

DISSERTATIONES STUDIORUM GRAECORUM ET LATINORUM  
UNIVERSITATIS TARTUENSIS



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**FORM, STYLE AND SYNTAX:  
TOWARDS A STATISTICAL ANALYSIS  
OF GREEK PROSE RHYTHM:  
ON THE EXAMPLE OF “HELEN’S  
ENCOMIUM” BY GORGIAS**

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# ABBREVIATIONS AND CRITICAL SYMBOLS

## I. Abbreviations used in the description of prose rhythm<sup>1</sup>

ABS.COP – missing copula  
ACC – accent, accentual rhythm  
AC.RI – accentual rhythm index  
ADD – addition  
ALL – alliteration  
ANA – anaphora  
ANAPHR – anaphoric pronoun  
ANT – antithesis  
ARF, AUTOREF – auto-reference  
ASY – asyndeton  
BEG – beginning  
B, BO – boundary  
CATAPHR – cataphoric pronoun  
CEW – content words and emphatic function words  
CH – change  
CHI – chiasmus  
CLA – clausula  
CLO – closure  
COL – colon  
CONN – connection  
COP – copula  
CTR – contrast  
CW – content word  
EFW – emphatic function word  
EL – element  
EPAN – epanaphora  
EPIPH – epiphora  
EX – example  
FOLL – following  
FW – function word  
GRA – gradation  
H, HIAT – hiatus  
HOM – homoeoteleuton  
HYP – hyperbaton  
IMPS – impersonal verb

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<sup>1</sup> The abbreviations of principal reference works and journals, as well as the names of Greek and Latin authors follow the practice of *l'Année Philologique* and Liddell – Scott – Jones, *A Greek-English Lexicon*. The references to the analysis of Gorgias' Helen are given according to the parsing presented in Part III (and Appendix I) of this dissertation.

INT – internal (period- or colon-internal)  
ISOC – isocolon  
ISOS – isosyllabic rhythm  
LIT – litotes  
PAR – parallelism  
PARIS – parison  
PER – period  
PIV – pivot  
PLPT – polyptoton  
POS – position  
PT – part (e.g. in word-part repetition)  
QU – quantitative rhythm  
QU.RI – quantitative rhythm index  
QUANT – quantity word  
REF – keywords occurring elsewhere  
REP – repetition  
RH – rhythm  
RI – rhythm index  
RING – circular structure  
RP – repetition  
SL.RI – syllabic rhythm index  
SO.PL – sound play (parechesis)  
SY – syntax  
SYL – syllable  
SYM – symmetrical pattern or even distribution  
VE – verb; verbal syntax  
WD – word  
WTDI – word type distribution index

## **II. Abbreviations used in the analysis**

adv. – adverb  
alt. – alternating  
art. – article  
C – consonant  
Cl, Col. – colon  
Cm – comma  
cmpl – complex (cola)  
comp. – complement  
conn. – connector  
cont. – continuation  
el. – elementary (cola and commata)  
gnom. – gnomic (syntax)

inf. – infinitive  
int. – interlocked (word order)  
I.O. – indirect object  
Ma – main (clause)  
Niv – accentual rhythm with licence of suppression  
O, Obj. – grammatical object  
P. – period  
part. – participle  
Per. – period  
pred., Pd., P – predicate, predicative  
prep. – preposition  
Par. – paragraph  
Rel. – relative (clause)  
S., Subj. – grammatical subject  
Ū – short vowel  
V – vowel or a verb

### **III. Other abbreviations and signs**

∅ – absence of (certain) figure  
x – indifferent syllable (short or long) or secondary accent  
. – syllable without accent  
/ – gravis accents  
7 – syllable with acute and circumflex accents  
M – mobile word  
M<sup>a</sup> – preferential word  
p – prepositive word or introductory pivot  
q – postpositive word or closural pivot  
# – boundary  
| – group boundary  
' – slight boundary  
∪ – short syllable

