is our fleet lacking compared to theirs? Or both of these? For if our planning seems to be lacking, one should muster another army as quickly as possible.” To which he responded,

<sup>185</sup> The phrase οὔτε τῶν νεῶν τὸ πλῆθος has all the look of a right-dislocated or postposed phrase, and I am inclined to think that it was coded as an intonational phrase. I leave this possibility aside, as this issue requires a separate discussion, and postposing is much harder to detect in Greek than preposing.

saying, “O king, neither this army, anyone who is intelligent, would criticize, nor the number of ships.” 7.49.2

In the majority of cases, however, what we find in cases of multiple-preposing is a combination of topical and focal readings, with the former consistently preceding the latter. So in the following example, where Herodotus describes the situation of Democedes in Susa:

- (7.38) τότε δὴ ὁ Δημοκῆδης ἐν τοῖσι Σούσοισι ἐξιησάμενος Δαρεῖον οἶκόν τε μέγιστον εἶχε καὶ ὁμοτράπεζος βασιλείῃ ἐγεγόνεε. (πλήν τε ἐνὸς τοῦ ἐς Ἑλληνας ἀπιέναι)<sub>i</sub> (πάντα)<sub>i</sub> τᾶλλά-οἶ παρῆν.  
‘At this time Democedes, since he healed Darius among the Sousans, had both a big house and had become a dinner companion of the king. And with the exception of one thing, namely going back to Greece, he had absolutely everything else.’ 3.132.4

I interpret πλήν τε ἐνὸς τοῦ ἐς Ἑλληνας ἀπιέναι as set-membership preposing, and πάντα as bearing an exhaustive reading.

In the next example, the phrases χρηστοὶ τότε ἐόντες and καὶ τότε ἐόντες φλαυροὶ belong to a binary set:

- (7.39) (καί-γὰρ-ἄν χρηστοὶ τότε ἐόντες)<sub>i</sub> (ὧυτοί)<sub>i</sub> (νῦν-ἄν εἶεν φλαυρότεροι)<sub>i</sub> (καὶ τότε ἐόντες φλαυροὶ)<sub>i</sub> νῦν-ἄν εἶεν ἀμείνονες.  
‘Indeed, the ones who were then good, these same men would now be rather base, and the ones who were then base would now be rather good.’ 9.27.23

The pronoun ὧυτοί has a focal reading: it asserts that the referents became more base in spite of the fact they were once the opposite, namely χρηστοί. It thus has a counterassertive function.

In the following example, ἀγορῆ is coded as an intonational phrase because it is newly introduced, while δέκα ἡμερέων has a counterexpectational reading:

- (7.40) ἐπεὰν δὲ θάψωσι, (ἀγορῆ)<sub>i</sub> (δέκα ἡμερέων)<sub>i</sub> οὐκ<sub>p</sub>-ἴσταται-σφι οὐδ’ ἀρχαιρεσίη συνίξει, ἀλλὰ πενθέουσι ταύτας τὰς ἡμέρας.  
‘When they bury (someone), they do not hold a market for ten days, nor does the election of magistrates take place; rather they grieve during these days.’ 6.58.3

The same pattern of topic followed by focal preposed constituents obtains in the following examples, which I adduce without comment:<sup>186</sup>

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<sup>186</sup> 5.59.6 is opaque.

- (7.41) (τῶν μὲν δὴ), (οὐδὲν), προσίετό=μιν.  
‘Of these, none pleased him.’ 1.48.5
- (7.42) (καὶ τῶπὸ τούτου), (οὐκ οὕτω), (μέγα=τί=οἶ δώσεις), (ῶ μιν λάμψαι),  
‘And after this, you will not offer her any bribe so large that you will  
acquire her.’ 1.199.21
- (7.43) (οὔτε=γὰρ τὸ πρὸς τὴν ἡῶ τοῦ Νέστου), (οὐδαμόθι πάσης τῆς ἔμπροσθε  
Εὐρώπης), (ἴδοι=τις=ἄν λέοντα), οὔτε...  
‘For, nowhere in all of anterior Europe to the east of the Nestos, could one  
see a lion, nor...’ 7.126.6
- (7.44) (οὗτος ὁ στόλος), (ἐπὶ Κόδρου βασιλεύοντος Ἀθηναίων), ὀρθῶς=ἄν  
καλέοιτο.  
‘This expedition, to the era when Kodros was king of the Athenians, would  
correctly be dated.’ 5.76.8
- (7.45) μήκει μὲν γὰρ παρ’ ἀμφοτέρας παρήκει ἡ Εὐρώπη, (εὖρεος δὲ πέρι), (οὐδὲ  
συμβαλεῖν ἄξιη), φαίνεται=μοι εἶναι.  
‘For in length Europe stretches alongside both of them, and, in width,  
there seems to me to be no comparison.’ 4.42.5
- (7.46) ἡμεῖς μὲν ἐκαστέρω τε οἰκίεμεν (καὶ ὑμῖν), (τοιήδε τις), γίνοιτ’=ἄν ἐπικουρίη  
ψυχρή.  
‘We live on opposite sides and, to you, THIS kind of assistance, would be  
useless.’ 6.108.11
- (7.47) οὐ μὲν οὐδὲ λέληθε αὐτούς εἰ γὰρ τινες καὶ ἄλλοι τὰ Περσέων νόμιμα ὀρθῶς  
ἐπιστέαται καὶ Αἰγύπτιοι (ὅτι πρῶτα μὲν), (νόθον), οὐ=σφι νόμος ἐστὶ  
βασιλεῦσαι γνησίου παρεόντος.  
‘It has certainly not escaped them—for if anyone knows the customs of the  
Persians it is the Egyptians—that, first, it is not their custom for a  
bastard to be king when there is a legitimate son present.’ 3.2.7
- (7.48) τοῦτο δὲ Πεισιστρατιδέων οἱ ἀναβεβηκότες ἐς Σοῦσα, τῶν τε αὐτῶν λόγων  
ἐχόμενοι τῶν καὶ οἱ Ἀλευάδαι, (καὶ δὴ τι πρὸς τούτοις), (ἔτι πλέον),  
προσωρέγοντό=οἶ.  
‘On the other hand, those of the Peisistratids who came up to Susa, using  
the same arguments as the Aleuadai, they offered still more to him, in  
addition to these things.’ 7.6.10

There is at least one example that upsets this ordering, and appears to order the focal constituent before the topical:

- (7.49) (κοῦ γε δὴ), (ἐν τῷ προανασιμωμένῳ χρόνῳ πρότερον ἢ ἐμὲ γενέσθαι),  
 οὐκ-**ἄν** χλωθεῖη κόλπος καὶ πολλῶι μέζων ἔτι τούτου ὑπὸ τοσούτου τε  
 ποταμοῦ καὶ οὕτως ἐργατικοῦ;  
 ‘How—in the time before *I* was born—could a gulf much bigger even than  
 this not be buried by such a great and active river?’ 2.11.18

Here κοῦ γε δὴ functions as a presupposition-cancelling question word, and the prepositional phrase as a stage-setting frame for the proposition. What is not clear here is why the prepositional was not positioned to the left of κοῦ: it may be that it is better regarded as an interrupting parenthetical clause and not a preposed phrase.

There is a last pattern that stands apart from the three types outlined above. It involves the preposing of two arguments of the verb, among which there exists a semantic contrast, as with νύξ and ἡ ἡμέρη in the following example:

- (7.50) οὗτος ὁ τοῖσι Λυδοῖσι ἐστι μαχεσάμενος (ὅτε νύξ), (ἡ ἡμέρη), ἐγένετό-**σφι**  
 μαχομένοισι, καὶ ὁ τὴν Ἄλυος ποταμοῦ ἄνω Ἀσίην πᾶσαν συστήσας ἐωυτῶι.  
 ‘This [= Phraortes] is the king who fought against the Lydians when day  
 became night while they were fighting, and the (king who) annexed for  
 himself the whole of Asia above the Halys river.’ 1.103.8

Here νύξ and ἡ ἡμέρη are both preposed, and there exists a semantic opposition between them. The following examples further illustrate this pattern:

- (7.51) (τῶν εἵνεκα), (οὔτ’ ἀνὴρ Αἰγύπτιος οὔτε γυνή), (ἄνδρα Ἑλληνα), φιλήσειε-**ἄν**  
 τῶι στόματι...  
 ‘For these reasons, neither an Egyptian man nor woman would kiss a  
Greek man on the mouth...’ 2.41.8
- (7.52) αὐτός τε γὰρ Ἑλλήν γενος εἰμὶ τῶρχαῖον (καὶ ἀντ’ ἐλευθέρης),  
 (δεδουλωμένην), οὐκ-**ἄν** ἐθέλοιμι ὄρᾶν τὴν Ἑλλάδα.  
 ‘For I am myself Greek by ancient pedigree and would hate to see Greece  
enslaved instead of free.’ 9.45.9

A similar pattern appears to be found in poetry, as well (these examples are quoted from Thomson 1939: 148, where further cases are presented):

- (7.53) σμικροῖσι μὲν γὰρ μεγάλα | πῶς ἔλοι=τις-**ἄν**;  
 ‘For how could one attain great things with small?’ Eur. *Or.* 694
- (7.54) ἐγὼ δὲ πρὸς σέ | πότερον ὡς ἔτην λέγω,  
 ἢ ῥήτορ’ ἱεροράβδον, ἢ πόλεως ἀγόν;  
 ‘How am I to address you—as a kinsman,  
 a speaker bearing the sacred wand, or a leader of a city?’  
 Aesch. *Supp.* 247

- (7.55) ἐγὼ δὲ μητρὸς | τῷ φόνου δώσω δίκας;  
 ‘To whom will I pay the price for the murder of (my) mother?’  
 Eur. *El.* 977

I think these two examples should also be included in this category, even though the nature of the semantic opposition seems to differ somewhat from that of examples (7.50)-(7.55):

- (7.56) ὄρνιθος ὄρνις | πῶς ἂν ἀγνεύοι φαγών;  
 ‘How could bird eating bird be pure?’  
 Aesch. *Supp.* 226

- (7.57) θεὸς δ’ ἐν ἀσκῶι | πῶς γέγηθ’ οἴκους ἔχων;  
 ‘How could a god enjoy having his house in a wineskin?’  
 Eur. *Cyc.* 525

These cases present two problems. The first is that their pragmatic characterization is not entirely clear. This is a case where the syntax could conceivably provide some clarity on this issue, but indeed it is not clear what to make of (7.50)-(7.57) syntactically either. For in (7.50) the two preposed phrases occur after the complementizer ὅτε, while in (7.51)-(7.57) they occur to the left of the *wh*-word. On the assumption that ὅτε occupies C<sup>0</sup> and that the *wh*-words occupy Spec-CP, we have what appears to be the same type of preposed phrase showing up in two different places.

I can suggest two possibilities toward a solution. The first is that this type of oppositional double-preposing is a sub-type of the canonical singleton-preposing cases. As such, one can have double focus-preposing as well as double strong-topic preposing. With the *wh*-cases in (7.51)-(7.57), we expect such opposition-preposing always to occupy the space to the left of the *wh*-word, i.e. strong-topic layers of syntax, because in these cases the *wh*-word itself presumably represents the focus of the utterance, and there should not then be additional strong-focus items. That would account for the syntactic issue, but would leave the pragmatic meaning of the construction unaccounted for. For this all I can suggest is that we may have in (7.50)-(7.57) a type of register-heightening preposing (on register in this sense, see Reid 1956; Biber and Conrad 2009; for stylistic preposing, see recently Homberg 2006).<sup>187</sup> This idea is appealing for the poetic cases, but is hard to demonstrate for a case like (7.51), where Herodotus is in the middle of ethnographic exposition. In the next section, I present a case from prose, which appears to be a reliable case of stylistically-motivated preposing.

## 8 Pragmatics and the Metrical Data

As demonstrated in chapter five, clitic distribution in poetry differs considerably from that in prose. A crucial distinction between the two genres is that in poetry non-

<sup>187</sup> Donald Mastrorarde suggests to me another possibility, which is that the preposed phrases do in fact serve pragmatic functions, but that such constructions are only characteristic of intense artistic dramatic dialogue or other high-style poetry.



canonical clitic position need not result from preposing. In other words, preposing need not be pragmatically-motivated as it is in prose.<sup>188</sup> As a result, one cannot *grosso modo* take the pragmatic dossier that I have developed here for Herodotus and apply it to metrical texts. The nature of clitic-distribution in the metrical texts will require separate treatment, and presumably a separate model.

Here I want to make two observations. The first is that there are at least some cases in which a preposed phrase exhibits a pragmatic function similar to those found in prose:

- (7.58) κλαίω, στένομαι, | καὶ δόλος οὐδεὶς  
 μὴ ἄφρενός | ὀρθῶς=μῆ λιγαίνειν.  
 ‘I weep, I groan, and there is no pretense  
 (but) that I shriek straight from my heart.’ Aesch. *Sept.* 873-874

Here the preposing of ἄφρενός has all the look of focal preposing (with the preposed phrase beneath CP on the assumption that μὴ here occupies C<sup>0</sup>): the chorus want to dispel any suggestion that their lament is not sincere, and accordingly prepose the prepositional phrase.

The second observation to make is that the poetic pattern, whereby preposing is not pragmatically motivated, may also exist in non-poetic contexts, as we see from the following unique prose example:

- (7.59) καὶ ὁ μὲν ταῦτα ἔλεγε, οἱ δὲ πάρεδροι εἶπαν ὑπολαβόντες: (Εὐήνιε)<sub>i</sub>,  
 (ταύτην δίκην)<sub>i</sub>, (Ἀπολλωνιῆται)<sub>i</sub>, (τῆς ἐκτυφλώσιος)<sub>i</sub>, ἐκτίνουσί=τοὶ κατὰ  
 θεοπρόπια τὰ γινόμενα.  
 ‘And he [= Evenios] said these things, and the ones sitting beside him said  
 in response: Evenios, this restitution, the Apollonians, for the blinding,  
 pay to you according to the oracle.’ 9.94.15

This example is unique in two ways. First, it is the only one that I know of with three preposed verbal arguments. Second, its pragmatic behavior does not match that of other examples. This sentence is essentially discourse-initial, as the Apollonians utter it in response to Evenios’ telling the Apollonians what would be suitable restitution for his blindness. It is thus difficult to perceive the contextual role of the three preposed constituents. In fact, this example may suggest that preposing outside of poetry need not always be conditioned exclusively by pragmatic function. For it is possible here that the preposing reflects a slower, annunciatory style of speaking in which each constituent is assigned its own intonational phrase. Two features of (7.59) suggest this more formal style. The first is the context: the Apollonians are attempting to secure a deal with Evenios, and (7.59) is thus a performative utterance. One can easily imagine that they are speaking as clearly and deliberately as possible to ensure that any

<sup>188</sup> If it is the case that in poetry the prosodic encoding of phrases does not have the same pragmatic meaning that it does in prose, then the claim of Dik (2007), namely that metrical texts can be read pragmatically as if they were prose, stands in need of modification.

witnesses can agree on what was said. Second, the Apollonians refer to themselves in the third person, which is unexpected in a conversational style of speaking.

## 9 Conclusions

This chapter and the last have argued for a dossier of pragmatic functions served by preposed phrases. This framework is the first crucial step in understanding what “emphasis” means semantically and pragmatically. But perhaps more important than this is what this framework as a whole means for our understanding of texts: it essentially offers a new set of tools that will allow us to read texts with greater acuity than has thus far been possible, as I attempted to illustrate in section 2.2. While the potential for these tools can hardly be underestimated, I am obliged here to issue a caveat. This framework is unquestionably incomplete, and will require both supplement and refinement. As is well known, pragmatic assessment of ancient texts is a precarious endeavor (but certainly not an impossible one), and my analyses of individual passages may not always command agreement. What I have presented here are the pragmatic categories that seem to me best represented in the Herodotean data. As there is so much research to be done in this area, I not only do not deny the possibility of further categories (or sub-categories), but rather expect them, especially once further work is done on other authors, and pragmatic investigation focuses more on individual passages, as opposed to a larger framework, as I have attempted to do here.

One issue now in need of further consideration is how preposing and prosodic coding in general function pragmatically in comparison to discourse markers such as μέν, δέ, δή, and γε. The prosodic and pragmatic patterns described in this chapter and the last can also be investigated from a much broader perspective, namely, to what extent do these linguistic conventions result from fifth-century cultural or intellectual developments, i.e. from the so-called Greek Enlightenment?<sup>189</sup> One would expect broad intellectual and cultural trends to have an impact on pragmatic behavior, but how this happens is far from clear, and will have to await further research.

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<sup>189</sup> For an example of a study that links historical pragmatics and semantics with cultural and intellectual developments, see Bromhead (2009). For overviews of the beginnings of Greek prose, see Goldhill (2002); for the beginnings of large-scale literacy and written production, see Yunis (2003); for Herodotus’ intellectual environment, see Thomas (2000); Raaflaub (2002); and Bakker et al. (2002) generally.

## Chapter 8

### Clausal Cohesion I: Participial Phrases

In this chapter and the next, we turn our attention away from the left periphery of the clause to concentrate on its internal cohesion. More specifically, I investigate the behavior of clausal clitics vis-à-vis participial phrases and complement infinitival clauses. The relationship between participial phrases and clitic position has by and large been neglected (for early remarks on the phenomenon, see Wackernagel 1892: 371; Fraenkel 1964a: 94-97, 109). As a result, there is no current generalization as to where a clausal clitic should fall when its clause contains a clause-initial participial phrase; or whether clausal clitics can show up to the left of the participial phrase within which they are interpreted.

Before introducing the central question of this chapter, I want to offer a brief overview of participles in Greek, and some of the terms that I will use. As is well known, Greek participles are verbal adjectives. They are formed from verbal stems, but decline as adjectives (with all three genders and five cases). They bear the aspectual properties of their verbal stem, and can be inflected for voice (active, middle, and passive, although some tenses do not offer separate stems for each voice category). The handbooks typically divide participles into three categories according to syntactic role: attributive, circumstantial, and supplementary (so Smyth §2046). Attributive participles (Smyth §§ 2049-2053) modify nouns and are thus the closest to adjectives proper. Circumstantial participles (Smyth §§2054-2087) typically denote some attendant circumstance of the main (finite) clause, and in this regard they resemble finite adverbial clauses. Genitive and accusative absolute participial phrases (the latter of which I do not discuss here) are sub-types of the circumstantial participial phrase. Supplementary participles (Smyth §§2088-2145) are complements of finite verbs. (Smyth §2048 says that supplementary and circumstantial participial phrases cannot always be sharply distinguished, but this is not in fact true, although the issue does not concern us here.) I use the term *participial phrase* to include circumstantial and supplementary participial phrases, although in practice I refer predominantly to the former, as the clitic alternations described below are essentially limited to circumstantial participial phrases.

The basic issue is straightforward. Sometimes a clitic is admitted into a clause-initial circumstantial participial phrase and sometimes it is not, as the following pair of sentences with ἄν illustrates (the boundaries of participial phrases are marked with square brackets):

*Inclusion in Participial Phrase*

- (8.1) [ἔχων=δ'=**ἄν** ταύτην] ἠγόραζε οὔτε δορυφόρων ἐπομένων οὔτε ἄλλου οὔδενός.  
'In this [= Greek attire] he used to hang out in the agora with neither spearmen nor anyone else attending him.' 4.78.21

*Exclusion from Participial Phrase*

- (8.2) [γνώμη γὰρ τοιαύτη χρεώμενος] ἐπιτροπεύει=**ἄν** ἀμωμήτως τοῦ πλήθους.  
'Since he [= the monarch] uses such (good) judgment, he would administer the masses without fault.' 3.82.8

In (8.1), ἄν is admitted into the participial phrase and occurs second within the clause as a whole.<sup>190</sup> By contrast, in (8.2), ἄν is excluded from the participial phrase and hosted only at the onset of the finite clause, by the verb ἐπιτροπεύει.

This alternation can be handled easily under a prosodic analysis: when the participial phrase admits ἄν, it is because the participial phrase is not coded as an intonational phrase. When the participial phrase excludes ἄν, it is because it is coded as an intonational phrase. Schematically thus:

(8.1a) (ἔχων=δ'=**ἄν** ταύτην ἠγόραζε)<sub>i</sub> οὔτε...

(8.2a) (γνώμη γὰρ τοιαύτη χρεώμενος)<sub>i</sub> (ἐπιτροπεύει=**ἄν** ἀμωμήτως τοῦ  
πλήθους)<sub>i</sub>.<sup>191</sup>

In both cases, we see that the clitic is hosted at the left edge of an intonational phrase, as my account predicts. The position of ἄν is due to a combination of prosodic coding and selection.<sup>192</sup> With only rare exceptions (for which see section four below and example (8.7) in this section), only verbs can select for ἄν. When the participle and the verb co-occur in the same intonational phrase, as in (8.1a), the clitic is hosted at the left edge of the intonational phrase coinciding with the left edge of the clause. When the

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<sup>190</sup> The position of ἄν could actually be described in one of two ways here, either as second within the participial phrase (ἔχων=δ'=**ἄν** ταύτην) or second within the clause as a whole (ἔχων=δ'=**ἄν** ταύτην ἠγόραζε...). Since participial phrases generally speaking do not have the ability to select for ἄν (but see Smyth §§1845-1849, as well as section four below), we can confidently dismiss the first possibility, and describe ἄν as in clause-second position in cases like (8.1). When it comes to pronominal clitics, this issue is more complex, and is handled separately below in this section.

<sup>191</sup> As is generally the case, the designation of the right edge of the intonational phrase is only an educated guess. My argument in any event only concerns the left edge.

<sup>192</sup> It would also be possible to provide a syntactic account for this alternation: presumably participial phrases like that in (8.2) adjoin higher than the CP (= complementizer phrase) of the finite clause, while cases like (8.1) adjoin beneath it. In both scenarios the prosodic coding would fall out from standard assumptions about the syntax-phonology interface (e.g., code the left edge of CP with the left edge of an intonational phrase). Thus participial phrases, so far as I have been able to judge, offer no evidence for the theoretical question of syntax vs. prosody in accounting for clitic placement. My data will nevertheless be presented in prosodic terms in the interests of consistency.

clitic and the verb occupy separate intonational phrases, as in (8.2a), then  $\check{\alpha}\nu$  is hosted at the left edge of the intonational phrase of the finite clause, because it is selected for by the verb, and not by any element within the participial phrase. Thus, when a participial phrase is coded as an intonational phrase, it forms its own domain for second-position clisis.

The adequacy of this analysis rests on the motivation for the mapping between syntax and prosody in (8.1a) and (8.2a): specifically, what causes a participial phrase to be coded as an intonational phrase in cases like (8.2) but not in those like (8.1)? I claim that the prosodic coding of circumstantial participial phrases is conditioned by semantic scope:

*The Prosodic Coding of Participial Phrases*

- (8.3)  $\alpha$ . If the participial phrase modifies the entire finite clause, then it is coded as an intonational phrase.  
 $\beta$ . By contrast, when a circumstantial participial phrase modifies the finite verb phrase then it is coded at some level beneath an intonational phrase.

The participial phrase in (8.2) illustrates scenario (8.3. $\alpha$ ): the participial phrase modifies the entire finite clause in as much as it is used to provide a reason for the assertion in the finite clause. In the English translation it is accordingly characterized by the clause-level causal operator ‘since.’ Example (8.1), in contrast, illustrates scenario (8.3. $\beta$ ): the participial phrase  $\check{\epsilon}\chi\omega\nu\ \tau\acute{\alpha}\upsilon\tau\eta\nu$  modifies the verb  $\eta\gamma\acute{o}\rho\alpha\zeta\epsilon$ . This lower-level modification is reflected in the English translation by the prepositional phrase ‘in this’ (which is not a clause-level operator), as well as its prosodic coding (it is not set off from the finite verb by a comma). Another way to characterize these two categories would be in terms of predication: circumstantial participial phrases like that in (8.1) are not independent predicates, while those like (8.2) are. Thus we see how the more “clause-like” the semantics of a circumstantial participial phrase are, the more the participial phrase resembles a clause both prosodically and in terms of clitic distribution.

