# Word Order, Focus, and Clause Linking in Greek Tragic Poetry 

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A dissertation submitted for the degree of Doctor of Philosophy Cambridge University

January 1999
Monsieur Jourdain: Il n'y a que la prose ou les vers?
Maître de philosophie: Non, monsieur: tout ce qui n'est point prose est vers, et tout ce qui n'est point vers est prose.
Monsieur Jourdain: Et comme l'on parle, qu'est-ce que c'est donc que cela?

For Katherine and Cassie, with all love

## Declaration

No part of this dissertation is being or has been submitted for any other degree or qualification at any university, and it is the author's sole work, including nothing which is the outcome of work done in collaboration.

The word total is under 79,900, exclusive of the bibliography, and of the three appendices, of approximately 18,000 words in total, for which an extension was granted by the Degree Committee of the Faculty of Classics. The appendices contain formatted textual passages and some statistical tabulation of data. All results and summaries appear in the body of the thesis.

## Texts

Oxford Classical Text editions are used for Greek citations, and Loeb Classical Library editions for Latin.

English translations are the author's own, and are phrased to reflect the Greek syntax as closely as possible. Homeric translations are based on those of Lattimore (1951, 1965).

All statistical collation of textual material is original, unless otherwise stated.
Word searches were carried out with the help of Thesaurus Linguae Graecae, CD-Rom (D) edition (1992), published by the University of California at Irvine.

## Acknowledgments

A great debt is owed to the superlative resources of the Cambridge University Library, and to the British Academy and the Cambridge Faculty of Classics, both of whom gave financial support.

I was fortunate to be supervised by specialists in two fields: Geoffrey Horrocks, who devoted an enormous amount of time to reading the drafts and provided detailed linguistic criticism, and Richard Hunter, who gave invaluable stylistic and literary advice.

Pat Easterling and Peter Matthews kindly read parts of the work in progress. Anthony Bowen, James Diggle, and Ian McAuslan have my gratitude for helping me understand something of the beauty and form of the Greek language.

Sincere thanks are offered to Joseph Butler, Mark Hogarth, Joyce Reynolds, and Christine Salazar for their friendship and practical help.

## Sigla

Abbreviations and symbols are defined at first use, and are also noted here:

| AI | Accusative and infinitive (in a non-finite dependent clause) |
| :--- | :--- |
| CG | Classical Greek |
| Comp | Head position in a CP |
| CP | Complementizer phrase (the extended clause structure) <br> FP |
|  | Focus Phrase (an alternative visualisation of the CP, for <br> languages without complementation) |
| IE | Indo-European |
| IP | Inflection phrase (the main-clause structure) |
| OV | Object>verb ordering |
| OVO | Object>verb>object hyperbaton |
| PIE | Proto-Indo-European |
| NP | Noun phrase |
| SOV | Subject>object>verb ordering |
| SV | Subject>verb ordering |
| SVO | Subject>verb>object ordering |
| SVS | Subject>verb>subject hyperbaton |
| TP | Topic phrase (in some models, distinguished from the FP above) |
| VO | Verb>object ordering |
| VP | Verb phrase |
| VS | Verb>subject ordering |
| X' [X-bar] | Intermediate phrasal structure (and also the description of the linguistic |
|  | framework which uses the category) |


| * (with italic letters) | marks reconstructed PIE stems |
| :--- | :--- |
| * (with roman letters) | marks a hypothetical sentence <br> which is not grammatically well-formed |
| [ ] enclosing a phrase | mark constituent boundaries in citations <br> marks a regular sequence of words or phrases |
| $>$ | mark co-referent elements in citations |

Standard abbreviations of titles are used when citing ancient texts.

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## Introduction

## Scope

The dissertation comprises an investigation of three aspects of sentence structure in Classical Greek (henceforth CG) dramatic poetry: order of the main sentence elements (subject, verb, and object) within the clause, the emphatic position at the start of the clause, and the structure of inter-clausal linking. It is argued that these three features, usually considered separately, are interdependent, and that intra-clausal word order is directly related to the structure of compound and complex sentences. ${ }^{1}$ The discussion undertakes a systematic survey of subject, verb, and object order in a corpus of texts, ${ }^{2}$ proposes an explanation for the observed order, and develops a model which explains how prominence within the clause is exploited in clause linking to produce the complement structures observed in Homeric and tragic complementation.

## The problems

1) The primary problem is to explain the high degree of consistency in the order of the main sentence elements in what is traditionally considered a 'free word order' language. ${ }^{3}$ Ancient discussions usually described word order as an aspect of $\sigma \dot{v} \nu \theta \in \sigma \iota S$ ('composition'); ${ }^{4}$ and concentrated on unusual orders rather than the norm. Modern studies, though paying more attention to 'basic word order ${ }^{\prime},{ }^{5}$ have not identified structural motivation for the regularities, and generally attribute variations to pragmatic determinants. ${ }^{6}$

[^0]2) The prosody of the clause start is standardly considered separately from its structure: either as an emphatic first position, or in terms of enclitic elements in second position. ${ }^{7}$ However, the structural relation between these two features has not been investigated.
3) Complementation has been extensively analysed in terms of its formal structure, ${ }^{8}$ and its historical development has been surveyed in terms of the introductory conjunctions, ${ }^{9}$ but not in terms of the relationships between these conjunctions (henceforth complementizers) ${ }^{10}$ and the semantic categories of main verb types. The process by which a whole clause, rather than a referring expression within $i t$, came to function as an argument of the main verb, ${ }^{11}$ remains unexplained.

## The proposal

The three problems have a unified explanation, because word order, emphasis, and clause-linking are inter-dependent. Intra-clausal word order has a morphological and a prosodic trajectory, with larger words tending to be placed later. However, there is also a position for prominent elements at the clause start (henceforth P1), which are emphatic, not only as a consequence of their initial placing, but also because they reinforced by light words in second position (henceforth P2), which mark emphasis in one of two ways. Enclitic particles are cohesive focalizers, combining phonologically with the initial constituent, so creating a larger unit. Interrogative and relative pronouns are separated from the P1 unit by an intonation break, and also create a contrast with it, by reason of their small size. In both cases the whole focal unit is separated from the basic clause by an intonation break.

[^1]In complex sentences, the trajectory of 'weight to the right' within the main clause combines with 'prominence to the left' in the following subordinate, so the focal element has a functions in two clauses simultaneously. Its prominence is linked with its exophoric (non-linguistic) reference: the grammaticalization of ötı from a referring expression to a textually-deictic object involves a loss of specific reference, marked by an indefinite affix which is also a cohesive focalizer ('say whatever you like'); while the change of function of $\dot{\omega}$ from an adverbial to a complementizer is accompanied by the change of the preceding main verb object from a referring expression ('I know you how you are') to a textually-deictic pronoun ('say this, how...').

In both constructions, the transition to complementation involves a circumstantial construction, where a verbal object is combined with a modifying clause. ${ }^{12}$ A distinction is made between intransitive ('say of $x$ that it is $y^{\prime}$ ) and transitive circumstantials ('know $\mathbf{x}$ as being $\mathrm{y}^{\prime}$ ), because they are regularly associated with different main verbs (of speech and cognition respectively). ${ }^{13}$ The circumstantial form of tragic complementation is transitional, though it is regular in tragedy and Plato: full complementation involves a loss of prosodic prominence, as the complementizer becomes a conventional marker.

## Consequences

A unified framework has a number of advantages: it accords with the word order observed in the corpus of texts, it explains the presence of prominent words at the start of the clause and morphologically heavy ones at the end, and it shows a direct relation between the prosodic and pragmatic features of the sentence. It also provides a possible aetiology of complementation, by suggesting a semantic motivation for the change of complementizer function from a referring expression to a grammatical word, ${ }^{14}$ and for changes in word order (SV to VS, and OV to VO) and the change from a pitch to a stress accent between Ancient and Mediaeval Greek.

[^2]
## Summary of the argument

The argument is organized in seven chapters, grouped in three sections: I intra-clausal word order, II initial focus, and III inter-clausal linking.

## I: Intra-clausal word order

Chapter 1: An examination is made of the order of subject and verb in poetic texts, including a comparison with previous studies of prose order, to discover whether genre has a significant effect on word order. Poetic and prose order are comparable, though the level of variation between texts is high in both. No syntactic constraints are observed.

Chapter 2: Morphological determinants of order are examined. It is found that the order of subject, verb and object varies according as the verbal argument is pronominal or nominal, and also depends on the size of nominal arguments. Increasing word length is associated with SV and OV, and prosodic prominence with VS and VO. The latter is inferred from metrical structure: constructions with decreasing order are associated with a disyllabic word at the line end. Word size and the disyllabic ending are combined in a tendency of increasing 'phonological weight'.

Chapter 3: A study is made of a regular hyperbatic pattern, here termed 'phrasal tmesis', of a demonstrative-noun combination separated by a verb. In its two distinctive features, a phrasal constituent extending over the second colon of the trimeter line and a disyllabic line ending, it may be seen as a poetic exploitation of rightwards phonological weight, and also demonstrates formal similarities between intra-clausal word movement and subordination. It shows how the tendency towards rightwards weight has been exploited by ancient authors.

## II: Focus

Chapter 4: The prominence of words at the clause start (in P1 position) is attributable to their position and prosodic isolation from the body of the clause, and to the function of light words in P2. ${ }^{15}$ Enclitic particles emphasize the initial element, by cohesive focalization: forming part of the initial word grouping, so adding their morphological weight to it. The cohesive focalizers include emphatics, connectives, indefinite pronouns, and adverbials. Interrogative and relative pronouns, however, are separated from the initial element by an intonation break, but also mark it as being focal. P2 is, then, composed of two parts, divided by the intonation break. The structure of the whole sentence may be schematized as in Fig. 1 (=Chapter 4, Fig. 4), with the P2 groupings placed on either side of the main intonation break: ${ }^{16}$

## [ \{ P1 \} cohesive focalizers] [ interrogatives and relatives [personal pronouns \{clause\} ] ]

What is new about this analysis is that the functions of P1 and P2 elements are integrated with their prosodic relationship: the mechanism by which coordinating particles, for example, link clauses is by focalizing the initial element in their clause, so connective and emphatic particles are interpreted as belonging to the same semantic group. The 'meaning' of individual particles cannot, of course, be reduced to their focal function, but it is argued that particles with a wide variety of meanings all function in a prosodically analogous way. Cohesive focalization is a structural as well as a prosodic relationship, and marks the inter-clausal link in adverbials and conditionals.

## III: Clause linking

Chapter 5: The pattern of focalization in relative and completive clauses is shown to form a developmental sequence. The development from free relatives to ötı-complements in Homer involves two distinctive features: focalization at the clause join, with ös $\tau \epsilon$, ö $\sigma \tau \iota$, and ö $\tau \iota$, and a regular association with verbs of speech and cognition. The relative pronoun functions as main verb object, so an indirect question becomes complementlike when it is neuter ('say what you mean'). The change to a complement may

[^3]be seen in the use of a cognitive main, but not subordinate, verb, with ötı functioning as an argument of the main verb only ('I know that $x$ is $y^{\prime}$ ).

Chapter 6: Explicit objects in $\dot{\omega}$-complementation serve the same function: the Homeric adverbial clause becomes a completive by the addition of main verb objects, which are regular throughout complements in the corpus. In the corpus, complementation remains prosodically focal, so is a transitional, circumstantial, form. This aetiology suggests that participials rather than accusative and infinitive complements are the precursors of finite complementation, which developed through a convergence of indirect questions with ötı following speech verbs and adverbial ćs-clauses following cognitive verbs ('I know you, how you are'), into transitive circumstantials with either complementizer.

Chapter 7: The poetic form and discourse functions of complements are linked with the focalization of the inter-clausal link. Metrical regularities in the positions of the complementizers accord with it, as does the use of complementation evident throughout the corpus: as a rhetorical tool rather than simply as indirect speech.

## Comments and theory

The major points of the argument are summarized, and technical terms defined, in the sections below. Some details of linguistic structure are illustrated by diagrams, which are also reproduced in the body of the text:

> 1: Theoretical approach
> 1a: Subordination

2: Key concepts
2a: Weight
2b: Focus and focalization
2c: Subject, topic, theme, topicalization
2 d : Topic position and the CG clause
2 e : The intonation break and the clause break
$2 f$ : Free relatives and cohesive focalization
2 g : " $\Omega$ S-complementation and explicit objects
2h: Prolepsis

3: Aetiology of complementation<br>4: Justification of the hypothesis of focal linking<br>5: Metrical constraints<br>6: Textual scope

## 1: Theoretical approach

The approach is structural, but largely informal, owing a constant debt to Jespersen $(1924,1937)$, Dover (1960) and Lyons $(1968,1977)$. Works on Greek morphology and syntax by Jannaris (1897), Riemann and Goelzer (1897), Kühner (1904), ${ }^{17}$ Meillet and Vendryes (1927), Smyth (1956), Chantraine (1958, 1963), and Liddell and Scott (1968), are cited throughout.

In the diagrams, structural details are described using the terminology of $\mathrm{X}^{\prime}$ [X-bar] syntax, in which grammatical relations are visualised as a projection of underlying logical form, with hypothetical movement to explain the observed word order. ${ }^{18}$ While the existence of other structural and functional approaches is noted, ${ }^{19}$ the $\mathrm{X}^{\prime}$ model enables the relationships between word order, clause linking, and logical form to be described rigorously.

Only the general principles of the $\mathrm{X}^{\prime}$ model are adopted. Its central assumptions are that syntactic relations may be described structurally, ${ }^{20}$ and that phrases may be defined as endocentric. ${ }^{21}$ Figure 2 (adapted from Jackendoff 1977: 17) shows the configuration of the phrasal units of specifier, head, and complement, which define the structural relation between the head

[^4]word and the other elements in a phrase: ${ }^{22}$

Figure 2


In this framework, the head is defined structurally, as the central element of the phrase. While the possibility of other definitions is recognized, ${ }^{23}$ the basis of the schema is that words and phrases may be structural sisters. ${ }^{24}$ In Fig. 2, the pattern is shown as right-branching, but is reversible: there is no a priori reason why specifiers should not follow a complement-head pair, producing a left-branching structure, and the variable placing of some modifiers in CG (as the variable demonstrative position in NPs cited in Chapter 3, Section 6a) implies that this does occur. ${ }^{25}$

The basic clause is analysed as an Inflection Phrase (IP), with the verb inflection as its head. ${ }^{26}$ Preposed elements and complement-introducing conjunctions are placed outside the IP, in the Complementizer Phrase (CP) as in Fig. 3. ${ }^{27}$ If phrases are shown without an intermediate level, they are schematized as triangles, so specifier

[^5]and head are not distinguished. Word 'movement' within the structure is indicated by orthogonal lines.

The identification of phrasal constituents can be ambiguous in CG. Because there is no indefinite article, and the definite article may be omitted in tragic language, a noun may 'stand for' either an intermediate or a maximal projection. This is particularly relevant to the discussion of hyperbaton in Chapter 3.

## 1a: Subordination

The term 'subordination' is used in this discussion in two senses: a semantic and a structural one. In the examination of word order in Chapters 1 and 2, any clause in a semantically dependent relation to another is categorized as subordinated. In Chapters 4-7, subordination is considered more narrowly, as a structural category, with a linking word which defines the relation in which one clause modifies a constituent in another (as relatives and adverbials), or complementation, where one clause is a constituent in the other. Since Chomsky (1957) this has standardly been visualized as a recursive relation.

Structural subordination may be contrasted with four other relations: ${ }^{28}$
i) Co-ordination: a relationship between two clauses of equal status, with a link marking the relation, which may be a single word ('and, but, or') or a pair ('both ... and, either ... or').
ii) Apposition: the relationship between two clauses or phrases containing co-referent elements ('Odysseus, son of Laertes'). There may be an asymmetrical dependency relation.
iii) Adjunction: the juxtaposition of an element to a clause, as may be involved in the preposing of interrogative elements ('what ${ }_{i}$ will he do ${ }_{i}$ ?').
iv) Correlation: having an element in each clause which serves a syntactic function within it, as well as marking its co-ordinating relation to the other. The functions may be adverbial, as in temporal correlatives ('when ... then'), or pronominal ('which .... that').

These categories are not mutually exclusive (see Matthews 1981: 144 and 222), and Lehmann (1989) describes them as forming a continuum of independence. Correlation, subordination, and adjunction may all express co-

[^6]referent and adverbial relationships, co-ordination and correlation are similar, and both apposition and adjunction may be seen as a type of subordination. Recursive subordination is intimately connected with the mechanism of focal linking, because both involve an element functioning in two clauses simultaneously.

## 2: Key concepts

## 2a: Weight

The examination of intra-clausal word order identifies a correlation between order and two lexical factors:
i) Word size, judged by number of syllables: longer words are placed later. This accords with the principle of end-weight, proposed by Behaghel (1909: 138-139), and attributed to cognitive efficiency -an explanation followed by Hawkins (1983) and Dik (1978). ${ }^{29}$ The feature accords with a link often noted between the end of the sentence and pragmatic emphasis (Delbrück 1900, Kühner 1904, Denniston 1952).
ii) A disyllabic word regularly ending the poetic line. The regularity of this feature in both trimeters and hexameters (Raalte 1986: 21, 29) suggests that it is not only a metrical effect, sensu stricto, but exemplifies the prosodic prominence which has been observed to accompany the end of a period (Quintilian Institutio IX.iv.29, Demetrius De Eloc.39, Raalte 1986). While SV and OV constructions are overwhelmingly associated with factor (i), VS and VO are associated with factor (ii). This is partly explicable because CG nouns are generally shorter than verbs, but the lower connection between VS and factor (ii) in prose suggests that it is also metrically constrained.

The two features are combined in a principle of phonological weight. Other things being equal, a longer word is judged to have more weight than a shorter one, and a word at a prominent position in the stichic line is judged to have more weight than one placed elsewhere. Heavier elements tend to be placed to the right. The link between morphological and phonological weight may be explained in terms of a stress component in CG. ${ }^{30}$

[^7]
## 2b: Focus and focalization

Focus is regularly used in functional models to describe an initial position dedicated to marking certain kinds of information as new (Halliday 1967: 204, Jackendoff 1972, Lambrecht 1994: 208) or most salient or relevant (Dik 1980: 16, Sperber and Wilson 1986: 202-217). Dik (2007: 10) describes it as 'the most salient piece of information in the clause'. It is argued in Chapter 4, section 1a, that these are subjective categories, which can lead to circularity and imprecision.

The term is here used to describe the initial position P1 as occupied by presentationally-prominent elements, irrespective of the kind of information they convey: they may indeed be grammatical words. Prominence is defined as prosodic emphasis, whether by quantity or stress. The term focalization is used to describe the reinforcement of prosodic prominence by enclitics which add their weight to the initial element, or pronouns which create a contrast with it. The prominent element may be preposed from within the basic clause, but that is not always so: in subordination, the focalized word may even function syntactically in the preceding clause. It has regular and systematic links with clause structure: it is here identified with the X-bar position of Specifier of the CP (complementizer phrase: see figs.6-11).

Focalization of the initial element affects clause structure in five principal ways:

1) Enclitics (cohesive focalizers) are prosodically part of the P1 word group, on the left of the main intonation break at P2.
2) Focal prominence usually involves phonological weight, with the focalized element having more syllables than the following element. As grammatical words in P1 are often monosyllables, they are often followed by more than one cohesive

3) Enclitic pronouns in P2 are prosodically part of the main-clause intonation-group, and contrast with the P1 element both prosodically (because they are separated by the intonation-break) and morphologically (because they are lighter).
4) The initial element is regularly prominent in contrast with the preceding text, as well as the following clause.
5) This use of 'focus' is in accordance with the ordinary-language meaning of the term, as 'focus' of attention. The features which make it prosodically prominent create communicational emphasis too: it may be said that 'loud' implies 'important'.

When there is both a focalizer and an interrogative, the start of the clause may be schematized as in Fig. 3 (=Ch. 4, Fig. 2): ${ }^{31}$


## 2c: Subject, topic, theme, topicalization

In order to justify the prosodic definition of P1, the alternatives must be identified. Some categories by which the function of initial elements is analysed are inadequate because they are defined circularly (as topic, theme, and subject -see Li and Thompson 1976: 464; Lyons 1977: 507), and assume rather than demonstrate identity between structural and pragmatic categories (as in 'topicalization': Emonds 1976).

Structural, semantic and textual categories are distinguished here as follows:

1) 'Topic' is the semantic category of 'the person or thing about which something is said' (Lyons 1968: 335), which may be expressed in a sentence by the grammatical subject.
2) 'Subject' is defined by case and relation to a verb, as the nominative nominal or pronominal specifier of a finite verb inflection.
3) 'Theme' is interpreted as a textual category, referring to an element in a sentence which specifies textual relevance: a pragmatic and not a structural description. ${ }^{32}$ It is hard to see how a referring expression can be described as thematic, except insofar as topical referents, as defined in (1), are likely to be expressed at several points in a text. As its etymology suggests, a 'theme' is generally expressed by a noun.

[^8]4) 'Topicalization' is the placing of absolute-like constructions in any position adjoined to the clause structure, with no necessary connection with topic or theme. ${ }^{33}$ The central feature of this interpretation is that there is no dedicated structural position for the topic or theme, but there is a focus position for prominent elements: P1. Of course, the word expressing the topic may be focalized, ${ }^{34}$ and this may even be normal in declarative main clauses. However, no support is found in these texts for a position determined by thematic factors, or for the function of any Greek particles as topic or theme markers, as the Japanese $w a{ }^{35}$

## 2d: Topic position and the CG clause

The view of the Greek clause as having an initial focus position is in contrast with the common view, as expressed by Kiparsky (1995), that there was a dedicated position in early Indo-European (henceforth IE) languages for the topic, and that interrogatives are in a focus position which follows this, as in Fig. 4 (=Ch. 4, Fig. 1; adapted from Kiparsky 1995: 153, Fig. 33, with the same quotation as in Fig. 3 above): ${ }^{36}$


This interpretation is similar to that of most functional grammars, but has drawbacks as a model of CG structure:

1) The prosody does not accord with it, because the second-position element is always less prominent than the initial one. Though interrogatives bear an accent, $\tau i$

[^9]in Fig. 3 above is not prominent in comparison with the initial element, and in Chapter 4 it is argued that interrogatives are not prominent unless they are preposed to focus position.
2) In tragic complementation, the regular presence of focal elements preceding $\dot{\omega}$ may be better modelled if $\dot{\omega}$ is not itself focalized.
3) A regular topic> focus sequence is semantically impossible if topic is not a structural category. The phrase кaì vv̂v $\tau \grave{\alpha} \mu \alpha \dot{\sigma} \sigma \sigma \omega$ could be both topical and focal (though not, of course, 'topicalized' and focal).

## 2e: Intonation break and clause break

It is argued in Chapter 4 that P2 is not only the normal site for co-ordinating particles and other words normally regarded as P2 clitics, but also for interrogatives, which are regularly preceded by focal elements (as in Fig. 2 above), and by an intonation break. The prosodic relation between a relative pronoun and its antecedent is the same as that between an interrogative pronoun and its host, though in relative constructions the intonation break coincides with the clause boundary. The structure is shown in Fig. 5 (=Ch. 4, Fig. 3): ${ }^{37}$


[^10]The prosodic relation between the head noun and relative is similar to that between a specifier and head in a CP, but the focal pattern spans the clause break, ${ }^{38}$ so the structure differs from a correlative in having a prosodic link.

## 2f: Free relatives and cohesive focalization

Indefinite pronouns regularly introduce free (headless) relatives. It is not only the lack of a head noun which creates loss of specificity, but also the association with verbs of speech and cognition: ${ }^{39}$ a few Homeric free relatives are associated with verbs of giving or taking (Il.15.109, Od.1.316) or showing (Il.22.73), but almost all involve verbs of speech or cognition, so may be termed indirect questions. In free relatives, $\tau \epsilon, \tau \iota S$, and $-\tau \iota$ all function as indefinite markers, cohesive focalizers, and adverbial links. Epic $\tau \epsilon$ is modelled as the head of the CP in Fig. 6 (=Ch. 5, Fig. 1): ${ }^{40}$

Figure 6


[^11]"Os is here metrically prominent at the C2 caesura. ${ }^{41}$ It is not only subject of $\pi \epsilon \phi \epsilon$ ú $\gamma \mathrm{l}$, but also has an object-like relation with $\gamma \nu \dot{\mu} \mu \in \nu \alpha l$, in terms of its (missing) antecedent ('[the ones] who got away'). This is illustrated by the inclusion of the object NP in the diagram. The structure is therefore close to a correlative, with nominative case retained (see Chapter 5, Sections $2 b$ and 2 c ).

A functional parallel is created by $\operatorname{TiS}$ affixes. Although $\tau \iota S$ is etymologically a pronominal and not a conjunction, it may still be modelled as head of the CP (because indefinite and linking functions are semantically similar, and $T I S$ is not co-referent with an element in the subordinate clause). ${ }^{42}$ The construction is schematized in Fig. 7 (=Ch. 5, Fig. 2): ${ }^{43}$

Figure 7


Here, the function of the P1 element as main verb object is less clear (which is why the main clause NP position is omitted in the diagram), though the CP is structurally the main verb complement. The structure is closer to a direct question, though ős still functions as subordinate verb subject, in a focalized relation with $\tau ו s$. It is metrically prominent at the start of the line.

[^12]The next stage in the development of complementation is the use of neuter pronouns in indirect questions, because in these cases the pronoun can be interpreted syntactically as functioning in either clause, and there is also a semantic ambiguity: 'say [the thought] which you are thinking/ speak [the subordinated proposition]'. The structure is shown in Fig. 8 (=Ch. 5, Fig. 3) $)^{44}$

Figure 8


Because in complementation ött is not an argument of the subordinate verb, the form is encouraged by the use of a cognitive main, but not subordinate, verb ('I know that $x$ is $y$ '). The difference with respect to the main verb is that the complementizer does not only denote the textual object (the following subordinate proposition), but also deictically 'refers' to it. ${ }^{45}$ The prominence created by focalization is a prosodic marker which announces the following

[^13]clause, as in Fig. 9 (=Ch. 5, Fig. 4), where the construction may be translated as emphatic ('for I know well this, that you are all sick'): ${ }^{46}$

Figure 9


It may be remarked that the complementizer is here also prosodically highlighted by its position in the last foot of the trimeter line (a position noted above, in Section 2a, as emphatic).

## 2g: $\omega$-complementation and explicit objects

The interpretation of the linking element as focalized is justified, not only on semantic grounds (the connection between interrogation and indefinite reference), but also by analogy with $\dot{\omega} s$-complements. In the tragic texts of the corpus, a majority of $\dot{\omega}$-complements are preceded by explicit main verb objects. In many, the textually-deictic function is regularly performed by demonstrative objects, which themselves have a cohesively-focalizing suffix. The intonation break and clause break are coincident, and $\omega$ s functions as a

[^14]focus marker. The structure is shown in Fig. 10 (=Ch. 6, Fig. 3) $:^{47}$
Fig. 10

mâs tis aitòv roû mé ${ }^{\prime}$ as $\mu \hat{a} \lambda \lambda o v$ фı $\lambda \in \hat{\imath}$

Here, the focal element functions syntactically in the main clause, but deictically points to the following subordinate proposition. The 'catadeictic' demonstrative ő $\delta \epsilon$ is always involved in such constructions (rather than the 'anadeictic' oîtos). ${ }^{48}$ Monteil $(1963,251)$ interprets a demonstrative object as emphasizing the 'substantival' force of completives, but the construction is seen here as representing a development from the transitive circumstantial ('know x as being $\mathrm{y}^{\prime}$ ), though involving a deictic element as main verb object. Pragmatic as well as prosodic emphasis may be inferred ('Have you only just learned this, that...').

## 2h: Prolepsis

A close analogue of the transitive circumstantial is evident in proleptic constructions, where the main verb object is expressed by a referring expression which is co-referent with the subject of the subordinate verb. The

[^15]structure is schematized in Fig. 11 (=Ch. 6, Fig. 2): ${ }^{49}$
Fig. 11


This is, grammatically, irregular (because only one semantic role is standardly assigned to each verbal argument), ${ }^{50}$ but the anacoluthic structure seems semantically and prosodically accurate: its irregularity demonstrates the inchoate stage of complementation. Co-reference persists even in modern languages ('consider the lilies ${ }_{i}$ of the field, how they $\mathrm{y}_{\mathrm{i}}$ grow'). ${ }^{51}$

The phonological contrast evident in prolepsis (that it almost always involves $\dot{\omega}$ or other light conjunctions $)^{52}$ is central to the interpretation. Prolepsis is a regular feature of CG, as in the oî $\delta \dot{\alpha} \sigma \epsilon$ ös / $\dot{S} \in \epsilon \hat{i}$ construction, ${ }^{53}$ and it is argued in Chapter 6 that it exemplifies the developing structure of complementation, rather than being simply a stylistic curiosity.

[^16]587\mathrm{ and Med. }39\mathrm{ ( }\epsilon\textrm{i})\mathrm{ ; Frogs }41\mathrm{ ( }\mu\mathrm{ '').
${ }^{53}$ As Il.9.527-8, Eum. 454 .

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}

\section*{3: Aetiology of complementation}

As evident from the examples in the previous section, there is an ambiguity in the position of the linking element, as being in main verb object position with a following conjunction, or in subordinate focus position (P1) with a particle in P2. It is proposed that ambiguity reflects the origins, and that there is a prosodic and functional parallel between focus and object, and between P2 and the complementizer position.

All complementation requires a reporting verb with the linking word as object. There must therefore have been an expansion in the transitivity of these verbs, from taking only exophorically-referring objects, to textuallyreferring ones. It is generally assumed that the development of complementation involves a historical sequence of main verbs: of emotion> cognition/ perception> speech (Chantraine 1963, Monteil 1963). The aetiology developed in Chapters 5 and 6 suggests some modifications of this sequence:
1) The development of ötı-complements from free relatives required an indefinite object constituting a focal link, and a main verb of speech, since the meaning of an indirect question is semantically intermediate between a relative and a complement ('they asked what troubled him'), as the interrogative can be interpreted as functioning in both clauses. Only with a cognitive verb, however, is the structure unambiguously completive.
2) Complementation with \(\dot{\omega}\) developed from Homeric interrogative clauses following cognitive and speech verbs ('know how' and 'tell how'), to a transitional stage circumstantials following speech verbs, either with indirect objects ('singing about Ares and Aphrodite, how they lay together'), or following cognitive verbs, with direct objects ('knowing x as being \(\mathrm{y}^{\prime}\) ). \({ }^{54}\) The transition is exemplified by proleptic constructions.
3) Main verbs of emotion are less important to the structure, because they do not appear to be earlier than the others, and in fact increase in frequency into the fourth century. The causal meaning of öTı, 'because', may in fact derive

\footnotetext{
\({ }^{54}\) The expression 'cognitive verb' is used to denote verbs of perception and judgment.
}
from completives with öтı, so 'rejoice because' post-dates 'rejoice that', rather than the converse. \({ }^{55}\)

\section*{4: Justification of the hypothesis of focal linking}

The proposed relation between the prosody and the syntactic structure of the inter-clausal link is justified in two ways: in terms of its explanatory power, and because it makes a testable prediction.

It provides a unified explanation for a number of features of CG word order and clause linking:
i) A structural difference accompanying the order of conditionals.
ii) The regular position of relative and complement clauses following their main clause.
iii) The similarity of free relative constructions with öбtıs and complements with öтı.
iv) The high frequency of verbs of speech in Homeric free relatives.
v) A functional parallel between the affix of indefinite/interrogative pronouns and epic \(T \epsilon\).
vi) The use of two distinct complementizers, ötı and ís, and their variants. vii) The high frequency of main verb objects with \(\dot{\omega}\)-complements, and the association of proleptic constructions with \(\dot{\omega}\).

The proposed mechanism of focal linking also combines with the intra-clausal principle of phonological weight as a unified explanation of word order, as the 'heavy' element at the end of one clause is in emphatic position in the other.

The analysis also provides a structural motivation for VO order (since an element which is focalized in the subordinate clause is likely to follow the verb in the main clause), which accords with a transition between an OV and a VO order, and so might be added to the proposed motivations for a 'rightwards drift' in IE languages. \({ }^{56}\)

\footnotetext{
\({ }^{55}\) Monteil (1963) holds the second view, and Cristofaro (1998) the first.
\({ }^{56}\) See Ross (1970, 1973), Lehmann (1973, 1974, 1978, 1986), Vennemann (1974, 1984), Watkins (1976), and Bauer (1995).
}

Testability. The hypothesis makes a testable prediction: that, in CG, there is no regular initial emphatic position within the syntactic structure of subordinate clauses which follow their main, and that preposed elements function syntactically within the main clause. No evidence to the contrary is found in the texts studied here \(:{ }^{57}\) if it were found in contemporary texts, the hypothesis would require serious revision.

It is, of course, likely that as the syntactic structure became regular, so it also became less prosodically prominent. As \(\dot{\rho}\)-complementation became common, so it omitted main clause objects except in emphatic constructions, and the complementizer őtı also came to bear progressively less emphasis. The circumstantial is the inchoate form of complementation.

\section*{5: Metrical constraints}

The discussion concentrates on poetic texts, but the following presumptions may be made about the relationship between poetry and prose:
1) Poetic language is based on the same prosodic principles as prose. \({ }^{58}\)
2) The same syntactic rules apply in poetry and prose, even if the exploitation of these rules is subject to specific constraints in different genres.
3) If prosody reflects syntax, \({ }^{59}\) then metrical form, which constitutes particularly visible prosodic constraints on language, may help identify underlying syntactic structure.

This does not imply that poetic and prose order will necessarily be the same: constraints on rhythm also constrain word placing, yet all language has a rhythmic component, and Greek metrical patterns are likely to represent 'a stylization or normalization of the natural rhythm of language \({ }^{\prime} .{ }^{60}\) In order to determine the extent of constraints, prose texts are used as controls, and

\footnotetext{
\({ }^{57}\) The possible counter-examples are discussed in Chapter 6, Section 4b.
\({ }^{58}\) This assumption is made by Allen (1987: 132), Liberman and Prince (1977), Ruijgh (1990), and Devine and Stephens (1994: 100-1), and is implicit in the word groups discussed by Dover (1960: 17). See also Quintilian, Institutio IX.iv. 79 on the existence of feet in prose rhythm.
\({ }^{59}\) The converse is also possible: Liberman and Prince (1977) propose that constituent organization is itself motivated by prosodic stress.
\({ }^{60}\) Allen (1987: 132), quoting Meillet.
}
comparisons are made with previous studies of prose order (Frisk 1932, Dover 1960 and Dunn 1988) and of Homeric order (by Friedrich 1975).

In the corpus studied here, no consistent variations between epic, tragic, and prose texts are observed. \({ }^{61}\) Similarly, no consistent variations are found in comparison with previous studies of prose, so the findings on word order may be applicable to CG more generally. Focal patterns of clause linking are observable in Plato, though they are naturally less regular than in the poetic texts. A more extensive examination of fifth century prose texts would be needed to determine their extent.

\section*{6: Textual scope}

The discussion of subordination draws extensively on the Homeric and tragic corpora: all subordinating instances of öть in Homer and in tragedy are examined, and the frequency of other complementizing conjunctions is analysed. A systematic analysis is undertaken of all finite complementation in a corpus of texts, constituting a text base of 11,343 poetic lines, plus two prose texts as controls. The texts chosen are: Iliad 9, Odyssey 9, Septem, Agamemnon, Choephoroi, Eumenides, Oedipus Tyrannus, Medea, Cyclops, Frogs, Thucydides History 5, 85-113 (the Melian Dialogue), and Crito. \({ }^{62}\) This data-set is also used for the systematic study of word order in Chapters 1-3.

These texts are chosen so as to concentrate on tragedy, yet also to identify genre differences with epic and prose. The corpus is not intended to be a representative sample of tragic texts, \({ }^{63}\) but to provide the most varied sample. It includes the Oresteia, as the only extant trilogy, one tragedy by Sophocles and one by Euripides, and the only complete extant satyr play. Septem is included in order to determine whether the unusual features of word order observed in the Oresteia reveal a general trait of Aeschylean style. \({ }^{64}\) Frogs is

\footnotetext{
\({ }^{61}\) Differences between order in lyric and spoken passages in tragedy are discussed in Chapter 1, Section B4.
\({ }^{62}\) Traditional titles of ancient texts are given. While this may result in inconsistencies, the justification is advanced that even transliteration of Greek forms would not be 'authentic', because many titles are derived from secondary sources.
\({ }^{63}\) This would be an impossible aim, since it could represent only surviving texts.
\({ }^{64}\) The high proportion of Aeschylean language in the corpus reflects the centrality of his work in the tragic genre.
}
chosen as the comedy because it combines informal style with explicit parody of tragic language, which may demonstrate how the high style was seen at the time. Two prose dialogues are included as controls, but not historical narrative, as it has been systematically studied, in works cited earlier (in footnotes 5 and 6).

Complete texts are chosen (as by Dover 1960), rather than selections (as by Frisk 1932), in order to observe larger-scale discourse patterns as well as syntactic detail. Comparisons are occasionally made between selected texts within the corpus, when there is no reason to believe the results would differ significantly with a more extensive data-set. All figures are given with accompanying percentages, in order to facilitate inter-textual comparison. In the interest of clarity, percentages, other than those cited from other works, are rounded to the nearest integer.

Part I

Word Order

\section*{Chapter 1}

\section*{The order of subject, verb, and object}

\section*{Summary}

This chapter contains an investigation of the relative order of the main sentence elements (subject, verb, and object) in the selected corpus. The principal conclusions are that poetry and prose show comparable word order patterns, but that no syntactic rule captures both the regularities and the variations from them.

\section*{Chapter Sections}

A: Previous approaches to the study of word order are discussed, and their results summarized, in the following sections:

1: Stylistic interpretations of word order
2: Pragmatic interpretations
3: Structural interpretations
4: Word order in poetry and prose

B: The order of subject and verb in the textual corpus is collated. The results accord with those of Frisk (1932), Dover (1960), and Dunn (1988) for prose, in both the prevalence of SV, and also the frequency of variation from it, demonstrating that subject-verb order is not more variable in poetry than in prose. Part B is subdivided as follows:

1: Textual data: frequencies of SV and VS
2: Collation of data by clause type
3: Textual differences
4: Genre differences: lyric
5: Summary of word order patterns

C: Possible syntactic explanations are considered. Neither clause type nor clause order is shown to determine word order. The position of the object in relation to subject and verb is also examined: a principle of verb centrality is considered, but no support is found for it. No structural constraints on order are observed.

Section C is subdivided as follows:
1: Possible structural motivation for VS
1a: Clause type
1b: Verb preposing
1c: Questions
1d: Passives
1e: Clause order
2: Verb centrality and word order
2a: Verb centrality: subject, verb, and object
2b: Verb centrality: conjunction, verb, and subject
2c: Verb centrality: conjunction, verb, and object
3: Syntactic determinants: summary

\section*{A: Previous approaches to the study of word order}

This section is included to present the context to the discussion, by sketching different ways in which word order has been studied. It gives a brief survey of, and bibliographic references to, previous work.

\section*{A 1: Stylistic interpretations of word order}

Ancient writers and grammarians paid most attention to compositional techniques by which word order may be manipulated, and less to the nature of the regular order. This is presumably, as Matthews (1994: 101) notes, due to a separation between grammar and rhetoric: \(\sigma v ́ v \theta \in \sigma \iota s\) (composition) was primarily a rhetorical concern. Some grammarians did discuss a natural order: Dover (1960: 9) cites Dionysius of Halicarnassus (De Compositione Verborum 5) as thinking there was a natural criterion, тà ỏvó \(\mu a \tau \alpha\) тáттєเv \(\pi \rho o ̀ ~ \rho ं \eta \mu a ́ t \omega \nu ~(t o ~ p u t ~ n o u n s ~ b e f o r e ~ v e r b s), ~ b e c a u s e ~ s u b s t a n c e ~ s h o u l d ~ p r e c e d e ~\) accident. However, the passage (De Comp. 5.17-18) also decides against such an order (in a sentence which exemplifies its argument):

The argument [is] persuasive, but did not seem correct to me.

Demetrius (De Elocutione 199) considered there to be a natural order, фибькŋ тá \(\xi ı s\), with what might be defined as the element expressing the topic, тò \(\pi \epsilon \rho i\) oî, preceding. \({ }^{65}\) And yet, at 200 he writes (again iconically):


Of course the order might be reversed ... we do not absolutely approve the one order.

Rhythm was also frequently mentioned: Dionysius believed composition to be based on stylistic principles of rhythm and period. Similarly, Cicero \((\) Orator, 54\()\) cites 'numerus' as the criterion. However, these principles are open to a variety of interpretation, as analyses of the opening of the Republic by a number of writers, both ancient and modern, illustrate. \({ }^{66}\) At one point in De Elocutione (21), Demetrius describes the opening sentence as a dialogic period in which the elements show little regularity, \(\epsilon \pi \epsilon \in \rho \rho \iota \pi \tau \alpha l ~ \gamma a ̀ \rho ~ \alpha \dot{\alpha} \lambda \lambda \hat{\eta} \lambda o{ }^{\prime}\)
 (De Eloc.205) he describes the opening as composed of трıн́́тра ко́ \(\mu \mu \alpha \tau\), and
 and the iambic line. Quintilian (Institutio 8.6.62-65) attributes the choice of order of the first four words (from order 'ad necessitatem') to rhythm, as 'Nec aliud potest sermonem facere numerosum quam opportunata ordinis per mutatio' (it is impossible to make our prose rhythmical except by artistic alterations in the order of words). Weil (1869: 57) defines the passage as a 'descending construction', in which governing words precede the governed (a principle which is considered further in Chapter 2, Section B4a). Denniston (1952: 41) analyses the first eight words as two equal commata: кат́́ \(\beta \eta \nu \quad \chi \theta\) ès \(\epsilon i s\) Пєıраıิิ | \(\mu \in \tau \grave{\alpha}\) Г入аúк \(\omega \nu\) оs тои̂ 'Apíбт \(\omega \nu 0\), of which the first has a symmetrical pattern of two monosyllables flanked by trisyllabic words. \({ }^{67}\)

Cadence and rhythm were frequently discussed as important to the meaning of the sentence, yet no generally agreed structural principles were proposed.

\footnotetext{
\({ }^{65} \mathrm{~A}\) connection with the syntactic subject may be implied, but cannot be proved. See the Introduction, Section 2c, and Chapter 4, Section 1.

 son of Ariston to make my prayers to the goddess ...'
\({ }^{67}\) One might also note a rhythmic contrast, in the syllabic inequality of the commata, which creates a sense of acceleration.
}

The only generalization which was universally implied (though not explicitly stated) was a link between government and proximity. \({ }^{68}\)

This was usually discussed in terms of the exceptions. \(\Upsilon \pi \epsilon \rho \beta a \tau o ́ v\) (hyperbaton) is mentioned or described by Plato (Protagoras 339B-343E), Aristotle (Rhetoric III.v.2), Longinus on the Sublime 22, Dionysius of Halicarnassus (De Thucydides 31.27, 52.22), Quintilian (Institutio 8.6.62-65), and Philodemus (Rhetorica 1.160S). In Protagoras (339B - 343E), Plato has Socrates develop an argument based on the possibility that the adverb \(\dot{\alpha} \lambda a \theta\) é \(\omega\) s in the sentence (from an ode
 \(\operatorname{man}[\ldots]\) to become [truly] good) is an example of hyperbaton, being ob \(\rho \theta \omega \bar{s} \dot{\epsilon}^{\prime} \pi^{\prime}\) モ́ \(\sigma \chi \alpha ́ \tau \omega\) кє́́ \(\mu \in \nu \mathcal{V}\) (properly placed at the end). He does not define the meaning of ojp日जs, but it presumably implies a relation between sense and the proximity (or adjacency) of the words.

Other discussions of composition make the same assumption of proximity. Philodemus (Rhetorica 1.160S) considered that the interval between phrasal elements must not be too great, but again order is not mentioned. At Rhetoric 1407a26-30, Aristotle describes a construction in which \(\dot{\epsilon} \gamma \omega\) is separated from its verb by too great an interval as ḋ \(\sigma \alpha \dot{́} s\) (unclear), both on the grounds of correct ordering of protasis and apodosis, and of proximity between subject and verb.

A specifically poetic word order was not identified. Dover (1997: 96-112) describes how Greek rhetoricians and grammarians generally distinguished poetry and prose not by order but by lexical choices, such as poetic words, absence of the article and of prepositions with locative datives, and the use of attributive and compound adjectives (though Dover observes that such features also appear in prose). \({ }^{69}\)

\section*{A 2: Pragmatic interpretations}

\footnotetext{
\({ }^{68}\) Structural linguistic theory makes the same assumption, formalized in the 'transparency principle', as noted in the Introduction, Section 1, footnote 20.
\({ }^{69}\) For the use of \(\lambda\) ó \(\gamma\) os and its variants to identify prose, see Dover (1997: 185-6). The crucial distinction may be between sung and spoken language: see Dover (1987: 1-15) and Section B4 below.
}

In the twentieth century, the search for a structural clause model has led to the relative order of subject, verb, and object in prose receiving most attention. Frisk (1932: 14), Denniston (1952: 43) and Dover (1960: 25) all describe the normal declarative order of Classical Greek prose as subject before verb. However, just as the motivation for SV is not fully established, so the high degree of variation from it has remained somewhat puzzling. Using a text base of selected passages of prose texts, Frisk (1932: 16) finds percentages of between \(64-87 \%\) of SV as a total of [SV+VS]: an average (by texts) of \(76 \%\), and a variation of \(23 \%\) (though if only classical texts are included, the variation is \(71-87=16 \%\) ).

Denniston (1952: 44) concentrates on logical and rhetorical factors rather than syntactic ones, since 'The grammatical order of precedence is modified at every turn by the claims of logical coherence and of rhetorical emphasis: and these factors, again, at every turn conflict with one another'. Denniston analyses that conflict in terms of hyperbaton, period structure and proportion, different types of antithesis (anaphora, chiasmus), and the repetition of words between clauses. Variation is described psychologically, as 'a love of pattern-weaving for its own sake', which Denniston (1952: 59) attributes to Plato.

Dover (1960: 67) notes a similar 'desire to achieve variety', in Herodotus. However, Dover (1960) also suggests a number of general principles, in his systematic analysis of the interaction between logical, syntactic, and stylistic determinants of word order in three prose texts (Herodotus 3.61-87, Lysias 12, and Plato, Laches), in which words are categorized as prepositives, postpositives, or as mobile. The proportions of SV out of total subject and verb clauses in Dover's texts are: Herodotus 3, 59\%; Lysias 12, 83\%; Laches, \(74 \% .{ }^{70}\) Dover identifies four general principles (1960: 65):
i) Indispensability to sense: essential elements ('nuclei') tend to precede optional ones ('concomitants').
ii) Demonstratives are preferentially prepositive (so precede the verb, whether they are subject or object).
iii) Verbs used as copulatives are rarely initial.

\footnotetext{
\({ }^{70}\) These percentages are derived from the totals given by Dover (1960: 29).
}
iv) Dispensable subjects may be expressed through the verb inflection, while nominal subjects are usually essential to the sense (and so, by principle i, precede).

Dover's categorization of a word as nucleus or concomitant is based on predictability, judged from the context, so is similar to the comment and topic model, but makes a converse claim, since topic is normally considered to precede comment. However, Dover's principle (iv) suggests that even thematic nominal subjects would precede the verb.

All four principles motivate SV, while only (ii) motivates OV (and even then permits hyperbaton about the verb), so there is a much stronger motivation for SV than OV, as would be expected from textual observations. The factors combine structural and discourse criteria: subject-first is in Dover's system a discourse phenomenon, while verb and object order is a feature of clause structure. Variations are attributed to authorial choice.

A pragmatic interpretation of structure necessarily requires the pragmatic principles to be identified, yet they have been formulated in radically different ways. It is possible that new information is postponed because it is cognitively most difficult to process, as suggested by Behaghel (1929). This order accords with the Prague model of functional sentence perspective, in which theme is understood as preceding rheme. \({ }^{71}\)

However, it has also been suggested that thematic words might be delayed, either because more urgent information precedes (Givón 1983: 20), or because postponement creates emphasis: Denniston (1952: 46) observes that 'often an emphatic word placed at the end of a work, or of an important section of a work, strikes the keynote of the whole thought.' He suggests that such a keynote might correspond to Aristophanes' кєфа入aîov \(\dot{\rho} \hat{\mu} \mu\left(\right.\) Ra.854). \({ }^{72}\) Similarly, Fraenkel (1950:39) notes that the first 19 lines of the Agamemnon parodos consist of one period ending (at Ag.59) in'Epıvúv, 'a word heavy with meaning placed at the very end.' This is linked by Fraenkel to a 'tendency of archaic narrative not to display at the outset the most important \(\dot{\text { úrокє } \dot{\mu} \epsilon \nu \alpha \text { in }}\) their entirety, but to introduce the elements at the moment when they give rise to a new element in the story'.

\footnotetext{
\({ }^{71}\) See Firbas (1964), and the functional grammar of \(\operatorname{Dik}(1978,1980,1989)\).
\({ }^{72}\) A possible connection with the \(\gamma \rho \hat{1} \phi\) os (riddle) is noted in Section C2a.
}

The possibility that an element may be placed in two quite different parts of the clause weakens the argument for pragmatic motivation, unless one position can be shown as regular and the other as emphatic. \({ }^{73}\) However, the regularity of an emphatic position at the start of the CG clause, recognized by all commentators, weakens the view that there is a parallel between 'regular' and 'unemphatic'.

Further, clauses do not always package information into known and unknown categories: as Dover (1960:38) notes, the opening sequence of the Republic has no clearly thematic element. \({ }^{74}\) One would, then, expect it to have an unusual clausal trajectory, but it has been more often quoted as typical of the CG clause (as by the authors cited in Section A1).

Even more importantly, textual relevance is not necessarily expressed explicitly. The work of Strawson (1952), Karttunen (1973), Sperber and Wilson (1986), Grice (1989), and others has shown that relevance is standardly implied in underlying presuppositions or implicatures, rather than being always marked by specific referring expressions.

The identification of thematic elements appears to be inescapably subjective. While underlying pragmatic motivation is inevitable (because all languages are, presumably, structured to maximise communicational effectiveness), it gives a rather general interpretation (an absolute constraint on the positioning of information within the clause has never been suggested). The possibility that prepositives may be placed initially for presentational rather than informational reasons is considered in Chapter 4.

\section*{A 3: Structural interpretations of word order}

Dunn (1988) adopts a more general approach (in a smaller textual sample, of Herodotus 1), analysing the order not only of words but also of phrases and finite clauses, through a structural model of syntactic dependence, in which elements are categorized as either head or modifier. \({ }^{75}\) Dunn observes a number of regularities:

\footnotetext{
\({ }^{73}\) Canonically categorized as 'unmarked' and 'marked' (see Lyons 1977: 503).
\({ }^{74}\) Horrocks (1983: 103) considers that the first sentence of a text can never be a 'topic.'
\({ }^{75}\) These terms are defined in the Introduction, Section 1.
}
i) Finite subordinate clauses normally follow the main, except for temporal and conditional clauses, which generally precede.
ii) Participial constructions normally follow the main, except for genitive absolute, datives, and nominative aorists.
iii) Noun phrases (NPs) generally precede the verb, though those functioning as complements of copulas follow. Objects, instrumental datives, and accusatives functioning as subjects of infinitives show random ordering.

Dunn's findings for word order include the observation (1988: 75) that subjects of finite verbs precede their verb with approximately the same frequency \((71.31 \%\) of total \([\mathrm{SV}+\mathrm{VS}])\) as do indirect objects and manner adverbs, but direct objects precede or follow with nearly equal frequency. The SV figures differ somewhat from those in the prose texts studied by Dover (1960), being significantly higher than Dover's figure for Herodotus 3 and lower than the figure for Lysias 12, but are quite close to those in the poetic texts studied here, as summarized in Section B below.

Dunn's results show that regularities in clause order are statistically much more significant than those in word order: percentages are typically in the 80s or 90 s, and even the most variable, relative clauses and dependent infinitives, have an average regularity in the 70s. However, the unification between clause order and word order which Dunn attempts to achieve by collating his data in terms of modifier and head ordering seems unproved. Dunn's conclusion (1988: 78) is that, since \(33.33 \%\) of the modifiers tested normally precede the verb, while \(44.44 \%\) follow, this demonstrates that 'from the point of view of modifier/head placement the Greek sentence emerges as verbicentric, i.e. having the verb at the centre with modifiers on either side'. This is equivalent to the Mittelstellung observed by Kieckers (1911), and adopted by a number of analysts in the functional tradition (as Dik 1995: 12). By itself, such a conclusion is incomplete, since it shows only that some verbal modifiers precede the verb and some follow, but pays no attention to the cooccurrence of both, or to the possible semantic or pragmatic motivations of verb centrality if it does exist.

There are also more general reasons to doubt the generalization. As Frisk (1932: 24) notes, verbal Mittelstellung is a feature of Hellenistic Greek, and to
categorise CG in the same way fails to explain the high level of OV order. \({ }^{76}\) Further, a statistical approach necessarily gives a general result, and leaves the less common order unexplained. Dunn explains the variations in terms of stylistic markedness, which creates a motivational problem: it is unconvincing to use results which do not fit a statistical pattern to argue that the pattern must be a datum from which deviations gain their force (unless a particular ratio has some inherent stability, or unless positive reasons for variation are given). Yet the goal of a more systematic explanation remains attractive, and the analysis of the textual corpus, in Section C below, includes a search for structural determinants, including that of verb centrality.

\section*{A 4: Word order in poetry and prose}

It was noted above, in Section A1, that poetry and prose were distinguished by the ancient grammarians in large part by lexical choices. Poetry was also differentiated as having metre: Gorgias (AS B vii. 39.9), Isocrates (ix.10), Aeschines (i.141), Plato (Gorgias 502.c), and Aristotle (Rhetoric 1408b21-26, 30\(31,1409 \mathrm{a} 22-23\) ) all distinguish poetry as being \(\not{\epsilon} \mu \mu \in T \rho O S\) (metrical), and prose as व̈v \(\downarrow \in v \mu \epsilon ́ T \rho o v\) (without metre). \({ }^{77}\) Yet prose shares the feature of rhythm: in his description of prose, Aristotle (Rhetoric 1408b21-2) considers that tò \(\delta \dot{\epsilon}\)
 should be neither metrical nor arrhythmic), and there is no evidence that poetic rhythm was considered fundamentally different in kind from prose rhythm. The comparison of Demetrius (De Eloc.204-205) between the length of an iambic trimeter line and an ideal prose clause suggests that poetry and prose were perceived as similar in kind. The descriptions of iambic rhythm by Aristotle as \(\mu\) á \(\lambda \iota \sigma \tau \alpha\) \(\lambda \epsilon \kappa \tau \iota \kappa o ́ v ~(t h e ~ b e s t ~ f o r ~ s p e e c h ~ — P o e t i c s ~ 1449 a 24-5), ~ a n d ~ \dot{\eta}\) \(\lambda \epsilon ́ \xi ı s \dot{\eta} \tau \omega ิ \nu \pi 0 \lambda \lambda \omega \bar{\omega}\) (the language of the many —Rhetoric 1408b19-20), are well known, yet he also considered the paeon as the best rhetorical rhythm (Rhetoric 1409a8-9): \({ }^{78}\)
 ढ̈бтє \(\mu \alpha ́ \lambda \iota \sigma \tau \alpha ~ \lambda \alpha \nu \theta a ́ v \epsilon เ \nu\)

\footnotetext{
\({ }^{76}\) Kieckers categorized the position of the verb with respect to any other sentence element, not simply its arguments, so his rule is not absolutely incompatible with OV.
\({ }^{77}\) Noted by Dover (1997: 183).
\({ }^{78}\) The paeon may be defined as a cretic (- v -) with either long syllable resolved. Aristotle (Rhetoric 1409a10-21) discusses the contrasting rhetorical effects of initial and final resolution.
}
for alone of the rhythms mentioned, it is the only one without metre, so most easily undetected.

This implies that the iambic rhythm is, by contrast, visible. Aristotle's objection to visible metre is that it creates predictability, \({ }^{79}\) but he seems to allow this in ordinary speech (see Poetics 1449a24-5). The attribution of different rhythms to different kinds of speech also assumes an overlap between prose rhythm and metre. Devine and Stephens (1994: 100-1) agree that 'The rhythms of Greek verse are simply more highly constrained versions of rhythms already existing in Greek speech: the \(\dot{\rho} \cup \theta \mu \iota \zeta\) ל́ \(\mu \in \nu \alpha\) [rhythmic systems] of verse are a selection of the most amenable \(\dot{\rho} \cup \theta \mu \zeta \dot{\partial} \mu \in \nu \alpha\) of prose. The basic principles of the two rhythmic systems are the same.'

If that is so, it might be expected that poetry and prose would have the same basic word order, yet the order of the main sentence elements in Greek poetry has not previously received much attention. Only Goodell (1890: 47) seems to have contemplated the possibility of comparing poetic and prose order. Homeric word order is examined by Ammann \((1922,1924)\), who describes the prevalence of OV order, and by Friedrich (1975), who uses a relatively small (and not precisely specified) database: passages from Books 1, 5 and 9 of the Iliad, and data from grammars by Schmidt (1885), Monro (1891), Cunliffe (1924), and Chantraine (1958, 1963). Friedrich's interests are typological: to ascertain whether the model of change from OV in Proto-Indo-European (henceforth PIE) to VO in Greek, as proposed by Lehmann (1973), is a tenable hypothesis. A study of hyperbaton in epic and lyric poetry by Conrad (1990) is considered in Chapter 3, but no other studies of Greek poetic word order have been undertaken.

In the next chapter, poetic word order is examined in terms of word morphology and sentence rhythm. In the remainder of this chapter, data from the textual corpus is collated, \({ }^{80}\) and possible syntactic motivation for the regularities and variations is discussed.

\footnotetext{
\({ }^{79}\) Rhetoric 1408b21-26.
\({ }^{80}\) This work follows the practice, attested from 1807 by the Oxford English Dictionary (Supplement 4, 1972: 737), of treating 'data' as a collective noun. This seems justified, especially since 'datum' has a quite different meaning (used above in Section A3).
}

\section*{B: Collation of subject, verb and object order in the corpus}

\section*{B 1: Textual data. Frequencies of SV and VS}

Subject and verb order in main and subordinate clauses is first examined, to determine overall frequencies and patterns of variation. The data is collected in Appendix 1A, and summarized below.

\section*{B 1 (a): Caveat 1. Categorization of subordination}

Main and subordinate clauses are here differentiated semantically, and no assumption of structural subordination is made: all finite clauses having a semantic dependency relation to another, including adverbials and correlatives, are categorized as subordinated. This includes even clauses with үáp (which are, however, collated separately in Appendix 1B, to facilitate an alternative analysis).

\section*{B 1 (b): Caveat 2. Restriction to finite clauses}

Non-finite clauses are not included. The inter-textual variations in their number may be inferred, very approximately, from the ratio of finite clauses to the number of lines. On average, there is one finite clause every 1.2 lines in the poetic texts. The frequency is lowest in Aeschylus. The number of lines per finite verb in the poetic texts are: Oresteia 1.7, Septem 1.6, Il.9 1.2, Od.9 1.2, OT.1.2, Medea 1.2, Cyclops 1.2, Ra.1.1.

\section*{B 1 (c): Caveat 3. Explicit subjects}

In most texts, the majority of clauses do not have explicit subjects: the average proportion of finite verbs with explicit subjects is \(33 \%\). The Homeric texts and the Melian Dialogue have the highest proportion, over 50\%, while Frogs has
the lowest, at 18\%. The figures are shown in Table 1:
\begin{tabular}{|c|c|c|c|c|}
\hline Iliad 9: & \multicolumn{2}{|l|}{374 main verbs,} & \multicolumn{2}{|l|}{\(174=47 \%\) with subjects} \\
\hline Odyssey 9 & 330 & " & 174=53\% & " \\
\hline Septem & 566 & " & 205=36\% & " \\
\hline Oresteia & 1,712 & " & 545=32\% & " \\
\hline OT. & 731 & " & 180=25\% & " \\
\hline Medea & 806 & " & 182=23\% & " \\
\hline Cyclops & 452 & " & 96=21\% & " \\
\hline Frogs & 976 & " & 174=18\% & " \\
\hline Melian Dialogue & 59 & " & 32=54\% & " \\
\hline Crito & 304 & " & 70=23\% & " \\
\hline
\end{tabular}

The percentage of subordinate clauses with explicit subjects is comparable, at \(31 \%\). OT. has the lowest proportion, at \(21 \%\), and Septem the highest, at \(50 \%\), as in Table 2: \({ }^{81}\)
\begin{tabular}{lllrl} 
Iliad 9: & \multicolumn{3}{l}{239 subordinates, } & \multicolumn{2}{c}{\(73=31 \%\) with subjects } \\
Odyssey 9 & 150 & \("\) & \(59=39 \%\) & \("\) \\
Septem & 108 & \("\) & \(54=50 \%\) & \("\) \\
Oresteia & 519 & \("\) & \(189=36 \%\) & \("\) \\
OT. & 519 & \("\) & \(111=21 \%\) & \("\) \\
Medea & 361 & \("\) & \(86=24 \%\) & \("\) \\
Cyclops & 137 & \("\) & \(31=23 \%\) & \("\) \\
Frogs & 380 & \("\) & \(86=23 \%\) & \("\) \\
Melian Dialogue & 73 & \("\) & \(19=26 \%\) & \("\) \\
Crito & 207 & \("\) & \(71=34 \%\) & \("\)
\end{tabular}

The figures show that there is no greater probability for either main or subordinate clauses to have subjects. \({ }^{82}\)

\footnotetext{
\({ }^{81}\) Subordinate clauses in the corpus are collated in Appendix 1A.
\({ }^{82}\) There is however, variation between nominal and pronominal subjects. This is discussed in Chapter 2.
}

\section*{B 1 (d): Caveat 4. Exclusion of SVS}

The collation excludes the small number of clauses with SVS hyperbaton, which are included here for reference. \({ }^{83}\) In SVS, the head nouns usually follow the verb, so the type is more similar to VS than to SV, as in Table 3:
\begin{tabular}{lcrcr} 
Iliad 9 & Main & 19 & Subordinate & 5 \\
Odyssey 9 & \("\) & 13 & \("\) & 9 \\
Septem & \("\) & 11 & \("\) & 3 \\
Oresteia & \("\) & 32 & \("\) & 11 \\
OT. & \("\) & 9 & \("\) & 18 \\
Medea & \("\) & 10 & \("\) & 4 \\
Cyclops & \("\) & 1 & \("\) & 0 \\
Frogs & 5 & \("\) & 1 \\
Melian Dialogue & \("\) & 0 & \("\) & 0 \\
Crito & \("\) & 0 & \("\) & 0
\end{tabular}

The high level of SVS in Homer and tragedy may be noted. Phrasal hyperbaton of this type is considered in detail in Chapter 3.

\section*{B 1 (e): Main/subordinate ratios}

Of clauses with explicit subjects, the average percentage of SV of [SV+VS] is \(70 \%\), with quite modest variation ( \(11 \%\), between 65-76\%). Listed from high to low: Melian Dialogue 88\%, Odyssey 76\%, Frogs 76\%, Cyclops 75\%, OT.72\%, Septem \(71 \%\), Ag. \(70 \%\), Iliad 69\%, Crito 66\%, Medea 65\%, Eum. \(65 \%\), Choe. \(65 \%\). The proportion in the Oresteia is \(67 \%\) overall, with \(A g\). distinctively higher than the others.

The proportion of SV which is in main clauses in each text is usually comparable to the proportion of main clause VS within that text, as may be seen in Table 4 (next page).

\footnotetext{
 part, every arrow has now been shot).
}

Table 4: Percentage of VS of [SV+VS]
Main clause Subordinate clause
\begin{tabular}{lll} 
Average & 28 & 27 \\
Iliad 9 & & \\
Odyssey 9 & 33 & 26 \\
Septem & 22 & 20 \\
Oresteia & 27 & 27 \\
OT. & 29 & 48 \\
Medea & 37 & 26 \\
Cyclops & 24 & 29 \\
Frogs & 23 & 27 \\
Melian Dialogue & 9 & 16 \\
Crito & 48 & 24
\end{tabular}

The results may be summarized as follows:
1) Main clauses constitute \(70 \%\) of total [SV+VS] clauses. This figure varies among the poetic texts by \(14 \%\) (from 65 to \(79 \%\) ).
2) The prose texts have a significantly lower ratio of main/ subordinate clauses (main clauses constitute \(40 \%\) of total [SV+VS] in the Melian Dialogue, and \(59 \%\) in Crito).
3) SV clauses constitute \(71 \%\) of [SV+VS] clauses, with quite modest variation ( \(11 \%\), between \(65-76 \%\), excluding the Melian Dialogue).
4) The poetic level of SV is comparable to Dunn's figure for Herodotus I ( \(71.31 \%\) ), to Dover's figure for Laches ( \(74 \%\) ), and to the average for Frisk's prose texts (76\%).
5) Order is highly regular across every type of clause, with variations at a generally comparable level. VS is always less common than SV, except in subordinate clauses in Eumenides (where it constitutes 55\% of [SV+VS]).
6) The prose texts differ between themselves: Crito has a percentage of SV comparable to the poetic texts, at \(66 \%\) of [SV+VS], but the Melian Dialogue has much higher SV ( \(88 \%\) ).
7) VS is slightly more common in subordinate clauses ( \(31 \%\) of [SV+VS]) than in main ( \(28 \%\) of main [SV+VS]).
8) VS is strikingly frequent throughout subordinate clauses in the Oresteia, constituting \(48 \%\) of total [SV+VS] subordinates. As noted in (5), the proportion is highest in Eumenides.
9) VS is equally frequent in main clauses in Crito, constituting \(48 \%\) of total [SV+VS] main clauses.

The overall concord between Crito and the poetic texts (and Dunn's figure of \(71.31 \%\) for Herodotus 1), the different frequencies of the Melian Dialogue, and the variations in Frisk's and Dover's prose texts ( \(23 \%\) and \(24 \%\) ), all show that genre cannot be an absolute determinant of order: there is a constant tendency for the subject to precede its verb, yet also a high level of variation. The motivation must be either structural or pragmatic.

\section*{B 2: Proportions of clause types}

The proportion of subordinate clauses varies by text in the following order: Septem 21\% of total [SV+VS], Odyssey IX 23, Cyc.25, Oresteia 26, Iliad IX 30, Medea and Frogs 33, OT.35, Melian Dialogue 45, Crito 56\%. An approximate correlation between style and proportion of subordination may be observed: the archaic style has less subordination (though Iliad 9 has a high level).

The types of subordinate clauses which predominate in different texts do not correlate directly with variations in subject and verb order. The data is collected in Appendix 1B. The results may be summarized as follows:

Conditionals: the proportion of conditionals remains approximately the same throughout the poetic texts (12-16\% of subordinates), though Odyssey 9 has a lower proportion than the others (9\%). The prose texts have a higher frequency, with \(22 \%\) in the Melian Dialogue and \(25 \%\) in Crito. This may reflect the different rhetorical concerns of the dialogues, where argument rather than description predominates.

Adverbials: in Homer, tragedy, and Aristophanes, adverbials constitute about half of the total of subordinate clauses. Of these, about half are adverbials with \(\gamma\) áp, which are often indistinguishable from main clauses with coordinated links. In the Melian Dialogue and Crito, the frequency of adverbials is reduced (and fewer conjunctions are used). The Oresteia has an unusually high proportion of adverbials, constituting \(60 \%\) of subordinates. This is almost entirely at the expense of relative clauses: conditional and complement frequencies are, though low, close to the average of tragedy. Aeschylean clauses with \(\gamma\) áp, however, are less frequent than in other authors.

The number of conjunctions used with adverbial clauses differs between texts. There is not simply a reduction over time: about 17 conjunctions are in regular use in Homer, the Oresteia, and Cyclops, while about 10 are used in Septem, the Melian Dialogue, and Crito. Medea and OT. show a greater variety (26 and 34 respectively, if prepositional phrases with relative pronouns like \(\epsilon \xi\) ồ and ' \(\phi^{\prime}\) ois are included, or 24 and 24 if not).

Complements and indirect questions show a temporal increase, from \(8 \%\) of the total of subordinates in Homer to 20\% in Crito. They average about 10\% in the poetic texts. The increase, and a corresponding reduction in adverbials, represents a movement from semantically causal to purely formal clause linking, as subordinate clauses come to function as the objects of reporting verbs.

Relative clauses: as may be seen from Appendix 1B, the percentage of relatives is fairly constant throughout the texts, being usually in the mid 20s (it is highest in Iliad 9, at 32\% of total subordinates). The Oresteia has an unusually low proportion of relatives: \(16 \%\) of total subordinates. This is in contrast with all other texts, even Septem, which has a high frequency ( \(29 \%\) ).

Although there is no constant correlation between clause type and subject/verb ordering, it is shown in Chapters 5-7 that clause linking in complements and indirect questions does affect verb and object order in main clauses.

\section*{B 3: Subject and verb order: textual differences}

As shown in Section B1e, a 70/30 ratio of SV/VS is the norm in the corpus. While, as noted in Section B 2, VS is marginally more common in main than in subordinate clauses ( \(31 \%\) as against \(28 \%\) of [SV+VS]), the difference is small and there is no constant differential. VS is particularly common in main clauses in Iliad 9, Medea, and Crito, and in subordinate clauses in the Oresteia and the Melian Dialogue (where the sample is very small). There are three very marked features:
i) There is a near absence of VS order in the Melian Dialogue, in both main and subordinate clauses.
ii) There is a high proportion of VS in main clauses ( \(48 \%\) of [SV+VS]) in Crito.
iii) There is an equally high proportion of VS in subordinate clauses in the Oresteia (48\% of [SV+VS]).

\section*{B 3 (a): Details of the variations from a 70/30 ratio}

\section*{(i) Melian Dialogue}

The almost total absence of VS order in the Melian Dialogue, in both main and subordinate clauses, is a consequence of the typically early placing of subjects, and postponement of verbs to the end, not only of the clause, but of the sentence. Subordinate clauses are typically placed in centrally embedded structures, which are sometimes highly complex. \({ }^{84}\) The extreme separation of subject and verb may be described as a form of hyperbaton (Aristotle's strictures against it in Rhetoric III 5.2 are noted above, in Section A1a).
(ii) Crito

The very high proportion of VS order in main clauses in Crito ( \(48 \%\), together with the high proportion of SV in subordinate clauses: 76\%), shows that VS is not simply a poetic trait, and is not only a feature of subordinate clauses.

\section*{(iii) The Oresteia}

The other extreme variation from the norm of \(30 \%\) is the very high proportion of VS in subordinate clauses in the Oresteia. Of the 513 [SV+VS] main clauses, \(80 \%\) have the subject first, while in the 178 [SV+VS] subordinate clauses (if the 34 with relative pronoun subjects are discounted) SV/VS numbers are therefore nearly equal: 85 are VS, compared with \(93 \mathrm{SV} .{ }^{85}\)

\footnotetext{
\({ }^{84}\) See Chapter 3, Section 5.
\({ }^{85}\) If relative clauses with relative pronoun subjects are included, the figures for subordinate SV /VS are SV 126 (59\%) and VS 86 ( \(41 \%\) ). Relative clauses are mainly SV if relative pronouns are included in the subject total, as would be expected, though there is one instance (Eum.7) where the relative pronoun follows its verb.
}

Such a high frequency of subordinate VS cannot be simply a consequence of subordination, as may be seen from its appearance in Crito main clauses. Possible structural motivations, such as the presence of interrogatives, verb voice, noun class of subject, or specificity of reference, are explored in Section C below (where it is concluded that the proportions of SV and VS are not caused by any syntactic factor).