## PREFACE

This dissertation has been written during my studies and work at the University of Tartu. It is based on different small papers which have been presented on the seminars of DAMON, a group for the study of ancient Greek and Roman metrics and rhythm, which connects mainly researchers from Switzerland, Italy and France and includes some members from Spain, Netherlands, Austria and Estonia. I began my doctoral studies at the University of Tartu with Prof. M. Lotman in 2000 and studied from 2001 to 2003 at the University of Lausanne, where Prof. C. Calame agreed to direct my studies. The change of theme, together with the circumstances which lead these professors to EHESS in Paris or to the Parliament of the Estonian Republic in Tallinn, have ended with the result that the only director of this dissertation is Dr. Martin Steinrück (Dr. habil. PD University of Fribourg), a co-founder of DAMON (with Alessandra Lukinovich) and the person to whom I owe most of what I have learned of ancient Greek rhythm and poetics during last ten years. I am extremely grateful to Professors Lotman and Calame for the attention they dedicated to me, and for their initial agreement to direct my thesis, which enabled me to enjoy the benefits of being a doctoral student at the Universities of Tartu and Lausanne, and most of all, to study at the libraries of Swiss universities. I owe thanks to several institutions and persons for their support during my studies: to the Ministry of the Foreign Affairs of the Italian Republic for the scholarship which allowed me to study for two months at the University of Urbino during Spring 2003 and to the professors and co-workers of the Institute of Classical Philology of the University of Urbino; to the Canton of Basel City for the scholarship as a guest student at the University of Basel in Winter Semester of 2003 and to the professors and co-workers of the Institute of Classical Philology and the Institute of Ancient History (especially Prof. Jürgen von Ungern-Sternberg and Prof. Rudolf Wachter); to two societies of Estonian Emigrants in the USA (Eesti Üliõpilaste Toetusfond and Ülemaailmne Eesti Kesknõukogu) for their scholarships which helped me to survive during my two years of study at Lausanne University; and to the Institute of German, Romance and Slavonic Languages (former Department of German and Romance Philology) for accepting me as a doctoral student and for giving me permission to work with tight schedules and take long leaves for my studies abroad, including special thanks to Prof. Anne Lill. I thank all persons, who have helped me to prepare this dissertation for print: Mrs. Linda Hurlock, Mrs. Tiina Kõiv, Mrs. Krõõt Kidson-Petlem and Mr. Gordon Kidson-Petlem for their efforts with my English, to Kadri Novikov and Neeme Näripä for their help in proofreading, as well as to the publisher. I want to thank especially my opponent, Prof. Pierre Chiron, whose preliminary report on this dissertation permitted me to improve the present version (although it was not possible to make changes of the essential character) and to correct numerous mistakes, and who gave valuable

suggestions for further research. Finally, I thank my colleagues, family and friends, including all members of DAMON, who have created the atmosphere of friendly interest and debate which makes the research worth the effort.

Tartu, 30 august 2007

Janika Päll

To the memory of my grandmother,  
Ester Petlem



## INTRODUCTION

The starting-point for this dissertation was the need to discuss the interaction of syntax, phrase rhythm (or rhetorical rhythm) and metrics in poetry, with a special focus on the coincidence of these three levels of rhythm and on the clashes between them. However, it soon became clear that it is impossible to study the role of syntax and phrase rhythm in poetry without knowing the role of syntax in prose rhythm and its relation to the structure of a rhetorical period and its sub-parts: cola and commata. As it is easier to study rhetorical periods in prose, this dissertation became an essay on a method for the description and analysis of prose rhythm, aiming to include the study of all the principal characteristics of prose rhythm.