In as much as the prosodic coding of an intonational phrase within a sentence reflects the nature of the relationship between the participial phrase and the finite clause, what we are dealing with is ultimately a question of clausal cohesion, and how (semantic and grammatical) cohesion is reflected in prosodic coding. On this phenomenon generally, see Lehmann (1988); Cristofaro (2003); Buijs (2005), which is a study of Greek specifically; Viti (2007), which is devoted to Sanskrit; for this issue in regard to prosody, see Bolinger (1984).

Although the distributional patterns of pronominal clitics vis-à-vis participial phrases are slightly more complex, they can also be handled under the framework sketched above. There are essentially three possibilities. First, if a circumstantial participial phrase is coded as an intonational phrase, and the clitic is selected for by some element within the participial phrase, then it will occur second within that domain. This is most strikingly illustrated by pronominal clitics within genitives absolute:

- (8.4) πρότερον γὰρ δὴ ἄρα (Περσέων=**οἱ** συνέδρων ἐόντων καὶ Κροίσου),  
 εἶρετο Καμβύσης κοῖός τις δοκέει ἀνὴρ εἶναι πρὸς τὸν πατέρα [τελέσαι]  
 Κῦρον, οἳ δὲ ἀμείβοντο ὡς εἶη ἀμείνων τοῦ πατρός.  
 ‘For previously, when the Persians and Croesus were sitting with him,  
 Cambyses asked what sort of man he seemed to be [to compare] to his  
 father Cyrus, and they answered that he was better than his father.’

3.34.13

Genitives absolute are standardly characterized by clause-level semantics and assumed to be coded as intonational phrases (for exceptions to this pattern, see section 2.1 below); when they occur clause-internally, as in (8.4), the prediction is that the clitic will be hosted by the prosodic word occupying the left edge of the phrase.

If a participial phrase is coded as an intonational phrase, and the pronoun is governed by the finite verb (and not by any element in the participial phrase), then it will be hosted by the first prosodic word of the finite clause, as in the following example:

- (8.5) ἐπεὰν δὲ γέρων γένηται κάρτα, (οἳ προσήκοντές οἱ πάντες συνελθόντες),  
 (θύουσι=**μιν** καὶ ἄλλα πρόβατα ἅμα αὐτῷ),  
 ‘When (a man) becomes really old, once all his relatives come together, they  
 sacrifice him and some sheep with him.’

1.216.8

Lastly, when the participial phrase is not coded as an intonational phrase, then the clitic is hosted at the left edge of the finite clause:

- (8.6) ...(καί,<sub>p</sub>=εἴ=**τίς**=**οἱ** τυγχάνει ἐὼν παῖς), τοῦτον ἀπείρασθαι.  
 ‘And if he happens to have any child, to disown him.’

1.59.11

Here οἱ is an argument of the supplementary participle ἐὼν παῖς. Since supplementary participles are complements of verbs and lack the requisite semantics to be coded as an intonational phrase, the clitic is hosted at the left edge of the intonational phrase instantiated by the onset of the clause,<sup>193</sup> just as expected according to (8.3).

The generalization in (8.3) has the further advantage that it can also account for the sentences (in prose) in which we find two tokens of ἄν, as in the following example:

- (8.7) εἰ ταῦτα οὕτω εἶχε, ὁ<sub>p</sub>=ἥλιος=**ἄν** ἀπελαυνόμενος ἐκ μέσου τοῦ οὐρανοῦ ὑπὸ  
 τοῦ χειμῶνος καὶ τοῦ βορέω ἤιε=**ἄν** τὰ ἄνω τῆς Εὐρώπης κατὰ περ νῦν τῆς  
 Λιβύης ἔρχεται.  
 ‘If this were the case, once the sun were driven from the middle of the sky

<sup>193</sup> It is possible that καί is coded as an intonational phrase here, but this possibility does not affect the argument. For if it were so coded, εἴ would then occupy the left edge of an intonational phrase, and the point would remain the same.

by winter and the north wind, it would go to the areas over Europe just as it now comes (to the ones over) Libya.’ 2.26.7

Double- $\check{\nu}$  is triggered when the participial phrase and finite-clause both have modal readings, and the latter is furthermore coded as an intonational phrase. This thus represents a scenario in which a participle can in fact select for  $\check{\nu}$ .

Just as the non-canonical positioning of clitics within main clauses informed us about the pragmatics of Greek sentences, in the same way we can use clitic position to diagnose the semantics of participial phrases. This enables us to read texts more closely because it gives us a more precise appreciation for event structure.

Section one presents clausal-scope participial phrases. Section two presents verb-scope participial phrases. Section three uses the generalization in (8.3) to identify a new construction in Greek, that of the successive participle, which is the use of a clause-level participial phrase and finite verb to form one predicate. Section four extends the analysis to the multiple- $\check{\nu}$  construction (in prose). Section five examines issues of pragmatics in the prosodic phrasing of participial phrases. Section six presents some outstanding cases and counterexamples. Section seven concludes the chapter.

## 1 Clause-Modifying Circumstantial Participial Phrases

The central claim of this chapter is that clitic position is conditioned by the semantic scope of participial phrases. As far as  $\check{\nu}$  is concerned, when it is barred from a clause-initial participial phrase, and appears second in the matrix clause, the participial phrase will have clausal scope. Such participial phrases are characterized semantically by the following clausal operators:<sup>194</sup>

### *Semantic Relationship Inventory*

- (8.8) 1. temporal: *when, after, while*  
2. causal: *since, because*  
3. conditional: *if*  
4. concessive: *although*  
5. relative: *who, that, which*  
6. purpose: *in order that, to*

While there are certainly more lexical possibilities than those listed here, this should be a complete dossier of the types of semantic relationships that can exist between a clause-level participial phrase and its matrix clause. Indeed, these semantic relationships are the very same ones that exist between matrix and adjoined clauses, when the latter are marked with overt complementizers. Thus the distribution of

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<sup>194</sup> My analysis here avoids the difficult issue of what morphosyntactically and semantically constitutes a subordinate or adjoined clause. For a discussion of the problems involved, see Hermann (1894: 5-12); Hettrich (1988); Cristofaro (2003).

clausal clitics vis-à-vis clause-level participial phrases parallels exactly their distribution vis-à-vis their finite counterparts.

The following examples illustrate these relationships:

*Temporal Relationship*

- (8.9) (τὴν στολὴν ἀποθέμενος τὴν Σκυθικὴν)<sub>i</sub> (λάβεσκε=ᾶν Ἑλληνίδα ἐσθῆτα)<sub>i</sub>.  
 ‘After he took off his Scythian equipment, he would put on Greek clothes.’  
 4.78.20

*Causal Relationship*

- (8.10) (γνώμη γὰρ τοιαύτηι χρεώμενος)<sub>i</sub> (ἐπιτροπεύοι=ᾶν ἀμωμήτως τοῦ πλήθους)<sub>i</sub>.  
 ‘Since he [= the monarch] uses such (good) judgment, he would administer the masses without fault.’  
 3.82.8

*Conditional Relationship*

- (8.11) ἐπεὰν ἀνδρωθέντας ἴδῃαι τοὺς παῖδας, (τάδε ποιῆσαι)<sub>i</sub> (οὐκ=ᾶν ἀμαρτάνοις)<sub>i</sub>.  
 ‘When you see the boys have become men, if you should do the following, you would not go wrong.’  
 4.9.19

With clitic pronouns, we find an identical situation. If a clitic pronoun is an argument of the finite-clause verb and is excluded from a participial phrase, then the participial phrase will have clause-level semantics, as illustrated by the following examples:

*Temporal Relationship*

- (8.12) (βυβλία γραψάμενος πολλὰ καὶ περὶ πολλῶν ἔχοντα πρηγμάτων)<sub>i</sub>  
 (σφρηγῖδά=σφι ἐπέβαλε τὴν Δαρείου)<sub>i</sub>. μετὰ δὲ ἦε ἔχων ταῦτα ἐς τὰς  
 Σάρδις.  
 ‘After he wrote many letters that also concern many things, he put Darius’ stamp on them. Then he went with them to Sardis.’  
 3.128.7

*Causal Relationship*

- (8.13) (ὁ δὲ δῆμος ὁ τῶν Ἀθηναίων ἐξαπατηθεὶς) (ἔδωκέ=οἱ τῶν ἀστῶν καταλέξας  
 ἄνδρας τούτους)<sub>i</sub> οἱ δορυφόροι μὲν οὐκ ἐγένοντο Πεισιστράτου,  
 κορυνηφόροι δέ.  
 ‘Since the Athenian people were completely fooled, they selected these men from their citizens, and gave them to him, who became not spear-bearers of Peisistratos, but rather club-bearers.’  
 1.59.26

*Concessive Relationship*

- (8.14) (σὺ μέντοι ἀποδεξάμενος ὑβρίσματα ἐν τῷ λόγῳ)<sub>i</sub> (οὐ=με ἔπεισας ἀσχήμονα  
 ἐν τῇ ἀμοιβῇ γενέσθαι)<sub>i</sub>.  
 ‘Although you displayed insults in your speech, you did not persuade me to become rude in my response.’  
 7.160.5



*Relative Clause*

- (8.15) τὰ μέν νυν Κῦρός τε καὶ Καμβύσης πατήρ τε ὁ ἐμὸς Δαρεῖος κατεργάσαντο καὶ προσεκτήσαντο ἔθνηα, (ἐπισταμένοισι εὔ), (οὐκ-ᾶν-τις λέγοι),  
‘What races both Cyrus and Cambyses and Darius my father conquered and acquired, one would not say to you all, who know (it) so well.’ 7.8.13

Since these participial phrases have no overt clausal operator, the semantic relationship (temporal, causal, etc.) has to be deduced from context, but this does not affect my argument, because the available options are only those at the level of the clause.

We can use (8.14) to further illustrate the difference between clause- and verb-scope readings of a participial phrase, as well as their incompatibility. On a verb-scope reading, the participial phrase would modify the verb alone (i.e., would be an adjunct of the verb), and the entire sentence would accordingly mean ‘you did not persuade me by displaying insults in your speech.’

Evidence from translation, while certainly of some value, has its drawbacks because there may in some cases be multiple possibilities in English. Fortunately, there are other diagnostics to rely on in determining the semantic scope of a participial phrase. One of these is modality domain: clause-level participial phrases form separate modality domains, while verb-modifying participial phrases do not. Consider the following two examples:

- (8.16) (γνώμη γὰρ τοιαύτηι χρεώμενος), (ἐπιτροπεύοι-ᾶν ἀμωμήτως τοῦ πλήθεος),  
‘Because he [= the monarch] uses excellent judgment, he would administer the masses without fault.’ 3.82.8
- (8.17) (πατὴρ δὲ καὶ μητὴρ οὐκέτι μοι ζώντων), (ἀδελφεὸς-ᾶν ἄλλος οὐδενὶ τρόπῳ γένοιτο),  
‘Since my mother and father are no longer alive, there’s no way I could get another brother.’ 3.119.25

In both cases, we have a participial phrase that excludes ᾶν and bears a causal relationship with the finite clause. Both participial phrases correspond semantically to indicative finite clauses: in (8.16), it is presented as a fact that the monarch uses excellent judgment; in (8.17) it is likewise presented as fact that the speaker’s parents are dead. In other words, the modal value of ᾶν does not extend into the participial phrase. When the participial phrase modifies only the verb, however, this is not the case:

- (8.18) μουνωθέντες-δὲ-ᾶν καὶ ἀποδεξάμενοι ἔργα μεγάλα ἀπέθανον γενναίως.  
‘They [= the Peloponnesians] would have died nobly left by themselves and (by) displaying great deeds.’ 7.139.13

Here the coordinated participial phrases *μουνωθέντες και ἀποδεξάμενοι ἔργα μεγάλα* describe the manner in which the Peloponnesians would have died nobly, and not that they would have died nobly when/if/after/because they were alone and displayed great deeds. The counterfactual modality of ἄν thus scopes over the clause as a whole, and the participial phrase is included in the calculation of second position, as predicted.<sup>195</sup>

### 1.1 Predictions of the Analysis

Since pronominal clitics can be governed by participial phrases as well as finite verbs, they will exhibit a wider range of distribution. (By contrast, ἄν, with limited exceptions, is a dependent only of finite verbs.) One of the predictions of my analysis is that clitic pronouns that are arguments of the head of clause-level participial phrases will only occur second in a non-clause initial participial phrase if the participle bears clause-level semantics. This prediction is amply borne out, as illustrated by the following examples (see also 2.32.20, 2.141.16, 3.34.13, 3.126.11, 5.76.1, 7.222.1). Within this subset of the data, there is a predilection for the participial phrases to function semantically as relative clauses; this is unsurprising because, of the categories listed above in (8.8), that of the relative clause (in its finite-clause form) is the one most commonly found clause-internally, while the others are either typically clause-initial (temporal, causal, conditional, concessive) or typically clause-final (purpose):

#### *Temporal Relationship*

- (8.19) πέμπτη δὲ ἢ ἕκτη ἡμέρη ἀπ' ἧς ἀπίκοντο (ἐξεμπολημένων=σφι σχεδὸν πάντων), ἐλθεῖν ἐπὶ τὴν θάλασσαν γυναικας ἄλλας τε πολλὰς καὶ δὴ καὶ τοῦ βασιλέος θυγατέρα.  
 ‘On the fifth or sixth day after they arrived, when they had sold almost all their goods, many other women came to the shore, in particular a daughter of the king.’ 1.1.11<sup>196</sup>

#### *Relative Clause*

- (8.20) τουτέων δὴ τὴν νεωτέρην (ἐπισπομένην=οἱ ἐπ' Αἴγυπτον), κτείνει.  
 ‘The younger of these, who followed him to Egypt, he kills.’ 3.32.1

<sup>195</sup> Ostensible exceptions to this pattern can arise, as in the following example:

- (i) ὅστις γὰρ νομίζει Ποσειδέωνα τὴν γῆν σείειν καὶ τὰ διεστεῶτα ὑπὸ σεισμοῦ τοῦ θεοῦ τούτου ἔργα εἶναι καὶ=ἄν (ἐκεῖνο ἰδὼν), φάη Ποσειδέωνα ποιῆσαι.  
 ‘For whoever thinks that Poseidon shakes the earth and that the fissures caused by earthquake are (the) work of this god, he would also say, once he saw this, that Poseidon did (it).’ 7.129.24

Here ἄν surfaces second within the matrix clause, but its modal value does not scope over the participial phrase. For the latter is characterized by clause-level semantics, and is interposed within the matrix clause. Cases like this are neither common nor problematic for my account. If the participial phrase were in clause-initial position, ἄν would occur second within the finite clause.

<sup>196</sup> See also 2.32.30.

*Relative Clause*

- (8.21) αὐτὸς δὲ ἔχων Λεσβίους ἐς Χίον ἔπλεε, καὶ Χίων φρουρῆι  
(οὐ<sub>i</sub>=προσιεμένηι=μιν), συνέβαλε ἐν Κοίλοισι καλεομένοισι τῆς Χίης χώρας.  
'He himself sailed to Chios with Lesbians, and he engaged a guard of  
Chians in an area of Chios called 'Hollows,' who didn't grant him access.'  
6.26.7

*Relative Clause*

- (8.22) νήσους δὲ ἐν αὐτῷ Λέσβωι μεγάθηα παραπλησίας συχνάς φασι εἶναι, ἐν δὲ  
αὐτῆσι ἀνθρώπους οἱ σιτέονται μὲν ρίζας τὸ θέρος ὀρύσσοντες παντοίας,  
καρπούς δὲ ἀπὸ δενδρέων (ἐξευρημένους=σφι ἐς φορβήν), κατατίθεσθαι  
ὠραίους καὶ τούτους σιτέεσθαι τὴν χειμερινήν.  
'They say that there are many islands in it [= the Araxes river] similar to  
Lesbos in (its) dimensions, in which (they say that there are) men who dig  
up and eat all sorts of roots in the summer, and tree fruits, which they  
have discovered (as being good) for food, they store up in season and eat  
them during the winter.'  
1.202.5

*Relative Clause*

- (8.23) Κροῖσος δὲ πέμπτου γονέος ἀμαρτάδα ἐξέπλησε, ὃς ἐὼν δορυφόρος  
Ἡρακλειδέων, δόλωι γυναικῆι ἐπισπόμενος ἐφόνευσε τὸν δεσπότην καὶ  
ἔσχε τὴν ἐκείνου τιμὴν (οὐδέν=οἱ προσήκουσαν).  
'Croesus atoned for a sin of an ancestor four generations back, who was a  
bodyguard of the Heraklids, and induced by a woman's trick murdered his  
master and assumed his power, which in no way was appropriate for him.'  
1.91.6

The examples here all support the claim that participial phrases with clause-level scope are semantically clausal units. Through their prosodic coding, they form their own domain for second-position clisis. When a participial phrase has purpose-clause semantics, it exhibits the same pattern:

- (8.24) πυθόμενος δὲ ταῦτα ὁ Ὀνήσιλος κήρυκας διέπεμπε ἐς τὴν Ἰωνίην  
(ἐπικαλεόμενός=σφας),  
'When Onesilos found this out, he sent messengers to Ionia to call them in  
as allies.'  
5.108.9

- (8.25) ἕως μὲν προσεδέχοντο ἐκ τῆς Πελοποννήσου στρατὸν ἧξειν  
(τιμωρήσοντά=σφι), οἱ δὲ ἔμενον ἐν τῇ Ἀττικῇ.  
'As long as they expected that an army would come from the Peloponnese  
to help them, they stayed in Attica.'  
9.6.3

- (8.26) ἔπεμψαν ἡμέας Λακεδαιμόνιοί τε καὶ Ἀθηναῖοι καὶ οἱ τούτων σύμμαχοι  
(παραλαμφομένους=σε πρὸς τὸν βάρβαρον),  
'The Lacedaimonians and Athenians and their allies sent us to acquire you

as an ally against the barbarian.’

7.157.4

My analysis makes a second prediction with regard to the presence of a pronominal clitic and ἄν in the same clause: if the pronoun is an argument of a clause-level participial phrase, and if ἄν only scopes over the finite clause, then they should surface in separate intonational phrases. While such sentences are rare, this prediction is borne out at least once:

- (8.27) κελεύει με Μαρδόνιος μένοντα αὐτοῦ πειρᾶσαι τῆς Πελοποννήσου, λέγων ὡς μοι Πέρσαι τε καὶ ὁ πεζὸς στρατὸς οὐδενὸς μεταίτιοι πάθεος εἰσί, (ἀλλὰ,=βουλομένοισι=σφι), (γένοιτ’=ἄν ἀπόδεξις),.  
‘Mardonius tells me to stay here and attack the Peloponnese, saying that the Persians and the army are not culpable for any disaster: for since they want it, there would be a display (of military prowess).’ 8.101.12

βουλομένοισι has a causal reading and its co-referent σφι accordingly falls second within that domain. Since ἄν only scopes over the matrix verb, it is positioned second within the finite clause. It is hard to overstate the importance of this example, as it demonstrates clearly how multiple second-position domains are created given the right semantic, prosodic, and morphosyntactic circumstances.

Lastly, any clitic argument of a supplementary participle, which will always be the complement of a finite verb, and thus not have clause-level semantics, should always surface second within the clause (and not the participial phrase), as in this example (see also 1.30.20):

- (8.28) ...καὶ εἴ=τίς=οἱ τυγχάνει ἐὼν παῖς, τοῦτον ἀπείπασθαι.  
‘...and if he happens to have any child, to disown him.’ 1.59.11

Here οἱ is the possessor argument of ἐὼν παῖς which is the complement of τυγχάνει. Since supplementary participial phrases do not bear clause-level semantics, they are not coded as intonational phrases. As a result, οἱ is hosted at the left edge of the intonational phrase instantiated by the beginning of the clause (here, that could lie either to the left of εἴ or to the left of καί, so I have left it unmarked), and not within the participial phrase, i.e. \*ἐὼν=οἱ παῖς.

## 2 Verb Phrase-Modifying Circumstantial Participial Phrases

We turn now to participial phrases that modify only the verb phrase, and not the clause as a whole. Broadly speaking, these participial phrases correspond semantically to the meanings expressed by non-argument nominal case forms, that is, case forms used for adjoined adverbial expressions (which tend to be dative, instrumental, locative, or ablative, depending on the language involved), or the equivalent prepositional phrases. They thus contrast nicely with the categories in (8.8), which are characteristic of clause-level operators such as complementizers.

I provide here a tentative inventory of the semantic categories of verb-scope participial phrases:

*Semantic Inventory*

- (8.29) 1. Manner: often expressed by *-ly* adverbs  
 2. Instrument/Means: *with, by*  
 3. Causal: *because of, on account of*  
 4. Temporal: *after, before* (as prepositions)  
 5. Location: *in, on*

The inventory of meanings for the verb phrase-modifying participial phrases is much harder to draw up, because it is not clear how finely the semantic space should cut up. Indeed this problem has plagued the handbooks for generations: there is considerable disagreement among the grammars of at least Greek and Latin as to how many semantic categories should be recognized for e.g. the dative case.

Such participial phrases behave semantically like manner and instrumental adverbial phrases. And, as noted above, in cases with ἄν, the modal value of the particle extends throughout both the finite clause and participial phrase. The following example illustrates this pattern:

*Manner*

- (8.30) ἀντορύσσοντες=δ' ἄν ταύτη οἱ Βαρκαῖοι ἔκτεινον τῶν Περσέων τοὺς γεωρυχέοντας.  
 'By digging in opposition this way the Barkaians killed the miners of the Persians.'  
 4.200.13

The phrase ἀντορύσσοντες ταύτη describes how the Barkians killed the Persians, and as such modifies the verb phrase ἔκτεινον τῶν Περσέων τοὺς γεωρυχέοντας. The events of digging and killing go hand-in-hand, and thus form an integrated whole. This integration is reflected also in information structure: together participial phrase and finite clause constitute one predicate and one assertion. Indeed, that the Barkaians were digging countertunnels has already been established in 4.200, and its activated status in (8.30) is reflected by ταύτη. If the participial phrase ἀντορύσσοντες ταύτη had clause-level semantics, it would be characterized by one of the meanings in (8.8). To take a causal reading as an example, (8.30) would then read: 'Since they were digging in opposition in this way, the Barkaians killed the miners of the Persians.'