\section*{B 4: Genre differences: lyric}

The data collation shows that there are no consistent differences between epic, prose, and tragedy. The possibility remains that word order might be different in lyric and stichic poetry. Lyric passages in the Oresteia show higher levels of VS, as may be seen from Table 5:

Ag.: \(\quad\) SV 176 (inc. 57 lyric: 32\%), VS 52 (inc. 30 lyric: 58\%)
Choe.: SV 103 (inc. 36 lyric: 35\%), VS 50 (inc. 23 lyric: 46\%)
Eum.: SV 100 (inc. 31 lyric: 31\%), VS 37 (inc. 15 lyric: 41\%)

The reason why lyric main clauses might show a higher level of VS is that the verb may, for some pragmatic reason, be regularly preposed. In fact, VS often appears in lyric constructions which express a general statement or maxim, as Choe.402:
4) aîua• Boâ yàp خotyòs 'Epıvùv
... for murder calls on the Erinys
and Choe.637:
5) \(\sigma \epsilon \in \beta \in L\) Yà \(\rho\) oưtıs tò \(\delta v \sigma \phi L \lambda e ̀ s ~ \theta \in o i ̂ s . ~\)
for none reveres the thing detested by the gods.

These verbs might be interpreted as preposed in a gnomic version of existential ordering: 'there calls murder...'. Similarly at Ag.392-4, the subject seems to be taîs, as Fraenkel (1950: 206) believes, though Blomfield (1818) suggests us should be understood to precede it, and Lloyd-Jones (1979: 39) translates the construction as a simile, 'for he is like a boy that pursues a flying bird':
6) \(\quad \mu \epsilon \lambda a \mu \pi a \gamma \grave{s} \pi \epsilon \in \lambda \epsilon \iota\)

Sıкаlw日eís, è \(\pi \epsilon i\)

he is , black-clotted, condemned,
since [he is] a boy [who] chases a flying bird

Such constructions suggest one reason why lyric might have a higher level of VS. However, in the Oresteia, the effect appears mostly in main clauses: there is no higher proportion of subordinate VS in lyric sections, and most subordinate VS is not in lyric, as shown in Table 6:

Subordinate clauses
\begin{tabular}{lll} 
Ag.: & SV 49 (15 lyric), & VS 41 (15 lyric) \\
Choe:: & SV 21 (4 lyric), & VS 20 (8 lyric) \\
Eum.: & SV 28 (14 lyric), & VS 30 (7 lyric)
\end{tabular}

In the Oresteia, then, VS is associated with subordinate clauses in stichic metres, and with main clauses in lyric. On the other hand, in Medea, the high level of VS in main clauses ( 64 of 88 total VS=73\%) is only slightly higher in lyric ( 12 in \(241=1\) every 20 lines) than in stichic metres ( 52 in \(1178=1\) every 23 lines). The high proportion of main clause VS in Crito also shows that VS is not only a feature of lyric. Again, genre does not appear to be a statistically significant determinant of subject and verb order: these differences must be due to authorial choice.

\section*{B 5: Summary of word order patterns}
i) Subject and verb order in CG poetry is comparable to that in prose. There is no correlation between variation in the SV/VS ratio and type of text (as prose, epic, or tragic). The high level of variation is also comparable: the most extreme of the variations are the high levels of VS in Oresteia subordinate and Crito main clauses. These results accord with those in the studies by Frisk (1932), Dover (1960), and Dunn (1988), which do not reveal a distinctively different pattern of subject and verb order: Frisk (1932: 16) gives percentages of between \(71-87 \%\) for SV in his classical texts, while Dover (1960: 29) gives proportions of SV order as: Herodotus 3, 59\%; Lysias 12, 83\%; Laches, 74\%. The high level of variation even within authors is evident from their figures: for Herodotus, Frisk gives a SV percentage of 74.1, \({ }^{86}\) compared with Dover's 59, and Dunn's 71.3. \({ }^{87}\)

\footnotetext{
\({ }^{86}\) Frisk uses a large number of short passages as his data-base. For example, his data on verb and object order in Herodotus is taken from: 1. 6-36, 2.151-176, 3.118-141, 4.118-142, 5.82-102, \(7.1-9 \& 121-137,8.113-144\). As Frisk (1932: 18) points out, the results might vary with a different sample.
\({ }^{87}\) Dunn (1988: 75). The text base is Herodotus I.
}
ii) The similarity of subject and verb order in poetic and prose texts, and between hexameters and trimeters, suggests that metre is not a major determiner of subject and verb order. Although lyric main clauses in the Oresteia have a somewhat higher VS level, a converse relation holds in Medea, so there is no consistent metrical effect. This supports the comment of Denniston (1952: 57) that 'The Greeks stylized everything; and it is the most difficult thing in the world to point to any Greek which may be regarded as "natural" ... Probably parts of Aristophanes are the best examples of spoken Greek. Certainly the metre must have had some influence on the word-order: but, as far as one can see, not much. \({ }^{88}\)

While it is possible, as Dover (1960) does, to attribute regularities primarily to logical determinants, a structural explanation would also be advantageous, since it would give more information about the language. In Section C, possible structural motivations for subject, object, and verb order are explored.

\section*{C: Syntactic explanations for variations}

\section*{C1: Structural motivation for VS}

\section*{C1 (a): Clause type}

A constant difference in order between main and subordinate clauses would be significant, since in some languages, such as German, the subordinate order is held to be the basic one. \({ }^{89}\) Frisk (1932: 38-39) believed that Greek relative clauses are 'frei von Affekten', and so demonstrate 'natürliche Wortfolge', and Kiparsky (1995: 162 n .2 ) considers this to be a cross-linguistic rule. However, the opposite view has also been proposed: Denniston (1952: 43) considers that 'order in subordinate clauses is particularly subject to influence from the context.' In fact, the texts studied here show no difference between word order in main and subordinate clauses.

\footnotetext{
\({ }^{88}\) Bers (1984: 12), also citing Aristophanes as attesting colloquial Attic usage of the late fifth century, considers versification 'must have caused at least some divergence from everyday language', but points out that this itself varies.
\({ }^{89}\) Proposed by Bach (1962), and the basis for much subsequent work on V2 in German main clauses, summarized by Zwart (1997). See Weerman (1989) for a theoretical overview.
}

A detailed analysis of clause types in the corpus was therefore undertaken, to explore the possibility of structural motivation. The data, collected in Appendix 1B, shows that in Homer and Sophocles, most subordinate VS is in adverbial clauses. In Euripides and Crito, other subordinates (especially conditionals and relatives) have more VS. The proportions in Frogs are about equal. The figures for Aeschylus vary: in Septem, other subordinates (particularly relatives and indirect questions) have more VS, while in the Oresteia, adverbials (and relatives, though they are few in number) have most VS, but the proportion of VS is high in all types of subordination.

It may be concluded:
a) VS is not caused only by some structural feature of adverbials. Although there is a high level of adverbials in the Oresteia, and a particularly high proportion of VS in those clauses, VS is high with all subordinates. Гá \(\rho\) clauses often have preposed words, yet contain a much lower proportion of VS than other adverbials ( \(70 \%\) compared with \(148 \%\) of SV totals). The individual conjunctions associated with the highest VS frequencies, \(\dot{s}, \grave{\epsilon} \pi \pi \epsilon\), and \(\grave{\epsilon} \pi \epsilon \iota \delta \dot{\eta}\), are not numerous enough to explain the percentages.
b) In relative clauses in the Oresteia in which the relative pronoun is the object of its clause, the subject tends to go on the opposite side of the verb to the pronoun. However, Sophoclean practice is different: OT. relatives are predominantly SV . The low number of relatives in the Oresteia shows that word order in relative clauses does not contribute significantly to the overall subordinate VS figures.
c) Conditionals: though Aeschylean conditionals have quite high VS, the proportion is matched by Medea, which does not have a high level of VS in subordinates generally.

The figures therefore show no statistical correlation between VS and type of subordinate clause. VS may be highest either in adverbials with \(\gamma \alpha\) áp, in other adverbials, in other types of subordinates, or (in Crito) in main clauses.

\section*{C 1 (b): Verb preposing}

The possibility that preposing some element other than the object might motivate VS suggests that subordinates might be more likely to have VS, because an adverbial particle might attract the verb next to it. This type of structural focalization is discussed by Kiss (1995a) and Horvath (1995). It appears to have occurred in Vedic, Mycenaean, and early Greek (see Horrocks 1990: 36), and to have become a standard feature of post-classical Greek (Horrocks 1997: 209). The very high frequency of VS in adverbials in the Oresteia would accord with it, but the comparative rarity of adverbial VS in other authors shows that it cannot be a general structural feature of CG.

\section*{C1 (c): Questions}

VS is not associated with questions. In interrogative constructions in the Oresteia, SV is more common than VS. Out of 196 questions, 151 are finite, with an explicit question word. The vast majority have no subject, but of the 48 which do, most are SV: 34 (in 16 of which the subject is the interrogative), compared to 10 VS (in another 4, VS constructions are headed by a question word modifying the subject, creating SVS order). Finite questions with an explicit subject (other than wh-subjects) in the Oresteia stichomythia are listed in Appendix 1C. 24 have SV order and 6 have VS, of which one is existential and one indefinite.

\section*{C1 (d): Passives}

The possibility that passivization might be linked to VS was tested by examining passive constructions in the Oresteia. 109 out of 2,231 finite verbs are passives ( \(=5 \%\) ). \({ }^{90} 42\) have no explicit subject, and of those which do, 33 are SV, 27 VS, and 7 SVS. The VS constructions therefore constitute \(45 \%\) of the [SV+VS] totals, which is very high, compared to the VS/SV ratio of all finite verb and subject constructions in the Oresteia, which is 231 out of \(709(=33 \%)\). There is clearly an association between passivization and VS.

The motivation may be connected with animacy: a tendency for animate nominals and pronominals to precede inanimates was noted by Silverstein (1976: 113) in Australian languages, generalized by Mallinson and Blake

\footnotetext{
\({ }^{90}\) The highest proportion of passives is in Choephoroi (41 out of \(689=5.9 \%\) ).
}
(1981: 80), and proposed as a universal linguistic principle by Tomlin (1986: 102): 'In a transitive clause, other things being equal, there is a tendency for the most "animated" NP to precede other NPs.' The motivation may derive from a semantic link between agent and animate, proposed by Fillmore (1968: 24), and perhaps from ergative features in early IE (see Lyons 1968: 351-378).

The link with VS could, then, be that there is a tendency for the subjects of passive verbs to be late in the clause because they are inanimate. This may be so in tragedy: the SVS constructions in tragedy discussed in Chapter 3 have late subjects. It is, however, of minor statistical importance for a model of CG word order, since the proportion of passive verbs is so low.

\section*{Conclusion on clause type}

The lack of correlation between word order and clause type is inconsistent with a motivation based on clause structure, along the lines of German V2, as noted in Section C1a. The explanation must either be stylistic, or some constant structural factor(s), realized in each text according to authorial choice.

\section*{C1 (e): Clause order}

As noted above, in Section A 2, Dunn (1988) posited that the ordering of head and modifier might be generalized to include both word and clause ordering. In order to see whether this is applicable to tragedy, the position of subordinate clauses in the Oresteia, OT. and Medea was collated. It was found that VS subordinates are ordered as in Table 7:
\begin{tabular}{lccc} 
& Preceding & Interpolated Following \\
Ag.: & 9 & 2 & 30 \\
Choe.: & 1 & 2 & 16 \\
Eum.: & 4 & 2 & 24 \\
OT.: & 7 & 3 & 18 \\
Medea: & 9 & 2 & 15
\end{tabular}

However, SV subordinates also preferentially follow their main clauses, as in Table 8:
\begin{tabular}{lccl} 
& Preceding & Interpolated Following \\
Ag.: & 11 & 2 & 35 (17 excluding ráp clauses) \\
Choe.: & 4 & 4 & 13 (or 8 " \\
Eum.: & 1 & 5 & 21 (or 10\()\) \\
OT.: & 12 & 16 & 56 (or 40\()\) \\
Medea: & 13 & 3 & 49 (or 30\()\)
\end{tabular}

Clause order therefore has no general relation with subject and verb order. Nor is there a correlation in terms of subordinate clause type. While the proportion of conditionals and other adverbials which precede or follow their main clause varies between texts, complements and relatives overwhelmingly follow. If a modifier and head polarity were universally applicable, as in the model of Dunn (1988) noted in Section A2, then VS would be more common when the subordinate clause follows the main (since Dunn 1988: 64 analyses subjects as verbal modifiers), and so would be more common in complement and relative clauses than in conditionals and adverbials. The absence of such a correlation shows that Dunn's generalization is too extensive: a modifier and head contrast does not operate outside the domain of the clause. It must be concluded that word order cannot simply be mapped onto clause order.

\section*{C2: Verb centrality}

\section*{C2 a: Verb centrality: subject, verb, and object}

\section*{C2 a (i) Collation of data}

The possibility that VS may be motivated by the preposing of some other element before the verb, so that the verb is central, would accord with the verbicentric model of the Greek clause, the 'Mittelstellung' of Kieckers (1911) noted in Section A2. Though Kieckers did not attempt to explain why the verb might be central, it could be explained structurally in terms of 'competition' between subject and another element for the same position in the clause.

In order to identify possible preposed elements, clauses containing S, V, and \(O\) are considered (it will be seen that these are quite rare). A categorization of clauses in the Oresteia, Medea, and Crito is shown in Table 9:
\begin{tabular}{|c|c|c|}
\hline & Main & Subordinate \\
\hline & SOV 23 & SOV 12 \\
\hline & SVO 13 & SVO 3 \\
\hline & OSV 11 & OSV 1 \\
\hline & VSO 0 & VSO 4 \\
\hline & VOS 2 & VOS 1 \\
\hline & OVS 9 & OVS 6 \\
\hline \multicolumn{3}{|l|}{Choe.} \\
\hline & Main & Subordinate \\
\hline & SOV 13 & SOV 3 \\
\hline & SVO 6 & SVO 1 \\
\hline & OSV 5 & OSV 1 \\
\hline & VSO 3 & VSO 2 \\
\hline & VOS 3 & VOS 0 \\
\hline & OVS 5 & OVS 1 \\
\hline \multicolumn{3}{|l|}{Eum.} \\
\hline & Main & Subordinate \\
\hline & SOV 12 & SOV 3 \\
\hline & SVO 11 & SVO 1 \\
\hline & OSV 8 & OSV 1 \\
\hline & VSO 3 & VSO 1 \\
\hline & VOS 1 & VOS 1 \\
\hline & OVS 9 & OVS 3 \\
\hline \multicolumn{3}{|l|}{Med} \\
\hline & Main & Subordinate \\
\hline & SOV 11 & SOV 16 \\
\hline & SVO 8 & SVO 1 \\
\hline & OSV 7 & OSV 4 \\
\hline & VSO 3 & VSO 1 \\
\hline & VOS 2 & VOS 1 \\
\hline & OVS 7 & OVS 7 \\
\hline
\end{tabular}

Crito
\begin{tabular}{ll} 
Main & Subordinate \\
SOV 4 & SOV 3 \\
SVO 1 & SVO 1 \\
OSV 0 & OSV 1 \\
VSO 0 & VSO 0 \\
VOS 1 & VOS 1 \\
OVS 3 & OVS 0
\end{tabular}

These figures show:
1) SV orders are more common than VS orders, except in constructions with a preposed object. With a preposed object, both OVS and OSV orders occur, with comparable frequency.
2) The SV/VS ratio is very similar to the overall ratio for all clauses with explicit subjects (noted above in Section B 2, and repeated here, in the righthand column, for reference). The ratios are shown in Table 10:
\begin{tabular}{llllc} 
& SV & VS & SV\% & Total SV\% \\
Ag. & \(47+16=63\) & \(11+11=22\) & 74 & 70 \\
Choe. & \(24+5=29\) & \(11+3=14\) & 67 & 65 \\
Eum. & \(31+5=36\) & \(13+5=18\) & 67 & 65 \\
Med. & \(26+21=47\) & \(12+9=21\) & 69 & 65 \\
Crito & \(5+5=10\) & \(4+1=5\) & 67 & 66
\end{tabular}
3) SOV is substantially more common than SVO.
4) SOV is particularly common in subordinate clauses in Medea. This partially supports the generalization of Friedrich (1975: 23) noted below (Section C 2c).
5) Of the VS orders, OVS is most common, and VSO and VOS are rare, in both main and subordinate clauses.

The rarity of VSO and VOS suggests that VS might motivate the preposing of a preposed object. The converse, however, is not likely (since OVS and OSV are equally common). Further, the Greek clause is unlikely to be verbicentric, if SOV is the regular order.
6) The VO/OV ratio is less similar to the overall figure for all clauses with objects (collated below in Section C2c, and repeated here, in the right-hand column, for reference). In all texts other than Choe., OV is higher when there is an explicit subject, as shown in Table 11:
\begin{tabular}{llllc} 
& OV & VO & OV\% & Total OV\% \\
Ag. & \(43+19=62\) & \(15+8=23\) & 73 & 62 \\
Choe. & \(23+5=28\) & \(12+3=15\) & 65 & 65 \\
Eum. & \(29+7=36\) & \(15+2=17\) & 68 & 61 \\
Med. & \(25+27=52\) & \(13+3=16\) & 76 & 52 \\
Crito & \(7+4=11\) & \(2+2=4\) & 73 & 68
\end{tabular}

The significance of this difference is that SOV, OSV, and OVS are, together, more common than SVO, VSO, and VOS. CG therefore appears to be more strongly SOV than simply OV. The rarity of SVO and VSO is especially striking, since these orders became so common in Hellenistic Greek (see Horrocks 1997: 59).

\section*{C2a (ii): Three-element VS orders in the Oresteia}

Details may be seen in the constructions in the Oresteia. Of VS subordinates, 18 clauses have all three main sentence elements (discounting relative pronoun objects and subjects).

OVS constructions constitute over half (10) the total of VS with objects. They occur at Ag.106ff., 222, 1035-6, 1186, 1424, 1432, Choe.755, Eum.309, 597, 647. The motivation for the position of the subject appears overwhelmingly metrical, because it is always disyllabic, and occupies a prominent position in the line:
i) In five constructions, it occupies the last foot of the line, as at Eum.647-8: \({ }^{91}\)
7) \(\dot{\alpha} \nu \delta \rho o ̀ s ~ \delta ’ ~ \epsilon ̇ \pi \epsilon เ \delta a ̀ \nu ~ a i ̂ \mu ’ ~ a ̀ \nu a \sigma \pi a ́ \sigma n ~ k o ́ v t s ~\)

but when the dust has drunk up the blood of a man once dead, there is no resurrection.

\footnotetext{
\({ }^{91}\) The traditional category of the foot is used as a convenient means of identifying positions in the poetic line: cf. West (1987: 5). However, feet may represent real prosodic features, even in prose (cf. Quintilian, Institutio IX.iv.79).
}
and Ag.1424-5:
8)

 [you will rule,] but if a god ordains the opposite you will learn, taught late, wisdom anyway.

Disyllabic subjects are also positioned in the last iambic foot at Ag.1186, 1432, and 1433.
ii) In the other 5 constructions, the subject is placed immediately after the penthemimeral caesura, as at Ag .1036-7: \({ }^{92}\)


since Zeus has kindly made you a sharer of lustral
water in our house ..
and Eum.597:

if the verdict catches you, you will soon say otherwise

At Ag.1035, Choe.755, and Eum.597, the subject also immediately follows the penthemimeral caesura.

VSO subordinate clauses total 7. They occur at Ag.267, 392-4, 563, 970, Choe.402, 637, and Eum.420. The construction often follows another preposed element, as at Ag .563 :
11) \(\chi \in \iota \mu \omega ิ \nu \alpha \delta^{\prime} \in i ̉ \lambda \notin \gamma o l ~ T I S ~ o i ́ \omega \nu o \kappa т o ́ v o \nu\), and were one to tell of bird-killing winter
and Ag.267:

the Argives have taken the city of Priam.

\footnotetext{
\({ }^{92}\) Fraenkel (1950: 468-9) discusses the problem of which verb \(\dot{\alpha} \mu \eta \nu i ́ t \omega s\) modifies.
}

At Ag.970, Zeús is in a metrically conspicuous position following the penthemimeral caesura, echoed by \(\psi \hat{v} \chi o s\) in the same position in the next line:


and when Zeus makes wine from green grapes,
it is cool in the house

However, where VSO clauses have verbs preceding a linking particle, and so prosodically prominent, they introduce a general statement or maxim, as in the lyric constructions at Choe. 402 and 637 (cited above in Section B4).

The rarity of VSO is surprising, because, as already noted, it became regular in Hellenistic Greek. The evidence of the corpus suggests that it is not a default order in CG, but an unusual one, always motivated pragmatically.

VOS also appears to be motivated pragmatically, by the postponing of the subject. There are only two in subordinate clauses in the Oresteia: one, at Ag .
 lights the fire on my hearth'), has a postponed subject, which appears prominent at the start of the next line (it has been noted, by Fraenkel 1950, that the postponement of names is common in tragedy, perhaps to create suspense). \({ }^{93}\)

The other subordinate VOS construction (at Eum.12-13) has a following
 As with the other VS constructions, metrical or pragmatic considerations appear to motivate subject and object position.

\section*{C2a (iii): OSV}

The possibility that the position of the subject is determined distributively, through 'competition' with the object, is examined by considering all OSV constructions in the Oresteia, Medea, and Crito. There are 39 such constructions, 23 of which have pronominal subjects or objects \({ }^{94}\) (including

\footnotetext{
\({ }^{93}\) As at Ag.681-7, 877-9, 1436, S.El.957, and E.El.764. Fraenkel (1950: 328, 394, 677) interprets the feature as a kind of \(\gamma \rho i \hat{i}\) os (riddle). However, observations of these texts suggest that the names of gods are more likely to appear pre-verbally (perhaps as their names are not NPs). \({ }^{94}\) Ag.330, 594, 1291, 1397, 1643, Choe.189, 224, 594, 953, 1063, Eum.116, 299, 459, 643, 735, Med.74, 310, 362, 546, 759, 1339, 1389, Crito 50b6.
}
two constructions, at Choe. 224 and Eum. 643 , with both), and 16 with nominal subjects and objects. \({ }^{95}\)

The presence of preposed objects, even in front of subjects, demonstrates that subjects do not compete directly for an initial position. The comparable frequency of OVS and OSV orders shows there is no automatic tendency for nominal subjects to follow when the object is preposed. Again, there is no evidence for verb centrality.

\section*{Summary of S, V, and O ordering}

In all constructions with three elements, the motivation appears to combine pragmatic and metrical features: either the preposing of an element into a prominent position (in the line as well as the clause), or, less often, the postponing of an element (usually the subject). There is no evidence for a tripartite typology based on structural determinants.

\section*{C2 (b): Verb centrality: conjunction, verb, and subject}

Since subordinate clauses frequently have a conjunction in first position, then subordinate VS could be motivated by the position of the verb in the clause, if it has a natural Mittelstellung. The percentages of SV and VS in subordinate clauses, discussed in Section B 2, show that VS cannot be motivated by the simple presence of a conjunction before the verb.

\section*{C2 (c): Verb centrality: conjunction, verb, and object}

A principle of verb centrality would imply that not only VS but also VO would be more common in subordinate clauses, where there is a conjunction preceding the verb. To consider whether this is the case, verb and object order in the three texts with highest VS (the Oresteia, Medea, and Crito) is collated below.

\footnotetext{
\({ }^{95}\) Ag.127, 198, 284, 320, 700, 951, 1022, Choe.334, Eum.334, 506, 529, 850, Med.1003, 1073, 1192, 1321.
}

The figures show that the proportion of VO in subordinates is similar to that in main clauses, and, further, that the proportion of VO in subordinates compared to main has no direct correlation with the proportions of subordinate and main VS. Neither figure supports a criterion of verb centrality, as may be seen from Table 12:


It may be observed:
1) \(O V\) is the normal order in both main and subordinate clauses, except in Choe. and Medea main clauses, and is most predominant in Crito.
2) OV is usually more common in subordinate than main clauses, especially in Medea (by 18\%) and Crito (by 13\%). The predominance of OV in subordinates weakens the case that order might be based on a principle of verb centrality.

This result is in accord with the opinion of Friedrich (1975: 23) that OV order is more frequent in subordinate than in main clauses, and with the data collected by Frisk (1932: 28-31), which shows a higher level of OV in relative, temporal and conditional clauses in a number of CG prose texts. It does not, however, support a view that OV is the basic order.

Nor do the triple orders or subordinate constructions give any support to an ordering principle based on verb centrality. The observations of Kieckers (1911) must therefore either correlate with the position of the verb with respect to sentence elements other than the subject and object, or must be a stylistic feature. The latter conclusion is supported by his figures, which show that Mittelstellung varies by up to \(38 \%\) in a corpus of historical and gospel texts. \({ }^{96}\)

\section*{C3: Summary of syntactic determinants}

None of the possible syntactic determinants of subject and verb order discussed above predicts the observed distribution of variations in word order. The connection between passivization and VS noted above in Section C1 (d) may be attributable to animate-first order, but the number of passive verbs is too small to explain the figures. The figures for verb and object order also suggest no syntactic motivation.

It may, then, appear that CG is a true 'free word order' language, with all regularities in ordering motivated by logical/cognitive or pragmatic/stylistic determinants. However, structural motivation does not involve only syntactic

\footnotetext{
\({ }^{96}\) The percentages of central verbs are, derived from the totals of Kieckers (1911: 5): Herodotus 58\%, Thucydides 52\%, Xenophon 56\%, Polybius 71\%, Matt. 47\%, Mark 51\%, Luke \(37 \%\), John 33\%, Theophanes 57\%.
}
patterning, especially in a highly inflected language, where morphological and prosodic factors may be even more important in determining order. They are investigated in the next chapter.

\section*{Chapter 2}

\title{
The presentational cadence: word order and phonological weight
}

\section*{Summary}

In Chapter 1, it was demonstrated that subject, verb, and object order in tragedy is comparable to that in prose, so implying that it is not constrained by genre-specific factors. Nor was evidence found for any syntactic motivation. However, structure is not identical to syntax, and, rather than concluding that word order must be purely pragmatically motivated, the possibility that features of the words themselves determine order is examined in this chapter.

The conclusions are that SV and OV are motivated by the comparative length of nouns and verbs, that VS and VO are associated with a stress component, and that a syntactic component is additionally involved in object placing. These regularities are combined as a principle of 'phonological weight'. Possible underlying cognitive reasons for this feature are considered, and a prosodic description adopted.

\section*{Chapter Sections}

The discussion is organized in two sections, the first concentrating on pronominal subjects and objects, and the second on the morphology of nominals:

A: Pronominal subjects and objects. A direct correlation between word order and the use of nominal or pronominal subjects is observed. It appears that a typology of word order which does not take account of pronominals is incomplete, though the feature does not fully explain variations in order. The section is subdivided as follows:

1: Pronominal subjects and word order
2: Lack of correlation
3: Pronominal objects
4: Summary: subjects and objects

B: Phonological weight. A morphological and a rhythmic feature are found to be associated with constructions having nominal subjects and objects:
i) Number of syllables. In the vast majority of SV constructions, the verb is longer than the subject, so there is an 'ascending' morphological trajectory. In VS constructions, however, descending sequences are equally common, though usually less than [ascending + constant] sequences. OV and VO show a similar correlation.
ii) Disyllabic endings. In VS and VO, the subject or object is frequently a disyllabic word in the last foot of the poetic line. This is not wholly a metrical constraint, since it applies in both trimeters and hexameters.

A third, minor, feature is the presence of appositional phrases. A subject which is modified by a following phrase tends to be last in its clause, so appositional NPs are often associated with VS. This factor does not, however, have a major effect on the frequencies, as the converse does not hold (most VS is not associated with appositional NPs).

Part B is subdivided as follows:
1: Nominal subjects: syllable number
1a: The results
1b: Apposed phrases
2: Nominal objects
3: Phonological weight
4: Cognitive motivation
4a: Right-branching syntax
4b: Rightwards phonological weight
5: Prosodic motivation for rightwards weight
5a: Prosodic motivation for poetic VS
5b: Prosodic motivation for prose VS
5c: VS, VO, and a stress accent
6: Phonological weight and authorial choice Conclusion: phonological weight, prosody, and metre

\section*{A: Pronominal subjects and objects}

A correlation between pronominal subjects and SV order is observed in all texts. A clause may end with a verb or a noun, but rarely a non-emphatic pronoun other than \(\grave{\epsilon} \gamma \omega^{\prime}\) (often in the phrase oá \({ }^{\prime}\) oî \(\delta^{\prime} \notin \gamma \omega\) ). \({ }^{1}\) This encourages SV order with pronominal subjects. The data for pronominal subjects, collated by main and subordinate clauses, is collected in Appendix 1D.

The results, summarized below, demonstrate that the proportion of pronominals varies considerably between texts. The most striking variation is that Aeschylus uses fewer pronouns than other authors. This is clearly a stylistic choice, but it does not, overall, affect word order, since Aeschylean order is comparable with that of the other authors. However, the proportion of pronominals may differ between main and subordinate clauses, and this does have a correlation with word order, as in Table 1:

Pronominal subjects
\begin{tabular}{lllll} 
& \multicolumn{2}{c}{ Main } & \multicolumn{2}{l}{ Subordinate } \\
Iliad 9 & 49 & [SV 47, VS 2] & 18 & [SV 17, VS 1] \\
Odyssey 9 & 80 & [all SV] & 15 & [SV 14, VS 1] \\
Septem & 53 & [SV 48, VS 5] & 8 & [SV 6, VS 2] \\
Oresteia & 153 & [SV 141, VS 12] & 29 & [SV 21, VS 8] \\
OT. & 75 & [SV 61, VS 14] & 49 & [SV 41, VS 8] \\
Medea & 58 & [SV 47, VS 11] & 30 & [SV 25, VS 5] \\
Cyclops & 51 & [SV 44, VS 7] & 15 & [SV 10, VS 5] \\
Frogs & 103 & [SV 86, VS 17] & 35 & [SV 26, VS 9] \\
Melian Dial. & 11 & [SV 11] & 7 & [SV 7] \\
Crito & 18 & [SV 11, VS 7] & 34 & [SV 29, VS 5]
\end{tabular}

\section*{A 1: Word order and pronominals: correlation}

A correlation between SV and VS variation and the presence of pronominal or nominal subjects may be seen in all texts. Details may be seen from a consideration of the Oresteia, OT., Medea, and Crito.

\footnotetext{
\({ }^{1}\) The placing of disyllabic subjects in line-end position is considered in Section B1b. The phrase is comparable to the 'afterthought' constructions discussed in Chapter 7, Section 3c.
}

\section*{A 1 (a): The Oresteia}

The high frequency of VS in Oresteia subordinate clauses (48\% of subordinate SV + VS, as noted in Chapter 1, Section B 1e) appears to be motivated by a low number of overt subject pronouns, as pronouns are less common in subordinate than main clauses. In the Oresteia, there are 29 subject pronouns in subordinate clauses ( \(8 \mathrm{VS}: 2\) with \(\tau \iota s, 2\) with \(\epsilon \in \gamma \dot{\omega}\), and one each with oưtıs, т \(\dot{\delta} \delta \epsilon, \tau \alpha \hat{\tau} \tau \alpha, \sigma \dot{v})\). They are listed in Appendix 1E. This compares with 153 subject pronouns in main clauses, of which 12 are in VS constructions. Subordinate subject pronouns therefore constitute \(19 \%\) of main clause subject pronouns: a very low proportion.

A 1 (b): OT.

The much lower proportion of subordinate VS in OT. ( \(28 \%\) of SV+VS) compared to the Oresteia is associated with a greater number of pronominal subjects. OT. has 49 subordinate subject pronouns (8 of which are VS), again listed in Appendix 1E. This contrasts with 75 subject pronouns in main clauses (of which 14 are in VS constructions). Subordinate subject pronouns are therefore much more common than in the Oresteia, totalling \(65 \%\) of main clause subject pronouns.

This is particularly marked in relatives. In the 23 relative clauses which have explicit subjects, almost all subjects are pronouns. There are only 3 nominal subjects, all in extensive clauses, and two with enjambement, at OT.853:
1) \(\phi a v \in i ̂ ~ \delta ı k a i ́ w s ~ o ̉ p \theta o ́ v, ~ o ̋ v ~ \gamma \in ~ \Lambda o \xi i ́ a s ~\)

[as it should have been], whom Loxias
declared should die at the hands of my son.
and OT.1452:

тати́р т' द́ \(\theta \in ́ \sigma \theta \eta \nu ~ \zeta ॅ \omega ิ \nu \tau \epsilon ~ к u ́ p l o \nu ~ \tau \alpha ́ \phi o \nu, ~\)
my mountain Cithaeron here, which my mother and father, living, set for my tomb

The third construction, at OT.382, has a subject immediately following the penthemimeral caesura. It might be analysed as a main clause exclamative rather than a subordinate:
3) ö öos map’ ípîv ó фӨóvos фu入á \(\sigma \sigma \epsilon \tau \alpha\),
how great is the grudge nursed for you

The reason why these nominal subjects are also in SV constructions is considered in Part B of this chapter. There are two pronominal VS clauses: one existential at 296 (to be expected, as indefinite subjects are standardly post-verbal), and one chiastic, at OT.1180-1:


... for if you are the man whom he says,
know that you were born unfortunate.

There is therefore a strong correlation between pronominal subjects and SV in Sophoclean subordinate clauses. In all instances the end of the clause or of the line is occupied by a polysyllabic word. Examples are OT.148:

and we came here for this, which this man proclaims
and OT.171:

with which one may defend oneself ...

Subject and verb order in Sophoclean constructions cannot be explained simply as the preposing of emphatic words, or as the placing of pronouns in P2 (see the Introduction). There seems to be a prosodic explanation in the examples above, and in patterns like OT.966, where the placing of \(\dot{\epsilon} \gamma \omega\) is the same as in many Aeschylean VS clauses:
7) к入á̧ovtas őpvєıs, î̀ \(\dot{\omega} \phi \eta \gamma \eta \tau \omega ิ \nu ~ \dot{\epsilon} \gamma \dot{\omega}\)

... [or] the cawing birds, by whose teachings I was to kill my father, ...

Similarly, in one of the rare Sophoclean relatives with a nominal subject, at OT. 853 (cited above), no \({ }^{\text {ías }}\) ends the line, though not the clause.

\section*{A 1 (c): Medea}

The data from Medea shows a similar correlation in subordinate clauses. Subordinate VS constitutes \(29 \%\) of total [SV+VS]: rather similar to the proportion in OT. There are 30 subordinate subject pronouns, of which 5 are in VS constructions, in contrast with 58 subject pronouns in main clauses, of which 11 are VS. Subordinate subject pronouns total \(52 \%\) of main clause subject pronouns: rather fewer than in OT., but much more than the Oresteia. The only VS relative (at 228) is existential, 4 of the 7 SV relatives have pronominal subjects, and the other three have emphatic nominal subjects.

A 1 (d): Crito

In Crito, a strong correlation between pronominal subjects and SV in subordinates contrasts with a lower proportion of pronominals in main clauses. There are 34 subordinate subject pronouns out of 70 subordinate subjects ( \(49 \%\) ), compared to 18 main clause subject pronouns of 50 main clause subjects ( \(36 \%\) ). Only 5 of the subordinate pronoun subjects are in VS constructions.

The presence of pronominals therefore correlates with the low level of subordinate clause VS ( \(24 \%\) of total [SV+VS]), and a high level of main clause VS (48\% of total [SV+VS]).

The highest level of pronominal VS occurs in the rather small total in Crito main clauses, where 7 of \(18=39 \%\) are VS. However, a number of constructions with pronominal subjects alternate SV and VS order. This is examined below in Section B 1b, in the discussion of appositional phrases.

Frogs and the Melian Dialogue also show a correlation between pronominal subjects and SV. In Frogs main clauses, nominal subjects constitute 66 of \(169=39 \%\) of the [SV+VS] total, and, of these, VS constitute 22 of \(66=33 \%\). In subordinate clauses, nominal subjects constitute 50 of \(85=59 \%\) of the [SV+VS] total, and of these, VS constitute 14 of \(50=28 \%\). The proportions of VS in main and subordinate clauses are comparable.

\section*{A 2: Pronominals and word order: non-correlation}

Word order is not, however, determined simply by the choice of pronominal or nominal subjects. The proportion of pronominal VS is variable, being as high as \(11 / 58=19 \%\) in Medea main clauses, and \(7 / 18=39 \%\) in Crito main clauses. In both texts, this reflects a generally high level of main clause VS (as shown in Chapter 1, Section B1e). Further, the proportion of VS with nominal subjects is also variable, as may be seen from Odyssey 9 and Septem:

\section*{A 2 (a): Odyssey 9}

In main clauses, nominal subjects constitute 88 of \(168=52 \%\) of the [SV+VS] total, and, of these, VS constitute 37 of \(88=42 \%\). In subordinate clauses, nominal subjects constitute 35 of \(50=70 \%\) of the [SV+VS] total, and of these, VS constitute 10 of \(35=29 \%\). Though there are more nominals in subordinate clauses than in main, VS is much higher among main clause nominals than among subordinates.

\section*{A 2 (b): Septem}

In main clauses, nominal subjects constitute 141 of \(194=73 \%\) of the [SV+VS] total, and, of these, VS constitute 51 of \(141=36 \%\). In subordinate clauses, nominal subjects constitute 43 of \(51=84 \%\) of the [SV+VS] total, and of these, VS constitute 12 of \(43=28 \%\). To a somewhat lesser extent than in Odyssey 9, VS is higher in main clause nominals, though, again, there are more nominals in subordinate clauses.

\section*{Summary}

It may be concluded that pronominals are overwhelmingly associated with SV, but two provisos must be made:
i) the pronominal SV/VS ratio is not constant between texts.
ii) the presence of pronominals is not enough to explain the \(\mathrm{SV} / \mathrm{VS}\) ratios. The proportion of VS in nominals varies between authors, and between clause type. Before possible reasons are discussed, the relation between pronominal objects and word order is considered.

\section*{A 3: Pronominal objects}

\section*{A 3 (a): OV and pronominal objects}

If word order is affected by the presence of pronominals, then it might be expected that there would not only be a correlation between SV and pronominal subjects, but also between OV and pronominal objects. The proportions in the Oresteia, Medea, and Crito show this to be the case. However, there is considerable variation, most notably in the high level of pronominal VO in Medea main clauses, as shown in Table 2:
\begin{tabular}{llll} 
Ag. & & Pronominal objects & OV \\
& Main & 44 & 35 \\
& VO \\
& Subordinate 9 & 9 & 8 \\
& & \(1=11 \%\)
\end{tabular}

Choe.
Main 37
\(28 \quad 9=24 \%\)
Subordinate 5
\(50=0 \%\)
Eum.
Main 31
Subordinate 6
\(21 \quad 10=32 \%\)
\(60=0 \%\)
Medea

Main \(\quad 74\)
Subordinate 25
Crito
Main 34
Subordinate 8

38 36=49\%
20 5=20\%

24 10=29\%
7 1=13\%

\section*{A 3 (b): Medea and pronominal OV}

A consideration of Medea shows that, although there are fewer pronominal objects than subjects, there is indeed a higher proportion of pronouns with OV than with VO, but the proportion ( 58 of \(99=59 \%\) ) is far less than for pronominal subjects, given in Section A 1.

When pronominal VO does occur, the pronoun always follows immediately on the verb, suggesting a structural motivation. The reason does not appear to be metrical, since line position is quite variable. It can be summarized in three categories:
1) Second word in the line: \({ }^{2} 12\) instances ( \(344,394,476,489,505,636,692,709\) ), including repetitions of \(\delta \rho \alpha ́ \sigma \omega\) тá \(\delta\) ', 4 times, at 268, 927,1019 , and 184:
8) \(\quad \delta \rho a ́ \sigma \omega ~ \tau a ́ \delta ’ \cdot a ̉ a ̀ \alpha ~ \phi o ́ ß o s ~ \epsilon i ~ \pi \epsilon i ́ \sigma \omega ~\)

I shall do it, but there is doubt whether I shall persuade ...
2) Last position in the line ( 6 instances). Pronouns here do not seem to carry pragmatic emphasis, though they do have prosodic prominence, as may be seen at Med.311:

I hate him. But you, I think, did this wisely
and 961:

... keep them; do not give them.

Similar patterns occur at 1057 and 1131. However, pragmatically emphatic pronouns appear in final position, as in two constructions with \(\sigma \epsilon\) which both contrast with pronouns earlier in the line, at Med.1058: \({ }^{3}\)

living there with me, they will gladden you.
and 515:
12) \(\pi T \omega \chi o u ̀ s ~ a ̀ \lambda a ̂ \sigma \theta a ı ~ \pi \alpha i ̂ \delta a s ~ \eta \eta ~ T ' ~ Є ̈ \sigma \omega \sigma a ́ ~ \sigma \epsilon . ~\)
... the children wandering as beggars, and I who saved you.

This construction echoes the enjambement four lines earlier, at 510-511:


... but in you I have a wonderful husband, and a faithful one, poor me.

\footnotetext{
\({ }^{2}\) At Med.344, 636 and 709, there are second-position particles or initial \(\dot{\alpha} \lambda \lambda\) ', so the object is, strictly speaking, the third word.
\({ }^{3}\) Lines 1056-80 are bracketed by Diggle (1984). The textual problems are discussed by Kovacs (1986).
}
3) Position elsewhere in the line ( 9 instances); at Med.326, 332, 351, 585, 613, 908, and 1040, and 306-7:
14) \(\sigma u ̀ ~ \delta '\) oûv фоßற̣ \(\mu \epsilon \cdot \mu \eta ̀ ~ \tau i ́ ~ \pi \lambda \eta \mu \mu \in \lambda e ̀ s ~ \pi \alpha ́ \theta \eta n ̧ ; ~\)

But you fear me: what harm are you afraid of?
It is not so with me; do not fear me, Creon

In three constructions, the pronoun functions as antecedent to a constituent within a complement clause, at Med.85-86, 168, and 39-40:


... I know her and fear her,
lest she drive a whetted sword through her innards

It may be concluded that there is a correlation, but a much looser one, between pronominals and OV than between pronominals and SV. The position of pronominal objects suggests that the same phonological motivation applies to object as to subject pronominals, but that there is a contrary, syntactic, tendency for objects to follow their verbs (see also Dover 1960: 18, and Luraghi 1998: 192). Clearly, head-government is much more prevalent in constructions with pronominal objects. This would accord with the diachronic movement of enclitics from P2 to adjacency to their head words, between CG and Hellenistic Greek (see Chapter 4, Section 3b).

\section*{A 3 (c): Pronouns and word order: summary}

In all texts, subject pronouns are rarely associated with VS order, and this explains some variations of order in the corpus. The Oresteia has a very low proportion of subject pronouns in subordinate clauses compared to the other texts, and a high frequency of subordinate VS. The greater number of subordinate pronominal subjects in the OT. is matched by a very high SV frequency. Medea has a slightly lower frequency of pronouns, but an equivalent subordinate SV frequency. The low frequency of main clause subject pronouns in Crito correlates well with the high main clause VS levels.

Most pronominal VS constructions involve either ' \(\varepsilon\) \(\gamma \dot{\omega}\), most commonly at the line end; indefinite \(\tau \iota s\); or \(\sigma u\). Pragmatic emphasis is not evident: the position of \(\dot{\epsilon} \gamma \dot{\omega}\) in the phrase oî \(\delta^{\prime} \dot{\epsilon} \gamma \dot{\omega}\) seems motivated prosodically.

Correlation between pronominal objects and OV is less marked than between subjects and SV. The reason appears to be that object pronouns are likely to follow immediately on their verb. The position of objects, then, is determined by both prosodic and syntactic determinants, while the placing of subjects appears to be determined prosodically.

\section*{B: Nominal subjects and objects}

\section*{B 1: Nominal subjects: syllable number}

It was noted above, in Section A3, that the presence of pronominals is not sufficient to explain the SV/VS ratios, and that the proportion of VS in nominals must therefore vary between authors. In this section, all clauses in the corpus with nominal subjects are examined, and subject and verb order is collated in terms of word size, judged in terms of number of syllables, and consequently categorized as ascending (longer words to the right), descending (the converse), or constant order.

The data is collected in Appendix 1F, and summarized below in Table 3. The following points should be noted:
1) In order to create a consistent test, only the subject noun, rather than the phrase (NP), is considered.
2) The syllable number of noun and verb rarely differs by more than one.
3) A consideration of complete phrases may change the figures in two ways:
i) a descending VS order (in terms of the subject noun) may become an ascending one, if the whole phrase is considered.
ii) an ascending SV order (in terms of the subject noun) may become a descending order, in terms of the whole phrase (these are collated in Appendix 1F).

Table 3: Nominal subjects
\begin{tabular}{lllcc} 
Iliad 9 Total & & Ascending & Descending & Constant \\
Main & SV 57 & 34 & 15 & 8 \\
& VS 49 & 24 & 17 & 8 \\
Sub. & SV 33 & 14 & 10 & 9 \\
& VS 17 & 4 & 8 & 5
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline \multicolumn{5}{|l|}{Odyssey 9} \\
\hline Main & SV 51 & 28 & 12 & 11 \\
\hline & VS 37 & 5 & 13 & 19 \\
\hline \multirow[t]{2}{*}{Sub.} & SV 25 & 14 & 1 & 10 \\
\hline & VS 10 & 0 & 6 & 4 \\
\hline \multicolumn{5}{|l|}{Septem} \\
\hline \multirow[t]{2}{*}{Main} & SV 90 & 52 & 19 & 19 \\
\hline & VS 51 & 12 & 19 & 20 \\
\hline \multirow[t]{2}{*}{Sub.} & SV 31 & 19 & 4 & 8 \\
\hline & VS 12 & 1 & 3 & 8 \\
\hline \multicolumn{5}{|l|}{Oresteia} \\
\hline \multirow[t]{2}{*}{Main} & SV 231 & 139 & 44 & 48 \\
\hline & VS 129 & 55 & 53 & 21 \\
\hline \multirow[t]{2}{*}{Sub.} & SV 72 & 35 & 21 & 16 \\
\hline & VS 77 & 33 & 32 & 12 \\
\hline \multicolumn{5}{|l|}{OT.} \\
\hline \multirow[t]{2}{*}{Main} & SV 61 & 38 & 15 & 8 \\
\hline & VS 35 & 16 & 13 & 6 \\
\hline \multirow[t]{2}{*}{Sub.} & SV 28 & 16 & 5 & 7 \\
\hline & VS 16 & 9 & 4 & 3 \\
\hline \multicolumn{5}{|l|}{Medea} \\
\hline \multirow[t]{2}{*}{Main} & SV 61 & 36 & 11 & 14 \\
\hline & VS 53 & 23 & 23 & 7 \\
\hline \multirow[t]{2}{*}{Sub.} & SV 34 & 22 & 2 & 10 \\
\hline & VS 19 & 5 & 8 & 6 \\
\hline \multicolumn{5}{|l|}{Cyclops} \\
\hline \multirow[t]{2}{*}{Main} & SV 27 & 15 & 4 & 8 \\
\hline & VS 17 & 4 & 10 & 3 \\
\hline \multirow[t]{2}{*}{Sub.} & SV 12 & 7 & 2 & 3 \\
\hline & VS 4 & 2 & 1 & 1 \\
\hline \multicolumn{5}{|l|}{Frogs} \\
\hline \multirow[t]{2}{*}{Main} & SV 44 & 24 & 8 & 12 \\
\hline & VS 22 & 8 & 7 & 7 \\
\hline \multirow[t]{2}{*}{Sub.} & SV 36 & 16 & 8 & 12 \\
\hline & VS 14 & 10 & 2 & 2 \\
\hline
\end{tabular}

Melian Dialogue
\begin{tabular}{lllll} 
Main & SV 10 & 4 & 2 & 4 \\
& VS 2 & 1 & 0 & 1 \\
Sub. & SV 9 & 4 & 3 & 2 \\
& VS 3 & 2 & 0 & 1 \\
Crito & & & & \\
Main & SV 15 & 9 & 4 & 2 \\
& VS 17 & 7 & 3 & 7 \\
Sub. & SV 24 & 10 & 7 & 6 \\
& VS 12 & 3 & 5 & 4
\end{tabular}

\section*{B 1 (a): Summary of results}
1) Descending constructions are in the minority in all texts, compared with [ascending + constant] orders.
2) An ascending order is more common with \(S V\) in all texts, in both main and subordinate clauses, with the exception of subordinate clauses in Eumenides.
3) A few ascending SV orders may be categorized as descending if the whole phrase is considered. However, in no text does this create a majority of descending SV.
4) The ascending / descending ratio is much more even in VS constructions, descending order often being in the majority. Descending order is more common than ascending in Iliad 9 subordinates, all clauses in Odyssey 9 and Septem, Ag. and Choe. subordinates, Eum. main, Medea subordinates, Cyclops main, and Crito subordinates. However, descending order rarely outweighs [ascending + constant] together: it does so only in Odyssey and Choe. subordinates and Cyc. main clauses.
5) Many descending VS constructions include a disyllabic subject in a prominent prosodic position, most commonly, the end of the line.
6) Some descending VS becomes ascending, if the complete NP is included.
7) A few descending VS constructions are followed by phrases in apposition. This is considered further in Section B1b.

The most significant prosodic element accompanying VS is factor (5). If disyllabic subjects in line-end position are discounted, there is a majority of ascending VS constructions in almost all texts. The more even figures actually observed suggests that a rhythmic element may compensate for a morphologically ascending trajectory in these constructions.

It may be concluded that SV is closely associated with ascending order. VS is, however, equally strongly associated with an ascending order only if a prosodic feature, of emphasis, is allowed. The same correlation is observed with verb and object ordering (see Section B 2).

\section*{B 1 (b): Apposed clauses}

There is a somewhat higher probability of VS when there is a following phrase in apposition. In the Oresteia, a high frequency of NPs in apposition to subordinate clauses may contribute to the high VS level in the trilogy. Out of 92 subordinate VS constructions, 22 have appositional phrases following (=24\%). This compares with 6 out of the 99 subordinate SV constructions (=6\%). It may be connected with the low number of finite relative clauses in the Oresteia. \({ }^{4}\)

Appositional phrases might preferentially follow subordinate clauses for stylistic or cohesive reasons: there can be a certain clumsiness (or at least lack of cohesion) when SV is followed by such a phrase, as at Septem 24 (the translation mimics the effect):
16) \(\nu v ิ \nu ~ \delta ’ ~ i ́ s ~ o ́ ~ \mu a ́ \nu t ı s ~ \phi \eta \sigma i ́ v, ~ o i ̉ \omega \nu \omega ̂ \nu ~ \beta о т \eta ́ \rho, ~\)

Now as the prophet says, the shepherd of birds, ...

However, there is no correlation between VS and following phrases in Crito. Nine VS constructions (out of \(41=22 \%\) ) have following infinitives or participle: 4 in main clauses, and 5 in subordinates. They are listed in Appendix 1H. The VS total compares with 16 SV constructions out of 79 (=20\%). A structural motivation would be possible only for the participles, which are in agreement with the subjects, in contrast with the infinitives (separated from their controlling verbs by the subject NPs).

\footnotetext{
\({ }^{4}\) Noted in Chapter 1, Section B 2.
}

An appositional phrase may be included in the prosodic trajectory, and so included in a principle of increasing word size. However, the presence of appositional phrases can be only a contributory factor: the figures from the Oresteia and Crito show that most VS constructions are not followed by nonfinite phrases. For this reason, a statistical study of the phenomenon is not undertaken here. Object and verb order is, however, affected by the presence of clauses following: in section B6c it is observed that complementation is associated with main clause VO.

\section*{B 2: Nominal objects}

As with pronominals, the OV/VO ratio is more variable with nominal objects than subjects. In the five texts, VO varies between \(27 \%\) and \(71 \%\) of [OV+VO], and may be higher either in main clauses (in Agam, Eum.and Med) or in subordinates (Choe.and Crito), as shown in Table 4:
\begin{tabular}{llll} 
Ag. & & Nominal objects & OV
\end{tabular}

Choe.
\begin{tabular}{llll} 
Main & 88 & 35 & \(53=60 \%\) \\
Subordinate & 21 & 6 & \(15=71 \%\)
\end{tabular}

Eum.
Main \(121 \quad 68 \quad 53=44 \%\)

Subordinate \(15 \quad 11 \quad 4=27 \%\)
Medea
Main 13
58
\(76=57 \%\)
Subordinate 46
29
17=37\%
Crito
\begin{tabular}{llll} 
Main & 22 & 14 & \(8=36 \%\) \\
Subordinate & 5 & 3 & \(2=40 \%\)
\end{tabular}

Verb and object order, like subject and verb order, shows an ascending order (longer words to the right). As with SV, so OV is overwhelmingly ascending. The figures for VO, however, are even more weighted towards descending order than is VS. The correlation may be seen in the Oresteia, Medea, and Crito (the data is collated in Appendix 1G).

It has been shown that SV and OV orders are predominantly ascending, VS is quite evenly balanced, and VO is predominantly descending. The features associated with descending VO include the same metrical determinants as with VS (disyllabic nouns in the last foot, or an extended phrase), but there appears to be an extra, presumably syntactic, motivation for the object to follow its verb. This accords with the positions of object pronouns in Medea, described above in Section A3.

The proposed explanation, that SV and OV are motivated by the morphology of the words, while VS and VO have a stress component (associated with metrical prominence), is discussed below. The first factor is examined in Sections B3 and B4, and the second in Section B6.

\section*{B 3: Phonological weight}

As discussed above in Sections B1 and B2, SV and OV constructions show a trajectory of increasing word size. This accords with the observation of Behaghel \((1909,1929)\), that a 'Gesetz der wachsenden Glieder' is evident in Indo-European languages. It has also been observed, by Frisk (1932: 44, 87, and 94) and Schwyzer (1950: 691), that, in Greek prose subordinate constructions, longer words tend to follow shorter ones. Chantraine (1952: 72) suggests that it may be a general rule of Greek for the longer term to follow the shorter. A tendency for word size to increase in English sentences is noted by Jespersen (1949: Chapter 2) and Quirk, Greenbaum, Leech, and Svartvik (1985: Chapter 14), and termed 'end-weight'.

Behaghel (1909: 138-139) initially suggested a cognitive motivation: that longer words follow shorter ones, in the absence of iconic factors like temporal or causal sequence, because a more complex task tends to be delayed. In a subsequent article, Behaghel (1929) suggested that the principle may be associated with the postponing of new information. Subsequent commentators have usually followed either the cognitive or the pragmatic motivation, and sometimes both: Mallinson and Blake (1981: 151-157) suggest that heavy elements place fewer demands on short-term memory if they are later, and that light elements, 'typically a pronoun or a simple noun phrase', occur at the start of the clause for reasons of textual cohesion (which they describe as topic to the left). Reasons for doubting the value of a pragmatic approach were outlined in the Introduction, Section 2c, and Chapter 1,

Section A2. The possibility of a cognitive explanation is discussed in the next section.

\section*{B 4: Cognitive motivation}

\section*{B 4 (a): Right-branching syntax}

The notion that word order may reflect principles of logical ordering has been suggested by both ancient and modern critics. The stylistic divisions posited by Demetrius (De Eloc.12-14, 36), the free ( \(\delta \iota \alpha \lambda \in \lambda \nu \mu \epsilon ́ \nu \eta\) ) and the periodic or compacted ( \(\kappa \alpha \tau \epsilon \sigma \tau \rho \alpha \mu \mu \epsilon ́ \nu \eta)\) ), were reinterpreted by Weil (1869: 51-67) as 'constructions descendantes' or 'ascendantes' according as the governing word precedes or follows the governed. Because Weil's terminology is unrelated to the morphologically descending and ascending sequences described in Section B1, the symbols G> and \(<G\) are used here for governorfirst and governor-last respectively. Weil's definition of government is based on propositional logic, so categorizes the subject as governing the predicate: SV and VO therefore represent \(\mathrm{G}>\), and VS and \(\mathrm{OV}<\mathrm{G}\). The implication of this interpretation is that SVO order would be categorized as G> in Weil's terms, while, in the \(\mathrm{X}^{\prime}\) schema, SV is \(<\mathrm{G} .{ }^{5}\)

Weil (1869: 56-7) considers that G> emphasizes the ideas which the individual words represent (he notes its frequency in Aristotle's definitions, and, as noted in Chapter 1, Section A1, he identifies the opening of the Republic as an example), while \(<\mathrm{G}\) emphasizes the unity of a phrase, because 'l'attention est éveillée, l'esprit est en suspens et demande qu'on lui donne le terme qui gouverne'. This is similar to the view of Demetrius (De Eloc.201) that narrative naturally starts with a nominative (or accusative in an indirect construction following a verb of speech), ai \(\delta \grave{\epsilon}\) ä \(\lambda \lambda a l ~ \pi \tau \omega ́ \sigma \epsilon เ S ~ a ̉ \sigma a ́ \phi \epsilon เ \alpha ́ v ~\)
 other cases will cause obscurity and put on tenterhooks both speaker and listener). \({ }^{6}\)

\footnotetext{
\({ }^{5}\) In the X' schema, the basic clause (IP) is governed by the verb inflection (Chomsky 1981: 5052), yet Lyons (1968: 241-242) notes that the subject-verb relation implies semantic dependence of the verb upon the subject, which determines number. The two views may be reconciled by an identification of the subject with the inflection. Chomsky (1992: 7-8) has more recently adopted a neutral interpretation, of agreement rather than government. \({ }^{6}\) The terms used by Demetrius (De Eloc. 198 and 201), \(\dot{\eta}\) ỏ \(\rho \theta \dot{\eta}\) (upright) and Tò \(\pi \lambda a ́ \gamma \iota o v\) (oblique), as well as the distinctive nominative morphology, also suggest a default.
}

The reason could be that \(G>\) is easier to remember: Yngve (1960) showed that when constituents are organized in a pattern of dependency, a speaker has to remember each until the utterance is complete, and the memory load required will vary according to structure; a feature he characterized as 'sentence depth'. Yngve's model predicts that right-branching structures, which correspond to Weil's G> (SV and VO), are easier to remember than 'flat' or left-branching ones. Though influential, the explanation has several problems:
i) Psycholinguistic: it is not proven that binary-branching structures are easier to learn or to process than 'flat' structures (see Frazier and Fodor 1978, Matthei 1982, Slobin 1986). \({ }^{7}\)
ii) Typological: the fact that left-branching languages are not markedly less common than right-branching ones implies that many languages are 'inefficient', which is counter-intuitive. \({ }^{8}\)
iii) Diachronic: the model cannot in itself explain language change.
iv) Variation: non-standard orders are not always emphatic, and the level of suspense they create does not necessarily constitute a great load on the memory. Goodell (1890: 10) noted that Weil's model does not explain variations in order within CG, or between CG and Latin, and Yngve's model is open to the same objection.
v) Structural: The model is purely linear, and does not model optional constituents or prosodic groups (Frazier 1985: 155).

A cognitive basis for word order appears attractive, as it links a structural generalisation with stylistic choice, but word order clearly involves more than the existence of right-branching syntactic structures. What does seem likely is that a consistently-branching structure is cognitively simpler than a mixed one: Kuno (1974) notes that centre-embedding structures are particularly difficult to process. The significance of this is that changes in order might be cumulative.

\section*{B 4 (b): Rightwards phonological weight}

The connection between a cognitive explanation for right-branching and for rightwards phonological weight is in the interaction between syntax and

\footnotetext{
\({ }^{7}\) Binary-branching systems may, however, be inherently more efficient: see Simon (1962).
\({ }^{8}\) See Kayne (1994) for discussion of the structural implications.
}
morphology (especially evident in an inflecting language). \({ }^{9}\) Memory load is clearly applicable to large (phrasal) constituents, as 'Heavy NP Shift' (the rightwards adjunction of complex NPs - see Ross 1967), and extraposition (rightwards placing of subject clauses —see Jespersen 1924, Koster 1978). The most rapid recognition of even small-scale phrasal constituents may also be achieved by postponing heavier elements (see Hawkins 1983, 1990, 1994; Dik 1978: Ch. 9; id. 1989). \({ }^{10}\)

Parsing efficiency suggests an explanation of why weight might be placed to the right, though analyses of textual corpora have not yet shown strong correlation between word order and constituent size (see Siewierska 1993). \({ }^{11}\) Wasow (1997) argues that a better explanation is provided by a productionbased explanation: that it is in a speaker's interest to 'keep options open' as long as possible, so an order of words which is less predictable to a listener might be preferred by a speaker (as postponing heavy elements generally delays a speaker's commitment to the final structure).

The prospect of a direct cognitive explanation for linguistic structure is attractive, but cognitive models have so far had little predictive power, perhaps because they concentrate on constituent ordering \({ }^{12}\) rather than word size or prosodic prominence (only Dryer 1992 has addressed the relationship between constituent and word ordering). \({ }^{13}\)

In a highly inflected language, weight could be analysed as a morphological feature, as words are often full phrasal constituents. The data here accords with either view: the figures in Section B 1(a) show that the predominance of

\footnotetext{
\({ }^{9}\) The relation between the two is described by Baker (1985) as the 'mirror principle' .
\({ }^{10}\) Hawkins proposes that order is motivated by Early Immediate Constituent (EIC) recognition, while Dik (1989: 351, 369) suggests a weight-based 'language-independent order of constituents' (LIPOC), of [clitic> pronoun \(>\mathrm{NP}>\) adpositional phrase \(>\) subordinate clause]. \({ }^{11}\) Siewierska examines only subject and object order, in terms of number of words in an XP.
\({ }^{12}\) This may change with progress in machine-based parsing, on which see Marcus (1980), Fodor (1983), Berwick and Weinberg (1984) Hausser (1989), Berwick, Abney, and Tenny (1991), and Bunt and Tomita (1996).
\({ }^{13}\) Dryer (1992) describes word order in terms of phrases and single words, associating VO with word> phrase order. This creates the problem of defining a phrase, which Dryer (1992: 112-4) restricts to full (XP) projections.
}
ascending SV is similar in both frameworks, though categorization by constituents somewhat reduces the predominance of descending VS. Single words are used here as the unit of analysis, in order to concentrate on the smaller-scale features.

In either framework, inflections add rightwards weight: the nominative is often phonologically zero, and generally precedes the non-zero accusative (see Gil 1982: 133-4). The inflectional system may then motivate subject> object order, and also SV and OV, due to the relative size of noun and verb inflections. This feature is particularly relevant to the figures for pronominal order discussed above: the proportional difference between a monosyllabic and a disyllabic constituent is greater than that between two constituents with, say, 5 and 6 syllables, so pronominals are especially sensitive to casemarking rules (see Gil 1982: 134).

However, the lack of correlation between VS and ascending order (described above in Section B1a) shows that more is involved in rightwards phonological weight than simply number of syllables. A prosodic component appears to be involved too.

\section*{B 5: Prosodic motivation for rightwards weight}

\section*{B 5 (a): Prosodic motivation for poetic VS}

There does not appear to be a simple rightwards trajectory of increasing emphasis: the traditional view (as Thomson 1938: 18, Denniston 1952: 44) is that emphasis declines over the course of the CG clause. However, the clause end is also generally agreed to have some prominence. The conclusion must be that a purely linear model is inadequate, and prosodic and intonational groupings should also be considered. Three metrical groupings are of particular relevance: the prominence of the start of the line, a more regular metrical organisation in the second colon than in the first, and a rhythmic effect in the last foot:
i) The start of the clause is universally agreed to be emphatic, and this is reflected in the typical prosodic structure of the stichic line, with a single intonation break, discussed by Fraenkel (1932, 1933), De Groot (1935), and

Allen (1973). \({ }^{14}\) Allen (1973: 115) describes the colon (or its delimiting caesurae) as 'a metrical feature, based on grammar, and manifested in composition.' Ruijgh (1990: 229-230) notes the frequency with which the line break and the penthemimeral caesura define the phonetic frontier between 'l'expression thématoïde' (by which he means topical expressions, including adverbials) and 'la phrase proprement dite.' The start of the clause is examined further in Chapter 4.
ii) It is observed by Allen (1973: 106) that the second colon of the stichic line is normally defined more rigidly than the first. This appears to be a very ancient feature: West (1987: 6) notes that, in early IE poetry, quantities were free, except towards the end of the verse. Its appearance in tragic iambics is exploited at Ra.1198ff., where Euripides is criticized for the Lekythion pattern commencing at the penthemimeral caesura. A different criticism of Aeschylus, that his lyrics include dactylic refrains, is made at Ra.1264-5 (=Myrmidons 1):

ín, кóтоข, oủ \(\pi \epsilon \lambda \alpha ́ \theta \epsilon \iota S ~ \epsilon ̇ \pi ’ ~ a ̀ \rho \omega \gamma a ́ v ; ~\)
Phthian Achilles, | why hearing the man-slaying
-ah- blows, do you not join to help?

This implies that, in Aeschylean lyric, the second period of a clause is prosodically predictable, even in a following line. \({ }^{15}\) The connection with phonological weight lies in the highlighting effect which a predictable rhythm has on linguistic form (discussed by Aristotle, Rhetoric 1408b21-26, and implicit in the 'poetic function' of Jakobson 1987: 69). The impression of solidity resulting from a highly visible form may be seen in hyperbatic constructions, as at Choe.773:

For in the messenger the crooked word is made straight. \({ }^{16}\)

\footnotetext{
\({ }^{14}\) Bibliographies may be found in De Groot (1919: 200-217), Allen (1973: 361-389), and Devine and Stephens (1984: 142-147, 1994: 498-562).
\({ }^{15}\) Dover (1993: 345) notes that the satire is directed not only to Aeschylus's fondness for dactylic rhythm, 'but also his use of refrains, which sometimes consist of only a few words ... but may also constitute short stanzas.'
\({ }^{16}\) Garvie (1986: 253) discusses the textual problems of the line.
}

Here, the hyperbaton may be considered to give more weight to the whole constituent киттòs \(\lambda\) óros. The metrical regularity of this type of hyperbaton is considered in detail in Chapter 3.
iii) The last word: while weight to the right does not involve only a continuum of increasing emphasis, the final position itself appears to be prominent (cf. Quintilian, Institutio IX.iv.29). Pragmatic reasons why this might be so (mostly involving the notion of a key or thematic word) have been suggested by Delbrück (1900: 110), Kühner (1904: 597), Thomson (1938: 19), and Denniston (1952: 45). \({ }^{17}\)

However, the prominence of the last word of the stichic line may serve a prosodic function: the marking of a period. Quintilian (Institutio IX.iv.91-3) notes that long syllables, which carry more auctoritas (dignity), create a sentence ending which is firmissima (strongest), Demetrius (De Elocutione 39) describes a long final syllable in prose as \(\mu \in \gamma a \lambda \epsilon i ̂ \nu\) (grand), and a general tendency for the last syllable of a word group to be lengthened is noted by Allen (1973: 204-207) and Devine and Stephens (1984: 25-28).

Final emphasis is particularly clear in poetry: though Thomson (1938: 368) argues that 'the end of the line, as such, is never emphatic', the iambic line and the clause regularly coincide (as is implied by the fact that enjambement is worthy of note, and by the correlation proposed by Demetrius, De Eloc.204205, between the trimeter line and the ideal length of a prose clause, noted in Chapter 1, Section A4). Final emphasis is encouraged by the rhythmic principle, canonically described in terms of 'bridges', \({ }^{18}\) that repeated coincidence of word boundaries with metrical units should be avoided. This presumably also motivates the normal division of trimeter and hexameter lines by caesura within the metra (such as the penthemimeral and hephthemimeral caesurae) rather than diaeresis (when word and metron end coincide).

However, metrical and word boundaries regularly coincide in the final foot, with a high frequency of final disyllabic nouns throughout trimeters in tragedy: Raalte (1986: 207, 214 Table XX) shows that more than 75\% of tragic trimeters have word breaks before the penultimate or final foot. The late

\footnotetext{
\({ }^{17}\) See Chapter 1, Section A 2.
\({ }^{18}\) An extensive discussion is given by Devine and Stephens (1984).
}
position is the more common, with similar proportions in Aeschylus, Sophocles, and Euripides (with percentages in the mid-50s, rather than the 30s after the second metron). It is interpreted by Raalte (1986: 21) as a return to the initial rising movement of the iambic. It cannot be simply a metrical feature, because it is also a feature of the hexameter line, so it may be not only the coincidence of word and final foot, but the disyllabic beat itself, which is 'a rhythmic index of verse-end' (Raalte 1986: 29). \({ }^{19}\)

These three features (initial prominence, increasing rhythmic regularity, and final prominence) are further discussed in the remainder of this work, and it will be shown that, in connected texts and in complex sentences, initial and final prominence are combined.

\section*{B 5 (b): Prosodic motivation for prose VS}

Since, as shown in Chapter 1, prose and poetic order are comparable, similar prosodic motivation might be expected. This is partly borne out in the prose texts of the corpus: in the Melian Dialogue and Crito, SV is always associated with ascending order (see Appendix 1F). However, VS is also associated with ascending or constant order (in both texts, though only in Crito main clauses is there a significant number of examples: 17, of which 7 are ascending, 3 descending, and 7 constant). The same predominance of ascending constructions may be seen in verb and object ordering in Crito (see Appendix 1G). It may be inferred that there is the same association of noun and verb length and morphological weight in both genres, but that the last position of the stichic line is more prominent than the final word of a prose period, as might be expected.

Prosodic groupings can, of course, be observed in prose too. \({ }^{20}\) In Crito, there seems to be a final rhythmic component in VS clauses with the subject oi mó \(\lambda \lambda o l\), where the repeated long syllables create prominence. The

\footnotetext{
\({ }^{19}\) It seems to be a contrastive effect, because final trisyllabic words are permitted when preceded by a monosyllable, as described by Porson's Bridge, which disfavours [-- |-v-||], again ensuring final emphasis. See Porson (1802, reproduced in Allen 1973: 308-9).
\({ }^{20}\) References to discussions of the 'clausula' (the last 4 or 5 syllables preceding a pause) are given by Dover (1996).
}
constructions include what would, in verse, be hiatus after the noun, as at Crito 44c3-4:


For the many will not be persuaded that you yourself did not wish to leave here, while we were willing

44d2-3:
 є́ \(\xi \in \rho \gamma \alpha ́ \zeta \epsilon \sigma \theta a \iota\)
...that the many are able to achieve not the smallest of harm.....
and 48a11:

And the many are able to destroy us.

In these constructions, VS does not appear motivated structurally or pragmatically, by the preposing of emphatic elements or the postponing of thematic ones, but by the creation of a rhythmic cadence, which would not exist if the subjects preceded the verbs. It may also be noted that in the three VS constructions with \(\dot{\eta}\) mó \(\lambda \mathrm{ls}\), the short final syllable is lengthened by following consonants, at 50c1, 51b9, and 53a3-4:
22) oút \(\sigma\) ol \(\delta \iota a \phi \in \rho o ́ v t \omega s ~ T \omega ิ \nu ~ a ̈ \lambda \lambda \omega \nu ’ A \theta \eta \nu a i ́ \omega \nu\)

So much more than the other Athenians did the city and we the laws please you, it is clear.

Further evidence of prosodic groupings might be adduced from the phonetic gap created by the aspirated article \({ }^{21}\) and the greater phonological prominence of nouns compared to verbs (see Devine and Stephens 1994: 352).

How far tonal intonation may be identified remains uncertain, though it was proposed as a motivation for prose word order by Loepfe (1940), who associated the G> and <G orders of Weil (1869) with falling and rising intonation respectively. \({ }^{22}\) An initial rise and terminal fall in Greek speech is suggested by Devine and Stephens (1994: 429-431), from the evidence of the

\footnotetext{
\({ }^{21}\) Comments on the articulation of initial [/h/] may be found in Chapter 4, Section \(2 \mathrm{~b}(\mathrm{v})\).
\({ }^{22}\) A critique of Loepfe's criteria may be found in Dik (1995: 266-273).
}
relationship between word groups and musical pitch in the Delphic hymns. The accentual system, of course, provides evidence of intonational patterning, and the change from a pitch to a stress accent implies changes in intonation and syntactic structure too. This is discussed in the next section.

\section*{B 5 (c): VS, VO, and a stress accent}

CG is known (especially from the evidence of Dionysius of Halicarnassus De Comp.11.40) to have had an accent based on pitch. \({ }^{23}\) However, the system is also directly related to syllable number and length, in terms of morae. \({ }^{24}\) Allen (1987: 130) observes that, on the evidence of Christian hymn metres, the change to a stress accent in Greek must have happened by the late 4th century AD , and may have occurred as early as the late second century. It could have been even earlier: Allen (1973: 296-304, 1987: 131-139) considers that even in CG there was likely to have been some feature of syllabic prominence additional to quantity, which could have been the precursor of a full stress accent, and Devine and Stephens (1994: 215) cite evidence of stress elements in vulgar Attic of the 4th century BC.

A movement from OV to VO and from SV to VS appears to have taken place alongside the accentual change: Dover (1960: 25) describes SV and OV as 'syntactic rules' in fifth and fourth century Greek, while by Hellenistic times, there was, as Horrocks (1997: 59) notes, a 'dramatic increase in the frequency of verb-subject order' and also the establishment of VSO as a standard order. The change has been interpreted in two ways, as rightwards movement of the verbal arguments (Ross 1970, 1973; Lehmann 1973, 1974, 1978, 1986; Venneman 1974, 1984; and Watkins 1976), or as verb preposing (Horrocks 1990, 1997). In either interpretation, there is likely to have been a causal connection between the accentual change and the movement from a morphologically ascending trajectory [OV and SV] to a prosodically ascending one [VO and VS]. Reasons to infer this include:
i) An increase in relativization, which encourages VS order in the main clause (because that order avoids centre-embedding: see Section B4a above).

\footnotetext{
\({ }^{23}\) A bibliography is given by Devine and Stephens (1994: 171).
\({ }^{24}\) The smallest time-unit of prosody, equal to a short syllable. See Jakobson (1937), Allen (1973), West (1987: 88), Steriade (1988), Devine and Stephens (1994: 47-9).
}
ii) The development of complementation, where a subordinate clause functions as the object of a verb, and is placed to its right, encouraging VO. iii) A regular association between syntactic object and discourse focus in modern languages (see Hopper and Thompson 1980, 1982). \({ }^{25}\)

These features are discussed further in Chapters 5-7.

\section*{B 6: Phonological weight and authorial choice}

The advantage of an explanation for word order based on phonological weight is that word choice is obviously within the control of the author, so the principle puts minimal constraint on style, and in fact suggests that considerable variations would occur.

Since it is a relative rather than an absolute principle, it is applicable both to the heavy Aeschylean style, and the morphologically lighter Euripidean one. It is, however, especially noticeable in the heavier style. By тò ßápos T \(\omega \nu\) \(\dot{\rho} \eta \mu \alpha ́ \tau \omega \nu\) (the weight of the words), Aristophanes (Ra.1367) meant the weight of the referents, but both a morphological and a psychological weight are implied in his image (Ra.824-5) of Aeschylus hurling:

\(\gamma \eta \gamma \in \nu \in i ̂ ~ ф \cup \sigma \grave{\mu} \mu a \tau \iota\)
bolted words, tearing them away like boards
with gigantic breathing

The use of complex compounds is one of the techniques by which Aeschylus
 words do sometimes occur early in the Aeschylean line, compounds usually involve rightwards weight: of the 107 instances in Agamemnon dialogue listed by Earp (1948: 30-1), only 30 are positioned at or near the line start. \({ }^{27}\) The constraint here may be metrical, yet the underlying reason is, at least partly, morphological: many Aeschylean neologisms, as Stanford (1942: 62) observes, are formed by adding an affix to an adjective, often tautological with the

\footnotetext{
\({ }^{25}\) These include Czech, English, French, Japanese, and Russian, and a number of African and American languages.
\({ }^{26}\) Bios 15.
\({ }^{27}\) At Ag.323, 334, 536, 597, 643, 669, 870, 872, 889, 898, 920, 926, 960, 1043, 1185, 1192, 1195, 1225, 1237, 1241, 1281, 1440, 1441, 1443, 1586, 1592, 1594, 1616, 1623, and 1626.
}
noun, \({ }^{28}\) and such \(\dot{\epsilon} \pi \epsilon ́ \kappa T a \sigma ı S\) (lengthening by long vowel or extra syllable), considered by Aristotle (Poetics 1457b35-1458a25) to be a feature of \(\lambda \epsilon ́ \xi\) เS \(\sigma \epsilon \mu \nu \eta^{\prime}\) (dignified style), involves adding elements to the right.

The textual evidence shows that Aeschylean word order varies according to word choice: the much higher level of VS in subordinate rather than main clauses in the Oresteia, noted in Chapter 1, Section B1e, is evidently due to lexical factors, since it is in large part caused by nominal rather than pronominal subjects, and does not appear in Septem or in other authors.

The similarity of subject and verb order in the morphologically lighter Euripidean style demonstrates the extent to which ordering by increasing weight has a rhythmic component. The similarity between Aeschylean prosody and the Lekythion pattern of Euripides was noted above in Section B5a, and the parallel between the two suggests that inflections, rather than compounds, are the principal motivation for order (since inflections are presumably common to all authors).

Stylistic motivation for variation in word order is also suggested by the frequency of contiguous VS constructions, which may be observed throughout the texts, and also by constructions where SV and VS clauses alternate in the same sentence. This may be seen in constructions with \(\dot{\eta} \mu \in \mathfrak{i} s\) in Crito (collected in Appendix 1H), and at Medea 390-3, where a high level of hyperbaton accompanies a double conditional:



aủtǹ \(\xi i ́ \phi o s ~ \lambda a ß o v ̂ \sigma \alpha, ~ . . . . . . . ~\)
and if some citadel of rescue appears for me,
I shall go about this murder by stealth;
but if hard circumstance forces me into the open, I shall take the sword ......

Such 'mirror forms' constitute a type of chiasmus, as in the variations of order in lists (fifth century boundary inscriptions, Athenian tribute lists and the accounts for the reconstruction of the temple at Delphi), described by Dover

\footnotetext{

}
(1960: 54-56). Variations in order are, perhaps, more unexpected in a list than a literary text, where moıкıגía (diversity) was considered a virtue, \({ }^{29}\) and they show how authorial choice may result both in regularities of word order and in variations from them, without invoking syntactic constraints.

\section*{Conclusion: phonological weight, prosody, and metre}

The comparable word order in hexameter, trimeter, and prose texts described in Chapter 1 shows that metre is not a statistically significant constraint on word order. However, there is a correlation between word order and phonological weight, which affects the prosodic cadence of the sentence. If an ascending trajectory of word size motivates SV and VS, while prosodic emphasis is required to explain VS and VO, then the change to a stress accent in Greek may help explain the diachronic shift between the two sets of orders.

The advantages of the weight criterion are that it links morphology and syntax, it is a formal feature (and so objectively identifiable), and yet it allows maximum scope to authorial choice, and to structural detail as well as the overall trajectory of the sentence.

Nor is it in conflict with an initial emphatic position: it will be shown in Chapters 5-7 that the two features are inter-related, because in complex sentences the initial position of one clause coincides with the final position of the other. The syntactic exploitation of metrical prominence by the writers, and its relation to a principle of phonological weight to the right, are further discussed in Chapter 3, which considers a distinctive pattern of hyperbaton involving the second colon of the trimeter line.

\footnotetext{
\({ }^{29}\) Mentioned by Pindar, Astydamas, Aristotle, and Dionysius of Halicarnassus. See Heath (1987: 105ff.).
}

\section*{Chapter 3}

\section*{Intra-clausal poetic syntax: phrasal tmesis in the Oresteia and other texts}

\section*{Summary}

In Chapter 2, Sections B1 and B2, it was noted that many VS and VO constructions are morphologically 'descending' (longer words are earlier), but may be regarded as prosodically ascending, since they have a disyllabic subject or object in the last foot of the line, which seems to be an emphatic position. \({ }^{1}\) If phonological weight includes a prosodic component, it might be expected that the disyllabic ending might be combined with morphological weight, if constituent coherence could somehow be maintained.

This chapter discusses a distinctive poetic exploitation of the two aspects of phonological weight, in a regular type of hyperbaton found in tragic trimeters, consisting of a verb inserted into an NP, between a demonstrative or adjective and a noun in agreement with it. The resultant NP extends over the second colon of the trimeter line, and includes a disyllabic final noun, so combining the morphological and prosodic features of 'phonological weight.' The pattern is termed 'phrasal tmesis', because it has structural parallels with Homeric verbal tmesis. \({ }^{2}\) The prosody may vary according to the components of the NP and their ordering, but NPs with the demonstrative ö \(\delta \in\) show particular regularity.

A comparison is made with the use of hyperbaton in the other texts of the corpus. Phrasal tmesis is found in all the poetic texts, though trimeter prosody is of course restricted to tragedy and the tragic parodies and quotations in Frogs. Euripidean practice in Medea appears very similar to Aeschylean style. The pattern appears rather less frequently in OT., and even more rarely in Prometheus. A comparison with hyperbaton in prose is made by examining the constructions cited by Denniston (1952: 52), and those in the

\footnotetext{
\({ }^{1}\) The analysis in Chapter 2 Section B1 was organized by nouns rather than phrases, though constituent organization was considered in Section B4.
\({ }^{2}\) It is generally held, as by Smyth (1956: 367) that tmesis is properly only post-epic, because in Homer the preposition or adverb is not fixed to the verb. However, it remains the common label for verbal constructions in which a phrasal head is separated from its modifier.
}

Melian Dialogue of Thucydides (Book 5, 85-113), where hyperbaton is largerscale, and movement normally involves the preposing of subject pronouns. No similar pattern is observed in Crito.

An analogous pattern of phrasal tmesis is common in Homer, being more frequent than the verbal type (at least in Il. 9 and Od.9). Comparison between Homeric and tragic practice shows two notable features:
1) There is a change from SVS to OVO as the most frequent type. This may result from an increased frequency of transitive constructions.
2) There is a change from animate-last order in Homer to animate-first in tragedy. While tragic SVS hyperbaton has predominantly inanimate subjects, the Homeric constructions do not.

Two specific prosodic features are evident in both trimeters and hexameters: the position of the demonstrative or adjective at the caesura (in trimeters, the penthemimeral), and a high frequency of disyllabic nouns in the final foot, which appears to have especial prominence, as discussed in Chapter 2, Section B5a. The tmetic pattern creates a constituent NP co-extensive with the second colon of the line. The effect is twofold: to define the second part of the line more rigidly than the first, and to increase emphasis at the line end, so exemplifying the interrelation between the morphological and prosodic elements which is involved in rightwards phonological weight.

\section*{Chapter Sections}

1: Phrasal tmesis in Aeschylus
1a: Object hyperbaton about the verb in Aeschylus
1b: Similar phrasal tmesis: indirect object, apparent OVO, adjectival, and SVS
1c: Combined phrasal tmesis
1d: Comparison with other types of hyperbaton in the Oresteia
1e: Phrasal tmesis elsewhere in Aeschylus
2: Phrasal tmesis in the other tragedians
2a: Phrasal tmesis in OT.
2b: Phrasal tmesis in Medea
2c: Hyperbaton in Cyclops
3: Hyperbaton in Frogs
4: Phrasal tmesis in Iliad 9 and Odyssey 9
5: Phrasal tmesis in prose

\title{
6: Phrasal tmesis and prosody \\ 6a: Demonstrative position \\ 6b: Noun position and narrative function \\ 6c: Phrasal tmesis and phonetic weight \\ 6d: Tmesis and subordination
}

\section*{1: Phrasal tmesis in Aeschylus}

\section*{1a: Object hyperbaton about the verb}

Studies of Aeschylean style have usually discussed hyperbaton as a longrange feature. Stanford (1942: 79) gives one example, from Supplices (1006-7), where he describes the extreme separation of \(\hat{\omega} \nu\) and oúv \(\nu\) к as clumsy, though noting that hyperbaton can have aesthetic motivation: \({ }^{3}\)
1) \(\pi \rho o ̀ s ~ \tau \alpha u ̂ T \alpha ~ \mu \grave{~} \pi \alpha ́ \theta \omega \mu \in \nu\) ̂̀̀ \(\pi\) mo入ùs móvos

And so, let us not suffer that for which we have undergone great toil, and [for which] much sea was ploughed by ship

The only other tragic construction where oưveka is as distant from its antecedent is at OT.857-8, where prepositional oúvєка follows a governed noun ( \(\mu \alpha \nu \tau \epsilon\) ías). It may be noted that both constructions involve a genitive which signals a governing element, a feature which is common in smallerscale hyperbaton.

Separation of a genitive from a governing noun in stichomythia is noted by Fraenkel (1950: 827-8) as an Aeschylean trait, and Fraenkel observes that it is often a verb (sometimes with adverb or pronominal subject) which is the interpolated element. A complex example occurs at Eum.50-51:

ठєîmvov фєpoúбas. ...
I have seen before painted female forms carrying off
the feast of Phineus ...

Fraenkel considers that this construction 'defies classification', and is explicable only by assuming a lacuna after 49. Sommerstein (1989: 90) adopts

\footnotetext{
\({ }^{3}\) An alternative interpretation is that the hyperbaton is simply caused by the postpositive placing of oưvєк'.
}
an iconic explanation, arguing that 'the transmitted text is quite intelligible; its abruptness and vagueness give an appropriate impression of the speaker groping to describe the almost indescribable.' Both consider hyperbaton to cause an interpretative problem.

However, it has also been noted that hyperbaton can create predictability as well as ambiguity. Foucault (1964) identified a clause-final pattern of word order in a great number of authors, both poetic (Homer, the lyric poets, the tragedians) and prose (the orators, Plato, Polybius, and Koine writers), which he termed 'l'hyperbate du verbe', in which the verb intervened in a two-word phrase, of which the last is usually disyllabic.

His interpretation follows a previous discussion on an analogous feature in Latin, by Marouzeau (1935), who judged it to be motivated either metrically, for rhythmic effect, or pragmatically, in order to emphasise the last word (whether a noun or an adjective). Marouzeau believed the emphasis to be created by the delay and the subsequent surprise, and also categorized the pattern as a form of homoeoteleuton (because of the final disyllable). Similarly, Foucault interpreted the pattern in rhetorical terms, and (1964: 68) described how, in later authors like Polybius, the feature becomes a disjunctive cliché, 'une recherche mécanique sans aucune valeur littéraire.' Neither commentator considered the grammar and prosody of the clause in which the pattern appears.

This chapter undertakes the task. This type of hyperbaton is an especially common feature of Aeschylean style, and is prosodically extremely regular. Because of its syntactic features, it is here termed phrasal tmesis. Just as Aeschylus is known for his assemblies of word compounds (see Chapter 2, Section B7), so his syntax is organized in appositional patterns: the low frequency of finite verbs in the Oresteia and Septem was noted in Chapter 1 (Section B1b), and the frequency of apposed NPs in the Oresteia in Chapter 2 (Section B1c). The description by Aristophanes (Ra.824) of Aeschylean style as
 morphology.

In the Oresteia, the most common pattern involves a demonstrative or adjective separated from its noun by a verb. There are 116 such instances of a verb (or participle) between a noun and an attribute, usually in trimeters,
most with an object phrase, creating a distinctive line pattern of four elements:
1) adjoined and/or subject elements, and particles.
2) disyllabic demonstrative or adjective, often elided.
3) verb, most frequently trisyllabic.
4) disyllabic noun, normally in the last iambic foot.

The pattern is very condensed, and never includes words other than enclitic particles (and those very rarely). Lexical words preceding the hyperbaton are more commonly adjuncts than subjects, and when there are subjects, \({ }^{4}\) they are mostly emphatic, or relative pronouns with adjuncts. The pattern is almost always clause-final, \({ }^{5}\) though it occasionally occurs in the first colon of the line (Ag.4, 20, Eum. 306).

There are 43 instances of object nouns with demonstrative which surround a verb, 28 being at the line end. These are collated in Appendix 2A.
Demonstrative-first constructions are always clause-final.

Examples include Ag.934:

If any with sure knowledge had prescribed this ritual

Ag.1070:

Go, wretched one: desert this carriage
Choe.149:

after such prayers I pour forth these libations

Choe.197:
 but it could truly tell that I must spurn this lock

\footnotetext{
\({ }^{4}\) There are 18 instances: Ag.281, 934, 1202, 1248, 1275, 1400, 1588, 1614, Choe.254, 510, 615, 760, 927, 991, Eum.3, 58, 639, 760.
\({ }^{5}\) The principal non-final constructions involve elements outside the tmetic pattern, like the 'apparent \(\mathrm{OVO}^{\prime}\) patterns described below in Section 1b (2).
}

Eum.405:

yoking this carriage to vigorous foals
and Eum.590:

You utter this boast over one not yet down.

The demonstrative is almost always positioned immediately after the penthemimeral caesura, usually creating a secondary, hephthemimeral, caesura, as at Eum.581:

\(\mathbf{v}\) - \(\quad \mathbf{v}\) |-: - \(\mathbf{v}:-\mid-\quad \mathbf{~ - ~}\)
...and decide this case as you know how.

If the demonstrative is elided, a caesura is created after the third foot, as Ag.1627:
10) \({ }^{2} \nu \delta \rho i ̀ ~ \sigma \tau \rho a \tau \eta \gamma \varphi ̣ ~ т o ́ v \delta ’ ~ \epsilon ́ ß o u ́ \lambda є v \sigma a s ~ \mu o ́ \rho o \nu ; ~\)
- - \(\mathbf{v}\) - |-: - \(\mathbf{v}\) - |- - \(\mathbf{v} \mathbf{v}\)
did you plan this death for the general?

A caesura following the third foot is described by West (1987: 25) as a rare but distinctive tragic pattern: 'In a small percentage of lines in tragedy the caesura occurs at the end of the third foot, nearly always with elision'. Though West does not comment on a connection with hyperbaton, his example line ( Ag .20 :
 pattern is frequently associated with it (as Ag.310, 917, 934, 1070, 1202, 1248, 1627 , and other instances where the demonstrative is elided). Although West is presumably referring to lines without a penthemimeral caesura, the presence of both in tmetic constructions gives the demonstrative a particular prominence in the line.

It will be shown that the position of the demonstrative is a defining feature of the pattern, and also has a wider significance in the trimeter line.
Constructions with adjectives are prosodically similar. Most have penthemimeral caesurae, as at Ag.599:
11) व้̈актоs aủtov̂ пóvта \(\pi \epsilon\) v́бонац 入óyov. from the king himself I shall learn the whole story.
and Eum.734:

this my job, to decide final judgment:

Hyperbaton with adjectives is generally metrically freer, as would be expected with their syllabic variability compared to demonstratives. 38 instances of phrasal tmesis with object noun and adjective or quantifier are listed in Appendix 2B.

\section*{1b: Similar phrasal tmesis: indirect object, apparent OVO, adjectival, and SVS}

Four other forms of hyperbaton are prosodically similar:
1) Hyperbaton with indirect object or dependent genitive about the verb, as Ag. 501:
 whoever prays otherwise for this city

Choe.891:

for that indeed is the point I have reached in this evil
and Eum.902:
15) \(\quad\) Tí oûv \(\mu^{\prime}\) ảv \(\omega \gamma \alpha\) т

What then do you command me to sing over this land?

Other instances occur at Ag.35, 320, 528, 543, 1202, 1248; Choe.114, 188, 282; and Eum.215, 888. This pattern is so regular that it appears plausible to interpret it as parallel to hyperbaton with direct objects. It is structurally similar in being governed by the verb.
2) Apparent OVO. Stylistic manipulation is evident in instances where hyperbaton surrounds a verb, but is dependent on some other constituent, as at \(A g .4\) :

I know well the company of the stars of night

Choe.100:
 be sharers in this counsel, friends.
and Eum.58-59:
18)


nor what land boasts that it reared this race
with impunity and not lament its labour
3) Adjectival hyperbaton. In some instances, a governing noun is surrounded by a genitive demonstrative and noun, in an inversion of the ordinary pattern. This sort of hyperbaton also occurs in Homer, where Friedrich (1975: 5) terms it 'genitival tmesis'. It is structurally similar to OVO and type (1) above in being head-governed. \({ }^{6}\) Instances include \(A g .1\) (echoed at Eum.83, as well as \(A g .20\) ):

I pray the gods for release from this toil
Eит.287-9:


\(\mu \mathrm{O} \in \mathrm{îv}\) ảp \(\omega \gamma\) óv ...
And now with pure mouth I call auspiciously on the queen of this country, Athena, to come to help me
and Eum.884:

... dishonoured, [you] wandered as exile from this land.

At Eum.204, a noun and adjective surround the head noun:

and then you offered yourself as the receiver of fresh blood?

\footnotetext{
\({ }^{6}\) The term is used to mean that the phrase is endocentric, with the head element governing the other elements, as in the X' model. See Introduction, Figure 2, and Rizzi (1990: 6).
}
4) There are 16 instances of SVS tmesis, with the noun most commonly in agreement with an adjective. These are listed in Appendix 2C. Only six constructions include a demonstrative, and in only three does it precede the noun, at Ag.547:

From where came this dejection to the army?

Choe.260:

nor, if this royal stem is all withered, ....
and Eum.742-3:


throw out the lots from the urns as quickly as possible
those judges to whom this task has been assigned

The three demonstrative-last constructions are at Choe. 550 (the second element of ring-composition with 541):

I am her killer, as this dream announces

Choe.580:
27) öт \(\omega\) s àv ảpтíко入入а \(\sigma u \mu \beta a i ́ \nu ท ุ ~ \tau \alpha ́ \delta \epsilon \cdot . ~\) so these things may happen close-fitting,
and Eum.482:

but since this matter has fallen on us here
In two of the adjective-noun constructions (Ag. 653 and Eum.192), the clitic \(\delta \epsilon\) precedes the verb, and Ag .347 includes the only example of a non-clitic element ( \(\mu \eta^{\prime}\) ) intervening in the pattern: otherwise the structure is regular. SVS tmesis seems to constitute a syntactic mirror of OVO through case marking. It is analogous to passivization, in that most instances are semantically parallel to OVO, with a high proportion of passive verbs and
neuter subjects (13 out of 23: the others are all non-animate), such as Choe.773:

v - v-|- : - v:-|- v v
for it is the messenger who straightens a crooked tale
and Eum.676:

- - v -|-: - : v - |- - v v
for our part, every arrow has now been shot
As in OVO, final nouns are thematic rather than emphatic. In both SVS and OVO constructions, the human element tends to precede the inanimate NP. The parallel between OVO and SVS constructions emphasizes the structural similarities between subject and object, as does the prominence of the demonstrative in OVO: as Lyons (1968: 338) points out, in traditional logic, particular terms are restricted to subject position. The semantic parallel of the SVS instances in the Oresteia, with their universally inanimate subjects, and generally passive verbs, suggests a syntactic as well as pragmatic parallel. \({ }^{7}\) As noted in Chapter 1, Section C1 (d), animate-inanimate order has been postulated to be a linguistic universal. Yet, as discussed below, phrasal tmesis is, in Homer, predominantly SVS with animate subjects, so there appears to be a change in priority.

\section*{1c: Phrasal tmesis combined}

Interplay between related types of hyperbaton is exploited at Choe.508-511, where an SVS construction is followed immediately by two lines of OVO with identical object phrases, and then by a double adjectival pattern with causal and objective genitives, with an article rather than demonstrative:


каì \(\mu \grave{\nu} \nu\) ả \(\mu \epsilon \mu \phi \hat{\eta}\) тóvס' є̇тєívatov 入óyov,


\footnotetext{
\({ }^{7}\) Lyons (1968: 355-359) considers that the link between ergative, animate, and subject-object relations suggests that early IE may have had ergative features. Lehmann (1993: 216ff.) interprets the same relations in the framework of an active-stative model of PIE.
}
(El.) Listen. These laments are over you, you are saved if you grant this petition.
(Ch.) You two have stretched out this long speech faultless, the price of the [ ] fate of the [un-wailed] tomb \({ }^{8}\)

This passage shows great prosodic variety, with verbs varying from one to four syllables, and the demonstratives being elided accordingly. The SVS pattern in Choe. 508 has the typical neuter subject noted above, so following an animate-inanimate order. The aesthetic purpose of the repetition at 509-10 is described by Garvie (1986: 184) as emphasizing the reciprocal relation between father and children: it may also be noted that the pattern bridges the lines spoken by different speakers, so could be seen as also aligning the chorus with the attitude of Electra and Orestes.

Choe. 511 appears to show that the article as well as the demonstrative can appear in the pattern, though the phrase is not strictly hyperbatic, as the verbal adjective is in the normal position. Another possible article occurs at Choe.278-9:
32) Tà \(\mu \epsilon ̀ v ~ \gamma \alpha ̀ \rho ~ \epsilon ̇ K ~ \gamma \eta ̂ s ~ \delta v \sigma \phi \rho o ́ v \omega \nu ~ \mu \epsilon ı \lambda i ́ \gamma \mu a t \alpha ~\)

for the means of appeasing the hostile powers under the earth, revealing these to men he spoke, naming diseases

However, \(\tau \grave{\alpha} S \delta^{\prime}\) could here be interpreted as a demonstrative, as it is by Headlam (1938), since the following lines enumerate the diseases (responsive \(\delta\) '́ is not required: Garvie (1986: 114) suggests that Tò \(\mu \epsilon ̀ v ~ \gamma \alpha ́ \rho ~ i n ~ t h e ~ p r e v i o u s ~\) line is balanced by \({ }^{\prime \prime} \lambda \lambda\) as \(\tau^{\prime}\) at 283). In fact, there are no other instances of particles following immediately on a determiner in constructions like this, and so Headlam's interpretation seems more probable.

\section*{1d: Comparison with other types of hyperbaton in the Oresteia}
1) In wide-scope hyperbaton, the demonstrative is typically very prominent in the line. The position of the demonstrative is variable, but a disyllabic object noun is often at the line end, as in the tmetic type, at Ag.1431:


\footnotetext{
\({ }^{8}\) The double hyperbaton amplifies the ambiguity of the governing relations at Choe.511:

}
and this you hear, the power of my oath

\section*{Choe. 911}

Then this your doom Fate has also sent.
and Eum. 700:

rightly fearing such an object of reverence
'Nesting' of subject and two accusatives about a verb occurs at Eum.843, which therefore shares characteristics of both wide and narrow-scope hyperbaton. However, the position of the pronouns is prosodically and structurally motivated:
36) Tís \(\mu\) ’ imoठúєtal \(\pi \lambda \epsilon\) voás ỏסúvך;

What pain penetrates my sides?

Nested subject and object hyperbaton about a participle occurs at Choe.985-6, though 986 is probably interpolated: \({ }^{9}\)


[so the father may see], not mine, but the one watching all this, Helios, the unholy deeds of my mother

Wide-scope patterns of OVO are listed in Appendix 2D.
2) Demonstrative- (or adjective) -following instances. There are seven instances of OVO where the demonstrative follows, and one with adjective following. Three have the canonical prosodic pattern, Ag.1295:
38) \(\dot{\alpha} \pi о \rho \rho \nu є ́ \nu \tau \omega \nu\), ő \(\mu \mu \alpha\) \(\sigma \nu \mu \beta a ́ \lambda \omega ~ т o ́ \delta \epsilon . ~\)
| : : |
[blood] gushing forth, I may close these eyes
Choe.267:

| : : |

\footnotetext{
\({ }^{9}\) West (1990b: 262-3) notes that Aeschylus does not elsewhere begin trimeter lines with dactylic words: cf. Ag.7, ḋ \(\sigma\) t'́ \(\rho a s\), also generally thought to be corrupt (Fraenkel 1950: 6-9 surveys the textual problems).
}
and for the sake of talking tell all this
and Eum.444:

| : |
I shall remove the great anxiety evident in your words

Postponed demonstratives and adjectives appear emphatic (and usually
spatially deictic) in these, and in clause-initial constructions at Choe.226-7:
41) коupàv \(\delta\) ’ i i
ì \(\chi\) робкотоиิба́ ..
seeing this lock I had cut in mourning, and
examining the tracks....

Choe.525:

she sent these libations, the godless woman
and Eum.306:
43)
 and you will hear this song as binding you

Postponed adjectives may be emphatic in the SVS instances too, as Choe.13:

Does a new trouble befall the house
or predicative, as Eum.750:
 In the absence of wisdom, trouble becomes great

A pragmatically remarkable pattern appears at Eum. 751 (the translation mirrors the word order):
46) \(\beta a \lambda o v ̂ \sigma \alpha ́ ~ \delta ’ ~ o i ̂ k o \nu ~ \psi \eta ̂ \phi o s ~ c ̋ \rho \theta \theta \omega \sigma \in \nu ~ \mu i ́ a . ~\) but when it is thrown, the effect on a house, of a vote, is to set it right - even a single one. \({ }^{10}\)

\footnotetext{
 by Sommerstein (1989: 233).
}

Here, three words ( \(\beta \alpha \lambda o \hat{\sigma} \sigma \alpha, \mu i ́ \alpha\) and \(\psi \hat{\eta} \phi o s)\) are prosodically emphatic. \({ }^{11}\) It may, perhaps, be significant that \(\psi \hat{\eta} \phi o s\), framed by the caesurae, is the most immediately salient word: it has often been noted (as by Gagarin 1975, Hester 1981, and Conacher 1987: 166), that there is no clear description of the point where Athena votes. While it is usually considered that Eum. 742 is the latest point at which the casting vote could occur, this line appears to mark some important stage business. \({ }^{12}\)

\section*{Summary of the features of phrasal tmesis}

Phrasal tmesis has a regular form, of three words at the line end, with a noun plus demonstrative or adjective, as object or indirect object of a verb or participle. The prosodic pattern is the defining criterion, so 'apparent' OVO (where the object depends on another verb outside the pattern), genitive hyperbaton surrounding a noun, and SVS instances of the same metrical pattern, are all comparable. They constitute a total of about 75 clauses, which differ from other types (demonstrative-last, and wide-scope, which are emphatically motivated).

\section*{1e: Phrasal tmesis elsewhere in Aeschylus}

Phrasal tmesis appears most frequently in the Oresteia. 22 instances from other Aeschylean works, and 7 from Prometheus, are collected in Appendix 2 E . The same placings of the demonstrative at the penthemimeral caesura and disyllabic thematic noun at the line end are evident, as at Supp.252:

the race of Pelasgians reaps the fruits of this land

Supp.325-6:


\footnotetext{
 \(\gamma i \gamma \nu \in T \alpha \iota \mu \epsilon ́ \gamma \alpha\).
\({ }^{12}\) Sommerstein (1989: 233) considers the line to mark a gesture. Its significance is considered
 out [equal votes] with her arm). The attribution of 748-751 to Apollo depends partly on a paragraphus only in M: the lines have also been attributed to the Chorus and to Orestes (see Wecklein 1885: I.452, II.283, where the lines are numbered 751-4).
}
tảpxaîov.
you seem to me to share of old in this land

Supp.378:

this is not wise, to dishonour these prayers.

The greatest number outside the Oresteia is in Supplices, where 11 instances include 6 demonstrative-noun combinations at the line end. This constitutes almost half the total of 13 canonical instances outside the Oresteia (which are included in the list in Appendix 2E).

All constructions in Supplices have a disyllabic end noun ( \(\chi\) Өóva twice, \(\lambda\) ó \(\gamma\) os, \(\gamma^{\prime} \nu\) os, and \(\left.\lambda \iota \tau \alpha ́ s\right)\). There are two instances where the demonstrative is postponed, once apparently for emphasis, at 233:

so the outcome for you in this instance is victory
and once with spatially deictic force, at Supp.508:
51) \(\lambda \in \cup \rho o ̀ v ~ к а т ' ~ a ̉ \lambda \sigma o s ~ v v ̂ \nu ~ \epsilon ̇ \pi เ \sigma \tau \rho \epsilon ́ \phi o u ~ т o ́ \delta \epsilon ~\)
now turn towards this level grove.

The infrequency of the pattern elsewhere in Aeschylus suggests that it is a late development, and this stylistic evidence accords with the dating of Supplices as a mature work. \({ }^{13}\)

The frequency of the pattern in Prometheus is low: there are 3 OVO constructions with demonstratives ( \(31,87,738\) ), and 4 other constructions, of which only 975 might be considered to have the canonical line-end pattern:

in a single word, I hate all the gods

The others have emphatic demonstratives: 386 and 766 have the demonstrative at the line end, and 980 at the start. All are collected in Appendix 2E. The rarity of the pattern in Prometheus contrasts with its frequency in Supplices and the Oresteia (and is even less than the number in

\footnotetext{
\({ }^{13}\) The evidence for dating it to the 460s is summarized by Lloyd-Jones (1957: 595-598), and considered in detail by Garvie (1969).
}

OT., discussed below). This difference is additional to those noted between Prometheus and secure Aeschylean works by Herington (1970) and Griffith (1977), and represents a further reason to doubt Aeschylean authorship.

The similarity of placing of ötı in Prometheus and Sophocles is considered further in Chapter 7, Section 2b(i).

\section*{2: Phrasal tmesis in the other tragedians}

All instances of hyperbaton about a verb in OT. and Medea are collected in Appendices 2F and 2G.

\section*{2a: Phrasal tmesis in \(O T\).}

Similarities with the Oresteia are evident in OT.:
1) Hyperbaton about the verb is common, with 46 instances of demonstrative or adjective and noun about a verb or participle occurring at the line end.
2) Disyllabic nouns regularly take last position in the line.

However, there are fewer constructions with the distinctive Aeschylean prosody. There are 9 instances of OVO at the line end, 6 of which show the demonstrative/verb/noun pattern. These are:

OT.51:

(caesurae: penthemimeral \& after 3rd foot)
but restore this city in safety

OT.72:

by what act or word I might save the city

OT.102:
55) Пoíov \(\gamma\) à \(\rho\) ả \(\nu \delta \rho o ̀ s ~ \tau \eta ́ \nu \delta \epsilon \epsilon ~ \mu \eta \nu v ́ \epsilon \iota ~ T u ́ \chi \eta \nu ;\) and what man's fate does he speak of?

OT.134:
56)
\(\pi \rho o ̀ s ~ t o u ̂ ~ \theta a v o ́ v t o s ~ т \eta ́ v \delta ’ ~ \epsilon ̈ \theta \epsilon \sigma \theta ’ ~ \epsilon ̇ \pi เ \sigma \tau \rho о ф \eta ́ v \cdot ~\)
...you set this observance for the dead

OT.138:
57)
 but for myself, I shall dispel this plague.
and OT.340:

hearing (the words by) which you are now dishonouring the city

They all occur early in the text, which may suggest a link with the function of establishing narrative theme (since the words mó \(\iota \iota \nu\), \(\mu\) v́бos, and Túx \(\eta \nu\) could be taken as thematic). However, the fact that the nouns are disyllabic is probably more relevant, and the placing of the constructions may reflect a tendency for the earlier part of texts to be particularly formal. \({ }^{14}\)

The three instances of adjectival OVO at the line end show both prosodic regularity and a disyllabic last word (the adjectives show more emphasis than the demonstratives), at OT.291:


What are they? For I am looking at every word

OT.841:
60) Moîov ठé \(\mu\) ov \(\pi \epsilon \rho เ \sigma \sigma o ̀ v ~ \eta ̋ \kappa o v \sigma a s ~ \lambda o ́ \gamma o v ; ~\)


What extra word of mine did you hear?
and OT.1272:
 | : : |
neither evils like those he had suffered or done
4) There are 10 instances of SVS, overwhelmingly with neuter or non-animate subjects, and sometimes with middle or passive verbs, so showing the same semantic pattern as OVO ordering. Most have interposed elements additional

\footnotetext{
\({ }^{14}\) Placing in the Oresteia is different: demonstrative OVO occurs throughout the plays, and most instances are in Choephoroi (though Agamemnon has most adjectival OVO).
}
to the verb. Three are tmetic, one with a human subject, at OT.281, where the motivation appears to be pragmatic:

to what they do not want, one man cannot [force the gods]

One construction has a demonstrative, at OT.732:
63) Kaì тoû' \(\sigma \theta\) ' ó \(\chi \omega ̂ \rho o s ~ o \tilde{i} \tau o s, ~ o ̂ ̃ ~ \tau o ́ \delta ' ~ \eta र \nu \nu ~ \pi a ́ \theta o s ; ~\)

And where is the place where this happened?

The only example with the canonical prosodic pattern has an adjective which appears emphatic, at OT.1440:

But surely his oracle was made all clear
5) Hyperbaton in adjacent lines occurs three times, at OT.51-3, which includes interwoven hyperbaton:
65) \(\dot{\alpha} \lambda \lambda ’\) ả \(\sigma \phi \alpha \lambda \epsilon i ́ a ̨ ~ T \eta ́ v \delta ’ ~ a ̉ \nu o ́ p \theta \omega \sigma o v ~ \pi o ́ \lambda ı \nu . ~\)

тарє́ \(\sigma \chi \in S\) ض̀ \(\mu \hat{v} \nu, . .\).
but restore this city in safety
for with fair augury then you supplied our good fortune

A second construction, at OT.137-8, appears motivated by the phonetic parallelism (homoioptoton), as 137 is not strictly hyperbatic, \(\dot{\alpha} \pi \omega \tau \epsilon \in \rho \omega\) being in regular adjectival position:


for not on behalf of my friends further off
but for myself, I shall dispel this plague.

The construction at OT.1032-3 is connected more loosely, with different order of noun and qualifier:


The joints of your ankles may witness.
(Oed.) Alas, why do you speak of this old evil?

\section*{Conclusions from the OT}

The Aeschylean pattern appears, with a disyllabic noun at the line end, and framing of the demonstrative by caesurae. \({ }^{15}\) However, the frequency is lower in OT. than in the Oresteia in three respects:
1) There is a lower frequency of the distinctive metrical pattern ( 28 instances in 1,530 lines \(=1\) every 55 lines, as against 116 in \(3,796=1\) every 33 lines).
2) There is a smaller proportion of OVO constructions ( 5 constructions with a demonstrative and noun at the line end, as against 28).
3) There is a smaller proportion of SVS constructions, and only one has the regular prosodic pattern (OT.1440).

\section*{2b: Phrasal tmesis in Medea}

Medea shows a frequency more similar to the Oresteia, with 43 instances of phrasal tmesis at the line end ( 13 with a demonstrative), including 18 of OVO at line end, and 8 of demonstrative and noun at line end. They are collected in Appendix 2G.

The 8 demonstrative-noun constructions are, in narrative terms, extremely striking, because they appear in pairs, in a pattern of echoic lines, with repetitions of the NPs, very widely spaced ( 340 and 373,604 and 682,790 and 811, 576 and 1307). None constitutes ring composition, though 340/373 and \(790 / 811\) appear in the same episodes. The pairs 604/682 and 576/1307 are very extreme. The syntax of the 340/373 pair (both in the first episode, but separated by a short anapaestic passage) is 'apparent' OVO, with the accusatives dependent on the (external) infinitives.
Med.340:

Allow me to remain this one day
and its 'pair' at Med.373-4:

\(\mu \in i ̂ \nu a i ́ ~ \mu ’, \ldots\).
(... by exiling me), he has allowed me to remain this day

\footnotetext{
\({ }^{15} \mathrm{~A}\) sample of tmetic constructions elsewhere in Sophocles may be found in Appendix 2F.
}

The 790/811 pair (in the third episode) appears to have a cohesive function, since the repetition aligns the attitude of the chorus with that of Medea:

Med.790:

(Med.) But now I shall leave this argument
and Med.811:

(Ch.) As you have shared this plan with me
The 604/682 pair is more extensive, spanning the second and third episodes. It makes a comparison between the plight of Medea and Aegeus (and perhaps creates cohesion between the episodes):
Med.604:

but I shall leave this country in solitude
and Med.682:

And as you want what, are you sailing to this land?

At 576 in the second episode, the Chorus introduce their reproof to Jason with a line which is echoed at 1307 in the exodos, when they are about to tell him of the children's deaths. This is the most widely separated pattern, and appears to be more than simply formulaic, in view of the emotional context:

Med.576:

Jason, you have organized this speech well
and Med.1307:

[...Jason:] for you would not have spoken these words

There are two passages in Medea with triple tmesis at shorter range. The first, at Med.487-491, appears to be pragmatically emphatic, since the consequent prominence of the NPs contributes to the emotional force. The nouns could
perhaps be analysed as thematic:
76) \(\pi \alpha i ́ \delta \omega \nu ~ i ́ \pi ’ ~ a u ̀ \tau o v ̂, ~ \pi \alpha ́ v т a ~ \tau ' ~ ॄ ̇ \xi \in i ̂ \lambda o \nu ~ \delta o ́ \mu o v . ~\)




... by his daughters, and I destroyed his whole house.
And experiencing such things from me, wretch,
you have betrayed me, and have taken a new marriage,
although there were children; for if you were still childless,
it would have been pardonable for you to desire this marriage

In the second passage, at Med.927-32, the sequence of the lines has been questioned, and in some editions (though not Diggle 1984) lines 929-31 are moved to follow 925. Transposition results in the two hyperbatic patterns ooîs ... 入ó \(\begin{gathered}\text { ots and } ̇ \mu o u ̀ s ~ . . . ~ \lambda o ́ \gamma o u s ~ b e i n g ~ s e p a r a t e d ~ b y ~ o n l y ~ o n e ~ l i n e, ~ s o ~\end{gathered}\) becoming more prominent.

Med.927:
77) \(\delta \rho a ́ \sigma \omega ~ \tau a ́ \delta ' . ~ o u ̉ t o l ~ \sigma o i ̂ S ~ a ̉ m ı \sigma T \eta ́ \sigma \omega ~ \lambda o ́ \gamma o l s \cdot ~\)
(Med.) I shall do that: I shall not distrust your words.
 1988):

(Jas.) But why do you lament over these children so much?
........
Med.932:

(Med.) but of the reasons why you have come to have this talk with me ...

\section*{Conclusions from the Medea}

Euripidean use of the form is closer to Aeschylean practice than is Sophoclean, though OVO with demonstratives is not as common as in Aeschylus. The frequency of phrasal tmesis is the same as in the Oresteia (43 out of 1,419 lines = 1 per 33 lines). As also in Sophocles and Aeschylus, the NPs in SVS constructions are mostly neuter.

A caesura after the third foot (with elision) is common in both Medea and OT. The most distinctive stylistic feature of tmesis in Medea, however, is the use of widely spaced echoic tmesis, which may be intended to establish or emphasise narrative cohesion.

Of the 5 SVS instances, also cited in Appendix 2G, only three (871, 906 and 911) have the canonical pattern. Like Sophocles, Euripides does not demonstrate the same syntactic parallel with OVO as does Aeschylus, though again all SVS instances have inanimate subjects.

\section*{2c: Hyperbaton in Cyclops}

There are very few instances of prosodically regular tmesis, but the patterns which do occur are very prominent. The play begins with two instances, of OVO and SVS, at 1-2:

\(\nu v ̂ \nu \chi \omega ̈ \tau ' ~ \epsilon ̇ v ~ \eta ̈ ß n ~ т o u ̉ \mu o ̀ v ~ \epsilon ن ̉ \sigma \theta \epsilon ́ v \epsilon l ~ \delta \epsilon ́ \mu a s . ~\)
O Bromios, I have many troubles because of you, both now and when my body was strong in youth.

There is another formulaic couplet at Cyc.467-8:


... putting you on the hollow hull of my black ship,
I shall leave this land with paired oars.

The pairing of the lines demonstrates the formality of the pattern. The restrained effect of this type of hyperbaton is especially evident at Cyc.666-8, which occurs at a particularly affective moment, after Polyphemus has been blinded, yet the tightness of the pattern appears to contain the emotional intensity (since it highlights the linguistic form):

> but you will not leave this cave unpunished,
> being worthless: for standing at the gates
> I shall fit my hands to its mouth.

The Homeric model, at Od.9.415-418, contains one instance of verbal tmesis
 the boulder from the doorway), and one hyperbatic construction with a preposed
 might try to go out with the sheep), the looser structures of which have no similar effect of emotional restraint.

Phrasal tmesis with demonstratives also occurs at Cyc.437:

if only we might see that day
and Cyc.704-5:

aủtoîol \(\sigma \nu \nu \nu a u ́ t a l \sigma l ~ \sigma u \nu \tau \rho i ́ \psi \omega ~ \beta a \lambda \omega ́ \nu . ~\)
... because, breaking off some of this rock, I shall throw it
and destroy you and your fellow sailors.

At Cyc.529, the pattern starts at the caesura, but the postponed demonstrative is somewhat emphatic:

I hate the wine-skin, but I love this drink

Only these examples have a similar prosody to tragic constructions. Although the language and metrical technique of Cyclops are usually considered to be similar to tragedy (see Seaford 1984: 47-8), in this respect the play's language differs from the style of Medea and the other tragic texts studied here.

\section*{3: Hyperbaton in Frogs}

There are 34 instances of phrasal tmesis in Frogs, listed in Appendix 2H, of which 20 are in lines which are similar to epic or tragic constructions, or are tragic quotations. 16 of them occur in lines describing Aeschylus or Euripides, or spoken by their dramatic personae. Four are direct quotations (one, at 1240, matched against the 'wine-bottle', Lekythion, pattern):

Ra. 105 (Euripidean quotation, probably from Andromeda):

'Do not rule my mind'; for you have a house to rule.

Ra. 1126 (= Choe.1):

\[
-\quad \text { v - | - - : v - | - - v - }
\]

Chthonic Hermes, witnessing a father's power, ...

\section*{Ra. 1206 (spoken by Euripides): \({ }^{16}\)}

Aegyptos, as most stories spread it around, ...
and Ra.1240-1 (=E. fr. 516, from the prologue of Meleagros):


Oeneus once reaping a rich harvest from the land offering the first-fruits...

Three other constructions reproduce the same pattern, and, in view of their speakers (and addressees), appear to parody the style, as at Ra. 889 (spoken by Euripides):

For they are other, the gods to whom I pray

Ra. 1301 (spoken by Aeschylus):
 but he brings his lyrics from all whores' songs
and Ra. 1436 (spoken by Dionysus):
92) \(\pi \epsilon \rho \grave{~ T \eta ̂ S ~ \pi o ́ \lambda \epsilon \omega s ~ \eta ̋ ~} \nu \tau \iota \nu ’ \notin \chi \in T O \nu \sigma \omega T \eta \rho i ́ \alpha \nu\)
... what plan of safety for the city you two have

Aristophanes appears to be parodying the tragic style, though his examples do not have such regularity as in tragic practice, and the demonstrative is uncommon. There are three constructions combining demonstrative and noun, of which one, at Ra.1146, is a trimeter pattern of the canonical kind, and also occurs in a construction which not only represents an explanation of the

\footnotetext{
\({ }^{16}\) Possibly from Euripides' Archeleos, though see Dover (1997: 205).
}

Choephoroi quotation at 1126 (cited above) but contains the same hyperbatic pattern: \({ }^{17}\)
 [saying] that he obtained his father's privilege

The other two are at Ra.951, in an iambic tetrameter:
 Did you not deserve to die for such impudence? (Eur.) By Apollo, no.
and Ra.1306-7:
95)
... \(\delta \in \hat{v} \rho o, ~ M o ̂ ̂ \sigma ' ~ E u ̉ p ı m i ́ \delta o u, ~\)

... Come here, Muse of Euripides,
to the accompaniment of whom these songs are suitable for singing

The origins of the figure may be inferred from a comparison with other genres. The fourteen instances of hyperbaton which are not in pseudo-tragic passages \({ }^{19}\) can all be explained by different motivation. Most are wider-scope and involve demonstrative emphasis, and none has a similar pattern. Four occur in one comic trimeter passage. At Ra.502, the postponed demonstrative probably indicates some stage business:

Come on, I shall pick up these coverlets.

However, Ra. 503 echoes tragic style (Dover 1997: 143 notes that it is matched in E.Or.112):
 Have you come, dearest Heracles? Come in.

Ra. 506 occurs in a passage of asyndeton, which Dover (1997: 143) interprets as creating a picture of great activity. The adjective is in emphatic, line-final, position:

\footnotetext{
\({ }^{17}\) Aristophanes' choice of quotations and his use of the pattern here does not prove that he is parodying tragedy, but raises a strong likelihood: Ra.1126=Choe. 1 is cited by Dover (1997: 199) as a typical instance of Aeschylean áбá申єєı. It may at least be seen from these citations that Aristophanes makes a textual association of phrasal tmesis and tragic language.
\({ }^{18}\) This is the only instance where unelided тoûтo is used.
\({ }^{19}\) Ra.35, 120, 143, 154, 170, 314, 333, 502, 503, 506, 511, 708-714, 747-8, 808.
}

(she was boiling) two or three bowls of soup, and roasting an ox whole

As it is also at Ra.511:

(sweetmeats) were being roasted, and she was mixing sweetest wine.

Two other constructions are from the parodos, at Ra.334-5 from the invocation of Iacchos, in ionic (vv--) rhythm:
having the greatest part of the graces ...
and Ra.371, the last line of the choral anapaests in the Parodos:

and our night-long revels which belong to this feast

The high proportion of phrasal tmesis in pseudo-tragic and tragic lines in Frogs supports the assumption that it is a feature of tragic, and particularly Aeschylean, style. It is primarily a feature of spoken or recitative verse, despite the two choral examples above, as the parodies of tragic lyric (12641294, 1309-1322, and 1331-1363) do not include any instances. It is, naturally, a trimeter feature, though the tetrameter line at Ra. 951 (cited above) and the tragic parallel at Ra. 503 both involve a similar pattern.

\section*{4: Phrasal tmesis in Iliad 9 and Odyssey 9}

While metrical form precludes exact correspondence between tragic and epic patterns, phrasal tmesis is common in Books 9 of the Iliad and Odyssey, particularly in the Iliad: there are 52 instances in Iliad 9 and 22 instances in the rather shorter Odyssey 9 ( 566 lines as against 713 , so 1 per 14 lines and 1 per 26 lines respectively).

If the caesurae of the hexameter line are labelled as \(\mathrm{A}, \mathrm{B}\) or C , according to the schema of Fraenkel (1955), \({ }^{20}\) hyperbaton may be seen as starting as early as the A3 caesura, as at \(O d .9 .152=170,307,437,560\) :

\footnotetext{
\({ }^{20}\) A1, A2, A3 (within, or after, the first foot). A4 (trithemimeral): after the arsis of the second
 (hephthemimeral); C2 (bucolic): after the fourth foot.
}

But when the young dawn showed with her rosy fingers

They may also start at a non-caesural position, as II.9.4:
 as two winds stir up the fish-swarming sea ...

A number of regularities are evident:
1) Tmetic constructions are generally line-final, as in tragedy. This accords with the collation of hyperbatic patterns in Iliad 1-9 by Conrad (1990: 49), which demonstrates that the vast majority ( 252 out of 389 ) involve the second element in line-final position.
2) The pattern often starts at the B2 caesura, as Il.9.400:

to enjoy the possessions which aged Peleus won

Od.9.76:
 but when rose-fingered dawn brought the third day

Od.9.318=424=Il.9.94:
 and this seemed the best plan to me in my mind

This accords with a common Homeric pattern in which formulaic epithets start at the B2 position, noted by Parry (1928: 12-13).
3) Alternatively, the tmetic pattern may start at the B1 caesura, as

Od.9.214=515:

that I would encounter a man endowed with great strength
4) There is no pattern with demonstrative and noun: the first element is usually an adjective.
5) When at either B caesura, the adjective is emphatic, rather than being simply a traditional epithet, as in the constructions observed by Conrad (1990:
50), who identifies a pattern with the noun at the B caesura and the adjective at the line end as common. Conrad interprets the prosodically emphatic element as being also pragmatically emphatic, but this is not really sure: even though \(\mu \in \iota \lambda \iota\) фiol \(\sigma \iota\) is a traditional epithet, it does not have less emphasis than ध̈ \(\pi \in \sigma \sigma\) at Od.9.63:
 and then I addressed him with honeyed words

Conversely, the adjective at Od.9.381 is pragmatically, though not metrically, prominent:

.... but a daimon breathed great courage upon [us].
6) A striking difference from tragic practice appears in the much higher proportion of subject hyperbaton about the verb. Iliad 9 has 21 instances of SVS, 22 of OVO, and 9 of indirect object hyperbaton, and the proportion of subject hyperbaton is even higher in Odyssey 9 ( 15 SVS, 7 OVO). In both, hyperbaton is frequently associated with formulaic passages.

This does not necessarily conflict with a principle of animate>inanimate ordering, because it is due to a lower frequency of transitive constructions. As noted above (Section 1b), it could reflect a change from topic-prominence in Homer to subject-first in tragic practice.
7) Verbal tmesis constitutes a distinctively Homeric type of hyperbaton, which is associated with nominal hyperbaton in several cases, sometimes in adjacent lines, as at Il.9.211-2:


and the god-like son of Menoitios made the fire blaze greatly.
And when the fire had burnt out and the flame subsided

Od.9.296-7:

 but when the Cyclops had filled his great stomach
feeding on human flesh and drinking down unmixed milk
and, in one case with verbal and phrasal tmesis interwoven, at Od.9.375:

\section*{}
and then I drove the beam under the deep cinder-pile

Three other instances of verbal tmesis occur at the line-end, Il.9.92=222:
 but when they had put aside their desire for drinking and eating
and Od.9.558:
 but when the sun set and darkness came over
The verbs involved in these constructions all have a close grammatical connection with the internal noun. As in phrasal tmesis, it involves the interaction of the three phrasal elements of head, modifier, and complement. \({ }^{21}\)

Three constructions represent a milder form of hyperbaton, with no lexical word intervening, with an interpolated clitic at Il.9.653:

ктєívovт'’Aprєíous, ката́ тє \(\sigma \mu v ̂ \xi a \iota ~ \pi u \rho i ̀ ~ \nu \eta ̂ a s . ~\)
... killing the Argives, and will darken the ships with fire
The second and third involve anastrophic tmesis, \({ }^{22}\) at Il.9.539:

... sent on them the wild boar with shining teeth
and Od.9.534:
 may he come late, in misfortune, having lost all his companions

Homeric phrasal tmesis shares some of the prosodic regularity of tragic practice, and also favours the line-end position for the second element, which may be a disyllabic noun. It may be noted that the syntactic and prosodic patterns of verbal and nominal tmesis are similar: in both constructions it is

\footnotetext{
\({ }^{21}\) See the Introduction, Fig. 2.
\({ }^{22}\) Quintilian (Inst.8.6.65) defines hyperbaton of two words as ảvaбт duobus verbis fit, d’עaбтоф' dicitur, reversio quaedam' (when hyperbaton involves two words, it is called anastrophe: a kind of reversal). His examples are тесит, secum, and quibus de rebus.
}
the specifier (demonstrative, adjective, or verb prefix) which is out of expected sequence, and these elements are usually phonetically light.

\section*{5: Phrasal tmesis in prose}

Denniston (1952: 51) notes the frequency of hyperbaton about the verb in CG prose. He calls the insertion of a verb between an adjective and noun in agreement one of 'the milder forms' of hyperbaton, 'common in all authors', and cites 19 examples from Herodotus, Isocrates, Plato, Demosthenes and Lysias. These show a variety of grammatical dependencies, and a variation in the number of intervening words. Ten involve the separation of noun and adjective in agreement, and in only one example, Plato Critias 116c, are they separated by a verb alone:

\section*{}
having fiery flashings

Other instances of separation of words in agreement involve only pronoun insertion, or are of wider scope. All other examples of verb interpolation involve a noun and a dependent genitive, which create a less striking effect. \({ }^{23}\)

The function of 'genitival tmesis' could often be seen as thematic (since both the dependent and governing words are nouns). When the genitive precedes, it signals its dependence on a noun, so providing the context for it, as at Plato Leg.812c:
 to accompany them in the acquisition of virtue
and Isoc. 5.1-2:
120) ... Tov̂ \(\lambda o ́ \gamma o v ~ \pi o ı \eta ́ \sigma o \mu a l ~ T \eta ̀ v ~ d ̇ \rho \chi \eta ́ v ~ . . . ~\)
... I shall give the start of the speech ... \({ }^{24}\)
In contrast, when the governing noun precedes, it is frequently an evaluative word, which requires a genitive to follow it, as at Plato Phaedr.240d:

to go to the utmost of unpleasantness

\footnotetext{
\({ }^{23}\) These may be compared with the Aeschylean constructions cited by Fraenkel (1950: 827-8).
\({ }^{24}\) One might contrast the identical sequence of words in Isoc.10.16, which have a different grammatical structure, with the genitive governed by a prior instance of Tìv ápXŋ́v \(\nu\).
}
and Lys. 32.11:
122)
 the size of the misfortunes would force her...

\section*{5a: Hyperbaton in Thucydides}
'Longinus on the Sublime' (22.3) describes Thucydides as:


most clever in separating by hyperbaton both ideas unified by nature and indivisible alike.
However, most hyperbaton in the Melian Dialogue is wide-scope, and only occasionally involves a nominal phrase, as Thuc. 5.100:

 Surely then, if you and your subjects brave so great a risk, you so as not to lose your empire and they, already your slaves, so as to be rid of it ...

The patterns of subordination might be analysed as a sort of hyperbaton based on the clause rather than the word. The primary separation is that of subject and verb. This may be seen in a construction at Thuc. 5.86:
 oủ \(\psi \in ́ \gamma \in \tau \alpha u\), the fairness [of the proposal of mutual instruction at leisure] is not objectionable ...

In a non-finite construction at Thuc. 5.89, the subject is separated from its verb by a finite complement clause and by another, governing verb, ( \(\mathfrak{a} \xi\llcorner o ̂ \mu \epsilon \nu)\) :

 \(\pi \in \dot{\prime} \sigma \in \iota \nu]\)
nor do we think that you [will think it possible to persuade us by saying [either that being colonists of the Spartans you did not become allies, or that you have done us no wrong] ]

The subject pronoun in the non-finite clause is early, and the verb is late. This is the type of pattern criticized by Aristotle at Rhetoric 1407a26-30 as à \(\sigma a \phi \dot{s}\). Denniston (1952: 50) suggests two motivations for hyperbaton in prose: preposing an emphatic word, and the creation of a rhythmic pattern.

Thucydidean usage may be considered as a third type: the establishment of subject reference as early as possible in dialogic exchanges.

\section*{5b: Contrast between poetic and prose hyperbaton}

The similarity of hyperbaton and subordination is shared by prose and poetic constructions, as discussed further below, in Section 6d. However, a condensed and prosodically regular pattern is distinctive to epic and tragic poetry. The expansion of phrases to fill the second colon of the poetic line has a similar effect to the postponement of phonological weight, as is considered below in Section 6c.

\section*{6: Phrasal tmesis and prosody}

It is clear from the patterns of emphasis that in wide-scope hyperbaton the demonstrative is preposed, and in demonstrative-last constructions postponed, to a prominent position in the clause. This description accords with a pragmatic explanation for hyperbaton, in terms of marked elements (see Dik 1995: 7).

However, in phrasal tmesis, there is no single emphatic element, and an explanation in terms of movement of complete phrases, as by 'scrambling \({ }^{\prime 25}\) or topicalization, \({ }^{26}\) is also inappropriate, because the pattern involves the separation of two elements of a phrase. In fact, no purely structural model provides a satisfactory explanation, because 'movement' cannot be judged except in relation to an 'original' position. The regular placing of the demonstrative and the noun suggests a prosodic explanation.

\section*{6a: Demonstrative position}

The demonstrative ő \(\delta \epsilon\) has variable placing in CG, being categorized by Dover (1960: 23) as 'preferential' (Ma): that is, tending towards the front of the clause, though quite frequently appearing in Herodotus and Plato as the last word of a clause. However, the position of the demonstrative in the trimeter line is remarkably regular. In the trimeters of the Oresteia, there are 67 nonhyperbatic phrases with a noun and demonstrative (collected in Appendix

\footnotetext{
\({ }^{25}\) Suggested by Ross (1967: 75ff.) as the formalisation of an intuitively-simple notion, and developed by Williams (1984), Webelhuth (1984), and Grewendorf and Sternefeld (1990).
\({ }^{26}\) Defined in the Introduction, Section 2c.
}

2I): in 35 the demonstrative follows the noun, and in 32 it precedes. There seem no clear pragmatic differences: \(\gamma \hat{\eta} S \tau \eta \bar{\eta} \sigma \epsilon\) and \(\tau \hat{\eta} \sigma \delta \epsilon \gamma \eta{ }^{\gamma} S\) both occur.

There is, however, great prosodic regularity. In noun-first constructions, the demonstrative is framed between the penthemimeral and hephthemimeral caesura in over half the instances ( 22 out of 35 ), as at Ag.18:
127) к \(\lambda \alpha i ́ \omega\) то́т' ő̋коv тоиิठє \(\sigma u \mu ф о \grave{\alpha} \nu ~ \sigma т \epsilon ́ v \omega \nu\)
- - v - |- : v: - | v - v -
then I weep, lamenting this house's misfortune,

Ag.906:
 come down from this wagon, not setting [your foot] on the ground

Ag.1039:

get down from this wagon, and do not be proud

Ag.1071:
 yielding to this constraint bear the new yoke.

The other constructions are collected in Appendix 2I. The regularity of the demonstrative position does not necessarily imply a marked ordering with respect to the noun, because demonstrative-first instances occur later in the line precisely because the demonstrative is in the same position, in 22 out of the 32 instances of demonstrative-noun order, as Ag .24 :
 in Argos for the sake of this event

Ag.33:
 this beacon-watching having thrown a triple

Ag.619:
 he will come with you, dear ruler of this land

Choe.85:

since you are here in this supplication to attend me

The other 18 constructions are collected in Appendix 2I. Since this is also the position of the demonstrative in phrasal tmesis, it appears that the position of the demonstrative between the penthemimeral and hephthemimeral caesurae, is basic. Such a constant position, even with noun-demonstrative order, implies that metrical motivation is primary.

The regular position of the demonstrative is not, therefore, a feature unique to hyperbaton, or even particularly associated with it, as the 90 Aeschylean instances of this central position are divided about equally between \(\mathrm{D}>\mathrm{N}\), \(\mathrm{N}>\mathrm{D}\), and hyperbatic patterns. Nor is the central demonstrative position distinctive to Aeschylus: it is also evident in Medea ( \(\tau \tilde{\eta} \sigma \delta \epsilon 272,353,702,709\), 729,916 , with 2 instances of alternative placing) and OT. ( \(\tau \bar{\eta} \sigma \epsilon \in 54,418,601\), \(764,811,1043\), with 5 alternative placings). It may be motivated metrically: a word which is disyllabic, but readily elided, and with a compound accent, is highly suited to the central position of the trimeter line.

\section*{6b: Noun position and narrative function}

It was noted above, in Section 1a, that the pattern is overwhelmingly linefinal, with a disyllabic noun in the last foot. The importance of the clause-final noun may be inferred from its frequency even in the Homeric examples, where it is most often a subject. The stress component of a double beat at the line end was discussed in Chapter 2, Section B6 (a).

These final words could, perhaps, sometimes be interpreted as thematic. In Aeschylus, sequences with demonstrative and \(\lambda o ́ \gamma o \nu\) or \(\mu\) ópov appear 12 times, and тати́ 10 times (mostly in Choephoroi). Possibly thematic final words appear in Sophocles and Euripides too, as the prominence of mólıs and кака́ in OT., and 入óyos, тéк are analysed as thematic, tmesis might be considered a technique by which the narrative line is highlighted. However, as has been argued in the Introduction, Section 2c, and Chapter 2, Section B4, the category of theme is not very informative: any noun has a high probability of being thematic.

A narrative function may, however, be observed in the position of the formulaic tmetic patterns within the texts: the repetitions of complete hyperbatic lines in Medea appear to constitute a sort of ring composition (as discussed in Section 2 b above), and several of the texts start with a tmetic line: Od.9.2 (the first line of Odysseus's speech), Ag. 1 (with ring composition at Ag.20), Choe.1, Cyc. 1 and 2. The former seems to be a cohesive device, but the latter feature may reflect a tendency for the start of texts to be especially formal, as suggested above in Section 2a.

\section*{6c: Phrasal tmesis and phonological weight}

Phrasal tmesis can be seen as a syntactic feature rather than a thematic pattern. It was noted above in Section 1a that the effect of the tmetic pattern is to define the second part of the line more rigidly than the first, by creating a constituent which is co-extensive with the second colon of the line. The visibility of the artifice, evident from the Aristophanic quotations, is essential to this effect. The author of Longinus on the Sublime (22.1) considers that the effects of hyperbaton in prose should be imperceptible:


for art is perfect when it looks like nature, and equally nature successful when containing art hidden within her.

However, the extreme regularity of tragic hyperbaton is, in contrast, very conspicuous (as Aristophanes' citations of it demonstrate). It contributes to Aeschylean ő \(\gamma к о\) (weight), since it gives prominence to the whole phrase.

Cognitive effort is involved: parsing a sentence involves recognizing the phrasal constituents, and the extra interpretative effort created by the separation of the elements emphasizes the phrasal structure, because the constituent is recognized as early as possible, but the reference is delayed. This creates suspense, which could be reinforced by rarity of the article, common in wide-scope hyperbaton \({ }^{27}\) (demonstratives are less predictable than articles because they may be interpreted as pronouns or adjectives), the typical neuter case of adjectives ( \(\pi \alpha \dot{\nu} \tau \alpha\) is especially common), \({ }^{28}\) and the rarity

\footnotetext{
\({ }^{27}\) There is of course a metrical constraint: tó would be possible at the penthemimeral caesura only with resolution.
\({ }^{28}\) Ag.582, 599, 1210; Eum.501; Pers.246; OT.291, Aj.480, Tr.484, Phil.1240; Med.487; IA.97, 1249.
}
of explicit subjects (only 17 of the 81 OVO constructions in the Oresteia have an explicit subject). \({ }^{29}\)

Yet any ambiguity is only a minor effect: phrasal tmesis appears primarily to be a poetic exploitation of interaction between prosodic patterning and constituent structure, using metre to emphasise a syntactic unit, and to give weight to the line end, by drawing attention to the linguistic form.

\section*{6d: Tmesis and subordination}

Denniston (1952:52) notes the frequency in Greek prose of hyperbaton with separation of article and noun, and compares it with German nominalization, in a jocular construction: 'The every year all England with excitement filling Oxford and Cambridge boat race.' This demonstrates a similarity with relativization: Denniston's example could be rephrased as 'The Oxford and Cambridge boat race, which fills...'. The tmetic structure is similar to a relative clause with agreement attraction, where the relative takes the case that a correlative in the main clause would have, creating a structure similar to a
 used those books he had'). The prosodic pattern is the same as if the verb functioned adjectivally, qualifying the NP like an attributive relative clause: 'for the general this [you planned] death' (Ag.1627), 'over one not yet lying down this [you boast] speech' (Eum.590). Though not a true relative construction, since it is the main verb which is interpolated, this type of hyperbaton creates a subordinate-like construction, which nominalizes the whole clause.

The comparison with subordination is very close: in his discussion of agreement attraction in relative clauses, Gonda (1954a: 29) categorizes a construction at S.El.762-3 as Attic attraction, \({ }^{30}\) although it is actually tmetic, as it does not depend on a main verb, but is in agreement with an adjective:
the greatest of all evils I have seen.

\footnotetext{
\({ }^{29} 7\) relative pronouns (Ag.934, Choe.615, 991, Eum.3, 58, 639, 760), and 10 which appear emphatic (Ag.281, 1212, 1248, 1275, 1588, Choe.254, 401, 760, 765, 927).
\({ }^{30}\) Attic attraction is discussed in Chapter 5, Section 2b.
}

The the parallel with subordination extends to the use of the demonstrative. As noted in the Introduction, Section 2 i , the demonstrative ő \(\delta \epsilon\) is involved in the development of \(\dot{\omega}_{s}\)-complementation, because it has an anticipatory textual function, and the demonstrative in the tmetic pattern is almost always ö \(\delta \epsilon\) too: the rarity of oîtos in this position cannot be only metrically motivated, as it appears in four Aeschylean and two Sophoclean constructions, \({ }^{31}\) and is also at the caesura in 14 non-tmetic constructions in the Oresteia.

The function of anticipatory ö \(\delta \epsilon\) is considered further in Section \(4 b\) of Chapter 4. That chapter, which constitutes Part II of this work, is devoted an examination of prosodic and syntactic details of the start of the CG clause. In Chapter 5, the analysis will be extended to the function of anticipatory ö \(\delta \epsilon\) as a clause-initial feature.

\footnotetext{
\({ }^{31}\) Elided тоиิт' appears at Ag.547; Choe.991, Eum.58, 743, and OT. \((138,1033)\).
}

Part II

Focus

\section*{Chapter 4}

\section*{Focus, particles, and the clause start}

\section*{Introduction}

The importance of a rightwards trajectory of phonological weight in determining word order was discussed in Chapters 2 and 3. In this chapter, the prosody and structure of the start of the clause are investigated, and a unified explanation proposed for the regular initial placing of emphatic elements and the functions of enclitics following. It is argued that particles with a wide variety of functions all fulfil their function by emphasizing the initial element, and that coordinating particles are also focalizers.

\section*{The problem}

The beginning of the CG clause has two distinctive features: an emphatic element in first position (P1), followed by an enclitic word or words with a variety of different syntactic functions in second position (P2). As noted in the Introduction, the prosody and structure of these elements are usually considered separately. P1 prominence is canonically explained in terms of logic, textual relevance, or emphasis. P2 has traditionally been studied functionally, though its prosody has more recently been investigated (in work cited below, in Section 2c). The interrelation between P1 and P2 elements has, however, always been considered in purely prosodic terms. A functional description of the relation would be desirable.

\section*{The proposal}

The \(\mathrm{P} 1>\mathrm{P} 2\) sequence can be described by a unified model which integrates prosody and structure. The prominence of initial words is attributed to focalization by enclitics in P2. These are divisible into cohesive focalizers and operators (interrogative and relative pronouns). Emphatics, coordinating, and adverbial particles all function as cohesive focalizers, being part of the same intonation group as the P1 word. Operators are separated from the word in P1 by an intonation break, and mark it as focal, also usually being in morphological contrast with it.

\section*{Consequences}

The proposed \([\mathrm{P} 1>\mathrm{P} 2]\) structure suggests a mechanism of inter-clausal linking:
1) The first constituent of a main clause is regularly focalized.
2) The inter-clausal link is also focalized: in co-ordinated links, the focal element is in the second clause, focalized by the P2 element. In subordination, the final element of the main clause, standardly the object, may be focal, marked by the subordinating conjunction.
3) Subordinate clauses which precede their main have a focal element in P1, while subordinates which follow their main do not. Clause order therefore directly affects clause structure and prosody.

Inter-clausal linking in relatives and adverbials is also discussed in this chapter. A survey of conditional clause order with respect to main clauses is also undertaken, and it is observed that, throughout the corpus, there is a correlation between clause order and patterns of focalization, which creates formal similarities between following conditionals and indirect questions.

\section*{Chapter Sections}

1: P1
1a: Prominence
1b: Logic
1c: Topic
1d: Textual relevance
1e: Clause structure
1f: Definition of focus

2: P2
2a: Summary of P2 enclitic functions
2b: P2 as an operator position
2 b (i): Interrogatives
2b (ii): Questions in Choephoroi
2 b (iii): Interrogatives and the intonation break 2b (iv): Relatives
2c: P2 and the intonation break
2c (i): Order in collocations

2c (ii): The cohesive focalizer/operator division

3: Cohesive focalization
3a: Overlaps in particle function
3b: Diachronic changes in position and function
3c: Гáp and dual function
3d: Other cohesive focalizers

4: Focalization and linking
4a: Mechanism
4b: Pragmatic functions of focalization

5: Focus and clause order
5a: Focus and conditional order
5b: Conditional order and discourse function
5c: Conditional order and indirect questions

Summary: focus and prosody

\section*{1: P1}

The start of the clause is always taken to be communicatively special, but there are reasons to doubt the canonical descriptions (of topic, focus, and theme), as noted in the Introduction. They can be summarized as an overrigid association of logical and textual categories with sentence structure.

In order to present the background to the proposal of an initial focus position, alternative descriptions of P1 are presented in terms of three criteria: prominence, logic, and textual cohesion. The relations between these categories and clause structure are discussed briefly, and the categorization of the initial position as focal is justified.

\section*{1a: Prominence}

The emphasis of the beginning of the CG clause has been interpreted in two ways: as the start of a continuum of gradually declining emphasis, or as a unique emphatic position at the beginning. Denniston (1952: 44) adopts the first approach, considering that 'the weight of a Greek sentence or clause is usually at its opening, and the emphasis tends to decline as the sentence
proceeds.' Thomson (1938: 367) holds the second view, believing that the basic order of CG is predicate-first, as in copulative sentences ( \(\dot{\alpha} \pi \lambda o v ̂ S \dot{\delta}\) \(\mu \hat{\vartheta} \theta\) os simple [is] the story, Choe.554), and so SV is always an emphatic order. This view accords better with the principle of increasing phonological weight discussed in Chapter 2 than does Denniston's interpretation, and is assumed by most subsequent commentators (though not necessarily for the same reason as Thomson).