The following examples further illustrate this pattern:

*Manner*

- (8.31) καὶ πρῶτα μὲν λόγῳ μετεῖς τὴν τυραννίδα ἰσονομίην ἐποίησε τῆι Μιλήτῳ,  
 ὡς ἄν ἐκόντες αὐτῷ οἱ Μιλήσιοι συναπιστάατο.  
 'And at first in word having released his tyranny he established equality of

law in Miletos in order that the Milesians would willingly join him in revolt.’ 5.37.9

*Causal*

- (8.32) τί-δ’=ἄν ἐπιδιζήμενος ποιέοιμι ταῦτα;  
‘In search of what (i.e., why) would I do these things?’ 5.106.13

In the latter example, τί ἐπιδιζήμενος behaves semantically as though it were a compound interrogative meaning ‘why’; that is, while τί is technically an argument of ἐπιδιζήμενος, together they seem to function as an argument of ποιέοιμι. The following example is somewhat remarkable, as χρήσας τι seems to behave essentially as a noun phrase, meaning ‘something I need’ vel sim.; accordingly, I am not sure what semantic category it should fit into:

- (8.33) ὦ δέσποτα, (χρήσας=ἄν=τι σέο βουλοίμην τυχεῖν), τὸ σοὶ μὲν ἐλαφρὸν τυγχάνει ἐὸν ὑπουργῆσαι, ἐμοὶ δὲ μέγα γενόμενον.  
‘Master, I would like to obtain from you something I need, which for you happens to be trivial to assist with, and for me (happens) to be important.’ 7.38.4

It is worth highlighting the following two examples, as they dispel the notion that the length of a participial phrase plays a role in the placement of ἄν. (One might, for instance, think that there was a tendency for ἄν to migrate to clause-initial position in the face of a very short participial phrase, or to seek second position within the finite clause in the face of a long one.) Here we see that ἄν can be positioned within quite a long participial phrase (see also 7.139.10):

*Temporal*

- (8.34) ἐπίσταμαι δὲ τοσοῦτο, ὅτι, εἰ πάντες ἄνθρωποι τὰ οἰκῆμα κακὰ ἐς μέσον συνενείκαιεν, ἀλλάξασθαι βουλόμενοι τοῖσι πλησίοισι, ἐγκύψαντες=ἄν ἐς τὰ τῶν πέλας κακὰ ἀσπασίως ἕκαστοι αὐτῶν ἀποφεροῖατο ὀπίσω τὰ ἐσηνείκοντο.  
‘I know this much, that, if every man were to bring together his own ills into public, intending to exchange them with those of his neighbors, each of them after peering into the ills of their neighbors, would gladly take back what they brought in.’ 7.152.8

With pronouns, the situation is somewhat different: in fact, clitic pronouns cannot diagnose verb-scope participial phrases (there is one exception to this tendency, which is discussed in the next section). If a participial phrase only scopes over the verb phrase, the pronominal clitic should fall second within the clause as a whole, and indeed it does:

*Manner*

- (8.35) ταῦτά=οἱ πέμψας ὁ Σιτάλκης ἐπεκηρυκέετο.  
‘Sitalkes announced this to him by sending him a message.’ 4.80.13

Here the participle πέμψας informs us how Sitalkes ἐπεκηρυκεύετο: the two events are temporally co-extensive, and thus arguably one composite event. Where the problem arises is that in participial phrases with clause-level semantics that share an argument with the finite verb clitics will occupy the selfsame place:

*Temporal*

- (8.36) ἐξάρας-γάρ-με ὑψοῦ καὶ τὴν πάτρην καὶ τὸ ἔργον, ἐς τὸ μηδὲν κατέβαλες  
 παραινέων νεκρῶι λυμαίνεσθαι, καὶ ἦν ταῦτα ποιέω, φὰς ἄμεινόν με  
 ἀκούσεσθαι.  
 ‘After you raised aloft me and my country and my deed, you threw me  
 down into nothing, by encouraging me to abuse a corpse, and if I do this,  
 saying that I would have a better reputation.’ 9.79.3

Here με falls in the same position as οἱ from the previous example. This time, however, the participial phrase has clause-level scope. For I presume that ἐξάρας is not the manner in which the event of the finite clause (κατέβαλες) was carried out. The pattern in (8.36) is quite common: in cases where a participial phrase and finite-clause verb share a clitic argument, it is placed second in the sentence, and then interpreted via zero-anaphor in the finite clause.

We find the same pattern of clitic placement when a clause-level participial phrase is found clause-internally:

- (8.37) Κροῖσος-δέ-σφι ὠνεομένοισι ἔδωκε δωτίνην.  
 ‘Croesus gave it to them [= Spartans] as a gift, although they were  
 intending to buy it.’ 1.69.17

Some exceptions to this pattern have been discussed above, and others will be considered below.

## 2.1 The Presence of ἄν in Genitives Absolute

Typically, one does not expect to find ἄν in genitives absolute. Absolute participial phrases standardly bear clause-level semantics, and accordingly are coded as intonational phrases. Since participles do not usually select for ἄν, there is thus nothing that should cause it to show up in this domain (although see below in section four on multiple-ἄν).

Despite these tendencies, there are two cases in Herodotus in which ἄν occurs within a genitive absolute:

- (8.38) ξεῖνος δὲ ξείνωι εὖ πρήσσοντι ἐστὶ εὐμενέστατον πάντων,  
 συμβουλευομένου-τε-ἄν συμβουλεύσειε τὰ ἄριστα.  
 ‘A foreign guest-friend<sub>i</sub> is the kindest thing of all to a foreign guest-friend<sub>k</sub>.

who is successful, and he<sub>i</sub> would give him<sub>k</sub> the best advice if he<sub>k</sub> sought (it).’ 7.237.12

(8.39) ἐμέο-δ’-ᾗν ἐόντος ἐν Ἰωνίῃ οὐδεμία πόλις ὑπεκίνησε.  
 ‘If I [= Histaeus] had been in Ionia, no city would have revolted.’ 5.106.23

This position of ᾗν in each of these cases is surprising and *prima facie* flies in the face of my claims. For in both cases, my account would have predicted the clitic to surface second in the finite clause.

But there is a way to account for these cases, if we recognize the possibility that genitives absolute can scope over verbs, and not just clauses, in which case they would not be coded as intonational phrases, and would therefore not exclude ᾗν; see Devine and Stephens (2006: 77-79) on this point for Latin. There is good motivation for such an analysis here. In (8.38) συμβουλευομένου, though translated above with a protasis, seems to function more like an argument of the finite verb (note not only the prosodic reduction, but also the absence of a modified noun), and thus to mean ‘the one seeking counsel’ (and thus not all that “absolute” after all). With this meaning, the position of ᾗν is then unremarkable: it is exactly what we would find with a conjunct participle, i.e. συμβουλευομένωι-τε-ᾗν συμβουλεύσειε τὰ ἄριστα. Ultimately I think the reasons for this reduction are pragmatic. The use of the same verb, their juxtaposition, and the absence of any overt arguments (on this point, see Cristofaro 2003: 251) emphasize the reciprocal pattern of the behavior, as well as the speaker’s certainty. One question that remains outstanding, though, is why the speaker did not simply use dative συμβουλευομένωι.

In (8.39), there is also pragmatic motivation for prosodic reduction, but this time from information structure. It appears that the participial phrase is the focus of the sentence, and does not contain its own focus. As such, (8.39.1) would be a more accurate paraphrase of (8.39) than (8.39.2):

(8.39.1) ‘No city would have revolted [with me in Ionia]<sub>Foc</sub>.’

(8.39.2) ‘If I [had been in Ionia]<sub>Foc</sub>,<sup>197</sup> no city [would have revolted]<sub>Foc</sub>.’

In (8.39.1), the state of affairs ἐμέο δ’ ἐόντος ἐν Ἰωνίῃ has thus been reduced to an adverbial adjunct of the verb phrase. Semantically it thus patterns like the examples in the previous section, and the position of ᾗν follows suit. As for where to place the genitive absolute within the list in (8.29), I would tentatively assign it to the category of location. For an assertion is being made about an event in relation to the location of a person—essentially, the event would not have taken place in the presence of the person. It is perhaps via extensions like this that the Latin ablative case acquired both

<sup>197</sup> This is perhaps an analysis some at least would object to, as protases have been argued to serve as sentence topics: see e.g. Haiman (1978).



the meaning of spatial location as well as that of attendant circumstance, which is essentially what we have in (8.39.1).

I would attribute the reduction to speaker certainty and information structure. Pragmatically, (8.39) diverges from canonical counterfactual conditionals in that the speaker is certain about the outcome of the apodosis (as hypothetical and otherwise unrealis scenarios do not lend themselves to high speaker commitment). In terms of information status, the state of affairs encoded by the participial phrase was mentioned in the previous sentence (the relevant portion is here underlined):

- (8.40) εἰ δ' ἄρα τι τοιοῦτο ποιεῦσι καὶ σὺ τὸ ἔδον ἀκήκοας, ὦ βασιλεῦ, μάθε οἷον  
 πρῆγμα ἐργάσαο ἐμὲ ἀπὸ θαλάσσης ἀνάσπαστον ποιήσας. Ἴωνες γὰρ οἴκασι  
ἐμεῦ ἐξ ὀφθαλμῶν σφι γενομένου ποιῆσαι τῶν πάλαι ἴμερον εἶχον. ἐμέο δ' ἄν  
 ἔοντος ἐν Ἴωνίῃ οὐδεμία πόλις ὑπεκίνησε.  
 'If then they are doing such a thing and you have heard the truth, O king,  
 recognize that you created such a situation by dragging me away from the  
 sea. For the Ionians seem—with me out of their sight—to have done what  
 they have long desired. No city would have revolted if I had been in  
 Ionia.'

5.106

We now see that the sentence preceding (8.39) conveys almost the same message as (8.39) itself. For the two sentences serve to strengthen the message: while the first says 'x happened because of y' (where x = the Ionian revolt, and y = Histaeus' absence) the second reaffirms this by framing it in the negative 'if not y, then not x.' Far from being redundant, this recasting serves to promote Histaeus' absence to the status of the one and only cause of the Ionian revolt. For to say 'x happened because of y' does not pragmatically rule out the possibility of other causes, nor does it make an explicit claim as to whether x would have happened if y had not obtained. This pragmatic strengthening is part of Histaeus' rhetorical strategy: he wants to convince the king that he needs to be sent to Ionia for there to be peace in the area.

## 2.2 Constraints on Dative Pronouns

If a dative pronominal clitic is semantically interpreted with both the participle and the verb, it will occur second within the participial phrase, as illustrated in section two. There is an exception to this principle, however: if the participial phrase contains a dative noun phrase (which I underline in the following two examples), then the dative clitic will be hosted second within the finite clause:

- (8.41) ἐς Ἴαλον δὲ τῆς Ἀχαιῆς ἀπικομένωι Ξέρξῃ οἱ κατηγεμόνες τῆς ὁδοῦ  
 βουλόμενοι τὸ πᾶν ἐξηγέεσθαι (ἐλεγόν=οἱ ἐπιχώριον λόγον), τὰ περὶ τὸ ἱρὸν  
 τοῦ Λαφυστίου Διός.  
 'The guides of the road, wanting to relate to Xerxes everything, once he  
 arrived at Halos in Achaea, told him a local story, which concerned the  
 sanctuary of Laphystian Zeus.'

7.197.3

- (8.42) ἐωυτῶι μὲν δὴ τῶι θύοντι ἰδίηι μούνωι (οὔ=οἱ ἐγγίνεται ἀρᾶσθαι ἀγαθὰ), ὁ δὲ τοῖσι πᾶσί τε Πέρσησι κατεύχεται εὖ γίνεσθαι καὶ τῶι βασιλείι.  
 ‘For one sacrificing privately, it is not permitted to him to pray for boons for himself alone. He prays that there is good for all the Persians and for the king.’ 1.132.8

If this principle is correct (and indeed it should be, as it is entirely unsurprising and intuitive), then it will permit us to sort out a textual issue involving the position of a dative clitic pronoun. At Herodotus 5.117.5, most of the manuscripts have οἱ placed after the participle ἐλαύνοντι, as such:

- (8.43) ταύτας μίαν ἐπ’ ἡμέρηι ἐκάστηι αἴρεε, ἀπὸ δὲ Παισοῦ ἐλαύνοντι=οἱ ἐπὶ Πάριον πόλιν ἤλθῆ ἀγγελίη τοὺς Κᾶρας τῷτὸ Ἴωσι φρονήσαντας ἀπεστάναι ἀπὸ Περσέων.  
 ‘He captured these one each day and while en route from Paisos to the city of Parion, there came to him a message that the Carians were ideologically aligned with the Ionians and were revolting.’ 5.117.5

But four mss. (A, B, C, and T) place the clitic after the finite verb:

- (8.44) ταύτας μίαν ἐπ’ ἡμέρηι ἐκάστηι αἴρεε, ἀπὸ δὲ Παισοῦ ἐλαύνοντι ἐπὶ Πάριον πόλιν ἤλθῆ=οἱ ἀγγελίη τοὺς Κᾶρας τῷτὸ Ἴωσι φρονήσαντας ἀπεστάναι ἀπὸ Περσέω.  
 ‘He captured these one each day and while en route from Paisos to the city of Parion, there came to him a message that the Carians were ideologically aligned with the Ionians and were revolting.’ 5.117.5

We would expect (8.44) only if οἱ had no thematic relationship with the participial phrase, or if the participial phrase already contained a dative. Since it is coreferent with ἐλαύνοντι and there is no other dative in the participial phrase, (8.43) should be the correct reading (and indeed this is what both Hude and Rosén print). Moreover, (8.44) fits our expectations about the direction of corruption: for (8.43) is non-canonical (given that there is a preposed prepositional phrase, ἀπὸ δὲ Παισοῦ), whereas (8.44) is more canonical.

### 3 The Successive Participle

We come now to what is perhaps the most interesting interaction between participial phrase and finite clause. It involves a use of the participial phrase that has not to my mind been previously noted in the literature, and which I refer to here as the successive participle. In terms of clitic position, successive participles pattern like those that modify verb phrases, but, in terms of semantics, do not. At the same time, successive participles do not bear clause-level semantics. Instead, the participial phrase and finite clause in a successive construction appear to stand in a coordinate relationship, as in the

following case (I forgo indication of prosodic phrasing in these cases, my reason for which is presented below near the end of the section):

- (8.45) εἰ δέ τις τοῦ κλήρου ὁ ποταμός τι παρέλοιτο, ἐλθὼν=ᾶν πρὸς αὐτὸν ἐσήμαινε τὸ γεγενημένον.  
 ‘If the river should destroy any (part) of someone’s plot, he would come to him [= the king] and indicate what happened.’ 2.109.5

The particle ᾶν is in second position within the apodosis (i.e., the consequent of the conditional), and scopes over both the participle ἐλθὼν and the finite verb ἐσήμαινε. The participle does not, however, tell us how the landholder ἐσήμαινε. And at the same time, it does not seem to have a clause-level reading either. Indeed, if it did, the placement of ᾶν would be exceptional. Further evidence against the clause-level reading comes from the following example:

- (8.46) Μαρδόνιος δέ, ὡς=οἱ ἀπονοστήσας Ἄλέξανδρος τὰ παρὰ Ἀθηναίων ἐσήμηνε, ὀρμηθεὶς ἐκ Θεσσαλίας ἤγε τὴν στρατιὴν σπουδῆι ἐπὶ τὰς Ἀθήνας.  
 ‘Mardonius, once Alexander returned and indicated to him the message from the Athenians, setting out from Thessaly led his army in haste toward Athens.’ 9.1.1

If we tried to force a clause-level reading for ὡς ἀπονοστήσας Ἄλέξανδρος, the position of οἱ would be entirely unexpected:

- (8.46.a) (Μαρδόνιος δέ)<sub>i</sub>, (ὡς<sub>p</sub>=ἀπονοστήσας=οἱ<sup>!</sup> Ἄλέξανδρος)<sub>i</sub>, (τὰ παρὰ Ἀθηναίων ἐσήμηνε)<sub>i</sub>,...  
 ‘Mardonius, once Alexander returned for him<sup>17</sup>, indicated the message from the Athenians...’

The problem is that, with ὡς<sub>p</sub>=ἀπονοστήσας Ἄλέξανδρος coded as an intonational phrase, one expects οἱ to be after ἀπονοστήσας. But this is not the case, as οἱ bears a thematic relationship not with ἀπονοστήσας, but with ἐσήμηνε. So if we had the semantic situation represented by (8.46a), we would expect the clitic to be positioned in the third intonational phrase, as follows (οἱ could also follow Ἀθηναίων, I think, but the point remains the same):

- (8.46.b) \*(Μαρδόνιος δέ)<sub>i</sub>, (ὡς=ἀπονοστήσας Ἄλέξανδρος)<sub>i</sub>, (τά=οἱ παρὰ Ἀθηναίων ἐσήμηνε)<sub>i</sub>,...

Clitic-climbing as a phenomenon does exist in Greek (see in particular the next chapter), but I am aware of no other example that could parallel (8.46.b). Indeed, to posit such an analysis here would essentially be to create a unique example. Accordingly, I dismiss the possibility of a clause-level interpretation for the participial phrase in (8.46).

The successive-participle construction is characterized by the following semantic properties:

1. Either the participle or the finite verb will be a motion verb; typically, it is the former.
2. The participle and finite verb describe an event that has perfective aspect (which is canonically realized in an aorist participle), and which is often repeated.
3. The temporal relationship between the event encoded by the participial phrase and that encoded by the finite verb tends to be contiguous: one event follows immediately upon the other.

The following examples illustrate these properties:

- (8.47) θερίσαντες=δ'=**ἄν** τὸν σῖτον ἔπλεον. 4.42.17  
 'They would reap crops and sail.'
- (8.48) πολιορκήσαντές=τε=**ἄν** ἡμέρας ὀλίγας ἀπαλλάσσοντο ἐς τὴν Σπάρτην. 5.65.4  
 'They would besiege them for a few days and then go back to Sparta.'
- (8.49) ὅπως δὲ γίνοιτο φθινόπωρον, προσσχόντες=**ἄν** σπείρεσκον τὴν γῆν... 4.42.15  
 'When autumn came, they would come to shore and sow the earth...'

The following is the only example in which the participle is not aorist:

- (8.50) ἀπελαυνόμενος=δ'=**ἄν** ἦε ἐπ' ἑτέρην τῶν ἐταίρων. 3.51.13  
 'Expelled he [= Lycophron] would go to another (house) of his friends.'

While ἀπελαυνόμενος is formally a present participle, semantically it has the same punctual aspect as the morphological aorist participles above. For the participle does not mean 'while being expelled' (i.e., it does not have imperfective aspect), but rather refers to the fact that Lycophron was expelled multiple times, but on each occasion, the progression from expulsion from one house to ending up in another is presented as taking place in immediate succession.

With pronominal clitics, we can identify the serial-verb construction because the pronoun will occupy second position within the participial phrase, but will not bear a thematic relationship with the participle, as in the following cases:

- (8.51) (κατημένου Εὐηνίου ἐν θώκῳ)<sub>i</sub> ἐλθόντες=**οἱ** παρίζοντο καὶ λόγους ἄλλους

ἐποιεῦντο, ἐς ὃ κατέβαινον συλλυπεύμενοι τῷ πάθει.

‘As Euenios was sitting in his chair, they came and sat down beside him and talked about other things, until they got to sympathizing with his suffering.’

9.94.4

The following example involves subject preposing:

(8.52) (οὗτος ὢν ὁ Ἄβρωνιχος), ἀπικόμενός=σφι ἐσήμηνε τὰ γεγονότα περὶ  
Λεωνίδην καὶ τὸν στρατὸν αὐτοῦ.

‘This Abronikhos arrived and told them what happened concerning  
Leonidas and his army.’

8.21.9

It is harder to find examples of the serial-verb construction with pronominal clitics because the only certain cases are those in which a participle hosts a pronominal form that it does not select for. It is possible, for instance, that the following is an example of this construction:

(8.53) βίηι=δέ=μῃ λαβῶν ἐκ Κῶ εἶχε ὁ Πέρσης.

‘The Persian took me by force from Kos and kept me.’

9.76.15

But since we would expect the pronoun to be positioned here given that it is the object of λαβῶν, we cannot be sure.

The difference between the successive participle and a clause-level participial phrase is nicely illustrated by the following example:

(8.54) οἱ=δὲ=ᾧ Πέρσαι ἐπελθόντες λάβεσχον τὰ πρόβατα καὶ λαβόντες  
ἐπηείροντο=ᾧ τῷ πεποιημένῳ.

‘The Persians would attack and seize their flocks and, once they seized  
them, were inspired by what they had done.’

4.130.6

In the first conjoined clause we have a successive participle with the characteristic verb of motion in the aorist (ἐπελθόντες); we also have a finite verb with habitual semantics (λάβεσχον), which is also common in this construction. We can characterize the information in the participle as sequential information: it is the first stage of a bipartite event. Given the tight sequentiality of the events, it is even possible to get a purpose-clause reading out of the finite verb: ‘the Persians would attack them in order to seize their flocks.’ Such a reading is typically available only to future participles.

In the second half of the sentence, by contrast, we can characterize the participial phrase as background information, such as participles canonically provide (see Givón 2001b: 339). Here λαβόντες describes the circumstances under which the main event, namely ἐπηείροντο, took place.

The background-quality of clause-level participial phrase is evident also in the following example:

- (8.55) (οἱ δὲ Πέρσαι ἐπελθόντες)<sub>i</sub> πολλοὺς=μέν=σφρων ἐφόνευσαν, πολλῶι δ' ἔτι πλέονας ἐζώγησαν, καὶ ἄλλους καὶ τὸν τῆς βασιλείης Τομύριος παῖδα, στρατηγέοντα Μασσαγετέων, τῶι οὖνομα ἦν Σπαργαπίσης.  
 'When the Persians attacked, they killed many of them, but many more still they took prisoner, both others and, in particular, the son of the queen Tomyris, who was the leader of the Massagetae, who was named Spargapises.'  
 1.211.9

Again we have a participial phrase headed by ἐπελθόντες. Here there is no possibility of a purpose-clause reading for the finite verb. Moreover, the information in the main clause is foregrounded: for Herodotus is making a point about the number of prisoners, and the fact that the Persians captured the prince of the Massagetae. The participial phrase serves only to situate this event. Moreover, that the Persians attack is not news: the context of the passage leads us to believe that they will in fact attack.

The following example provides a nice contrast to the serial-verb construction in terms of its immediacy:

- (8.56) (πέμπων κήρυκα)<sub>i</sub> (ἠγγόρευέ=σφι τάδε)<sub>i</sub>.  
 'Sending a herald, he [= Datis] wanted to proclaim the following to them.'  
 6.97.6

The destination of the herald and the audience of Datis' proclamation are one and the same: so we could have expected σφι to appear directly after πέμπων. This does not happen here, I would maintain, because of the temporal and spatial distance between the event of sending and the event of the announcement. Datis has to make his announcement remotely by sending his herald to another island (Datis is on the island of Rheneia, and he sends his messenger to Tenos, towards which the Delians have fled). Without the temporal contiguity that we have seen in the other examples, it is thus not surprising that these two events are presented as bipartite and not unitary.

As for the prosodic coding of the serial-verb construction, I presume that, since the participial phrase does not bear clause-level semantics, it is not coded as an intonational phrase, and that, as a result, the clitic ends up in clause-second position. In the preceding examples, I have not attempted to indicate prosodic phrasing, because I have no solid way of diagnosing the right edge of the intonational phrase.

It is worth noting that the successive-participle construction is similar to what is known in other languages (particularly those of Africa, New Guinea, and East Asia) as a serial-verb construction. The serial-verb construction involves a string of verbs that together form one clause; see Foley and Van Valin (1984: 256-263); Aikhenvald and Dixon

(2006); Muysken and Veenstra (2006). The following example, from Yoruba (Niger-Congo, spoken in West Africa) is characteristic (cited from Baker 1989: 513):

- (8.57) *Ó mú iwé wá*  
 he take book come  
 ‘He brought the book.’

(8.57) involves a more complete merger of the two verbs than anything in Greek (indeed, 8.57 is also comprised of finite verbs, while the Greek construction involves exclusively a participle plus finite verb), but there are nevertheless similarities. One is the temporal overlap or immediate sequentiality of the two events. Another concerns illocutionary force: Aikhenvald and Dixon (2006: 10) note that the verbal members of a serial verb construction do not have independent illocutionary force, in contrast to those of, say, a subordinate or coordinate clause. Lastly, Givón (1991) argues that serial-verb constructions in fact describe a mentally unified event.