In itself, emphasis is a purely formal category, involving phonological prominence, which is either morphological, positional, or marked by stress or intonation. The emphatic element may be the intonational centre of the sentence (Chomsky 1971: 202), and may carry stress, perhaps even in CG (see Chapter 2, Section B 5a). Emphasis is usually also taken to have a communicative function, so 'loud' implies 'important'. \({ }^{1}\) Emphasis has been linked to a variety of communicative functions, such as emotional stimulation or expositive power (Dover 1960:32), or the marking of information as new (Halliday 1967: 204, Jackendoff 1972, Lambrecht 1994: 208) or most salient or relevant (Dik 1980: 16, Sperber and Wilson 1986: 202-217). These functions can be identified only subjectively, with the possible exception of new information, though they underlie the observable phonological feature. There is, of course, no reason why emphasis should not serve a variety of functions. In Section 1e, a prosodic basis for the prominence of P1 will be proposed, and in Section 4a, a functional description will be given.

\section*{1b: Logic}

Grammatical words are likely to be placed early if they are operators: that is, quantifiers having scope over the basic clause (more precisely, binding variables within it). \({ }^{2}\) These include interrogatives and relatives ('wh-words'). Operator position is often identified with the category of sentence focus (Chomsky 1976, Kiss 1995a: 15). In this interpretation, focus is co-referential with a 'trace' (empty position) in the basic clause, \({ }^{3}\) so is regarded as having

\footnotetext{
\({ }^{1}\) The Prague model of communicative dynamism (CD) exemplifies the connection: Firbas (1964: 270) defines CD (somewhat circularly) as 'the extent to which the sentence element contributes to the development of communication'.
\({ }^{2}\) See Lyons (1977: 454), Kiss (1995a: 15).
\({ }^{3}\) The trace theory of movement, a central feature of \(X\) ' theory, derives from Chomsky (1973). It is exemplified by interrogatives ( \(\mathrm{Whom}_{\mathrm{i}}\) did you see -i ?).
}
moved from within the clause. It will be argued here, in Section 2b, that the operator and focus positions are not the same in CG: though operators can be emphasized by movement into focus position, their regular position is not prosodically emphatic.

\section*{1c: Topic}

Alternatively, a lexical word might be placed early because it is the logical subject, which in propositional logic standardly precedes the predicate. This schema is associated by Hockett (1958: 201), Li and Thompson (1976), and Lyons (1977: 503) with the division between topic and comment. Lyons (1977: 501) describes the difference as categorial: 'The subject, then, is the expression which refers to and identifies the topic and the predicate is the expression which expresses the comment.' However, the parallel between topic, logical subject, and grammatical subject is not exact, and the topic or subject does not necessarily precede comment or predicate, even in declarative sentences (as may be seen from the citation from Choe. 554 in Section 1a above).

\section*{1d: Textual relevance}

A third reason why elements might be initial is that they are thematic, and express known information (Mathesius 1939: 234). Theme is standardly associated with topic, and so taken to provide an association between the intra-sentential and textual organization of information: Kuppevelt (1995: 140) analyses 'bound discourses' (such as literary texts) as sequences of 'discourse topics' in which the sentence topics are embedded, and, in discourse analysis, texts are standardly visualized as organized by 'clause chaining' and 'thematic paragraphs'. \({ }^{4}\)

A congruence of textual theme and sentential topic is, however, very restrictive: a topic may be a theme, but there is no reason to consider that it must be thematic. Textual cohesion is typically expressed by linking words in P2, and themes are not necessarily expressed explicitly, but are often communicated through presuppositions and implicatures (see Chapter 1, Section A 2).

\footnotetext{
\({ }^{4}\) See Greimas (1966), Halliday and Hasan (1976), Fries (1981), Halliday (1982), Brown and Yule (1983), Givón (1983), and Coulthard (1994). In the functional grammar of Dik (1978, 1980, 1989), theme is also considered to be structurally more peripheral than topic.
}

\section*{1e: Clause structure}

The pragmatic categories of topic, theme and focus are, clearly, of great value in describing function: their formulation by \(\operatorname{Dik}(1978,1980,1989)\) has stimulated much recent work on the functional organization of Ancient Greek (by Ruijgh 1971, 1990; Rijksbaron 1989, 1997a; Wakker 1994, 1997; and others cited below, in this and subsequent chapters).

However, they have less power to explain word order or details of clause structure. In fact, they are regularly associated with different structural positions: emphatic information follows unemphatic, in the theme-rheme model (Firbas 1964: 170), but precedes it in terms of task urgency (Givón 1983: 20). The only reliable definition may be that of Halliday (1967: 212), that 'Basically, the theme is what comes first in the clause'. This is, however, simply a (linguistically uninformative) way of describing a common sequence in declarative sentences.

In structural terms, an initial element can be modelled within or outside the basic clause: a position outside the clause is usually described as 'topicalized', defined here, following Emonds (1976), as movement to a position adjoined to the sentence, with a purely co-referential link. In Modern Greek, topicalized words typically have a resumptive pronoun in the main clause. \({ }^{5}\) The use of the word 'topicalization' to describe this sort of adjunction is unfortunate, because it implies an association with the pragmatic category of topic, yet topicalization cannot be always topical (since it is possible to have multiple topicalized elements adjoined to one clause). \({ }^{6}\)

Neither theme nor topic appears to be a structural category of CG: there is no evidence from the corpus that any syntactic position is determined by thematic factors, or that any Greek particles are topic markers. There may be an association between topic and definite NPs ( Li and Thompson 1976, Gundel 1988), but not all definite NPs are topical, and (in tragedy) not all topical NPs are explicitly definite.

The conclusion that P1 is not a structural topic position in CG contrasts with the view, expressed by Kiparsky (1995: 153), that there was an initial

\footnotetext{
\({ }^{5}\) See Horrocks (1983) and Philippaki-Warburton (1985).
\({ }^{6}\) See Horrocks (1983: 104) and Kiss (1995a: 11).
}
structural topic position external to the sentence in early IE, preceding a focus position, as in Fig. 1 (=Introduction, Fig. 4): \({ }^{7}\)


It is not clear that кaì \(\nu \hat{v} \nu \tau \grave{\alpha} \mu a ́ \sigma \sigma \omega \mu \epsilon ́ v\) is here semantically a topic (though part of it, \(\grave{\tau} \alpha \mu \alpha ́ \sigma \sigma \omega\), might well be), or that only a topic can be placed initially. Nor does the prosody support Kiparsky's interpretation: the interrogative appears less, not more, prominent than the initial phrase, which is emphasized by the intonation break following. \({ }^{8}\)

A similar objection may be raised to the description of thematic being applied to other word groups which are separated from the rest of the sentence by an intonation break, as at Hdt. 1, 10.2 (discussed also by Dover 1960: 17 and Ruijgh 1990: 229):

et (quant à) la femme, elle le voit sortir \({ }^{9}\)

Ruijgh (1990: 229) defines \(\dot{\eta} \gamma \nu \nu \dot{\eta}\) as the theme of its sentence, an interpretation which could perhaps be plausible for an NP, but scarcely for a

\footnotetext{
\({ }^{7}\) Adapted from Kiparsky (1995: 153, Fig. 33), with the quotation, from Ag. 598 ('And now, for the full story, what need have you to tell me it?'), added.
\({ }^{8}\) This interpretation is supported by the metre: Raalte (1986: 186) considers that a sequence of two monosyllables following the penthemimeral caesura emphasizes a word-boundary after the third foot (here, between \(\mu \epsilon \in \nu\) and \(\tau^{\prime}\) ).
\({ }^{9}\) The translations of this and the following citation are taken from Ruijgh (1990: 229).
}
temporal phrase at Od.8.55-56 which he defines similarly:


....... Mais quant à ce qui se passa après cela,
ils se mirent en marche pour aller ...

Ruijgh's translation puts quite a strain on a two-word phrase, but its length implies emphasis, and the view taken here is that these constructions are emphatic, either as part of the basic clause (as the first could be) or perhaps topicalized, but certainly not thematic: they rather create a contrast with the preceding text.

Nor can anaphoric elements, as the demonstrative at Eum.649-650, be interpreted as occupying a topic or thematic position, though they may be initial in the clause:

oúpós, . . .
for these matters, my father has not set charms.

Such elements could be interpreted as adjoined, but there is no regular position for them: they may appear anywhere in the sentence, as at Eum.199:
4) aủtòs où toút \(\omega \nu\) oủ \(\mu \in T \alpha i ́ t L o s ~ \pi \epsilon ́ \lambda \eta, ~, ~\)
you yourself, for this you are not only jointly responsible ...
or Eum.932-3:

oủk oîठєv ö \(\theta \in v\) п \(\pi \eta \gamma \alpha\) 亿̀ \(\beta\) ıóтov.
and yet the one meeting the hostility of these
does not know from where [are] the blows assailing his life

These pronouns may be structurally topicalized, but they cannot be topics, which have a unique function in the clause. The rarity of such adjoined elements also precludes a model of the sentence as having regular focus and topic position: almost all CG sentences have an emphatic initial element with a particle following, and topicalized elements appear much less frequently.

\section*{1f: Definition of focus}

Initial position is regularly occupied by constituents which are prosodically prominent, either by phonetic assimilation of a P2 enclitic, or by morphological contrast with a word in P2, and such prosodic prominence is here identified with focalization. Enclitic particles are part of the same intonation group as the P1 word, and have a syntactic as well as phonetic relation with it, so are here classed as 'cohesive focalizers'. Operators, classed as 'focus markers', create a contrastive prominence with the P1 element by virtue of relative morphological size, accentuation pattern, and the intonation break separating the elements. P1 is therefore defined as prosodically focal. The functional consequence is that it is always presentationally prominent too. \({ }^{10}\)

The proposed structure is shown in Fig. 2 (=Introduction Fig. 3), with a cohesive focalizer ( \(\mu \epsilon^{\prime} \nu\) ) and an operator ( \(\tau^{\prime}\) ) in P2:


The P1 element here is preposed, but this is not a necessary condition of focalization: the presence of an initial prominent position in practically every CG main clause implies that at least some of the variations must represent 'basic' word order, and indeed, in the corpus, initial focalization makes no noticeable difference to word order: in \(\gamma\) áp-clauses, the grammatical subject can be, and frequently is, placed in P1, but this does not affect order

\footnotetext{
\({ }^{10}\) The view that P1 is a focal, rather than a topic, position is in accord with the view of Luraghi (1998: 195) rather than that of Steele (1977).
}
statistically. \({ }^{11}\) Any motivation for preposing must therefore affect all elements equally, and not only the subject. Nor is the P1 element normally an operator: that function is regularly fulfilled by a P2 word. Evidence for distinguishing the focus position from the interrogative position is examined below, in Section 2b.

As discussed by Hock (1996: 202ff.), a P2 enclitic may follow a prosodic host in a preceding clause, and this might seem to justify a purely prosodic model of the \(\mathrm{P} 1>\mathrm{P} 2\) 'string'. It is, however, an assumption of this work that there is a close connection between prosody and syntactic function, which is evident in inter-clausal linking: the prosodic relation between the elements in P1 and P2 determines their function, not only within the clause, but inter-clausally. Prominence creates contrast with the preceding text as well as the word following it.

P1 is therefore seen, not simply as the initial position of the clause, but as a valency position which may function in two clauses simultaneously. When the distinctive \(\mathrm{P} 1>\mathrm{P} 2\) prosody spans the clause boundary, it creates a structural link too. CG may have 'discourse-configurational' features, but only with respect to main clauses: in complex sentences, the function of the P1 element in the main clause is established through focalization by P2 elements in the subordinate. The functions of these particles are discussed next.

\section*{2: P2}

In this section, the traditional groupings of P2 enclitics are described, and a division is made between particles and pronominals, based on their intonational and syntactic relationship with the P1 element.

\section*{2a: P2 categories}

The regular presence of grammatical words in P2 is associated with languages having largely free word order, including early IE languages and

\footnotetext{
\({ }^{11}\) The relation between \(\gamma \alpha \dot{\rho} \rho\) clauses and SV order in the corpus is collated in Appendix 1A. A majority of 140 SV constructions ( \(81=58 \%\) ) have a subject in P1. The figures are: Il.9, 3 out of 7; Od.9, 5/10; Septem, 9/15; Agam., 12/20; Choe., 5/9; Eum., 14/17; OT., 14 /23; Medea, 13/23; Cyclops, 2 /4; Frogs, 14/19; Melian Dialogue, 2 /3; Crito, 4/6.
}
the Australian language Warlpiri, \({ }^{12}\) which suggests that the position has a regular syntactic function. P2 words may be grouped in four functional categories:
i) Linking. A connective function is implied in the term \(\sigma v ́ \nu \delta \in \sigma \mu \circ S\) (conjunction), as used by Aristotle (Rhetoric 1407a20), who gives \(\mu \epsilon ́ v\) and \(\delta \epsilon\) as examples. Aristotle (Poetics 1456b36-1457a4) identifies two features, a lack of denotative meaning and a postpositive placing, in his definition of \(\sigma v ́ \nu \delta \in \sigma \mu \circ S\)
 \(\pi \lambda \epsilon \iota o ́ v \omega \nu \quad \phi \omega \nu \omega ิ \nu \pi \epsilon \phi \cup \kappa v i ̂ a \nu \quad \sigma v \nu \tau i \theta \epsilon \sigma \theta a l\) (a sound without meaning which neither hinders nor causes the formation of a single sound or phrase from several sounds), which is not put at the beginning of a phrase which is by itself ( \(\eta \nu \mu \grave{\eta} \dot{\alpha} \rho \mu o ́ \tau T \in L ~ \grave{\epsilon} \nu\)
 Denniston (1954) as additional (кaí), adversative ( \(\mu\) èv ơ̂v, ả \(\lambda \lambda \alpha ́, ~ \delta \epsilon ́, ~ \mu \eta ́ \nu), ~\) confirmatory ( \(\gamma\) á \(\rho\) ), or inferential ( \(\tau \hat{\omega}\), тot \(\gamma a ́ \rho\), oûv, ả \(\rho \alpha\) ).
ii) Adverbial. Some words, which Demetrius (De Eloc.II, 55.1) terms \(\pi \alpha \rho a \pi \lambda \eta \rho \omega \mu \alpha т \iota \kappa o i \quad \sigma v ́ \nu \delta \in \sigma \mu \circ\) (expletive conjunctions), seem to have a primarily

 conjunction is set initially and separates what follows from what precedes, it creates a certain dignity': Demetrius De Eloc.II. 56.4-5). \({ }^{14}\)

Words like 'subtlety', 'nuance', 'elusive', 'colour', and 'bouquet' are often used to describe this group, \({ }^{15}\) as they have the most subtle shades of meaning. Adverbials may be subcategorized, as by Denniston (1954: xxxvi-xl), into affirmative, intensive, determinative, and limitative particles. Alternatively, a binary division may be made into adverbials with scope over one word, usually termed emphatics, and those with sentence scope, which may be

\footnotetext{
\({ }^{12}\) The data for Warlpiri is described by Hale (1976, 1983, 1992), Kashket (1991), and Simpson (1991).
\({ }^{13}\) Poetics 1456 b 38 -1457a10 is marked by Kassel (1965) as 'corrupta et confusa', but the general sense may be discerned. Simpson (1991: 69) notes a similar feature in Warlpiri, that the auxiliaries normally appearing in P2 occur sentence-initially in connected speech.
\({ }^{14}\) These include orthotonic words as well as P2 particles: Demetrius's examples include \(\delta \eta\), \(\nu v\),

\({ }^{15}\) These epithets are used by Denniston (1954) and Smyth (1956).
}
called sentence adverbials. It will be shown below, in Section 2c (ii), that not only do these function similarly, but that they belong to the same semantic group: the focalizers. It may be noted that Aristotle (Poetics 1456b36-1457a4) appears to view the category of \(\sigma \dot{v} \nu \delta \epsilon \sigma \mu \circ s\) as including connectives and adverbials, as he gives as examples \(\delta \dot{\eta}\) and \(\tau о\), as well as \(\mu \epsilon ́ \nu\) and \(\delta \epsilon ́\).
iii) Anaphoric textual reference. Bergaigne (1877) and Delbrück (1878) described P2 as the natural place or Haus of pronominals as well as connective particles. Bergaigne (1877: 177-178) suggested that anaphoric pronouns come as early as possible in the sentence because, like conjunctions, they have a linking function, and that first and second personal pronouns are placed there by analogy. However, the argument by analogy seems weak: pronouns might be placed in P2 for purely phonetic reasons, or for reasons of scope (as is suggested by the high frequency of subject pronouns in P1 or P2, as described in Chapter 2, Section A2). Dik (1980: 23) defines P2 as the preferred placing for pronominals on the basis of a phonetic weight criterion, as described in Chapter 2, Section B5b, and Mallinson and Blake (1981: 151) combine this explanation with a pragmatic one, based on theme-first.
iv) Scope. Elements may be placed early because they have scope over the whole clause. Wackernagel (1892: 34-5) pointed out that enclitic verbs are regularly placed in P2 in early Greek and Vedic (see also Hock 1982). The reason may be that the verb inflection has scope over the clause, of which it is the head (in the \(\mathrm{X}^{\prime}\) model). \({ }^{16}\) A prosodic explanation appears necessary to explain verb placing in P2 rather than P1 (see Anderson 1993, Adams 1994b), and this could be modelled as a Focus Phrase, with the verb as head and the focalized element as specifier (Horvath 1986, Kiss 1995b). This accords with a principle of morphological weight: as inflections became more complex, so verbs moved rightwards.
v) Prosody. Wackernagel (1892) implicitly attributed the placing of light elements in P2 (to which he famously gave the status of ein Gesetz) to prosody, by defining P2 clitics in terms of their lack of accent, and so concentrating on the P 2 position itself as attracting different categories of elements, including pronominals, linking words, and verbs. \({ }^{17}\)

\footnotetext{
\({ }^{16}\) It may be noted that in Warlpiri, P2 is regularly occupied by the tense marker: see Hale (1992: 65).
\({ }^{17}\) For a recent discussion of his model, see Anderson (1993).
}

Wackernagel's criterion (that the element in P2 is accent-less) implies a contrast with the element in P1, which is therefore emphasized. It follows that a complete description of P 2 clitics requires an analysis of the function of the P1 element too. Explanations of why these varied elements are placed in P2 may be divided into syntactic and prosodic interpretations, which are discussed further in Section 2c (i) below.

Clitics are canonically categorized as reduced forms of orthotonic words simple and special clitics in the schema of Zwicky \((1977)^{18}\)-or independent enclitics with no orthotonic form: 'bound words', including all words traditionally termed 'enclitic particles'. It is proposed that the most important division should be drawn between elements which can appear in either P2 or P1, and those which are always enclitic. The principal contrast is between operators ('special clitics' when they are in P2 and do not occupy the same positions as full forms), and cohesively-focalizing particles (always P2). \({ }^{19}\) Operators are considered first.

\section*{2b: P2 as an operator position}

\section*{2b (i): Interrogatives}

Although focalized constructions are standardly analysed as semantically similar to interrogatives and relatives (as Schachter 1973, and Chomsky 1981), a distinction may be drawn in CG between focus position and P2, where interrogatives and indefinite pronouns appear. Evidence will be adduced that interrogatives appear in initial position only by being focalized: that is, foregrounded in P1 by a focalizer in P2.

This conclusion is stimulated by the observations of Thomson (1939b) on the very common placing of emphatic constituents preceding interrogative pronouns in tragedy and Aristophanes, in over 400 constructions. Thomson described this pattern as the postponement of the interrogative, but his

\footnotetext{
\({ }^{18}\) The basic distinction between simple and special clitics is that the former have no distinctive placing or syntactic restrictions: clitics other than bound words which appear regularly in P2 are therefore special clitics.
\({ }^{19}\) The terms particula and \(\mu\) ópıov were applied by the ancient grammarians to phonetically light words, including lexical ones, so correspond more closely to enclitics than particles. For references, see Schenkeveld (1988), and, for a historical overview, Sluiter (1997).
}
examples show that the elements in P 1 are always prominent. He identified a number of regularities:
1) If one of the clauses in a \(\mu \epsilon \in \nu-\delta \epsilon ́\) construction is interrogative, the pronoun is postponed, as at OT.1232-3:


There lacked nothing in what we knew before of lamentable matters: and in addition to that, what may you say?
and Ag. 598 (also cited in Figs. 1 and 2 above):
7) Kaì vôv tà \(\mu a ́ \sigma \sigma \omega \mu \epsilon ̀ v ~ \tau i ́ ~ \delta \in i ̂ ~ \sigma ' ~ Є ̇ \mu o i ̀ ~ \lambda \epsilon ́ ~ \gamma \epsilon \iota \nu ; ~\)

And now the full story, what need to tell it me?
2) A word repeated, either by one speaker or in a stichomythic exchange, is emphasized, as at Eum.94:

Do sleep on, hey - and of sleeping, what use is there?

Sometimes there is no actual repetition, and a synonym is used, as Ra.628-30:



I say that I should not be beaten, being a god. Otherwise, you will blame yourself. (Ae.) What are you saying?
3) The second of two questions usually has a preposed element, as Eum.678:
10) tí \(\gamma\) áp; \(\pi \rho o ̀ s ~ i ́ \mu \omega ิ \nu ~ \pi \omega ̂ S ~ \tau ı \theta \in i ̂ \sigma ' ~ a ̈ \mu о \mu \phi o s ~ \hat{\omega} ;\)

What then? In regard to you, how may I arrange matters so I may be blameless?
4) Shifts of focus between speakers in dialogue are regularly emphasized, as Ra.1430:

Brilliant, by Poseidon. And as for you, what is your opinion?

Shifts of focus between ideas are similarly emphasized，as Choe．924－5：
öpa，фúhaگal \(\mu \eta \tau \rho o ̀ s ~ \grave{~ \epsilon} \gamma к о ́ т о u s ~ к u ́ v a s . ~\)

（Clyt．）Look，watch out for your mother＇s spiteful hounds
（Or．）Those of my father，how may I escape them，neglecting this？

Expression of a contrast is also associated with the same pattern，as Cyc．525：

But a god in a wineskin，how can he be happy to have his home there？
Thomson identifies other functions：to mark stages in an interrogation，to make an objection，or to recall something in the previous text．His figures demonstrate that the pattern is least common in Aeschylus and most frequent in Aristophanes and the later works of Euripides（and Cyclops），which suggests that it is a developing feature．Metrical convenience cannot be the explanation，as the＇postponed＇pattern is common in Plato too，as at Crito 44a9：\({ }^{20}\)

What was it，the dream？

Thomson＇s＇postponement＇always involves the preposing of the element in \(\mathrm{P} 1 .{ }^{21}\) It seems possible to go further，and infer that P 2 is the regular position for interrogatives，and that they appear first in the clause only by being focalized，in which case they are always followed by particles，as at Ag．1286：

Why then do I make this pitiful lament？
and Ag．1643－4：

oủk aủtòs ク̉レápıらЄS，à \(\lambda \lambda a ̀ ~ \sigma u ̀ v ~ \gamma v \nu \eta ́, ~\)
Why then with your cowardly heart did you not
yourself kill this man，．．．．

Here，focalization appears to express an adversative force：all Thomson＇s examples cited above involve a contrast with the preceding text．It is argued in Section 4b that focalization is always，in discourse terms，contrastive．

\footnotetext{
\({ }^{20}\) Thomson（1939b：151）cites other Platonic examples at Rep．349b，Crat．388a，Ap．20c．
\({ }^{21}\) This accords with the \(\mathrm{X}^{\prime}\) schema，in which rightwards movement of the interrogative is impossible，because a＇trace＇cannot precede its antecedent．See Chomsky（1981）．
}

\section*{2b (ii): Questions in Choephoroi}

In order to test the hypothesis that P 2 is the regular position for interrogatives in CG, the 80 finite interrogatives in Choephoroi were examined. If the 25 polar questions \({ }^{22}\) are discounted (because they are not marked as questions, or are introduced by the prepositives \(\hat{\eta}\) or \(\pi o ́ \tau \epsilon \rho \alpha),{ }^{23}\) the 55 remaining interrogatives may be categorized in two groups:
a) Line-initial, with respect to a clause start which coincides with the line:
i) With particles following: \(21 .{ }^{24}\)
ii) With other enclitics following: \(3(87,778,844)\).
iii) As quantifier in an NP: \(2(10,530)\).
iv) Other: \(3(88,858,871\), all with interrogative \(\pi \omega \bar{s})\).
v) In P2: \(12 .{ }^{25}\)
b) Clause-initial, not coinciding with the line start:
vi) With particles following: \(6 .{ }^{26}\)
vii) With other enclitic following: 1 (883).
viii) As quantifier in an NP: 2 (12 and 885).
ix) Other: 2 ( 88 and 871 , both with \(\pi \omega\) s).
x) In P2: \(3(256,408,778)\).

These figures show that most interrogatives are clause-initial, and followed by P2 enclitics. The unspecified 'enclitics' noted at (ii) and (vii) are all verbs, except the element at Choe. 844 (the demonstrative taût'). Пஸ̂s is clearly a stronger prepositive than \(\tau i ́\), since it is the only wh-word to appear in first position without following enclitics, though Dover (1960: 12) classes it with the other interrogative/indefinite pronouns and adverbs. It is phonetically different from the others in having a long closed syllable. No other interrogative appears in first position without being followed by an enclitic,

\footnotetext{
\({ }^{22}\) The expression derives from Jespersen (1924). Polar questions may also be termed 'yes/no' questions: see Lyons (1977: 754).
\({ }^{23}\) These are: Choe. \(14,90,92,112,120,122,177,220,222,224,297,339,418,495,496,526,774\), \(775,845,894,899,909,912,1010,1074\).
\({ }^{24}\) Choe.48, 110, 114, 123, 169, 171, 338, 418, 569, 638, 720, 732, 766, 847, 885, 900, 916, 994, 997, 1051, 1075.
\({ }^{25}\) Choe.179, 214, 216, 218, 315, 394, 528, 532, 594, 855, 899, 925.
\({ }^{26}\) Choe.10, 187, 338, 388, 703, 880.
}
unless it functions as quantifier in an NP, in one construction at Choe.10-11:
тí \(\chi \rho \eta ̂ \mu \alpha ~ \lambda \in u ́ \sigma \sigma \omega ; ~ \tau i ́ s ~ \pi о \theta ’ ~ \eta ̋ ~ ठ ’ ~ o ́ \mu \eta ́ \gamma v \rho ı s ~\)

What thing do I see? what company of women
conspicuous in black robes comes? \({ }^{27}\)

The line and clause start usually coincide, but this does not affect the pattern. Because clause-initial position does not occur without following particles (unless the interrogative is part of an NP), it is likely that the emphasis is created by the P2 particles themselves, and that interrogatives are in P1 only when focalized. Although that is their most common position (approximately double the number of interrogatives which are in P2), it may still be always emphatic. \({ }^{28}\)

\section*{\(2 b\) (iii): Interrogatives and the intonation break}

A semantic as well as morphological similarity may be noted with indefinites, which occur regularly in P2: interrogative 'who?' presupposes indefinite 'someone', and both are presupposed by relative 'who' (for references see Chapter 5, Section 2c). The difference in placing between the two may be identified through the existence of an intonation break: interrogatives are preceded by one, while indefinites are not. Dover (1960: 12-13) questions
 who/someone tells of a blow, mortally wounded) is really a question or an indefinite statement. Yet, although tis is in second position in the line, it is first in the clause, following an intonation break, suggesting an interrogative, though the pattern of emphasis creates ambiguity (Ag.553-4 tís \(\delta \grave{e}\) \(\pi \lambda \grave{\eta} \nu \quad \theta \epsilon \omega \nu / a ̈ \pi \alpha \nu \tau\),
 more clearly a question). Conversely, at \(A g .449\), tís is truly enclitic to \(\sigma i \hat{\gamma} \alpha\),

\footnotetext{
\({ }^{27}\) Dindorf (1851: Vol. 1) adds <Ë \(\alpha>\) before line 10, which could provide a prosodic host.
 \(\pi o ́ v \omega \nu \dot{\epsilon} \mu \omega \hat{\nu} \ldots .\). (Ah, what [is] the matter? Have you too come [to gape] at my torture?)
\({ }^{28}\) Left-dislocated constituents regularly precede wh-clauses in Vedic too (see Luraghi 1998: 192).
}
with no intonation break, so an indefinite meaning is more likely: \({ }^{29}\)

these things someone / who mutters in a whisper

Indefinite \(\tau ו S\) is part of the same word group as a preceding word, so may be considered a cohesive focalizer, while it is itself focalized at Ag .553 by \(\delta \epsilon ́\).

\section*{2b (iv): Relatives}

In relative constructions, the prosodic relation between an antecedent and the relative pronoun is analogous to that between a P1 word and an interrogative, as discussed above. This is particularly clear in constructions where there is also a metrical break before the head noun, when it is lineinitial, as at Od.9.197:
 sweet [wine], which was given me by Maron, son of Euantheos...

Ag.1433:
 by Ruin and the Erinys, to whom I sacrificed him
and Eum.484:
21) \(\theta \epsilon \sigma \mu o ́ v, ~ t o ̀ v ~ \epsilon i ̉ s ~ a ̈ \pi \alpha \nu \tau ' ~ \epsilon ́ \gamma \omega ̀ ~ \theta \eta ́ \sigma \omega ~ \chi \rho o ́ v o \nu . ~\)
an oath, which I shall set for all time.

Here, the prominence of the head noun creates a particularly strong contrast with the relative pronoun. However, the prosodic relation between head noun and relative is contrastive, even when there is no intonation break before the noun, as at Eum.661:

She preserves the offspring for such as a god does not harm

Septem 426:

He threatens our towers with terrors, which may fortune not fulfil

\footnotetext{
\({ }^{29}\) The position of \(\tau \iota s\) as third word implies that tá \(\delta \epsilon\) is topicalized, like the demonstratives in Section 1d.
}
and Ag.525-6:


he who uprooted Troy with the pick of avenging Zeus,
with which the earth has been worked over.
An intonation break between head noun and relative pronoun may be observed in all these constructions, including Eum. 661 (a restrictive relative, which in English would not have 'comma intonation').

The close relationship between prosody and meaning is demonstrated by the rare constructions where the head noun is not adjacent to the relative. Such a purely prosodic relation is stylistically uncomfortable, as may be seen from Ag.1221-2:


... and with the entrails, the viscera, a pitiful load,
they seem to be holding, which their father tasted.
The clause boundary is schematized in Fig. 3 (=Introduction, Fig. 5):30


\footnotetext{
\({ }^{30}\) The citation is from Choe.267, cited also above: ‘[someone might tell this] to the rulers, whom may I see die one day'.
}

This demonstrates that the \(\mathrm{P} 1>\mathrm{P} 2\) sequence is a relational one, which holds across syntactic boundaries (as noted by Hock 1996), and creates a prosodic link, additional to the co-referential one.

\section*{2c: P2 and the intonation break}

The mechanism of cohesive focalization is described below in Section 4. Focalizing particles may also be distinguished prosodically from pronominals by their ordering in P2 collocations.

\section*{2c (i): Function and order in P2 collocations}

It was observed by Delbrück (1900:51) that, in early Greek, connectives precede pronouns, and Watkins (1964: 130ff.) generalizes that feature as common to all early IE languages. Denniston (1954: lx) notes that sentence adverbials usually follow connectives. Recent models have focussed on the relative order of enclitics in collocations, especially the 'initial string' in Vedic (Hock 1982, 1996; Hale 1987, 1996; Schäufele 1996), Hittite (Luraghi 1998), and Homeric and Koine Greek (Ruijgh 1990, Wills 1993, Taylor 1996).

As noted above in Section 2a, interpretative approaches tend to be polarized between the syntactic and the prosodic. The former is exemplified by the schema of Ruijgh (1990: 223) for Homeric particle clusters:
1) Adverbials with single-word scope ( \(\pi \epsilon \rho, \gamma \epsilon, \mu \alpha ́, \mu \alpha ́ \nu, \mu \epsilon ́ \nu)\).
2) Preparatory co-ordinating connectives ( \(\mu \epsilon \nu^{\prime}, \tau \epsilon\) ).
3) Connectives ( \(\delta \in ́, \gamma \alpha ́ \rho, \tau \epsilon, \mu \epsilon ́ v)\).
x) [see below]
4) Sentence adverbials (a̋ \(\rho \alpha>\nu v\), epic \(\tau \epsilon>\kappa \epsilon\), a̋ \(\nu>\theta \eta \nu\), oûv> \(\delta \dot{\eta}>\alpha \hat{u}\) ).
5) Indefinite pronouns and adverbs.
6) Personal pronouns.

Ordering like this seems both over-rigid and incomplete, and Ruijgh (1990: 225) admits the exception that \(\alpha p \alpha\) and \(\nu v\) may follow \(\delta \dot{\eta}\), and the categorization of \(\gamma \alpha ́ \rho\) only as a connective and oûv as an adverbial is partial. A gap (x) has been left in the listing above, where interrogatives and relatives are placed (see Hale 1987: 42, Wills 1993: 72).

Ruijgh (1990: 217) explains the sequence in terms of syntactic domain, because 'un postpositif suit immédiatement le mot initial de la séquence qui constitue son domaine', so in a complex sentence at \(I l .3 .396-8\), the postpositives are ordered by increasing domain, with the connective \(\tau\) ' at 398 preceding the adverbial áp’ because its domain is the whole line ( \(\theta\) á \(\mu \beta \eta \sigma \in ์ \nu\)... ỏvó \(\mu \alpha \zeta \epsilon\) ),




And then, [ [ as she recognized the round sweet throat of the goddess and her desirable breasts and her eyes that were full of shining,]
she both wondered, and spoke a word, and called her by name]

Organization by increasing domain clearly has some validity, as it suggests why particles like \(\gamma \epsilon, \pi \epsilon \rho\), and adverbial \(\tilde{s}\) (which have scope over single words) precede others in collocations. The position of preparatory particles and adverbials may also be explained by their domain: preparatory \(\mu \epsilon ́ \nu\) and \(\tau \epsilon\) (in \(\tau \epsilon \kappa \alpha i ́\) ) precede connectives because their function is limited to the first clause of a compound sentence, while a connective like \(\gamma \alpha ́ \rho\) has scope over both: Ruijgh (1990: 218) illustrates this by the use of \(\mu\) èv \(\gamma \dot{\alpha} \rho\) at \(I l .11 .825 .{ }^{31}\)

However, a principle of increasing domain does not explain the standard (decreasing) sequence of [indefinite \(>\) personal pronoun], as Il.4.245.32

(connective \(>\) adverbial \(>\) indefinite \(>\) personal pronoun)
.... stand still, and there is no heart of courage within them?

Nor does it explain the decreasing sequence of \(\delta\) ' and d" \(\rho \alpha\) at Il.5.47:

(connective > adverbial > personal pronoun)
he dropped from the chariot, and the hateful darkness took hold of him

Position by domain does not, therefore, give a full description. An alternative analysis of P2 in terms of word movement has been suggested for Vedic by

\footnotetext{
\({ }^{31}\) Wills (1993) adopts a similar analysis, observing that particles which emphasise single words are normally adjacent to them, so precede connectives and sentence adverbs. His examples are \(\gamma \epsilon\) and \(\pi \epsilon \rho\), and he notes that \(\mu \epsilon \prime \nu\), \(\delta \dot{\prime}\) and \(\nu v\) may be placed in the same position. \({ }^{32}\) Although tís is here an adjective, it occupies the same position as would a pronominal.
}

Hale (1987), who proposes that sentence adverbials follow connectives because they are enclitic to P1 as defined after wh-movement (the preposing of interrogatives and relatives) but before the focalization of lexical words, \({ }^{33}\) while connectives are, as it were, 'inserted' last, as discourse rather than sentential elements, so precede question words. Emphatics are 'cliticized to the constituent they will emphasize, and ... following this the emphasized element can be topicalized' (Hale 1987: 46).

This model is formalized by Hale (1996) in terms of two maximal projections: a topic phrase and a focus phrase (the latter being the position for pronominals and adverbials). The sequence accords with the observed order [emphatic > connective > wh-word> adverbial], so agrees with the collocation sequence more accurately than Ruijgh's principle. However, it is inadequate in two respects. It does not match the prosody, and Hale (1996: 178) admits to being 'not entirely comfortable with "focus" as a general name for that function'. Secondly, it is uninformative: no explanation is given of why focalization should occur 'after' wh-movement, or why indefinites should precede demonstratives. Neither model explains the overlap between interrogatives and indefinite pronouns, which may be placed in a different sequence, either preceding or following sentence adverbs.

Enclitic position has also been described in terms of prosody, as in the proposal of Halpern (1992), that P2 elements are, structurally, the leftmost elements in the clause, adjoined to the IP, but are placed in P2 by a prosodic 'flip', which allows an enclitic to move one place rightwards if it lacks a host, due to an intonation break to its left. In Halpern's view, the sequence [P1 phrase \(>\mathrm{P} 2\) clitic] results from phrasal preposing (to the specifier position in CP ), but the sequence [ P 1 word \(>\mathrm{P} 2\) clitic] results from an automatic 'prosodic inversion' of the two elements. The difference is that only the first, phrasal, construction involves pragmatic motivation. However, it has also been suggested that phrases as well as single words can undergo prosodic inversion (see Hock 1996, Taylor 1996). Observations of the variable positions of \(\gamma\) áp in the corpus texts, discussed in Section 3b below, suggest that phrases and single words are focalized analogously.

\footnotetext{
\({ }^{33}\) The focalized word may of course itself be an interrogative, as at Il.5.703: év \(\theta a\) Tíva \(\pi \rho \hat{\omega} T 0 \nu\), тiva \(\delta^{\prime}\) v̈бтатov \(\epsilon \xi \epsilon \in \alpha ́ p ı \xi \alpha \nu\); (then whom first and whom last did they slaughter?).
}

Prosodic analyses have usually been presented as alternatives to syntactic interpretations: one may detect a rather confrontational tone in the way Hock (1996) and Hale (1996) comment on each other's models. It seems more useful to investigate the relation between prosodic and syntactic approaches, and a combined approach seems particularly relevant to the structure of the clause break in subordination, as is discussed below.

\section*{2c (ii): The cohesive focalizer/operator division}

Prosody and syntax have generally been considered separately, since P2 enclitics are not always syntactically linked to their prosodic host. In particular, it is usually held that, in Homeric Greek and CG, only emphatics follow their host in terms of both phonological liaison and syntactic precedence (as Hock 1996). However, it is argued here that connectives, adverbials and indefinite pronouns do too, and the only syntactic division is between the cohesive focalizers (emphatics/ connectives/ indefinites / adverbials) and operators or 'wh-words' (interrogatives/ relatives); a division which is also marked prosodically by an intonation break.

The whole sentence, including the P1>P2 string, may then be schematized as in Fig. 4 (=Introduction, Fig. 1):
[ \{ P1 \} cohesive focalizers] [ interrogatives and relatives [personal pronouns \{clause\} ] ]

The cohesive focalizers include connectives, indefinite pronouns, emphatics and other adverbials. Enclitic verbs may be grouped with the operators, since their scope is analogous (as noted in Section 2a above).

P2 then consists of two word groups divided by domain and by the intonation break. This gives a different ordering from the canonical one in two principal respects:
i) Particles normally defined as sentence adverbs (ảpa, \(\nu v\), epic \(\tau \epsilon, \kappa \epsilon, \alpha \not \nu, \theta \eta \nu\), oûv, \(\delta \dot{\eta}, \alpha \hat{u}\) ) form part of the initial intonational group.
ii) Indefinite pronouns precede operators (unless the latter are focal, in P1).

The morphology of the P2 element accords with this interpretation: the distinctively harsh articulatory onset of a voiceless central fricative (like oüs
and other relatives) may reinforce the intonation break. \({ }^{34}\) Of course, \([/ \mathrm{h} /]\) is not necessary to create an intonational pause, since a boundary also occurs with interrogative \(\tau i\), but it is suggestive that not only do relative pronouns start with an aspirate, but complementizers do also. The accent borne by an operator is, presumably, also indicative of increased vocal friction compared to an indefinite or other accent-less enclitic.

It might be objected that a prosodic division after the cohesive focalizers does not correspond to syntactic domain: after all, emphatics have a single-word domain, connectives link two clauses, and adverbs modify a verb or a whole clause. This is what prosodic interpretations like those of Hock (1996) and Taylor (1996) assume. However, it can be shown that emphatics and connectives in fact have the same domains, and the same can be attributed to sentence adverbs too: their position in collocations may vary according as their prosodic 'target' is the word in P1, or a non-preposed wh-word in P2. In either case, their function is primarily local. It will be shown in Section 4 that this is true for all cohesive focalization, and, in Chapter 5, that indefinites also function cohesively.

An alternative analysis is possible for the position of operators: they could be in P1, preceded by topicalized elements. As noted in the Introduction, Section 2 d , this analysis is not adopted, because it fails to model the prosodic prominence of the initial elements in contrast with the operator, and it does not explain the interrogative patterns discussed above in Section 2b, or the regular presence of focal elements preceding \(\dot{\omega}\) in tragic complementation (discussed in Chapter 6). The focalizer-operator division gives a more unified analysis. In the next section, evidence for a single function of 'cohesive focalizer \({ }^{\prime}\) is discussed.

\section*{3: Cohesive focalization}

Cervin (1990: 59-65) notes that CG particles have a regular emphatic effect on constituents to their left (or complex constituents in which they appear late). It is argued here that the emphatic and linking functions are always shared by the same particles, and particles with one function are always associated with

\footnotetext{
\({ }^{34}\) Cavity friction would certainly disrupt the intonational pattern. See Allen (1987: 18-19) on the articulation of CG aspirates.
}
both. Further, overlaps may be observed in the linking and adverbial functions too.

\section*{3a: Overlaps in particle function}

A coincidence of emphatic and connective function has often been noted. Denniston (1954) suggests an aetiology for three groups of particles. Though tentative (cf. Rijksbaron 1997b), it makes the case for a causal connection between the two functions:
1) Some ( \(\gamma \epsilon, \delta \eta\), \(\mu \eta^{\prime} \nu\), tol) may have originally expressed thoughts in isolation, but also have connective functions (Denniston 1954: xxxvii).
2) Conversely, primarily connective particles may have emphatic functions. Denniston (1954: 359) believes that 'the primary function of \(\mu \epsilon\) ' \(\nu\), as of \(\mu \dot{\eta} \nu\), is emphatic'. Other connectives with emphatic force include \(\gamma \alpha{ }^{\prime} \rho\) (considered below, Section 4b) and oũv (Denniston 1954: 416-425). Responsive particles like \(\delta \epsilon ́\) and \(\tau \epsilon\) also emphasise the preceding word.
3) Apodotic function in conditionals (i.e. in the consequent clause) may involve adverbials ( \(\gamma \epsilon, \hat{\eta}, \mu \epsilon \prime \nu \tau o l, \delta \eta ́)\) and paratactic connectives (kaí, oûv, тoívvv). Denniston (1954: xl) suggests an adverbial origin for this.

\section*{3b: Diachronic changes in position and function}

The interpretation of variable particle position as historically transitional (as in Denniston's schema described above) \({ }^{35}\) suggests the possibility of a functional connection between emphatics and connectives, in three respects:
i) Origin. The remark by Denniston (1954: xl-xli) that 'it is by no means certain that the connective sense of any Greek particle is the original sense' implies that at least some particles changed function from adverbial to connective. A general development from adverbial to connective functions is a plausible inference, since intra-clausal meaning might be expected to precede a linking function chronologically (since it precedes logically).
ii) Rightwards movement. The converse development is better established: in post-Homeric Greek there was a diachronic movement of enclitics from P2 to

\footnotetext{
\({ }^{35}\) See also Ruijgh (1990: 221ff.) on \(\pi \epsilon ́ \rho, \alpha ̉ \rho \alpha\) סض́ and \(\delta \eta \dot{\rho} \dot{\rho} \alpha\), and Wills (1993: 63n7) on \(\alpha \not \rho \alpha\).
}
adjacency to their head words (see Dover 1960: 15-19, Horrocks 1990). \({ }^{36}\) Rightwards movement is also influenced by phonetic factors: Horrocks (1990: 39) notes that in CG the enclitic pronoun \(\mu \mathrm{o}\) may be placed next to the most emphatic sentence constituent, rather than to its governing verb (as at Xen. Resp. Ath. 3.10 and Dem. 37.23). Movement may also be motivated in part by an intonational change: postponement is linked by Dunn (1989) with the movement of a postulated sentence accent (as the Satzmelodie of Schwyzer 1950) from Wackernagel's position in CG (Comrie 1980: 86) to fall on the main verb in Hellenistic Greek (Dunn 1989: 11). Adams (1994a) observes a similar placing for weak pronouns in Classical Latin. There appears also to have been a rhythmic component (see Marshall 1987).
iii) Rightwards movement and subordination. A second motivation for postponement may be found in the loss of connective function, which was increasingly fulfilled by subordinating conjunctions like \(\epsilon \in \pi \epsilon i ́\), \(\epsilon i\), \(\omega\) s, and ö ôt. The discussions of \(\epsilon i\) below in Section 5a and of \(\dot{\omega}\) in Chapter 6 suggest that this was a gradual process, with conjunctions showing enclitic features before occupying an independent position in a developed system of subordination.

There does, then, appear to be a historical progression, which strengthens the case for a functional explanation. In Section 4, it is argued that the causal connection may be found in the mechanism of focalization. In the next section, a constant emphatic/connective effect is noted in constructions with ráp, and, in Section 3d, the same link is noted for other particles.

\section*{3c: Гáp and dual function}

Denniston (1954: 56-57) considers that the core function of \(\gamma\) á \(\rho\) is causal, all instances having a connective function. However, noting that 'few Greek connecting particles started their careers as conjunctions', he suggests that 'an earlier, asseverative, force lay behind the causal sense', and links this to an etymology of \(\gamma a ́ p\) from \(\gamma \epsilon+\) äpa. Smyth (1956: 638) has the same view, suggesting that \(\gamma \in\) originally gave prominence 'either to the word it followed

\footnotetext{
\({ }^{36}\) Head-government appears as early as Homer too, explaining a feature which Wills (1993: 66) describes as 'third position', adducing constructions like Il.1.81: \(\epsilon\) l \(\pi \epsilon \rho\) रá \(\rho \quad \tau \epsilon \chi\) д́dov \(\gamma \epsilon\)
 however, are better explained as head-governed: '[xó入ov \(\gamma \epsilon\) ] [каì aủtn̂ \(\mu \alpha \rho\) ]'. Cf. Ruijgh (1990: 219-20) on \(\gamma \epsilon\) at Il.2.703.
}
or to the whole clause, while äpa marked this prominence as due to something expressed or latent in the context.'

Such an interpretation raises the possibility that retrospective and preparatory function may reflect the same force, and indeed anticipatory (preparatory) use is considered by Denniston (1954: 68) to be a stylistic variant, rather than an independent asseveration (which was the view of Kühner 1904: 332-3). Retrospective and anticipatory \(\gamma\) áp simply reverse the dependency ordering: 'since \(a\), therefore \(b\) ' is logically equivalent to ' \(b\), because \(\mathrm{a}^{\prime}\), and parenthetical \(\gamma\) áp following the main subject could be translated as either (or 'as'), as Ag.1069:

but I, because/since I pity her, will not be angry
and Eum.230:

\(\mu \epsilon ́ т \epsilon \iota \mu \iota ~ т о ́ v \delta \epsilon ~ ф \omega ิ т \alpha ~ к а ̉ к к \nu \nu \eta \gamma \epsilon ́ т \eta s . ~\)
but I, since a mother's blood urges, shall pursue this
man to punish him, and be his tracker \({ }^{37}\)

Throughout the corpus, causal force is always combined with pragmatic emphasis, as at OT.409:

... arguing equally, for in that I rule too

Med.1376:
32) \(\pi \omega ิ s ~ o u ̂ v ; ~ \tau i ́ ~ \delta \rho a ́ \sigma \omega ; ~ к \alpha ́ \rho т a ~ \gamma a ̀ \rho ~ к a ̉ \gamma \grave{\omega ~} \theta \in ́ \lambda \omega\).

How? What shall I do? For I very much wish that too.

\footnotetext{
\({ }^{37}\) Denniston (1954:58) believes that retrospective use of \(\gamma \alpha ́ \rho\) is 'commoner in writers whose mode of thought is simple than in those whose logical faculties are more developed. The former tend to state a fact before investigating its reason, while the latter more frequently follow the logical order, cause and effect'. In the corpus, there are in fact fewer instances of ráp in Crito than the other texts: one per 320 words, compared with 100 in OT. (c. per 12 lines), Med. 112 ( 15 lines), Ra. 150 ( 16 lines). Frequencies in the Oresteia are less: 170 (one every 22 lines), and in Septem even less: 251 ( 40 lines). However, this seems based on presentational rather than logical criteria: see Sicking and van Ophuijsen (1993: 21ff.).
}
and Crito 50b6:
 towards this and other similar things, for one might have many things [to say]

While the identification of pragmatic emphasis must be a subjective judgment, it is sufficient for this argument that all constructions are consistent with an emphatic interpretation of the initial word. The relation between pragmatic and prosodic emphasis may be interpreted in terms of factive rather than causal force, as in the suggestion by Sicking and van Ophuijsen (1993: 24) that \(\gamma \alpha\) 人́ is responsive in the sense of 'making explicit a presupposition of the previous sentence. \({ }^{38}\) Such a unified explanation in fact accords with the range of functions which Denniston \((1954: 63,65)\) identifies for causal \(\gamma\) áp, referring loosely to the preceding discourse, or more specifically to a single clause or individual word. The categorization of \(\gamma \dot{\alpha} \rho\) by Ruijgh (1990) as purely co-ordinating is therefore incomplete.

The effect of focalization appears to be inherently local: the view of Halpern (1992), cited above, that only phrasal focalization is pragmatically motivated, while focalization of individual words is an automatic 'flip', is not supported by the constructions in the corpus, where \(\gamma \dot{\rho} \rho\) is always adjacent to the word or phrase it emphasizes pragmatically, though when ráp follows NPs, the whole phrase may be regarded as prominent, as at \(A g .32\) :
34) \(\tau \alpha ̀ ~ \delta \epsilon \sigma \pi о т \omega ̂ \nu ~ \gamma a ̀ \rho ~ \epsilon \hat{\imath} \pi \epsilon \sigma o ́ v \tau \alpha ~ \theta \eta ́ \sigma о \mu \alpha \iota ~\)
for after my master's lucky throw, I shall make the next move
and Ag.461:
35) т \(\omega\) тодикто́v \(\omega \nu\) रà \(\rho\) оủк
äбкотоь \(\theta\) єоí, ...
for of the killers of many, the gods are not unwatchful
In contrast, when rá \(\rho\) appears within an NP, as at Eum.334, only the demonstrative seems emphatic, so a specific pragmatic effect may be
understood:
36) тои̂то \(\gamma\) àp \(\lambda a ́ \chi o s ~ \delta ı a v t a i ́ a ~\)

For this lot, piercing Fate
spun for us to be permanent

\footnotetext{
\({ }^{38}\) Factivity may be defined as the transference of presuppositions between clauses. See Kiparsky and Kiparsky (1970), Karttunen (1971), Lyons (1977: 599-606, 794-809) and the discussion in Chapter 6, Section 1c.
}

Following a VP at Ag.222, the adjacent element, rather than the whole phrase, appears pragmatically emphatic (as Dover 1987: 61 suggests):
37) Bротоùs \(\theta \rho a \sigma u ́ v \in l\) रà \(\rho\) aỉ \(\chi \chi \rho o ́ \mu \eta t ı s\)

Woeful madness, the first cause,
suggesting evil, emboldens men;

The variable position of connective particles with respect to an initial phrase is described by Dover (1960: 16) as 'the result of a compromise between pattern and principle' in the interaction between prosody and syntax. If connectives are always also emphatic, as proposed here, variable placing may be understood as reflecting variable emphasis, which is presumably open to authorial choice.

Though үá \(\rho\) may emphasise cohesive material (as at Ag. 222 and Eum. 334 above), Dover (1987: 61-3) argues that it tends to emphasise new information. The reason is prosodic: an emphatic function certainly has a contrastive effect, and when the emphatic and linking functions are in tension, the former is dominant, as at Eum.797, where it is adjacent to ék \(\Delta\) iós, though its linking function is related to that of \(\dot{\alpha} \lambda \lambda\) ':

and yet, from Zeus, there was clear witness,

The primacy of the emphatic function may also be seen when \(\gamma\) áp follows grammatical words which themselves are primarily connective, as in \(\epsilon \mathfrak{l}\) ráp, \({ }^{39}\) and \(\hat{\eta}\) ráp, which appears to have a sense of urgency in Plato (Erp Taalman Kip 1997). Its dominance follows from the mechanism of cohesive focalization (described below in Section 4a).

\section*{3d: Other cohesive focalizers}

Other connectives and adverbial particles also have a regular emphatic force. The high frequency of collocations beginning with \(\mu \epsilon ́ \nu\) (as \(\mu \epsilon ́ \nu \dot{\rho} \alpha, \mu \epsilon ́ \nu \gamma \epsilon\), \(\mu \epsilon ̀ v \delta\) خ́, \(\mu \epsilon ̀ v\) oûv, \(\mu \epsilon ́ v \tau o l\) ), not only in Homer, but also tragedy and prose, accords with a combined emphatic and linking function. This may be seen

\footnotetext{
\({ }^{39}\) See Misener (1908).
}
even when \(\mu\) èv \(\gamma\) áp follows a monosyllabic grammatical word, as at Il.9.515:
 and yet, if he were not to bring gifts and to name still more hereafter...
and Od.9.132:
 for in [it] there are meadows near the shore of the grey sea ...

The functional overlap is at least partly due to position: if the most emphatic constituent of the sentence is standardly initial, a particle following it may have either function: it cannot, for example, be known by a listener at the moment of utterance that there will be a responsive clause, so every instance of \(\mu \epsilon \prime \nu\) must carry the possibility of emphasis. \({ }^{40}\)

The contrastive quality of the emphatic function may be seen in the force of ס́́, which, Bakker (1993) argues, regularly marks a variety of discourse boundaries, both continuative and contrastive. \({ }^{41}\) The importance of 'adversative' function is also observed by Basset (1997), Slings (1997), and Jacquinod (1997), in studies of orthotonic conjunctions and P1>P2 sequences. \({ }^{42}\) However, \(\delta\) '́ does not simply mean 'but': Davies (1997) shows that, in Arcadian, \(\delta\) é changes from a 'seriously' adversative particle into a continuative one, functioning as a textually cohesive marker. \({ }^{43}\)

As noted in the previous section, the probable origin of \(\gamma \alpha ́ \rho\) from \(\gamma \epsilon\) and äpa depends on their functions as making some sentence element prominent, and other adverbial particles also seem to be cohesive focalizers, placed in the same word group as their prosodic host. \({ }^{44}\) Denniston (1954) identified emphatic uses of \(\theta \eta \nu\), oûv, and \(\delta \dot{\eta}\), and the pragmatic functions which Sicking (1997) identifies in Platonic interrogatives always involve the relative

\footnotetext{
\({ }^{40}\) The frequency of particle collocations following grammatical words may also have a morphological significance, in providing the weight to focalize a monosyllable.
\({ }^{41}\) Bakker's analysis is based on discourse framing: for which see Goffman (1974) and Tannen (1993).

\({ }^{43}\) For discussions of the pragmatic functions of \(\delta \dot{\text { é }}\), see also Dover (1987: 59-61) and Rijksbaron (1997c).
\({ }^{44}\) Assimilation to a larger phonological unit may be seen in a capacity to function as affixes

}
emphasis of the P1 and P2 elements (oưкоuv as expressing disbelief while oủkoûv elicits assent, \(\tau i ́\) ठ́́ as expressing a new discourse topic while \(\tau i ́\) oủv marks logical coherence). It is argued in Chapter 5 that epic \(\tau \epsilon\) also focalizes its relative host, and a contrastive textual effect is implied in its function of marking a digression from the main narrative. \({ }^{45}\)

A unified view of focalization may seem at odds with the great variety of particle functions: as Rijksbaron (1997b, 12) argues, 'instead of treating "the" particles as one monolithic block in "the" Greek literature, there is a need for studies dealing with (groups of) particles in specific dialects, genres, authors and discourse types.' However, the intention here is not to deny the value of such specificity, but to suggest a single mechanism which may underlie the multiplicity of functions. This is described in the next section.

\section*{4: Focalization and linking}

In this section, emphatic, connective, and adverbial particles are shown to share the same prosody and function, though the syntactic domain of each appears quite different, because they all function in the same way: by creating a unified prosodic group centred on a focalized word in P1.

\section*{4a: Mechanism}

Although the discourse functions of grammatical words have been intensively studied, their meanings have usually been considered as purely conventional (as Grice 1989), and their phonology has not been investigated. Conjunctions are usually described simply by their logical function: as 'signals' (Hockett 1958: 153-4), 'markers' (Matthews 1981: 60-69), or 'coordinators' (Quirk et al. 1985: 918-1007). It is proposed here that the connective function is a kind of emphasis, because, just as a flag attracts attention by being physically prominent, so connectives also function, by making a contiguous element phonologically prominent. The proposed mechanism has three principal aspects:
1) Phonological. The cohesive focalizers function by assimilation, adding their morphological weight to the prosodic host. This difference correlates with

\footnotetext{
\({ }^{45}\) Gonda (1954b: 274) compares it to an actor's 'aside'. The classic study of ' \(\tau \epsilon\) digressifpermanent' is by Ruijgh (1971). The earliest is by Bäumlein (1861: 227-235).
}
order in P2 collocations: primary emphatics like \(\gamma \epsilon\) and \(\pi \epsilon \rho\) precede connectives for reasons of scope or domain, as in Ruijgh's model, because emphasis is inherently short-range (no particle emphasizes a preceding sentence, though responsive \(\gamma\) á \(\rho\) may come close). It may be noted that, though pronominals are usually separated from the P1 group by an intonation break, the pronominal tol can function cohesively as a particle, though properly an ethical dative. \({ }^{46}\)
2) Cognitive. The word in P1 is consequently prominent, not only through focalization by the particle following, but in contrast with the preceding text. It therefore attracts attention to its own meaning. If it is a referring expression, it introduces a new referent into the discourse. If it is a pronominal, focalization creates indefinite reference, so raises the question 'what?'.
3) Textual. The prominence of the P1 element has two pragmatic effects: of marking its own meaning as important, new, or in contrast with the preceding text, and of introducing the new proposition of which it is a part. Focalization is therefore, in pragmatic terms, epiphenomenal: it is not the presentation of any particular category of information, but the intensification of that presentation: it could be described as phonological amplification.

Its pragmatic effects vary according to the P1 element, as well as the discourse context. The observation that particles have a great range of pragmatic functions does not preclude the possibility that they may function in a similar way. The core meanings of individual particles are compatible with a unified model of focalization, in terms of what element is in P1.

\section*{4b: Pragmatic functions of focalization}

The discourse functions of cohesive focalization are realized in four ways: 1) When connectives are P2 enclitics, the clause needs an initial, prominent element functioning as an attention-getting device. If the P1 element is a lexical word, the link is automatically contrastive, because new information is being foregrounded. This explains the typically contrastive character of CG coordination, and also the association of focus with new information, noted above in Section 1a: the word chosen as highlighted in contrast with the preceding text is likely to be emphatic in a communicative sense, even though
\({ }^{46}\) Liddell and Scott (1968: 1801) note that its function corresponds to focal stress in English.
this is not the primary motivation for its prominence. A focal word is functionally necessary, but the pragmatic effect varies according to the word selected.
2) Subordinate clauses, however, lack a P1 element. In relative clauses, the pronoun is syntactically initial, though prosodically in P2 (as schematized in Fig. 3 above). This creates a tension between prosody and syntax, which may lead to ambiguity. In relatives with a nominal head, the relative pronoun is clearly a P2 element, so is not followed by enclitics, but in free relatives, where the relative pronoun can be interpreted as in P1, there is nearly always an enclitic or affix following. This creates a combined [ \(\mathrm{P} 1>\mathrm{P} 2\) ] focal grouping.
3) While the reference of a pronoun may be anaphoric or anticipatory, focalized demonstratives have indefinite reference when they function as interrogatives, which are anticipatory (öбTıs). The same focal and indefinite function is performed by indefinite \(\tau \iota S\) in free relative clauses introduced by öбtıs, and epic \(\tau \epsilon\) (which marks a clause as denoting a class rather than an individual) \({ }^{47}\) when it follows an interrogative pronoun (see Chapter 5).
4) The demonstratives therefore function by 'impure textual deixis' (Lyons 1977: 668), as they point to a proposition, rather than to a referring expression in the text. \({ }^{48}\) A few constructions in tragedy (with oîtos) are retrospective, as Ag.1303, 1320, and 1617-8:
41) \(\sigma \grave{~ t a v ̂ т a ~ \phi \omega v \in i ̂ s, ~ v \in \rho т \epsilon ́ \rho a ~ \pi \rho о \sigma ́ n ́ \mu \in v o s ~}\)

кढ́mற̣, ....
you speak this, seated at the lower oar
However, the majority of demonstratives are anticipatory, with ö \(\delta \epsilon\). The typical tragic form is as Pers.356-7:




\footnotetext{
\({ }^{47}\) Though Ruijgh (1971: 9) argues that its meaning is not simply generic.
\({ }^{48} \mathrm{~A}\) similar view of complementizer function as textually-deictic is the basis of the influential model of Modern English complementation advanced by Davidson (1968). On deixis, see Bühler (1934, 1982), Lyons (1977, 1982), Jarvella and Klein (1982), Ehlich (1982), Rauh (1983), Morel and Danon-Boileau (1992), Létoublon (1992a), and Green (1995). On the distinction between textual deixis and anaphora, see Lyons (1977: 442-3) and Ehlich (1982).
}
[A Greek,] coming to your son Xerxes, told him this, that when the darkness of black night should come, the Hellenes would not remain...

The demonstrative has a double effect: a local one of \(\delta \in\) upon rá, and the effect of Tádє on the clause \(\dot{\omega} s . . . \mu \in \nu o i ̂ \epsilon \nu\).

It is shown in Chapters 5 and 6 that functions (3) and (4) are central to the development of complementation. Functions (1) and (2) not only affect coordinated linking, but also link prosodic structure to clause order. This is examined in the next section.

\section*{5: Focus and clause order}

Throughout the textual corpus, there is a correlation of clause order with the placing of the focal element:
1) When a dependent clause precedes, the focal element is syntactically within it. The P1 element may be the conjunction itself, as at OT.1266-7:


[... he loosened the halter]; and when the wretched woman lay
on the ground, it was terrible to see what happened next.
Alternatively, a focal element may precede the conjunction, as at \(A g .866-8\).
The focal element is clearly not thematic ('wounds' is a new topic):



and of wounds if this man was enduring as many
as rumour was channelled to the house,
he has now more holes to count in him than a net.
2) When a dependent clause follows, it is the last element of the main clause which is focalized. As discussed in Section 2b (iv), this effect may be seen in relativization, when the head noun in the main clause is emphatic, but the same pattern is also evident in conditionals, even though there is no main clause head noun.

The structural difference between (1) and (2) may be motivated by the requirements of clause linking, but the effects are to focalize the initial element of the first clause, whether the main or the dependent, and to make a (dependent) second clause more prosodically integrated with the main. It will be shown that it can make it more syntactically integrated too.

\section*{5a: Focus and conditional order}

Prosodic integration can be seen especially clearly in conditional constructions, where clause order is highly variable. Friedrich (1975: 20 n.10) states that conditionals normally precede their main clause in Homer, but it has also been observed (by Houben 1977, Dunn 1988), that conditionals more often follow than precede their main clause in Homer and Herodotus 1.

In the texts of the corpus, conditionals precede the main clause more often than they follow it: Frogs is the only text to have a higher proportion of conditionals following. The overall ratio is about \(60 / 40\), but there is considerable variation, with a particularly high proportion of conditionals preceding in Odyssey 9, Septem, OT. and Cyclops. Conditional order with respect to the main clause is schematized in Table 1: \({ }^{49}\)
\begin{tabular}{|c|c|c|c|}
\hline & Preceding & Interpolated & Following \\
\hline Iliad 9 & 17 & & 12 (=41\%) \\
\hline Odyssey 9 & 7 & & 3 (=30\%) \\
\hline Septem & 8 & & 3 ( \(=27 \%\) ) \\
\hline Agamemnon & 23 & 2 & 13 (=34\%) \\
\hline Choephoroi & 10 & & 9 (=47\%) \\
\hline Eumenides & 7 & & 6 (=46\%) \\
\hline OT. & 61 & & 25 (=29\%) \\
\hline Medea & 23 & 4 & 17 (=39\%) \\
\hline Cyclops & 9 & 4 & 4 (=24\%) \\
\hline Frogs & 23 & 5 & 27 (=49\%) \\
\hline Melian Dialogue & 6 & 4 & 5 (=33\%) \\
\hline Crito & 30 & 1 & 20 (=39\%) \\
\hline Totals & 224 & 20 & 144 (=37\%) \\
\hline
\end{tabular}

\footnotetext{
\({ }^{49}\) The percentages are given with respect to the total number of conditionals in each text.
}

A very strong correlation between position and structure is evident. As noted in the previous section, when a conditional precedes the main, the conjunction may be cohesively focalized by P2 particles, as at Ag.1025-9:
45) \(\epsilon i ̉\) ठè \(\mu \grave{~} \tau \epsilon \tau \alpha \gamma \mu \epsilon ́ v a\)


трофӨ́́баба карঠía
\(\gamma \lambda \omega \sigma \sigma \alpha \nu\) àv \(\tau \alpha \delta^{\prime}\) ' \(\epsilon \xi \xi ́ \chi \in \iota^{\circ}\)
and if one fate, appointed by the gods,
did not restrain another
from going too far
my heart outstripping my tongue
would pour this out.

However, preceding conditionals more often have a substantial focalized constituent before the conjunction, as at Ag.345-7:
46) \(\theta \epsilon o i ̂ s ~ \delta ’ ~ d ̀ \nu a \mu \pi \lambda \alpha ́ к \eta т о s ~ \epsilon i ~ \mu o ́ \lambda o l ~ \sigma т \rho a т o ́ s, ~\)

\(\gamma \in ́ \nu o u t{ }^{\prime}\) ä \(\nu, \ldots\)
and even if, without wandering from the gods, the army return,
the awakened pain of the dead might
arise: .....
and Ag.563-4:


and winter, if one were to speak of it, bird-killing,
how intolerable the snow of Ida made it ... \({ }^{50}\)

These constructions are analogous to the interrogative patterns discussed in Section \(2 b\) (i), and demonstrate that \(\epsilon i\) also regularly appears in P2. The semantic effect may be, as in Ag. 563 and 671-2, to increase inter-clausal cohesion by foregrounding a referring expression which is co-referent with (Ag.671), or even syntactically part of (Ag.563), a constituent in the main clause.

\footnotetext{
\({ }^{50}\) The sentence continues with further subordinate clauses: a possible main clause occurs at Ag. 567 ( \(\tau\) í тav̂ta \(\pi \epsilon \nu \theta \in i ̂ v ~ \delta \in \imath ̂ ; ~ ' W h y ~ s h o u l d ~ o n e ~ l a m e n t ~ f o r ~ t h i s ? ') . ~\)
}

Interpolated conditionals, however, always follow emphatic elements in the main clause, as \(A g .37-8\) :
48) \(\beta \in ́ \beta \eta \kappa \epsilon \nu\) oîkos \(\delta^{\prime}\) aủtós, \(\epsilon i\) í \(\phi \theta\) оүク̀̀v \(\lambda a ́ \beta o\),

The house itself, if it had a voice, could best say...
and Medea 66:
49) \(\sigma \iota \gamma \grave{\nu} \nu \gamma \alpha ́ \rho, \epsilon i \quad \chi \rho \eta ́, \tau \omega ิ \nu \delta \epsilon\) Өńбонal \(\pi \epsilon ́ \rho l\). for silence, if necessary, I shall keep silence about this.

Similarly, when the conditional follows the whole main clause, initial emphasis occurs in the main clause, as at OT.1166:
 You die, if I ask you this again.

Emphasis may be purely formal, with no pragmatic force, as at Medea 1134-5, where the contrast seems rather to be between т́́p \(\psi \in \iota a s\) and таүка́к \(\omega s\) :

 Say then, how did they die? For you will give twice as much pleasure to me, if they died horribly.

Only one following construction in the corpus was found to have focalized elements syntactically within the conditional, at OT.120-1. Here, the demands of line integrity apparently outweigh textual cohesion, demonstrating that a conditional may be structurally very peripheral: \({ }^{51}\)
52) Tò moîov; 'Ev \(\gamma \alpha ̀ \rho ~ \pi o ́ \lambda \lambda ’ ~ a ̀ \nu ~ \epsilon ́ ~ \xi \epsilon \epsilon u ́ p o l ~ \mu a \theta \epsilon i ̂ v, ~\) ảpхウ̀v ßрахєîav \(\epsilon i ̉ \lambda \alpha ́ \beta o \iota \mu \in \nu\) є̇ \(\lambda \pi i ́ \delta o s\).
..... for one thing might be the way to learn many, if we could gain narrow ground for hope.

\section*{5b: Conditional order and discourse function}

As discussed above in Section 4b, focalization appears to function as an attention-getting device, and may be said to introduce a new 'participant' in the discourse. In preceding conditionals, this is usually (before following

\footnotetext{
\({ }^{51}\) Conjunctive \(\dot{\omega}\) is also sometimes followed by enclitics when it is line-initial, as \(\dot{\omega} s\) is at

}
conditionals, always) a referring expression rather than the conditional itself. Clause order therefore functions as a way of modulating emphasis.

This view has not been suggested in other discussions of conditional clause order, since conditionals are not considered to be structurally subordinated, \({ }^{52}\) and are consequently studied either in semantic terms (Strawson 1952, Traugott et al. 1986, Sanford 1989), \({ }^{53}\) or pragmatically (Wakker 1994), in respect to their informational relationship with the main clause.

It has been observed (by Haiman 1978, and Sweetser 1990) that there is a pragmatic similarity between conditionals and topics, as the conditional gives the context for the main clause proposition. A topic function is likely to motivate a conditional to precede, since topics precede and comments follow in the Prague FSP model, and because a protasis may precede its apodosis for iconic reasons (Greenberg 1963: 84-5, Lewis 1973, Comrie 1986).

A topic function could underlie the semantic similarity between conditionals and indefinite relatives which has been observed by Clapp (1891), \({ }^{54}\) Kühner (1904: 423), and Chantraine (1963: 245), and extended to temporals by Wakker (1992: 49), who notes the equivalence of the constructions: ös äv \(\dot{\alpha} \mu \alpha ́ \rho т n ़, ~\)
 errs, sacrifices to the gods).

Such generic conditionals tend to precede the main clause. However, analogous relatives may follow, as at Od.1.352-3:


For surely people give more applause to that song
which [/if it] is latest to circulate among the listeners.

\footnotetext{
\({ }^{52}\) Matthews (1981) notes that the 'if...then' construction is correlative.
\({ }^{53}\) Relations between verb mood and semantic type are discussed by Gildersleeve (1876), Goodwin (1889), Koppers (1959), Gonda (1980: 149-196), Greenberg (1986), Bakker (1988b), and Horrocks (1995).
\({ }^{54}\) Clapp collates 3,226 conditionals in tragedy, of which there are 398 in Aeschylus ( \(=49.8\) per 1,000 lines), 1,039 in Sophocles (=103.1 per 1,000 lines), and 1,743 in Euripides (=69.7). As well as using fewer conditionals, Aeschylus also uses comparatively fewer hypothetical ones.
}

It appears that, even though the generic type might be considered topical in the sense of giving contextual information, order with respect to the main clause may still be determined by emphasis. The predominance of preceding conditionals in the corpus (noted above) could, perhaps, be attributed to a topic function, but the large proportion of following conditionals would then lack explanation.