#### 4 The Multiple-*ἄν* Construction

My analysis has the further benefit of explaining an odd phenomenon, which has only received marginal attention in the literature, that whereby the modal particle *ἄν* shows up more than once in a clause. Multiple-*ἄν* is a complex phenomenon, which I plan to explore in greater detail elsewhere. The phenomenon concerns us here because a number of multiple-*ἄν* tokens involve one token of *ἄν* in a participial phrase and the other in a finite clause, as we see in the following examples:<sup>198</sup>

- (8.58) εἰ ταῦτα οὕτω εἶχε, ὁ<sub>p</sub>=ἥλιος=*ἄν* ἀπελαυνόμενος ἐκ μέσου τοῦ οὐρανοῦ ὑπὸ τοῦ χειμῶνος καὶ τοῦ βορέω ἦε=*ἄν* τὰ ἄνω τῆς Εὐρώπης κατὰ περ νῦν τῆς Λιβύης ἔρχεται.  
 ‘If this were the case, once the sun were driven from the middle of the sky by winter and the north wind, it would go to the areas over Europe just as it now comes (to the ones over) Libya.’ 2.26.7
- (8.59) κατακλήσαντες=γάρ=*ἄν* πάσας τὰς ἐς τὸν ποταμὸν πυλίδας ἐχούσας καὶ αὐτοὶ ἐπὶ τὰς αἰμασιὰς ἀναβάντες τὰς παρὰ τὰ χεῖλεα τοῦ ποταμοῦ ἐληλαμένας, ἔλαβον=*ἄν*=σφέας ὡς ἐν κύρτηι.  
 ‘For they could have closed all the gates facing the river and they themselves would have gotten up on the walls running along the banks of the river, and they would have had them as in a well.’ 1.191
- (8.60) ἦ ταῦτα ἂν ἔπαθον, ἦ πρὸ τοῦ ὀρῶντες=*ἄν* καὶ τοὺς ἄλλους Ἕλληνας μηδίζοντας ὁμολογίηι=*ἄν* ἐχρήσαντο πρὸς Ξέρξην.

<sup>198</sup> Stein created another example of multiple-*ἄν* by inserting *ἄν* after *διέφθειραν* at 1.191.19. This example is not discussed here because I have on principle excluded from consideration examples that arise through emendation.

‘Either they would have suffered these things or—before this—once they had seen even the remaining Greeks joining the Persian side, they would have made an agreement with Xerxes.’ 7.139.15+7.139.16<sup>199</sup>

- (8.61) (διεξιόντα=δ’=ἄν=μιν διὰ πάσης Εὐρώπης), (ἔλπομαι), (ποιέειν=ἄν τὸν Ἴστρον τὰ περ νῦν ἐργάζεται τὸν Νεῖλον),  
 ‘Since it [= the sun] would traverse all of Europe, I expect that it would affect the Ister just as it now affects the Nile.’ 2.26.7

And an example from Demosthenes:

- (8.62) καὶ γὰρ εἰ οἰκέτης ὑμῶν, μὴ πολίτης ἦν, ὀρῶντες=ἄν=μου τὴν φιλεργίαν καὶ τὴν εἰς ὑμᾶς εὐνοίαν, ἀνεπαύσατ’=ἄν=με τῶν ἀναλωμάτων καὶ ἐπὶ τὸν δραπετεύοντα τῶν ἄλλων ἦλθετε.  
 ‘Indeed if I had been your slave, and not a citizen, since you would see my beneficence and good intention toward you would have given me relief from my expenditures and you would go to one of the others running from his duty.’ Dem. 42.32.2

The motivation for multiple-ἄν in these cases is simple: the participial phrase has both clause-level scope and a modal reading. These two properties trigger the multiplication of ἄν because the same meaning could not have been achieved with only one token. If ἄν were only placed in the participial phrase, modality would indeed extend throughout the whole clause, but the participial phrase would have a verb-scope reading. If ἄν were positioned second in the finite clause, the participial phrase would indeed have a clause-level reading, but this would then form a separate modality domain (as we have already seen above in section one). Thus speakers use the multiple-ἄν construction as a way to endow a participial phrase with both clause-level and modal semantics.

One might object that only finite verbs select for ἄν, and not participial phrases. Under this assumption about the behavior of ἄν, one would accordingly look for motivation within the verb phrase or the sentence as a whole. To be sure, ἄν typically is selected for by a finite verb, but occasionally it is selected for by a participle. So the following example, where the scope of ἄν is limited exclusively to the participial phrase:

- (8.63) “ὦ βασιλεῦ, ἡμεῖς, παραλαμβανόντων τῶν Ἑλλήνων ἡμέας ἐς τὸν πόλεμον τοῦτον, ἔχοντες δύναμιν οὐκ ἐλαχίστην οὐδὲ νέας ἐλαχίστας (παρασχόντες=ἄν ἀλλὰ πλείστας μετὰ γε Ἀθηναίους), οὐκ ἠθελήσαμεν τοι ἐναντιοῦσθαι οὐδέ τι ἀποθύμιον ποιῆσαι.”  
 ‘O king, we, when the Greeks attempted to lure us into this war, (we) who have no meager power nor the fewest ships (since we would have provided the most after Athens) we did not want to oppose you nor do anything displeasing.’ 7.168.19

<sup>199</sup> I take πρὸ τοῦ as focus-preposed.



The semantics of ἠθελήσαμεν are non-modal, which demonstrates that the scope of ἄν does not extend past Ἀθηναίους. The participial phrase headed by παρασχόντες has clause-level semantics in that it bears a causal relationship with the rest of the clause.

## 5 Preposing

In this section, I touch briefly on two topics. The first is the presence of preposed phrases vis-à-vis participial phrases. The pragmatic values of the preposed phrases follow those outlined in chapters six and seven:

### *New-Subject Preposing*<sup>200</sup>

- (8.64) (οἱ δ' ἐκ τῆς αὐτῆς κώμης Μηῆδοι)<sub>i</sub> (ὁρῶντες αὐτοῦ τοὺς τρόπους)<sub>i</sub>  
 (δικαστήν=**μιν** ἐωυτῶν αἰρέοντο)<sub>i</sub>.  
 ‘The Medes from the same village, since they saw his character, chose him  
 as their judge.’ 1.96.11

### *Exhaustive Focus*

- (8.65) ἀπικόμενος δὲ ἐς τὰς Σάρδις (τὴν τε μάχην καὶ τὸν τοῦ παιδὸς μόνον)<sub>i</sub>  
 (ἐσήμηνέ=**οἱ**)<sub>i</sub>.  
 ‘When he arrived in Sardis, he described the battle and the death of his  
 son.’ 1.44.1

### *Counterassertive Focus*

- (8.66) ὡς δὲ τὸν Γύνδην ποταμὸν ἐτείσατο Κύρος (ἐς τριηκοσίας καὶ ἑξήκοντα)<sub>i</sub>  
 (διώρυχάς=**μιν** διαλαβῶν)<sub>i</sub>.  
 ‘So Cyrus punished the Gyndes river, by dividing it into three-hundred  
 and sixty channels.’ 1.190.2

This pattern is only sparsely attested, but it is nevertheless interesting that in (8.64), the preposed subject precedes the participial phrase, while the preposed focus phrase in (8.65) comes between the participial phrase and finite clause. This organization is consonant with the claim in chapter four that non-focus preposed phrases occupy a higher layer of the clause than the focus preposed material (for an example of double preposing, see 1.68.23). I leave aside here the question of where the participial phrases themselves sit. (8.66) is of interest, as well, although for a different reason: here the participial phrase διώρυχάς διαλαβῶν appears to have verb-phrase scope (in that it explains how Cyrus ἐτείσατο). We might therefore have expected it to be grouped with the verb in the same intonational phrase. But this does not happen, and moreover, the participial phrase contains the anaphoric pronoun (μιν), which refers back to the Ganges river of the main clause. Why is the anaphor triggered here? Is it due to the presence of the focus phrase? The idea would be that the presence of the preposed phrase (ἐς τριηκοσίας καὶ ἑξήκοντα) would somehow be responsible for raising the prosodic status of

<sup>200</sup> See also 3.119.12.

the participial phrase as a whole (from some lower category up to an intonational phrase); and once this happened, the anaphoric pronoun then became necessary. This is only a tentative suggestion, and more investigation of cases like (8.66) will be required before anything more definite can be said.

The next topic concerns the pragmatic status of participial phrases themselves, which is an issue that has not been thus far discussed in this chapter, as the focus has been on their semantic properties. Nevertheless, it is possible for participial phrases to be coded as intonational phrases for pragmatic reasons, such as those laid out in the preceding two chapters. Such examples are difficult to identify, but I do think the following two examples are reasonably secure cases:

- (8.67) ὁ δὲ δῆμος ὁ τῶν Ἀθηναίων ἐξαπατηθεὶς ἔδωκέ οἱ τῶν ἀστῶν καταλέξας  
 ἄνδρας τούτους οἱ δορυφόροι μὲν οὐκ ἐγένοντο Πεισιστράτου,  
 κορυνηφόροι δέ. (ξύλων γὰρ κορύνας ἔχοντες)<sub>i</sub> (εἶποντό=οἱ ὄπισθε)<sub>i</sub>.  
 ‘Since the Athenian people were completely fooled, they selected these  
 men from their citizens, and gave them to him, who became not spear-  
 bearers of Peisistratos, but rather club-bearers. For it was with wooden  
 clubs that they followed behind him.’ 1.59.28

In the latter half of the first sentence, Herodotus draws a contrast between *δορυφόροι* and *κορυνηφόροι*. The second sentence then explains the latter and specifies that the clubs were made of wood.<sup>201</sup> The coding of *ξύλων γὰρ κορύνας ἔχοντες* appears to be motivated by its counterassertive focus (which I have tried to represent in translation with a cleft construction): ‘for it was wooden clubs (and not spears) that they carried.’ The expectation is that a tyrant would be followed by *δορυφόροι* (Arist. Fr. 516 reports that Periander was the first to have spear-bearers as bodyguards).

In the following example, we appear to have a case of new-subject preposing:<sup>202</sup>

- (8.68) τὸ μὲν ἱρήμιον αὐτὸ ἐμπεποδισμένον τοὺς ἐμπροσθίους πόδας ἔστηκε.  
 (ὁ δὲ θύων)<sub>i</sub> (ὄπισθε τοῦ κτήνεος ἑστεῶς)<sub>i</sub> (σπάσας τὴν ἀρχὴν τοῦ  
 στρόφου)<sub>i</sub> (καταβάλλει=μιν)<sub>i</sub>.  
 ‘The sacrificial victim stands alone bound at its forefeet. Although the  
 sacrificier stands in back of the animal, once he pulls the beginning of the  
 rope, he brings him down.’ 4.60.5

The switch from *τὸ μὲν ἱρήμιον* to *ὁ δὲ θύων* and the fact that they are marked with *μέν* and *δέ* suggest that *ὁ θύων* is a preposed subject. Since the two intervening participles bear clause-level semantics, *μιν* can only surface in the intonational phrase containing the verb, as expected.

<sup>201</sup> Is it possible that this sentence is a gloss on *κορυνηφόροι* that has crept into the text?

<sup>202</sup> I am indebted to Donald Mastronarde for this suggestion.

## 6 Outstanding Cases and Counterexamples

For all the coverage of the above analysis, there are some outstanding issues and knotty examples. There are cases in which the clitic shows up later in the clause than would otherwise be predicted. So the following example (see also 4.147.5):

- (8.69) (τετραμμένωι γὰρ δὴ καὶ μετεγνωκότι), ἐπιφοιτῶν ὄνειρον φαντάζεται=μοι,  
οὐδαμῶς συνέπαινον ἐὸν ποιέειν με ταῦτα.  
‘For since I turned and changed my mind, a dream keeps coming and  
appears to me, and it does not at all agree that I do these things.’ 7.15.10

Given that μοι and the participles τετραμμένωι γὰρ δὴ καὶ μετεγνωκότι are co-referential, one would have expected the pronoun to show up second within their domain, as we find in examples like the following:<sup>203</sup>

- (8.69) ἀπικομένωι-δέ=οἱ ἔλεγε Ξέρξης τάδε. 7.15.3  
‘When he arrived, Xerxes said the following to him.’
- (8.70) ὕστερον δὲ δείσας Λακεδαιμονίους ἔφυγε ἐς Θεσσαλίην, καί=οἱ φυγόντι ὑπὸ  
τῶν Πυλαγόρων, τῶν Ἀμφικτυόνων ἐς τὴν Πυλαίην συλληγομένων, ἀργύριον  
ἐπεκηρύχθη.  
‘Later, fearing the Spartans, he fled to Thessaly, and a price of silver was  
announced on him in exile by the Pylagoroi, while the Amphiktyones were  
meeting at Pylaia.’ 7.213.7

There is a further issue with (8.68), which is why the clitic does not show up after ἐπιφοιτῶν either (as the verb can select for a dative). This may be due to verbal semantics: it is possible that ἐπιφοιτάω only selects a dative when it means ‘to visit someone,’ and a ghost appearing to someone in a dream may not qualify.

The following example raises a similar issue (see also 4.9.5):

- (8.71) (ἐμπλάσαντα δὲ), κομίζειν=μιν ἐπ’ Αἰγύπτου ἐς τοῦ Ἥλιου τὸ ἱρόν.  
‘After it [= the phoenix] has plastered it [= the egg] up, it carries it [= its  
father? the egg?] into Egypt to the temple of Helios.’ 2.73.17

On the assumption that μιν is the object of both ἐμπλάσαντα and κομίζειν, and refers to the egg, then it is not clear why the pronoun does not surface after ἐμπλάσαντα. This problem could be removed if we could understand that the object of ἐμπλάσαντα is the egg, but that of κομίζειν is the father. The position of the pronoun only after κομίζειν would be entirely expected, since it would not bear a direct thematic relationship with ἐμπλάσαντα.

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<sup>203</sup> See also 3.129.11; 5.114.8; 7.37.7; 7.88.4; 8.108.15; 8.128.2; 9.10.13; 9.15.11; 9.108.2.

A second issue involves clitics not surfacing in the expected position within a participial phrase, as in the following example:

- (8.72) Ἄρπαγος δὲ ὡς εἶδε με, ἐκέλευε τὴν ταχίστην ἀναλαβόντα τὸ παιδίον οἴχεσθαι φέροντα καὶ θείναι ἔνθα θηριωδέστατον εἶη τῶν ὀρέων, φὰς Ἄστυάγεα εἶναι (τὸν ταῦτα ἐπιθέμενόν=**μοι**), πόλλ' ἀπειλήσας εἰ μὴ σφρα ποιήσαιμι.  
 'And Harpagos, when he saw me, said to pick the child up immediately and go off with it and put it where there are the most wild animals in the mountains, saying that it was Astyages who laid this command on me, threatening over and over were I not to do these things.' 1.111.19

Here one would expect the *μοι* to show up after *τόν* or *τὸν ταῦτα*, as we have in the following example:

- (8.73) ὡς δέ με εἶδε ἔχουσαν στεφάνους, εἰρώτα τίς εἶη ὁ=**μοι** δούς.  
 'When he saw me with crowns, he asked who it was who gave it to me.' 6.69.9

If *ταῦτα* were preposed, then there would be nothing remarkable about the position of *μοι*. But justifying a focus reading for the demonstrative here does not seem plausible. It is certainly true, as Donald Mastrorarde points out to me, that Astyages' command is a harsh one, but the strong focus in this sentence seems to be centered on *Ἄστυάγεα*, and not *ταῦτα*. It is possible that this is one context where clitic placement is in fact syntactically conditioned, and that the dative is barred from penetrating the participial phrase: this issue was raised in chapter four.

Lastly, there are some cases where it is difficult to assess the semantic level of a participial phrase. Consider the following example:

- (8.74) καίτοι γενομένης λέσχης ὃς γένοιτο αὐτῶν ἄριστος, ἔγνωσαν οἱ παραγενομένοι Σπαρτιητέων Ἀριστόδημον μὲν βουλόμενον φανερώς ἀποθανεῖν ἐκ τῆς παρεούσης=**οἱ** αἰτίας, λυσσῶντά τε καὶ ἐκλείποντα τὴν τάξιν ἔργα ἀποδέξασθαι μεγάλα. Ποσειδῶνιον δὲ οὐ βουλόμενον ἀποθνήσκειν ἄνδρα γενέσθαι ἀγαθόν.  
 'When there was gossip as to who was the best of them, those of the Spartans who had been there recognized that, since Aristodemos wanted to die conspicuously because of the charge against him, he displayed great feats out of madness and by leaving his post. But Poseidonios, since he did not want to die, truly was a noble man.' 9.71.14

There appear to be two ways to construe the phrase *ἐκ τῆς παρεούσης=οἱ αἰτίας*: either as a causal clause ('since there was a charge against him'), in which case we expect it to be coded as an intonational phrase, or as a prepositional phrase ('because of the charge against him'). The default case in the latter scenario would be for the phrase not to be

coded as an intonational phrase, because it lacks the necessary semantics. However, on pragmatic grounds it is at least possible that it was so phrased.

## **7 Conclusion**

I have argued that the position of a clitic vis-à-vis a participial phrase is conditioned by the prosodic coding of the participial phrase, which is in turn determined by its semantic scope, whether it modifies the verb phrase or the clause. This accounts for a large swath of the data including the (previously unrecognized) successive participle and the multiple-*žv* construction. Just as the non-canonical position of clitics with respect to clausal arguments enabled us to diagnose subtle properties of information structure, so here it enables us to understand in greater detail the conception of an event.

## Chapter 9

### Clausal Cohesion II: Complement Infinitive Clauses

The literature on Wackernagel's Law in Greek (as in other languages) has focused preponderately on the the distribution of clitics in root and matrix clauses. As a result, much less attention has been given to the question of clitic distribution vis-à-vis complement infinitive clauses (embedded and adjoined clauses with overt complementizers have not received much attention either, but this is because the data are so well-behaved in this environment). Indeed, Fraenkel despaired over applying his *Kolon*-analysis to infinitive complements, and wrote (1964a: 101):

Die Frage, ob eine von einem Verbum sentiendi oder declarandi abhängige Infinitivkonstruktion im Griechischen und im Lateinischen ein eigenes Kolon bildet oder ob sie mit dem regierenden Verbum in syntaktischer Synaphie steht, kann nicht von vornherein und nicht generell beantwortet werden.

In particular, Fraenkel had misgivings about how one could establish generalizations about the mapping between syntax and prosody when it came to infinitival clauses. On the one hand, some infinitival phrases are so short that they must have formed a *Kolon* with their matrix verbs (*ibid.*). But at the same time, Fraenkel was well aware that even short (e.g. four-word) infinitival clauses could form their own *Kola*. (For further discussion of clitics in embedded clauses, see Taylor 1990: 62-63 and 1994: 155-156.)

While Fraenkel's misgivings are not to be ignored, there are nevertheless reliable generalizations to be made about clitic distribution vis-à-vis embedded infinitive clauses, principally the following: pronominal clitics are positioned second in the domain (whether matrix or embedded) in which they are semantically interpreted. As I will demonstrate below, this generalization can account for initially surprising alternations like the following:

- (9.1) ταῦτα ἀκούσας ὁ Καμβύσης ἔφη ψεύδεσθαί=**σφρα**ς καὶ ὡς ψευδομένους  
θανάτῳ ἐζήμιον.  
'When he<sub>i</sub> heard these things, Cambyses<sub>i</sub> said that they<sub>k</sub> [= Egyptians]  
were lying and on the ground that they were lying he<sub>i</sub> punished (them<sub>k</sub>)  
with death.'  
3.27.13
- (9.2) ὁ δὲ ἄλλο μὲν οὐδὲν ἀμείβεται τὸν πατέρα, ἔφη=**δέ=μιν** ἱρὴν ζημίην ὀφείλειν  
τῷ θεῷ ἐωυτῷ ἐς λόγους ἀπικόμενον.  
'And he<sub>i</sub> [= Lykophron] offers no other answer to his father<sub>k</sub> [= Periandros,  
his father], but he<sub>i</sub> said he<sub>k</sub> owed a sacred fine to the god, since he<sub>k</sub>

In both (9.1) and (9.2) a matrix clause with a locutionary verb (*φημί*) is followed by a complement infinitive clause. In the first, the embedded subject pronoun *σφρας* falls second within the complement clause, whereas in the second type the embedded subject pronoun *μιν* is hosted by the matrix verb itself. Cases of the second are sometimes referred to as *clitic-climbing*, on the assumption that the clitic, being the subject of the embedded infinitive, should occur second within that domain: on clitic-climbing, see Wackernagel (1892: 335-336, 357-359); Smyth §1764.a; Bošković (2001); Anderson (2005: 227-228, 246-249, 254); Bok-Bennema (2006); Roberts (2007: 35). As I will demonstrate below, the position of *μιν* in (9.2) is not the result of clitic-climbing (whatever that should mean precisely), but rather is due to the lexical semantics of the matrix verb and their effect on the (prosodic and syntactic) cohesion of the clause.

My analysis predicts (9.1) and (9.2) to be prosodically coded as follows:

(9.1a) ταῦτα ἀκούσας ὁ Καμβύσης ἔφη (ψεύδεσθαί=**σφρας**)...

(9.2a) ὁ δὲ ἄλλο μὲν οὐδὲν ἀμείβεται τὸν πατέρα, (ἔφη=**δέ=μιν** ἱρὴν ζημίην ὀφείλειν τῷ θεῷ), ἔωυτῷ ἐς λόγους ἀπικόμενον.

In (9.1a), *σφρας* owes its position to the prosodic break between the matrix verb *ἔφη* and the onset of the complement clause, *ψεύδεσθαί*. By contrast, in (9.2a), there is no intonational break between the matrix and the complement clauses; thus the pronoun is housed at the left edge of the intonational phrase before *ἔφη* (which we can safely assume on the nature of the phrasal break—essentially that of a sentence—between *πατέρα* and *ἔφη*). In (9.1a) the matrix and complement clauses are less prosodically integrated, while in (9.2a) they are more so. I have marked the right edge of the intonational phrase in these two examples, but this is purely suggestive, and I present it here without commitment.

As with participial phrases, and (perhaps) preposing, this is a case where assumptions about prosody and syntax appear to yield the same outcome. For underlying the prosody of (9.1a) and (9.2a) I presume the following syntactic configurations:

(9.1b) ταῦτα ἀκούσας ὁ Καμβύσης ἔφη [<sub>CP</sub> ψεύδεσθαί=**σφρας**]...

(9.2b) ὁ δὲ ἄλλο μὲν οὐδὲν ἀμείβεται τὸν πατέρα, [<sub>CP</sub> ἔφη=**δέ=μιν** ἱρὴν ζημίην ὀφείλειν τῷ θεῷ] ἔωυτῷ ἐς λόγους ἀπικόμενον.

<sup>204</sup> Dover (1961: 14-15) frames such cases as an inversion of M and q (which are his symbols, essentially, for a lexical word and an enclitic). I think the idea of an inversion is descriptively misleading, and Dover's analysis will not be discussed in this chapter.

Thus the left edges of the intonational phrases in (9.1a) and (9.2a) fall out naturally from the assumption that the left edge of CP is coded as an intonational phrase. I would attribute the structure of (9.1b) to the use of *φημί* as an ECM-verb. In (9.2b), by contrast, it behaves as a control verb.<sup>205</sup> (I leave open the question of what the syntactic structure of (9.2b) should be deeper inside the complement clause, but ECM-verbs do take a clausal complement of a category smaller than CP, whereas control verbs take a CP complement.)

To capture the alternation between (9.1) and (9.2), I claim that the position of the prosodic coding of the matrix and embedded clauses is conditioned by the degree of cohesion between the two (on which, see Givón 2001b: 73). The degree of cohesion is in turn conditioned by the lexical semantics of the matrix verb. In cases like (9.1), there is no thematic relationship<sup>206</sup> between the pronominal clitic and the matrix verb. By contrast, with cases like (9.2), there is a thematic relationship between the pronoun and the verb. Given that we have the same matrix verb in (9.1) and (9.2), what my analysis predicts then is that verbs that permit alternations like that in (9.1)-(9.2) must be polysemous. Below I introduce data that bear out this prediction. Thus once again we see that clitic position enables us to diagnose fine-grained meanings within a clause, just as we have seen with preposed and participial phrases.