A pragmatically-based taxonomy of conditional placing has been developed by Wakker (1994: 49), who divides conditionals into three types: predicational (where the protasis gives the condition for the realization of the state of affairs described by the main clause: 'if it rains, I'll take an umbrella'), propositional, (where the protasis gives the condition for its truth: 'if the story is true...'), and illocutionary (where the protasis gives the condition for its speech act felicity: 'if I may say...'). \({ }^{55}\) Her figures (Wakker 1994: 58, 60, 89) indicate that predicational conditionals generally precede the main clause in Greek, except in Homer (where they precede and follow in equal proportions), while propositional and illocutionary types more often follow (except in Thucydides and Xenophon). \({ }^{56}\) Wakker (1994: 84-88) associates preceding conditionals with an 'orientation' function (similar to theme) and following conditionals with an 'elaboration' function. \({ }^{57}\)

The categorization into propositional, predicational and illocutionary types appears somewhat over-rigid. This may be seen by considering a preceding conditional at Il.9.604-5:


But if without gifts you go into the fighting where men perish, your honour will no longer be as great, though you drive back the battle.

Wakker would, presumably, categorise this as predicational (since it gives the condition for the realization of the state of affairs designated by the main

\footnotetext{
\({ }^{55}\) Speech act felicity conditions are defined by Austin (1962) and Searle (1969). Wakker (1994: 49n10) notes that her categories are roughly equivalent to the content, epistemic and speech act conditionals of Sweetser (1990).
\({ }^{56}\) Wakker gives percentages only for the predicational type, so it is not possible to compare it with the [propositional + illocutionary] total, and so determine the overall order of conditionals in her data-set.
\({ }^{57}\) Functions similar to, but wider than, the Functional Grammar categories 'theme' and 'tail'.
}
clause). However, it also (obviously) gives the condition for the truth of the main proposition, so it could also be categorized as propositional.

Conversely, a preceding conditional at Crito 45c2-3 is explicitly categorized by Wakker (1994: 84-5) as illocutionary:
 \(\sigma \epsilon \pi \epsilon \rho i ̀ m o \lambda \lambda o \hat{~ \pi o \iota \eta ́ \sigma o v t \alpha ı ~ . . . ~}\)
and if you wish to go to Thessaly, I have friends there who will make much of you \({ }^{58}\)

However, this conditional also gives the condition for the realization of the state of affairs described by the main clause, and it therefore appears somewhat partial to categorize it as illocutionary only.

The evidence from the corpus suggests that there is a causal component involved, because there is a strong tendency for past unreal conditionals ('he would have ... if he had not ...') \()^{59}\) to follow their main clause. The following conditionals in Homer cited by Houben (1977) are also overwhelmingly past unreal conditionals, \({ }^{60}\) so a pragmatic explanation appears more likely than a logical one (since there is no real cause>effect sequence in a counterfactual). This does not support Wakker's argument, since these are propositional (and so should precede).

The only pragmatic function which is always apparent is an emphatic one: it is clearly possible to place any conditional clause before or after its main clause, and the reasons for placing must therefore be logically independent of the semantic structure of the clause itself.

Conditionals, then, share this feature with true subordinates: following clauses are prosodically more integrated (since less prominent). Because conditionals have a loose syntactic relation to their main clause, their clause ordering shows greater variety than that of other subordinates, but the basis on which order is based appears to be the same.

\footnotetext{
\({ }^{58}\) To avoid any misunderstanding, the translation is taken from Wakker (1994: 84).
\({ }^{59}\) See Smyth (1956: 518-520), and Sanford (1989: 182ff.), who terms them 'backtracking conditionals.'
\({ }^{60}\) Houben calls them 'contrary-to-fact conditionals', but his examples are only of the past unreal type.
}

\section*{5c: Conditional order and indirect questions}

Prosodic integration leads to syntactic integration, because the conjunction can be interpreted as the complement of a transitive main verb. Conditionals following speech verbs may then be formally indistinguishable from indirect questions, as at Choe.105:

Say whether you have anything better than that [or: speak, if ....]

Choe.668:

Strangers, say whether anything is lacking [or: speak, if ...]
and Choe.755-7:
 \(\epsilon i ̉ \lambda \iota \mu o ́ s, ~ خ ̀ ~ \delta i ́ \psi \eta ~ \tau ı s, ~ \eta ̀ ~ \lambda ı \psi o u p i ́ a ~\)
モ \(\chi \in \iota^{-}\)
For a child still in swaddling clothes does [not say anything/speak at all], whether it has hunger or thirst or the desire to make water

The humour of Choe.755-7 would be greater with a complement interpretation ('a child in swaddling clothes does not say whether...'), but a real ambiguity exists in all these constructions. At Eum.587, it is obviated only by the textual context:

Say first whether you killed your mother (or: speak, if ...)

Ambiguity exists in these constructions because of the ambiguous transitivity of speech verbs. \({ }^{61}\) Following cognitive verbs, there is no indeterminacy, as at Eum.142:

Let us see whether any of this prelude is faulty

\footnotetext{
\({ }^{61}\) The interpretation of these constructions depends on the transitivity of speech verbs and the status of the conditional conjunction.
}
and Choe.890:
61) \(\epsilon i \delta \omega ิ \mu \epsilon \nu \in i \quad \nu \iota \kappa \omega \hat{\mu} \epsilon \nu\), خ̄ \(\nu \iota \kappa \omega ́ \mu \epsilon \theta a\). Let us know whether we are to be victors or vanquished

The position of indirect questions following their main clause gives some support to the view of Houben (1977: 5) that 'postposition of if-clauses occurs under the influence of completive clauses'. The persistence of conditionals which precede their main clause shows that there is no purely structural rightwards 'drift', but the high frequency of following conditionals in Frogs (noted above) suggests that there may be a diachronic effect. This is likely to be cognitive: the tendency for a following conditional to be an afterthought is encouraged by speech patterns in which main clauses tend to precede. It may also be noted that the 'illocutionary' conditionals of Wakker (1994) are likely to be afterthoughts, and so to be textually non-prominent.

\section*{Summary: focus and prosody}

The start of the clause was mapped in terms of prosodic focalization of the P1 element by P2 enclitics. Cohesive focalization is associated with connectives and emphatics, while interrogative and relative pronouns mark a focal element across an intonation break. The link functions as a form of deixis by which the textual prominence of the P1 element signals the entry of a new 'participant' in the discourse: either a referring expression, foregrounding some information, or a grammatical word, emphasizing the relation of the new clause to the preceding text.

Evidence that early subordination is not merely a clausal sequence, but an overlap, may be seen in the focalization patterns of free relatives and completive clauses. These are examined in Chapter 5.

\section*{Clause linking}

\section*{Chapter 5}

\section*{Subordination: clause order and focalization}

\section*{Summary}

In Chapter 4, the regular focalization of the clause start was discussed, and extended to the inter-clausal link in relatives and conditionals. In this chapter, the development of complementation is considered by examining the grammaticalization of ötı from an indefinite relative pronoun to a complementizer. All constructions in extant Homeric and tragic texts are considered, and comparisons are drawn with iss-complements.

\section*{The problem}

It is generally accepted, following Meillet and Vendryes (1927), Chantraine (1963), and Monteil (1963), that the development of complementation involved a convergence of causal and transitive features in subordinate clauses dependent on verbs of feeling, thought, and speech.

Complements are canonically defined formally either as completives (functioning as main verb object), or substantivals (having nominal function). \({ }^{1}\) They can be described pragmatically as constructions which report propositions, so their 'objects' are not referring expressions, as in relatives, but clauses. Yet they are generally analysed as a subdivision of relativization. \({ }^{2}\)

There is certainly a semantic similarity between complements and indefinite relatives (common in the Rigveda texts and in Homeric Greek), and also a morphological one with ötı-complements, since both are introduced by the PIE pronoun *yo- (Sanskrit ya and Greek ös). \({ }^{3}\) However, an explanation of the transition from one type to the other must demonstrate how the relative

\footnotetext{
\({ }^{1}\) Discussed more fully in Chapter 6, Section 1a.
\({ }^{2}\) As by Delbrück (1900: 295-345), Gonda (1954a), Benveniste (1954), Chantraine (1963: 236249), Monteil (1963), Touratier (1980), and Lehmann (1984).
\({ }^{3}\) See Delbrück (1900: 311-314, 406-7), Porzig (1923), Schwyzer (1950: 639), Sihler (1995: 400). The Ionic and Doric use of *so/to- as a relative is discussed by Monteil (1963: 5 and 15). For discussions of the Italic use of the indefinite \({ }^{*} k^{w} O\) in correlatives, see Kühner (1914), Haudry (1973), and Lehmann (1989).
}
pronoun developed into a complementizer. Further, \(\mathrm{w}_{\mathrm{s}}\)-complements must have a different origin, since they do not derive directly from relatives. A convergence of two syntactic structures must be involved.

\section*{The proposal}

Complement structure developed from adverbial and relative forms which depend on main verbs of speech and cognition, through the focalization of a nominal or pronominal element placed at the clausal interface, having a double function (as object of the main verb and marker of the subordinate clause to follow). Complementation therefore developed as a circumstantial construction, with a focalized object and a modifying clause. This sequence explains how completive structure emerged from two distinct sources: a regular focal element is observed in complements with both ötı and with ís.

\section*{"Otı-complementation}

The development of ötı-complementation is mapped in terms of phonological effects at the clausal interface, involving the placing of öбTLS and ötı as main verb objects, combining an indefinite and a linking function. Four factors are central to the grammaticalization of ötı from indefinite relative pronoun to complementizer:
1) The position of relatives following the main clause, which creates phonological interference at the clausal interface, causing case indeterminacy. 2) The regularity of free relative constructions following main verbs of knowing, which include an indefinite pronoun functioning as a (focalized) interrogative conjunction ('to find out who had got away').
3) Loss of gender marking, which renders case ambiguous, so the complementizer may be interpreted as functioning in both clauses. The construction involves indirect questions depending on main verbs of speech ('say what you are thinking'), which are common in Homeric constructions.
4) A purely textually-deictic function for the indefinite pronoun in full complements. This requires a cognitive verb in the main, but not the subordinate, clause ('for I know well that you are all sick').

\section*{' \(\Omega\) s-complementation}

Complementation with \(\dot{\omega} s\) developed from Homeric adverbial clauses following cognitive and speech verbs ('know how' and 'tell how'), to a transitional stage of intransitive circumstantials, with indirect objects following speech verbs ('singing about Ares and Aphrodite, how they lay together'). These are the precursors of circumstantial completives with cognitive verbs and direct objects ('know \(\mathbf{x}\), how it is \(\mathrm{y}^{\prime}\) ), which are discussed in Chapter 6.

\section*{Chapter Sections}

1: Correlatives, relatives, and clause order

2: "Oбтts and ötı: from relatives to complements
2a: The position of relative clauses
(i): Correlatives, indefinite reference, and focalization
(ii): Subordinated relatives preceding the main verb

2b: Subordination and case attraction
2c: Free relatives and focalization
2d: Interrogation, indefinite reference, and focalization
2e: "Otı with free relatives in Homer
2f: From relatives to complements in Homer
2 g : Subordinating ő in Homer

3: Homeric ötı and main verb type

4: Complementation with \(\omega\)
4a: ' \(\Omega\) S in Homer
4 b : \(\Omega_{S}\) and circumstantial constructions

Summary: subordination in Homer with ötı and \(\dot{\omega}\)

\section*{1: Correlatives, relatives, and clause order}

As schematized in the Introduction, Figure 2, a structurally subordinated clause functions as complement to a phrasal head, and (in IE languages) is standardly to its right. A clause to the left of the phrasal projection is usually described as apposed to the structure, with a co-referential link, which may
be unmarked morphologically (in parataxis) or marked with grammatical words, in a relation of co-ordination ( \(\mu \epsilon \in \nu\)... \(\delta \dot{\epsilon}\) ) or of correlation (when the linking words have an intra-clausal as well as linking function). Much early
 \(\tau \epsilon ́ \omega s\), öтє ... то́тє), and the 'if ... then' construction may also be construed as forming a correlative group. \({ }^{4}\)

The early correlative type is exemplified by the IE generic relative, as \(R V\) 1.36.16 (cited by Kiparsky 1995: 156):
1) yó mártyah sísite áty aktúbhir, mánah sá ripúr iśata which mortal makes himself too sharp by night, [may] not us that trickster dominate.

The correlative elements may be identified with the PIE pronouns *yo- and *so-/to-, relative and demonstrative respectively, though they function here as determiners rather than pronouns. \({ }^{5}\)

The constituent structure of the early IE sentence appears not to have included structural subordination: Kiparsky (1995: 153) expresses the common view that 'The key difference [between PIE and Germanic] is that there were no complementizers, and therefore no CP , and no embedding.' There must have been a position to the left of the basic clause to which emphatic and interrogative elements could be preposed, but these, presumably, simply had scope over the basic clause, rather than serving a subordinating function. \({ }^{6}\)

It follows that correlatives have a semantic but not a structural link. While the semantic function of all relatives is the establishment of co-reference (Touratier 1980: 34), a subordinated relative has the additional property of

\footnotetext{
\({ }^{4}\) As noted by Matthews (1981: 239).
\({ }^{5}\) Determiners are here described, following Quirk et al. (1985) and Lyons (1977) as the class of words, including articles and demonstratives, which restrict the reference of nouns. For discussions of their functions in NPs, see Lyons (1977: 452-455) and Horrocks and Stavrou (1987: 100-101).
\({ }^{6}\) Perhaps as a Focus Phrase: see Introduction, footnote 27. Further discussion of IE relativization, and bibliography, may be found in the monograph by Kurzová (1981). The situation in Vedic is examined most fully by Hettrich (1989: 467-790), and a cross-linguistic comparison of correlative constructions is undertaken by Downing (1973).
}
supplying a variable which identifies the head. \({ }^{7}\) Though, as noted in the Introduction, a complement can theoretically be to the left of its head, the presence of correlative elements in almost all main clauses which have a preceding relative clause suggests that Homeric and Classical Greek were right-branching. The development of subordinated constructions therefore requires a change in clausal position, from preceding to following the main clause. \({ }^{8}\) While correlation does not involve only subordinates which precede the main, even in the IE type (Gonda 1954a: 40-41), the majority do; and, conversely, subordinated relatives always follow a head in the main clause.

This may affect intra-clausal word order: while a subordinated relative may follow any main clause nominal, there is a cognitive advantage if the relative follows the whole main clause, so avoiding centre-embedding (the man who mistook his wife for a hat suffered from prosopagnosia). \({ }^{9}\) The relative clause will be to the right of whole clause, if it modifies either the main verb object in a VO clause, or the subject of a VS construction. \({ }^{10}\)

Head-relative adjacency has phonological effects which may be described as 'agreement attraction', discussed below in Section 2b. In Section 2c, this feature is linked to focalization, through the free relative construction, which is interpreted as the precursor of ötı-complementation.

\section*{2: "Oбtıs and ötı: from relatives to complements}

\section*{2a: The position of relative clauses}

The greater ease of parsing a relative clause which follows the main verb is reflected in its typical position in Ancient Greek: Dunn (1988: 69) notes that, in Herodotus 1, relative clauses follow their main verb with a frequency of

\footnotetext{
\({ }^{7}\) Both explicative (appositive, or non-restrictive) relatives and determinative (restrictive) ones have comparable syntactic structure: see Keenan (1985: 169).
\({ }^{8}\) See Porzig (1923), Benveniste (1954), Chantraine (1963: 236), Haudry (1973), and Lehmann (1974).
\({ }^{9}\) As noted in Chapter 2, Section B5a, these constructions are difficult to process.
\({ }^{10}\) The consequent motivation for VO rather than OV has been noted in Chapter 4, Section 6, and is discussed in Chapter 6, Section 4b, and Chapter 7, Section 2c. Motivation for VS rather than SV is equally plausible.
}
\(79.3 \%\), and Friedrich (1975: 19) observes that \(92 \%\) of relatives of a sample from the Iliad and \(97 \%\) from the Odyssey follow their main verb. \({ }^{11}\)

The textual corpus studied here also shows a preponderance of relative clauses following the main verb, as schematized in Table 1:
\begin{tabular}{|l|l|ll|l|}
\hline & Preceding & \multicolumn{2}{|l|}{ Following } & Following an NP \\
\hline Iliad 9 & 8 & \(69 \quad(=90 \%)\) & \\
\hline Odyssey 9 & 1 & 34 & \((=97 \%)\) & \\
\hline Septem & 4 & 23 & \((=77 \%)\) & 3 \\
\hline Agamemnon & 14 & 17 & \((=55 \%)\) & \\
\hline Choephoroi & 6 & 14 & \((=70 \%)\) & \\
\hline Eumenides & 4 & \(25 \quad(=86 \%)\) & \\
\hline OT. & 28 & 94 & \((=72 \%)\) & 8 \\
\hline Medea & 16 & 63 & \((=75 \%)\) & 5 \\
\hline Cyclops & 4 & \(21 \quad(=66 \%)\) & 7 \\
\hline Frogs & 2 & \(77 \quad(=94 \%)\) & 3 \\
\hline Melian Dialogue & 4 & 13 & \((=72 \%)\) & 1 \\
\hline Crito & 11 & \(46 \quad(=81 \%)\) & \\
\hline Totals & 102 & \(496 \quad(=83 \%)\) & 27 \\
\hline
\end{tabular}

Relatives preferentially follow the main verb in all the texts, with a higher proportion in Homer and Aristophanes than in tragedy or prose. The highest proportion of preceding relatives is in tragedy, most of all in Agamemnon (which in this respect appears more like early IE than does Homer). Relative clauses appear in five positions with respect to the main clause:
a) Preceding the main clause, in a correlative relation.
b) Following a main clause NP but preceding the main verb.
c) Following a main clause NP and the main verb. Some relatives in stichomythia follow a verb in a previous utterance, as at OT.1120:

(Oed.) Do you speak of this man? (Mess.) This one, whom you see.
d) A small number of relative clauses depend on NPs which are either in

\footnotetext{
\({ }^{11}\) Friedrich's sampling and definition are somewhat imprecise: he defines clauses as preposed or postposed without defining the terms, and his sample is of 254 unidentified relatives from the Iliad and 167 from the Odyssey. The correct percentages are given here, rather than the errors of the published version.
}
apposition to other phrases, or apostrophes, as Med.496:
 Oh right hand, which you often grasped ...
e) Free relatives following the main verb, without depending on an NP.

The semantic and phonological effects associated with these different positions are discussed in Sections 2a (i, ii) and 2b.

\section*{2a (i): Correlatives, indirect reference, and focalization}

A small number of preceding correlatives persist, in prose as well as tragedy, and are presumably motivated pragmatically (as are correlatives in modern languages). Aeschylus uses the correlative construction with indefinite reference, in general statements. This is the same function as in the IE-type correlative (though in tragic constructions the correlative markers are full pronouns rather than adjectives), as at Ag.501-2:
 aủtòs ф \(\rho \in \nu \omega ิ \nu\) картоîто тク̀v \(\dot{\alpha} \mu a \rho т i ́ a \nu\).
Whoever prays otherwise for this city
may he himself reap the error of his mind.

Eит.316-320:


нáptupes ỏp \(\theta a i ̀ ~ \tau o i ̂ \sigma \iota ~ \theta a \nu o v ̂ \sigma ı \nu ~\)
тараүгүvó \(\boldsymbol{\mu}\) val тра́кторєs aïцатоs
aủtต̣ \(\tau \epsilon \lambda \epsilon ́ \omega s ~ \epsilon ̇ \phi \alpha ́ \nu \eta \mu \epsilon \nu\).
but whoever, wandering like this man,
hides his bloody hands
standing by as true witnesses for the dead as blood avengers
to that one we appear in power.
and, with the Homeric relative tó, at Eum.336-9: \({ }^{12}\)
6) \(\quad\) vatติv тoîбıv aủtoupyíal
\(\xi \nu \mu \pi \epsilon ́ \sigma \omega \sigma \iota \nu \mu a ́ t a l o l\),
тoîs ó \(\mu \alpha \rho т \epsilon i ̂ \nu\), ő \(\phi \rho\) ' à \(\nu\)
रâv ímé \(\lambda \theta \underline{1} \cdot \theta a \nu \grave{̀ v} \delta^{\prime}\)
... of mankind, to whom there happen
wanton kin-murders
to pursue those, until he goes under the earth ...

The other authors, however, use correlation in constructions with specific reference, as at OT.68-9:


and which one remedy that I could find by careful searching, that I effected.
and, in a non-finite construction, at Thuc.5.98.5-6:
8) Őซol \(\gamma\) à \(\nu \hat{v} \nu ~ \mu \eta \delta \epsilon T \epsilon ́ \rho o l s ~ \xi ु \nu \mu a \chi o v ̂ \sigma \iota\), \(\pi \omega ิ s\) oủ \(\pi \circ \lambda \epsilon \mu \omega \dot{\omega} \sigma \epsilon \sigma \theta \epsilon\) aủtoús,
For who are now allies of neither,
how shall you not make enemies of them?

At Med.14-15, the main clause is a temporal correlative:
9) \(\quad \eta \pi \epsilon \rho \mu \in \gamma i ́ \sigma T \eta ~ \gamma i ́ \gamma \nu \in T a l ~ \sigma \omega T \eta \rho i ́ a, ~\)
öта⿱
This is the greatest security,
when a woman does not disagree with her husband.

It may be noted that the P1 element in the relative clause is always focalized, and that this is associated with indefinite reference in the relative clause: specific reference is established only with the main clause. The regular interclausal movement from the general to the specific may be marked by modal subordinate verbs, as at Crito 45d6:
 what a good and brave man would choose, take that ...

\footnotetext{
\({ }^{12}\) Monteil (1963: 23ff., 82ff.) describes the Homeric and Herodotean uses of relative tó.
}
and Crito 50e5-7:


and whatever we undertake to do to you, you think it right to retaliate to that?

The correlative remains significant as a rhetorical form into the fourth century. Its prosodic effect, of focalizing the relative pronoun, is analogous to the conditional pattern discussed in Chapter 4, Section 5a, and to the structure of preposed complements discussed in Chapter 7, Section 4a.

\section*{2a (ii): Subordinated relatives preceding the main verb}

Most relatives which precede a main verb follow a main clause NP, functioning as its complement (category ' \({ }^{\prime}\) ' above, p.174). As discussed in Chapter 4, Section \(2 b\) (iv), the head noun is focalized by the relative pronoun. There may sometimes be a main clause correlative element, as OT.449-451:



But I say to you: this man [ whom you have been seeking
threatening him and loudly proclaiming him as murderer of Laius,] this one is here.

The resumptive element here creates emphasis as well as clarity, after the extended relative clause. However, most relatives have no resumptive element (if the verb inflection is discounted). The head noun is usually the main verb subject, as Il.9.60-1:

є́ \(\xi \in i ́ \pi \omega\) каі̀ \(\pi \alpha ́ v \tau \alpha ~ \delta ı i ́ \xi\) о \(\mu a l\).
But come, \(\mathbf{I}\), who declare myself to be older than you, may I speak and go through the whole matter ...

Occasionally, the object is the head, as at Il.9.59-61:
14) \(\pi o ́ \lambda \lambda ’ ~ a ̉ \pi \epsilon \mu v \theta \epsilon o ́ \mu \eta \nu . ~ \sigma u ̀ ~ \delta e ̀ ~ \sigma ̣ ̣ ~ \mu \epsilon \gamma а \lambda \eta ́ т о \rho ı ~ \theta v \mu ̣ ̣ ~\)


.... but you, giving way to your proud heart's anger, dishonoured a great man, whom even the immortals honoured ...

The other type of relative which may (though rarely) precede the main verb is the 'free relative' construction, where there is no head noun. Kiparsky (1995: 157) cites two early IE constructions (RV 10.27 .11 and KUB XI IV 19ff.) where the relative precedes. Both have a loose syntactic relation with the main clause. The construction is regularly associated with aphorisms, as at \(B a\). \(881=901\), where the copula is (standardly) omitted: \({ }^{13}\)
ő tı ка入òv фí入ov à \(i ́\).
What [is] honourable [is] always precious

The same function may be seen in modern languages: 'qui dort, dîne'. \({ }^{14}\) In English, these constructions share a morphological feature with correlation, because they are always third person singular, so the verb inflection could be regarded as a correlative marker ('who dare- \(\mathrm{s}_{\mathbf{i}}\), win- \(\mathrm{s}_{\mathbf{i}}\) '): the construction is therefore similar to the IE-type generic correlative (as \(R V\) 1.36.16 in Section 1c, citation 1, above).

There are only four instances of preceding free relatives in the corpus, all with an initial focal element. \({ }^{15}\) In two constructions, focalization does not involve the relative pronoun, and the reference is consequently more specific. At Od.9.94-5, the relative is in P2, preceded by a focalized anaphoric pronoun:
16) T \(\omega \hat{\nu} \delta^{\circ}\) ös tıs \(\lambda \omega t o i ̂ o ~ \phi a ́ \gamma o l ~ \mu \epsilon \lambda ı \eta \delta e ́ a ~ k a \rho \pi o ́ v, ~\)

But of them, whoever ate the honey-sweet fruit of lotus, was no longer willing to take any message back or go away...

At Septem 1046, the adversative element rather than the relative pronoun is prosodically focalized:

But whom the city hates, you will honour with a tomb?
The third construction, at Med.453-4, seems to be purely appositional:
```

ä \delta' \epsiloṅs tupá\nuvovs \epsiloṅ\sigmatí \sigmaol \lambda\epsilon\lambda\epsilon\gamma\mu\epsilońva,
\pi\alphâ\nu к\epsilońр\deltaos \etaं\gammaov̂ \zetaॅ\eta\muьou\mu\epsilońv\eta фu\gammaற̣.

```

But (as for) what you said against the royal family, consider yourself lucky you have been punished with exile.

\footnotetext{
\({ }^{13}\) For the omission of the copula in tragedy, see Havelock (1978).
\({ }^{14}\) Cyrano de Bergerac, IV.1.
\({ }^{15}\) Constructions elsewhere in tragedy include E.Hipp. 191 and 193, Hel.822, Ba.515, IA.1014.
}

At OT.486, however, indefinite reference is marked by ö \(\tau \mathrm{T}\) in a construction involving speech and cognitive verbs:
\[
\text { .... ő } \tau \iota \lambda \epsilon ́ \xi \omega \delta^{\prime} \dot{\alpha} \pi о \rho \omega \hat{\omega}
\]
but what I can say I do not know

This last construction shows the close connection between indefinite reference and interrogation (discussed below, in Section 2d), which is clearer when the relative follows the main clause ('I am at a loss what to say'). The fact that almost all free relatives follow the main verb is particularly important to the development of complementation, because of the phonological and structural features of the clausal interface. These may be described in terms of case attraction.

\section*{2b: Subordination and case attraction}

The different orderings of relative and main clauses are aligned with different meanings: the IE-type correlative is indefinite because it precedes the head noun supplying the specific reference, and even those preceding correlatives with specific reference cited above in Section 2a (i) do not have their reference established until the appearance of the head in the main clause.

Subordination of relatives requires the correlative elements to be adjacent, so creating a tension between referential and relational marking (because casemarking is a syntactic marker, and so varies according to intra-clausal function, while markers for number and gender remain inter-clausally constant between co-referent elements). \({ }^{16}\)

Proximity, however, encourages phonological attraction of case marking, which occurs regularly in Homeric and Classical Greek. There are four possible permutations: either the head noun or the relative pronoun may be attracted to the case of the other, or the head may be omitted and the relative stand either in the case proper to the head, or to its own case (see Gonda 1954a, Chantraine 1963: 237-9). Though Gonda (1954a: 29) cites Greek constructions involving case attraction as demonstrating that the dependency of the ős-clause on the main is symptomatic of pragmatic prominence (rather

\footnotetext{
\({ }^{16}\) Failure of number agreement occurs in relatives at Il.11.367, 16.368-9, and Od.23.121, and of gender agreement in a coordinated construction at Il.11.237-9.
}
than being syntactically fixed), it will be shown that the patterns have a direct relationship with clause order, and prosodic prominence too. The types may be seen as forming a historical sequence, because the first requires the relative to precede the main verb, while the fourth, the free (headless) relative, almost always follows, and is semantically similar to complementation with ötı. The other three are first discussed briefly, to demonstrate the effect of clause order on focalization:
1) When the subordinate precedes, the antecedent typically takes the case of the relative, in 'inverse attraction'. This is the most common type in the Rigveda, \({ }^{17}\) in Homer (Gonda 1954a: 30, Chantraine 1963: 237), and in Old Latin (Vonlaufen 1974: 29), which suggests it may be an early form. It gives prominence to the relative clause, since antecedent and relative are both casemarked with respect to their function in the subordinate clause, as at Il.14.756:

є̈ \(\lambda \kappa \omega \mu \in \nu .\).
Let us drag those ships which are beached in the first line near the sea...
and Il.14. 371-2:

غ́ \(\sigma \sigma \alpha ́ \mu \in \nu o l ~ . . . ~\)
Putting on the shields which are best in all the army and biggest

Most instances, like those above, involve the attraction of the case of the main verb object to that of the relative. Adjacent subjects may also be attracted, as at Il.10.416-7:


Those guards which you ask of, hero,
there is no detail which protects the army and guards it

This last instance could be apposed, since there is a resumptive element (TLS) in the main clause. Havers (1926) analyses the construction as substituting for an emphatic nominative, while Gonda (1954a: 32n115) interprets it as thematic.

\footnotetext{
\({ }^{17}\) RV 6.74.2; 3.37.11; 5.30.15; and others cited by Gonda (1954a: 33).
}

In this type, the antecedent is isolated from the rest of the main clause, so its function as an argument of the main verb is less noticeable. An antecedent may even be positioned inside the relative clause, as at Il.18.429-30, where \(\theta \epsilon a ́ \omega \nu\) might be expected, so ő \(\sigma a \downarrow\) appears to be a determiner in the NP öбal \(\theta \in a i\), and the construction is similar to the IE-type correlative: \({ }^{18}\)


Is there any of the goddesses who are on Olympus, who in her heart has endured such grim sorrows?

Inverse attraction creates phonological emphasis, because the case agreement constitutes homoioptoton, \({ }^{19}\) and its echoic pattern may be considered a form of focalization, which may also draw attention to the meaning of the words. \({ }^{20}\)
2) In the 'Attic' type, the relative pronoun is attracted to the case of the head NP, as OC 334:

(I came) with the one true servant that I had.
and X. An.1.7,3:
25) Őт so you will be men worthy of the freedom which you possess \({ }^{21}\)

Here, there is a similar phonological effect to type 1, as Havers (1931: 72) observes. Although antecedents do not always precede immediately (Gonda 1954a: 29), the relative clause always follows the main verb. The syntactic effect is to integrate the relative clause in the structure of the main, with a clearer adjectival function. Such constructions do not exist in Homer, but non-
\({ }^{18}\) Chantraine (1963: 238) and Gonda (1954a: 21) differ on whether this should be termed inverse attraction, because Gonda thinks it represents a single prosodic constituent unified by the pronoun. Sihler (1995: 396) notes that the placing of the antecedent in the relative clause is also typical of Hittite and Tocharian.
\({ }^{19}\) See Rhetorica ad Herennium IV.xx. 28 and Quintilian, Institutio IX.iii.77-80.
\({ }^{20}\) Cf. Pope, An Essay on Criticism 365: ‘The Sound must seem an Eccho to the Sense.' See also Jakobson (1987: 86ff.) on paronomasia and 'the internal nexus between sound and meaning'.
\({ }^{21}\) These constructions are cited by Kühner (1904: 407).
finite analogues do, and Chantraine (1963: 237) and Gonda (1954a: 25)
categorise them as attraction, as at Il.1.262-3: \({ }^{22}\)


For I never yet have seen nor shall see again
such men as Peirithoos, and Dryas, shepherd of the people
A different effect is created if the 'antecedent' noun is positioned within the relative clause, as the noun at Xen.An.1.9.14:

He made them rulers of the land he subdued
The great inter-clausal integration of this construction is described by Gonda (1954a: 29) as 'Verschmelzung' (melting). It should not really be considered as attraction, because it does not involve adjacency, and its effect depends rather upon constituent recognition than on phonetic similarity. It is very similar to the intra-clausal tmesis discussed in Chapter 3, and Gonda (1954a: 29) categorizes a tmetic construction at S.El.762-3 as Attic attraction, though it is not subordinated to a verb, but is in apposition to an adjective (and here homoioptoton is reinforced by very strong assonance throughout):

> ... piteous, but for those seeing it, as I saw it,
> the greatest of all evils I have seen.

Attraction with the antecedent positioned in the subordinate clause may reflect the earlier function of the relative as a determiner rather than a full pronoun (Section 1b above), though the dependent clause is here in modifier position within the NP.
3) The relative clause normally follows the main also in constructions where the relative has its case assigned with respect to the main clause, but the head noun is omitted, as at S.El.1048. This is similar to type 2 in functioning in the main clause, but differs in that the relative functions as a full pronoun, so is properly ellipsis rather than attraction:

You seem to hear nothing of what I say. \({ }^{23}\)

\footnotetext{
\({ }^{22}\) Similar constructions occur at Od.9.322, 9.325, 10.113, 10.167, 11.25, and 19.233.
}

The construction highlights the governing relations in the main clause, and (in this construction) the assonance in the subordinate.

The similarity between types 2 and 3 is that the main clause case is realized because it precedes, so cohesion in the main clause varies according to clause order with respect to the main verb. Although a true relative modifies a nominal head, so having no direct connection with the main verb, phonological factors encourage a movement from correlative to modifying elements when the subordinate clause follows the main verb.

A different effect is created by a fourth type of attraction, where the relative pronoun retains its proper case in the subordinate clause, despite the absence of a head noun, so the subordinate clause is more prominent. As with type 3, this is a form of ellipsis, so draws attention to what is not there, and therefore to the meaning of the matching clause, rather than its phonology. This is discussed in the next section.

\section*{2c: Free relatives and focalization}

The 'free relative', where the relative stands in its proper case (with respect to the subordinate clause), without a head word in the main clause, appears to be central to the development of subordination, for a number of reasons:
i) The structure occurs regularly, in contrast with the other types of attraction.
ii) The subordinate clause almost always follows the main clause.
iii) The syntax retains the syntactic integrity of the subordinate, rather than the main, clause, yet the subordinate follows main clauses without correlative elements, so the relative has a semantic function in the main clause.
iv) The construction has a regular association with the same types of verbs on which complement clauses depend.
v) The pronouns are indefinite. This is interpreted as a transitional stage between exophorically-referring relatives and textually-deictic complement conjunctions.
vi) Indefinite affixes function as cohesive focalizers, making the pronoun more prominent.

\footnotetext{
\({ }^{23}\) See also S.Phil.1227, Demosthenes 37.2, and other constructions cited by Kühner (1904: 408).
}

In tragedy, the pronoun almost always stands for the main clause object, though an instance of subject function occurs at Septem 452 (and it may be noted that this encourages VS order in the main clause):

May he perish, he who boasts greatly against the city.

The characteristic feature of a free relative functioning as object is dependence on a cognitive verb (of perception or judgment). The construction may therefore be analysed as an 'indirect question'. \({ }^{24}\) The pronouns always have generic reference, marked by epic \(\tau \epsilon,-\tau \iota S\), or \(\kappa \epsilon\), as at \(I l .2 .365-6\) :


Then you will see which of your leaders is bad, and which of your people, and which also are brave...

Il.21.609-10:


... to wait for each other and find out which one had got away and who had died in the battle...
and Od.3.184-5:
33)
\begin{tabular}{|c|c|}
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{\begin{tabular}{l}
oủס́́ Tl oỉ oía \\
 .... and I knew nothing of those Achaians, which had survived, which had perished.
\end{tabular}}} \\
\hline & \\
\hline
\end{tabular}

There are also 12 similar indirect questions with öбtıs following cognitive verbs, \({ }^{25}\) and only one following a speech verb, at Od.10.109-10:


My men stood by her and talked with her, and asked her who was king of these people and who was lord over them.

\footnotetext{
\({ }^{24}\) This may be defined as indirect speech or thought with an interrogative or relative pronoun, but no head noun.
\({ }^{25}\) At Il.3.167, 3.192, 11.219, 14.509, 16.424, 20.363, Od.4.380=423=469, 4.552, 8.28, 9.331-2. There are therefore 16 construction in Homer, as against 51 constructions with other verbs \((=31 \%)\).
}

The reason for the rarity of dependence on a speech verb in Homer is not only that indirect speech is uncommon in epic, because, as shown in Chapter 7, it is uncommon in tragedy too: as is argued in Chapter 6, speech verbs could not take animate direct objects, but cognitive verbs could ('know him'). \({ }^{26}\) Though the pronouns are masculine, their function with respect to the main verb is like that of an object. However, it will be shown below, in Section 2 f , that constructions with speech verbs and neuter pronouns are quite common in Homer, and their use represents a further stage in the development of the relative pronoun from a referring expression to a textual deictic ('say what...' to 'say that...').

\section*{2d: Interrogation, indefinite reference, and focalization}

A semantic connection between indefinite and interrogative pronouns is noted by Dover (1960: 12), Monteil (1963: 150, 154), and by Lyons (1977: 7612), who points out that an interrogative with tis presupposes the truth of an indefinite statement with \(\tau \iota s .{ }^{27}\) The semantic link is reflected lexically: Sihler (1995: 396-7) observes that the PIE stem \({ }^{*} k^{w}\) - has indefinite and interrogative function in every IE branch, while its relative function was usually lost, and speculates that the link between relative and interrogative might be that \({ }^{*} k^{w_{-}}\) was a focus marker. \({ }^{28}\)

The functional parallel drawn here between \(\tau i s\) and 'epic' \(\tau \epsilon\) is supported by the analysis of Ruijgh (1971: 9), who notes that epic \(\tau \epsilon\) is regularly associated with digressive, non-restrictive, relatives (after ős, \(\delta\), ö \(\theta \mathrm{l}\), ő \(\theta \in \nu\), öт \(\tau\), oios, \(\omega \dot{\omega}\) ) and co-ordinated clauses (after \(\delta \dot{\epsilon}, \dot{\alpha} \tau \alpha ́ \rho, \gamma \dot{\alpha} \rho, \mu \epsilon ́ \nu, \kappa \alpha i ́, \alpha \dot{\alpha} \lambda \lambda \alpha ́)\). It is central to his definition of the function of epic \(\tau \in\) as 'digressif-permanent' that it has a linking function and that it marks non-specific reference. \({ }^{29}\)

\footnotetext{
\({ }^{26}\) Jussives are analysed differently, with a semantically indirect object.
\({ }^{27}\) See also Monteil (1963: 65), Ruijgh (1971: 310), and Biraud (1985: 162). Indefinite reference appears to involve the loss of a causal connection between clauses: as Kiparsky and Kiparsky (1970: 167) note, there is a connection between truth (and factivity) and specific reference. \({ }^{28}\) A view anticipated by Delbrück (1897: 511ff.), who considered that, following a pronoun, \({ }^{*} k^{w_{e}}\) always had an emphatic function, linked to indefiniteness, which was prior to a connective function (see also Bernert 1940: 78).
\({ }^{29}\) The view of Sihler (1995: 401) that \(-\tau \epsilon\) is added to relative pronouns 'without any apparent change in meaning' is not, therefore, followed here. On the meaning of epic \(\tau \epsilon\), see also Bäumlein (1861: 227-235), and Gonda (1954b), who analyses it as digressive.
}

There may be an etymological connection too: though Gonda (1954b: 181) considered that the similarity of \({ }^{*} k^{w} e\) and the indefinite interrogative adjective \({ }^{*} k^{w_{O}}{ }^{-} *^{*} k^{w^{w}}\) - is mere 'phonetic coincidence', \(\tau \backslash S\) and \(\tau \epsilon\) may be, as Sihler (1995: 160) suggests, 'perhaps ultimately related' etymologically. \({ }^{30}\)

The difference between definite and indefinite reference parallels that between anaphora and textual deixis: as noted by Ehlich (1982), when pronouns are used phorically, their function is to sustain the listener's focus of attention, whereas deictic use alters the focus. The phonological effect of both indefinite reference markers therefore accords with the description of the P1>P2 sequence described in Chapter 4: the particle is prosodically in P2, focalizing the relative pronoun. \({ }^{31}\) The structure accompanying epic \(\tau \epsilon\) is shown in Fig. 1 (=Introduction, Fig. 6): \({ }^{32}\)

Figure 1


The object NP is included in the diagram to illustrate the function of ös as object of the main verb. The construction may be considered a circumstantial version of type 4 case attraction.

\footnotetext{
\({ }^{30} \mathrm{~T} \epsilon\) appears to be derived from the stem \({ }^{*} k^{w_{0-}}{ }^{*} k^{w_{\mathcal{C}}}\) : see Meillet (1898), Kühner (1904: 236, 241), Schwyzer (1950: 573ff.), Gonda (1954b), Monteil (1963: 109-111), and Ruijgh (1971).
\({ }^{31}\) For a discussion of the focal effect of \(\kappa \in\) and äv in indefinite clauses, see Howorth (1955).
\({ }^{32}\) The citation is from Il.21.609: 'To find out who had got away'.
}

The loss of gender marking creates the possibility of a completive interpretation. Focal ő \(\tau \in\) occurs in similar constructions following cognitive verbs at Il.5.331:

knowing her, that she was a god without warcraft
and Il.8.251:
 but when they saw the bird, that it had come from Zeus

Similar constructions occur at Il.17. 623, 17.626-7 and Il.1.411-2 (=16.273-4). All are indistinguishable from complements, though Monteil (1963: 263) notes they could be also interpreted either as relatives or temporals, and that only Il.5.331 (cited above) is clearly completive, because relative ő is excluded by the gender ( \(\theta \epsilon\) ós refers to Aphrodite). The use of neuter öтı in relative constructions is discussed in the next section.

A similar pattern occurs with \(\tau \iota 5\), as in Fig. 2 (=Introduction, Fig. 7): \({ }^{33}\)

Figure 2


The structural difference between this and the construction with epic \(\tau \epsilon\) is that \(T I S\), being pronominal, is less likely to be in head position in the CP.

\footnotetext{
\({ }^{33}\) The citation is from Od.10.109-10: 'And they asked who was king of these people...'
}

However, the etymological and functional link between the two words, noted above, suggests that a semantic parallel may be drawn.

The connection between these functions and the forms -TIS and \(\tau \epsilon\) signifies, then, not only a semantic link with interrogation, but also the structural effect of cohesive focalization, which co-occurs with a contrastive feature: the intonation break between the relative pronoun and the main verb.

\section*{2e: "Otı with free relatives in Homer}

The grammaticalization process is encouraged by the loss of gender marking (which involves a further loss of referential specificity) with non-animate objects. \({ }^{34}\) Of the 128 Homeric constructions in which ötı appears, 39 are relatives or free relatives which have generic reference (see below in Section 2i). \({ }^{35}\) A few of these constructions depend on verbs of giving or taking, as at Il.15.109 (where the relative is adjectival):
 you must each take whatever evil he sends you.
and Od.18.112-3:
38) Zєús tol סoín, \(\xi \in i ̂ v \epsilon\), kaì à \(\theta a ́ v a t o l ~ \theta \epsilon o i ̀ ~ a ̈ \lambda \lambda o l, ~\)
 may Zeus and the other gods, stranger, give you whatever you want most and is dearest to your spirit.

However, most of the constructions depend on verbs of speech, as at Il.1.85:

Speak very boldly the prophecy that you know

Without a correlative, constructions with speech verbs constitute indirect questions, as Il.14.195=Od.5.89:
40) aűסa ő tı фроขヒ́ \(\epsilon\) เS \(\qquad\)
Say what you are thinking

\footnotetext{
 corresponding to the PIE *yot \(k^{w i d}\). See Monteil (1963: 247) and Sihler (1995: 400).
\({ }^{35}\) The function of mood in marking indefinite reference may also be noted. For references, see Chapter 7, Section 3a, n. 49.
}

The absence of gender marking, and consequently of case marking, facilitates the interpretation of the relative as functioning in either the main or the subordinate clause. In Fig. 3 (=Introduction, Fig. 8) the pronoun can be interpreted as accusative in both:

Figure 3


The high frequency of speech verbs with relative őtтı extends even to the verb in subordinate clauses which depend on main verbs of other classes. There is an evident metrical component \((|-\mathrm{v} v|--| |)\) in the frequency of öтtí \(\kappa \in \nu \in \ell \not \pi \omega\) and its variants at the line end, as at \(I l \cdot 1 \cdot 294=14 \cdot 190=O d \cdot 1 \cdot 158=1.389\) :

if I must carry out every order which you might say

It is significant that either the main or subordinate clause may contain a speech verb, and sometimes both do, as at Od.8.548-550:



do not keep hiding now with crafty purposes
what I ask you. It is better to speak .
Tell me the name which your mother and father called you there...

This pattern shows that the linking element is properly the object of both verbs. The subordinate at Od.8.550 above is the only definite Homeric relative with ötтı (it may be influenced by the use of the same pronoun with indefinite reference in the previous line, at 549).

Explicit main verb objects are common with relative öтtı, occurring in 14 out of the 32 constructions. However, reference appears no more specific: there seems little difference between its reference at Od.19.378:

But come, listen to whatever word I speak.
and at \(O d \cdot 2 \cdot 25=2.161=2.229=24.454\) :

Hear now, Ithacans, whatever I tell you.

Failure of number agreement occurs occasionally, always accompanied by a subjunctive verb, and involving neuter relatives. It is not a sign of a complement, because it occurs in relatives at Od.18.142 and at Il.10.207-208:

ä \(\sigma \sigma \alpha\) Tє \(\mu \eta \tau \iota o ́ \omega \sigma \iota \quad \mu \epsilon T \grave{\alpha} \sigma \phi i ́ \sigma \iota \nu, \eta \geqslant \mu \epsilon \mu a ́ a \sigma \iota \nu\)
or he might learn some report of the Trojans,
what they deliberate among themselves, ...

\section*{2f: From relatives to complements in Homer}

Free relatives are associated with verbs of speech and thought, which frequently both appear in the same construction. The semantic significance of speech verbs is that their reference can combine exophoric and textual features: in 'hear what I say', the referent is also the linguistic object itself, even when there is a correlative pronoun, as at Il.1.294:

if I must accept every point which you might say

If the pronoun expresses the subordinate subject, the subordinate is semantically closer to a complement, because the pronoun then has scope over the whole clause, as at Od.9.402:
 and standing about the cave they asked what troubled him.

The similarity with complementation stems from a structural ambiguity: a transitive complement clause does not have a referential gap as a relative does (the place that \(\mathrm{I}_{\mathrm{i}}\) know -i ), but a relative subject would, if it existed, have a position indistinguishable from that of the relative pronoun, so it is not clear that any element has moved (the man that \({ }_{\mathrm{i}}-{ }_{\mathrm{i}}\) broke the bank at Monte Carlo), \({ }^{36}\) and the subordinate clause appears formally more independent.

The key step to a completive is in the use of the neuter pronoun with a cognitive main, but not subordinate, verb (because then ötı cannot be interpreted as an argument). The structure of ötı-complementation is shown in Fig. 4 (=Introduction, Fig. 9). The CP is not now a site for elements preposed from the subordinate clause, so they now have only one \(\theta\)-role, as main verb object, and the structure is syntactically regular: \({ }^{37}\)

Figure 4


\footnotetext{
\({ }^{36}\) The point is that the co-referent positions are indistinguishable: Chomsky (1986: 48-54) defines this as 'vacuous movement'.
\({ }^{37}\) The citation is from OT.59-60: ' For I know well that you are all sick...'
}

\section*{2g: Subordinating ő in Homer}

Occasional Homeric relatives involving the definite pronominal ő also demonstrate inter-clausal focalization. \({ }^{38}\) Some have a specifying function, and these have an intonation break before the pronominal, so the prosodic pattern is similar to the following conditionals discussed in Chapter 4. The absence of an indefinite marker in these constructions results in a weak inter-clausal bond: the semantic relation of the subordinate to the main clause is appositional, as at Od.1.382 \((=18.411=20.269)\) :
 they wondered at Telemachos, at the daring way he had spoken
and Od.21.289-90:
 Is it not enough that you dine in peace among us arrogant people

However, after cognitive verbs, the conjunctive meaning is stronger, because the pronoun is focalized by P2 pronouns. It may be interpreted as having an adverbial force ('how' rather than 'that'), as at Od.17.545:

do you not see how my son sneezed for everything I have spoken?
and Il.15.248:
 oüs モ́Tápous ò \(\lambda \epsilon ́ к о \nu \tau \alpha\) ßoŋ̀v ả \(\gamma \alpha \theta\) òs ßá \(\lambda \epsilon \nu\) Aỉas did you not know how, by the Achaians' grounded ships, Aias of the great war cry struck me as I killed his companions...

A number have pronominal main verb direct or indirect objects (never adjacent to the relative pronoun), as at \(I l .8\). 362:
52) ởठ́́ Tı Tต̂v \(\mu \epsilon ́ \mu \nu \eta \tau \alpha \iota\), ỏ oi \(\mu a ́ \lambda a ~ \pi о \lambda \lambda a ́ k ı s ~ v i o ̀ v ~\)

тєเро́ \(\mu \in \nu \circ \nu \quad \sigma \omega ́ \in \sigma \kappa о \nu\) ím' EủpuбӨŋ̂os ả́ \(\theta \lambda \omega \nu\).
he does not remember that I often protected his son
when the tasks of Eurystheus were too much for his strength

\footnotetext{
\({ }^{38}\) Monteil (1963: 77-78) cites 24 instances in Homer. Delbrück (1900: 311-5) derives ö from the correlative pronoun *so-/to-, while Chantraine (1963: 166) identifies it with both the article and the demonstrative pronoun.
}

Il.9.493:
 thinking that/how the gods would not bring to birth any children ...
and \(I l .20 .466=O d .3 .146\) :
 ... and did not see that there would be no way to persuade him

These are very similar to constructions with ötı. The presence of the ethic datives is particularly revealing: whatever their pragmatic function, they have the prosodic effect of identifying ő as in P1, and so of focalizing it.

\section*{3: Homeric ötı and main verb type}

As noted for relative constructions with case attraction, the local phonological effects at the inter-clausal link are also dependent on clause order (main first) and syntactic relations: principally the transitivity of the main verb. It is argued here that the 'indirect question' with verbs of speech is central to the development of complement structure.

The types of verbs involved in Homeric subordinate clauses introduced by őtı are collated below. There are 128 constructions with ötı, \({ }^{39}\) including 41 so spelt in the Oxford texts, together with 72 instances of the variant öTTı, \({ }^{40}\) and 15 of oo \(\tau \iota .{ }^{41}\) The constructions are schematized according to the type of main

\footnotetext{
\({ }^{39}\) The constructions are cited in Appendix 3A.
\({ }^{40}\) Sihler (1995: 400) derives Homeric öтtı from the same PIE stem ( \({ }^{*}\) yot \(k^{w}\) id) as öть.
\({ }^{41}\) Monteil (1963: 254) notes that the graphological difference between ő \(\tau L\) and ő \(\tau\llcorner\) 'ne repose en fait sur aucune tradition ancienne.'
}
verb they follow, in Table 2 : \(^{42}\)
\begin{tabular}{|c|c|c|c|c|}
\hline Main Verb & Öтı & ÖtTı & Ö TL & TOTALS \\
\hline Emotion & 13 & 11 & 0 & 24 \\
\hline Cognitive (perception or judgment) & 14 & 11 (6 relative, including 5 with sub. speech vbs.) & \begin{tabular}{l}
1 (relative: \\
Il.10.503)
\end{tabular} & 26 \\
\hline Speech & 2 (Od.16.131, \& Il.17.641-2, dep. on speech noun) & 12 (6 relative, including 4 with sub. speech vbs.) & 6 (4 relative, all with sub. cog. vbs.) & 20 \\
\hline Other verbs, (relative öть) & & 20 (including 8 with sub. speech vbs.) & 8 (inc. 2 with sub. cog. vbs.) & 28 \\
\hline Other verbs, (ÖTL causal 'because') & 12 & 5 & & 17 \\
\hline Other verbs, (adverbial öтı) & & \[
\begin{array}{|ll|}
\hline 10 \\
\text { (öTTı TóxıOTa) } \\
\hline
\end{array}
\] & & 10 \\
\hline Dependent on an adjective & & 3 & & 3 \\
\hline TOTALS & 41 & 72 & 15 & 128 \\
\hline
\end{tabular}

Three principal features may be noted:
i) 53 out of 128 constructions ( \(=41 \%\) ) are completive, 24 following verbs of feeling, 19 following cognitive verbs, and 10 following speech verbs (or the noun \(\dot{a} \gamma \gamma \in \lambda i ́ \eta s)\).
ii) 39 out of 128 constructions \((=30 \%)\) are relatives or free relatives.
iii) If relatives are included, 20 constructions depend on speech verbs, and in 17 of the relative constructions, the relative clause itself contains a speech verb. There is therefore a stronger connection between relatives and speech verbs than of any other type.

It has been proposed that subordination with verbs of emotion is the precursor of true complements, either because these verbs take causal completives (Chantraine 1963), or because the subordinate clause is a specifying substantival, in an appositive relation (Monteil 1963). Chantraine

\footnotetext{
\({ }^{42}\) As the constructions include completives and relatives, and are listed by verb type and variant pronouns, the data-set and analysis differ from Monteil (1963: 399ff.), where 36 constructions are categorized as substantival, and between 19 and 31 as causal conjunctions.
}
（1963：288－299）believes that declaratives following verbs of thought，speech， or perception are derived from causal completives following verbs of feeling， as Od．19．247－8：
55）


Odysseus prized him above his other companions，in that their thoughts were in harmony．

Monteil（1963：248）agrees，though categorizing the structure as substantival． He interprets a construction at \(I l .14 .406-7=22.291-2\) in the same way：
\[
\begin{align*}
& \text {.............. } \chi \text { б́бато } \delta \text { ' "Ект } \omega \rho
\end{align*}
\]
\[
\begin{aligned}
& \text { and Hektor was angered that his swift weapon had been loosed } \\
& \text { from his hand in vain. }
\end{aligned}
\]

This would also be a causal completive in Chantraine＇s terms，and Monteil considers that＇il est hors de doute que la subordinée tout entière sert de regime au verb principal：＂Hector s＇irrita du fait que son trait avait vainement quitté sa main．＂\({ }^{\prime 43}\) The key factor here is the main verb，because substantivals following other types of verb are not complements，as the causal construction at Il．9．75－7：
57）
．．．．．．\(\mu a ́ \lambda a\) ठè x \(\rho \in \grave{\omega}\) mávtas＇A Axaloùs

кaíovalv mupà mo入入á•．．．．．．
for there is great need for all the Achaians of good close［counsel］，
in that close to the ships the enemy burn many fires．
However，the substantival function appears less central to the development of complementation than does the completive：as the figures in Table 1 show，all but 20 of the non－relative subordinating constructions in Homer are completives following emotional，cognitive，or speech verbs．

The view that the earliest completives are those dependent on verbs of emotion is not borne out by the Homeric ötı－constructions：although there are rather more completives which follow verbs of emotion than of any other single type，there is a strong association of ötı with speech verbs，even in

\footnotetext{
\({ }^{43}\) Monteil（1963：249）derives his interpretation from the＇Substantivsätzen＇of Kühner（1904： 354－377）and Schwyzer（1950：645）．Monteil（1963：257）identifies the substantival function of Öтし with that of an adjectival article，following Benveniste（1954：188－192）．
}

Homer, as shown at (iii) above. The common presence of speech verbs in the subordinate clause, as well as the main, shows that the transitivity of both main and subordinate verbs is crucial: relative őtı usually functions as object in both clauses. The observation of Monteil (1963, 249-250) that 'La prééminence des verbes "de pensée" sur ceux "de déclaration" continue à se manifester après Homère et jusqu'à la fin du ve siècle' may be valid for complements, but not for all indirect questions.

There is, on the other hand, no evidence that causal completives following verbs of emotion are earlier than the others: extant constructions are contemporary with, not earlier than, completives following cognitive and speech verbs. The consequence is that the pronominal meaning of ötı may well precede its causal meaning ('because'), \({ }^{44}\) and the causal sense could derive from causal constructions with reporting verbs. The meaning is ambiguous in constructions such as Il.10.503:

But he waited, divided as to what more daring he might do
and Il.14.220-1:
59)

Nor do I say that you are going unsuccessfully in whatever you desire.

In the analysis of Monteil (1963) these constructions would be substantivals, but it is significant that both involve a verb of thought or speech, even if that is not the governing verb. Conversely, indirect questions dependent on speech verbs quite often contain verbs of emotion in the subordinate clause, as at Od.8.577:

Tell me why you weep/what you bemoan
and Il.1.64:

Who can tell why Phoibos Apollo is so angry/what Phoibos Apollo is angered about

\footnotetext{
\({ }^{44}\) This view is also held by Cristofaro (1998: 72). The high level of causal ötı in Euripides supports it: see Chap. 7, Section 2b (iii). It may be noted that English 'because' is also substantival in origin, originally focalized: 'by cause that' (OED Vol. 1: 746).
}

It appears, then, futile to attempt to establish primacy among the verb types: verbs of thought, speech, and emotion are approximately equally involved. However, their regular appearance in both the subordinate and the main clauses shows that it is the transitivity of the verbs rather than a substantival clause function or a causal interpretation of the pronoun which is central. The importance of free relatives in the development of ötı-complementation depends on the pronominal rather than the causal sense of ÖTl, though, as Monteil (1963: 251) notes, both are involved with verbs of emotion, which are 'verbes exprimant un procès dont l'objet est de toute façon la cause' (and as noted in fn. 44, 'because' may derive from a focalized substantial).

\section*{4: Complementation with \(\dot{\omega}\)}

\section*{4a: ' \(\Omega S\) in Homer}

The principal syntactic difference of \(\omega\) s-complements from those with ött is a closer connection with verbs of thought, partly because \(\dot{\omega}\) does not introduce relative clauses. However, is appears after speech verbs too.

There are over 2,000 instances of is in Homer, most either with adverbial meaning, or as a textually deictic link, especially after a speech. Completive, causal, and interrogative uses of \(\dot{\omega} s\) analogous to those of ötı may be identified. \({ }^{45}\)

Completive constructions are more common than are substantival: Monteil (1963: 355) considers there to be only one sure substantival construction, at Il.17.450=Od.2.312:

[Is] it not enough that he has the armour and so exults in it?

As this sort of construction is so rare in Homer, it may, in fact, not be early. A few constructions appear with ötı and the same predicator (ä入ıs), as Il.23.670:

[Is] it not enough that I am lacking in battle skills?

Similar appositive constructions, where the subordinate clause expresses the subject (formally, the complement of an unexpressed copula), become more

\footnotetext{
\({ }^{45}\) As Riemann and Goelzer (1897: 497-499) and Monteil (1963: 351-364).
}
common in Aristophanes, Plato and Aristotle, as in the use of \(\delta \hat{\eta} \lambda o v\) noted in Chapter 7, Section 3a. A minimal main clause frame is more characteristic of late than emerging complementation.

Completives, though more frequent, are much less common in Homer than those with ötı. Monteil (1963:354) cites 16 instances of \(\dot{\omega}\)-completives following cognitive or speech verbs ( 7 and 9 respectively), and 5 of completives following verbs of emotion (in view of their rarity, his argument that these last are forerunners of the substantival category is therefore even weaker than for constructions with ötı). The low frequency of Homeric completive \(\omega\)-constructions is somewhat puzzling, as they became so common in tragedy (as discussed in Chapter 7).

\section*{4b: ' \(\Omega S\) and circumstantial constructions}

A clue to the origin of \(\dot{\omega}\)-complements may be seen in the difference of position according as the conjunction follows a cognitive or speech verb. ' \(\Omega_{S}\) normally follows directly after cognitive verbs, as Il.4.360:


for I know how the spirit in your secret heart
knows ideas of kindness only; for what you think is what I think.
Il.10.160:
65)

 do you not know how the Trojans at the break of the land are sitting close to our ships, and narrow ground holds them from us?
and Il.15.204:
 you know how the Furies forever side with the elder

However, after speech verbs, \(\omega\) s is typically line-initial, and generally does
not follow the verb immediately, as Od.4.376:


so I will tell, whoever you may be of the goddesses, how I am not detained of my free will

Od.8.75:
68) \(\nu \in i ̂ k o s ' O \delta v \sigma \sigma \eta ̂ o s ~ к a i ̀ ~ \Pi \eta \lambda \epsilon i ̂ ́ \delta \epsilon \omega ' A \chi ı \lambda \eta ̂ o s, ~\)


the quarrel between Odysseus and Achilles son of Peleus,
how these once contended, at the gods' generous festival, with words of violence, ...
and Od.8.266-9:


 \(\lambda \alpha ́ \theta p \underline{̣} \cdot .\).
Then he struck the lyre and began singing well about Ares and sweet-garlanded Aphrodite, how they first lay together in the house of Hephaistos secretly ...

There seems no metrical reason for this regular difference in position, and a structural motivation seems likely: that there are different origins for constructions with cognitive verbs and those with verbs of speech. The former involve indirect questions ('know how'), and the latter take intransitive circumstantials, with main verb prepositional phrases ('singing about Ares and Aphrodite, how they lay together'), where the objects delay the subordinate clause. This second type creates a focal link, comparable to that of the constructions with öбtıs and ötı described earlier in this chapter. This is discussed further in Chapter 7, Section 2a.

This aetiology is supported by rare Homeric constructions which Monteil (1963: 399) considers as the instrumental use of \(\dot{\omega},{ }^{46}\) as at Od.4.389-390. This may be interpreted as a transitive circumstantial, with an early use of a speech verb with a direct object:


... he could tell you the way and the length of the journey, and the homecoming, how you could venture on the fish-swarming sea.

\footnotetext{
\({ }^{46}\) Biraud (1985: 163) follows Monteil in considering that all non-substantival Homeric instances of \(\dot{\omega}\) (and öm \(\pi \omega\) ) may be interpreted as instrumental pronouns. On whether \(\dot{\omega}\) was originally instrumental or ablative, see Cristofaro (1998: 66, 85n4).
}

It is likely that adverbials following cognitive verbs and (with indirect objects) following speech verbs were both early forms, and that the development of complementation involved the transitive circumstantial construction following cognitive verbs, which could take a direct object ('know \(x\) as being \(y^{\prime}\) ). In Chapter 6, it is shown that direct objects are extremely common in tragic \(\omega_{s}\)-complements in tragedy, and that their placing accords with the function of \(\dot{\omega}\) s as a focal marker.

\section*{Summary: subordination in Homer with ö otı and \(\dot{\omega} s\)}

The discussion of ötı-clauses concentrated on two aspects of relative and completive subordination:
1) Clause order, leading to phonological effects at the clausal interface, involving a linking element functioning as a pronominal in one clause, as well as a conjunction in the other. The presence of a focalized verbal object creates a transitive circumstantial.
2) A change in the semantic class of object, from a referring expression to a textually-deictic word. The transition involved the use of indefinite pronouns, and reporting verbs, in both the main and subordinate clauses.

Complementation with \(\omega\) s has a different origin, from adverbial clauses: either directly following cognitive verbs, or in circumstantials with indirect objects following speech verbs.

In circumstantial constructions, the subordinate clause has an adverbial rather than substantival function. The central factor is the transitivity of the verbs, which is central to the development, not only of finite complements with ötı and \(\dot{\omega}\), but also of non-finite complements (discussed in Chapter 6, Section 1d). The changes in transitivity of reporting verbs during the epoch covered by the Homeric and tragic texts are considered in the next chapter.

\section*{Chapter 6}

\section*{Complementation: verb transitivity and focalization}

\section*{Summary}

In Chapter 5, öTı-complementation was discussed in terms of clause order and the resultant phonetic features. The prominence of the inter-clausal link was interpreted as a focalized object in Homeric free relatives with öбTls following cognitive verbs and öтı following speech verbs. \(\Omega_{S}\)-completives were described as adverbials following cognitive verbs, or circumstantial-like constructions following speech verbs.

In this chapter, focalization of the object is considered from the point of view of main verb transitivity. The development of \(\dot{\omega} s\) as complementizer is not, as with öтl, the grammaticalization of a referring expression, but a change of grammatical function from an adverbial to a completive. The process involves the regular presence of explicit main verb objects, again creating a circumstantial structure. Two aspects of the change of function of these objects, from referring expressions to textually-deictic markers, are discussed:
1) The influence of non-finite on finite complementation. The key constructions appear to be circumstantial participials: accusative and infinitive (henceforth AI) constructions appear peripheral to the development of finite complements.
2) The presence of a focal main verb object in the majority of \(\dot{s}\)-completives in the tragic texts of the corpus. These constitute a structure comparable to that of ötl-complements.
i) In the early type, the objects are proleptic referring expressions. Their rarity following speech verbs is explained by restrictions on transitivity: \({ }^{1}\) such verbs do not take referring expressions as (semantically) direct objects (*'say them').
ii) In tragedy, textually-deictic elements regularly precede \(\omega s\) : these are occasionally nouns explicitly naming 'these words', but more commonly the anticipatory demonstratives тóठє or Tád \(\epsilon\).

\footnotetext{
\({ }^{1}\) Standardly termed 'selection restrictions'. See Katz and Fodor (1963), Chomsky (1965: 113ff., 1981, 1986), and Jackendoff (1983).
}

This analysis shows how finite complementation may have developed by an expansion in verb transitivity, and provides a new interpretation of prolepsis.

In Section 5, the hypothesis of focal linking is put under test by examining possible counter-examples. As noted in the Introduction, Section 3, it is predicted that there is no initial emphatic position in subordinate clauses which follow their main, and that preposed elements function syntactically within the main clause. An examination is made of constructions in which the focal element in a subordinate clause does not function as main verb object. It is concluded that these structures do not invalidate the hypothesis.

\section*{Chapter Sections}

1: Complements and main verb transitivity
1a: Definition of complementation
1 b : Transitivity of the introductory verbs
1c: Transitivity and factivity
1d: Non-finite complements
1d (i): Participial complements
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2: Animate objects in finite complementation
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4: Textual objects in \(\dot{s}\)-complementation
4a: Pleonastic objects
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5: Testing the hypothesis of focal linking
Summary: focus, transitivity and speech verbs

\section*{1: Complements and main verb transitivity}

\section*{1a: Formal definitions of complementation \({ }^{2}\)}

As discussed in Chapter 5, complements may be defined as completives or substantivals. The first category concentrates on the relationship of the subordinate clause to the main verb, as 'the syntactic situation that arises when a notional sentence or predication is an argument of a predicate ... [and in particular]... if it functions as the subject or object of that predicate \({ }^{\prime}\) (Noonan 1985: 42). This is equivalent to the traditional definition of completives as propositions which are logically the subject or complement of a main verb (Meillet and Vendryes 1927: 661, Riemann and Goelzer 1897: 449). Chantraine (1963: 288) gives a more cautious definition, describing completives as propositions which 'énoncent une notion indispensible à l'expression du verbe principale'.

The substantival criterion is used by Kühner (1904: 348-377), who categorizes Substantivsätzen in terms of their nominal function. This definition concentrates on the meaning of the complementizer as 'the fact', rather than its subordinating role, and is not tied to particular classes of main verb, so is closer to a specifying meaning ('in that'). This approach is adopted by Schwyzer (1950), Monteil (1963), and Lehmann (1984: 153-156). The substantival category is independent of the meaning of the main verb, but models the pattern of focalization: emphasis is regularly associated with specificity, as in demonstratives (see Chapter 4, Section 4b).

It was argued in Chapter 5 that the completive categorization gives the best description of the development of the form. However, neither category explains the semantic types of complement-introducing main verbs, or their modality and factivity. \({ }^{3}\) Functionally, they do not distinguish indirect speech and rhetorical use. Nor do they explain why so many pronominals and adverbials are used as complementizers. In this chapter, the dependence of complements on particular types of verbs, and the high frequency of explicit main verb objects, are examined in terms of their grammatical relations.

\footnotetext{
\({ }^{2}\) There have been no formal syntactic studies of finite CG complementation: generative studies of classical complementation (Lakoff 1968, Lightfoot 1971, Quicoli 1982) have all concentrated on the AI construction.
\({ }^{3}\) Factive verbs presuppose the truth of their clausal complements. See Section 1c below.
}

\section*{1b: Transitivity of the introductory verbs}

The principal complement-introducing verbs are those of judgment, perception, and speech. \({ }^{4}\) The function of taking a clausal complement is a purely formal type of transitivity, or valency (Tesnière 1959), as a complement does not fulfil a non-linguistic thematic function (a \(\theta\)-role' in the \(\mathrm{X}^{\prime}\) schema). \({ }^{5}\) Since grammatical relations appear to derive from thematic functions, \({ }^{6}\) the development of complementation involves an expansion in the transitivity of the introductory verbs, to taking textually-deictic as well as thematic objects.

The semantic reason is that clausal complements are not normally analysed as having thematic roles. \({ }^{7}\) Complement-introducing verbs do, of course, regularly take thematic object NPs ('see/know someone'), but agentive and spatial terms seem inapplicable to clausal complements. Fillmore (1968: 85-6) considers them to be semantically vacuous ('dummy') factitives, but they might also be analysed as participants which limit the scope of the verb. \({ }^{8}\) In both ötl- and iss-subordination in the corpus, a referring expression regularly serves as main verb object, with a subordinate clause as adverbial modifier.

\section*{1c: Transitivity and factivity}

As transitive constructions became progressively more common in IE languages (Coleman 1989, Bauer 1993b), increasing formalization could be seen as a loss of factive force: that is, the semantic property of presupposing

\footnotetext{
\({ }^{4}\) A fuller categorization is given by Noonan (1985: 10-133), who lists complement introducing predicates (CTPs) as utterance predicates ('say'), propositional attitude predicates ('believe'), pretence ('imagine'), commentative or factive ('regret, be significant'), knowledge ('know, see'), manipulative ('persuade, let'), and others.
\({ }^{5}\) Defined in terms of causality or agency (Tesnière 1959, Fillmore 1968), or of spatial or temporal goals (Gruber 1976, Jackendoff 1983).
\({ }^{6}\) See Gruber (1976) and Jackendoff (1983).
\({ }^{7}\) Gruber (1976: 128) and Jackendoff (1983: 203) identify even the complements of speech verbs as thematic: an utterance is interpreted as a thematic entity moving from the speaker [agent] to the hearer [goal]. It is, however, difficult to see how such an analogy can be sustained. See Munro (1982) and Amberber (1996) for further discussion.
\({ }^{8}\) This constitutes a specifying function, which is pragmatically and prosodically focal.
}
the truth of a subordinate proposition. \({ }^{9}\) Since verbs of emotion presuppose the truth of their clausal complements ('happy that [ x is y ' presupposes \([\mathrm{x}\) is y\(]\) ), while cognitive verbs may be factive ('see that \(x\) is \(y^{\prime}\) presupposes \([x\) is \(y\) ]) or nonfactive ('know \(x\) is \(y^{\prime}\) asserts \([x\) is \(y]\) ), \({ }^{10}\) and speech verbs are non-factive ('say that \([x\) is \(y]^{\prime}\) asserts ['x is \(\left.\left.y^{\prime}\right]\right),{ }^{11}\) there is progressively less causal force in the sequence of [emotional> cognitive> speech] verbs. This appears to be taken by Chantraine (1963) as indicating the historical sequence, \({ }^{12}\) though the Homeric evidence suggests that completives depending on emotional verbs are no earlier than the others (see Chapter 5, Section 3).

\section*{1d: Non-finite complements}

If, as proposed in Chapter 5, early complements have a circumstantial form, then non-finite complementation would be expected to show the same precedence of circumstantials over other forms, such as jussives, and participial constructions are more likely to be the precursors of finite complements than are AI constructions.