Thus far I have made no mention of *ἄν*. It undergoes the alternation exhibited by (9.1) and (9.2), as illustrated by the following pair of examples:

- (9.3) τούτων δὲ τοιούτων συμβαινόντων, ἐγὼ μὲν ἔλπομαι, εἰ καὶ αὐτὸς Πρίαμος  
 συνοίκεε Ἑλένη, ἀποδοῦναι-*ἄν* αὐτὴν τοῖσι Ἀχαιοῖσι, μέλλοντά γε δὴ τῶν  
 παρόντων κακῶν ἀπαλλαγῆσεσθαι.  
 ‘Since the results (of the battle) were like this, I think that, if Priam himself  
 were living with Helen, he would have given her back to the Achaeans, if he  
 was thereby going to be rid of the troubles they had.’ 2.120.15
- (9.4) τοῦτο εἶπε τῶν τις Βαβυλωνίων, οὐδαμὰ ἐλπίζων-*ἄν* ἡμίονον τεκεῖν.  
 ‘The preceding is what one of the Babylonians said, since in no way did he  
 expect that a mule would give birth.’ 3.152.1

I argue in section five that cases like (9.4) are conditioned by the same factors as the pronoun-cases, namely that prosodic constituency (as well as syntactic cohesion) are conditioned by the lexical semantics of the verb.

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<sup>205</sup> *ECM* is an abbreviation for “exceptional case-marking.” The term is used within generative syntax to describe clauses that in non-generative traditions would often be called accusative-and-infinitive constructions. In ECM-clauses, there is crucially no thematic relationship between the matrix verb and the argument of the embedded infinitive clause (hence the source of the accusative case is considered “exceptional”). In object-control scenarios, this is not the case, as there is a thematic relationship between the matrix verb and the embedded infinitive clause.

<sup>206</sup> I use the term *thematic* to mean essentially ‘semantic.’ On thematic relationships generally, see Jackendoff (1987) and Dowty (1991).



Section one presents cases in which a clitic bears a thematic relationship exclusively with the matrix verb; section two, those in which it has a thematic relationship exclusively with the complement verb. Section three looks at cases where a pronominal clitic bears a thematic relationship with both the matrix and complement verbs. Against the backdrop of these three sections, section four then begins to look at cases where the position of the clitic alternates according to the sense of the verb involved. These sections focus almost exclusively on pronominal clitics, as they offer the vast majority of data; section five looks briefly at the issue in regard to ἄν. Section six presents some of the puzzling issues with this topic that remain outstanding. Section seven offers concluding remarks.

## 1 Thematic Relationship with Matrix Verb

The fundamental generalization for the position of a clausal clitic in regard to complement and matrix domains is the following:

*Distributional Generalization*

- (9.5) A clausal clitic will surface second in the domain (whether matrix or embedded) in which it is semantically interpreted.

If a pronominal clitic bears a thematic relationship with the matrix clause, it will surface second there; if it bears a thematic relationship with the complement clause, then it surfaces second in this domain. There are cases in which a pronoun bears a thematic relationship with both the matrix and the complement clauses: in such cases, the pronoun appears second within the matrix clause; this pattern is discussed in section two.

In the following examples, the clitic pronoun bears a thematic relationship exclusively with the matrix verb, and thus appears second in that domain (see also 2.93.25, 5.80.2):

- (9.6) ἐγώ=**μοι** δοκέω συνιέναι τὸ γεγονός τοῦτο, ὦ βασιλεῦ.  
 ‘I think that I understand this event, sire.’ 3.63.16

The pronoun μοι is thematically interpreted with δοκέω, and thus appears second in the matrix domain. It has no thematic relationship with the embedded infinitive συνιέναι. Further examples of this type are presented in section 1.2 with impersonal constructions.

### 1.1 Thematic Relationship with the Complement Predicate

With embedded environments, we do not encounter this problem, as one does not find the same sort of extended reference of pronouns. When a clitic pronoun bears a thematic relationship solely with a complement infinitive clause, it appears second

within that domain, as we have already witnessed with (9.1) above. This pattern can be copiously illustrated, as in the following example:

- (9.7) τὸ παράπαν ἀπολιπόντες τοὺς Ἴωνας ἐπικαλεομένου σφέας πολλὰ δι' ἀγγέλων Ἀρισταγόρῳ οὐκ ἔφασαν (τιμωρήσειν=**σφι**).  
 ‘(The Athenians) completely abandoned the Ionians, (and) although Aristagoras appealed to them many times through messengers, they said that they would not help them.’ 5.103.4

The Athenians have abandoned the Ionians and Aristagoras appeals to them to reconsider, but the Athenians refuse. The pronominal clitic *σφι* is the object of *τιμωρήσειν*. Here it bears no thematic relationship with *ἔφασαν* and accordingly shows up second only in the embedded clause. This is the same pattern of clitic placement that we would expect if the embedded clause were marked with an overt lexical complementizer:

- (9.8) οἱ δὲ ἔφραζον ὡς=**σφι** θεὸς εἶη φανείς διὰ χρόνου πολλοῦ ἐωθῶς ἐπιφαίνεσθαι καὶ ὡς ἐπεὰν φανῆι τότε πάντες Αἰγύπτιοι κεχαρηκότες ὀρτάζοιεν.  
 ‘They said that the god appeared to them, though he usually shows up only at long intervals, and then all the Egyptians celebrate joyously, as (they do) whenever he appears.’ 3.27.11

Here, as expected, the (Experiencer) argument *σφι* of *εἶη φανείς* shows up second within the embedded clause.

The generalization in (9.5) is supported by a wealth of examples; in all of the following cases, the pronoun bears a thematic relationship exclusively with the embedded verb (see also 3.118.7):

- (9.9) ὁ μὲν δὴ Συλοσῶν ἠπίστατο (τοῦτό=**οἱ** ἀπολωλέναι δι' εὐηθείην).  
 ‘Syloson knew that this had been lost to him on account of good-heartedness.’ 3.140.1
- (9.10) οἱ δὲ ὡς ἐπύθοντο, Ποσειδέωνι Σωτῆρι εὐξάμενοι καὶ σπονδὰς προχέαντες τὴν ταχίστην ὀπίσω ἠπείγοντο ἐπὶ τὸ Ἄρτεμισιον, ἐλπίσαντες (ὀλίγας=τινάς=**σφι** ἀντιζόους ἔσεσθαι νέας).  
 ‘When they [= Hellenes] found out, praying to Poseidon the Savior and pouring libations, they hastened back to Artemision immediately, hoping that there would be some few ships opposing them.’ 7.192.8
- (9.11) καταστήσας δὲ τὰς ἀρχὰς καὶ ἄρχοντας ἐπιστήσας ἐτάξατο (φόρους=**οἱ** προσιέναι), κατὰ ἔθνεά τε καὶ πρὸς τοῖσι ἔθνεσι τοὺς πλησιοχώρους προστάσων, καὶ ὑπερβαίνων τοὺς προσεχέας τὰ ἐκαστέρω ἄλλοισι ἄλλα ἔθνεα νέμων.

‘Having set up the provinces and putting governors in charge of them he arranged that tribute be sent to him, organizing it according both to tribes and the neighbors by the tribes, and going beyond the nearby ones, assigning the more distant tribes to different governors.’ 3.89.4

## 1.2 Alternation in Impersonal Constructions

Impersonal constructions offer further evidence for the generalization in (9.5): if there is a thematic relationship between the clitic pronoun and the main (impersonal) verb, the clitic will surface second in the matrix clause. If, on the other hand, the thematic relationship is between the pronoun and the embedded verb, then it will surface second in the embedded clause.<sup>207</sup> The following two examples illustrate these patterns:

### *Thematic Relationship with Matrix Verb*

- (9.12) Κώης ὁ Ἐρξάνδρου, στρατηγὸς ἐὼν Μυτιληναίων, ἔλεξε Δαρείῳ τάδε, πυθόμενος πρότερον, εἶ-οἶ φίλον εἶη γνώμην ἀποδέκεσθαι παρὰ τοῦ βουλομένου ἀποδείκνυσθαι.  
 ‘Koes son of Erxander, who was a general of the Mytilenaeans, said the following to Darius, having inquired first, if it were dear to him to receive an opinion from anyone who wanted to offer one.’ 4.97.7

### *Thematic Relationship with Complement Infinitival Phrase*

- (9.13) οἱ δὲ δὴ ἱερεῖς οὐδὲ ὀρῶντες ἀνέχονται, νομίζοντες οὐ καθαρὸν (εἶναί=μιν ὄσπριον).  
 ‘But the priests do not tolerate even seeing (them), thinking that it is not clean that it is pulse.’ 2.37.18

In (9.12), οἶ is assigned a thematic role by the phrase φίλον εἶη, and therefore occurs second within the matrix domain. In (9.13), by contrast, the pronoun μιν is assigned a thematic role by the verb εἶναι, and does not bear a thematic relationship with νομίζοντες or καθαρὸν. Before moving on, it is worth noting that the clitic pronoun can precede the impersonal construction, as οἶ precedes φίλον εἶη in (9.12) (see also 4.43.11, 6.117.10).

As the evidence from impersonal verbs shows, there are two separate domains in which second-position clisis takes place. Further evidence for this claim comes from split enclisis:

- (9.14) (ἐπὶ μέντοι τοῖσι κατήκουσι πρήγμασι). (δοκέει=μοι). (αὐτὸν=μέν=σε ἀπελάνειν ὀπίσω).  
 ‘Given the present circumstances, it seems best to me that you yourself

<sup>207</sup> 2P with impersonal verbs: 1.123.16, 1.209.11, 3.124.3, 3.154.1, 4.43.11, 4.79.1 (with dislocated adv.), 4.81.20, 4.97.7(?), 4.118.4(?).

Here *μοι*, which is thematically interpreted with the matrix verb, appears second in that domain, while *σε*, which is thematically interpreted with the embedded verb, appears second in the embedded domain. (The phrase *ἐπὶ μέντοι τοῖσι κατήκουσι πράγμασι* is a preposed framing expression.)

The following example demonstrates that with impersonal verbs, the matrix and embedded clauses are each separate domains for case-assignment:

- (9.15) οὐ-γάρ-οἱ<sub>i</sub> λυσιτελέειν τῶν ἑωυτοῦ ἐξημεληκότα<sub>i</sub> τοῖσι πέλας δι’ ἡμέρης  
δικάζειν.  
‘For it no longer benefited him that he judge cases the whole day for his  
neighbors, and neglect his own affairs.’ 1.97.5

Although the pronoun *οἱ* and the participle *ἐξημεληκότα* are co-referent, they nevertheless are assigned different cases: *οἱ* is marked with the dative since it is the Experiencer argument of *λυσιτελέειν*, while *ἐξημεληκότα* is in the accusative since it is the subject accusative of *δικάζειν*.

## 2 Shared Thematic Relationship (Object-Control Predicates)

In this section, we observe cases in which a clitic pronoun bears a thematic relationship with both the matrix predicate and the embedded predicate. When there is a shared thematic relationship of this type, the clitic surfaces second within the matrix clause:

- (9.16) ἐγώ-σε ὦν μετέρχομαι τῶν θεῶν εἰπεῖν τῶληθές.  
‘I beg you, by the gods, to tell the truth.’ 6.68.9<sup>208</sup>

The matrix verb *μετέρχομαι* selects two complements, a direct object Theme, and a Goal infinitival complement. In (9.16) the pronoun *σε* is the Theme of the matrix verb *μετέρχομαι* (i.e., the one being begged), as well as the Agent of the embedded predicate *εἰπεῖν* (i.e., the one who is to tell the truth). In terms of grammatical relations, the pronoun is the direct object of *μετέρχομαι* and, via PRO, the subject of *εἰπεῖν*:

- (9.17) [I beg you<sub>i</sub>]<sub>Matrix</sub> [PRO<sub>i</sub> tell the truth]<sub>Embedded</sub>

Since *you* of the matrix clause controls the referent of the subject pronoun of the embedded clause (here represented by PRO, known as ‘big pro’), *beg* is referred to as an object-control verb. On the issues of control and raising more generally, see Postal (1974); Jackendoff and Culicover (2000); Davies and Dubinsky (2004).

<sup>208</sup> Cf. 7.11.3, 8.65.26, 8.143.14.

A crucial property of this construction, and one that will play a significant role below in section four, is the direct thematic relationship between the matrix verb and the pronoun. In (9.17), Demaratos has come to ask his mother about his paternity: he beseeches her face-to-face. Below we will see cases in which there is no direct thematic relationship between the matrix object and another argument; in such a case, the clitic pronoun surfaces second in the embedded clause.

The following examples further illustrate this pattern (the relevant matrix verb is in each case underlined):

- (9.18) εἴ τοι ἡ ὄψις τοῦ ἐνυπνίου μὴ ἐναργῆς οὕτω ἐφάνη, εἶχες ἂν τὴν ἀρχαίην γνώμην, οὐκ ἐῶν=με στρατεύεσθαι ἐπὶ τὴν Ἑλλάδα, ἢ μετέστης ἄν;  
 ‘If the vision of the dream had not been so vivid, would you have held to your original opinion, not letting me campaign against Greece, or would you have changed your mind?’ 7.47.6
- (9.19) οὐ=γὰρ=ἄν=οἱ πυραμίδα ἀνέθεσαν ποιήσασθαι τοιαύτην, ἐς τὴν ταλάντων χιλιάδες ἀναρίθμητοι ὡς λόγῳ εἰπεῖν ἀναισίμωνται.  
 ‘For they would not have attributed to her the construction of such a huge pyramid, for which almost innumerable thousands of talents have been spent.’ 2.134.7
- (9.20) Ξέρξης=δέ=οἱ οὐ συγγινώσκων λέγειν ἀληθέα, οὐκ ἐπιτελέσαντά γε τὸν προκείμενον ἄεθλον, ἀνεσκολόπισε, τὴν ἀρχαίην δίκην ἐπιτιμέων.  
 ‘Since Xerxes did not believe that he was telling the truth, and as he hadn’t fulfilled the assigned task, he impaled him, maintaining the original punishment.’ 4.43.27
- (9.21) δέσποτα, τίνα λέγεις λόγον οὐκ ὕγιέα, κελεύων=με δέσποιναν τὴν ἐμὴν θεήσασθαι γυμνήν.  
 ‘Master, what you are saying is not right—commanding me to view my mistress naked.’ 1.8.13

As we see from this sample, the verbs in this pattern are of two types, either manipulation verbs (ἔάω, κελεύω) or perception/cognition verbs (συγγινώσκω, ἀνατίθημι).

### 3 Subject-Control Predicates

In this section, we encounter the first ostensible exceptions to the generalization in (9.5). In the following examples, an object pronoun occurs second within the matrix domain, even though it bears a thematic relationship only with the embedded verb:

- (9.22) ...ἴνα=δὴ=μιν οἱ πολέμιοι ἐκπίπτοντες ἐκ τῆς τάξιος μετακινήσαι μὴ δυναίατο.

‘...in order that the enemies, when falling out from their ranks, should not be able to move him.’ 9.74.5

δύναμαι is referred to as a subject-control verb because its subject controls the referent of the embedded clause. Schematically thus:

(9.22.a) [The enemies<sub>i</sub> could not]<sub>Matrix</sub> [PRO<sub>i</sub> move him]<sub>Embedded</sub>

The pronominal object of the embedded clause (*him*) is thematically interpreted with the embedded verb (as a Patient), but bears no such thematic relationship with the matrix verb. In cases like (9.22), I will refer to the presence of μιν in the matrix clause as *object-raising*.

While the behavior of the clitic pronoun might be slightly surprising from the point of view of (9.5), it is not so cross-linguistically. For it is entirely de rigueur for a matrix verb and its complement infinitive to fall under one intonational contour: see Givón (2001: 55). Furthermore, from a syntactic perspective, one presumes that the infinitive is only a complement TP, and not CP. Accordingly, we are not dealing with a violation of (9.5) here: for the intraclausal coherence of the matrix verb and its infinitive complement is such that together they form one domain. This bond is determined by the lexical semantics of the matrix verb, which is a crucial point to bear in mind for the next section, where we return to the alternation of (9.1)-(9.2).

This construction is typically found with modal verbs (e.g., βούλομαι, ‘want’; ἐθέλω, ‘id.’; δύναμαι, ‘be able to’):

(9.23) (ἄνδρα Μιλήσιον ἀπικόμενον ἐς Σπάρτην)<sub>i</sub> (βούλεσθαί=**οἱ** ἐλθεῖν ἐς λόγους)<sub>i</sub>, προῖσχύμενον τοιάδε.  
 ‘A Milesian, who came to Sparta, wanted to talk to him [= Glaukos] and made the following offer.’ 6.86.α.17<sup>209</sup>

(9.24) ὁ δὲ Ἄρτάβαζος γνοὺς ὅτι εἰ<sub>p</sub>=ἐθέλει=**σφι** πᾶσαν τὴν ἀληθειήν τῶν ἀγώνων εἰπεῖν, αὐτός τε κινδυνεύσει ἀπολέσθαι καὶ ὁ μετ’ αὐτοῦ στρατός.  
 ‘Artabazos realized that if he wanted to tell them the whole truth of the contests, both he himself and the army with him would risk being killed.’ 9.89.7

<sup>209</sup> Cf. also with βούλομαι, 6.86.α.17, 7.28.7, 8.110.14, 2.141.16, 5.104.14 (where οὐ βούλομαι means ‘refuse’), 6.135.5. And with ἐθέλω, see 1.59.21, 2.13.17, 2.14.3, 5.50.12, 7.49.14, 7.168.20, 8.67.5, 9.89.7, 9.120.10; 2.47.6, 3.52.5, 9.16.12 are technically ambiguous but I think can still be classified with the other examples in this category.

- (9.25) (ἐπεὶ τοίνυν), (οὐ<sub>p</sub>-δύναμαι=**σε** πείθειν μὴ ἐκθεῖναι),, σὺ δὲ ὧδε ποίησον.  
 ‘In that case, since I cannot persuade you not to expose it, do it this way.’  
 1.112.9
- (9.26) (πρὸς ὧν δὴ τοῦτο τὸ κήρυγμα), (οὔτε=**τίς=οἱ** διαλέγεσθαι οὔτε οἰκίοισι  
 δέχεσθαι ἦθελε),.  
 ‘On account of this proclamation, no one was willing to converse with him  
 or let him in their homes.’  
 3.52.4
- (9.27) οὐ γὰρ ἔδεισά κω μὴ ἐσσωθέωμεν ὑπὸ Σκυθῶν μάχη, (ἀλλὰ μᾶλλον),  
 (μὴ<sub>p</sub>=οὐ<sub>p</sub>-δυνάμενοι=**σφέας** εὐρεῖν), πάθωμεν τι ἀλώμενοι.  
 ‘For I have never feared that we would be defeated by the Scythians in  
 battle, but rather that, not being able to find them, we would suffer as we  
 wandered around.’  
 4.97.16
- (9.28) ἡ γῆ ἥδε οὐκ ἡμετέρη ἐστί, (οὐδέ=**μιν** δυνησόμεθα ὑποχειρίην ποιήσασθαι),.  
 ‘This land is not ours, and we will not be able to subdue it.’  
 6.107.18

With verbs of wanting and wishing, object-raising also occurs with dative subjects of embedded predicates (see also 4.143.7, 9.109.6, 1.61.5, 1.3.10, 7.152.16; with ἐθέλω, 1.3.3, 3.65.27):

- (9.29) Κροῖσε, ἀναρτημένου σέο ἀνδρὸς βασιλέος χρηστὰ ἔργα καὶ ἔπεα ποιέειν,  
 αἰτέο δόσιν (ἦντινα<sub>p</sub>=βούλεαί=**τοῖ** γενέσθαι παραυτίκα),.  
 ‘Croesus, since you, (who are) of royal blood, are willing to do good deeds  
 and words, ask for whatever gift you want to acquire straightaway.’ 1.90.5

Dative τοῖ is the Experiencer (or perhaps Possessor; in traditional grammar, it would be labeled a dative of the possessor) argument of the embedded verb γενέσθαι, but does not occur second within the infinitival phrase (which would be after γενέσθαι itself), but rather second within the matrix clause.

#### 4 Alternation in the Position of Embedded Pronominal Clitics

Now that we have surveyed the more stable distributional patterns, we can return to the alternation observed at the beginning of the chapter in the position of embedded subjects. The alternation essentially obeys the generalization in (9.5), and is ultimately conditioned by the lexical semantics of the verb. When there is a thematic relationship between the matrix verb and the pronominal clitic, it will be placed second in the matrix clause. In the following sections, I investigate the alternation in clitic placement conditioned by the polysemy of the following verbs: πυνθάνομαι; ἐλπίζω; νομίζω; and the locutionary verb φημί.

## 4.1 Verbs of Perception and Cognition

Cognition and perception verbs typically involve a high degree of epistemic commitment to the embedded proposition; so Givón (2001b: 53). In spite of this general characteristic, such verbs do vary in the degree of their epistemic commitment, as the following pair with *πυνθάνομαι* reveals (I have tried to highlight this distinction in the examples with differing translations of the verb):

- (9.30) (*πυνθάνομαι*), (*ἐπιβουλεύειν=σε* *πρήγμασι* *μεγάλοισι*), (*καὶ* *χρήματα=τοὶ* *οὐκ* *εἶναι* *κατὰ* *τὰ* *φρονήματα*).  
'I hear that you are aiming at great things and that you don't have money for your plans.'  
3.122.14

- (9.31) (*πυθόμενος=δέ=σφραξ* *τὸν* *λαγὸν* *διώκοντας*), *εἶπε ἄρα* *πρὸς* *τοὺς* *περ* *ἐώθεε* *καὶ* *τὰ* *ἄλλα* *λέγειν*.  
'When he learned they were chasing the hare he said to the men whom he was accustomed to tell everything.'  
4.134.6

The subject can occur either second within the embedded clause, as in (9.30), or second within the matrix clause, as in (9.31). The difference in distribution is conditioned by the differential semantics of the matrix verb. In (9.30), the embedded clause contains a proposition that was heard, but not one that is necessarily true. By contrast, (9.31) presumes the truth of the embedded clause. Put differently, when *πυνθάνομαι* has a non-factive reading, the clitic subject of the embedded predicate surfaces second in the embedded clause. When it has a factive reading, it appears second within the matrix domain. (For the distinction between factive and non-factive, see Karttunen 1971; Givón 2001b: 154.)

The factive reading is the more common with *πυνθάνομαι*, and appears in all the remaining cases where the verb co-occurs with an embedded subject pronoun:

- (9.32) (*καὶ ἡ Ἄμηστρις*), (*πυνθάνεται=μιν* *ἔχουσιν*).  
'And Amestris, she, finds out that she [= Artaynte] is wearing it.'  
9.110.2

- (9.33) (*οἱ δὲ Πέρσαι*), (*πυθόμενοι=σφραξ* *προσπλέειν*), *ἀνήγον* *καὶ* *αὐτοὶ* *πρὸς* *τὴν* *ἡπειρον* *τὰς* *νέας* *τὰς* *ἄλλας*, *τὰς* *δὲ* *Φοινίκων* *ἀπῆκαν* *ἀποπλέειν*.  
'When the Persians learned that they were approaching, even they themselves brought all the rest of their ships to the mainland, while they let the Phoenician ones sail away.'  
9.96.5

- (9.34) (*καί=μιν* *Κροῖσος* *πυθόμενος* *τῶν* *Λυδῶν*), *τῶν* *ἐς* *τὰ* *χρηστήρια* *φοιτεόντων* *ἑωυτὸν* *εὖ* *ποιεῖν* *μεταπέμπεται* *ἐς* *Σάρδις*.  
'Once Croesus learned from the Lydians, who regularly visited the oracles, that he [= Alkmeon] was serving him well, he invited him to Sardis.'  
6.125.6



It is possible that this example belongs here as well, although it is not exactly clear how one should analyze the structure of such sentences (see section 6.4 below on interlacing):

- (9.35) ἐπεῖτε γὰρ τάχιστα=σε ἐπυθόμην ἐπὶ θάλασσαν καταβαίνοντα τὴν Ἑλληνίδα, βουλόμενός τοι δοῦναι ἐς τὸν πόλεμον χρήματα ἐξεμάνθανον, καὶ εὖρον λογιζόμενος ἀργυρίου μὲν δύο χιλιάδας εἰσάσας μοι ταλάντων, χρυσοῦ δὲ τετρακοσίας μυριάδας στατήρων Δαρεικῶν ἐπιδεούσας ἑπτὰ χιλιάδων.  
 ‘For as soon as I [= Pythius] found out that you [= Xerxes] were coming down to the Greek sea, since I want to give you money for the war, I made an inquiry, and found doing the calculations that I have two thousand talents of silver, four million Daric staters, lacking seven thousand.’
- 7.28.6

The exact same pattern (whereby the clitic occurs second in the matrix clause) is found with verbs that only license factive readings, such as μανθάνω (see also 1.68.6, 3.157.10, 4.166.9, 7.46.1):<sup>210</sup>

- (9.36) (ἔμαθον=δέ=σφραγας οἱ Φωκέες ὧδε ἀναβεβηκότας).  
 ‘The Phocaeans learned as follows that they [= Persians] had climbed up.’
- 7.218.1

We find the same consistent pattern with ὀρέω/ὀράω (see 3.52.7, 3.78.20, 3.128.13, 3.128.18, 4.79.21, 4.98.5, 5.29.3, 6.69.8, 6.119.6, 7.194.15, 7.236.4, 8.10.1, 8.87.18, 8.90.12, 8.97.9, 9.53.2, 9.55.2; 5.40.3 and 9.22.16 are ambiguous on account of interlacing).

A similar situation obtains with the verb ἐλπίζω, which encodes a spectrum of epistemic confidence from ‘hope’ to ‘expect.’ With the former meaning, an embedded subject surfaces second within the embedded clause:

- (9.37) τέσσερας μὲν δὴ παρήκε ἡμέρας, ἐλπίζων αἰεὶ=σφραγας ἀποδρήσεσθαι.  
 ‘He [= Xerxes] let four days go by, hoping all the while that they [= the Greeks] would just run away.’
- 7.210.2

The embedded proposition here describes an event that Xerxes wants to take place, but apparently does not have much reason to believe that it actually will, nor does he have much control over the situation. By contrast, when the matrix verb and embedded subject are coded as one intonational phrase, there is a higher degree of epistemic commitment (although not so high as to be factive), and the verb means ‘expect’ or ‘anticipate’ vel sim.:

<sup>210</sup> There is a glaring exception to this pattern that I cannot account for:

μαθὼν ὦν ταῦτά=μιν διανοούμενον ὁ Ὀροίτης πέμψας ἀγγελίην ἔλεγε τάδε.

‘Having learned that he was planning this, Oroites sent him a message and said the following.’

3.122.12

- (9.38) (ἐλπίζων=δέ=μιν ἀποθανέεσθαι ὁ ἀδελφεός), τῷ οὖνομα ἦν Λυκάρητος, ἵνα εὐπετεστέρως κατάσχηι τὰ ἐν τῇ Σάμῳ πρήγματα, κατακτείνει τοὺς δεσμώτας πάντας.  
 ‘Expecting him to die, his brother, whose name was Lykaretos, in order that he might control the affairs on Samos with less resistance, killed all the prisoners.’ 3.143.8

Here Lykaretos undertakes a set of actions in the belief that his brother will die. Presumably it is this belief, i.e. a high level of epistemic commitment, that in fact enables him to undertake these actions.

The following examples illustrate the verb with with the sense ‘hope’:

- (9.39) οἱ δὲ ὡς ἐπύθοντο, Ποσειδέωνι Σωτῆρι εὐξάμενοι καὶ σπονδὰς προχέαντες τὴν ταχίστην ὀπίσω ἠπείγοντο ἐπὶ τὸ Ἄρτεμίσιον, ἐλπίσαντες (ὀλίγας=τινάς=σφι ἀντιζόους ἔσεσθαι νέας).  
 ‘When they found out, praying to Poseidon the Savior and pouring libations, as quickly as possible they hurried back to Artemision, hoping that there would be only a few ships opposing them.’ 7.192.8
- (9.40) πρὶν μὲν νυν ἢ πυθέσθαι ἀνεκώχευε, θέλων εἰδέναι τὸ παρ’ Ἀθηναίων, ὁκοῖόν τι ποιήσουσι, καὶ οὔτε ἐπήμεινε οὔτε ἐσίνετο γῆν τὴν Ἀττικὴν, (ἐλπίζων), (διὰ παντὸς τοῦ χρόνου), (ὁμολογήσειν=σφέας).  
 ‘Before finding out, he held back, wanting to know (the decision) from the Athenians, what they would do, and he neither attacked nor harmed Attica, hoping that, through all this time, they would make an agreement.’ 9.13.6
- (9.41) οἱ δὲ Βαβυλώνιοι ὀρῶντες ἄνδρα τῶν ἐν Πέρσησι δοκιμωτάτων ῥινόσ τε καὶ ὠτων ἐστερημένον μάστιγι τε καὶ αἵματι ἀναπεφυρμένον, πάγχυ ἐλπίσαντες (λέγειν=μιν ἀληθέα), καὶ σφι ἦκειν σύμμαχον, ἐπιτρέπεσθαι ἔτοιμοι ἦσαν τῶν ἐδέετο σφέων.  
 ‘The Babylonians seeing a man who was one of the most esteemed men among the Persians, with his nose and ears cut off with a knife, and incarnadine with blood, completely hoping that he was telling the truth and that he had come to them as (their) ally, they were ready to offer him whatever he asked them.’ 3.157.3

The following illustrate the verb with the sense ‘expect’:

- (9.42) ταῦτα δὲ τὸ δεύτερον ἀπέστελλε προέχων μὲν τῶν Ἀθηναίων οὐ φιλίας γνώμας, (ἐλπίζων=δέ=σφεας ὑπήσειν τῆς ἀγνωμοσύνης), ὡς δοριαλώτου ἐούσης πάσης τῆς Ἀττικῆς χώρας καὶ ἐούσης ἤδη ὑπ’ ἐωυτῷ.  
 ‘He sent this off a second time, though aware in advance of the unfriendly

disposition of the Athenians, expecting them to let up on their stubbornness, since all of Attica was captured and now under his power.’

9.4.5

- (9.43) ὄρῳντες δέ σφεας οἱ τε ἄλλοι στρατιῳται οἱ Ξέρζεω καὶ οἱ στρατηγοὶ ἐπιπλέοντας νηυσὶ ὀλίγησι, πάγγυ σφι μανίην ἐπενείκαντες ἀνήγον καὶ αὐτοὶ τὰς νέας, (ἐλπίσαντές=σφεας εὐπετέως αἰρήσειν), οἰκότα κάρτα ἐλπίσαντες, τὰς μὲν γε τῶν Ἑλλήνων ὄρῳντες ὀλίγας νέας, τὰς δὲ ἑωυτῶν πλήθει τε πολλαπλησίας καὶ ἄμεινον πλεούσας.  
 ‘When the other soldiers and generals of Xerxes saw them sailing at them in only a few ships, thinking they were completely crazy they also brought out their ships, expecting to capture them easily, an entirely reasonable expectation, seeing that the ships of the Greeks were few, and their own many times in number and sailing better.’

8.10.4

- (9.44) ἅτε γὰρ ὀλίγων ἐόντων, (ἐλπίσαντές=σφεας κατατετρωματίσθαι τε), καὶ οὐκ οἴους τε ἔσεσθαι ἔτι χεῖρας ἀνταίρεισθαι συνέβαλλον.  
 ‘Since the Greeks were few in number, they [= the Persians] attacked, expecting them to be covered in wounds and that they would no longer be able to raise up their hands against them.’

7.212.5

- (9.45) ἀναμιμνήσκων σφέας τὸ χρηστήριον, τὸ οὐδαμὰ (ἤλπισαν=σφίσι οἱ Πελασγοὶ ἐπιτελέεσθαι),.  
 ‘Reminding them about the oracle, which the Pelasgians never expected to be fulfilled.’

6.140.7

The verb is also used with the sense ‘believe’; when it has this sense, the matrix verb is coded as one intonational phrase with its embedded predicate. This is exactly what we would expect, given that belief entails a high level of epistemic commitment:

- (9.46) Καμβύσης δὲ ἀκούσας ταῦτα [ἐκ] τοῦ κήρυκος (καὶ ἐλπίσας=μιν λέγειν ἀληθέα), αὐτὸς τε προδεδόσθαι ἐκ Πρηξάσπεος (πεμφθέντα γὰρ αὐτὸν ὡς ἀποκτενέοντα Σμέρδιν οὐ ποιῆσαι ταῦτα) βλέψας ἐς τὸν Πρηξάσπεα, “Πρηξάσπες,” ἔφη...  
 ‘Cambyses, once he heard these things from the herald, and believing him to be telling the truth that he himself was betrayed by Prexaspes (for he, although sent to kill Smerdis, did not do this), looking at Prexaspes, said “Prexaspes...”’

3.62.5

Thus the greater the epistemic commitment encoded by the matrix verb, the more likely it is that it will form one cohesive prosodic domain with the embedded predicate.

The semantic polysemy conditioning the position of clitics with νομίζω is slightly different. For the conditioning factor is not epistemic commitment, but rather cognition

versus evaluation. When νομίζω is used as a verb of cognition with the meaning ‘think, believe,’ the clitic surfaces second within the embedded clause:

- (9.47) γράφουσί τε δὴ καὶ γλύφουσι οἱ ζωγράφοι καὶ οἱ ἀγαλματοποιοὶ τοῦ Πανὸς τῷγαλμα κατὰ περ Ἑλληνας αἰγοπρόσωπον καὶ τραγοσκελέα, οὔτι τοιοῦτον νομίζοντες (εἶναί=**μιν** ἀλλ’ ὅμοιον τοῖσι ἄλλοισι θεοῖσι).  
 ‘Painters and sculptors paint and carve statuary of Pan just like the Greeks do, with the face of a goat and legs of a male goat, although not really believing that he looks like this, but rather is similar to the other gods.’ 2.46.7

- (9.48) ἐξηγεομένων δὲ τῶν Ἰχθυοφάγων τὸν κόσμον αὐτοῦ γελάσας ὁ βασιλεὺς καὶ νομίσας (εἶναί=**σφρα** πέδας), εἶπε ὡς παρ’ ἐωυτοῖσιν εἰσι ῥωμαλεώτεραι τουτέων πέδα.  
 ‘When the Fish-eaters explained the adornments made of it [= gold], the king laughed and thought that they were shackles, he said that among his people shackles are stronger than these.’ 3.22.9

By contrast, when it is used as an evaluative verb, the clitic surfaces second within the matrix clause:

- (9.49) (καί=**μιν** ἐνόμισε Δαρεῖος πάντων ἀνδρῶν δικαιοτάτον εἶναι), ὅσοι ἐκ τῆς Ἑλλάδος παρ’ ἐωυτὸν ἀνέβησαν.  
 ‘And Darius believed him to be the most just of all men who had ever come up to him from Greece.’ 6.24.3

- (9.50) οὐ μέντοι αὐτοὶ γε Κορίνθιοι ὁμολογέουσι, (ἀλλ’<sub>p</sub> ἐν<sub>p</sub> <sub>p</sub>=πρώτοισι=**σφέας** αὐτοὺς τῆς ναυμαχίης νομίζουσι γενέσθαι).  
 ‘The Corinthians themselves, however, do not agree, but think that they were themselves foremost in naval battle.’ 8.94.21

- (9.51) Πρήξασπες, (κοῖόν=**μέ**=τίνα νομίζουσι Πέρσαι εἶναι ἄνδρα), τίνας τε λόγους περὶ ἐμέο ποιεῦνται;  
 ‘Prexaspes, what kind of man do the Persians think I am and what do they say about me?’ 3.34.5

- (9.52) οὗτος δὴ ὢν ὁ Κανδαύλης ἠράσθη τῆς ἐωυτοῦ γυναικός, (ἐρασθεὶς δὲ), (ἐνόμιζέ=**οἱ** εἶναι γυναιῖκα πολλὸν πασέων καλλίστην).  
 ‘This Candaules fell in love with his wife, and since he was in love, he believed his wife to be the most beautiful woman of all by far.’ 1.8.2

This reading appears to involve direct perception between the matrix subject and the clitic pronoun. It is perhaps this direct thematic relationship that conditions the prosodic grouping, and thus clitic placement, of the pronoun.

The last verb to consider in this section is εὐρίσκω, which encodes a broader semantic spectrum than the verbs thus far considered. When it describes direct, co-temporal perception (on which see further Givón 2011b: 61), clitics will pattern as they do with ὀρέω/ὀράω.

- (9.53) πλέοντες δὲ ἐνθεῦτεν οἱ Πέρσαι καὶ διώκοντες Δημοκῆδεα ἀπικνέονται ἐς τὴν Κρότωνα. (εὐρόντες=δέ=μιν ἀγοράζοντα), ἄπτοντο αὐτοῦ.  
 ‘The Persians sailing from here and in pursuit of Democedes get to Kroton. They found him hanging out in the agora and seized him.’

3.137.2

By contrast, when perception of a situation is not co-temporal, the verb and embedded predicate form separate intonational phrases:

- (9.54) εὔρον γὰρ (ἀντιουμένην=σφι στρατιὴν οὐκ ὀλίγην),.  
 ‘For they [= Scythians] found that no small army was opposing them.’

4.1.13

Here I presume that what is being described is not the Scythians’ direct perception of a physical army in front of them, but rather the understanding that they were opposed by a large army. As such, it is equally possible that we could classify this as a verb of cognition, a sense which is described in the next paragraph.

εὐρίσκω can also be used as a verb of mental cognition. When the subject of the verb is more like an experiencer who undergoes a realization, the verb and the embedded clause fall under the same intonational phrase:<sup>211</sup>

- (9.55) ἀνακρεμασθέντος ὦν αὐτοῦ, λογιζόμενος ὁ Δαρεῖος (εὔρέ=οἱ πλέω ἀγαθὰ τῶν ἁμαρτημάτων πεποιημένα), ἐς οἶκον τὸν βασιλῆιον.  
 ‘After he had been hung, Darius considered and realized that more good things than faults had been done by him toward the royal house.’ 7.194.10

- (9.56) οὕτω μὲν Πέρσαι λέγουσι γενέσθαι, καὶ διὰ τὴν Ἰλίου ἄλωσιν (εὐρίσκουσι=σφίσι ἐοῦσαν τὴν ἀρχὴν), τῆς ἔχθρης τῆς ἐς τοὺς Ἕλληνας.  
 ‘The Persians say it happened thus, and they find their hatred for the Greeks begins with the destruction of Ilion.’ 1.5.2

- (9.57) μετὰ δὲ εὐφρόνη τε ἐγίνετο καὶ Ξέρξην ἔκνιζε ἡ Ἀρταβάνου γνώμη. (νυκτὶ δὲ βουλήν διδοὺς πάγχυ), εὐρισκέ=οἱ οὐ πρῆγμα εἶναι στρατεύεσθαι ἐπὶ τὴν Ἑλλάδα.  
 ‘Afterwards, night came and the argument of Artabanos was getting to

<sup>211</sup> It is remarkable that each of these examples involves a dative pronoun. One might wonder whether this is driven by the practically reflexive sense of εὐρίσκω in this class (cf. German *ich finde mich*). I am inclined to doubt this possibility, but one would have to investigate a much larger sample size before anything reliable could be said.

Xerxes. Given over to deliberation all night, he was realizing that it was not wise for him to march against Hellas.’ 7.12.3

By contrast, when the subject of εὐρίσκω behaves more like an agent who is actively contemplating a situation, then the matrix and embedded clauses are coded as separate intonational phrases:

(9.58) εὐρίσκω δὲ (ᾧδ’=ᾗν γινόμενα ταῦτα), εἰ λάβοις τὴν ἐμὴν σκευὴν πᾶσαν καὶ ἐνδὺς μετὰ τοῦτο ἴζοιο ἐς τὸν ἐμὸν θρόνον, καὶ ἔπειτα ἐν κοίτῃ τῇ ἐμῇ κατυπνώσειας.  
‘I think that these things would happen, if you were to take all my accoutrement and, once you put it on, to sit on my throne, and then you were to sleep in my bed.’ 7.15.14

(9.59) Κῦρος δὲ αὐτίκα ἀπελαύνοντος Κροΐσου μετὰ τὴν μάχην τὴν γενομένην ἐν τῇ Πτερίῃ, μαθὼν ὡς ἀπελάσας μέλλοι Κροΐσος διασκεδᾶν τὸν στρατόν, βουλευόμενος εὕρισκε (πρῆγμά=οἱ εἶναι ἐλαύνειν), ὡς δύναιτο τάχιστα ἐπὶ τὰς Σάρδις, πρὶν ἢ τὸ δεύτερον ἀλισθῆναι τῶν Λυδῶν τὴν δύναμιν.  
‘Cyrus immediately, while Croesus was driving back after the battle that took place in Pterie, having learned that, once Croesus drove back, he was going to disband his army, he thought it over and realized that it was best for him to drive to Sardis as fast as he could, before the forces of the Lydians could be assembled again.’ 1.79.3

This last example forms a near-minimal pair with (9.57) above. Here Cyrus is deliberately and actively strategizing (note βουλευόμενος) about how to win a war; he is formulating a prediction. εὐρίσκω in this sense overlaps semantically with λογίζομαι, which exhibits the same pattern of clitic placement:

(9.60) οὕτω τε ἐλογίζετο (κατύπερθέ=οἱ τὰ πρήγματα ἔσεσθαι τῶν Ἑλληνικῶν).  
‘And thus he reasoned that he would have the upper hand over the Greeks.’ 8.136.16

By contrast in (9.57) above, Xerxes appears to be at the mercy of his worry and misgiving: his change-of-mind is something that he undergoes, rather than something that he is in control of. Besides the position of the clitic, there are further circumstantial hints in this direction. One is the verb ἔκνιζε, which denotes Xerxes’ agitation. The second is the dream that he later has, which tells him to maintain his original plan: again he is depicted as at the mercy of nocturnal vision. And lastly, it fits the characterization of Xerxes as somewhat unstable in his purpose (see esp. 7.13 on this point).

### 4.3 φημί

We turn now to consider the alternation in clitic placement found with the locutionary verb φημί. Typologically, complements of locutionary verbs exhibit less temporal and deictic integration with the matrix clause than do complements of locutionary verbs (Givón 2001b: 53). Locutionary verbs can often develop a wide range of senses and functions: see Goossens (1985); Traugott and Dasher (2001: 73-79); for the diversity of the grammaticalization paths of ‘say,’ see Heine and Kuteva (2002: 325).

The basic meaning of φημί is ‘say,’ and it can select either for an accusative noun phrase, a complement clause introduced by an overt complementizer, or an infinitive complement clause. It is the last of these that concerns us here. In particular, what we need to explain is the alternation in the position of the embedded accusative subject, which we observed in (9.1) and (9.2) above, repeated here:

- (9.61) ταῦτα ἀκούσας ὁ Καμβύσης ἔφη (ψεύδεσθαί=**σφρα**ς), καὶ ὡς ψευδομένους θανάτῳ ἐζήμιου.  
 ‘When he<sub>i</sub> heard these things, Cambyses<sub>i</sub> said that they<sub>k</sub> [= Egyptians] were lying and on the ground that they were lying he<sub>i</sub> punished (them<sub>k</sub>) with death.’ 3.27.13

- (9.62) ὁ δὲ ἄλλο μὲν οὐδὲν ἀμείβεται τὸν πατέρα, (ἔφη=**δέ=μιν** ἱρὴν ζημίην ὀφείλειν τῷ θεῷ ἐωυτῷ), ἐς λόγους ἀπικόμενον.  
 ‘And he<sub>i</sub> [= Lykophron] offers no other answer to his father<sub>k</sub> [=Periandros, his father], but he<sub>i</sub> said he<sub>k</sub> owed a sacred fine to the god, since he<sub>k</sub> spoke to him<sub>i</sub>.’ 3.52.22

The alternation is conditioned by the semantics of the verb. In (9.61), φημί encodes a representative speech act (see Searle 1975): the narrator reports a proposition whose truth the subject of ἔφη has committed himself to. Cambyses characterizes the proposition of the Memphis governors as false, and moreover claims that they too know that it is false. As we will see, this use of φημί entails the “loosest” cohesion between matrix and embedded clause, which in turn is responsible for clitic placement.

By contrast, in (9.62), the subject of ἔφη is not describing a situation: he is, instead, creating one. Through his utterance, Lykophron imposes on his father Periandros a sacred fine. (Earlier in this section, his father declared that anyone who talked to his son would owe a sacred fine to Apollo.) When Lykophron utters the original direct statement (i.e., ἱρὴν ζημίην ὀφείλεις τῷ θεῷ), he brings into reality a new state of affairs in which his father owes a fine to Apollo; he is essentially fining his father. This situation raises a question of whether his son has the necessary authority to enact this speech act. Indeed, he probably does not, and for this reason the speech act was probably infelicitous and void. However, Periander’s response to Lycophron’s response leaves no doubt that this is what he was attempting: for his father banishes him to Corcyra, presumably on account of his incorrigible insolence. Thus, the speech event

here differs starkly from that in (9.61) because it is not a description or characterization of a state of affairs: for this particular state of affairs does not exist to be described before Lykophron enacts it.

We can capture this distinction nicely in terms of direction-of-fit (see Searle and Vanderveken 1985). In the (9.61)-type, the sentence has a word-to-world fit. The subject of the locutionary verb commits himself to a description of reality. By contrast, in the (9.62)-type, we have a world-to-word-to-world direction of fit. In uttering the speech act, the world is altered.

We can illustrate this difference even more clearly with the following near-minimal pair:

- (9.63) τῆι δέ σεο μάλιστα κατάπτονται οἱ ἐχθροί, λέγοντες ὡς αὐτὸς ὁ Ἄριστων, ὅτε αὐτῷ σὺ ἠγγέλθης γεγενημένος. πολλῶν ἀκούοντων (οὐ<sub>p</sub>-φήσειέ-σε ἐωυτοῦ εἶναι)<sub>i</sub>, τὸν χρόνον γάρ, τοὺς δέκα μῆνας, οὐδέκω ἐξήκειν. αἰδρεῖται τῶν τοιούτων κείνος τοῦτο ἀπέρριψε τὸ ἔπος.  
 ‘In this your enemies assail you, saying that Ariston himself, when your birth was announced to him (lit. ‘you were announced as born to him’). With many present to hear it, he said that you were not his, since the time, the ten months, had not yet elapsed. He blurted out his statement in ignorance of such things.’ 6.69.23

Demaratos’ mother is explaining to her son that his father is in fact Ariston, who had denied that he was Demaratos’ father. In declaring that the child is not his, he alters reality: the child goes from having a father to not having a father, while Ariston goes from being a father to not being a father.

In the following passage, we encounter a subtle difference:

- (9.64) μετὰ δὲ τὴν κατωμοσίην ἐδίωκε ἀνασώζων ἐκεῖνο τὸ ἔπος, τὸ εἶπε Ἄριστων τότε ὅτε οἱ ἐξήγγειλε ὁ οἰκέτης παῖδα γεγονέναι, ὁ δὲ συμβαλλόμενος τοὺς μῆνας ἀπώμοσε, φᾶς (οὐκ<sub>p</sub>-ἐωυτοῦ=μιν εἶναι)<sub>i</sub>.  
 ‘After the oath he [= Kleomenes] prosecuted him [= Demaratos], recalling that statement, which Ariston made when his servant announced to him that a child was born, and counted the months and swore an oath, saying that he was not his.’ 6.65.16

Ariston now avers that Demaratos is not his son. While φᾶς οὐκ ἐωυτοῦ=μιν εἶναι is almost synonymous οὐ<sub>p</sub>-φήσειέ-σε ἐωυτοῦ εἶναι, at the speech-act level they are very different. For now Demaratos is testifying to the falsity of the proposition that Demaratos is the son of Ariston. He is characterizing a state of affairs, just as Cambyses did with the Memphis governors.