The evidence is surveyed in the next sections. The semantic difference between participial and AI constructions involves the factivity of the main verb: factive verbs are typically followed by participials and non-factives by infinitives. \({ }^{13}\) With verbs that can take either infinitives or participles, the infinitive construction normally has an imperative, inchoative, or final sense, \({ }^{14}\) and verbs of thought which have a connotation of judgment, as סок \(\bar{\omega}\),


\footnotetext{
\({ }^{9}\) See Kiparsky and Kiparsky (1970), Karttunen (1971), and Lyons (1977: 599-606 and 794-809). \({ }^{10}\) This view is justified below. Lyons (1977: 794), however, analyses 'know' as always factive, on the basis of epistemic necessity (if the proposition is negated, the presupposition remains).
\({ }^{11}\) Verb person determines the difference here.
\({ }^{12}\) Chantraine (1963: 289-290): ‘Les propositions déclaratives sont issues de propositions complétives de cause. Les propositions causales complétives se développent à la suite de verbes exprimant un sentiment. C'est de propositions causales de ce type que sont issues les propositions exprimant un jugement...' See also Schwyzer (1950: 645).
\({ }^{13}\) Kiparsky and Kiparsky (1970) note this feature in English too.
\({ }^{14}\) Examples discussed by Smyth (1956: 474-476) include aỉ \(\sigma\) xúvo 1 al (ashamed at doing/to do),
 how to), ̇̇mi \(\lambda \alpha \nu \theta \dot{\alpha} \nu o \mu \alpha l\) (forget /forget how to).
}
 \(\pi v \nu \theta\) ávo \(\mu a r .{ }^{15}\)

The classification of 'know' as assertive rather than factive (suggested in the previous section) accords with this structural difference. As Kiparsky and Kiparsky (1970: 147) argue, the sentence 'it is true that [John is ill]' does not presuppose, but asserts, the truth of [John is ill], so is non-factive. The sentence 'he knows that [John is ill]' could also be analysed as assertive, while 'he sees that [John is ill]' presupposes, rather than asserts, the truth of the subordinate proposition, so is factive. Since many CG cognitive verbs can have either sense, as noted above, they may be interpreted as factive when taking participial complements. Their assertive use is a common feature in the corpus (see Chapter 7, Section 3).

The implication for complementation is that participials can always be associated with factive verbs, which may take referring expressions as direct objects in circumstantial participial constructions, while non-factive verbs usually take infinitive complements. \({ }^{16}\) Cognitive verbs like oî \(\mu\) a take direct thematic objects when functioning as verbs of perception ('see John as being ill'), but only (semantically) indirect objects when functioning as verbs of judgment ('believe [about] John to be ill'). Similarly, speech verbs take only (semantically) indirect human objects ('it is necessary for them to go' ... 'order [to] them to go').

In both constructions, there is an accusative element with a double function, but the presence or absence of thematic objects mirrors the semantic difference between participial and infinitive constructions. It is argued below that the difference is reflected in the origin of non-finite complementation, and that participial complements precede AI complements. This may be seen from an examination of the semantic function of the accusative elements.

\section*{1d (i) Participial complements}

Participial constructions have two characteristic structural features: the subordinate clause is typically phonologically heavy, due to the inflection,

\footnotetext{
\({ }^{15}\) See Riemann and Goelzer (1897: 687-8).
\({ }^{16}\) The converse does not hold absolutely: occasional Homeric AI complements depending on cognitive verbs are used factively. See below in Section Id (ii).
}
and is also more syntactically integrated in the structure of the main clause than are infinitive constructions, because the inflection, in addition to any explicit subordinate subject, ordinarily agrees with whichever of the arguments of the main verb it is co-referent. \({ }^{17}\)

Participial complements appear to derive, as Smyth (1956: 471) suggests, from circumstantial use following cognitive verbs, so oủ \(\gamma\) à \(\delta \epsilon \epsilon \sigma \nu\) aủtòv \(\tau \in \theta \nu \eta \kappa\) ќta ('they did not know him as being dead') may be interpreted as completive ('... know that he was dead'). The accusative subject of such a construction is functionally the object of the main verb, so its case may be explained by assignment from the main verb in the canonical way. \({ }^{18}\)

The function of the main verb in assigning case is less clear when the verb does not normally take an accusative. Participle and subordinate 'subject' may agree with the indirect object of a main verb, or take an accusative in a complement-like construction, as in the alternatives \(\sigma\) v́vot \(\delta \alpha \sigma o l \in \hat{\mathcal{U}}\)
 an accusative construction with ov́vot \(\delta \alpha\) is rare: the prefix \(\sigma v{ }^{v}\) implies an indirect object, though an accusative construction may be more likely when there is also an indirect object, as at Dem. 61.23: \(\sigma v \nu \epsilon \iota \delta \omega ̀ s ~ \tau \omega \hat{\nu} \dot{\alpha} \theta \lambda \eta \mu \alpha ́ \tau \omega \nu\) סoúlous \(\mu \in T\) '́ XovTas (knowing about the contests, that slaves participate in them).

In that construction, differentiation of case may have a pragmatic motivation: of creating clarity. The opposite effect seems to be achieved in adjacent lines at Choe.216-7, where the change to accusative creates ambiguity, hiding the object ( Opé \(\sigma \tau \eta \nu)\) among the other accusatives:


(El.) And whom among men do you know of me that I call upon?
(Or.) I know that it is Orestes whom you very much admire.

The assignment of case by the main verb, rather than as an accusative default, is the more likely, since the accusative construction seems to be

\footnotetext{
\({ }^{17}\) In reflexive constructions, case is assigned with respect to the main clause, as \(\lambda \alpha \nu \theta \alpha ́ \nu \omega\)
 not know that I am doing something) would be self-contradictory: see Kühner (1904: 50).
\({ }^{18}\) The current syntactic model involves morphological 'feature checking' between a specifier and head: see Chomsky (1992).
}
chronologically later: none of the accusative constructions with \(\sigma v v^{\prime}\) oı \(\delta \alpha\) cited by Kühner (1904) predates the fifth century, while \(\sigma v v^{\prime} o t \delta a\) with dative occurs in Herodotus. Case can always be explained as assigned by other main verbs too. Clearly, the accusative form developed by analogy, either with the majority of participial constructions depending on transitive verbs, or with the other non-finite form, the AI. This is considered in the next section. \({ }^{19}\)

\section*{1d (ii): AI complements}

Case attraction requires adjacency, if it is a phonological process, and this is normally taken to be applicable to AI constructions: \({ }^{20}\) Horn (1985) considers that AI exists only in languages where the subjects of finite complements occupy the same apparent position as the object of the main verb. This is not strictly applicable to CG, which may have OV ordering in main clauses with a dependent AI clause, as in a co-referent construction at E. Alc. 641:
2) кaí \(\mu\) ’ oủ vo \(\mu i \zeta \zeta[] \pi \alpha i ̂ \delta a ~ \sigma o ̀ v ~ \pi \epsilon ф u к є ́ v a \iota ~\)
and I do not count myself as any true child of yours

However, non-contiguous elements may be interpreted as preposed within the main clause: and the pronominal often follows the main verb, as at Pl . Hipp. Maior 282E:
3) ... каì \(\sigma \chi \in \delta o ́ v ~ t l ~ o ̂ ̀ \mu a l ~ \epsilon ́ \mu \epsilon ̀ ~ \pi \lambda \epsilon i ́ \omega ~ \chi р \eta ́ \mu a t a ~ \epsilon i ̣ p \gamma a ́ \sigma \theta a ı ~\)

I know well enough I earn more money...

Case assignment in AI is usually described on the analogy of control (jussive) sentences, where a semantically indirect but accusative object has a thematic relation with the main verb. \({ }^{21}\) Variations of case following a main verb taking
 \(\dot{\epsilon} \lambda \theta \in i ̂ \nu\), I beg you to go) are usually explained with the accusative as the default, and other cases as the result of case attraction to that of the main verb object (Kühner 1904: 24, Smyth 1956: 438-440). This description is incomplete, as it does not explain the origin of the supposed accusative default, other than by analogy with the transitive sense of jussives ( \(\kappa \in \lambda \in \dot{v} \omega\) meaning 'urge on', \(\pi \rho \rho \in i ̂ m o \nu\)

\footnotetext{
\({ }^{19}\) For further discussion of participials, see Kühner (1904: 49ff.) and Quicoli (1982).
\({ }^{20}\) By Kühner (1904), Rosenbaum (1967), Lakoff (1968), Lightfoot (1971), Andrews (1971), Miller (1974), and Quicoli (1982).
\({ }^{21}\) The contrast between 'control' and 'exceptional' constructions, corresponding to jussives and non-finite complements, derives from Chomsky (1981).
}
'proclaim', \(\nu 0 \cup \theta \in T \epsilon \in \omega\) 'advise'). Yet the very high proportion of jussives which take datives ( \(\kappa \omega \lambda \hat{v} \omega\), \(\beta \circ \alpha ́ \omega, \dot{\epsilon} \pi เ \sigma \tau \epsilon ́ \lambda \lambda(\omega\), etc.) weakens the argument for an accusative default: there must have been another, transitive, construction which provided the analogy, and this is likely to be the circumstantial following cognitive verbs (since the accusative is the thematic object). The view that AI complements are the precursors of finite constructions (Meillet and Vendryes 1927: 589, Aitchison 1979: 53) therefore lacks plausibility.

There is, in fact, little textual evidence for it. Participial complements are common in Homer (Kühner 1904: 49), but AI complements are even less frequent than finite complements. This may be demonstrated by grouping Homeric AI constructions into four categories: \({ }^{22}\)
i) Ditransitive constructions, where the accusative functions as the main verb object after jussives, as Il.17.30:
 but I myself tell you to get back into the multitude
and Il.2.11:

Bid him arm the flowing-haired Achaians
Meillet and Vendryes (1927:561) consider this to be the earliest type. \({ }^{23}\) However, as noted above, the accusative element is semantically an indirect object ('goal' rather than 'patient'), and its case must be motivated by some other construction.
ii) The accusative functions as the infinitive subject in impersonal
 prepositions \(\pi \rho \iota^{\prime} \nu\) and \(\pi \alpha ́ \rho o s\), or in final clauses. In these constructions, the accusatives could have a thematic function as a 'goal' or as 'patient'. Some are similar to ditransitive factitives ('appoint him general'), as at Od.4.209-210:


As now he has given to Nestor, forever, all his days,

\footnotetext{
\({ }^{22}\) Following Monro (1891: 202-203), Kühner (1904: 26-33), Meillet and Vendryes (1927: 561ff.), and Chantraine (1963: 312-318).
\({ }^{23}\) Similar constructions occur at Il.14.62, Od.10.531-3, and Od.23.258.
}
for himself to grow old prosperously in his own palace, ...

In the final and prepositional types, the accusatives may have a thematic function as goals, as they appear to do after verbs of movement in Homer. \({ }^{24}\) In the impersonal constructions ('it seems that/it is necessary that \([x]^{\prime}\) ), the accusative element is semantically an indirect object. This is explicit at Thuc. 1.120:

It is right for good men, being wronged, to fight instead of peace.

The accusative may be used to avoid ambiguity, as with the participial at Dem. 61.23 cited above in \(1 \mathrm{~d}(\mathrm{i})\). Otherwise, it must occur by analogy with some other construction. Impersonals, which may be termed modal subordinating predicators (Lyons 1977, 793-809), could be considered as similar to jussives, and another construction must have provided an analogy for their form.
iii) Accusative constructions following desiderative, perceptual, and judgmental verbs. These constitute a type of complement, because the infinitive describes a fact or action, and the accusative element is logically the object of the main verb, as at Il.4.247:

Are you waiting for the Trojans to come close?

The construction appears occasionally with perceptual verbs, when it has the circumstantial meaning normally associated with participials, as at Il.6.386-7:
9) ... oưvєк' äкоvбє / [ \(\tau \epsilon i ́ \rho \in \sigma \theta a \iota ~ T \rho \omega ̂ a s ~], ~ . . . ~\)

Because she heard that the Trojans were being pressed hard

It is most plausible that this construction is an analogue of the more common participial circumstantial.
iv) Chantraine (1963: 312) cites one reporting construction depending on a speech verb, at Il.1.521:

she accuses [me], and speaks of how I help the Trojans in battle

\footnotetext{
\({ }^{24}\) The thematic roles of accusatives following Homeric verbs of movement ( \(\beta \alpha \dot{\lambda} \lambda \omega \omega\), i̋ \(\kappa \omega\), iк \(\alpha \nu \omega\) ) are discussed by Kühner (1898: 303), Haudry (1977), and Boel (1988).
}

Here the accusative element is placed in the P2 collocation, preceding the speech verb and following connective particles, so focalizing \(\nu \in \leftarrow \kappa \in \hat{\imath}\), and functions as its object, as well as subject of \(\dot{\alpha} \rho \dot{\gamma} \gamma \epsilon \iota \nu\). This construction is therefore a transitive circumstantial. Il.1.521 is the only citation by Monro (1891), Kühner (1904), or Chantraine (1963) of a AI complement depending on a speech verb which predates the fifth century. Although Moorhouse (1955: 181) finds 20 instances of AI (all dependent on \(\left.\phi \eta \mu^{\prime}\right)^{25}\) in Iliad Books 1-10, he notes that in another 6 infinitive constructions the subject is omitted, even though it differs from the main verb subject, suggesting that the AI construction is a late development. \({ }^{26}\) An AI complement at Od.2.171 is cited by Coleman (1985: 327), who describes AI as common in Homeric Greek. Here, the order highlights the accusative element at the line end, which is followed by \(\dot{\omega}\) (a pattern discussed in Chapter 7):

ढ̈s oi є̇ \(\mu v \theta \epsilon\) ó \(\mu \eta \nu\)...
and about him I say that everything will be accomplished as I said...

The circumstantial form of this construction may be seen from the datives, and from the prominence of the accusative element, and its word order may be influenced by the finite adverbial clause following.

Of these types, the jussives (i) cannot, as argued above, motivate the accusative use in complementation. The 'goal' accusatives (ii) and the transitive circumstantials (iii) constitute the most plausible candidates. Spatial relations may provide the earliest analogue: it has been proposed (in the 'thematic relations hypothesis' of Gruber 1976 and Jackendoff 1983) that all thematic relations derive ultimately from spatial ones. However, the circumstantials are semantically closer, because they involve reporting verbs, and so are likely to have been involved in the development: probably by analogy with the more common circumstantial participials. This aetiology

\footnotetext{
\({ }^{25}\) Moorhouse (1955: 180) considers that the predominance of \(\phi \eta \mu i ́\) is explicable by its meaning as a cognitive rather than speech verb.
\({ }^{26}\) Monteil (1963: 405) and Miller (1974: 241-2) describe AI constructions as more common than finite complements in Classical Latin too, so even if there was a linear development, it must have taken place independently in different languages.
}
would also explain the circumstantial form of early finite complementation observed here.

\section*{1e: Finite complements}

As noted above, in participial constructions, the subordinate element is phonologically heavy. In finite complementation, prominence is motivated syntactically, by the function of the linking element as focal main verb object. In Chapter 5, it was argued that öтı functions as the object. The following sections describe how ís-complements regularly include an explicit object, either as referring expressions, or as textually-deictic demonstratives.

\section*{2: Animate objects in \(\dot{\omega}\)-complementation}

\section*{2a: Prolepsis and Homeric specifying constructions}

A number of Homeric constructions with indirect objects and ötı are similar to intransitive circumstantials, such as Il.1.56:
 for she pitied the Danaans, because/in that she saw them dying.
and \(I l .23 .555-6\) :


So he spoke, and brilliant swift-footed Achilles smiled, favouring Antilochos because/in that he was his dear companion

These are also similar to the specifying completives following verbs of emotion occurring in Homer, which also follow main verbs with an explicit object, as at Od.11.102-3=13.342-3:


... who holds anger against you in his heart,
angry because/that you blinded his own son.

These are the causals which Chantraine (1963) and Monteil (1963) consider to mark the origin of complementation. However, a completive interpretation ('she grieved that the Danaans.../rejoicing that Antilochos...') requires an object in the
main clause. It also involves greater inter-clausal integration, so an object is almost always followed by the phonologically light \(\omega\) s, rather than öть. \({ }^{27}\)

\section*{2b: Prolepsis}

Referring expressions may function as accusative objects in finite completives, especially with cognitive verbs, which regularly take a human object. The construction occurs in Homer, as at \(I l .2 .409\) :

he knew in his mind his brother, how he was troubled

Prolepsis, as this structure is standardly termed, \({ }^{28}\) has usually been discussed in purely pragmatic terms, whose value is somewhat diminished by the contradictory interpretations which have been proposed: \({ }^{29}\) either that a preposed 'subject' is pragmatically prominent (Kühner 1904: 577-8, Gonda 1958), or that it has reduced emphasis because it is a theme (Panhuis 1984, Slings 1992: 105). \({ }^{30}\)

The first view is more accurate in terms of the structural relationship between the two clauses: just as case attraction of the relative pronoun to that of the main clause gives more prominence to the latter (Gonda 1954a: 29), so prolepsis demonstrates the integration of the subordinate in the main. In any case, pragmatic indeterminacy (between emphatic or thematic function) can exist only in relation to the subordinate clause: the object is always prominent in the main clause. The view that 'there is nothing emphatic or vivid etc. in a sentence containing a prolepsis' (Panhuis 1984: 38) is especially inappropriate to minimal clauses of the oî \(\delta \alpha \dot{\alpha} \sigma \epsilon\) ôs/iss \(\epsilon \hat{\mathrm{l}}\) pattern, as Il.9.527-8:

[ \(\omega\) 解 \(\nu \cdot .\). ]
I remember this behaviour of old, it is not a new thing, how it was.

\footnotetext{
\({ }^{27}\) Two exceptions are cited in Section \(2 b\).
\({ }^{28}\) For its early rhetorical sense, of 'anticipation', see Hermogenes, Meth. 10, and other references in Liddell and Scott (1968: 1488).
\({ }^{29}\) A bibliography is given by Slings (1992: 105n46).
\({ }^{30}\) Slings (1992: 106) defines theme as syntactically disjunct from its clause, yet 'articulating the focal information', so defining theme, topicalization, and focus circularly.
}
and Eum.454:

you will soon learn my race, how it is

Such constructions always reduce the subordinate clause to a parenthesis, and emphasise the accusative. As with other, more extensive, types of prolepsis, the construction is most common in Euripides: \(\hat{\omega}^{\prime} \notin X \in\llcorner\) occurs 15 times (Alc. 280, Her.956, Ion 1416, Troi.394, 923, 931, 1144, El.427, IA.106, 446, and in the fragments), as against two in Aeschylus (Eum. 454 above and Fr. 726g), three in Sophocles (Trach.622, OT.1172, El.791), and one in Aristophanes (Eq.153). \(\Omega_{S} \hat{\eta} \nu\) occurs once in Homer (Il.9.527-8 above), and in tragedy only in Euripides (And.381, HF.27, El.690, IT.532, Phoen.1280). Constructions with öt \(\omega\) 光 \(\chi \in\) I occasionally occur, as at Ra.75, and the type occurs also with polar indirect questions, as at S.Phil.444:

Do you know of him, if he is alive?

The prosody supports the interpretation of prolepsis as focalization, because it almost always involves phonologically light complementizers: proleptic Öтl-complements are rare, and in such constructions the subordinate clauses appear more peripheral, as at Od.8.461-2:


Good-bye stranger and think of me sometimes when you are back at home, how I was the first you owed your life to.
and Eum.970-1 (Monteil's substantival type -see Chapter 5, Section 3):
20)
.... \(\sigma \tau \epsilon ́ \rho \gamma \omega \delta^{\prime}\) ő \(\mu \mu \boldsymbol{\alpha} \alpha\) Пє \(Ө\) Өôs

... and I rejoice in the eye of Persuasion,
that it was guiding my tongue and lips

The function of the accusative element may be seen in its early dependence on cognitive rather than speech verbs: Homeric prolepsis appears always to involve cognitive verbs. Aeschylus occasionally uses prolepsis after other verbs, such as the verb of emotion at Eum.970-1 cited immediately above, after a speech verb at Septem 375-6, and at Choe.851-3, where the proleptic
element functions as object of a cognitive and a speech verb:



I wish to see and question the messenger, whether he was near, being there, or whether he speaks, learning from a faint rumour.

This is a partial analogue of the jussive construction, as тò \(\quad a ̈ \gamma \gamma \in \lambda o \nu\) is semantically an indirect object of the second verb in the main clause ( \(\epsilon \lambda \epsilon \in \gamma \xi \alpha\) i, although though not the first). The only construction in the Oresteia where a speech verb governs an element preposed from the subordinate clause is an 'object-to-object' construction at Eum.308-311:
22) \(\mu \circ v ิ \sigma \alpha \nu ~ \sigma T v \gamma \in \rho a ̀ \nu\)
àтофаívєбӨaı \(\delta \epsilon \delta о ́ к \eta \kappa \epsilon \nu\),
\(\lambda \epsilon ́ \xi \alpha \downarrow ~ \tau \epsilon ~ \lambda a ́ \chi \eta ~ \tau \alpha ̀ ~ к а т ’ ~ \alpha ̉ \nu \theta \rho \omega ́ т о u s\)

it seems appropriate to show our grim song,
and to speak of the lots among men,
how our band apportions them.

Sophoclean prolepsis also usually involves cognitive verbs, although an object-raising construction at OT. 604 appears transitional (depending on the categorization of \(\pi v \nu \theta a \nu o ́ \mu \alpha \iota ~ a s ~ a ~ c o g n i t i v e ~ o r ~ s p e e c h ~ v e r b): ~\)

Enquire [about] the oracles, whether I declared them truly to you.

In contrast, prolepsis may follow speech verbs in Euripides, even with human objects, as at Med.248-9:


They speak [of] us, that we live a safe life
at home, while they fight with the spear

Med.452:

saying [of] Jason, how he is the worst of men
and Med. 669 (the preposed genitive emphasizes that the object is human):
26) \(\pi \alpha i ̂ \delta \omega \nu ~ \epsilon ́ \rho є \cup \nu \omega ิ \nu ~ \sigma \pi \epsilon ́ \rho \mu ' ~ o ̋ \pi \omega s ~ \gamma \epsilon ́ v o \iota t o ́ ~ \mu o l . ~\)
to ask [of] the seed of children, how I might have them

The relatively late use of prolepsis following speech verbs reflects their transitivity: while both cognitive and speech constructions are used circumstantially, so in translation requiring the addition of a subject pronoun in the subordinate clause which is co-referent with the preposed element ('consider the lilies \({ }_{i}\) of the field, how they \(\mathrm{y}_{\mathrm{i}}\) grow' \(^{\prime}\) ), speech verbs have the additional difference of not functioning transitively, so the proleptic element is semantically an indirect object ('they speak of usi, that we \({ }_{i}\) live a safe life').

Prolepsis following speech verbs is, therefore, semantically similar to constructions with syntactically indirect objects, as at Med.1246-7:


and do not weaken, or remember about these children
that you love them, that you bore them ...

The early use of proleptic elements depending on cognitive verbs exploits their double valency, in being able to take a transitive circumstantial complement. This may be seen in constructions with verbs of fearing, as at Med.39-40:
28) \(\pi a ́ \sigma \chi o v \sigma \cdot \cdot \epsilon ̇ \gamma ஸ ̣ ̂ \delta a ~ T \eta ́ v \delta \epsilon, ~ \delta \epsilon \iota \mu a i ́ v \omega ~ T \epsilon ́ ~ \nu L \nu\)

... I know her, and fear her,
lest she drive a sharpened sword through her liver

It may be demonstrated that the double transitivity of such constructions was perceived by speakers of CG, from the evidence of an Aristophanic joke at Ra.41, where a transitive sentence is turned into a complement main clause by the addition of an unexpected subordinate clause. The humour depends on the double transitivity of ס́́ \(\delta o \iota \kappa \alpha\), so 'afraid of' becomes 'afraid that':
 (Dion.) How terribly afraid of me he was. (Xan.) Yes, [afraid] that you were mad.

Prolepsis, then, appears to be a regular effect of ambiguous transitivity, which reveals the developing structure of complementation. The same ambiguity
appears in following \(\epsilon \mathrm{i}\)-clauses, which may be interpreted as either conditional or completive (as discussed in Chapter 4, Section 5a).

\section*{2c: Prolepsis and subordinating structure}

Gonda (1958: 119) considers proleptic structure to be 'a more or less mechanical reproduction of an originally paratactic supplementation to a short sentence', presumably because it appears to be an early form, but the accusative element in fact provides evidence of the developing form of subordinating structures: 'they speak about us that we live a safe life' is not a mechanical reproduction of the forms ['they speak of us'] + ['how we live a safe life'], but is rather a development of transitive circumstantials ('I know you how/who you are'), initially following cognitive verbs.

If prolepsis represents the preposing of the subordinate subject to the main clause object position (Panhuis 1984: 26, Christol 1989), the configuration might, provisionally, be described as in Fig. 1:


In this configuration, the preposed phrase is not focalized, since \(\pi \omega \bar{s}\) is interpreted as in initial position in the subordinate clause, and emphasis would, as Panhuis (1984) and Slings (1992) assume, be somehow debarred from crossing the clausal boundary. However, the placing also creates rightwards weight within the main clause. The weakness of the Fig. 1 structure derives from its failure to model the prosody of the inter-clausal
link, and in particular the start of the subordinate clause and the absence of emphatic elements following the proleptic element.

The subordinate subject may better be modelled as preposed to the focus position within the subordinate clause, which is adjacent to the main verb object position, and followed by a conjunction which is the head of the CP. Semantically, the focal element functions as the object of the main verb, so the structure is as in Fig. 2 (=Introduction, Fig. 11):

Fig. 2


The double function of the focal element is, as noted in the Introduction, formally anacoluthic, because (in \(\mathrm{X}^{\prime}\) terms) it can have only one \(\theta\)-role. However, the valency of verbs of knowing allows the pronoun to be interpreted intra-clausally as a direct object, so the double structure, though formally broken-backed, is perfectly intelligible, and, as noted earlier, is mirrored in English translation ('consider the lilies \({ }_{i}\) of the field, how they \(y_{i}\) grow'). \(^{\text {) }}\)
The difference between the structures in Figs. 1 and 2 affects the position of \(\pi \omega \bar{s}\), which is in complementizer position in Fig. 2, but may be in complementizer or focus position in Fig. 1.

Prolepsis therefore demonstrates a stage in the development of a separate complementizer and focus position．The contrasting pragmatic views described at the start of this section are reconciled by the model of focal linking：the proleptic element is indeed in the main verb object position，but it is also in subordinate focus position．

\section*{3：Transitional predicators}

\section*{3a：Double constructions}

In Homer，ötı may be interpreted as possessing causal force when it is governed by verbs of perception．After intransitive verbs of emotion，both őtı and ís must be interpreted adverbially，mostly in a causal sense（＇because＇）， while after cognitive verbs，the conjunctions may be interpreted as manner adverbs（＇how＇）．Speech verbs，by contrast，were not followed by transitive circumstantial constructions，because they took as ditransitive complements only infinitive jussives（they did，of course，also take relative subordinates， both with and without head nouns）．The change from Homeric practice to the high frequency of speech verb objects in tragic complements implies a semantic shift in the relation of the object to the subordinate clause（from a circumstantial to a textually－deictic one）．

The double transitivity of speech verbs may be seen at Od．19．463－4，where （after a verb of emotion taking an indirect object）a speech verb takes two explicit objects，\(\check{\epsilon \prime \kappa \alpha \sigma \tau \alpha ~ a n d ~ o u ̈ \lambda \eta ́ v: ~}\)


they rejoiced in his homecoming，and asked about everything， and his wound，how he suffered it．．．

Here，both ëкабта and oủ入ウ́v are referring expressions，though ëкабта is indefinite．Oü入向 \(\nu\) could，perhaps，be parsed as the head noun of a following relative（＇the wound that he suffered＇），though the modality of the subordinate clause would be inappropriate to such an interpretation．In constructions with iss，however，the circumstantial meaning is unambiguous．

Homeric complements following verbs of speech may be preceded by an
adverbial phrase, as at Od.8.266ff. (also cited in Chapter 5, Section 4b):



\(\lambda \alpha ́ \theta p \eta{ }^{\prime} . . .\).
Then he struck the lyre and began singing well about Ares and sweet-garlanded Aphrodite, how they first lay together in the house of Hephaistos secretly ......

In tragedy, there is a regular use of explicitly transitive constructions, with accusative objects. The characteristic association of speech verbs with explicit objects may be due to the influence of relative-type structures, and their restricted transitivity: the only object they may take is a textual marker ('I say this...').

Because the referent of a speech verb's object is itself a linguistic entity, the object functions somewhat like an introducer of direct speech. The semantic similarity between complementation and direct speech is noted by Kiparsky and Kiparsky (1970: 157n.7), and in many non-IE languages the complementizer itself is etymologically related to a speech verb..\(^{31}\) In Homer, of course, words are standardly reported in direct speech, followed by is モौ \(\phi \alpha \theta\) or its cognates.

\section*{3b: Verbs of witness}

A form intermediate between cognitive and speech predicators occurs in a few constructions involving the notion of witness, as a verb or nominal predicator. At Med.619-20, the accusative is really factitive ('invoke them as witnesses'):


Well, I call as witnesses the gods how I am willing to help you and the children in every way

\footnotetext{
\({ }^{31}\) This feature is noted by Lord (1976) in a number of African and Asian languages, including Yoruba, Tamil and Burmese.
}

The subordinate clause functions adjectivally as a modifier of the nominative нápтus，at Choe．988－9：


so he may be present as my witness in the trial at some point，
how I justly pursued this fate（of my mother）

The clause may also modify a gerund，as at Ag．1505－6．Here the preposing of the clause highlights its adverbial force：

34）\(\dot{\text { és }} \mu\) èv d̀ áaítıos \(\epsilon \hat{i}\)
то̂̂ठє фóvou tís ó \(\mu \alpha \rho т и \rho \eta ́ \sigma \omega \nu\) ；
that you are innocent of this murder，
who［will be］the witness？

Aeschylus uses the verb transitively，with a deictic object，at Ag．494－6：
．．．\(\mu a \rho т v \rho \epsilon i ̂ ~ \delta e ́ ~ \mu o l ~ к a ́ \sigma ı s ~\)
mŋ入oû そúvoupos סıభía кóvıs тáסє，

ű入ךs ỏpeías onuaveî кamv＠̣ mupós．
and the neighbouring brother of mud，
thirsty dust，witnesses to me this，
how he is not voiceless，nor for you kindling the flame
of mountain wood will he signal with smoke of fire

These constructions are somewhat similar to completives depending on verbs
 which are a feature of Herodotean complementation（Neuberger－Donath 1982：260－263）．The Aeschylean construction，however，demonstrates an additional feature：the use of a textually－deictic object．

\section*{4：Textual objects in \(\dot{s}\)－complementation}

In the epic and tragic texts considered here，the subordinating conjunction \(\dot{\omega}\) is regularly preceded by an accusative element functioning as main verb object，and in the tragic and prose texts the majority of is－complements have antecedents of some kind：every instance of completive \(\omega\) s in the Oresteia， almost all in OT．and Crito，and most in Medea，follow a main clause accusative element．Citations are given in Appendix 3B．The elements may be
divided into three categories: the proleptic elements described above, and nominals or pronominals with purely textual reference.

Although öть is occasionally preceded by тó or тои̂то (Ant.61, 98, 188; Prom.377), accusatives are associated almost exclusively with \(\omega\). The reasons may be etymological as well as phonological: Monteil (1963:329) describes \(\dot{\omega}\) as originally anaphoric: 'Ancienne forme casuelle d'instrumental, is a dû primitivement se référer à un substantif antécédent, à l'intérieur d'un énoncé anaphorique puis relatif.'

Accusatives are more frequent with verbs of speech than verbs of knowing. The explanation is not that \(\dot{\omega}\) is more likely to be used after verbs of speech and ötı after verbs of knowing: there is an increase in complements dependent on verbs of speech with both conjunctions. The preference for a specifying object seems to be connected with verb valency: cognitive verbs may take a human object, while speech verbs do not, except as indirect objects in jussive constructions. This motivates their association with pronominals with purely textual reference, while cognitive verbs may take objects which have exophoric reference, in proleptic constructions.

\section*{4a: Pleonastic objects}

The textual reference may be explicit, and expressed by nominals following speech predicators, as Med.776-7:
\(\mu 0 \lambda o ́ v t l \delta^{\prime}\) aủt@̣ \(\mu a \lambda \theta a \kappa o u ̀ s ~ \lambda \epsilon ́ \xi \omega ~ \lambda o ́ \gamma o v s, ~\)

when he comes I shall speak soothing words,
that the matter seems the same to me....

Or.892-3:
37) \(\lambda\) óyous \(\dot{\epsilon} \lambda i ́ \sigma \sigma \omega \nu\), őtı кaӨıбтaín vópous

És toùs tєкóvtas oủ ka入oús. \(\qquad\)
... twisting words, that he set precedents
dangerous for parents
and in lyric at IT.1092-3 (one of two instances in these texts where complementizing ötı stands at the head of the poetic line):32
38) \(\epsilon \dot{u} \xi \dot{v} v \in \operatorname{Tov}\) छuvvєToîS ßoáv,

a cry intelligible to those who can understand
that you mourn your husband with songs

In these constructions, the object position is filled by a nominal which explicitly categorizes the subordinate (as ßoá or \(\lambda o ́ \gamma o t\) ). NPs like \(\mu \alpha \lambda \theta a \kappa o u ̀ s\) \(\lambda\) ó \(\quad\) ous do not only specify the syntactic function of the subordinate clause, but also comment on its form as speech, along the lines of the Homeric \(\epsilon \pi \pi \epsilon a\) \(\pi \tau \in\) ро́ \(\in \nu \tau a{ }^{33}\)

Sophocles uses the construction at OT.790-1:
39) кaì \(\delta \epsilon \iota v a ̀ ~ к a i ̀ ~ \delta v ́ \sigma т \eta \nu a ~ \pi \rho o u ̉ \phi a ́ v \eta ~ \lambda \epsilon ́ \gamma \omega v, ~\)
 and saying terrible and lamentable revelations that I was to wed my mother ...
and at S. El.44:

Use this story, that you are a foreigner...

In a participial, circumstantial-like, construction, at OT.1287-90, the NP does not refer catadeictically, but retrospectively (to the unspoken head noun in the phrase 'тòv \(\mu \eta\) т \(о\) òs ...'):
41) Boạ \(\delta \iota o i ́ \gamma \in เ \nu ~ к \lambda \grave{̣} \theta \rho \alpha\) каì \(\delta \eta \lambda о\) v̂v \(\tau \iota \nu \alpha\)


is ék \(\chi\) Өovòs pílíwv モ́autóv, ...
he calls for someone to undo the bolts, and show
him to all the Cadmeans, his father's killer,
his mother's - saying unholy things, unutterable by me,
that he will cast himself out of the land

\footnotetext{
\({ }^{32}\) The other is Ra.599, cited in Chapter 7, Section 3c. There are also appositive constructions with line-initial ötı at Eum. 971 and Ra.20, 742.
\({ }^{33}{ }^{3}\) 'Winged words', as Il.1.201, 2.7, 3.155, 4.92, and many other instances.
}

These nominals are always in tragedy associated with speech verbs, because they can take only textual objects. One Homeric construction involves a verb of perception, at Il.17.641-2:
42) .....é \(\pi \epsilon i\) oủ \(\mu \tau \nu\) ỏítoual oưdè \(\pi \epsilon \pi v ́ \sigma \theta a \iota\)

... since I think he has not yet heard
the terrible news, that his dear companion has perished.

\section*{4b: Pronominal objects}

The most common textually-deictic object, however, is the demonstrative, as at Ag.494-7 (cited above in Section 3b) and OT.729-30:

катабфаүєín трòs трıт入aîs \(\dot{\alpha} \mu \alpha \xi ı \tau о i ̂ s . ~\)
I thought I heard you say this, that Laius
was killed where three roads meet. \({ }^{34}\)

The complementizer may be seen as enclitic upon the pronominal, in the contrastive pattern described in Chapter 4, Section 2b. The deictic force of the demonstrative (itself prominent through cohesive focalization), creates an emphatic effect, drawing attention to the subordinate proposition, as at Medea 85-6:

ஸ́s mâs tis aútòv toû mé \(\lambda a s\) \(\mu \hat{a} \lambda \lambda o \nu ~ \phi i \lambda \epsilon i ̂, ~\)
Have you only just now learned this,
that/how each loves himself more than his neighbour?

The positions of both the pronominal and of \(\omega\) s with respect to the line end are quite regular, as shown in Chapter 7. Constructions in which the clause break does not coincide with the line end occur mostly with cognitive/perceptual verbs, as at OT.729-30 (cited above). In these instances, the object may be preposed within the main clause, as at Med.1405:

Zeus, do you hear this, that/how I am driven away...

\footnotetext{
\({ }^{34}\) On the significance of the definite article, see Dawe (1982: 165).
}

Constructions with pronominals do not generally mark factivity, as they assert, rather than presuppose, the truth of the subordinate: the pronouns mean 'these words' rather than 'this fact', so their function is that of impure textual deixis (referring to a proposition: see Chapter 4, Section 4b). There is an extremely high frequency of accusatives in tragedy: all complements with is in the Oresteia (11), and most in OT. (10 out of 15) and Medea (10 out of 14), have them. Some are cited in Chapter 7, Section 2c, and other constructions with pronominals are cited in Appendix 3B. The structure is modelled in Fig. 3 (=Introduction, Fig. 10): \({ }^{35}\)

Fig. 3


The construction is analogous to the ötı-complements discussed in Chapter 5, and involves a similar focal pattern: the demonstrative typically occupies the same line-final position as ötı. The functional difference is that öтı itself performs both the interrogative and object functions, while \(\dot{\omega} s\) and a main verb object share the interrogative function. With both, however, the significance of an indefinite suffix is the reduction in causal connection between the clauses (see Chapter 5, Section 2d, n.27).

\footnotetext{
\({ }^{35}\) The citation is from Medea 85-6, 'Have you only just learned this, that each loves himself more than his neighbour?'
}

\section*{5: Testing the hypothesis of focal linking}

The use of proleptic and demonstrative accusatives accords with the mechanism of focal linking described in Chapter 5. As noted in the Introduction, this requires there to be no focus position in structurally subordinated clauses in CG. A study of the corpus texts and all epic and tragic ötl-constructions revealed five constructions which appear to be counter-examples. They are examined here.

In four constructions, an element is preposed before the conjunction, but remains nominative. The most perplexing construction occurs at OT.779-780:
 \(\kappa \alpha \lambda \epsilon i ̂ ~ \pi \alpha \rho ’ ~ o i ้ \nu \varphi ̣ ~ \pi \lambda a \sigma \tau o ̀ s ~ \omega ́ s ~ \epsilon i ̋ \eta \nu ~ \pi \alpha т \rho i ́ . ~\)

For at dinner a man overfilled with drink
called me, drunk, that I was counterfeit to my father.

There are three possible explanations for the nominative:
i) It could be an effect of ambiguity between the adverbial and conjunctive
 öm \(m\) s at Ag .1371). \({ }^{36}\)
ii) It might function as a pragmatic marker, identifying the speaker from the subjects in the surrounding text, as a 'hanging' nominative. \({ }^{37}\) However, this does not accord with the presence of \(\mu\) ' in the previous line.
iii) It may mimic direct speech, perhaps because the presence of an accusative object in the previous line debars \(\pi \lambda a \sigma \tau o ́ s\) from occupying the object position.

The last seems the most plausible, though it does not preclude the first, especially as speech verbs do not, before Euripides, generally take accusative proleptic constructions (as noted above, Section 2b). This interpretation is supported by three similar constructions with ötı which also follow speech verbs. These constructions are formal announcements, so a parallel with direct speech is likely.

\footnotetext{
\({ }^{36}\) '... to know definitely how it is faring with the son of Atreus' (?): see Denniston and Page (1957: 195)
\({ }^{37}\) Nominative pronominals occur in extended infinitive constructions, as at Thuc. 4.114 and Dem. 21.204. See Smyth (1956: 439). The third episode of OT. has a very high frequency of subjects: 45 in 165 lines (=1 every 4 lines).
}

The nominative constructions occur at Hel.1491-4:
47)

кари́ \({ }^{\prime} \alpha \tau\) ' à \(\gamma \gamma \epsilon \lambda i ́ \alpha \nu\)

M \(\epsilon \nu \epsilon ́ \lambda \epsilon \omega\) ӧть \(\Delta a \rho \delta a ́ v o v\)

Proclaim the message
as you perch on Eurotas
that Menelaus has taken the town
of Dardanus and will come home

Ba.173-4:

گŋTєî vlv• ...
Someone go and say that Teiresias is looking for him.
and Ra.519-20:


Go now, and first tell those dancing-girls inside that I myself am coming in

A more serious counter-example to the hypothesis of focal linking is constituted by a preposed dative phrase in the complement at OT.525-526:

\(\pi \in เ \sigma \theta \epsilon i s ~ o ́ ~ \mu a ́ v t ı s ~ t o u ̀ s ~ \lambda o ́ \gamma o u s ~ \psi \in u \delta \in i ̂ s ~ \lambda \epsilon ́ \gamma o l ; ~\)
But was the word clear [ ], persuaded by my advice, that the prophet gave false answers?

It is clear that taîs \(̇ \in \mu \alpha i ̂ s ~ \gamma \nu o ́ \mu \mu \alpha s ~ i s ~ e m p h a t i c ~(s e e ~ D a w e ~ 1982: ~ 147), ~ a n d ~ m a y ~\) therefore be interpreted as focalized, so appears to be a counter-example to the claim of identity between main verb object and subordinate focus. It may, however, be observed that there is no main verb object here, and the pragmatic motivation for preposing the dative (together with a metrical one, in the Sophoclean regularity of putting öть in the last foot of the iambic line) may be realizable structurally precisely because of the absence of a main verb object.

Though all are syntactically irregular, only the first construction has a preposed focus co-occurring with an explicit main verb object, and this puts a clear stress on its syntax (since all commentators regard it as problematic). It is therefore concluded that none of these constructions disproves the hypothesis that an element in subordinate focus position is indistinguishable from a main verb object. \({ }^{38}\)

It may be noted that accusative elements which are clearly preposed from the subordinate clause may be also preposed within the main clause: the possibility of OV ordering with pronominal objects has been noted above, and the same order may occur with proleptic nouns, as at OT.842-3:
 ös vıv катактєívєเаข.....
you were saying of robbers, that he said
that they killed him.....
and OT.955-6:
52) 'Ек тฑ̂s KopívӨov, тaтépa Tòv oòv ả \(\gamma \gamma \epsilon \lambda \omega \hat{\nu}\)

ஸ̀ oủkє́т' ővтa Пó入vßov, à \(\lambda \lambda\) ’ ò \(\lambda \omega \lambda\) óta.
...from Corinth, announcing your father Polybus
as no longer living, but having perished.

Preposing the object within the main clause requires it to move out of subordinate clause focus position. However, the extra interpretative difficulty of such constructions create a tension between meaning and structure, which does not exist with VO ordering.

\section*{Summary: transitivity and speech verbs}

The importance of verb transitivity has been demonstrated in completive constructions with explicit main verb objects, including textually-deictic pronominals and proleptic nominals. Though transitivity presumably originally reflected non-linguistic agentive relations, its expansion to

\footnotetext{
\({ }^{38} \mathrm{~A}\) contrast may be drawn with the focalized element within a following conditional at OT.120-1 (cited in Chapter 4, Section 5a), demonstrating the difference between a subordinated and a peripheral clause. A somewhat similar construction at Crito 51c6, cited in Chapter 7, Section 3a, appears motivated by interference between features of direct and indirect speech.
}
encompass textual objects as well as referring expressions is evident in both non-finite and finite Homeric and tragic complementation. The importance of main verb objects is that they provide an explanation of the change of function of \(\dot{\omega}\) from an adverbial to a completive, through the intermediate stage of transitive circumstantial constructions.

The proposed historical sequence is: participial intransitive circumstantials, transitive circumstantials following verbs of knowing; then a convergence of indirect questions with ötı following speech verbs and adverbial \(\dot{\omega}\)-clauses following cognitive verbs; a transitive circumstantial structure with a focalized object, with either complementizer, and eventually with either verb type. The AI construction appears peripheral to the aetiology.

The explanation advanced here is based on the interaction of structural and prosodic features. However, the development of complementation presumably had pragmatic motivation, and, in poetry, its prosodic patterns are expressed in metrical form. The relationships between prosodic features of the poetic line and the presentational functions of complementation are discussed in Chapter 7.

\section*{Chapter 7}

\title{
Inter-clausal poetic syntax: focus and the discourse functions of subordination
}

\section*{Summary}

In Chapter 6, the overlap between main verb object and subordinate focus was examined in terms of verb transitivity. In this chapter, the clausal overlap is considered in terms of prosodic patterning and discourse function. The focalization of the inter-clausal link, discussed in Chapters 5 and 6 in terms of its prosodic pattern, is discussed in terms of the positions of ötı and \(\dot{\omega}\) in the hexameter and trimeter line.

Though complements are often described in terms of indirect speech, \({ }^{1}\) that is not a common function of complementation in the corpus, which is in epic principally the management of point of view, and, in tragedy and Plato, asseveration and rhetorical persuasion. Relationships between clause order and function are also examined, in a discussion of preposed complements. Discourse function is seen to be reflected in the patterns of focalization.

\section*{Chapter Sections}

1: Complementizer use and meaning
1a: Distribution within the corpus
1b: Meaning: ötı and \(\omega\) s
2: Complementizers and focus
2a: Prosodic features of Homeric complements
2b: Prosodic features of tragic ötl-complements
2c: Prosodic features of tragic ís-complements
2d: Prosody and syntax
3: Discourse functions of complementation
3a: Structural implications of function
3b: Discourse function and clause order: preposing
3c: Complementizer meaning in preposed complements
Conclusion

\footnotetext{
\({ }^{1}\) As by Jannaris (1897: 453), and Smyth (1956: 580-1).
}

\section*{1: Complementizer use and meaning}

\section*{1a: Distribution within the corpus}

The most unexpected finding is that there is a diachronic increase in the number of complementizers between Homeric and 4th century texts. This is in contrast with the view of Monteil (1963: 400) that there are in effect only two completive conjunctions by the end of the fifth century: an assumption based on conjunction frequency rather than variety. The prose works considered here, the Melian Dialogue and Crito, demonstrate a narrowing of conjunction frequency (ött is the principal introducer), but not a reduction in variety (öm \(\quad 1 \omega\) s also occurs in Crito and \(\delta\) tótı elsewhere in Plato). It may be that by the fourth century the meanings of subordinating conjunctions had become more established than in Homer. However, complementation structure remains highly fluid, and retains its focal emphasis even in Plato.

The distribution of the principal complementizers (ötl, \(\dot{\omega}\), ö \(\pi \omega s\) and \(\epsilon i\) ) in the corpus (plus Prometheus) is schematized in Table 1 (which excludes free relative and final constructions):
\begin{tabular}{|c|c|c|c|c|c|}
\hline & Ötı & ¢s & öTms & \(\epsilon \mathrm{l}\) & Totals \\
\hline Iliad 9 & 1 & 5 & 2 & 0 & 8 \\
\hline Odyssey 9 & 1 & 2 & 1 & 2 & 6 \\
\hline Oresteia & 1 & 11 & 4 & 11 & 27 \\
\hline Other Aesch. works & 0 & 12 & 1 & 0 & 13 \\
\hline Prometheus & 7 & 9 & 2 & 1 & 19 \\
\hline OT. & 5 & 11 & 5 & 2 & 23 \\
\hline Medea & 1 & 14 & 1 & 7 & 23 \\
\hline Cyclops & 2 & 2 & 0 & 2 & 6 \\
\hline Frogs & 7 & 4 & 4 & \[
\begin{array}{|l|}
\hline \text { (1 Euripidean } \\
\text { quote) } \\
\hline
\end{array}
\] & 15 \\
\hline \begin{tabular}{l}
Melian \\
Dialogue
\end{tabular} & 7 & 4 & 0 & 0 & 11 \\
\hline Crito & 33 & 14 & 2 & 4 & 53 \\
\hline & 65 & 88 & 22 & 29 & 204 \\
\hline
\end{tabular}

Four principal features are evident:
i) There is a low level of finite complementation in Homer and tragedy.
ii) An increase in prose is accompanied by a movement from \(\dot{\omega}\) to ötL (also evident in Frogs). This may be a more general feature of Attic prose: Lysias also demonstrates a great preference for ő ótı. \({ }^{2}\)
iii) Finite complementation is particularly rare in Aeschylus, and the use of Őть is very low in both Aeschylus and Euripides (the rarity of complementation in Aeschylus may be an archaism, since it is also very rare in Cyclops).
iv) There is a higher level of indirect questions with \(\epsilon i\) in the Oresteia and Medea than in the other texts. \({ }^{3}\)
v) The frequency of ött in Prometheus is atypical of Aeschylus, and is closer to Sophoclean frequency (on which see also Section 2a.i below).

Other complementizers include \(\mu \eta_{\text {( }}\) (in most texts), oiov, öтą, őтๆ (Oresteia), є́áv (Prometheus, Crito); öтov (OT.), oía (Medea), ôos (Cyclops), őтıń (Frogs).

Even causal complementizers like \(\dot{\delta} \theta\) ои́vєк \(\alpha\) and ойvєка (which Monteil 1963, 400 regards as insignificant, because they are restricted largely to tragedy) do not decline in frequency: they are uncommon even in Homer (not occurring in the Iliad). A few complements are introduced by oưveka in Homer, Sophocles, and Euripides, \({ }^{4}\) and by ó \(\theta\) ov́vєка in Sophocles (Trach.813, OT.572, 1271, El.47, 617, 1308, OC.852, 944, 1005) and Euripides (Alc.796).

Similarly, the frequency of öt \(\pi \omega\) s as a complementizer remains at a constant low level, rather than declining from the 7 th to the 4 th C. In Homer, only 1 out of 30 subordinating constructions is a complement (Il.10.491-2).
Aeschylus uses it in at least three complements (Supp.289ff., Ag.105ff., Eum.591), \({ }^{5}\) and Sophocles 3 times in OT. (OT.548, 1058, 1366). There are 5 instances in Medea (171, 322-3, 669, 1060, 1099-1102). Subordinating constructions with öt \(\omega\) s in Frogs are mostly final: 4 out of 12 introduce complements. The use of adverbials may reflect the persistence of circumstantial constructions. \({ }^{6}\)

\footnotetext{
\({ }^{2}\) Monteil (1963: 399) finds 293 instances as against 135 for \(\dot{\omega} s\).
\({ }^{3}\) Constructions in the Oresteia are cited in Chapter 6, Section 4c. In Medea, polar indirect questions occur at 184-5, 346, 931, 941, 1319, 492-4, and 1103-4.
\({ }^{4}\) Od.5.215-6, 7.300, 15.42, 16.300, 16.379, S.Phil.232, Ant.63, OT.708, S. El.1478, E.IA 102.
\({ }^{5}\) Ag. 1371 is another possible example: see Denniston and Page (1957: 195).
\({ }^{6}\) A survey of the use of ötris may be found in Amigues (1977).
}

In addition to its variant öttı, two compounds of ötı occur: ótıท́ and סเótı. The former, defined by Liddell and Scott (1968: 1265) as a colloquial form of Őtı in its causal meaning, appears occasionally in the fifth century, but not in tragedy. It is used to introduce complements in Aristophanes, at Nu.331, Ra.1146, and Plutus 48, and appears once in Plato, at Philebus 58a1:
1) \(\Delta \hat{\eta} \lambda o \nu\) ótıǹ ... \(\pi a ̂ s ~ a ̈ \nu ~ T \eta ́ \nu ~ \gamma \epsilon ~ \nu v ̂ v ~ \lambda \epsilon \gamma o \mu \epsilon ́ \nu \eta \nu ~ \gamma \nu o i ́ \eta ~\)

It is clear that ... everyone would know what has just been said.
\(\Delta\) lótl is much more common, though only in prose (apart from Aeschylean fragment 19 321.b1). It occurs in Herodotus, Isocrates, Isaeus, and Demosthenes, usually with causal meaning, though an appositive, specifying, meaning is also evident. It introduces complements in perhaps 2 of the 14 Herodotean constructions (2.50.2, 6.86.24), 1 of 5 in Isaeus (3.50.6), and 8 of 26 in Demosthenes. \({ }^{7}\) Only Isocrates uses it primarily to introduce complements after cognitive verbs, in 10 out of 12 constructions. \({ }^{8}\) It becomes much more common in the fourth century, appearing in Plato 62 times, and over 460 times in Aristotle.

It appears, then, that there is an increase, rather than a decline, in the number of complementizers by the fifth century, even in prose. The only postHomeric reduction is the almost total abandonment of ö \(T \epsilon\) (explicable by the restriction of \(\tau \epsilon\) to a co-ordinating link). Surprisingly, relative ő is as frequent in Aeschylus as in Homer, and occasionally occurs elsewhere in the fifth century, usually followed by focalizers. \({ }^{9}\)

\section*{1b: Complementizer meaning: öTL and \(\dot{\omega}\) S}
"Otı is generally thought to have a more objective meaning than ís: Humbert (1960: 185) proposes that 'en général, on emploie \(\omega\) is quand le jugement énoncé comporte des réserves -comme quand le verbs principal est négatif ou quand on ne prend pas à son compte ce que dit quelqu'un', while Smyth (1956:582) notes that the subordinate verb may be the negative one. Monteil (1963: 356) considers that, 'tandis que őтı insiste sur la réalité du fait, , is

\footnotetext{
\({ }^{7}\) Cor. 155.11, 167.5, Or. 46.16.1, 47.42.3, 58.36.10, 58.42.1, 59.111.4, Erot. 38.1.
\({ }^{8}\) In Call. 1.6, 31.1, In Loch. 8.2, De Big. 43.5, Paneg. 48.3, Plat. 23.2, Arch. 24.5, De Pac. 14.1, Antid. 133.2, Philip 1.1.
\({ }^{9}\) Monteil (1963: 399) cites 24 substantival constructions in Homer, and Sommerstein (1989: 128) gives a total of 'nearly 30 ' for relative *to- in Aeschylus. It occurs with final clauses at E.Phoen.155, Hec.13, Ar.Eccl.338; and ä, with following particles, at S.Phil.559, Trach. 136.
}
exprime des nuances de doute ou de simple vraisemblance'. Chantraine (1963: 291) identifies the core value of Homeric \(\dot{s}\) as adverbial 'comme'. Yet Biraud (1985: 170) notes that there is no presumption of subjectivity in the
 when there is explicit contrast between the complementizers.

In the characteristically emphatic structures of the corpus, a contrast in meaning is evident. Two chiastic patterns at A.Prom.259-260 and E.Cyc.321322 demonstrate the difference clearly. In both constructions, öтı precedes and is follows, with the former dependent on a verb of perception and the latter on a value judgment. The adverbial force of is is emphasized by the clause order: as discussed below in Section 3c, it is especially clear in preposed complements, because \(\dot{\omega}\) s is then emphatic in P1 (with focalizers following it).

Prom.259-61:
2) ........ oủ \(\mathfrak{\text { òpâs ötı }}\)


do you not see that you have erred?
yet how you erred is not pleasant for me to speak, and pain for you
A similar preposed completive occurs at Cyclops 321-3:



nor do I know that Zeus is a greater god than I.
I am not concerned for the future, and how I am unconcerned,
listen....

In Crito, a clear difference may be seen in a correlation between complementizer and verb type: ötı is used after cognitive verbs (or \(\delta \bar{\eta} \lambda o v\) ) in 13 complement constructions, as Crito 49d2:
4) oîठa yàp öтı ỏ入íyoıs tıoì taûta кaì סокєî kaì \(\delta o ́ \xi \in \iota\).

For I know that there are few who believe or will believe this.

Similarly at Crito 51a7:
5)

öтᄂ \(\mu \eta \tau \rho o ́ s ~ t \epsilon ~ к a i ̀ ~ \pi \alpha т \rho o ̀ s ~ к \alpha i ̀ ~ T \omega ิ \nu ~ a ̈ \lambda \lambda \omega \nu ~ \pi \rho о \gamma o ́ v \omega \nu ~ \dot{\alpha} \pi \alpha ́ \nu \tau \omega \nu\)

Or are you so wise that it has escaped your notice that your country is more to be honoured than your mother and father ...

By contrast, all 8 constructions with \(\dot{\omega} s\) depend on verbs of emotion or attitude, as Crito 44b9:

 \(\dot{\alpha} \mu \in \lambda \eta \eta_{\sigma} \alpha\).

And I shall seem to many who do not know me and you well that being able to save you if I had been willing to spend money, I neglected it.
and Crito 44c3:
7) \(\qquad\)

\(\dot{\eta} \mu \omega ิ \nu \pi \rho \circ \theta v \mu о \nu \mu \epsilon ́ v \omega \nu\).
For the many will not believe that you refused to get away, while we were eager to help.

All 13 constructions are listed in Appendix 3C. The difference in meaning accords with the mechanism of focal linking, as ötı is focal and draws attention to the following proposition (see Chapter 4, Section 4b), while \(\dot{\omega}\) emphasizes the preceding constituent ('the many'), on which the prosodic emphasis is placed. The morphology of the words fits this interpretation, too: the origins of ötl as a determiner and of \(\omega\) s as anaphoric accord with the distinction made by Benveniste (1933: 124) between demonstrative and anaphoric themes as respectively strong and weak in morphological characteristics and semantic value. \({ }^{10}\) The interpretation of the difference as focal would explain why, in the Melian Dialogue, is appears to be used simply to alternate with ötı, as in the construction at 5.89.1ff., cited below in Section 3 (where it is noted that the complementizers bear little prosodic emphasis).

\footnotetext{
\({ }^{10}\) Though adverbial \(\ddot{s}\) s may have a different etymology from the conjunction \(\dot{\omega} s\) : the former from *F \({ }^{*}\) s and the latter from the relative adverb \(y \omega(s)\). See Ruijgh (1971: 856).
}

A related interpretation is suggested by Cristofaro (1998: 73), who considers that "öть typically conveys new, focalized and non-topical information ... while \(\omega\) s introduces already known, non-focalized and topical information'. Cristofaro uses these terms as pragmatic categories, \({ }^{11}\) but prosodic focalization provides an even more precise explanation, since it identifies a specific constituent as focal.

\section*{2: Complementizers and focus}

The regular presence of prosodic emphasis and main verb objects in the corpus shows a contrastive style, perhaps stimulated by the experimentation naturally associated with a developing syntactic form. An emphatic link is implied, not only by proleptic objects, but also by the metrical placing of the introductory conjunctions. The typical positions of both complementizers in tragedy (ö \(o \iota\) at the line end, ís at the start) give them a prosodic prominence which emphasizes their linking function, and accord with the focalization patterns described in Chapters 4-6. In both Homer and tragic stichic verse, there is often a line break between speech verbs and their complements, in contrast with cognitive verbs, which are usually in the same line as their subordinates. The position of \(\omega s\) in Homer varies according as it follows a cognitive or a speech verb, while the position of öтı with respect to the line break is very regular in tragedy. There appears to be a structural as well as metrical motivation for these regularities.

\section*{2a: Prosodic features of Homeric complements}

The normal position of ötь is immediately following the main verb (which is frequently at the start of the line). There are 4 line-initial instances of complementizing öтtı: Il.5.407, 13.675, 24.564, and Od.4.392, and 8 instances which introduce causal clauses. \({ }^{12}\)

\footnotetext{
\({ }^{11}\) Her terminology is based on the model of Dik (1989).
\({ }^{12}\) Il.14.407, 15.156, 16.531, 17.568, 22.292, and Od.14.52, 14.527, 21.415.
}

Both ötı and öTtı are frequently followed by enclitic elements, which are typically dative pronouns (preceded by short-vowelled particles after ötть, evidently for metrical reasons), as at \(I l .24 .241\) :

Is it not enough for you that Zeus son of Kronos has given me sorrow \({ }^{13}\)
and \(I l .17,567-8\) :

 So he spoke, and the grey-eyed Athene rejoiced that first among all the divinities she had been prayed to. \({ }^{14}\)

The presence of short-vowelled particles after öтTı must be metrically constrained, but the regular presence of enclitics following both forms suggests a functional motivation: that a conjunctive meaning is linked with focalization by an enclitic in P2.

The line position of öть is quite variable, while őtть is more often line-initial. Both features reflect metrical constraints, but more is involved, as öT \(\tau \iota\) is more frequently line-initial after verbs of emotion than after other types (as may be seen from the citations in Appendix 3A), so causal and resultative clauses are prosodically as well as syntactically more peripheral than relatives.

The position of \(\dot{\omega}\) also varies according to the main verb: as noted in Chapter 6 , Section \(4 b\), it is normally placed directly after cognitive verbs, while after speech verbs it is normally line-initial, and generally does not follow the verb immediately. The Homeric constructions cited by Monteil (1963) show the same correlation, and also reveal a stylistic difference between the Iliad and Odyssey: constructions in the Iliad mostly (6 out of 7) follow line-initial verbs of perception or knowing, as Il.9.647:

'Aтрєî́סŋs \(\qquad\)
I remember how the son of Atreus insulted me before the Argives

\footnotetext{
\({ }^{13}\) Datives follow ötı also at Il.1.537, 2.255, 5.326, 16.35, 23.484, 23.545, 23.556, 23.577, Od.5.340, 11.103, 13.343, 17.377, 16.130, 18.11, and 19.248.
\({ }^{14}\) Particles follow öтtı also at \(I l .13 .675,14.407,15.156,16.531,17.411,17.655,22.292,22.439\), Od.14.52, 14.367, 14.527, and 21.415.
}

In contrast, the 9 constructions following verbs of speech are all from the Odyssey, and in all, ws is line-initial, as Od.22.373:


so you may know in your heart, and say to another, how good dealing is better by far than evil dealing

Monteil's examples are listed in Appendix 3A. Constructions following verbs of emotion also generally (in 4 out of 5 constructions) have line-initial \(\omega s\). Similar positions may be observed for completive \(\dot{\omega}\) in Iliad 9 and Odyssey 9. The sample is rather small, and more research would be needed to discover whether the same correlation holds throughout Homer. However, the existence of a similar, though less strong, tendency in tragic trimeters, noted below, suggests that the phenomenon has a structural as well as metrical component, which accords with the aetiology suggested in Chapter 5: that completives following cognitive verbs were originally interrogative, and that the development of full complementation involved a transitional stage of circumstantial-like complements, which are also likely to be structurally peripheral (since they require an explicit main verb object).

\section*{2b: Prosodic features of tragic complements with ötı}

\section*{2b (i): "Otı in Sophocles}

In the total of 35 Sophoclean complements introduced by ötı, the most notable feature is its prosodic regularity: it is in 32 constructions at the line end. Examples include Trach.439-40:

Xaípetv тє́фuкєv oủxı toîs aủtoîs à \(\epsilon\) í.
...nor [am I] one who does not know of men that we cannot ourselves enjoy constant happiness
and OT.59-60:


....... for I know well that
you are all sick, ......

The form of the second construction, with the clause starting at the hephthemimeral caesura, is common in Sophoclean complementation (and \(\epsilon \hat{\mathcal{V}}\) үà \(\rho\) oî \(\delta\) ' őtı occurs also at OT. 1133 and Ant.1043). However, the first example shows that the line and clause may coincide. \({ }^{15}\) Almost all of the complements are introduced by a cognitive rather than speech verb. \({ }^{16}\)

Two of the constructions where öтı is not line-final are in choral odes, so do not have the same metrical constraint. They are also structurally irregular: the complement clause is preposed at OT.499, and, at El.1070, ötı begins a choral antistrophe, but depends on the verb Bóaбov (or its object obveí \(\delta \eta\) ) in the previous strophe, so it functions as a cohesive link, and may have causal force:
14) катá pol ßóaбov oikтта̀̀v
őта тoîs \({ }^{\prime \prime} \nu \in \rho \theta^{\prime}\) 'Atpeí \(\delta a l s\)


carry below a piteous tale,
to the Atreidae below
carrying a reproach not to be danced.
That/because now their house is sick...

The iambic line-end position occurs also in all 7 complement constructions in Prometheus. \({ }^{17}\) All follow verbs of knowing, most of perception rather than judgment, and generally state a general truth or proverb, as \(\operatorname{Pr} 104-5\) :
\[
\begin{align*}
& \gamma \iota \gamma \nu \omega ́ \sigma \kappa о \nu \theta^{\prime} \text { öть }
\end{align*}
\]
\[
\begin{aligned}
& \text {... knowing that } \\
& \text { the strength of necessity is unconquerable }
\end{aligned}
\]

The similarity of position in Prometheus and in Sophocles is noted by Griffith (1977: 192), who describes the line-end position as 'a form of "Sophoclean" enjambement', and attributes it to the difficulty of fitting ötı into trimeters.

\footnotetext{
\({ }^{15}\) Other full line clauses occur at Tr. 904, Ant.61, 311, 779, Aj.678, El.332, 426, 1106, Phoen.325, 405, and OC. 666.
\({ }^{16}\) The two constructions introduced by speech verbs are at Ant. 325 and El.1070.
\({ }^{17}\) Pr.104-5, 186-7, 259-60, 323-4, 328-9, 377-8, and 951-2.
}

However, it may be noted that this position is not universal for conjunctive ötı in Sophoclean trimeters, though it is normal. At Ant.2-3, it is early in the line:


Do you know which of the miseries from Oedipus
Zeus does not accomplish equally on us still now alive? \({ }^{18}\)

There is evidently a metrical constraint on the position of ötl, but there are reasons for thinking this is connected with the syntax. Griffith's observation (1977: 192) that 'Aeschylus chose not to use the word, whereas Prom. uses it with Sophoclean frequency and style' is not a complete explanation, for the following reasons:
1) His assumption that this feature constitutes 'enjambement' begs the question of where the clause break occurs. The prosody accords with the functions of ötı as focal and main verb object, as described in Chapter 5.
2) As is observed below in Section 2b (iii), completive ötı is much rarer in Euripides, despite showing a greater variety of position. Euripides' reluctance to use it is unlikely to be simply metrical (since the line-end position is available).
3) Not only ötı, but also complementizing \(\dot{\omega}\), is rare in Aeschylus, as indeed the figures of Griffith (1977:335) demonstrate. \({ }^{19}\) Even if the tendency for linefinal placing of öTı were entirely metrically constrained, alternative complementizers were available to the tragedians, as noted above in Section 1a. The fact that Aeschylus rarely uses any type of finite complementation is at least as significant as his reluctance to use one particular conjunction. The distinctive discourse function of Aeschylean complements is considered below in Section 3.
4) Sophoclean use of ötı is almost always completive in trimeters, \({ }^{20}\) and always relative or causal ('because') in its rare appearance in other metres. \({ }^{21}\) This is in great contrast to Euripidean practice, which is described below in

\footnotetext{
\({ }^{18}\) Lloyd-Jones and Wilson (1990: 183) suggest a syntactic break after 2, and \(\hat{\alpha}\), mô̂ov for ómoîov. \({ }^{19}\) Aeschylean complements with \(\omega\) s are discussed below, in Section \(2 b\) (ii).
\({ }^{20}\) The possible exceptions (Ant.2, OT.71, Aj.513, and Tr.161) are all free relatives depending on cognitive verbs.
\({ }^{21}\) Relatives occur at Tr.1278, El.155, Ph.849, OC.250; free relatives at Tr.1009, OT.486, Ph.210; and causal use at Ant.159, 1321, OT.1340, Ph.1022, 1165.
}

Section \(2 b\) (iii). A purely metrical interpretation does not explain these functional differences: the prosody also reflects the poets' distinctive syntax.

\section*{2b (ii): "Oть in Aeschylus}

As noted in the previous section, Aeschylus rarely uses finite complementation. However, the three instances of ötı in extant Aeschylean texts suggest a link between position and meaning, as well as metre.
Completive ötı follows a speech verb at Eum.98-9, and this is line-final, in the canonical trimeter position:
\[
\begin{align*}
& \text {..... } \quad \text { проvขvé } \pi \omega \text { } \delta^{\prime} \text { ن́pîv öть } \\
& \text { Є} \chi \omega \mu \in \gamma i ́ \sigma \tau \eta \nu \text { aitíav кєív } \omega \nu \text { üтo. } \\
& \text {....... I declare to you that } \\
& \text { I am accused by them of the greatest crime }{ }^{22}
\end{align*}
\]

In a proleptic construction in anapaestic lines at Eum.970-1 (also cited in Chapter 6), the conjunction is line-initial, in the typical Homeric position following verbs of emotion:


... and I rejoice in the eye of Persuasion,
that it was guiding my tongue and lips

In a free relative construction, also in anapaests, at \(A g .97-8,00 \mathrm{TL}\) is adjacent to the main verb, reflecting its function as object: \({ }^{23}\)
19) Toút \(\omega \nu \lambda \grave{\prime} \xi a \sigma\) ' ő Tl kaì \(\delta u v a t o ̀ v\)

каì \(\theta \epsilon ́ \mu l s, ~ a l ้ \nu \in L ~ \pi a l \omega ́ \nu ~ t \epsilon ~ \gamma \in \nu o \hat{v}\)
Of these matters say what [is] possible
and right, and consent and be healer

There is evidently a metrical constraint on the line position of ötı, but again the prosodic patterns accord with semantic type.

\footnotetext{
\({ }^{22}\) Pragmatic and prosodic features of this construction are considered below.
\({ }^{23} \mathrm{M}\) and V have aì \(\epsilon \hat{\imath} \nu ; \mathrm{F}\) and \(\operatorname{Tr} \epsilon i \pi \epsilon \imath ิ \nu\), either of which would make ö \(\tau \iota\) the object in both clauses. Denniston and Page (1957: 77) justify Wieseler's conjecture סvvaróv through the necessity for \(\tau \epsilon\) to link to a preceding imperative.
}

\section*{2b (iii): "Otı in Euripides}

A purely metrical explanation of line placing is usually invoked for the greater variability in the position of Euripidean ötı, which correlates with a higher frequency of trimeter resolution. \({ }^{24}\) The position of the conjunction shows great prosodic variation, being line-final only 4 times. \({ }^{25}\)

However, Euripidean use is also functionally distinctive, in three ways:
1) The most common use of ö \(\tau\llcorner\) (usually ő \(\tau \iota\) ) is as a relative, in 32 constructions. Of these instances, 8 are preposed (some with correlative elements), \({ }^{26}\) and 12 are free relatives, most (7) depending on speech verbs. \({ }^{27}\)
2) A function intermediate between relative and interrogative, with a similar force to epic \(\tau \epsilon\), appears in three constructions with \(\epsilon \sigma \tau i\), as at \(I A .525\) :

Odysseus is not able to injure you and me.

A similar, but impersonal, use occurs at \(I A .1453\) (' \(\mathcal{\epsilon \prime} \sigma \theta\) ö \(\tau 1 . . . I s\) it possible that...'), while a relative function appears at Or.418:
21) \(\delta\) ou入єúo \(\mu \epsilon \nu\) Өєoîs, ö tı пот' єỉoìv oi \(\theta \epsilon\) oí.

We are slaves to the gods, whoever the gods are.
3) The most common conjunctive use of ötı (in 18 constructions) is causal ('because'), as at Ba.944: \({ }^{28}\)

[to lift it,] and I rejoice because/that you have changed your mind.

The high frequency of causal use compared to the other tragedians accords with a late development of this meaning: as suggested in Chapter 5, Section 3,

\footnotetext{
\({ }^{24}\) See West (1987: 25-26).
\({ }^{25}\) At Cyc.421-2 and Med.560-1 (cognitive verbs); and Phoen. 1617 and Ba. 173 (speech verbs).
\({ }^{26}\) Preposed relatives occur at Hipp. 191 and 194, IT.20, 822 (a free relative), and 1137, Ba. 430 and 881=901, IA. 1014 .
\({ }^{27}\) Free relatives occur at Cyc.548, Hec.585, IT.760, Hel. 822 and 1254, Phoen.1015, Or.150, Ba. 492 and 506, IA.127, 129, and 652.
\({ }^{28}\) The others are at Cyc.230, 553; Ion 831; IT.848, 1274; Hel.9, 186, 581, 1406; Or.395, 767; Ba.31, 245, 296, 616, 944; IA.506, 824.
}
the pronominal sense is likely to have been earlier. \({ }^{29}\) In some constructions, ӧть has no completive force at all, as at Cyc.229-230:


(Cyc.) By whom? Who has been boxing with your head, old man?
(Sil.) By these men, Cyclops, because I would not let them take your things.

The 13 non-causal complements depend on speech verbs rather than on cognitive verbs (8 as against 4). \({ }^{30}\) All constructions are cited in Appendix 3B. The rarity of completive ötเ is comparable to Aeschylean rather than to Sophoclean practice (where there are 34 constructions in a much smaller corpus), and it may be inferred that the freedom of Euripidean placing of öti has a semantic as well as a metrical component.