In the following example, we find the declarative use of φημί in the context of oracular pronouncement, which is just what we would expect:



- (9.65) ἀμείβεται Κροῖσος τοῖσδε. “ὦ παῖ, οὔτε δειλίην οὔτε ἄλλο οὐδὲν ἄχαρι παριδῶν τοι ποιέω ταῦτα, (ἀλλά μοι ὄψις ὄνειρου ἐν τῷ ὕπνῳ ἐπιστᾶσα), (ἔφη=**σε** ὀλιγοχρόνιον ἔσεσθαι),, ὑπὸ γὰρ αἰχμῆς σιδηρῆς ἀπολέεσθαι.”  
 ‘Croesus answers with the following. “My son, I am doing these things, not because I have witnessed in you cowardice or any other fault, but a dream that appeared to me in my sleep said that you will be short-lived, since you will be killed by an iron spear.”’ 1.38.3

The following examples all illustrate φημί in its representative sense:

- (9.66) γράψας ἐς βυβλίον τὰ ἐβούλετο, ἀλίην τῶν Περσέων ἐποιήσατο. μετὰ δὲ ἀναπτύξας τὸ βυβλίον καὶ ἐπιλεγόμενος ἔφη (Ἄστυάγεά=**μιν** στρατηγὸν Περσέων ἀποδεικνύναι),.  
 ‘He<sub>i</sub> [= Cyrus] wrote down on a scroll what he<sub>i</sub> wanted, and assembled the Persians. After unrolling the scroll and reading it off, he<sub>i</sub> said that Astyages appointed him<sub>i</sub> leader of the Persians.’ 1.125.5
- (9.67) ...φᾶς (οὗ=**οἱ** πεποιῆσθαι ἔργα), οἷά περ Σεσώστρι τῷ Αἰγυπτίῳ.  
 ‘...saying that the deeds that have been done by him are not as (good) as (the deeds that have been done by) Sesostris the Egyptian.’ 2.110.7
- (9.68) ...φᾶς (ἄλλα=**οἱ** πολλαπλήσια ἀντιδώσειν),.  
 ‘...saying that he will give him [= Democedes] in return manifold other stuff.’ 3.135.11
- (9.69) ...φάντα (συντυχεῖν=**τέ=οἱ** ἰόντι ἐπὶ Κύζικον), καὶ ἐς λόγους ἀπικέσθαι.  
 ‘...saying that he just met with him [= Aristeas] on his way to Cyzicus and talked to him.’ 4.14.10
- (9.70) δοκέειν γὰρ ἔφασαν καὶ τῶν δημοσίων (οὕτω=**δὴ=σφραεας** ἐπιμελήσεσθαι), ὥσπερ τῶν σφετέρων.  
 ‘For they said that they thought that they would care for the public affair just as (they cared for) their own.’ 5.29.11
- (9.71) φάναι δὲ (Καρίη=**μιν** γλώσσηι χρᾶν),.  
 ‘And he [= Mys] said that it [= the oracle] prophesied in the Carian language.’ 8.135.15
- (9.72) ...φᾶς (ἄμεινόν=**μει** ἀκούσεσθαι),.  
 ‘...saying that I will have a better reputation.’ 9.79.5

Thus far we have observed a contrast between the use of φημί as a representative and as a declarative. The verb has a further dimension to it, however, as it is also used as an evaluative-cognition verb (cf. *LSJ* s.v. II.b.: “since what one says commonly expresses a

belief or opinion, *think, deem, suppose.*”) In this sense, clitics pattern with φημί just as they did above with evaluative νομίζω (see also 1.138.7, 6.82.2):

- (9.73) (φασί=δέ=μιν Δελφοὶ Θεοδώρου τοῦ Σαμίου ἔργον εἶναι),, καὶ ἐγὼ δοκέω.  
‘The Delphians claim it belongs to Theodorus the Samian; I think so too.’  
1.51.10
- (9.74) (φασί=δέ=μιν ἐς τὸν ἥλιον ἀμαρτόντα τι ταῦτα ἔχειν),.  
‘They say that he has this [= leprosy or “the white sickness”] because he did wrong against the sun.’  
1.138.7
- (9.75) (ἔφασαν=δέ=μιν Αἰγύπτιοι τοῦ πρώτου βασιλεύσαντος Αἰγύπτου παῖδα μουνογενέα γενέσθαι),.  
‘The Egyptians said he was the only son of the first Egyptian king.’  
2.79.10
- (9.76) οἱ δὲ Αἰγύπτιοι (ἔφασάν=σφραα οὕτω τιθέντας), πάντως τοῦ δικαίου ἡμαρτηκένα.  
‘The Egyptians said that they had completely missed justice setting (the games) up thus.’  
2.160.16
- (9.77) ...(φάμενοί=μιν ἐκ ταύτης δὴ τῆς Ἀπρίεω θυγατρὸς γενέσθαι),.  
‘...saying he [= Cyrus] was born from this daughter of Apries.’  
3.2.1
- (9.78) (οἱ=μὲν=δὴ=μιν φασί), τοῦτο ἀκούσαντα καὶ ἀλγήσαντα τῶι ὀνειδίει ἐπιθυμῆσαι οὐκ οὕτω τὸν εἶπαντα ταῦτα τίσασθαι ὡς Πολυκράτεια πάντως ἀπολέσαι, δι’ ὄντινα κακῶς ἤκουσε.  
‘Some say that he, hearing this and offended by the reproach, desired not so much to punish the one who said it, as to utterly destroy Polykrates, on account of whom his reputation suffered.’  
3.120.16
- (9.79) ἦν δὲ μὴ ἀποθάνῃ, αἰτιῶνται αὐτὸν τὸν ἄγγελον, (φάμενοί=μιν ἄνδρα κακὸν εἶναι),, αἰτιησάμενοι δὲ τοῦτον ἄλλον ἀποπέμπουσι.  
‘If he does not die, they blame the messenger himself, deeming him to be a bad man, and after blaming him they send another.’  
4.94.12
- (9.80) οἱ δὲ Αἰγινῆται (ἔφασαν=σφίσι=τε καὶ Ἀθηναίοισι εἶναι οὐδὲν πρῆγμα),.  
‘The Aiginetans didn’t acknowledge any relationship between themselves and the Athenians.’  
5.84.9
- (9.81) Λευτυχίδης μὲν γὰρ ἔφη ἐν τοῖσι νείκεσι λέγων κυέουσάν σε ἐκ τοῦ προτέρου ἀνδρὸς οὕτω ἐλθεῖν παρὰ Ἀρίστωνα. οἱ δὲ καὶ τὸν ματαιότερον λόγον λέγοντες (φασί=σε ἐλθεῖν παρὰ τῶν οἰκετέων τὸν ὀνοφορβόν),, καὶ ἐμὲ ἐκείνου εἶναι παῖδα.

‘For Leotychides said in our disputes that, pregnant by your previous husband, you came to Ariston. Others, who tell a more foolish story, portray you as visiting the stable boy from the domestic staff, and (say) that I am his son.’ 6.68.7

- (9.82) τὰ δὲ Ἀβδηρα ἴδρυται πρὸς τοῦ Ἑλλησπόντου μᾶλλον ἢ τοῦ Στρυμόνος καὶ τῆς Ἡϊόνος, (ὄθεν=δή=μιν φασὶ ἐπιβῆναι ἐπὶ τὴν νέα).  
 ‘Abdera is situated nearer to the Hellespont than to the Strymon and Eion, where they say he boarded the ship.’ 8.120.9

We see further the affect of polysemy on clitic position, when we consider another meaning of φημί, that of ‘agree, consent,’ as well as its antonym, ‘refuse,’ which arises under co-occurrence with the negative οὐ. When φημί has one of these two readings, it is a control verb, and the clitic pronoun again falls second within the matrix clause:

- (9.83) ὁ δὲ παῖς (οὐ<sub>p</sub>-γὰρ<sub>p</sub>=ἔφη=οἱ συμπλεύσεσθαι)<sub>i</sub>; τοιγαρῶν ἔφη αὐτὸν καταλείψειν ὄϊν ἐν λύκοισι.  
 ‘His son refused to sail with him; so he would leave him as a sheep among wolves, he said.’ 4.149.1

- (9.84) Κῦρος δὲ ἠσθεὶς τῇ ὑποθήκῃ καὶ (ὑπεὶς τῆς ὀργῆς), (ἔφη=οἱ πείθεσθαι)<sub>i</sub>.  
 ‘Cyrus, pleased with the advice and having let go of his anger, agreed to obey him.’ 1.156.8

It is possible that the following example belongs here as well:

- (9.85) καὶ νῦν ἦν τις εἴρηται περὶ Ἀναχάρσιος, (οὐ=φασί=μιν Σκύθαι γινώσκειν)<sub>i</sub>, διὰ τοῦτο ὅτι ἐξεδήμησέ τε ἐς τὴν Ἑλλάδα καὶ ξεινικοῖσι ἔθεισι διεχρήσατο.  
 ‘And now, if anyone asks about Anacharsis, the Scythians refuse to acknowledge him, for this reason, that he went abroad to Greece and practiced foreign customs.’ 4.76.20

Another possibility is that οὐ=φασί=μιν Σκύθαι γινώσκειν means ‘they say that they don’t know him,’ in which case we would be dealing with the representative sense of φημί, and (9.85) would then be exceptional. But it is not yet possible to decide this issue: for one needs to investigate the semantics of enclitic forms of φημί. It may be the case that the alternations observed above for non-reduced φημί may not exist with the reduced version.

The alternations attested with φημί offer further support for the view that the position of clitics vis-à-vis the matrix or embedded clauses is conditioned by the semantics of the matrix verb.

## 5 The Distribution of ἄν

Thus far my discussion has focused on the distribution of pronominal clitics in relation to embedded complements. The reason for this is that there is so much more data available. Such alternations are simply far less frequent when it comes to ἄν. Nonetheless, the patterns that we established above with the pronominal clitics hold in the same way for ἄν. So in the following examples the particle is canonically positioned second in the clause in which it is interpreted:

- (9.86) δοκέειν ἐμοὶ (οὐκ-ἄν=σφι Σπαρτιήτας μῆνιν οὐδεμίαν προσθέσθαι).  
 ‘It seemed to me that the Spartans would not have laid any wrath on them.’ 7.229.16

Cases of clitic climbing are decidedly rare; the following is perhaps the only example from Herodotus:

- (9.87) τοῦτο εἶπε τῶν τις Βαβυλωνίων, οὐδαμὰ (ἐλπίζων=ἄν ἡμίονον τεκεῖν).  
 ‘The preceding is what one of the Babylonians said, since in no way did he expect that a mule would give birth.’ 3.152.1

The behavior of ἄν here parallels that of clitic pronouns above, when the verb ἐλπίζω is used in the sense of ‘expect.’

I would like at this point to step outside my corpus momentarily to comment on an issue that has arisen in the literature on Pindar *Py.* 3.1-3, specifically the opening verses:

- (9.88) ἦθελον Χείρωνά=κε Φιλλυρίδαν,  
 εἰ χρεῶν τοῦθ’ ἀμετέρας ἀπὸ γλώσσας κοινὸν εὐξασθαι ἔπος,  
 ζῶειν τὸν ἀποιχόμενον...  
 ‘I wish that Chiron the son of Philyra—  
 if it were fitting to utter this common prayer from our tongue—  
 were alive, the departed...’

I follow Pellicia (1987: 46) in treating the εἰ-clause as parenthetic, and not the protasis of a conditional. I also agree with Pellicia (1987: 48-49) that the opening line is semantically a clause of unattainable wish. But I see no reason to follow him in the claim that ἦθελον and κε belong together, as though ἦθελον ἄν of Attic. Simply put, the complement clause bears irrealis semantics, and therefore there is nothing remarkable about the position of κε in (9.88) in this regard.<sup>212</sup> Indeed, what is remarkable is the later Attic construction of ἦθελον ἄν plus complement infinitive clause. But even this is unsurprising in a diachronic light: with a reduction in the

<sup>212</sup> If this is the correct, then it would call into question the remark of Dawe ad Soph. *OT* 1348, ὤς=σ’ ἠθέλησα | μηδέ=γ’=ἄν γνῶναι ποτε, that “ἄν goes with ἠθέλησα.”

degree of complementation between the matrix and complement clauses, the modal particle would end up in the matrix clause, to the point where ἤθελον ἄν was considered a unitary irrealis-wish marker. There is also the possibility that the position of κε is meant to reflect the ineffectual nature of a desire that someone be brought back to life.

## 6 Outstanding Issues

While the above account offers some evidence for the claim that prosodic phrasing, and consequently clitic distribution, is conditioned by the semantics of the matrix verb, there are some outstanding issues that need to be dealt with.

### 6.1 Further Alternations

Perhaps the most pressing issue is that this account needs to be tested against a much wider range of data. In particular, one class of alternations that was not discussed above involves that found with manipulation verbs, in particular those with the meaning COMMAND. By far the most frequent pattern is for a pronominal clitic recipient of the command to occur second within the matrix clause, as illustrated here with the verb ἐντέλλω:

- (9.89) καλέσας δὲ Μαζάρεα ἄνδρα Μῆδον, (ταῦτά=τέ=οἱ ἐνετείλατο προειπεῖν),  
 Λυδοῖσι τὰ ὃ Κροῖσος ὑπετίθετο.  
 ‘He summoned Mazares, a Mede and ordered him to announce to the  
 Lydians what Croesus advised.’ 1.156.9

This is in fact what we expect, for cross-linguistically manipulation verbs and their predicates are coded within one intonational contour; see Givón (2001b: 41). Nevertheless, it is possible for the recipient argument to surface second in the embedded clause, in which case it is assigned accusative case (cf. Lys. 16.13 cited at *LSJ* s.v. φημί IV.):

- (9.90) ἐνθεῦτεν δὲ ὀρμώμενος ἔπεμπε κατὰ τὰ χρηστήρια ἄνδρα Εὐρωπαϊά γένος, τῷ  
 οὖνομα ἦν Μῦς, ἐντειλάμενος (πανταχῆι=μῖν χρησόμενον ἐλθεῖν),.  
 ‘Having set off from there, he [= Mardonius] sent a man of European  
 descent to the oracles, whose name was Mus, with the command that he  
 go everywhere to inquire of the oracle.’ 8.133.4

As we expect given the thematic relationship between the issuer of the directive and its recipient, the first pattern far outstrips the second (1.123.18, 1.208.7, 2.121.γ.7, 3.135.4, 3.137.17, 3.147.3, 5.2.7, 5.25.11, 7.210.5, 8.140.24, 9.18.10) versus (1.117.16, 5.107.2).

We observe the same alternation with κελεύω:

- (9.91) ἐπεῖτε δὲ καὶ ταῦτα ἔκαμον ποιεῦντες (ὃ γὰρ δὴ νεκρὸς ἄτε τεταριχευμένος  
 ἀντεῖχέ τε καὶ οὐδὲν διεχέετο), (ἐκέλευσέ=μῖν ὃ Καμβύσης κατακαῦσαι),  
 ἐντελλόμενος οὐκ ὄσια.

‘When they also grew tired of doing this (for since the body was embalmed, it was resistant and didn’t break up at all), Cambyses ordered them to burn it, enjoining unholy (acts).’ 3.16.9<sup>213</sup>

(9.92) τοςόνδε μέντοι ἐνετείλατό σφι Δημοκῆδης ἀναγομένοισι, κελεύων εἰπεῖν=**σφραγ** Δαρείω ὅτι ἄρμωσται τὴν Μίλωνος θυγατέρα Δημοκῆδης γυναῖκα.  
 ‘Democedes gave them an order as they were sailing out, ordering that they tell Darius that Democedes was taking the daughter of Milo as his wife.’ 3.137.18

As we would expect, the first pattern far outstrips the second in frequency (1.8.13, 1.45.4, 1.88.8, 1.110.14, 1.110.16, 1.155.19, 2.140.3, 2.162.14, 3.16.9, 3.36.8,<sup>214</sup> 5.51.8, 5.96.7, 6.46.3, 6.61.24, 6.129.7, 6.129.11, 7.146.12, 7.220.7, 9.79.10, 9.111.16, 8.101.9, 8.101.15, 8.107.2, 8.134.9, 9.17.9).

If semantic polysemy is responsible for the above alternations, it is not yet clear what senses are involved. One possibility is that it has to do with the strength of injunction; that is, the degree to which the matrix agent permits the complement-clause actor control, choice or independence (Givón 2001b: 45). The greater cohesion of (9.89) and (9.91) may be due to a sense closer to ‘command,’ while the looser cohesion of (9.90) and (9.92) may result from a sense closer to ‘instruct.’ Then again, there may be other factors at work, such as the topicality of the pronominal referent; how directly the command is issued; the relevance of specifying a target for a directive; or the social relation between the person who issues the directive and the person towards whom it is directed.

The verb πειράομαι offers another case of an opaque alternation. As a control verb meaning ‘try, attempt,’ one expects the object of the embedded infinitive to occupy second position within the matrix clause. Sometimes this happens (see also 5.91.21 and 7.148.9; note the same pattern with δύναμαι at 3.152.6 against canonical 1.112.9, 2.169.6, 4.97.14, 4.97.16, 6.107.18, 8.53.1):

(9.93) πρὶν δὲ ἐξελαύνειν ὀρμηῆσαι τὸν στρατόν, πέμψας κήρυκας ἐς τοὺς Ἴωνας ἐπειρᾶτό=**σφραγ** ἀπὸ Κροίσου ἀπιστάναι.  
 ‘Before he roused his army to start marching, he sent envoys to the Ionians to try to turn them away from Croesus.’ 1.76.11

But other times the clitic occurs within the infinitive clause:

(9.94) ἄτε δὴ πειρωμένων τῶν Θεσσαλῶν καταστρέφεισθαί=**σφραγ**, τοῦτο

<sup>213</sup> It is not clear to me if 3.14.45 belongs here as well.

<sup>214</sup> MSS D, R, S, and V read νουθετεῖν=**σε**, which is what my account would predict for the position of the clitic.

προεφυλάξαντο οἱ Φωκέες καὶ τὸ ὕδωρ τὸ θερμὸν τότε ἐπῆσαν ἐπὶ τὴν ἔσοδον, ὡς ἂν χαραδρωθεῖη ὁ χῶρος. πᾶν μηχανώμενοι ὅπως μὴ σφι ἐσβάλοιεν οἱ Θεσσαλοὶ ἐς τὴν χώραν.

‘Since the Thesalians were trying to conquer them, the Phocaeans guarded against this, and they let the hot water onto the pass, in order that the the land might be split by channels, taking every measure to keep the Thesalians from invading their land.’ 7.176.22

We also find this pattern in a slightly different syntactic environment:

(9.95) καὶ ἐπειρῶντο πείθοντές=**μιν** ὡς οὐ χρεὸν εἶη ταῦτα ποιέειν.

‘And they made an attempt, trying to persuade him that it was not needed to do these things.’ 9.53.17

Here one would expect πείθοντες, as a complement participle of ἐπειρῶντο, to be housed under one intonational phrase (for which see chapter eight), and thus for μιν to have been hosted by ἐπειρῶντο.

At present, it is not clear to me how we are to account for this anomalous behavior. I can suggest only one possibility, which is that πειράομαι is not actually a control verb per se. Instead, its complement is a purpose clause in the form of an infinitive phrase. On this view, the structure of cases like (9.94) would be something like ‘they made an attempt, in order that they might conquer them.’

### 6.3 Parenthetic-Clause Quirks

I have devoted very little attention to the phenomenon of clausal interruption throughout this dissertation. Its effect on clitic placement certainly bears further consideration, however, because it has the ability to cause unexpected distributional patterns:

(9.96) ἐμὲ ὧν ἢ ταῦτα κελεύει ποιέειν, (ἢ αὐτὸς ἐθέλει), (τριήκοντα μυριάδας ἀπολεξάμενος τοῦ στρατοῦ), (παρασχεῖν=**μοι** τὴν Ἑλλάδα δεδουλωμένην),.

‘He either bids me to do this, or he himself wants to take 30,000 men from the army and [wants] to offer me Greece enslaved.’ 8.101.15

(9.97) νῦν ὧν, (ὀφείλεις γὰρ), (ἐμέο προποιήσαντος χρηστὰ ἐς σὲ), (χρηστοῖσί=**με** ἀμείβεσθαι...),

‘Now, since you are obliged to repay me with favors, since I did favors in advance for you...’ 1.41.6

(9.98) ἵνα δὲ μὴ συνταράξῃ τὴν Ἑλλάδα, ἦν δι’ αὐτὸν στόλος μέγας πλέθι ἐπὶ τὴν Ἰταλίην, Κνιδίους μόνους ἀποχρᾶν οἱ ἔφη τοὺς κατάγοντας γίνεσθαι, δοκέων (ἀπὸ τούτων ἐόντων τοῖσι Ταραντίνοισι φίλων), (μάλιστα), τὴν<sub>p</sub>=κάτοδόν=**οἱ** ἔσεσθαι.

‘In order that he not disturb Greece, if on his account a great force sail against Italy, he said that it was sufficient that the Knidians alone be his escorts, thinking that, since they are friends with the Tarantines, he would indeed get his return.’ 3.138.9

In all three cases, the clitic pronoun surfaces second within the infinitive phrase, at the resumption of the clause after the parenthetical remark. But in each case we should have expected them to have been hosted second within the matrix clause. As such, these examples are not unlike cases like the following from the previous chapter:

- (9.99) τὸ μὲν ἱρήμιον αὐτὸ ἐμπεποδισμένον τοὺς ἐμπροσθίους πόδας ἔστηκε.  
ὁ δὲ θύων ὄπισθε τοῦ κτήνεος ἔστεῶς σπάσας τὴν ἀρχὴν τοῦ στρόφου  
(καταβάλλει=**μιν**)<sub>i</sub>.  
‘The sacrificial victim stands alone bound at its forefeet. Although the sacrificier stands in back of the animal, once he pulls the beginning of the rope, he brings him down.’ 4.60.5

It is conceivable that we are dealing with cases of verbal preposing in (9.96)-(9.99). I am skeptical of such a scenario, however, because as noted above in chapter seven, preposing of the verb is practically non-existent in Herodotus. Another possibility is that the speaker may have thought that the position of the clitic within the infinitive phrase may have been easier to process, given that in each case the pronouns are semantically interpreted as objects of the infinitives. If there is any truth to this idea, it suggests that parenthetical clauses may not always be all that “parenthetical” (i.e., characteristic of an afterthought): for the speaker would have to have the parenthetical clause in mind before beginning the sentence; otherwise, one would have expected him to place the clitic second within in the matrix clause.

This issue is further complicated by the possibility that we are dealing here only with a mirage: the position of the clitic in (9.96)-(9.99) may well be conditioned by some other factor, and have nothing whatsoever to do with the parenthetical clause. In spite of these complications, (9.96)-(9.99) are useful in that they provide support for the claim that clitics are hosted at the left edge of an intonational phrase. For if we assume that parenthetical clauses themselves are coded as intonational phrases, then in each case the clitic is hosted at the left edge of an intonational phrase.

#### 6.4 The Problem of Interlacing

In addition to questions pertaining to empirical coverage, there is also a deeper issue of Greek syntax that needs to be addressed. The issue concerns cases where the embedded predicate and pronominal clitic precede the matrix verb, as in the following example (ἐκ τούτου appears to be a counterassertive preposed phrase; it scopes over **μανῆναι**):

- (9.100) ἐκ τούτου δὲ **μανῆναι=μιν** νομίζουσι Σπαρτιῆται.  
‘The Spartans think that, because of this, he [= Cleomenes] went insane.’



It is not clear how we diagnose the structure of the infinitive *μανῆναί* and its subject *μιν* in relation to *νομίζουσι*: is *μανῆναί=μιν* itself an embedded clause or part of the matrix clause? The two possibilities can be illustrated as follows (the preposed prepositional phrase has been omitted for expository ease):

(9.101) [<sub>CP</sub> [<sub>CP</sub> *μανῆναί=μιν*] *νομίζουσι* *Σπαρτιῆται*]

(9.102) [<sub>CP</sub> [<sub>TP</sub> *μανῆναί=μιν*] *νομίζουσι* *Σπαρτιῆται*]

The ambiguity results from the fact that the clitic would end up in the exact same position regardless of the structural configuration. Ideally, semantics should be able to offer some clarity. My intuition is that *νομίζουσι* has a cognitive reading (which would point to the structure in 9.101), but I am not certain that we can actually rule out an evaluative reading.

The following examples further illustrate this issue:

(9.103) βασιλεὺς ὁ Περσέων Καμβύσης, βουλόμενος φίλος καὶ ξεῖνός τοι γενέσθαι, ἡμέας τε ἀπέπεμψε (ἐς<sub>p</sub>=λόγους=τοὶ ἐλθεῖν), κελεύων καὶ δῶρα ταῦτά τοι διδοῖ τοῖσι καὶ αὐτὸς μάλιστα ἥδεται χρεώμενος.  
‘Cambyses king of the Persians, who would like to become your friend and ally, has sent us with orders to speak to you, as well as offers these gifts to you, which he himself also greatly enjoys using.’ 3.21.5

(9.104) (οἱ δὲ ἀμβώσαντες μέγα), εὐφημέειν=μιν ἐκέλευον.  
‘They burst out shouting loudly and told him to be silent.’ 3.38.19

(9.105) (ὁ δὲ), οὐδέν=οἱ ἔφη Θρασύβουλον ὑποθέσθαι, θωμάζειν τε αὐτοῦ παρ’ οἶόν μιν ἄνδρα ἀποπέμψειε, ὡς παραπλήγᾳ τε καὶ τῶν ἑωυτοῦ σινάμωνρον, ἀπηγεόμενος τά περ πρὸς Θρασυβούλου ὁπώπεε.  
‘And he said that Thrasyboulos suggested nothing to him, and that he was surprised at the sort of man to whom he [= Periander] sent him, that he was a lunatic and destroyer of his own things, detailing what he had seen from Thrasyboulos.’ 5.92.ζ.19

The following example differs from the others, but is still puzzling:

(9.106) καὶ τάδε λέγειν φαίη=τις=ἄν=με ἑμεωυτοῦ εἶνεκεν, ὡς καταμένω.  
‘And someone could say that I say these things on account of myself, in order that I may stay behind.’ 4.97.17

Semantically, this seems to be a case where φημί means ‘deem’ or ‘judge,’ like (9.73)-(9.82) above. There are some cases in which the introduction of the subject at the onset of clause clarifies things, as in the following:

- (9.107) ὁ=δέ=μιν ἀληθείηι χρήσασθαι ἐκέλευε, φὰς οὐδέν οἱ ἀηδέστερον ἔσεσθαι ἢ πρότερον ἦν.  
 ‘He [= Xerxes] told him [= Demaratos] to tell the truth, saying that he would be no less pleasing to him than he was before.’ 7.101.15

Here I assume that μιν falls second within the matrix clause, and that the structure is something like the following:

- (9.108) [<sub>CP</sub> ὁ=δέ=μιν [<sub>TP</sub> ἀληθείηι χρήσασθαι [<sub>VP</sub> ἐκέλευε

In all of the analyses and data counts above, interlaced examples have by and large been excluded or signaled as ambiguous. It is not clear how a devoted analysis of this phenomenon would impact the argument of this chapter.

## 6.6 Split Enclisis

It is not often that we find embedded clauses with two pronominal clitics. Rarer still are the cases where the two clitics are not adjacent, as in the following example:

- (9.109) ἐπεῖτε δὲ ἐξέμαθε ὡς οὐ σὺν κείνοισι εἶη ταῦτα πεπονηκώς, ἔλαβε αὐτόν τε τὸν Ἰνταφρένεα καὶ τοὺς παῖδας αὐτοῦ καὶ τοὺς οἰκηλίους πάντας, ἐλπίδας πολλὰς ἔχων μετὰ τῶν συγγενέων=μιν ἐπιβουλεύειν=οἱ ἐπανάστασιν. συλλαβῶν δὲ σφραγῆς ἔδησε τὴν ἐπὶ θανάτῳ.  
 ‘After he found out that he had done this not with those, he seized both Intaphernes himself and his kids and all the domestic staff, having many suspicions that he was plotting a rebellion against him with his kinsmen. Once he arrested them, he condemned them to death.’ 3.119.9

Typically cases of split enclisis provide crucial information about prosodic and syntactic structure, as in the following example:

- (9.110) ἀπικομένηι δὲ τῆι μητρὶ ἐσθεις ἐς τὰς χεῖράς οἱ τῶν σπλάγχνων κατικέτευε, τοιάδε λέγων. “ὦ μητερ, (θεῶν=σε τῶν τε ἄλλων καταπτόμενος ἰκετεύω), καὶ τοῦ ἐρκείου Διὸς τοῦδε (φράσαι=μοι τὴν ἀληθείην),: τίς μευ ἐστὶ πατήρ ὀρθῶι λόγῳι;  
 ‘When his mother arrived, he placed into her hands entrails and beseeched her with the following words: ‘Mother, touching this Zeus here the protector of the household and the other gods too, I beseech you to tell me the truth: who really is my father?’ 6.68.2+6.68.4

Here *σε* and *μοι* each surface exactly where we expect them to, second within the domains in which they are semantically interpreted. But with (9.109), the positions of *μιν* and *οἱ* only create problems. My account would predict that the embedded structure would be prosodically coded thus:

(9.111) (μετὰ<sub>p</sub>=τῶν<sub>p</sub>=συγγενέων=**μιν**)<sub>i</sub> (ἐπιβουλεύειν=**οἱ** ἐπανάστασιν)<sub>i</sub>.

If this is right, the motivation for the prosodic coding here is far from clear. (One cannot for instance posit the preposing of μετὰ<sub>p</sub>=τῶν<sub>p</sub>=συγγενέων, for it should not then admit *μιν*.) It is possible that, in certain environments, speakers want to avoid clitic chaining. The following example would seem to support this notion:

(9.112) (νῦν=ῶν)<sub>i</sub> ἐπειρέσθαι=**σε** ἕμερος ἐπῆλθέ=**μοι** (εἶ τινα ἤδη πάντων εἶδες ὀβριώτατον)<sub>i</sub>.  
 ‘Now then, desire comes upon me to ask you, if you have ever seen someone happiest of all.’ 1.30.13

It may be significant that we once again have an accusative (although this time an object, and not a subject as in the previous example) and dative pronominal clitic, and that it is the accusative that exhibits second position behavior, while the dative is hosted by its governing verb.

## 7 Conclusions

The claim of this chapter, broadly construed, is that clausal cohesion (i.e., subcategorization properties) is not determined by matrix verbs per se, but rather by the particular senses of matrix verbs (Givón 2001a: 161). We can also see the alternations in clitic position as the result of the Proximity Principle (Givón 2001b: 64), according to which the closer the functional relationship between two linguistic entities, the more contiguously they are coded.

Whatever validity the claims in this chapter have, there is much more work to be done on this topic. For one, a more complete investigation of the positional alternations vis-à-vis complement clauses is needed. What is presented here is only an initial step. Second, it should be possible to provide more fine-grained semantic analyses of the verbs in question: my suspicion is that we are indeed dealing with a scalar phenomenon here. Lastly, once the clitic data have been analyzed, the investigation should be extended to look at how the position of non-clitic elements is affected by the polysemy of matrix verbs.

## Chapter 10

### Conclusions

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This chapter presents an overview of the results obtained from the preceding six chapters (chapters one through three are not considered here, as they contain preliminary material), followed by an outline of further questions that will form the basis for future work.

#### 1 Results

In this dissertation I have argued for a prosody-dominant model of clitic distribution in fifth-century Greek. As demonstrated in chapter four, syntactic domain is relevant but decidedly secondary. In canonical situations, the highest-ranked requirement is that the clitic be hosted at the left edge of an intonational phrase. The dominance of prosody in clitic distribution does not mean that clitics cannot be used to diagnose syntactic structure. Indeed, on the basis of clitic distribution (as well as pragmatic meaning), I proposed a novel scheme for the left periphery of the Greek clause, in which strong topics (generally) occur above CP, while strong-focus elements occur below CP.

One of the central predictions of the prosody-dominant model is that if the prosodic contour of an utterance is altered (specifically, if more intonational-phrase boundaries are created), without alteration to the syntactic structure of the clause, then additional landing sites for a second-position clitic within a clause will be licensed. While there is some evidence for this prosody-dominant model in prose, the bulk of it comes from metrical texts, as was detailed in chapter five. For here we see clearly that the metrical template, by inserting more intonational-phrase breaks into a clause, licenses more landing sites for a clitic (outside of canonical second position). In previous work, clitic distribution in Attic drama had either been entirely ignored or seen as reason for despair. By contrast, in my presentation, these data have an integral role to play as they reveal in a way that prose texts do not the underlying organization of clitic distribution in fifth-century Greek. My investigation of the metrical data must be seen as only an initial step: there is much more to be learned about Greek syntax and prosody (not to mention metrical composition) from the study of clitic distribution.

Within this prosody-dominant framework, chapters six through nine then investigated alternations in clitic-distribution in three environments: root and matrix clauses, participial phrases, and infinitival complement clauses. In the first, which was handled in chapters six and seven, I argued that material preceding a clitic host in a root or matrix clause is pragmatically marked. Specifically, chapter six argued for a dossier of strong-topic functions, which include marking set-membership; introducing new subjects; topic resumption; and topic conclusion. Chapter seven complements this chapter by

presenting a inventory of strong-topic functions, which include marking counterassertion; inducing exhaustive readings; and cancelling presuppositions.

Chapter eight argued that when participial phrases bear clause-level semantics, they will be coded as an intonational phrase, and thus form their own domain for second-position clisis; by contrast, when the participial phrase has more restricted semantic scope, then it does not form its own intonational phrase, and consequently is not a licit domain for second-position clisis. On the basis of this distinction, I posited a new construction in Greek, that of the successive participle, while also providing a principled explanation for the multiple-*ἄν* construction.

Chapter nine examined the alternation in clitic position vis-à-vis infinitive complement clauses. Here I argued that the position of the clitic was conditioned by the lexical semantics of the verb, specifically the thematic link between the clitic pronoun and the matrix verb.

## 1.1 Further Implications

The implications of the claims in this dissertation are several. First, it reveals the profound extent to which Greek morphosyntax is functionally-motivated. All of the morphosyntactic alternations explored in this dissertation are conditioned by semantic and pragmatic factors. Chapters six and seven in particular suggest that Greek syntax may be organized according to grammaticalized categories of information structure. Further investigation of Greek syntax and word order should proceed with these results in mind.

Second, this functional portrait also shows the potential that detailed grammatical alternations hold for our understanding and reading of ancient texts. The study of grammar and the study of literary, historical, and philosophical texts are not at odds (despite what some seem to think: see e.g. Fratantuono 2009, as well as the review by Gervais 2009), but go hand-in-hand. For the only way to understand in detail *what* texts say is through a detailed examination of *how* they say it.

Lastly, a theoretical point: it is a standard assumption of most (if not all) theories of syntax that the relationship between syntax and phonology is relatively neat and unidirectional. Syntactic structure is assumed to be composed first, without regard to the phonological properties of the morphosyntactic items. The syntactic output is then handed off to the phonological component of the grammar where the phonological properties of the individual items and the clause are “filled in.” To be sure, in its broad outlines and in most cases, this is probably accurate. But it is certainly not the whole story, and the data from clitic distribution in Greek go some way toward showing that the division is not always so neat or unidirectional. For as I have argued there are cases in which syntactic structure cannot be determined without reference to the phonological content of the clause. Despite this, one cannot (and should not) go so far as to say that the principle of “phonology-free syntax” is bunk. It is simply not the whole story, as

there are cases (especially from metrical texts) in which phonological properties can affect morphosyntactic output.

As with any model, these claims require further testing before they can be reliably accepted. In the sections that follow, I lay out areas in which further work needs to be undertaken before a truly adequate understanding of second-position phenomena is possible.

## 2 Areas for Future Research

For all of the ground that the preceding nine chapters have covered, there is still a lot of work that remains to be done on Wackernagel's Law in Greek. Indeed, some of the claims summarized above have created new questions for investigation. In the following subsections, I outline issues for future research.

### 2.1 The Remaining Clitic Lexicon

Greek is well known for its rich clitic lexicon. My investigation has focused on only a part of this lexicon. Perhaps the most pressing issue for the model offered here is how it would handle other clitics, such as μέν, δέ, γάρ, and εἰμί. The prediction would run as follows: the second-position items in the lexicon should select for hosts at the left edge of a prosodic domain whose identity is determined by semantic scope. To illustrate this idea with γάρ, this is a discourse-marker that binds one sentence causally to a preceding utterance (see further Misener 1904; Denniston 1954). It thus has extra-sentential scope in that it encodes reference to a previous utterance; furthermore, it scopes over the entirety of the utterance in which it occurs. Given these scopal properties, my account would predict that such an operator would almost invariably select a host at the left edge of the utterance. It should accordingly be able to occur earlier in the clause than clausal clitics. Such a pattern is indeed attested, as we have seen:

- (10.1) ((ἄνδρὸς=γάρ ἐνὸς τοῦ ἀρίστου), (οὐδὲν), (ἄμεινον=ἄν φανείη)),<sub>υ</sub>.  
 'For compared to one noble man nothing could seem better.' 3.82.7

Here we see that γάρ falls second within the larger domain of the utterance, while ἄν selects for a host at the edge of an intonational phrase. My impression thus far is that the thorniest cases will be μέν and δέ, as these two particles seem to exhibit a diversity of scopal properties, sometimes scoping over a clause, and sometimes only over a noun phrase.

It may also be the case that some clitics not only select for different prosodic domains, but also that within a particular prosodic domain they select for a host with different properties. What I am suggesting is that some clitics may select a host at the right edge of a particular domain. The most likely candidate for this type of behavior would be εἰμί.

It is entirely possible that some clitics, or some clitics in certain constructions, have become grammaticalized or syntacticized. In fact, this is not something that my account rules out. If I may speculate for a moment, one of the domains in which this might be happening in fifth-century Greek is the possessor clitics. As cited in the introduction, there are cases where a possessor clitic can be abstracted away from its governed noun phrase to occur in clause-second position. There are also cases, where it seems that such an operation does not occur, and the possessor clitic is housed within its governed noun phrase.

The first task in dealing with the larger clitic lexicon is thus to lay out the full inventory according to semantic scope. This is not as straightforward as it might at first seem, as it is possible for some items to belong to two different categories, as appears to be the case with verbal argument pronominal clitics versus possessor-clitics. I provide here a tentative categorization:

*The Clitic Lexicon According to Scopal Type*

**Extra-sentential:** δέ, δῆτα (on the basis of Hdt. 2.22.5?), γάρ, μέν, τε, οὖν.

**Clausal:** ἄν, ἄρα, εἰμί, περ, που, τε, τοι (as discourse-marker), φημί, verbal-argument pronominal clitics.

**Phrasal:** δέ, δῆ, μέν, τε, possessor clitics.

**Word:** δῆ, γε, τε.

I must emphasize the preliminary nature of this list, which has been formulated only on the basis of the Herodotean data. I would expect the scopal behavior of clitics to differ (although not drastically) both between authors as well as between dialects. Furthermore, it eventually needs to be worked out how and why clitics are ordered within a given scopal category (i.e., why ἄν typically precedes a pronominal clitic; this question is explored further in the next subsection).

## 2.2 Clitic Chains and Split Enclisis

This second topic follows closely on the heels of the first. Once we have a broader picture of the distributional patterns of the clitic lexicon in Greek, it will then, presumably, be possible to set up a template of the Greek clitic chain. Attempts to work out the templatic ordering of clitics have already been made for Homer (see Delbrück 1900: 51-53; Ruijgh 1990; Wills 1993). It is well known that after Homer clitics within the sentence tend less and less often to cluster together at the opening of the sentence, but rather what we find is so-called split enclisis, whereby clitics are distributed throughout the clause. As noted in chapter two, some have argued in fact that this is the result of a “weakening” of Wackernagel’s Law. Before that issue can be

thoughtfully addressed, what we need is a descriptive account of just how exactly the clitics can be distributed through the clause and what sort of ordering tendencies are observable.

As far as clausal clitics are concerned, their distribution is fairly straightforward within prose. When ἄν and a pronominal clitic end up adjacent in the same second-position domain, the former canonically precedes the latter, as in the following example:

- (5.31) καὶ νῦν, εἴ φοβερὸν τι ἐνωρῶμεν, πᾶν=ἄν=σοι προεφράζομεν.  
 ‘Even now, if we had noticed anything frightful, we would be telling you everything in advance.’  
 Hdt. 1.120.31

While there are examples that do diverge from this pattern (see e.g. 3.52.1, 3.53.9), the prose data do not otherwise present much difficulty. But note that there are dialectal differences in clitic chaining (Wackernagel 1892: 344, 369).

It is in fifth-century drama that the real difficulties emerge. For here we find not only the prose pattern, but also the three following variations (which have already been mentioned in chapter five):

Pattern	Description
1. ἄν=pronoun	Clitic Chain (canonical)
2. ἄν...pronoun	Split Enclisis
3. pronoun=ἄν	Clitic Reversal
4. pronoun...ἄν	Split Reversal

As in prose, we find the canonical position in which ἄν immediately precedes a pronominal clitic:

- (10.3) ἀλλ’ εἰ δόμων σφε καὶ πόλεως ἀπήλασα  
 ξένον μολόντα, μᾶλλον=ἄν=μ’ ἐπήνεσας;  
 ‘But if I had driven him<sup>215</sup> from my house and polis,  
 a guest-friend who had arrived, would you have praised me more?’  
 Eur. *Alc.* 553-554

We also find a variant of this pattern, whereby the clitic set is united but deferred:

- (10.4) τί καί ποτε  
 γράψειεν=ἄν=σοι | μουσοποιὸς ἐν τάφῳ;  
 ‘What could a poet ever write for you on (your) grave?’  
 Eur. *Tro.* 1188-1189

We find the following patterns of split enclisis:

<sup>215</sup> On σφε with singular reference, see Parker ad loc. and v. 16.



(10.5) οὐκ ἔστιν οὐδείς | ὅστις=ᾶν μέμφαιτό=σε.  
 ‘There is no one who would blame you.’ Eur. *El.* 903

(10.6) πάρα γὰρ δροσερὰ πύργοις συνεχῆς  
 κλειτύς, ὅθεν=σοι | πῶμα γένοιτ’=ᾶν.  
 ‘For there is a dewy slope alongside  
 the city walls, from which you could get a drink.’ Eur. *Hipp.* 226-227

Least common of all is the simple reversal pattern, as illustrated in the following example:

(10.7) ἤχιστ’ ἐπεί=μ’=ᾶν ἐν μέσῃ τῆι γαστέρι  
 πηδῶντες ἀπολέσαιτ’ ἂν | ὑπὸ τῶν σχημάτων.  
 ‘Not at all, since leaping around in the middle of my belly  
 you’d kill me with your moves.’ Eur. *Cyc.* 220-221

It is far from clear what conditions these alternations.

### 2.3 Proclisis

In chapter three, I noted that some words do not always have a static prosodic status, and that some can in fact be variably coded, such as e.g. οὐκ, καί, and the definite article. It remains to be seen just what conditions the prosodic status and behavior of these items vis-à-vis second-position clitics. There is also the issue of how proclitics can affect the prosodic phrasing of adjacent enclitic items. Consider the following analyses of the string ἡ δὲ Πυθίη:

(10.8) (ἡ)<sub>ω</sub>=δὲ Πυθίη σοι χρᾶι τάδε.  
 ‘The Pythia prophesies to them the following.’ 1.66.8

(10.9) (ἡ)<sub>ρ</sub>=δὲ<sub>ρ</sub>=Πυθίη)<sub>ω</sub>...

According to (10.8), the definite article is coded as a prosodic word, which enables it to serve as the host of second-position δέ. By contrast, in (10.9), the definite article is analyzed as a proclitic, which also induces the proclisis of δέ. Although this is speculative, what I believe at this point is that both (10.8) and (10.9) are possible, but will vary according to context and meaning. The great problem that we have is figuring out how to diagnose when we have cases like (10.8) and when we have cases like (10.9). For unfortunately their morphosyntactic (surface) form is identical.

### 2.4 A Theory of the Intonational Phrase in Greek

In chapters six through nine, I presented a dossier of pragmatic and semantic meanings that correspond prosodically to an intonational phrase. Amidst this background, we are

now in a position to ask a deeper question, namely: what feature or set of features do these meanings have in common that gives rise to their shared prosodic coding? Another way to frame this question would be to ask: what kind of pragmatic or semantic meaning triggers the coding of a syntactic as an intonational phrase? To fully answer this question, one needs to consider not simply the semantic and pragmatic inventories presented in chapters six through nine, but also those from finite adjoined and embedded clauses, which are also routinely coded as intonational phrases.

## 2.5 Diachrony and Dialect

Now that we have a description of clitic-distribution patterns found in fifth-century Greek, we can begin the work of understanding how the second-position system changes over time. This will involve first a detailed comparison of the classical data with the Homeric,<sup>216</sup> and then a comparison of these two with Hellenistic Greek (for changes in the clitic system of later Greek, see Condoravdi and Kiparsky 2001, 2004). At some point the generalization offered here for Herodotus and Attic drama breaks down. What we need is to pinpoint as precisely as possible when that breakdown starts to occur, in what contexts, and how the innovation emerges from the older system. My expectation is that the trend we will find is for the fifth-century prosodic system to slowly become more syntacticized; that is, for prosodic generalizations to be reinterpreted as syntactic generalizations. One of the ways in which this might happen is via prosodic bleaching. That is, certain prosodic patterns, which once served as cues for clitic position, may weaken over time (how and why such weakening may have taken place is a question in itself, and one that is presumably connected in some way with the change from pitch- to stress-based accentuation). A potential consequence of this would be that the prosodic generalization of clitic distribution gives way to one that is morphosyntactic.

Ideally, the diachronic patterns of clitic distribution should not be narrowly investigated but rather should be examined within a more catholic perspective, and include changes in discourse patterns more broadly. For as some have argued (e.g. Givón 1979; DuBois 1985; Bybee 2001: 5), syntactic change can result from changes in discourse patterns (e.g. the selection of certain constructions, or the use to which those constructions are put). If this is the case for Greek, we would want to see how changes in clitic distribution correlate with broader changes in discourse (e.g. the use of preposing, as well as that of participial phrases, both of which have an effect on clitic position within the sentence). It should then be possible to take the further step and align the linguistic changes that we observe with those at the literary, cultural, or social level; for all three of these are known to have an effect on discourse patterns. Thus one would be able to use evidence from clitic distribution to study cultural and literary trends more broadly. Thus we see once again that the study of Wackernagel's Law in Greek offers insights

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<sup>216</sup> This comparison is perhaps not as straightforward as one would imagine. Since the Attic dialect does not stand in a direct linear relationship with the earlier Homeric, it may not be possible to link the two systems along a diachronic continuum.

that extend far beyond the realm of Greek syntax, as clitic distribution has so much to teach us about Greek prosody, pragmatics, literature, and culture.

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