Even if the explanation were (impossibly) prosodic but not structural, it could not be simply metrical, because line-final placing is not restricted to trimeters: the pattern occurs in over half the instances in Aristophanes, where 14 of the 24 instances of complementizing ötı occur at the line end, and in Pindar, where the six instances of completive öтL are always terminal; \({ }^{31}\) five following verbs of emotion, and one of speech, at N. 5.3-5:

> [my song] sped from Aegina, announcing that
> the son of Lampon, strong Pytheas,
> won the crown for the Nemean pancratium

The prosodic pause at the end of any stichic line is likely to be reflected in the syntax. In trimeters, the brevis in longo created by line-end ötı \({ }^{32}\) standardly coincides with a sense-pause (see Stinton 1977a). On occasion, the break

\footnotetext{
\({ }^{29}\) Aristophanes demonstrates both uses: 5 out of 15 instances in Frogs are causal.
\({ }^{30 r}\) Otı follows speech verbs at Ba.173, Ba.649, HF.1417, Or.8-10, Or.892-3, IT.1093-4, El.171, Hel.1493; cognitive verbs at Cyc. 321 and 421-2, Phoen.1617, and Med.560-1, and once depends on \(\pi \lambda \not \subset \nu \quad\) (at \(E l .1312\) ).
\({ }^{31}\) P. 2.31, P. 5.20, P. 10.69, N. 4.43, and N. 5.3; as against 16 non-completive instances, none of which is line-terminal.
\({ }^{32}\) The terminology is discussed by Rossi (1963).
}
involves hiatus with the following line, as at Eum.98-9 (öть / \({ }^{\prime \prime} \chi \omega\) ), Prom.259-60
 therefore an emphatic component to this position as a clause introducer. The regular occurrence of the expletive phrase oîठ ötı at the line end (OT.59, 1133, Ant.276, 1043, E.Phoen.1617, Ar.Ra.600) also shows that a sense-break can be quite normal here. \({ }^{34}\) The regular position of complementizing ötı at the line end emphasizes its function in the main clause, as modifier or complement of the main verb.

\section*{2c: ' \(\Omega^{\prime}\) s in tragedy}

The position of the conjunction \(\dot{\omega}\) s is more variable in the tragic texts than in Homer: initial position following speech verbs occurs in the single instance in the Oresteia (Eum.310-1), 6 out of the 7 constructions in other Aeschylean works, 4 out of 5 in Prom., and 6 out of 12 in OT, but in only 2 of the 6 constructions in Medea. \({ }^{35}\)

However, the presence of main verb objects is very striking: every instance of complementing \(\dot{s}\) in the Oresteia, almost all in OT. and Crito, most instances in the Medea, \({ }^{36}\) and half of the Aeschylean instances outside the Oresteia are preceded by accusatives (see Appendix 3B). There is a somewhat higher frequency following main verbs of speech than those of knowing (the structural details are discussed in Chapter 6, Section 4). Though ís is not preceded by hiatus as often as őtı is followed by it, hiatus does occur, sometimes also with brevis in longo, as at Ag.494-6 (тósє / ís), Choe.987-8 (тотє̀ / ís), Pers.287-8 ( \(\pi \alpha ́ \rho \alpha / \dot{\omega}\) ) and 356-7 (тáठє/ís), OT.712-3 (äто/ís), and Med.85-6 (тóסє / \(\dot{\omega}\) ). \({ }^{37}\)

Of the 23 completive clauses with \(\omega\) is Aeschylus (approximately equal to the number of resultative and final constructions with \(\omega s\) ), almost all have a proleptic or pronominal object, or depend on a nominal, and most have nonfinite subordinate clauses (they are cited in Appendix 3B). Most Aeschylean

\footnotetext{
\({ }^{33}\) Hiatus with ötl occurs three times in Pindar too: at P. 5.20-1, P. 10.69-70, and N. 5.46-7.
\({ }^{34}\) See Section 3c for the function of these phrases as 'afterthoughts'.
\({ }^{35}\) The single instance of \(\dot{\text { s }}\) s following a speech verb in Cyclops, at 452, is also line-initial.
\({ }^{36}\) As Med.248, 447, 452, 530, and 1405.
\({ }^{37}\) Hiatus occurs also with \(\epsilon i\), as at Choe.181-2 ( \(\left.\tau \alpha ́ \delta \epsilon / \epsilon i\right)\) and Eum.466-7 ( \(\left.\kappa \alpha \rho \delta i ́ a ̨ / \epsilon i\right)\).
}
constructions depend on cognitive verbs, and conjunction and verb are usually (as in Homer) in the same line, as Choe.1034-6:
25) кaì vv̂v і́рâT'є \(\mu\) ', is \(\pi \alpha \rho \epsilon \sigma к є v a \sigma \mu \epsilon ́ v o s ~\)

\(\mu \in \sigma o ́ \mu \phi a \lambda o ́ v \theta^{\prime}\) íठpu \(\mu a\), \(\Lambda o \xi i ́ o v ~ \pi \epsilon ́ \delta o v, ~\)
And now look at me, how equipped with
this branch and wreath I shall approach
the shrine at the earth's navel, the land of Loxias

Eит.454:
 and my race, how it is, you will soon learn.
and Choe.492:
27)

remember how you first used/they devised a net \({ }^{38}\)

The only \(\dot{s}\)-completive in the Oresteia which follows a verb of speech is in (anapaestic) line-initial position, at Eum.310-1 (also cited in Chapter 6, Section 2b):
28)

\(\dot{\omega}\) 白 \(\pi \iota \nu \omega \mu \hat{a}\) \(\sigma \tau \alpha ́ \sigma ı s ~ \dot{\alpha} \mu \eta ́\).
and to speak of the lots of men,
how my band apportions them.

There are 12 complements with \(\dot{\omega} s\) in other Aeschylean works. Four depend on cognitive verbs (Pers.287-9, 525, 599-600, Sept.617), 7 on speech verbs (Supp. 390-1, Pers.356-7, 754, 819-20, Sept.375-6, 468-9, 922-3), and one on a verb of showing (Sept.176). Again, the position of the conjunction varies with the main verb: 6 of the 7 constructions dependent on speech verbs are lineinitial, as against 1 of the 4 following cognitive verbs. Similarly in Prometheus, none of the four constructions following cognitive verbs (Prom.359, 442-4, 1002-3, 1093) is line-initial, but 4 of the 5 following speech predicators are (Prom.211-3, 296-7, 842-3, 889-90, 1073-5).

\footnotetext{
\({ }^{38}\) Garvie (1986: 179), following Blomfield (1824), argues for this construction (rather than the dative \(\hat{\mathscr{\varphi}}\) in the Laurentian manuscript M, which would reflect ois in 491).
}

The positions of the conjunctions are more regular than authorial practice in the placing of other prepositives in the iambic line would suggest: West (1982: 83-4) notes great differences between the tragedians in the use of prepositives at the line end, and postpositives at the beginning: \({ }^{39}\) Aeschylus occasionally places prepositives at the line end, \({ }^{40}\) Euripides almost never does, while Sophocles uses enjambment very freely, \({ }^{41}\) even putting a postpositive at the line start, at \(A j .986\) ( \(\delta \hat{\tau} \tau \alpha\), after several lines of \(\alpha \nu \tau \iota \lambda \alpha \beta \eta ́) ~ a n d ~ O T . ~ 1085 ~(п о т ', ~, ~\) though the previous line ends with \(\notin T L\), creating a metrical pause).

\section*{2d: Prosody and syntax}

These examples show that there is regularly a prosodic pause after ötı and before \(\dot{\omega} s\), and that there is also normally a sense-pause, even with enjambement. If prosody reflects syntactic organization, then ötı would be placed in the main clause group, and \(\dot{\omega}\) in the subordinate. The frequent presence of main verb objects before \(\dot{\omega}\) accords with this interpretation. It was noted above in Section 1 that the meaning of the two complementizers is consistent with their etymologies as demonstrative and anaphoric (and consequent prospective or retrospective force respectively), and this accords with their positions with respect to the line break. The opposition of [ 0 Tı / - ] and \([-/ \omega s\) ] may therefore be interpreted as a metrical reflection of the focal patterns of the circumstantial construction. The pragmatic function of emphasis ('I tell you this') accords with the typical use of complementation in the corpus as a foregrounding technique, \({ }^{42}\) discussed in the next section.

\section*{3: Rhetorical functions of complementation}

Complementation is not only, or even primarily, indirect speech. In Homer, it is normally a perspectival technique ('he did not know that...'; 'Hector was angry that...'). In the tragic texts of the corpus, it is overwhelmingly used for rhetorical effect and persuasion. The rarity of reported speech is very striking: the change of the proportion of main verbs, from cognitive verbs in Homer to speech verbs in tragedy, discussed in Chapter 6, does not represent an

\footnotetext{
\({ }^{39}\) These terms are used as distributional categories, as by West (1987: 9n2) and Dover (1960: 12-13).
\({ }^{40}\) West cites Pers. 486 oî̀, Ag. 1354 ís, Choe. 1005 u'́, and Eum. 238 трós.
\({ }^{41}\) As Ant. 5 oủ, 171 кaí, \(324 \mu \eta ̀, 409\) тòv, El. 879 тoîs, 1309 üs, OC. 495 Є̀v, and 993 єỉ.
\({ }^{42}\) 'Foregrounding’ translates the aktualisace of Mukarovsky: see Burbank and Steiner (1977).
}
increase of reported speech, but rather of constructions which assert or suggest the truth of a statement or the authority of the dramatic speaker (as
 Aeschylus in particular uses first person verbs of speech asseveratively, as in the performative construction at Eum.98-9 (also cited above, in Section 2b):
29) ..... \(\quad\) проvvvé \(\pi \omega \delta^{\prime}\) í \(\mu \mathrm{\imath} \nu\) őtᄂ

Є้ \(\chi \omega \mu \in \gamma i ́ \sigma \tau \eta \nu\) aitíav кєív \(\omega \nu\) üтo.
.... I declare to you that
I am accused by them of the greatest crime

Subordination adds greatly to the pragmatic complexity of this utterance, by giving it four arguments (' I , you, them, the crime'), and creating a self-reflexive point of view, though adding nothing to the information expressed in the subordinate clause. \({ }^{43}\) The prominence of ötL is increased by two prosodic
 \(\kappa \in(\nu \omega \nu\) Üто). Its emphasis suggests that öтı may here be interpreted as 'this fact'. Kiparsky and Kiparsky (1970) argue that such a meaning underlies factive constructions, and it is also claimed by asseverative ones. \({ }^{44}\)

The low level of finite complementation in Aeschylus is offset by a use of 'guarantee' clauses as afterthoughts. This construction may be seen with first



 third person verbs is evident at Choe.527: ... is au̇tウ̀ \(\lambda \epsilon \in \gamma \in \iota\) ( \(\dot{s}\) may be used dismissively here), and, in anticipation, Eum.420: \(\mu \dot{\alpha} \theta\) o七 \(\mu\) ’ \(\alpha \nu, ~ \epsilon i ̉ ~ \lambda \epsilon ́ \gamma o l ~ T I S ~\) є́ \(\mu \phi а \downarrow \eta\) خórov.

The other tragedians use complementation less as asseveration than as an argumentative or emotionally expressive technique (constructions in the corpus are cited in Appendix 3B). Sophoclean complementation is often

\footnotetext{
\({ }^{43}\) The performative use of language was first defined by Austin (1962), and the self-reflexive character of poetic language formulated as a linguistic principle by Jakobson (1958: 69).
\({ }^{44}\) An analogous tragic use of participles depending on speech verbs to assert truth is noted by Fournier (1946).
}
argumentative, as in the pattern of anaphora mirroring the confrontation at OT.547-8:


(Cr.) This same thing, now first hear how I say it.
(Oe.) Don't tell me this same thing, that you are not evil.

A self-referential, perhaps ironic, use of complementation appears in the double construction at OT. 1366 (at the end of the second kommos, after Oedipus has blinded himself). The position of \(\sigma \epsilon\) in P2 after the complementizer, though it properly belongs in the following AI construction, is, presumably, phonetically motivated:

I do not know how/that I can say you have planned this well.

Euripidean use is often exclamative, as at Med.1405:

Zeus, do you hear this, how I am driven away...
and Med.1060:

    тaîठas тарŋ́бш тoùs Є̇ \(\mu\) oùs каӨvßрíбal.

This will never be, that I
shall leave my own children to be mocked by my enemies.

Complementation in the Melian Dialogue is, not surprisingly, used as a persuasive technique: the shifts of viewpoint create the impression of common understanding, while in fact expressing a single argument about the justice of force. This is reflected in a predominance of cognitive verbs, which are generally used as assertions. The factive \(\delta \eta \lambda o ́ \omega\), which is particularly common in Plato and Aristotle (see Section 3a below), appears twice. The extraordinary complexity of the passage at Thuc. 5.89 (part of which is cited in Chapter 3, Section 5) is increased by the embedding of the finite
complements inside a participle construction, itself juxtaposed to a double infinitive construction:
We ourselves then will make use of no fair phrases, that either we rule justly because
we overthrew the Persians, or come against you injured, offering lengthy but
unbelievable arguments, nor do we think that [ you will think it possible to persuade
us by saying [ either that being colonists of the Spartans you did not become allies,
or that you have done us no wrong ] ]

The style of this passage is the converse of the emphatic: the clauses are organized less contrastively, as the complementizers are less prominent, with no P2 particle following ötı, and no evident focal elements before \(\dot{\omega} s\). The juxtaposition of the complementizers with \(\eta\) and the use of negatives make the effect disjunctive, yet not prosodically contrastive. \({ }^{45}\) It was noted above (in Section 1b) that there is no evident difference here in the sense of ötı and \(\dot{\omega}\), which need some emphasis to be semantically distinct. The structure is therefore more clearly completive.

Negation is also common in Platonic complementation, typically involving questions, suggesting an evaluation of the subordinate clause, which may itself be negative. However, the prosody is more emphatic, with P2 focalizers, as may be seen at Crito 47a2-3:
oủx ikavติs ठокєî бol \(\lambda \in ́ \gamma \epsilon \sigma \theta a l\) őtı oủ

Do you not think it is satisfactorily said that we ought not to honour all opinions, but only some...
and Crito 50e3-4:
 кaì סoûdos, aủtós tє kaì oi бoì mpóyovol;
Could you say to begin with that you were not our offspring and slave ...

\footnotetext{
\({ }^{45}\) The sentence appears designed to be difficult to understand: a kind of cognitive bullying.
}

Other constructions from Crito are cited in Appendix 3C. The emphatic style is reinforced by the Platonic use as main verbs of \(\pi \epsilon i \theta \omega\) (Symp.212b, Ap.27e) and \(\grave{\epsilon} \pi \iota \delta \epsilon\) ík \(\nu \mu \mathrm{L}\) (Ap.25c, Prot.320c), with both ötl and \(\omega\) s, noted by Neuberger-Donath (1982: 273). The use of preposed complementation also creates emphasis, as in the 4 constructions from Crito discussed below in Section 4.

The low frequency of complementation in tragedy may be an effect of genre, because reporting is, presumably, less used in drama than other genres, and indirect speech forms might be expected to be more common in historical and forensic writing. No figures are available for the historians, but Monteil (1963: 399) observes a high level of 'substantival' constructions in Lysias. The frequency and interrogative form of complementation in Plato suggests it is one of the techniques by which the dialogic management of the Socratic elenchus is effected, and, in particular, a device by which one voice may appropriate the arguments of another, without departing from the dialogue form. \({ }^{46}\)

\section*{3a: Structural implications of function}

In fact, all the tragedians use complementation to highlight a proposition by subordinating it: it might be described as a presentational frame. \({ }^{47}\) Pragmatic motivation may underlie a number of structural features, such as multiple embedding, verb person, the use of nominal predicators, and of preposed clauses.

\footnotetext{
\({ }^{46}\) Relations between discourse structure and argument in Plato are discussed by Vlastos (1983), Kahn (1996), and Gill and McCabe (1996). The functions of P2 particles in Plato are discussed by Cook (1992), Sicking and van Ophuijsen (1993), Kip (1997), and Sicking (1997).
\({ }^{47}\) Presentational frames are discussed by Goffman (1974), Tannen (1993), and Dik (1989: Chap. 10).
}

Double complements occur in Sophocles, at OT. 1366 (cited in the previous section) and OT.1133ff., where \(\hat{\jmath} \mu \mathrm{os}\) may be used as a subordinating conjunction: \({ }^{48}\)
```

                                    ..... \epsilon\hat{\imath} \gammaà\rho oî\delta' öт\iota
    кáToเ\delta\epsilonv \hat{M}\muos тòv Kı0alp\omegâ\nuos тótov
    ```

```

< ,
\epsiloṅ\pi\lambda\eta\sigmaía\zetăov T@̂ठ\epsilon Tả\nu\delta\rhoì \tau\rho\epsilonîS ö\ous
for I know well [that he knows [when about Kithairon,
he with two flocks, and I one,
I was this man's neighbour for three whole half-years ...] ]

```

The shifting point of view created by multiple embedding is matched in a construction combining features of direct and indirect speech at Crito 51c6:



Observe then, Socrates, the laws might perhaps say, [if what we speak is the truth, ] that you do not justly try to do to us what you are now trying.

Here, the structurally irregular position of the conditional creates a slight perspectival ambiguity (who or what are \(\mathfrak{\eta} \mu \epsilon i s ?\) ).

As most complement constructions have indicative verbs (in contrast with many of the free relatives discussed in Chapter 5, Section 2), the asseverative function of complementation is marked primarily by person rather than by mood or tense. \({ }^{49}\) Complements in the texts studied here show the use of first person constructions for rhetorical rather than narrative uses. Even a speech

\footnotetext{
\({ }^{48}\) Though there may have been a conjunction in the lacuna following 1135: see Lloyd-Jones and Wilson (1990).
\({ }^{49}\) The use of mood in expressing the attitudes and factivity of complementation is outside the scope of this discussion. See Lyons (1977: Chs. 16 and 17) for a theoretical overview, and Howorth (1955), Lightfoot (1971, 1979: 282-294), Boel (1980), Crespo (1984), and Sicking and Stork (1996) for surveys of Greek usage. The use of subjunctives and indicatives in relative clauses is considered by Vester (1989), and mood in conditionals is discussed by Bakker (1988b) and Horrocks (1995). A study of complementation modalities has been undertaken for English by Ransom (1986).
}
verb will pass on presuppositions when the main verb is in the first person: the performative use of the first person is common in Aeschylus (as cited above) and also in the Homeric \(\epsilon\) Ü \(\chi o \mu a \iota ~ c o n s t r u c t i o n, ~ a s ~ a t ~ O d .9 .263: ~\)

We claim to be the people of Agamemnon son of Atreus.
Constructions with second person verbs are, as might be expected, more confrontational, as in Sophoclean argumentation, in the constructions cited in the previous section. Both first and second person constructions are quite different from complements depending on third person verbs, which generally express no commitment to the truth of the subordinate clause. Complementation may therefore be considered as a way of mediating point of view as well as asserting truth. \({ }^{50}\)

Dependence on a nominal or adjectival predicator becomes progressively more common. Monteil (1963) and Jespersen (1924) analyse these constructions as expressing the logical subject of the main verb, but recent models would consider them to be complements. \({ }^{51}\) They make a judgment, rather than simply reporting the subordinate proposition. The rare Homeric examples include ä \(\lambda \iota s\) ötı at \(I l .5 .349\) and \(I l .23 .670\), and \(\alpha \quad \lambda \iota s\) is at \(I l .17 .450\) and Od.2.312 (see also Chapter 5, Section 3a). A complement with \(\delta \bar{\eta} \lambda o v\) appears once in Homer, at Od.20.333, with a pronominal object:

But now this has become clear that there will never be a homecoming [for him].

In post-Homeric use, \(\delta \hat{\eta} \lambda o \nu\) occurs as a main clause idiom. It introduces complements three times in extant tragedy, all with \(\dot{\omega}\) and with omitted copula, at S.Phil.162-3:

бтíßov ỏ \(\gamma \mu \epsilon\) úєı тóvठє mé入as mov
It [is] clear to me that he has gone to find food somewhere near here.
E.Hipp.627:

From this [is] clear how great a curse [is] woman.

\footnotetext{
\({ }^{50}\) Relationships between focus, point of view and verb person in Latin are discussed by Fowler (1990) and Jones (1991).
\({ }^{51}\) Following the analysis by Koster (1978) that such complements are base-generated within the VP, rather than being 'extraposed' from subject position as suggested by Jespersen (1924).
}
and at E.El.660:

But if she comes home, it [is] clear that she will die.

Prose use is much more extensive. Demosthenes uses \(\delta \bar{\eta} \lambda o v\) is ( 5 instances) and \(\delta \hat{\eta} \lambda o v\) Ötı (32 instances), \(\delta \mathfrak{\eta} \lambda o v\) ढ̈бтє (once, at Or. 21.162.6), and \(\delta \bar{\eta} \lambda o v\) Sıótı, in a preposed complement at Or. 58.42.1:



For that it is the opposite case, and not he but I am libelled, and, though some have said they would aid me, I have been betrayed by their collaborators, [this] will be [made] clear to you in the following way.

The predicator appears to be especially suited to philosophical argumentation (perhaps because it involves a value judgment): \(\delta \hat{\eta} \lambda o v\) occurs over 400 times in Plato, and over 1,500 times in Aristotle, introducing complements in many instances, most commonly with őtı. As noted earlier, it is also employed as an afterthought ( \(\delta \bar{\eta} \lambda\) о⿱ with öтl, at 53b1 ( \(\sigma \chi \in \delta o ́ v ~ \tau \iota ~ \delta \tilde{\eta} \lambda o \nu\) ). It appears in 4th century texts as the adverbial \(\delta \eta \lambda\) ovótı, occasionally in Plato and Demosthenes (8 instances), and rather more often in Aristotle (23 instances). The use of a nominal predicator may also be a consequence of the increasingly formalized and minimal main clause frame.

\section*{3b: Discourse function and clause order. Preposing}

As described in Chapter 5, clause order is crucial to the development of complementation, because, when the subordinate clause follows, the complementizer occupies a bivalent position. However, a small number of complements precede the main: in the corpus, there are 288 complement clauses (as shown in Appendix 1A), and of these 13 (under 5\%) precede their main clause. Most are cited below. \({ }^{52}\) Preposing may be regarded as rhetorical hysteron proteron, with the order giving the subordinate clause greater prominence.

\footnotetext{
\({ }^{52}\) The ones omitted are at Il.9.704 ( \(\omega \varsigma\) ) and Eum. 652 ( \(\pi \omega \varsigma\) ).
}

The only Homeric instance of preposing with öтtı, at Od.23.115-6, has a correlative structure and a causal sense:


but now that I am dirty and wear foul clothing
for this she dishonours me and says I am not her husband.

Preposed tragic and Platonic complements are appositive rather than correlative. There is only one preposed complement with ötı in tragedy, at OT.499-501:



but that [the word of] a seer, a man,
weighs more than mine,
the conclusion is not established

In Crito, all four preposed complements are introduced by ötı. Three are semantically subjects, two with \(\delta \bar{\eta} \lambda o \nu\) and one with \(\mu \in ́ v \in \mathrm{l}\). At 48 b 8 , the subject of the subordinate is itself preposed:

\(\mu \epsilon ́ v \in\llcorner\) خ̉ oủ \(\mu \in ́ v \in \iota\);
And, the good, [living] both well and justly, that they are the same thing, does it hold or not?

At 53b1 the complementizer, focalized by particles, signals the construction:
 aủtoì \(\phi \epsilon u ́ \gamma \epsilon เ \nu\) каì \(\sigma \tau \epsilon \rho \eta \theta \eta \eta v a l ~ T \eta ̂ S ~ \pi o ́ \lambda \epsilon \epsilon s ~ \eta ̄ ~ T \eta ̀ \nu ~ o u ̉ \sigma i ́ a \nu ~\) \(\alpha \dot{\alpha} \pi \lambda_{\epsilon ́ \sigma \alpha L}, \sigma \chi \in \delta o ́ v ~ \tau \iota ~ \delta \hat{\eta} \lambda o \nu\).
For that your friends will themselves risk banishment and loss of home or destruction of property, this [is] fairly clear.

At Crito 53a3, the main clause is really an afterthought:


So much more than the other Athenians
the city and we the laws pleased you, it [is] clear.

When the subordinate is the object of the main verb, it makes a greater call on the memory, as at Crito 53d7ff.:

 \(\mu \in \gamma i ́ \sigma t o v s ~ m a \rho a ß a ́ s, ~ o u ̉ \delta \epsilon i s ~ o ̂ s ~ \epsilon ́ ~ ¢ \epsilon i ̂ ; ~\)

But that, being an old man, having a short time to live, probably, you clung to life with such shameless greed, transgressing the greatest laws, will there be no-one who will say [this]?

When \(\dot{s}\) is used in a preposed complement, it is also usually focalized by particles (as in the conditionals discussed in Chapter 4). There is only one correlative in the corpus, in the Melian Dialogue, 5.91.6ff.:



But how it is for the benefit of our empire that we are here, and for the safety of your city that we now propose to speak, this we shall make plain....

The main verb has a pronominal object at OT.1369-70, in a ditransitive construction (since the object is semantically indirect):


That/how these things have not been done in the best way, do not teach me, nor give me advice now

Preposing emphasizes the causal force: Jebb (1981: 93) considers \(\dot{\omega}\) at OT. 848 (and similar preposed constructions elsewhere in Sophocles) to be purely adverbial, as it 'merely points to the mental attitude which the subject of \(\dot{\epsilon} \pi i \sigma \tau a \sigma o\) is to assume'. However, it is also conjunctive:

But how the word was thus set forth, you may understand,

In a participial construction at Medea 1311, , \(s\) could be analysed as adverbial:

As being no longer alive, you must think of your children.

At Ag.1505-6, the construction could bear a substantival interpretation, because of the meaning of the gerund, but again a reinterpretation of the conjunction is required:

тоûठє фóvou tís ò \(\mu a \rho т \cup \rho \eta ́ \sigma \omega \nu\);
how/that you are innocent of this murder
who [will be] the witness?

\section*{3c: Complementizer meaning in preposed constructions}

As noted above, almost no post-Homeric constructions have a correlative element, in contrast with the persistence of correlative relatives in tragedy and in Plato, as cited in Chapter 5, Section 2a. In preposed complements, the complementizers bear a greater emphasis than they would when following the main clause, and are always focalized by P2 particles. The consequent emphasis of the whole clause is evident from the opening of the Apology, 17a1-2, where preposing implies a specifying interpretation, and by delaying the main clause, minimalizes the completive function:
 катпүóp \(\omega \nu\), oủk oìठa.
In that (how) you have been affected by my accusers, men of Athens, I do not know.

Without clues to the contrary, the conjunction may initially be interpreted in its pronominal sense ('what you have suffered'). Such constructions may therefore create a level of irony, as 'garden-path utterances' (Sperber and Wilson 1986: 184), because they require re-interpretation when the main clause is heard.

The semantic ambiguity of preposed constructions supports the assumption (discussed in Chapter 2, Section B 5a) that left-branching structures are more difficult to process, and, as the dependent clause is much larger than the governing clause, demonstrates the markedness of decreasing weight (at least in terms of constituents). This contrasts with 'afterthought' constructions, where ötı may be interpreted as an emphatic main clause pronoun, as at S.Ant.276:

and I am here unwilling to those who do not welcome me, I know that.

At E.Phoen.1616-7, both the main and subordinate clauses are minimal:


What guide will accompany the foot of the blind man?
The dead girl? If she were alive, I know that well.
At Ar.Ra.599-600, the conjunction is repeated, in what may be interpreted either as epanadiplosis, or with the first ötı as a causal link, as in dialogue elsewhere (including Ra.20), with the repetition as an afterthought:


that then, if anything good happened,
he would want to take the clothes back from me, I know that well
As with the interpretation of ötı and \(\omega\) s in preposed complements, so the meaning of \(\epsilon i\) depends on its position. In a preposed indirect question, the conjunction will carry a conditional sense until the main clause is heard, as at E.Med.1103-4: \({ }^{53}\)


And then of these, whether they toil upon worthless
or whether on worthy objects, this is unclear.

\section*{Conclusion}

This chapter discussed relationships between prosodic features and pragmatic function in complementation, showing that focalization is intimately associated with clause order and the prosody of the stichic line. Complementation is used in the corpus primarily as a presentational form rather than as indirect speech. A close interrelation between discourse function and focalization is evident, with point of view expressed through prosodically- as well as pragmatically-focal patterning. Only in the Melian Dialogue is complementation unemphatic: elsewhere in the corpus it retains focal prosody, implying that it also retains a circumstantial, adverbial, form.

\footnotetext{
\({ }^{53}\) Of course, indirect questions may also be ambiguous when they follow speech verbs, as discussed in Chapter 4, Section 5b.
}

\section*{Conclusion}

\section*{Recapitulation}

Chapter 1 showed that subject, verb, and object order in epic and tragedy is statistically comparable to that observed in prose. No structural constraints on order were observed. The Greek clause cannot be regarded as verbicentric, because most finite clauses do not have both an explicit subject and object, and in those which do, SOV is more common than SVO.

Chapter 2 showed that intra-clausal word order is motivated by phonetic weight rather than syntactic structure. Larger words preferentially come later in the sentence, motivating SV and OV, while VS and VO are associated with a prosodically prominent noun. The features are combined in a principle of 'phonological weight.'

Chapter 3 discussed tragic phrasal tmesis, which demonstrates similarities between intra-clausal patterns and subordinated ones. It was treated by Aristophanes as typical of the tragic style. By its prosodic regularity, the construction highlights the form of the second colon, and so may be seen as exemplifying 'weight to the right'.

In Chapter 4, a prosodic definition of focus was proposed, and the \(\mathrm{P} 1>\mathrm{P} 2\) sequence interpreted as a focal unit. Focalization and clause linking were analysed as the same, textually deictic, force. Focalization was also identified in relative and conditional clauses.

Chapters 5-7 examined the development of complementation. The grammaticalization of öTı involved its indefinite reference initially following speech verbs, and of \(\dot{\omega}\) its function as an adverbial in circumstantial constructions, following cognitive verbs. Because of the focal element, tragic complementation remained circumstantial, with adverbial features.

The model of focalization accords with features of clause linking observed in conditional, relative, and complement constructions, and suggests a way in which a convergence of adverbial and relative structures could have developed into complements by a series of gradual steps. It also accords with the discourse functions observed in tragic and Platonic complementation.

In the Introduction, Section 3, it was noted that the hypothesis is testable, as it predicted that there would be no focus position in subordinate clauses which follow their main. Apparent counter-instances were discussed in Chapter 6, Section 4 c , and it was concluded that they do not disprove the hypothesis.

\section*{Principles of clause and word order}

The existence of regularities in word order has been taken to imply that underlying principles may be found by examining statistical frequencies: Dunn (1988: 78) considers that 'Greek word order is not a matter of absolute laws, but is by its very nature a statistical phenomenon. It follows that Greek word order must be investigated by statistical methods.' However, the findings here show that statistics do not in themselves explain variations.

Nor, it appears, do purely pragmatic explanations. The similarity of word order in poetry and prose demonstrates that genre is not a significant determinant. \({ }^{1}\) Two structural factors must also be considered: rightwards phonological weight and initial focalization. The prosodic component of rightwards phonological weight also suggests a causal connection between the development of subordination and of a stress accent in Greek.

\section*{Word order change}

Focalized linking also suggests an explanation for some historical changes in word order. While the ordering of subject, verb and object in early IE languages remains uncertain, \({ }^{2}\) it is usually thought that there was a transition in post-Classical Greek from free object and verb ordering to VO, and also from SV to VS. Suggested explanations of these changes have included 'phonetic erosion' (the need to preserve clarity when inflections are lost: Vennemann 1974), 'gapping' (when elements of the second clause in a coordinated structure are omitted: Ross 1970), or a general rightwards 'leakage', due to a global change in modifier and head ordering (Ross 1973, Lehmann 1973).

\footnotetext{
\({ }^{1}\) Although, as noted in Chapter 1, Section B 4, there is a high proportion of VS in lyric passages in the Oresteia, it was also observed that this is restricted to main clauses, and is matched by the high VS level in main clauses in Crito.
\({ }^{2}\) See Delbrück (1878), Watkins (1964), Lehmann (1973), Friedrich (1975), Miller (1975), and Taylor (1994).
}

This discussion has shown reason to doubt these explanations. In Chapter 2 it was shown that head-modifier ordering cannot be a complete explanation for word order, and, if preceding clauses are not structurally subordinated, it cannot be an explanation for changes in clause order either. Phonetic erosion is not applicable to CG, which retains its inflections.

The structure of the subordinating link constitutes a more plausible motivation: complementation motivates VO order in the main clause, and may also motivate VS order within the subordinate clause, because P1 is syntactically in the main clause. \({ }^{3}\) The avoidance of centre-embedding in relativization also motivates VS in the main clause. It is clear that intra-clausal word order must be considered in the context of inter-clausal structure.

\section*{Last words}

Throughout the discussion, a link between the stichic line and clause structure has been noted, with intonational and metrical boundaries reflecting the syntax. The study of ancient poetry therefore appears to be a valid approach in the study of linguistic structure. Precisely because stichic verse is prosodically very regular, underlying patterns may be the more evident. And we may expect to identify them in prose too. Poetry is not a derived form of language, but a 'way of speaking', a compositional technique which exploits the existing rhythms of speech by highlighting their natural regularities.

This realization suggests that the answer to Monsieur Jourdain's question cited in the epigraph of this work is not as obvious as might at first appear. The prosody of speech is at least as close to poetry as it is to prose, and poetic texts may provide our best evidence for the speech patterns of ancient times.

\footnotetext{
\({ }^{3}\) Kühner (1904: 597) notes the occurrence of VS order in complements, attributing it to the prominence of the elements, in almost the same words he uses to describe prolepsis: 'wenn der Inhalt derselben gleichsam mehr vor das Auge gerückt werden soll'.
}

\section*{Appendix 1}

\section*{Subject, verb, and object order}
1A: Subject and verb order: the textual data ..... Page 262
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Oresteia, Medea, and Crito, collated by syllable number ..... 283
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\section*{Appendix 1A}

The textual data: subject and verb order by main and subordinate clauses

\section*{The whole corpus}

Total [SV+VS] clauses \(=2,437\)
Main [SV+VS] main clauses=1,710 (70\% of total clauses)
Subordinate [SV+VS] clauses=727
\begin{tabular}{ll} 
SV total \(=1,724\) & \((71 \%\) of total SV+VS) \\
SV main \(=1,224(71 \%\) of total SV \()\) & \((72 \%\) of main SV+VS \()\) \\
SV subordinate \(=500\) & \((69 \%\) of subord. SV+VS \()\) \\
& \\
VS total \(=713\) & \\
VS main \(=486(68 \%\) of total VS \()\) & \\
VS subordinate=227 &
\end{tabular}

\section*{The individual texts}

Iliad 9 (713 lines) has a high number of subjects (both SV and VS) in main rather than subordinate clauses.

It has a higher proportion of VS than the Odyssey, in both main and subordinate clauses.

Total [SV+VS] clauses=223
Main [SV+VS] clauses=155 (70\% of total)
Subordinate [SV+VS] clauses \(=68\)
\begin{tabular}{ll} 
SV total=154 & \((69 \%\) of total SV+VS \()\) \\
SV main \(=104(68 \%\) of total SV \()\) & \((67 \%\) of main SV+VS \()\) \\
SV subordinate=50 & \((74 \%\) of subord. SV+VS \()\)
\end{tabular}

VS total=69
VS main=51 (74\% of total VS)
VS subordinate=18

Odyssey 9 (566 lines)
(a high proportion of SV and VS in main rather than subordinate clauses)

Total [SV+VS] clauses=217
Main [SV+VS] main clauses=168 (77\% of total)
Subordinate \([S V+V S]\) clauses \(=49\)
\begin{tabular}{ll} 
SV total=170 & \((78 \%\) of total SV+VS \()\) \\
SV main=131 (77\% of total SV) & \((78 \%\) of main SV+VS) \\
SV subordinate \(=39\) & \((80 \%\) of subord. SV+VS \()\)
\end{tabular}

VS total=47
VS main=37 (79\% of total VS)
VS subordinate \(=10\)

Septem (1078 lines)
(a high proportion of SV and VS in main rather than subordinate clauses)

Total [SV+VS] clauses=245
Main [SV+VS] main clauses=194 (79\%)
Subordinate \([\mathrm{SV}+\mathrm{VS}]\) clauses=51
\begin{tabular}{ll} 
SV total \(=175\) & \((71 \%\) of total \(\mathrm{SV}+\mathrm{VS})\) \\
SV main \(=138(79 \%)\) & \((71 \%\) of main \(\mathrm{SV}+\mathrm{VS})\) \\
SV subordinate=37 & \((73 \%\) of subord. \(\mathrm{SV}+\mathrm{VS})\) \\
& \\
VS total=70 & \\
VS main=56 \((80 \%)\) & \\
VS subordinate=14 &
\end{tabular}

Oresteia (3,796 lines)
All three plays of the Oresteia have a high proportion of VS subordinates, compared to SV subordinates. Main clauses are predominantly SV ( \(68 \%\) of main clauses with subjects), \({ }^{1}\) while in subordinate clauses, SV /VS proportions are about equal.

Total [SV+VS] clauses=691
Main [SV+VS] main clauses=513 (74\%)
Subordinate [SV+VS] clauses=178
\begin{tabular}{ll} 
SV total \(=465\) & \((67 \%\) of total \(\mathrm{SV}+\mathrm{VS})\) \\
SV main \(=372(80 \%)\) & \((73 \%\) of main \(\mathrm{SV}+\mathrm{VS})\) \\
SV subordinate=93 & \(\mathbf{( 5 2 \%}\) of subord. SV+VS)
\end{tabular}

VS total=226)
VS main=141 (62\%)
VS subordinate=85

Agamemnon (1,673 lines)
\begin{tabular}{ll} 
SV total=218 & \((70 \%\) of total SV+VS) \\
SV main=171 \((78 \%)\) & \((76 \%\) of main SV+VS) \\
SV subordinate \(=47\) & \((55 \%\) of subord. \(\mathrm{SV}+\mathrm{VS})\)
\end{tabular}

VS total=92
VS main=54 (59\%)
VS subordinate \(=38\)

Choephoroi (1,076 lines)

SV total=125
SV main=103 (82\%)
SV subordinate=22

VS total \(=68\)
VS main=50 (74\%)
VS subordinate=18

Eumenides (1,047 lines)
\begin{tabular}{ll} 
SV total=122 & \((65 \%\) of total \(\mathrm{SV}+\mathrm{VS})\) \\
SV main=98 \((80 \%)\) & \((73 \%\) of main \(\mathrm{SV}+\mathrm{VS})\) \\
SV subordinate \(=24\) & \((45 \%\) of subord. \(\mathrm{SV}+\mathrm{VS})\)
\end{tabular}

VS total=66
VS main=37 (56\%)
VS subordinate \(=29\)

OT. (1,530 lines)
(a high proportion of both SV and VS in subordinates)

Total [SV+VS] clauses=264
Main [SV+VS] main clauses=171 (65\%)
Subordinate [SV+VS] clauses \(=93\)

SV total=191
SV main=122 (64\%)
SV subordinate \(=69\)

VS total=73
VS main=49 (67\%)
VS subordinate \(=24\)

Medea (1,419 lines)
(a high proportion of VS in main clauses)

Total [SV+VS] clauses=255
Main [SV+VS] main clauses=172 (67\%)
Subordinate [SV+VS] clauses \(=83\)
\begin{tabular}{ll} 
SV total \(=167\) & \((65 \%\) of total SV+VS \()\) \\
SV main \(=108(65 \%)\) & \((63 \%\) of main SV+VS \()\) \\
SV subordinate \(=59\) & \((71 \%\) of subord. SV+VS)
\end{tabular}

VS total=88
VS main=64 (73\%)
VS subordinate \(=24\)

Cyclops (709 lines)
(a high proportion of SV and VS in main rather than subordinate clauses)

Total [SV+VS] clauses=126
Main [SV+VS] main clauses=95 (75\%)
Subordinate [SV+VS] clauses=31
\begin{tabular}{ll} 
SV total=94 & \((75 \%\) of total SV+VS) \\
SV main=72 (77\%) & \((76 \%\) of main SV+VS) \\
SV subordinate \(=22\) & \((71 \%\) of subord. SV+VS) \\
& \\
VS total \(=32\) & \\
VS main=23 (72\%) & \\
VS subordinate=9 &
\end{tabular}

Frogs (1,533 lines)

Total [SV+VS] clauses=254
Main [SV+VS] main clauses=169 (67\%)
Subordinate [SV+VS] clauses \(=85\)
```

SV total=192
(76% of total SV+VS)
SV main=130 (68%)
SV subordinate=62
VS total=62
VS main=39 (63%)
VS subordinate=23

```

\section*{Melian Dialogue}
(overwhelmingly SV)

Total [SV+VS] clauses=42
Main [SV+VS] main clauses=23 (55\%)
Subordinate [SV+VS] clauses=19
\begin{tabular}{ll} 
SV total \(=37\) & \((88 \%\) of total SV+VS \()\) \\
SV main \(=21(57 \%)\) & \((91 \%\) of main SV+VS \()\) \\
SV subordinate \(=16\) & \((84 \%\) of subord. SV+VS \()\) \\
& \\
VS total \(=5\) & \\
VS main \(=2(40 \%)\) & \\
VS subordinate \(=3\) &
\end{tabular}

\section*{Crito}
(a high proportion of SV subordinates and of main clause VS, in contrast with the Oresteia)

Total [SV+VS] clauses=120
Main [SV+VS] main clauses=50 (42\%)
Subordinate \([\mathrm{SV}+\mathrm{VS}]\) clauses \(=70\)
\begin{tabular}{ll} 
SV total=79 & \((66 \%\) of total SV+VS) \\
SV main \(=26(33 \%)\) & \((\mathbf{5 2 \%}\) of main SV+VS) \\
SV subordinate=53 & \\
& \\
VS total \(=41\) & \\
VS main \(=24(59 \%)\) & \\
VS subord. SV+VS
\end{tabular}

\section*{Appendix 1B:}

Subject and verb order in subordinate clauses, analysed by type

Iliad 9 (713 lines)

\section*{Subordinates (1 per 3 lines)}
( \(239,73=31 \%\) with subjects: SV 50, VS 18, SVS 5)
[VS are \(41 \%\) of SV]
\(47 \%\) Adverbials 113 (in descending order of frequency) SV 26, VS 15 (VS \(58 \%\) of SV):




32\% Relatives (77: SV 15)
13\% Conditionals (30: SV 9, VS 4)
Complements (11: SV 1, VS 1)
\(8 \% \quad\) Indirect questions (7: VS 1)
Fearing (1)

Omitting ráp clauses from subordinates: adverbials=84, SV 19, VS 11 (VS 58\% of SV), compared to \(57 \%\) VS for \(\gamma\) áp clauses.

Omitting all adverbials leaves other subordinates=126, SV 25, VS 6 (VS \(24 \%\) of SV). VS is therefore associated with adverbial clauses.

\section*{Odyssey 9 (566 lines)}

\section*{Subordinates (1 per 3.7 lines)}
(150, 59=39\% with subjects: SV 39, VS 11 SVS 9
[VS are \(31 \%\) of SV]
\(57 \%\) Adverbials 85 (in descending order of frequency) SV 25, VS 10, SVS 1 (VS \(40 \%\) of SV):


SV), ő \(\sigma\) (1), єîos (1), oîa (1: SV), ойขєка (1), ö \(\sigma \sigma o \nu ~(1) . ~\)

25\% Relatives (37: SV 5, VS 2)
9\% Conditionals (14: SV 5)
Indirect questions (10: SVS 2, VS 1)
Final (2: SV 1)
9\% Complements (1: SV)
Fearing (1: SV)

Omitting \(\gamma\) á \(\rho\) clauses from subordinates: adverbials=65, SV 15, VS 6 (VS 40\% of SV), compared to \(40 \%\) VS for \(\gamma\) áp clauses.

Omitting all adverbials leaves other subordinates=65, SV 13, VS 3 (VS 23\% of SV). As with Iliad 9, VS is associated with adverbial clauses.

\section*{Septem (1084 lines)}

\section*{Subordinates (1 per 10 lines: a very low proportion)}
(108, \(54=50 \%\) with subjects —high: SV 37, VS 14, SVS
[VS are \(36 \%\) of SV]

49\% Adverbials 53 (in descending order of frequency) SV 25, VS 6, SVS 1 (VS 24\%):
үáp (27: SV 15, VS 4), ஸ́s (10: SV 4), ধ̇ \(\pi \in i ́ ~(6: ~ S V ~ 2, ~ V S ~ 1), ~ \epsilon ป ̂ t \epsilon ~(2: ~ S V), ~ o ̈ t \epsilon ~(2: ~ S V S ~ 1), ~ ' ̌ \nu \alpha ~(2), ~ o ̈ т \alpha \nu ~\) (1: SV ), ő \(\mu \omega\) (1), \(\mu \dot{\text { ( }}\) (1: VS), \(\check{\sigma} \sigma \pi \in \rho(1: \mathrm{SV})\).

29\% Relatives (31: SV 3, VS 4: high VS)
\(12 \% \quad\) Conditionals (13: SV 8)
Complements (6: SV 3)
10 \% Indirect questions (3: VS 2)
Final (2: SV 1, VS 1)

Omitting \(\gamma\) á clauses, adverbials=26, SV 10, VS 2 (VS 20\% of SV), compared to \(27 \%\) VS for \(\gamma a ́ \rho\) clauses.

Omitting all adverbials leaves other subordinates=55, SV 29, VS 12 (VS \(41 \%\) of SV). In contrast with Homer, VS is associated with non-adverbial subordinates.

\section*{Oresteia (3796 lines)}

\section*{Subordinate Totals (1 per 7.3 lines: a low proportion)}

Oresteia (519, 189=36\% with subjects: SV 93, VS 85, SVS 11)
[VS are \(93 \%\) of SV].
VS is especially high for relatives and adverbials (non- \(\gamma \alpha{ }^{\prime} \rho\) ).

60\% Adverbials (310: SV 68, VS 65, SVS 4) VS 97\%
16\% Relatives (84: SV 9, VS 9) VS 100\% quite low number of relatives
14\% Conditionals (75: SV 14, VS 11) VS 79\%
\(10 \% \quad\) Complements (21: SV 1, VS 2)
Indirect questions (29: SV 7, VS 3) VS 63\%

Omitting rá \(\rho\) clauses, adverbials=140 (27\%), SV 21, VS 31 (VS 148\% of SV), compared to \(70 \%\) VS for \(\gamma \alpha ́ \rho\) clauses ( \(170=33 \%\) ).
Omitting all adverbials leaves other subordinates=208, SV 31, VS 24 (VS 77\% of SV). VS is associated particularly with adverbials, but not clauses introduced by \(\gamma\) áp.

\section*{Agamemnon (1673 lines)}

\section*{Subordinates (214, 1 per 7.8 lines, \(42 \%\) with subjects: SV 49, VS 41) [VS are \(84 \%\) of SV]}
\(58 \%\) Adverbials 125 (in descending order of frequency) SV 32, VS 29, SVS 1 (VS 91\%):




18\% Conditionals (39: SV 11, VS 6)
15\% Relatives (33: SV 2, VS 4)
8\% Complements (9: VS 1)
Indirect questions (8: SV 4, VS 1)

Omitting róp clauses, adverbials=56, SV 12, VS 11 (VS 92\% of SV), compared to \(85 \%\) VS for ráp clauses.

Omitting all adverbials leaves other subordinates \(=87\), SV 16, VS 11 (VS 69\% of SV)

\section*{Choephoroi (1076 lines)}

\section*{Subordinates (151, 1 per 7.1 lines, \(28 \%\) with subjects: SV 22, VS 20)}
[VS are \(91 \%\) of SV]
(A lower proportion of subordinate clauses with subjects than Agamemnon or Eumenides)

62\% Adverbials 93 (in descending order of frequency) SV 16, VS 16, SVS 2 (VS 100\%):



15\% Conditionals (23: SV 3)
\(15 \% \quad\) Relatives (22: SV 1, VS 2)
\(9 \% \quad\) Indirect questions (9: SV 1)
Complements (4: SV 1, VS 1)

Omitting \(\gamma\) á clauses, adverbials=47, SV 6, VS 8 (VS 133\% of SV), compared to \(80 \%\) VS for \(\gamma \alpha ́ \rho\) clauses.

Omitting all adverbials leaves other subordinates=59, SV 6, VS 3 (VS 50\% of SV).

\section*{Eumenides (1047 lines)}

\section*{Subordinates (154, 1 per 6.8 lines, \(38 \%\) with subjects: SV 28, VS 30)}
[VS are \(107 \%\) of SV]

60\% Adverbials 92 (in descending order of frequency) SV 20, VS 20, SVS 1 (VS 100\%):




19\% Relatives (29: SV 6, VS 3 SVS 1)
8\% Conditionals (13: VS 5) (High VS)
\(13 \% \quad\) Indirect questions (12: SV 2, VS 2)
Complements (8)

Omitting \(\gamma\) á clauses, adverbials=37, SV 3, VS 12 (VS 400\% of SV), compared to \(47 \%\) VS for ráp clauses.
Omitting all adverbials leaves other subordinates=62, SV 8, VS 10 (VS \(125 \%\) of SV)

\section*{OT. (1530 lines)}

\section*{Subordinates (1 per 3 lines) Great variety of conjunctions (34).}
(519, 111 \(=21 \%\) with subjects: SV 69, VS 24, SVS 18)
[VS are \(38 \%\) of SV]
\(48 \%\) Adverbials 247 (in descending order of frequency) SV 42, VS 22 (Vs \(52 \%\) ):




 (1: SV).

25\% Relatives (129: SV 21, VS 2)
\(16 \% \quad\) Conditionals (84: SV 13, VS 1)
Indirect questions (33: SV 1, VS 2)
\(12 \%\) Complements (20: SV 2, VS 1)
Fearing (6: SV 1, VS 1).

Omitting \(\gamma\) áp clauses, adverbials=121, SV 19, VS 10 (VS 53\% of SV), compared to \(52 \%\) VS for үáp clauses.
Omitting all adverbials leaves other subordinates \(=272\), SV 38, VS 8 (VS \(21 \%\) of SV). VS is associated with adverbials.

\section*{Medea (1419 lines)}

\section*{Subordinates (1 per 3.9 lines)}
(361, \(87=24 \%\) with subjects: SV 59, VS 24, SVS
[VS are \(38 \%\) of SV]
\(50 \%\) Adverbials 182 (in descending order of frequency) SV 41, VS 12 (VS 29\%):





24\% Relatives (86: SV 7, VS 1)
\(12 \% \quad\) Conditionals (45: SV 11, VS 7)
(conditionals are the main reason for high VS level)
Indirect questions (27: SVS 1, VS 1)
\(14 \%\) Complements (16: SV 4, VS 2)
Fearing (7: VS 1).

Omitting \(\gamma\) á clauses, adverbials=87, SV 18, VS 7 (VS 39\% of SV), compared to 22\% VS for \(\gamma\) á \(\rho\) clauses.

Omitting all adverbials leaves other subordinates=181, SV 22, VS 12 (VS \(55 \%\) of SV). VS is associated with non-adverbial subordinates.

\section*{Cyclops (709 lines)}

\section*{Subordinates (1 per 5 lines)}
(137, 31=23\% with subjects: SV 22, VS 9, SVS 0)
[VS are \(43 \%\) of SV]
\(51 \%\) Adverbials 70 (in descending order of frequency) SV 13, VS 2, SVS 1 (VS 15\%):

 (1: VS).

26\% Relatives (35: SV 2, VS 4)
\(12 \% \quad\) Conditionals (16: SV 3)
\(12 \% \quad\) Indirect questions (12: SV 1)
Complements (4: SV 2, VS 1)

Omitting \(\gamma\) á clauses, adverbials=53, SV 9, VS 2 (VS 22\% of SV), compared to \(60 \%\) VS for \(\gamma\) á \(\rho\) clauses.

Omitting all adverbials leaves other subordinates=67, SV 8, VS 6 (VS 75\% of SV). As in Medea, VS is associated with non-adverbial subordinates.

Frogs (1533 lines) (Very even percentages)

Subordinates (1 per 4 lines), with 2nd greatest variety of conjunctions (28).
(380, 86=23\% with subjects: SV 62, VS 23, SVS
[VS are \(36 \%\) of SV]

52\% Adverbials 199 (in descending order of frequency) SV 42, VS 14, SVS 2 (VS 33\%):



 отто́боข (1: SV).
\(22 \% \quad\) Relatives (83: SV 12, VS 8, SVS 1)
\(15 \%\) Conditionals (58: SV 7, VS 1)
Indirect questions (24: SV 3)
\(11 \%\) Complements (14: SV 2, VS 1)
Fearing (2: SV 1)

Omitting ráp clauses, adverbials=104, SV 22, VS 8 (VS 36\% of SV), compared to 30\% VS for ráp clauses.

Omitting all adverbials leaves other subordinates=181, SV 25, VS 10 (VS \(40 \%\) of SV). VS is not associated with any one type of subordinate clause.

\section*{Melian Dialogue (about 200 lines)}

\section*{Subordinates (1 per 2.7 lines)}
( \(73,19=26 \%\) with subjects: SV 16, VS 3, SVS 0 )
[VS are \(\mathbf{2 4 \%}\) of SV]
\(37 \%\) Adverbials 27 (in descending order of frequency) SV 9, VS 2 (VS 22\%):

SV), ©̣̂ (1), \(\check{\omega} \sigma \pi \epsilon \rho(1: S V), ~ o ̋ \tau \alpha \nu(1)\).

25\% Relatives (18: SV 5)
\(22 \%\) Conditionals (16: SV 2, VS 1)
\(16 \%\) Complements (11: SV 1, VS 1) Indirect questions (1)

Omitting ráp clauses, adverbials=15, SV 6, VS 1 (VS 17\% of SV), compared to 33\% VS for \(\gamma\) á \(\rho\) clauses.

Omitting all adverbials leaves other subordinates=46, SV 8, VS 2 (VS \(25 \%\) of SV).

\section*{Crito (about 560 lines)}

\section*{Subordinates (1 per 2.7 lines)}
(207, 70=34\% with subjects: SV 53, VS 17, SVS 0)
[VS are \(\mathbf{3 2 \%}\) of SV]

27\% Adverbials 56 (in descending order of frequency) SV 15, VS 4 (VS 27\%):

(2), ö \(\mu \omega s\) (1), є̇ \(\pi \epsilon i ́ \delta \alpha \nu\) (1).

Much lower than tragedy, and fewer conjunctions.

28\% Relatives (58: SV 18, VS 6)
\(25 \%\) Conditionals (52: SV 12, VS 4)
Complements (30: SV 7, VS 3)
20\% Indirect questions (8) (Much higher than tragedy)

\section*{Fearing (3: SV 1)}

Omitting \(\gamma \alpha ́ \rho\) clauses, adverbials=39, SV 9, VS 0 (VS 0\% of SV), compared to \(67 \%\) VS for \(\gamma \alpha ́ \rho\) clauses.

Omitting all adverbials leaves other subordinates=151, SV 38, VS 13 (VS 34\% of SV).

\section*{Appendix 1C: Questions in Oresteia stichomythia}

\section*{SV (not including wh-subjects)}
\begin{tabular}{|c|c|}
\hline Ag.626: &  \\
\hline Ag.630: & \begin{tabular}{l}
 \\

\end{tabular} \\
\hline &  \\
\hline Ag.942: &  \\
\hline Ag.1198: &  тацढ́vlov \(\gamma\) モ́volto; \(\qquad\) \\
\hline Ag.1204: &  \\
\hline Ag.1251: & тívos moòs à \(\nu \delta \rho\) òs тov̂t' ảXos mopoúvetal; \\
\hline Ag.1286: &  \\
\hline Ag.1542: &  \\
\hline Ag.1643-4: & \begin{tabular}{l}
тí סウ̀ тòv ảvסpa тóvס’ ảmò \(\psi v \chi \eta ̂ S ~ \kappa а к \eta ̂ S ~\) \\

\end{tabular} \\
\hline Choe.179: &  \\
\hline Choe.394-5: &  \\
\hline & Zєìs \(\epsilon \pi \pi i ̀ \chi \in i ̂ p a ~ \beta a ́ \lambda o r\), \\
\hline Choe.532: &  \\
\hline Choe.775: &  \\
\hline Eum.717-718: &  \\
\hline & \(\pi \rho \omega\) токто́volбı пробтротаîs 'I Gíovos; \\
\hline Eum.744: &  \\
\hline
\end{tabular}

OSV



\section*{VS}
\begin{tabular}{|c|c|}
\hline Ag.272: &  \\
\hline 276: &  \\
\hline 278: &  \\
\hline 935: &  \\
\hline Choe.177: &  \\
\hline 528: &  \\
\hline
\end{tabular}

\section*{Non-finite VS}


\section*{SVS}

280: Kaì тís тó \(\delta^{\prime}\) द́gíkolt’ àv ả \(\gamma \gamma \in ́ \lambda \omega \nu\) тáXos;



\section*{Appendix 1D: The data for pronominal subjects, collated by main and subordinate clauses}

Iliad 9 (67 pronominal subjects out of 223 SV+VS=30\%)
Main pron 49 [SV 47, VS 2]
(out of a total of \(155 \mathrm{SV}+\mathrm{VS}\) main subjects = 32\%)
Subordinate pron 18 [SV 17, VS 1]
(out of a total of \(68 \mathrm{SV}+\mathrm{VS}\) subordinate subjects \(=26 \%)\)

Odyssey 9 ( 95 pronominal subjects out of 218 SV+VS=44\%)
Main pron 80, all SV
(out of a total of \(168 \mathrm{SV}+\mathrm{VS}\) main subjects \(=48 \%\) )
Subordinate pron 15 [SV 14, VS 1]
(out of a total of \(50 \mathrm{SV}+\mathrm{VS}\) subordinate subjects \(=30 \%\) )

Septem (61 pronominal subjects out of 245 SV+VS=25\%)
Main pron 53 [SV 48, VS 5]
(out of a total of 194 SV+VS main subjects = 27\%)
Subordinate pron 8 [SV 6, VS 2]
(out of a total of \(51 \mathrm{SV}+\mathrm{VS}\) subordinate subjects \(=16 \%\) )

Oresteia (182 pronominal subjects out of 691 SV+VS=26\%)
Main pron 153 [SV 141, VS 12]
(out of 513 SV+VS main subjects \(=30 \%\) )
Subordinate pron 29 [SV 21, VS 8]
(of a total of \(178 \mathrm{SV}+\mathrm{VS}\) subordinate subjects \(=16 \%)\)

OT. (124 pronominal subjects out of \(264 \mathrm{SV}+\mathrm{VS}=47 \%\) )
Main pron 75 [SV 61, VS 14]
(out of 171 SV+VS main subjects \(=47 \%\) )
Subordinate pron 49 [SV 41, VS 8]
(out of \(93 \mathrm{SV}+\mathrm{VS}\) subordinate subjects \(=53 \%\) )

Medea (88 pronominal subjects out of \(255 \mathrm{SV}+\mathrm{VS}=35 \%\) ):
Main pron 58 [SV 47, VS 11]
(out of 172 SV+VS main subjects \(=34 \%\) )
Subordinate pron 30 [SV 25, VS 5]
(out of \(83 \mathrm{SV}+\mathrm{VS}\) subordinate subjects \(=36 \%\) )

Cyclops ( 66 pronominal subjects out of \(126 \mathrm{SV}+\mathrm{VS}=52 \%\) )
Main pron 51 [SV 44, VS 7]
(out of a total of \(95 \mathrm{SV}+\mathrm{VS}\) main subjects \(=54 \%\) )
Subordinate pron 15 [SV 10, VS 5]
(out of a total of \(31 \mathrm{SV}+\mathrm{VS}\) subordinate subjects \(=48 \%\) )

Frogs (138 pronominal subjects out of 254 SV+VS=54\%)
Main pron 103 [SV 86, VS 17]
(out of a total of \(169 \mathrm{SV}+\mathrm{VS}\) main subjects \(=61 \%\) )
Subordinate pron 35 [SV 26, VS 9]
(out of a total of \(85 \mathrm{SV}+\mathrm{VS}\) subordinate subjects \(=41 \%\) )

Melian Dialogue (18 pronominal subjects out of \(42 \mathrm{SV}+\mathrm{VS}=43 \%\) )
Main pron 11 [SV 11]
(out of a total of \(23 \mathrm{SV}+\mathrm{VS}\) main subjects \(=48 \%\) )
Subordinate pron 7 [SV 7]
(out of a total of \(19 \mathrm{SV}+\mathrm{VS}\) subordinate subjects \(=27 \%\) )

Crito (52 pronominal subjects out of \(120 \mathrm{SV}+\mathrm{VS}=43 \%\) )
Main pron 18 [SV 11, VS 7]
(out of \(50 \mathrm{SV}+\mathrm{VS}\) main subjects \(=36 \%\) )
Subordinate pron 34 [SV 29, VS 5]
(out of \(70 \mathrm{SV}+\mathrm{VS}\) subordinate subjects \(=49 \%\) )

\section*{Appendix 1E: Subordinate clauses with pronominal subjects in the Oresteia and OT}

\section*{Oresteia}

Ag. 261 (SV \(\sigma u ́\) ), 423 (SV Tıs), 563 (VS Tıs), 671 (SV Tıs), 934 (SV TıS), 944 (VS тaûтa), 953 (SV





OT.


 aủtós), 618 (SV TıS), 725 (VS бú), 731 (VS тaûтa), 786 (VS тaûTa), 799 (SV бú), 884 (SV TıS), 966
 1173 (VS ท̋ઠє), 1179 (SV aủtós), 1181 (VS oîtos), 1209 (SV aútós), 1247 (VS aủtós), 1298 (SV
 aủtós), 1498 (SV aủtós), 1499 (SV aủtós), 1526 (SV TIS).

\section*{Appendix 1F: Subject and verb order with nominal subjects, collated by syllable number}

\section*{Notes}
1) Only the subject noun, rather than the phrase (NP), is considered.
2) A consideration of complete phrases may change the figures in two ways:
a) a descending VS order may become an ascending one: marked as [x asc.ph].
b) an ascending SV order may become a descending order: marked as [x desc.ph].
3) Other abbreviations used:
a) \([x\) dis \(]=\) descending VS (or, more rarely, SV) in which the second element is a disyllabic positioned at the line end (or occasionally at the penthemimeral caesura).
b) \([x\) names \(]=\) descending SV order in which the subject is a name.
c) \([x+\) appos \(]=\) descending VS with a following appositional phrase

\section*{The data}

\section*{Iliad 9}

Main pron 49 [SV 47, VS 2]
106 nominal subjects (out of a total of 155 SV+VS main subjects \(=68 \%\) )
Total SV 57, asc. SV 34 [1 des.ph], desc. SV 15 [2 dis., 8 names],
const. SV 8
Total VS 49, asc. VS 24, desc. VS 17 [7 dis.], const. VS 8
Subordinate pron 18 [SV 17, VS 1]
50 nominal subjects (out of 68 SV+VS subordinate subjects \(=74 \%\) )
Total SV 33, asc. SV 14, desc. SV 10 [ 2 dis, 4 names], const. SV 9
Total VS 17, asc. VS 4, desc. VS 8 [2 dis], const. VS 5

Odyssey 9
Main pron 80, all SV
88 nominal subjects (out of a total of 168 SV+VS main subjects \(=52 \%\) )
Total SV 51, asc. SV 28 [8 des.ph], desc. SV 12 [1 dis, 1 name], const. SV 11
Total VS 37, asc. VS 5, desc. VS 13 [5 dis, 5 asc.ph], const. VS 19
Subordinate pron 15 [SV 14, VS 1]
35 nominal subjects (out of \(50 \mathrm{SV}+\mathrm{VS}\) subordinate subjects \(=70 \%\) )
Total SV 25, asc. SV 14, desc. SV 1, const. SV 10
Total VS 10, asc. VS 0, desc. VS 6 [2 dis, 4 asc. phr], const. VS 4

\section*{Septem}

Main pron 53 [SV 48, VS 5]
141 nominal subjects (out of 194 SV+VS main subjects \(=73 \%\) )
Total SV 90, asc. SV 52 [7 des.ph], desc. SV 19 [ 6 dis, 4 names,
1 asc.ph], const. SV 19
Total VS 51, asc. VS 12, desc. VS 19 [ 7 dis, 3 asc. ph], const. VS 20
Subordinate pron 8 [SV 6, VS 2]
43 nominal subjects (out of 51 SV+VS subordinate subjects \(=84 \%\) )
Total SV 31, asc. SV 19, desc. SV 4 [2 dis], const. SV 8
Total VS 12, asc. VS 1, desc. VS 3 [ 3 dis], const. VS 8

Oresteia

\section*{Main pron 153 [SV 141, VS 12]}

360 nominal subjects (out of 513 SV+VS main subjects \(=70 \%\) )
Total SV 231, asc. SV 139 [30 des.ph], desc. SV 44 [9 dis, 3 asc.ph, 11 names], const. SV 48

Total VS 129, asc. VS 55, desc. VS 53 [32 dis, 12 appos/metric], const. VS 21

Subordinate pron 29 [SV 21, VS 8]
149 nominal subjects (out of 178 SV+VS subordinate subjects \(=84 \%\) )
Total SV 72, asc. SV 35, desc. SV 21, const. SV 16
Total VS 77, asc. VS 33, desc. VS 32 [21 dis], const. VS 12

Ag.
Main pron 58 [SV 56, VS 2]
179 nominal subjects (out of 237 main subjects \(=76 \%\) )
Total SV 115, asc. SV 69 [19 des.ph], desc. SV 25 [2 dis, 3 asc.ph, 6 names], const. SV 21

Total VS 52, asc. VS 24, desc. VS 19 [11 dis, 4 + appos], const. VS 9
Subordinate pron 14 [SV 11, VS 3]
74 nominal subjects (out of 88 explicit subordinate subjects \(=84 \%\) )
Total SV 36, asc. SV 19, desc. SV 7, const. SV 10
Total VS 35, asc. VS 15, desc. VS 17 [10 dis], const. VS 3

Choe.
Main pron 43 [SV 37, VS 6]
120 nominal subjects (out of 163 main subjects \(=74 \%\) )
Total SV 66, asc. SV 34 [6 des.ph], desc. SV 11 [4 dis, 2 names], const. SV 21
Total VS 44, asc. VS 19, desc. VS 18 [ 5 dis, 7 metric], const. VS 7
Subordinate pron 10 [SV 7, VS 3]
33 nominal subjects (out of 43 explicit subordinate subjects \(=77 \%\) )
Total SV 15, asc. SV 9, desc. SV 3, const. SV 3
Total VS 15, asc. VS 5, desc. VS 8 [5 dis], const. VS 2

Eum.
Main pron 52 [SV 48, VS 4]
92 nominal subjects (out of 144 main subjects \(=64 \%\) )
Total SV 50, asc. SV 36 [5 des.ph], desc. SV 8 [3 dis, 3 names], const. SV 6
Total VS 33, asc. VS 12, desc. VS 16 [8 dis, 4 + appos], const. VS 5
Subordinate pron 5 [SV 3, VS 2]
53 nominal subjects (out of 58 explicit subordinate subjects \(=91 \%\) )
Total SV 21, asc. SV 7, desc. SV 11, const. SV 3
Total VS 27, asc. VS 13, desc. VS 7 [ 6 dis], const. VS 7

OT.
Main pron 75 [SV 61, VS 14]
91 nominal subjects (out of 171 SV+VS main subjects \(=53 \%\) )
Total SV 61, asc. SV 38 [5 des.ph], desc. SV 15 [1 dis, 1 asc. ph,
1 name], const. SV 8
Total VS 35, asc. VS 16, desc. VS 13 [3 dis, 2 asc.ph], const. VS 6
Subordinate pron 49 [SV 41, VS 8]
44 nominal subjects (out of 93 SV+VS subordinate subjects \(=47 \%\) )
Total SV 28, asc. SV 16, desc. SV 5 [1 dis, 1 name], const. SV 7
Total VS 16, asc. VS 9, desc. VS 4 [2 dis], const. VS 3

\section*{Medea}

Main pron 58 [SV 47, VS 11]
114 nominal subjects (out of 172 SV+VS main subjects \(=66 \%\) )
Total SV 61, asc. SV 36 [9 des.ph], desc. SV 11 [3 names], const. SV 14

Total VS 53, asc. VS 23, desc. VS 23 [14 dis, 2 asc. ph], const. VS 7
Subordinate pron 30 [SV 25, VS 5]
53 nominal subjects (out of 83 SV+VS subordinate subjects \(=64 \%\) )
Total SV 34, asc. SV 22, desc. SV 2, const. SV 10
Total VS 19, asc. VS 5, desc. VS 8 [ 6 dis, 1 asc.ph], const. VS 6

Cyclops

\section*{Main pron 51 [SV 44, VS 7]}

44 nominal subjects (out of a total of 95 SV+VS main subjects \(=46 \%\) )
Total SV 27, asc. SV 15 [2 des.ph], desc. SV 4 [2 dis], const. SV 8
Total VS 17, asc. VS 4, desc. VS 10 [4 dis, 3 asc.ph], const. VS 3

\section*{Subordinate pron 15 [SV 10, VS 5]}

16 nominal subjects (out of \(31 \mathrm{SV}+\mathrm{VS}\) subordinate subjects \(=52 \%\) )
Total SV 12, asc. SV 7, desc. SV 2 [2 dis, 1 name], const. SV 3
Total VS 4, asc. VS 2, desc. VS 1 [1 equ.ph], const. VS 1

Frogs
Main pron 103 [SV 86, VS 17]
66 nominal subjects (out of a total of \(169 \mathrm{SV}+\mathrm{VS}\) main subjects \(=39 \%\) )
Total SV 44, asc. SV 24 [7 des.ph], desc. SV 8 [5 names],
const. SV 12
Total VS 22, asc. VS 8, desc. VS 7 [2 dis, 4 asc.ph], const. VS 7
Subordinate pron 35 [SV 26, VS 9]
50 nominal subjects (out of \(85 \mathrm{SV}+\mathrm{VS}\) subordinate subjects \(=59 \%\) )
Total SV 36, asc. SV 16 [3 des.ph], desc. SV 8 [2 dis, 2 names], const. SV 12
Total VS 14, asc. VS 10, desc. VS 2 [ 1 dis, 1 asc.ph], const. VS 2

Melian Dialogue
Main pron 11 [SV 11]
12 nominal subjects (out of \(23 \mathrm{SV}+\mathrm{VS}\) main subjects \(=52 \%\) )
Total SV 10, asc. SV 4, desc. SV 2 [1 name], const. SV 4
Total VS 2, asc. VS 1, desc. VS 0, const. VS 1
Subordinate pron 7 [SV 7]
12 nominal subjects (out of 19 SV+VS subordinate subjects \(=63 \%\) )

Total SV 9, asc. SV 4, desc. SV 3 [3 names], const. SV 2
Total VS 3, asc. VS 2, desc. VS 0, const. VS 1

\section*{Crito}

Main pron 18 [SV 11, VS 7]
32 nominal subjects (out of 50 SV+VS main subjects \(=64 \%\) )
Total SV 15, asc. SV 9, desc. SV 4, const. SV 2
Total VS 17, asc. VS 7, desc. VS 3, const. VS 7
Subordinate pron 34 [SV 29, VS 5]
36 nominal subjects (out of 70 SV+VS subordinate subjects \(=51 \%\) )
Total SV 24, asc. SV 10, desc. SV 7, const. SV 6
Total VS 12, asc. VS 3, desc. VS 5 [3 with appos.NP], const. VS 4

Appendix 1G: Object and verb order with nominal subjects in the Oresteia, Medea, and Crito, collated by syllable number

Ag.
Main
140 nominal objects (out of 184 main objects \(=76 \%\) )
Total OV 77, asc. OV 40 [11 des.ph], desc. OV 13, const. OV 24
Total VO 63, asc. VO 9, desc. VO 35 [19 dis, 17 asc.ph], const. VO 19
[pronominals 44
Total OV 35, asc. OV 31, desc. OV 3 const. OV 1
Total VO 9, asc. VO 0, desc. VO 6 [1 dis], const. VO 3]

\section*{Subordinate}

32 nominal objects (out of 41 subordinate objects \(=78 \%\) )
Total OV 20, asc. OV 13 [3 des.ph], desc. OV 2, const. OV 5
Total VO 12, asc. VO 0, desc. VO 10 [7 dis, 6 asc.ph], const. VO 2
[pronominals 9
Total OV 8, asc. OV 7, desc. OV 0, const. OV 1
Total VO 1, asc. VO 0, desc. VO 0, const. VO 1]

Choe.

\section*{Main}

88 nominal objects (out of 125 main objects \(=70 \%\) )
Total OV 35, asc. OV 15 [4 des.ph], desc. OV 7 [1 dis],
const. OV 13

Total VO 53, asc. VO 10, desc. VO 22 [9 dis, 8 asc.ph], const. VO 21
[pronominals 37
Total OV 28, asc. OV 25, desc. OV 0, const. OV 3
Total VO 9, asc. VO 0, desc. VO 7 [1 dis], const. VO 2]

\section*{Subordinate}

21 nominal objects (out of 26 subordinate objects \(=81 \%\) )
Total OV 6, asc. OV 5, desc. OV 0, const. OV 1
Total VO 15, asc. VO 1, desc. VO 5 [ 4 dis], const. VO 9
[pronominals 5
Total OV 5, asc. OV 4, desc. OV 0, const. OV 1
Total VO 0, asc. VO 0, desc. VO 0, const. VO 0]

Eum.

\section*{Main}

121 nominal objects (out of 152 main objects \(=80 \%\) )
Total OV 68, asc. OV 38 [10 des.ph], desc. OV 10 [ 3 dis], const. OV 20
Total VO 53, asc. VO 6, desc. VO 26 [18 dis, 6 asc.ph],
const. VO 21
[pronominals 31
Total OV 21, asc. OV 17, desc. OV 0 , const. OV 4
Total VO 10, asc. VO 0, desc. VO 9 [3 dis], const. VO 1]

\section*{Subordinate}

15 nominal objects (out of 21 subordinate objects \(=71 \%\) )
Total OV 11, asc. OV 9 [1 des.ph], desc. OV 0, const. OV 2
Total VO 4, asc. VO 1, desc. VO 3 [1 dis, 2 asc.ph], const. VO 0
[pronominals 6
Total OV 6, asc. OV 6, desc. OV 0, const. OV 0
Total VO 0, asc. VO 0 , desc. VO 0, const. VO 0]

Medea

\section*{Main}

134 nominal objects (out of 208 main objects \(=64 \%\) )
Total OV 58, asc. OV 38 [1 des.ph], desc. OV 7 [6 dis],
const. OV 13
Total VO 76, asc. VO 11, desc. VO 40 [18 dis, 12 asc.ph],
const. VO 25
[pronominals 74

Total OV 38, asc. OV 37, desc. OV 0, const. OV 1
Total VO 36, asc. VO 1, desc. VO 28 [3 dis], const. VO 7]

\section*{Subordinate}

46 nominal objects (out of 71 subordinate objects \(=65 \%\) )
Total OV 29, asc. OV 18, desc. OV 5 [3 dis], const. OV 6
Total VO 17, asc. VO 3, desc. VO 6 [ 4 dis], const. VO 8
[pronominals 25
Total OV 20, asc. OV 19, desc. OV 0, const. OV 1
Total VO 5, asc. VO 0, desc. VO 3, const. VO 2]

\section*{Crito}

\section*{Main}

22 nominal objects (out of 56 main objects \(=39 \%\) )
Total OV 14, asc. OV 10, desc. OV 3 [2 phrasal O], const. OV 1
Total VO 8, asc. VO 4, desc. VO 2 [1 asc.ph], const. VO 2
[pronominals 34
Total OV 24, asc. OV 14, desc. OV 4, const. OV 6
Total VO 10, asc. VO 2, desc. VO 6, const. VO 2]

\section*{Subordinate}

5 nominal objects (out of 13 subordinate objects \(=38 \%\) )
Total OV 3, asc. OV 3, desc. OV 0, const. OV 0
Total VO 2, asc. VO 2, desc. VO 0, const. VO 0
[pronominals 8
Total OV 7, asc. OV 5, desc. OV 1, const. OV 1
Total VO 1, asc. VO 0, desc. VO 1, const. VO 0]

\section*{Appendix 1H: VS in Crito}

\section*{Pronominal VS and SV}

\section*{VS}


51 d 7 is the central of three consecutive conditionals:
 тє \(\mu \in \operatorname{tolk\in ̂̂\nu ~ä\lambda \lambda о\sigma \epsilon ́~mol~} \grave{\epsilon} \lambda \theta \omega \dot{\nu} . .\).

\section*{SV}
 єîval;




\section*{VS with following non-finite phrases}

\section*{Crito}

9 VS constructions have following infinitives or participles, 4 in main clauses:
43c2:

44a10:
 єiteîv.

48a10-1:



5 in subordinates:
43a5:

43d3:

44d2:

\(\alpha \alpha^{\lambda} \lambda \alpha \dot{\alpha}\) Tà \(\mu \epsilon ́ \gamma เ \sigma T a \quad \sigma \chi \in \delta o ́ v\),
45a6:
 є́ \(\nu \theta\) Ө́ \(v \delta \epsilon\).

51a2:


\section*{Appendix 2}

\section*{Hyperbaton about the verb in the Oresteia and other texts}
2A: OVO phrasal tmesis with demonstrative ..... Page 288
2B: OVO tmesis with adjective or quantifier ..... 289
2C: SVS in the Oresteia ..... 291
2D: Wide-scope and combined hyperbaton in the Oresteia ..... 292
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2I: Aeschylean demonstratives without hyperbaton ..... 302

\section*{2A: OVO phrasal tmesis with demonstrative}

\section*{Stichomythia}
\begin{tabular}{|c|c|}
\hline Ag.934: &  \\
\hline Ag.1202: &  \\
\hline Ag.1248: &  \\
\hline Choe.114: &  \\
\hline Choe.488: &  \\
\hline Choe.500: &  \\
\hline Choe.927: &  \\
\hline Eum.590: &  \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline Rheses & \\
\hline Ag.310: &  \\
\hline Ag.1070: &  \\
\hline Ag.1295: &  \\
\hline Ag.1409: &  \\
\hline Ag.1614: &  \\
\hline Ag.1627: &  \\
\hline Choe.91: &  \\
\hline Choe.149: &  \\
\hline Choe.187: &  \\
\hline Choe.197: &  \\
\hline Choe.226: &  \\
\hline Choe.267-8: & \begin{tabular}{l}
 \\

\end{tabular} \\
\hline Choe.508-511: & \begin{tabular}{l}
 \\
 \\
 \\

\end{tabular} \\
\hline Choe.760: &  \\
\hline Choe.765: &  \\
\hline Choe.985-6: &  'Hスıos, ävaүva بŋт \\
\hline Choe.991: &  \\
\hline Choe.1015: &  \\
\hline Eum.3-4: & \begin{tabular}{l}
 \\

\end{tabular} \\
\hline Eum.78-9: &  \\
\hline
\end{tabular}


iкє́тŋך． \(\qquad\)


Eum． \(405+406\) ：







\section*{Lyrics}

Choe．411：тóvठє к久úovoav oỉkтоv．
Еит．940－1：ф入оүноѝs ò \(\mu \mu а т о \sigma т є \rho \in i ̂ s ~ ф и т \omega ิ \nu ~\)
тò \(\mu \grave{̀} \pi \epsilon \rho a ̂ \nu ~ o ̈ \rho o \nu ~ т o ́ \pi \omega \nu\),

\section*{Appendix 2B：OVO tmesis with adjective or quantifier}

\section*{Stichomythia}
\begin{tabular}{|c|c|}
\hline Ag． 937 &  \\
\hline Ag． 1665 & oủk äv＇Арүєíwv тóठ＇єlך，фفิтa проббаívetv \\
\hline
\end{tabular}

\section*{Rheses}
\begin{tabular}{|c|c|}
\hline Ag．17： &  \\
\hline Ag．281： &  \\
\hline \multirow[t]{2}{*}{Ag．535－6：} &  \\
\hline &  \\
\hline Ag．582： &  \\
\hline Ag．599： & ävaктоs aủtov̂ mávta mev́бонaı 入óyov． \\
\hline \multirow[t]{2}{*}{Ag．857－8：} & oủk äd \(\lambda \omega \nu\) тápa \\
\hline &  \\
\hline Ag．863： &  \\
\hline Ag．893－4： &  \\
\hline &  \\
\hline Ag．1067： &  \\
\hline Ag．1210： &  \\
\hline Ag．1275： &  \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline Ag．1588＋9： & \begin{tabular}{l}
 \\

\end{tabular} \\
\hline Ag．1609： &  \\
\hline Choe．133－4： &  \\
\hline &  \\
\hline Choe．283： & ä入入as T＇\(\epsilon \phi \dot{\omega}\) \\
\hline Choe．545： &  \\
\hline Choe．854： &  \\
\hline Eum．41： &  \\
\hline Eum．444： &  \\
\hline Eum．466： &  \\
\hline Eum．668： &  \\
\hline Eum．734： &  \\
\hline Eum．760： & ．．．ős matpêov aideôєis \(\mu\) ópov \\
\hline Lyrics & \\
\hline Ag．124： &  \\
\hline Ag．395： &  \\
\hline Ag．1015－6： &  \(\nu \eta ิ \sigma \tau เ \nu\) ढ̈入 \(\nearrow \epsilon \sigma \epsilon \nu\) vó \\
\hline Ag．1522－3： & \begin{tabular}{l}
тต̧̣є \(\gamma \in \nu \epsilon ́ \sigma \theta a \iota\) 〈סó入ıóv \(\tau \epsilon\) \\

\end{tabular} \\
\hline Choe．77： &  \\
\hline Choe．163： &  \\
\hline Choe．352－3： &  \\
\hline & тáфov sıamovtíou râs \\
\hline Choe．401－2： &  aî \(\mu\) \(\qquad\) \\
\hline Choe．418－9： & ．．．خ̉ тáme \\
\hline &  \\
\hline Choe．615： &  \\
\hline Eum．385： & àtíєтa \(\delta \iota o ́ \mu \in \nu a ı ~ \lambda \alpha ́ \chi \eta ~\) \\
\hline Eum．501： &  \\
\hline
\end{tabular}

\section*{Appendix 2C: SVS in the Oresteia}

\section*{Stichomythia}






\section*{Rheses}

Ag.347: \(\quad \gamma \in ́ v o l \tau ’ ~ a ̈ \nu, ~ \epsilon i ~ \pi \rho o ́ \sigma \pi a เ a ́ ~ \mu \grave{~ t u ́ \chi o l ~ к а к а ́ . ~}\)

\(\pi \alpha ́ \rho є \iota \sigma \iota ~ \delta o ́ \xi a \iota ~ . . . . . ~\)


Ag.766-7: .... ӧтє тò кúplov
нó̀ņ фáos тóкоv,




Choe.249-250: \(\qquad\) тoùs \(\delta^{\prime}\) àm \(\omega \rho \phi a \nu \iota \sigma \mu\) évous

Choe.260: oűт' ápxıкós \(\sigma\) ol \(\pi a ̂ s\) ő \(\delta\) ' aủav \(\theta \epsilon i ̀ s ~ \pi v \theta \mu \eta ̀ \nu ~\)



бкотєıvóv, ©̈pa \(\delta^{\prime}\) É \(\mu\) mópovs \(\mu \in \theta\) téval



Eит.664: \(\quad \mu a ́ \rho т u s ~ \pi \alpha ́ \rho \in \sigma т ь ~ \pi a i ̂ s ~ ’ O \lambda u \mu \pi i ́ o u ~ \Delta ı o ́ s, ~\)




\section*{Lyrics}
\begin{tabular}{|c|c|}
\hline Choe.65: & Toùs \(\delta^{\prime}\) äk \({ }^{\text {a }}\) ( \\
\hline Choe.961-2: & ... \(\mu \epsilon ́ \gamma \alpha \tau^{\prime} \dot{a} \phi \underline{\square} \rho^{\prime} \theta \eta\) \\
\hline &  \\
\hline Eum.313-4: & Tòv \(\mu\) èv каӨapàs Xeîpas mpovéfovt' \\
\hline &  \\
\hline Eum.336-7: & \(\theta \nu a \tau \omega ิ \nu\) тoîбıv aùtoupyíal \\
\hline & \(\xi \nu \mu \pi \epsilon \in \sigma \omega \sigma \iota \nu\) นátalol, \\
\hline Eum.544: & кúpıov \(\mu\) ével tédos. \\
\hline Eum.942-3: & \(\mu \eta \delta^{\prime}\) व̈картоя ala \(^{-}\) \\
\hline &  \\
\hline
\end{tabular}

\section*{Appendix 2D: Wide-scope and combined hyperbaton in the Oresteia}

\section*{Wide-scope hyperbaton (both object and subject)}
\begin{tabular}{|c|c|}
\hline Ag.279: &  \\
\hline Ag.890: &  \\
\hline Ag.947: &  \\
\hline Ag.1056-7: & \begin{tabular}{l}
\(\qquad\) тà \(\mu \epsilon ̀ v ~ \gamma a ̀ \rho ~ \dot{\epsilon} \sigma t i ́ a s ~ \mu \epsilon \sigma o \mu \phi a ́ \lambda o v ~\) \\

\end{tabular} \\
\hline Ag.1062: &  \\
\hline Ag.1102: &  \\
\hline Ag.1137: &  \\
\hline Ag.1309: &  \\
\hline Ag.1400: &  \\
\hline Ag.1431: &  \\
\hline Ag.1460-1: &  \\
\hline & "Epıs \(̇\) '́píduatos ảvopòs oiļús. \\
\hline Choe.299: &  \\
\hline Choe.406: & то入uкратєîS \(\geqslant \delta \in \sigma \theta \epsilon \phi \theta \epsilon \tau \mu \epsilon ่ \nu \omega \nu\) 'Apaí, \\
\hline Choe.591-2: & ..... кảvєนóєvt' \({ }^{\text {à } \nu}\) \\
\hline & \(\alpha i \gamma i \delta \omega \nu\) фрáбal кótov. \\
\hline Choe.731: &  \\
\hline Choe.798-9: &  \\
\hline &  \\
\hline Choe.896-7: &  \(\mu a \sigma \tau o ́ v, \pi \rho o ̀ s ~ \oint ̂ ̣ ~ \sigma u ̀ ~ m o \lambda \lambda a ̀ ~ \delta \grave{̀} \beta \rho i ́ \zeta \omega \nu ~ a ́ \mu \alpha\) \\
\hline Choe. 911 & кaì tóvঠє тoívvv Moîp’ ̇̇mópouvev \(\mu\) ópov. \\
\hline
\end{tabular}


Choe.1015: \(\quad \pi \alpha т \rho о к т о ́ \nu о \nu ~ \gamma ' ~ บ ̈ ф а \sigma \mu \alpha ~ \pi \rho о \sigma ф \omega \nu \omega ิ \nu ~ т о ́ \delta \epsilon . ~\)

Eum.20: toútous èv єủxaîs фроцнıá̧opal \(\theta\) єoús.









Eum.455-6: .... татє́ \(\rho \alpha \delta^{\prime}\) iбторєîS ка入へิs,
'A \(\boldsymbol{\gamma} \epsilon\) и́ \(\mu \nu \nu\) ', ........


a \(\sigma v \nu \alpha \rho \mu o ́ \sigma \in L ~ \beta \rho о т о u ́ s \cdot ~\)

Eum.700: toıóvठє tol tapßoûvtes ėvסíkws \(\sigma \in ́ \beta a s\)


Eum.898: каí \(\mu\) о \(\pi \rho o ̀ ~ \pi a \nu т o ̀ s ~ Є ̇ \gamma \gamma u ́ \eta \nu ~ Ө \eta ́ \sigma ŋ ̆ ~ \chi \rho o ́ v o v ; ~\)



\section*{Combined patterns in the Oresteia}

Choe.508ff. SVS, two OVO constructions, then a double nominal:


```

каì \mu\etàv ả\mu\epsilon\muф\etâ тóv\delta` \epsiloṅт\epsilonívatov \lambdaó\gammaov,
тí\mu\eta\muа ти́\mußоv т\etâS ả\nuоц\mu(́кттоv тÚ\chi\etaS.

```

Choe.985-6: Nested subject and object hyperbaton:



Ag.537: VS with object hyperbaton:

Ag.563:
\(\chi \in \iota \mu \omega ิ \nu a \delta^{\prime}\) єí \(\lambda \epsilon ́ \gamma o l ~ T I S ~ o l \omega \nu o к т o ́ v o \nu\),
Eum.707-8. Double hyperbaton of object and indirect object:


Ag.280. Subject and adverbial :

Eum.668-671. Narrow and wide-scope:




Choe.744-748. Wide-scope hyperbaton:





Eum.845-6. Wide-scope subject hyperbaton with verb tmesis and factitive adjunct separated from its pronoun:

Svбтá̀apoı таן’ oủdèv ท̉ןav sódoı.

\section*{Appendix 2E: OVO hyperbaton in other Aeschylean works}

\section*{Canonical demonstrative-noun constructions}
\begin{tabular}{|c|c|}
\hline Pers.214: &  \\
\hline Pers.363: & \(\pi \alpha ิ \sigma \iota \nu ~ \pi \rho о ф \omega \nu \epsilon ̂ ̂ ~ т o ́ v \delta \epsilon ~ \nu a v a ́ \rho \chi o r s ~ \lambda o ́ \gamma o v, ~\) \\
\hline Sept.638: &  \\
\hline Sept.717: &  \\
\hline Supp.252: &  \\
\hline Supp.325-6: &  тảpxaîov. \\
\hline Supp.378: &  \\
\hline Supp.461: &  \\
\hline
\end{tabular}







\section*{Other constructions}
\begin{tabular}{|c|c|}
\hline Pers.140: &  \\
\hline &  \\
\hline Pers.227: &  \\
\hline Pers.233: &  \\
\hline Pers.246: &  \\
\hline Pers.777: & ...... oís тó \(\delta^{\prime}\) ท̂v xpéos, \\
\hline Sept.48: &  \\
\hline Supp.189: &  \\
\hline Supp. 233 [SVS]: &  \\
\hline Supp. 278 [SVS:] &  \\
\hline Supp.508: &  \\
\hline Supp.1029: &  \\
\hline Prom.386: &  \\
\hline Prom.766: &  \\
\hline Prom.975: &  \\
\hline Prom.980: &  \\
\hline
\end{tabular}

\section*{Appendix 2F: OVO and SVS hyperbaton in Sophocles}

OT.

\section*{OVO}







110:
113:
134:
137-8:

143:
168-9:

203:
210:
248:
291:
311:




 '‘бтабӨє, тои́бס’’ äpavтєS iктท̂pas к入áסous,











 ’Evtav̂Өa үàp סخ̀ кaì какòs фaívŋ̣ фí入os.



 ठрâбaı ठıкаıô, ठvoîv ḋтокрívas какоı̂v,




 \(\pi \alpha ̂ \sigma \iota \nu \dot{\alpha} \rho \mu o ́ \sigma \epsilon \iota ~ \beta \rho о т о i ̂ s\).



 Táס' Є̇к \(\delta v o i ̂ v ~ \epsilon ̌ \rho \rho \omega \gamma є \nu, ~ o v ̉ ~ \mu o ́ v o v, ~ к а к \alpha ́, ~\) \(\delta ı \pi \lambda \hat{\alpha}\) \(\sigma \epsilon \pi \in \nu \theta \in i ̂ v\) кaì \(\delta \iota \pi \lambda \hat{\alpha}\) форєîv кака́.

\section*{SVS}



417: Kaí \(\sigma^{\prime}\) ả \(\mu \phi \iota \pi \lambda \eta ̀ \xi ~ \mu \eta \tau \rho o ́ s ~ t \in ~ к a i ̀ ~ t o v ̂ ~ \sigma o v ̂ ~ \pi a t \rho o ̀ s ~\)


561: \(\quad\) Maкроі̀ та入atoí \(\tau^{\prime}\) àv \(\mu \in \tau \rho \eta \theta \in i ̂ \epsilon \nu\) д \(\rho o ́ v o l . ~\)





\section*{Combined pattern}

1032:
\(\{А Г\}. ~ \Pi о \delta \omega ิ \nu ~ a ̉ \nu ~ a ̉ \rho \theta \rho a ~ \mu \alpha \rho т v \rho \eta ́ \sigma \epsilon \iota \epsilon \nu ~ т a ̀ ~ \sigma \alpha ́ . ~\)


\section*{Hyperbaton elsewhere in Sophocles}

Examples:
Aj. 545:
....... тарßそ́бєt \(\gamma \hat{\alpha} \rho\) où
\(\nu \epsilon \sigma \sigma \phi a \gamma \hat{\eta}\) тои тóvठє \(\pi \rho \circ \sigma \lambda \epsilon \cup ́ \sigma \sigma \omega \nu\) фóvov,









OC.712-3: \(\hat{\omega}\) maî Kpóvov, où ráp vut Єis


Formulaic constructions in other Sophoclean works:
```

\pi\alphávт' ..... \lambdaó\gammaov

```

```

т\etáv\delta\epsilon ....... пó\lambdaı\nu

```


```

т\́v\delta€ ..... vó\sigmaov

```


```

\piо\mu\pi\epsilonध́(\omega).

```

\section*{Appendix 2G: OVO and SVS hyperbaton in Euripides}

Medea

\section*{OVO}
\begin{tabular}{|c|c|}
\hline 166: & \begin{tabular}{l}
 \\

\end{tabular} \\
\hline 201: &  \\
\hline 340: &  \\
\hline 373: &  \\
\hline 391: &  \\
\hline 433-5: & \begin{tabular}{l}
 \\
 vaíєıs \(\chi\) Өoví, тâs àvávópov
\end{tabular} \\
\hline 462-3: &  какà そìv aútṇ. кaì \(\gamma \grave{a} \rho \in \mathfrak{l}\) бú \(\mu \epsilon \sigma \tau \cup \gamma \in i ̂ S\), \\
\hline 487-91: & \begin{tabular}{l}
 \\
 \\
 \\
 \\

\end{tabular} \\
\hline 510-1: & \begin{tabular}{l}
 \\

\end{tabular} \\
\hline 531: &  \\
\hline 576: &  \\
\hline
\end{tabular}


599:
604:
612:
667:
677:
682:

705:
727:
776:
780:
789-90:

1124:
1127:
1138:
1167:
1180:

1212:
1300:
1307

1355

691: \(\quad\) тí фṇ́s; \(\sigma a \phi \omega ̂ s ~ \mu o l ~ \sigma a ̀ s ~ \phi \rho a ́ \sigma o v ~ \delta v \sigma \theta v \mu i ́ a s . ~\)
697: \(\quad\) то́тєроข Є́ \(\rho a \sigma \theta \epsilon i ̀ s ~ خ ̀ ~ \sigma o ̀ v ~ Є ̇ \chi Ө a i ́ \rho \omega \nu ~ \lambda \epsilon ́ \chi o s ; ~\)










1120: \(\quad \delta \in i ́ k \nu v \sigma \iota \nu\) äs тı каıขòv ả \(\gamma \gamma \epsilon \lambda \in i ̂\) какóv.





\(\mu \alpha ́ \lambda \iota \sigma \tau^{\prime}, ~ \in ̇ \pi \epsilon i ́ l ~ t o l ~ k a i ̀ ~ \sigma o \phi \eta ̂ S ~ \delta \in i ̂ t a l ~ \phi \rho \in \nu o ́ s . ~\)


 \(\mu \circ \lambda o ́ v t \iota ~ \delta ’\) aủṭ̂ \(\mu \alpha \lambda \theta a \kappa o u ̀ s ~ \lambda \epsilon ́ \xi \omega ~ \lambda o ́ \gamma o u s, ~\) maîठas \(\delta\) è \(\mu \in i ̂ v a l ~ t o u ̀ s ~ e ́ \mu o u ̀ s ~ a i t n ́ \sigma o \mu a l, ~\)


є̇vtâ̂Өa \(\mu \in ́ v \tau o l ~ T o ́ v \delta ’ ~ a ̀ m a \lambda \lambda a ́ \sigma \sigma \omega ~ \lambda o ́ \gamma o v . ~\) тí \(\delta\) ’ ả \(\xi เ o ́ v ~ \mu o l ~ T \eta ̂ \sigma \delta \epsilon ~ т v \gamma \chi a ́ v \epsilon ı ~ \phi u \gamma \eta ̂ s ; ~\)



 \(\lambda \epsilon \pi \tau \grave{\nu} \nu\) そ̌ \(\delta \alpha \pi т о \nu \quad \sigma \alpha ́ \rho к а\) тท̂S \(\delta v \sigma \delta \alpha i ́ \mu о \nu о s\).

 'Iâoov. oủ \(\gamma \alpha ̀ \rho ~ \tau o v ́ \sigma \delta ' ~ a ̀ \nu ~ \epsilon ́ ~ Є \theta ́ ́ \gamma \xi \omega ~ \lambda o ́ \gamma o u s . ~\)


\section*{SVS}

Med.386-8 (double pattern):








\section*{Combined pattern}




\section*{Appendix 2H: phrasal tmesis in Frogs}

\section*{OVO and non-finite object constructions}

105: (Euripidean quote, probably from Andromeda):


סєıьótata.
170: Kaì үáp тıv’ éкфє́povol toutov̀ vєкрóv.















889 (Spoken by Euripides):

909-10 (Spoken by Euripides):


951 (Spoken by Aeschylus):

1044 (Spoken by Aeschylus):

1121 (Euripides of Aeschylus):

1126 (Aeschylean quotation):

1146 (Spoken by Aeschylus):

1178-9 (Spoken by Euripides):


1240 (Euripidean quote: Lecythian):

Өú㇒v ảтapxás
1299-1300 (Spoken by Aeschylus):

\(\lambda \epsilon \iota \mu \omega ิ \nu a\) Movoต̂v í \(\rho \rho \grave{\nu}\) ỏ \(\phi \theta \in i ́ \eta \nu \quad \delta \rho \epsilon ́ \pi \omega \nu\)
1301 (Spoken by Aeschylus):

1436 (Spoken by Dionysus):


SVS




948 (Spoken by Euripides):

1206 (Spoken by Euripides):

1307 (Spoken by Aeschylus):


\section*{Appendix 2I: Aeschylean demonstratives without hyperbaton}

\section*{Noun > Demonstrative (35)}
i) 22 at the penthemimeral caesura:
\begin{tabular}{|c|c|}
\hline Ag.18: & \begin{tabular}{l}
 \\
- - v - |- : v: - |v- v -
\end{tabular} \\
\hline Ag.906: &  \\
\hline Ag.1039: &  \\
\hline Ag.1071: &  \\
\hline Ag.1283: &  \\
\hline Ag.1419: &  \\
\hline Ag.1438: &  \\
\hline Ag.1441: & каі̀ коьขó入єктроs тоиิठє, \(\theta \in \sigma\) ¢атп入óүоs, \\
\hline Choe.142: &  \\
\hline Choe.200: &  \\
\hline Choe.231: &  \\
\hline Choe.540: &  \\
\hline Choe.740: &  \\
\hline Eum.1: &  \\
\hline Eum.16: &  \\
\hline Eum.103: &  \\
\hline Eum.185: & ойтоı ठó \\
\hline Eum.207: & oủ \(\gamma \dot{\alpha} \rho\) ठór \\
\hline Eum.623: &  \\
\hline Eum.762: &  \\
\hline Eum.834: &  \\
\hline Eum.854: &  \\
\hline
\end{tabular}

\section*{13 Noun > Demonstrative, positioned elsewhere:}
\begin{tabular}{|c|c|}
\hline Ag.311: & фáos тód' oủk ämammov 'İaiou mupós. \\
\hline Ag.504: &  \\
\hline Ag.829: &  \\
\hline Ag.867: &  \\
\hline Ag.1186: &  \\
\hline Ag.1603: &  \\
\hline Ag.1613: &  \\
\hline Choe.256: &  \\
\hline Choe.561: &  \\
\hline Choe.669: &  \\
\hline Choe.685: &  \\
\hline Choe.1011: &  \\
\hline Choe.1017: &  \\
\hline Eum.852: &  \\
\hline
\end{tabular}

\section*{Demonstrative > Noun 32:}

\section*{ii) 22 at the penthemimeral caesura:}
\begin{tabular}{|c|c|}
\hline Ag.24: &  \\
\hline Ag.33: &  \\
\hline Ag.619: &  \\
\hline Ag.1182: &  \\
\hline Ag.1282: &  \\
\hline Ag.1405: &  \\
\hline Ag.1583: &  \\
\hline Choe.85: &  \\
\hline Choe.129: &  \\
\hline Choe.246: &  \\
\hline Choe.555: &  \\
\hline Choe.692: &  \\
\hline Choe.718: &  \\
\hline Choe.761: &  \\
\hline Choe.1042: &  \\
\hline Choe.1043: &  \\
\hline Eum.142: &  \\
\hline Eum.179: &  \\
\hline
\end{tabular}





\section*{10 positioned elsewhere}
\begin{tabular}{|c|c|}
\hline Ag.17: &  \\
\hline Ag.28: &  \\
\hline Ag.1271: &  \\
\hline Ag.1635: &  \\
\hline Choe.92: &  \\
\hline Choe.1035: &  \\
\hline Choe.1038: &  \\
\hline Eum.195: &  \\
\hline Eит.278-9: & \begin{tabular}{l}
 \\

\end{tabular} \\
\hline Eum.613: &  \\
\hline
\end{tabular}

\section*{Appendix 3}

\section*{Complementation}
3A: Homeric őtı and \(\omega\) s ..... Page 306
3B: Complements in tragedy and comedy ..... 319
3C: Complements in prose ..... 332

\section*{3A: Homeric ötı and \(\dot{\omega}\) s}
"Otı

\section*{Specifying}

Il.2.254-6:


ท̋ \(\rho \omega \in\) S \(\Delta a \nu \alpha o i ́\) - \(\qquad\)
Il.9.75-7:


каíouøıl тupà mo入入á• \(\qquad\)
Il.16.34-5 :
........... \(\gamma \lambda a v \kappa \grave{~} \delta\) ठ́ \(\sigma \epsilon\) тíктє Өá \(\lambda a \sigma \sigma a\)

Il.21.410-1:


Il.21.487-8:


Il.23.483-4:


Il.24.239-40:
\(\qquad\) oű vv каì íuîv

Il.24.241:

Od.14.53-4:
"Zєús roı סoíף, \(\xi \in i ̂ v \epsilon\), кaì á \(\theta a ́ v a t o \iota ~ \theta \epsilon o i ̀ ~ a ̈ \lambda \lambda o ı, ~\)

Od.18.333=393:

Od.22.35-6:



\section*{Verbs of emotion}

Il.1.56:

Il.5.325-6:


Il.23.555-6:


Il.24.113-5=134-6:



Od.5.339-40:


Od.8.237-9:

 \(\nu \in\) \(£\) ќкє \(\sigma \in \nu\),
Od.11.103=13.343:
\(\chi \omega\) о́ \(\mu \in \nu O S\) ötı oi viòv фílov \(\mathfrak{\epsilon} \xi a \lambda a ́ \omega \sigma a s\).
Od.17.377-8:


Od.19.71-2:


Od.19.247-8:



\section*{Cognitive verbs}

Il.1.536-8:


'Aрүиро́тє \(\zeta \alpha\) Өє́тเs, ....
Il.6.230-1:
... őфра каі̀ oiĺє

Il.7.448:
oủx ópáąS őtı \(\delta\) ' aûte káp

Il.8.175:
 ขíкŋข каì \(\mu \epsilon ́ \gamma \alpha\) кûठos ...

Il.15.217:

Il.17.630:

Il.17.688:
 \(\gamma \iota \gamma \nu \omega ́ \sigma \kappa \in \iota \nu\) őtı пŋ̂ \(\mu \alpha\) Өєòs \(\Delta \alpha \nu \alpha o i ̂ \sigma \iota ~ к u \lambda i ́ v \delta \in \iota, ~\)

Il.17.641-2:


Il.20.434:

Il.23. 545:

Il.23.576-8:


itmtol, ......
Il.24.592-4:




\section*{Od.8.461-2:}


Od.13.314:

Od.17.269:

Od. 18.11:


\section*{Speech verb}

Od.16.130-1:



\section*{"OtтL}

\section*{Specifying}

Il.5.349:

Il.15.226-8:


xєîpas Ł̇цás, \(\qquad\)
Il.23.670:


\section*{Verbs of emotion}
II.5.421:
 Il.14.406-7:
\(\chi\) х'бато \(\delta\) ' 'Ектшр,

Il.15.155-6:
.... oưס́́ \(\sigma \phi \omega i ̈ v ~ i \delta o ̀ v ~ モ ́ X o \lambda ต ́ \sigma a t o ~ \theta v \mu ต ̣, ~\)

Il.16.530-1:


Il.17.567-8:


Il.22.291-2:
.............. \(\quad \chi \omega ́ \sigma а т о ~ \delta ' ~ " Е к т \omega р ~\)


\section*{Od.14.51-2 (with both conjunctions):}
\(\qquad\) रaîpe \(\delta^{\prime}\) 'Oठvб大єús,

Od.14.366-7:

 Od.14.526-7:
............. Xaîpє \(\delta^{\prime}\) 'Oঠvббєús,

Od.21.414-5:


Od.23.115-6:



\section*{Cognitive verbs}

Il.5.406-7:

 Il.11.408:

Il.13.674-6:


入aoì im' 'Apүєí \(\omega \nu\). .....
Il.24.56 3-4:


Od.10.44:
Alo

\section*{Speech verbs}

Il.17.410-1:


Il.17.654-5:



\section*{Il.22.438-9:}


Od.4.391-2:


Od.9.402:

Od.19.463-4:



\section*{Relative use}

Il.1.294:

Il.1.542-3:
........ oủठé Tí \(\pi \omega ́ \mu o l\)

Il.2.361:

Il.6.176-7:

öтtí jó oi \(\gamma \alpha \mu \beta\) роîo mápa Проítolo ф́́poıto.
Il.8.408 (=422):

Il.14.190:

Il.15.109:


Il15.148:


Il.18.63-4:


Il.22.73:

Il.24.92:

Od.1.158:

Od.1.316-7:



\section*{Od.1.389:}
 Od.2.25=2.161-2.229=24.454:


\section*{Od.4.600:}

Od.8.548-9:


Od.8.550:

Od.14.53-4:
Zєús тoı סoín, \(\xi \in i ̂ \nu \epsilon\), кaì à \(\theta\) ávatol \(\theta \epsilon\) oì ä \(\lambda \lambda\) дot,

Od.14.444-5:



Od.15.317:

Od.18.112-3:
Zєús tol סoíף, \(\xi \in i ̂ v \epsilon\), кaì à \(\theta\) ávatol \(\theta \in o \grave{~ a ̈ \lambda \lambda o l, ~}\)


Od.18.142:

Od.19.378:
\(\qquad\)

Od.19.403-4:
Aùtó̀uk', aùtòs vôv ővou' єưpєo, ötттı кє \(\theta \in i ̂ o\) \(\pi \alpha \iota \delta o ̀ s ~ \pi \alpha \iota \delta i ~ \phi i ́ \lambda \omega\).

Od.19.406:
 Od.20.115:

кр
Od.23.139-140:
...................... є̈ \(\nu \theta a \delta^{\prime}\) єँтєเта


\section*{Sentence adverbs}

I1.9.102:

Od.17.316-7:



\section*{Final/causal use}

Il.24.538-9:


Od.14.440-1:


Od.15.341-2:



\section*{Adverbial}

Il.4.192-3:
\({ }^{\imath} \mathrm{H}\) каі̀ Ta入өúßıov \(\theta \in i ̂ o v ~ к \eta ́ \rho u к а ~ \pi \rho о \sigma \eta u ́ \delta a \cdot ~ . ~\)


Il.9.658-9:


Il.15.146:

Il.22.129:

Il.23.71:
Өámтє́ \(\mu \epsilon\) öтть тá \(\chi เ \sigma \tau \alpha\) mú入as 'Aî́ठao \(\pi \epsilon \rho \eta ́ \sigma \omega\).
Il.23.403:

Il.23.414:
 Od.5.112:

Od.8.433-4:


Od.16.151-3:
......... àtà \(\rho\) трòs \(\mu \eta \tau \epsilon ́ \rho \alpha\) єỉtєîv

крúß \(\delta \eta \nu\) •...
"O тı

\section*{Speech verbs}

Il.1.64:

Il.1.85:
\(\theta \alpha \rho \sigma \eta ́ \sigma \alpha s ~ \mu a ́ \lambda \alpha ~ \epsilon i ̉ t e ̀ ~ \theta \epsilon o m \rho o ́ m ı o \nu ~ o ̋ ~ T l ~ o i ̉ \sigma \theta a ~\)
Il.14.195 (=18.426=Od.5.89):
aưסa ő tı фрогє́єıs....

Od.8.577:
єimṫ \(\delta^{\prime}\) ő tl кдaítis .....

\section*{Relative use}

Il.1.527:

Il.2.215:

є̈ \(\mu \mu \in v a \iota\)
Il.10.142:

Il.10.503:

Il.14.220-1:
.............. oủठ́́ \(\sigma\) є́ фпи兀

Od.2.33-4:
.............. \(\epsilon^{\prime}\) Ө€ oi aủṭ̣̂

Od.7. 150:

Od.8.147-8:


Od.12.331:


\section*{Completive ' \(\Omega s\) : constructions cited by Monteil \((1963,354)\)}

\section*{Verbs of emotion}

Il.16.17:


Il.16.599-600:


Il.23.648:


Od.9.413:

ஸ́s ővo \({ }^{\prime}\) є́ \(\xi a \pi \alpha ́ т \eta \sigma \epsilon \nu ~ \epsilon ̇ \mu o ̀ v ~ к а i ̀ ~ \mu \eta ̂ т ı s ~ a ̉ \mu u ́ \mu \omega \nu . ~\)
Od.11.418:


\(\kappa \in i ́ \mu \in \theta^{\prime}\) モ̇v̀̀ \(\mu \in \gamma \alpha ́ \rho \varphi\),

\section*{Cognitive verbs}

Il.4.360:


Il.10.160:


Il.14.482:

\({ }_{\epsilon}{ }^{\prime} \gamma \chi \in \iota \dot{\epsilon} \mu \omega \oplus\),
Il.15.204:

Il.23.787:
 \(\dot{\alpha} \theta \alpha ́ v a t o l ~ \tau \iota \mu \omega ิ \sigma l ~ \pi a \lambda a l o t e ́ p o u s ~ a ̀ \nu \theta \rho \omega ́ t r o u s . ~\)

\section*{Il.24.662:}


Od.3.193-4:



\section*{Speech verbs}

Od.4.376:


Od.8.75:
\(\nu \in i ̂ k o s ~ ' O \delta v \sigma \sigma \eta ̂ o s ~ к a i ̀ ~ \Pi \eta \lambda \epsilon i ́ \delta \epsilon \omega ~ ' A \chi ı \lambda \eta ̂ o s, ~\)

Є̇кாá \(\gamma \lambda o l \sigma \sigma^{\prime} \epsilon \in \pi \epsilon ́ \epsilon \sigma \sigma \iota \nu\),
Od.8.266:


 \(\lambda \alpha ́ \theta p \eta\).

Od.8.307:



Od.8.497:
aủтíka каì тâбเv \(\mu v \theta \dot{\eta} \sigma о \mu a l ~ a ̉ \nu \theta \rho \omega ́ т о \iota \sigma เ \nu\),

Od.15.157:



\section*{Od.19.464:}



Od.22.373:



Od.24.236:



\section*{Completive \(\omega\) s in Iliad 9 and Odyssey 9}

\section*{Verb of emotion}

Od.9.413-4:
....... É \(\mu\) òv \(\delta^{\prime}\) '̇ \(\gamma \in ́ \lambda a \sigma \sigma \epsilon\) ф́́入ov кท̂p,


\section*{Cognitive verbs}

Il.9.112:

Il.9.527-8:


Il.9.647:

'Aт \(\dagger\) єíठŋS .......
Il.9.704 :

Od.9.442-3:
\(\qquad\)



\section*{Speech verbs}

Il.9.103 =314 :

Il.9.369:

à \(\mu \phi \delta^{\prime} \delta^{2}\), \(\qquad\)

\section*{Final use}

Il.9.181:

Il.9.309-311:



Od.9.42 =549:


\section*{3B: Complements in tragedy and comedy}

\section*{Aeschylus}

\section*{' \(\Omega_{S}\) in the Oresteia}

22 instances introduce resultative or final clauses, usually after verbs expressing actions (Ag.358, 575, 665, 911, 1188, 1293, 1381; Choe.20, 556, 735, 767, 771, 984, 987, 1021; Eum.36, 613, \(638,771,799,882,895)\). There are 11 instances of complementizing use, 7 with antecedents, and two dependent on a nominal. The importance of verbs of witness is discussed in the main text. Most other completives involve cognitive verbs.

Ag.494-6:
... \(\mu \alpha \rho т v \rho \epsilon i ̂ ~ \delta e ́ ~ \mu o l ~ к a ́ \sigma ı s ~\)
\(\pi \eta \lambda o v ̂ ~ \xi u ́ v o u p o s ~ \delta ı \psi i ́ a ~ k o ́ v t s ~ \tau a ́ \delta \epsilon, ~, ~\)

ừŋs ỏpeías oquaveî катṿ̣ тupós.

Ag.1367:
\(\mu \alpha \nu \tau \epsilon v \sigma o ́ \mu \epsilon \sigma \theta \alpha\) тả \(\nu \delta \rho o ̀ s\) is ỏ̀ \(\lambda \omega \lambda o ́ t o s ;\)

Ag.1505:
ف́s \(\mu\) èv àvaítios \(\epsilon \hat{l}\) тоûठє фóvou tís ó \(\mu a \rho \tau \cup \rho \eta \dot{\sigma} \sigma \omega \nu\);

Ag.1619:



\section*{Choe. 492 (corrupt):}
\(\mu \epsilon ́ \mu \nu \eta \sigma o \delta^{\prime}\) ả \(\mu i ́ \beta \lambda \eta \sigma т \rho o \nu \dot{\omega}\) є̇каívıбаs.

Choe.988-9:



Choe.1034:


\(\mu \in \sigma o ́ \mu \phi a \lambda o ́ v \theta^{\prime}\) '̌ठpu \(\mu a, ~ \Lambda o \xi i ́ o v ~ \pi \epsilon ́ \delta o v, ~\)

Eum.310-1:
\(\lambda \epsilon ́ \xi \alpha \iota ~ \tau \epsilon \lambda \alpha ́ \chi \eta ~ \tau \alpha ̀ ~ к \alpha \tau^{\prime} \alpha \dot{\alpha} \nu \rho \omega ́ m o u s\)


\section*{Eum. 454 :}
\(\gamma \epsilon ́ v o s\) סè toủ

\section*{Eum.657:}


There is one appositive construction, at Ag.1464-6:


àvঠpติv \(\psi u \chi a ̀ s ~ \Delta a v a \omega ิ v ~ o ̀ \lambda \epsilon ́ \sigma \alpha \sigma ' ~\)


\section*{' \(\Omega\) S in other Aeschylean works}

There is a total of 101 (134 including Prometheus), with 12 (or 21) introducing complements. Of these, 7 follow verbs of speech and 4 of perception, and 1 of showing ( \(\delta \in \epsilon^{\prime} \xi_{\alpha} \theta^{\top}\) ).
\begin{tabular}{|c|c|}
\hline Supp 390-1: & \begin{tabular}{l}
 \\

\end{tabular} \\
\hline Pers.287-9: &  \\
\hline & ف́s \(\Pi \epsilon \rho \sigma i \delta \omega \nu\) mod入às \(\mu \alpha \alpha^{\prime} \alpha \nu\) \\
\hline &  \\
\hline Pers.356-7: & \(\dot{\epsilon} \lambda \theta \omega \dot{\omega}\) \\
\hline &  \\
\hline &  \\
\hline Pers.525: &  \\
\hline &  \\
\hline Pers.599-600: &  \\
\hline &  \\
\hline Pers.754: &  \\
\hline &  \\
\hline Pers.819-20: &  \\
\hline &  \\
\hline Sept 176: &  \\
\hline Sept 375-6: & \begin{tabular}{l}
 \\

\end{tabular} \\
\hline Sept 468-9: &  \\
\hline &  \\
\hline Sept 617: &  \\
\hline Sept 922-3: &  \\
\hline &  \\
\hline
\end{tabular}

\section*{Prometheus}

5 of the 9 constructions follow verbs of speech.
\begin{tabular}{|c|c|}
\hline 211-3: &  \\
\hline &  x \(\rho\) 㒶 \(\eta\) \\
\hline
\end{tabular}

259-61: \(\qquad\) oủx ópầs őtᄂ


296-7:


фídos \(̇\) є́ \(\sigma t i ̀ ~ \beta \in \beta a l o ́ t \epsilon \rho o ́ s ~ \sigma o l . ~\)
442－4：．．．．．тảv ßротоîs dè пף́ \(\mu \alpha \tau \alpha\)


842－3：\(\quad \sigma \eta \mu \in i ̂ a ́ ~ \sigma o l ~ T \alpha ́ \delta ’ ~ E ̇ \sigma T i ̀ ~ T \eta ̂ S ~ \grave{~} \mu \eta ิ S ~ \phi \rho \in v o ́ s\),

889－90：\(\quad \gamma \lambda \omega ́ \sigma \sigma \alpha\) д \(\delta є \mu \nu Ө\) о入ó \(\eta \eta \sigma \epsilon \nu\) ，



1073－5：．．．．．\(\mu \eta \delta \epsilon ́ є т о т ' ~ є ' l т п \eta \theta ’ ~\)

\(\pi \hat{\mu} \mu\)＇\(\epsilon \mathfrak{i} \sigma \in \in \beta a \lambda \epsilon \nu . . .\).


\section*{El in Aeschylus}

\(\epsilon \mathfrak{l}\) vóбтıцós tє кaì \(\sigma \epsilon \sigma \omega \mu \epsilon\) vos má \(\lambda \iota \nu\)

Ag．881－4：\(\quad \Sigma т \rho о ф i ́ o s ~ o ̀ ~ Ф \omega к є u ́ s, ~ a ̉ \mu \phi i ́ \lambda є к т а ~ т \eta ́ \mu а т а ~\)
 кívסvvov，\(\epsilon\) ̈ tє \(\delta \eta \mu o ́ \theta \rho o u s ~ d ̀ \nu a \rho \chi i ́ a ~\) ßou入ウ̀v катаррí \(\psi \in \iota \in \nu\) ，



\(\epsilon \mathrm{i}\) 入ı \(\mu\) ós，ク̉ \(\delta i ́ \psi \eta ~ t ı s, ~ \eta ̀ ~ \lambda ı \psi o u p i ́ a ~\)
モ́ \(\chi \in \iota^{-}\)









＂Ато入入ov，єll \(\sigma \phi \epsilon \sigma ⿱ 亠 v 刂 ~ \delta i ́ k n ̣ ~ к а т \epsilon ́ к т а \nu o v . ~\)

Prom 997: őpa vvv єl̉ ool tav̂t' ảp \(\omega\) yà фaívєTal.
"OTms

There are 5 instances of subordinating öt \({ }^{2}\) s in Aeschylus, always with an adverbial force, and all depending on verbs of knowing or saying. Two have a connotation of possibility: the complex introduction to the Parodos at Ag.105ff., and the idiomatic oűk \({ }^{\epsilon} \sigma \theta^{\prime}\) ö öm \(\omega\) at \(A g .620\), where the modality is expressed through an optative subordinate verb. There is a possible adverbial connotation, as also with \(\dot{s}\) s, which Liddell and Scott (1968: 1243) note at Prom. 1001 (ки̂ \({ }^{\prime}\) öт \(\quad \omega\) ).
\begin{tabular}{|c|c|}
\hline Supp 289-290: & \begin{tabular}{l}
 \\

\end{tabular} \\
\hline \multirow[t]{5}{*}{Ag.105-10:} &  \\
\hline & \begin{tabular}{l}
 \\

\end{tabular} \\
\hline & 乡úpфроva таүáv, \\
\hline &  \\
\hline & Өoúplos őputs Tєukpí ' ̇̇m' aỉav, \\
\hline Ag.620: &  \\
\hline Eum.591: &  \\
\hline
\end{tabular}

The word order at Ag.1370-1 is described by Denniston and Page (1957: 195) as 'an incoherence of language without parallel or proper explanation.' It might, however, also be interpreted as a regular participle construction, with adverbial ötms:
ӧт \(\omega\) S \(\theta \in ́ \lambda \in ا \cdot .\).


\section*{Mý in the Oresteia}

There are 103 instances of \(\mu \eta\), most of which are with imperative, optative, or non-finite verbs. None are complements.

\section*{Sophocles}
"Otı

There are 30 instances with complement function in the extant works, 18 without explicit subject (Tr. 439 and 1110; Ant.61, 98, 276, 311, 779; Aj. 678 and 792; OT. 59 and 1133; El.44, 332, 988, and possibly 1070; Phil.405; OC. 872 and 1039).

There are 10 instances of SV (Tr. 464, Ant.188-9, 325-6, 649-50, 1043-4, OT.499-500 and 525-6, Ph.325-6, 649-50, OC.941-2), 1 SVS (OC.666-7) , and 1 of finite VS, at El.426-7:
\(\pi \lambda \epsilon i ́ \omega\) ठè тоút \(\omega \nu\) oủ кáтot \(\delta \alpha, \pi \lambda \eta ̀ \nu\) öтı


This mirrors its inspiration, Choe.524-5, in having VS order preceded by focalization, even though the Choephoroi passage is not in a subordinate clause:



OT.

\section*{Completive ötı}
\begin{tabular}{|c|c|}
\hline OT.59-60: & \begin{tabular}{l}
 \\

\end{tabular} \\
\hline OT.499-501: & \begin{tabular}{l}
\(\qquad\) àv \\
 \\

\end{tabular} \\
\hline OT.525-526: &  \(\pi \in \iota \sigma \theta \epsilon i s ~ o ́ ~ \mu a ́ v t ı s ~ t o u ̀ s ~ \lambda o ́ \gamma o u s ~ \psi \in u \delta \in i ̂ s ~ \lambda \epsilon ́ \gamma o l ; ~\) \\
\hline OT.1132ff.: & ..... \(\epsilon\) Û \(\gamma\) à \(\rho\) oî \(\delta^{\prime}\) őtı \\
\hline &  \\
\hline &  \\
\hline & < \\
\hline &  \\
\hline
\end{tabular}

OT.1401-3: .......... àpá цоv \(\mu \epsilon ́ \mu \nu \eta \sigma \theta\) ’ öть

 \(\qquad\)

\section*{Relative ơ TL}

OT.71: \(\quad\) є́тє \(\mu \psi\) Фо


\section*{Adverbial őtı}


\section*{' \(\Omega s\) in \(O T\).}

In OT., there are 73 instances of \(\dot{s}\), of which 15 have complement function. Most (10) have an antecedent, and 12 follow verbs of speech: in 6 constructions, placed at the line start.

\section*{Cognitive verbs}

 катабфаүєín \(\pi \rho o ̀ s ~ т \rho ı \pi \lambda \alpha i ̂ ̂ s ~ a ́ \mu \alpha \xi ı т о i ̂ s . ~\)



\section*{Speech verbs}
(Optative subordinate verbs appear in 8 constructions)





 тòv \(\sigma \epsilon \mu \nu o ́ \mu \alpha \nu \tau \iota \nu\) ả \(\nu \delta \rho \alpha\) тє́ \(\mu \psi \alpha \sigma \theta a i ́ ~ \tau เ \nu \alpha ;\)
 Фоíßov \(\gamma^{\prime}\) àm’ aủtov̂, т \(\omega \nu \delta^{\prime}\) ímпрєT \(\omega \hat{\nu}\) ảmo, \(\dot{\omega}\) aùtòv ท̋そol \(\mu\) oîpa mpòs malסòs \(\theta a v \in i ̂ v ~\)
\begin{tabular}{|c|c|}
\hline \begin{tabular}{l}
OT.780: \\
OT.790-1:
\end{tabular} & \begin{tabular}{l}
\(\kappa \alpha \lambda \epsilon i ̂ ~ \pi \alpha \rho ’ ~ o l ้ \nu ̣ ̣ ~ \pi \lambda a \sigma \tau o ̀ s ~ \omega ́ s ~ \epsilon ' l \eta \nu ~ \pi \alpha т \rho i ́ . ~\) \\
 \\

\end{tabular} \\
\hline OT.842-3: & \begin{tabular}{l}
 \\

\end{tabular} \\
\hline OT.955-6: & \begin{tabular}{l}
'Ек тฑ̂s KopívӨov, тaтє́pa тòv \(\sigma o ̀ \nu ~ \grave{\alpha} \gamma \gamma \epsilon \lambda \omega \hat{\nu}\) \\

\end{tabular} \\
\hline OT.1161: &  \\
\hline OT.1172: &  \\
\hline OT.1289-90: & \begin{tabular}{l}
 \\

\end{tabular} \\
\hline OT.1369-70: & \begin{tabular}{l}
 \\

\end{tabular} \\
\hline
\end{tabular}
"Oт

There are six instances of subordinating ötws, three as complement introducers, at OT.548:
Toût' aủtò \(\mu n ́ ~ \mu o l ~ \phi \rho a ́ \zeta ̧ ’ ~ o ̈ \pi \omega s ~ o u ̉ k ~ \epsilon i ̂ ~ к а к o ́ s . ~\)




\section*{Ei}

Almost all instances are conditionals. A conditional following a verb of speech at 703 has a formal identity with a complement structure:


Two instances of \(\epsilon l\) introduce complements, both with antecedents, at OT.584:





\section*{M}

Of 71 constructions in OT., 5 are subordinating. All have the meaning 'lest' following verbs of fearing ( \(747,767,948,1011,1012\) ). These might be regarded as carrying a causal force rather than a reporting function, and all have a verb in the optative or subjunctive (though at 1074\(5, \delta \epsilon ́ \delta o l \chi\) ’ ö \(\pi \omega S \mu\) í is followed by a future indicative).

\section*{Euripides, Medea}
"Otı

Med.560: каі̀ \(\mu \grave{~ \sigma \pi a \nu \iota \zeta о ́ ́ \mu \epsilon \sigma Ө a, ~ \gamma ı \gamma \nu \omega ́ \sigma к \omega \nu ~ o ̈ т \iota ~}\)

' \(\Omega_{\mathrm{s}}\) in Medea

\section*{Cognitive verbs}
\begin{tabular}{|c|c|}
\hline Med.67-72: & \begin{tabular}{l}
ク̈кочбá тov \(\lambda \in ́ \gamma o \nu t o s, ~ o u ̉ ~ \delta о к \omega ิ \nu ~ к \lambda u ́ \epsilon \iota \nu, ~\) \\
 Өáббообь, \(\sigma \epsilon \mu \nu o ̀ v ~ a ̉ \mu \phi i ~ \pi \epsilon เ \rho \eta ́ \nu \eta s ~ v ̌ \delta \omega \rho, ~\) \\
 oùv \(\mu \eta \tau \rho i ̀ ~ \mu \epsilon ́ \lambda \lambda o l ~ т \eta ̂ \sigma \delta \epsilon ~ к o i ́ p a \nu o s ~ \chi Ө o v o ̀ s ~\) Kрé \(\omega \nu\)...
\end{tabular} \\
\hline Med.85-6: & \begin{tabular}{l}
Tís \(\delta\) ’ oủxi \(\theta \nu \eta \tau \omega ิ \nu\); äptı \(\gamma เ \gamma \nu \omega ́ \sigma \kappa \in เ S ~ T o ́ \delta \epsilon \epsilon, ~\) \\

\end{tabular} \\
\hline Med.446-7: & \begin{tabular}{l}
oủ vv̂v катєîठov трติтоv à \(\lambda \lambda \grave{\alpha}\) тод入áкıs \\

\end{tabular} \\
\hline \begin{tabular}{l}
Med.600: \\
Med.1119-20:
\end{tabular} & \begin{tabular}{l}
 \\

\end{tabular} \\
\hline Med.1246-7: & \begin{tabular}{l}
 кaì \(\mu \eta ̀ ~ \kappa а \kappa \iota \sigma \theta n ̣ ̂ s ~ \mu \eta \delta ’ ~ \alpha ̉ \nu \alpha \mu \nu \eta \sigma \theta n ̣ ̂ s ~ \tau \epsilon ́ \kappa \nu \omega \nu\), \\

\end{tabular} \\
\hline Med.1311: &  \\
\hline Med.1405: &  \\
\hline
\end{tabular}

\section*{Speech verbs}
\begin{tabular}{|c|c|}
\hline Med.248-9: & \begin{tabular}{l}
 \\

\end{tabular} \\
\hline Med.452: &  \\
\hline Med.529-31: &  \\
\hline & \begin{tabular}{l}
 \\

\end{tabular} \\
\hline Med.619-20: & \begin{tabular}{l}
 \\

\end{tabular} \\
\hline Med.776-7: & \begin{tabular}{l}
\(\mu \circ \lambda о ́ v t \iota \delta^{\prime}\) aùt@̣ \(\mu \alpha \lambda \theta a \kappa o u ̀ s ~ \lambda \epsilon ́ \xi \omega ~ \lambda o ́ \gamma o u s, ~\) \\

\end{tabular} \\
\hline Med.1410-2: &  \\
\hline &  \\
\hline & \#av̂бaí \(T \epsilon\) Xєpoîv Өázal te vekpoús \\
\hline
\end{tabular}

\section*{El}
\begin{tabular}{|c|c|}
\hline Med.184-5: &  \\
\hline &  \\
\hline Med.346: &  \\
\hline Med.931: &  \\
\hline Med.941: &  \\
\hline Med.1319-20 & Ér \\
\hline
\end{tabular}
\(\lambda \epsilon ́ \gamma\) ', \(\epsilon\) l Tl ßoú入ŋ̣..........

A double interrogative construction occurs at Med.492-4:
\(\qquad\) oủ \(\delta^{\prime}\) モ̌ \(\chi \omega \mu \alpha \theta \in \imath ̂ \nu\)



A preposed construction at Med.1103-4:



\section*{Mń}

There are 5 instances with \(\mu \dot{\prime}\) after verbs of fearing, at Med.37, 40, 283, 306, 317, with subjunctive verbs. All except the nominal-dependent 317 have antecedents, mostly proleptic subjects, as at 37 :



Other Euripidean öтı-complements following cognitive and speech verbs

\section*{Cognitive verbs (3)}


\section*{Speech verbs (8)}
\begin{tabular}{|c|c|}
\hline Ba.173-4: &  \\
\hline & \(\zeta ŋ \tau \epsilon i ̂ ~ \nu L \nu \cdot \ldots\) \\
\hline Ba.649: &  \\
\hline El.171-3: &  \\
\hline & \(\alpha \nu\) карúббоибıv Өvoíav \\
\hline & 'Aprєîol, ... \\
\hline Hel.1491-4: &  \\
\hline &  \\
\hline &  \\
\hline &  \\
\hline HF.1417: &  \\
\hline IT.1093-4: & єủgúveTov guveToîs ßoáv, \\
\hline &  \\
\hline Or.8-10: &  \\
\hline &  \\
\hline &  \\
\hline
\end{tabular}

Or.892-3: \(\lambda o ́ \gamma o u s\) є́ \(\lambda i ́ \sigma \sigma \omega \nu\), őtı каӨıбтаín vó \(\mu\) ous És toùs tєкóvtas oủ ka入oús‘ ..

\section*{Aristophanes, Frogs}
"Otı

\section*{Cognitive verbs}
\begin{tabular}{|c|c|}
\hline 584: &  \\
\hline 599-600: & \begin{tabular}{l}
 \\

\end{tabular} \\
\hline 741-2: & \begin{tabular}{l}
 \\

\end{tabular} \\
\hline 1136: &  \\
\hline
\end{tabular}

\section*{Speech verbs}

Ra. 8 and 9 (without main verbs):




19-20: \(\quad\) ' \(\Omega\) трьбкакобаі́ \(\mu \omega \nu\) ä \(\rho ’\) о́ т та́ұŋ入оs оиттобi,




The free relative constructions are:


There are 41 instances of \(\dot{s}\) in Frogs, with 4 complements. Two with antecedents are dependent on verbs of speech, at Ra.683-4:


```

    \omegas \hat{j}v ả\lambdaa\zetă\omegàv kail фéva\xi olots t\epsilon toùs 0\epsilonatàs
    \epsiloṅ\xi\etaпа́та...
    ```

The two others follow cognitive verbs, at Ra.400:
        кaì \(\delta \in i ̄ \xi o v\) ás ảvev móvov
        \(\pi о \lambda \lambda \eta े \nu\) ódòv \(\pi \epsilon \rho \alpha i ́ \nu \in ⿺ s\).




At Ra.5, there is an exclamative use which the context suggests may introduce direct speech:

"O \(\mathrm{O} \pi \omega\)



кขєфаîos єỉs ả \(\gamma\) орàv
фє́poū’ àmoठoí \(\mu \alpha \nu\).
 каі̀ \(\psi \in v \delta o \lambda o ́ \gamma o s ~ к а і ̀ ~ \beta \omega \mu о \lambda o ́ \chi o s ~\)



El

Complementizing \(\epsilon \mathrm{l}\) is rarer in Frogs than in any other of the texts studied. There is only one instance of \(\epsilon i\) introducing an indirect question, in a Euripidean quotation (=E.fr.638) at 1477:


\section*{3C: Complements in prose}

\section*{Thucydides, Melian Dialogue}

There are 11 complement clauses, 4 with \(\dot{\text { iss, }} 7\) with ötı. Instances other than those cited in the main text (in Chapters 4 and 7):
 \(\dot{\eta}\) є́s toùs ỏ入írous ả \(\gamma \omega \gamma \dot{\eta})\),








5.111.5:


\section*{Plato, Crito}
"Otı

\section*{Specifying}

51e4:
kaì Tòv \(\mu \grave{~} \pi \in \iota \theta\) Ó \(\mu \in \nu=\nu\)




\section*{Cognitive verbs}

43d4: \(\quad \delta \hat{1} \lambda o \nu\) oûv Є̇к тоút \(\omega \nu\) [т \(\omega \nu\) ả \(\gamma \gamma \epsilon ́ \lambda \omega \nu\) ]



 d̀ \(\lambda \lambda \grave{\alpha}\) Tà \(\mu \epsilon ́ \gamma \iota \sigma \tau \alpha \sigma \chi \in \delta o ́ v\),

46c1:

48b4:

49d2:
51a7:

54d2:

\section*{Speech verbs}






є́ \(\lambda \epsilon ́ \gamma \in т о\),
46d7:

47a2:

51c6:










\section*{Direct speech}


 тà \(\lambda \epsilon \gamma\) о́ \(\mu \in \nu \alpha\) à \(\lambda \lambda\) ’ àтокрі́vоv,






\section*{\({ }^{\prime} \Omega_{s}\) in Crito}

\section*{Verbs of emotion}

Crito 43b4:
\(\alpha \dot{\alpha} \lambda \lambda \dot{\alpha}\) кaì \(\sigma\) ov̂ má入aı


 \(\dot{\alpha} \mu \in \lambda \tilde{\eta} \sigma \alpha\).

44c3:

45e1:

48e2:

50d3:
 каì סoû入os, aùtós tє кaì oi бoì mpóyovol;

53d4:



\section*{El and \(\epsilon\) є́áv in Crito}

46d4ff.:



48b4ff.:



48d3ff:



52d3f.:

àтóкрıval, єỉ à \(\lambda \eta \theta \eta \hat{\eta} \lambda \in ́ \gamma о \mu \in \nu\)
There is one polar question with \(\epsilon^{\prime} \alpha v\), at 48 e 5 :

iкavôs \(\lambda \epsilon ́ \gamma \eta \tau \alpha \iota\)

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[^0]:    ${ }^{1}$ These terms refer to sentences of more than one clause, in a relation of conjunction or embedding respectively. See Lyons (1968: 266).
    ${ }^{2}$ In Chapters 1 and 2. Homeric order was discussed by Ammann (1922: 1924), Friedrich (1975), and Conrad (1990), and observations on tragic word order were made by Thomson (1938, 1939b). However, no systematic survey of tragic word order has previously been made.
    ${ }^{3}$ As by Kühner (1904: 595) and Dover (1960: 31).
    ${ }^{4}$ As Aristotle (Rhetoric), Cicero (Orator), Dionysius of Halicarnassus (De Comp.), and Quintilian (Institutio). See also Denniston (1952), Scaglione (1972) and Dover (1997).
    ${ }^{5}$ As Kieckers (1911), Fischer (1924), Frisk (1932), Thomson (1939a), and Chantraine (1952).
    ${ }^{6}$ As Goodell (1890), Loepfe (1940), Dover (1960), Dunn (1988), and Dik (1995, 2007).

[^1]:    ${ }^{7}$ An initial emphatic position was noted by Thomson (1938:367) and Denniston (1952: 44). Particles are analysed functionally by Denniston (1954), Ruijgh (1971, 1990), and Rijksbaron (1997a); structurally by Hale (1987, 1996), Schäufele (1991), and Wills (1993); and prosodically by Halpern (1992), Hock $(1982,1996)$ and Taylor (1996). Hale, Schäufele, Halpern, and Hock concentrate on Vedic Sanskrit. Other references are given in Chapter 4.
    ${ }^{8}$ Notably in the X-bar approach described below in Section 1.
    ${ }^{9}$ Most thoroughly by Monteil (1963). Other studies are cited in the main text.
    ${ }^{10}$ The term 'complementizer' to denote a complement-introducing conjunction derives from Rosenbaum (1967).
    ${ }^{11}$ The term 'argument' is used to identify the subject or object of a verb. For its sense in predicate calculus to denote the function of names in propositions, see Lyons (1977: 148-9).

[^2]:    ${ }^{12}$ Circumstantial constructions may be defined as verbal modifiers giving information on the circumstantial roles associated with a situation (see Halliday 1970b, Lyons 1977: 497). For their application to CG participial subordination, see Smyth (1956: 456-471).
    ${ }^{13}$ The distinction here depends on the form of the main, rather than the subordinate, clause.
    ${ }^{14}$ Meillet (1912) describes 'grammaticalisation' as one of the two processes by which grammatical forms evolve (he identifies the other as 'analogie'). For a recent discussion on grammaticalization in Ancient Greek, see Cristofaro (1998).

[^3]:    ${ }^{15}$ Discussion of studies of P2 enclitics, from Bergaigne (1877) to Rijksbaron (1997a), may be found in Chapter 4.
    ${ }^{16}$ The P2 placing of personal pronouns and enclitics is discussed more fully in Chapter 4.

[^4]:    ${ }^{17}$ Usually cited as Kühner-Gerth (1904).
    ${ }^{18}$ As by Jackendoff (1977), Chomsky (1981, 1986, 1992), Webelhuth (1995) and others.
    ${ }^{19}$ The phrase structure grammars of Gazdar, Klein, Pullum and Sag (1985) and Pollard and Sag (1988) are similar to the X-bar model in being based on constituency, while the wordbased grammar of Hudson (1984) concentrates on grammatical dependency relations. The drawbacks of functional models are discussed in Chapter 4, section 1a.
    ${ }^{20}$ Summarized as the principle of transparency, which assumes that logical and phonological form have a high degree of correspondence (see Lightfoot 1979: 121-141).
    ${ }^{21}$ The term, to describe phrases with a head word governing the other elements, originates with Bloomfield (1933). See discussions by Lyons (1977: 389-394), Jackendoff (1977: 7-27), and Radford (1988: 259ff.). Exocentricity (classical bahuvrihi) is interpreted as a transformation: that is, movement to a position adjoined to the clause-structure. See Radford (1988: 545-8).

[^5]:    ${ }^{22}$ The semantic relationship of a complement to its head may be as a functional argument, or a (restrictive or non-restrictive) modifier (Jackendoff 1977: 57).
    ${ }^{23}$ These may be semantic (the head is the word which assigns semantic roles: as Chomsky 1982: 6); or in terms of government, that it is the controlling element in a phrase (Hudson 1984: 76); or distributional, that it is substitutable for the complete phrase (Lyons 1968: 233, 1977: 391). On their compatibility, see Lyons (1977: 392), Williams (1981), Zwicky (1985), Hudson (1987), Horrocks and Stavrou (1987), and Dwyer (1992).
    ${ }^{24}$ The term canonically used for elements at an equal level in the clause structure.
    ${ }^{25}$ This view is challenged by Kayne (1994), who argues that all syntax is right-branching, and that left branches are always produced by adjunction.
    ${ }^{26}$ The advantage of this analysis is that it enables the binary phrasal structure of Fig. 2 to be applied throughout clause structure. See Chomsky (1965: 106-110, 1986).
    ${ }^{27}$ In languages without complementation, this could be analysed as a Focus Phrase (FP): see Horvath (1986) and Kiss (1995b). The label 'CP' is used here, as FPs are associated with enclitic verbs in P2. An FP is more appropriate to early IE, where verbs were often enclitic.

[^6]:    ${ }^{28}$ This typology is derived from discussions by Matthews (1981), Chomsky (1981), Quirk et al. (1985), and Shopen (1985).

[^7]:    ${ }^{29}$ Other suggested explanations are the postponing of new information (Behaghel 1929, Mallinson and Blake 1981), or the tendency for inflections to be to the right (Gil 1982).
    ${ }^{30}$ When pitch prominence is reinforced by duration, it becomes stress' (Devine and Stephens 1994: 216). On the possibility of a stress component in CG, see also Allen (1987: 131ff.).

[^8]:    ${ }^{31}$ The citation is from $\operatorname{Ag} .598$ ('And now, for the full story, what need have you to tell me it?').
    ${ }^{32}$ The semantic relation in which 'theme' corresponds to 'patient', and so is associated with the syntactic object in accusative languages, is described in Chapter 6, Section 1b. See Halliday (1967, 1968), Fillmore (1968), and Lyons (1968: 350-359).

[^9]:    ${ }^{33}$ This view is justified in Chapter 4.
    ${ }^{34}$ Also noted by Devine and Stephens (1994: 459). Dik (2007: 32-3) calls this 'contrastive topic.'
    ${ }^{35}$ See Bach (1971), and Bakker (1993).
    ${ }^{36}$ Kiparsky's use of the phrasal categories S, S', and S" reflects his assumption that early IE did not have a complementizer. His schema shows the topic as the specifier of the focus (a simplified version of the X-bar model). See also Hale (1996).

[^10]:    ${ }^{37}$ The citation is from Choe.267: '[Someone might tell this] to the rulers, whom may I see die one day'.

[^11]:    ${ }^{38}$ In the corpus, even restrictive relative clauses generally have a discernible intonation break, unlike restrictives in English. A phonetic motivation may be involved ('the man that broke the bank at Monte Carlo', rather than 'who'). On the aspirate, see Chapter 4, Section 2cii. ${ }^{39}$ A relation between indefinite reference and interrogation is observed by Dover (1960: 12), Monteil (1963: 150, 154), and Lyons (1977: 761-2), and is discussed in Chapter 5, Section 2d. ${ }^{40}$ The citation is from Il.21.609: 'To find out who had got away'.

[^12]:    ${ }^{41}$ After the fourth foot: see Fraenkel (1955), and Chapter 3, Section 4.
    ${ }^{42}$ Similarly, the English complementizer 'that' is also etymologically a pronominal (and may still retain the logical form of one: see Davidson 1968).
    ${ }^{43}$ The citation is from Od.10.109-10: 'And they asked who was king of these people...'.

[^13]:    ${ }^{44}$ Il.14.195=Od.5.89: 'Say what you are thinking.'
    ${ }^{45}$ This may be termed 'impure textual deixis' (Lyons 1977: 668). Such a 'sententialist' interpretation of complementation was first suggested, for English, by Davidson (1968). See also Quine (1968) and Davidson (1979).

[^14]:    ${ }^{46}$ OT.59-60.

[^15]:    ${ }^{47}$ Medea 85-6, 'Have you only just learned this, that each loves himself more than his neighbour?'
    ${ }^{48}$ It is also involved in the hyperbatic pattern discussed in Chapter 3.

[^16]:    ${ }^{49}$ The citation is from Matthew 6.24: 'Consider the lilies of the field, how they grow'.
    ${ }^{50}$ The $\theta$-criterion: see Chomsky (1981:36). $\Theta$-roles are defined in terms of causality or agency (Tesnière 1959, Fillmore 1968), or of spatial or temporal goals (Gruber 1976, Jackendoff 1983). ${ }^{51}$ The case is ambiguous here, but in other proleptic constructions it is clearly accusative, as
     how he was troubled).

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    52As at Eum. ```