The basis of the following dissertation is the analysis of one work: Fr. 82 B 11 in Diels – Kranz, *Die Fragmente der Vorsokratiker* (DK) or *The Encomium of Helen* (later referred to as *Helen*) by Gorgias. The choice of *Helen* as a corpus for the study of prose rhythm seems natural: this speech is a display of rhetorical means and prose rhythm *par excellence* (cf. Part III.1). During the study of this speech, a whole series of questions appeared:

- 1) What is rhythm in prose? What is its connection to metre? How can it be described and analysed statistically, and is this possible?
- 2) Is there a difference between syntactic (based on grammar) and rhetorical rhythm (based on the division of a period into cola and commata)? Could it be possible that prose rhythm (like poetry) uses rhythm patterns (so-called prose metre) which do not depend on syntax or rhetorical phrasing? If the answer is yes, then how can these three levels be correlated and studied?
- 3) What is the basis of rhythm in Gorgias, *Helen*? Is it based on syllables as elementary units, being either isosyllabic, accentual or quantitative? Or is it based on words or phrases? And is there a quantitative method, which enables study of these rhythm types in prose statistically, with satisfying results?
- 4) What is the function of rhetorical and style figures in prose rhythm? Are they used systematically? For example, could homoeoteleuton or parechysis be considered as structural elements of prose rhythm or not? And how can the rhetorical treatises of antiquity, which discuss these features, help?
- 5) What is the relationship between rhythm and sense, or the organisation of the discourse in Gorgias, *Helen*? Can the study of the dynamics of rhetorical figures or other prose rhythm elements reveal systematic patterns related to this?

In order to answer these questions, this dissertation is presented in four parts, corresponding to the logical sequence of presentation: the theoretical principles

of the study of prose rhythm; the method of description and analysis of prose rhythm; the description and analysis of Gorgias, *Helen*; and the results. Its main goal is to achieve a method for the empirical study of prose rhythm, based on a theory of prose rhythm.

Part I (corresponding to a *Forschungsbericht*) discusses the problem, what is prose rhythm and how to study it, examining how prose rhythm (and the related features in poetry) has been studied previously and the main problems found in these studies. The choice of the issues discussed and their associated problems has been made with regard to the following dissertation, which seeks a general theoretical basis for the study of prose rhythm.

Part II states and explains the principles of description and analysis of prose rhythm and presents the method for it. This part has two goals to fulfil: firstly, to define essential prose rhythm features and to discuss the theoretical and practical problems of their study. And secondly: to provide a practical guide for the description and analysis of prose rhythm, especially concerning parsing: division of the text into phrase rhythm units (rhetorical periods, cola and commata).<sup>1</sup> The introduction to Part II is dedicated to the general principles of analysis (coherence, demarcation and economy), whereas the following, longest chapter, in this part, is dedicated to lexical markers, which can be used as a guide in parsing (Part II.2). The next two chapters are dedicated to the elements of phrase rhythm in general: Ch.3 discusses and explains the description of the phrase rhythm units (from a word to a period) and their function and Ch.4 is dedicated to the function of different rhetorical figures in rhythm. The last two chapters in this part are dedicated to two special features in prose rhythm: Ch.5 discusses sound repetition, its function in prose rhythm and the possibilities of studying it in prose, whereas Ch.6 is dedicated to a more usual subject in the study of prose rhythm: the three types of syllabic rhythm (isosyllabic, accentual and quantitative) and the method of their study. The number of possible rhythm elements in prose is much greater than studies of prose rhythm usually discuss, therefore many principles from different methods, used in the study of poetry, grammar, rhetoric, or prose rhythm were combined or created for this study. As ancient rhetorical treatises discuss very many matters concerning prose rhythm, giving examples and explanations, they have been often discussed. However, as the interest of ancient authors is mainly in the theory of prose or in giving practical suggestions for writing it, this dissertation turns to them not as a basis for the method of analysis (which is found in modern empirical studies), but only as a source for inspiration and explanation.

Part III first presents a short introduction to Gorgias' rhetoric and explains the reasons for choosing this work for study, as well as the order of display. Its main part is the analysis of *The Encomium of Helen* by Gorgias, which includes the whole text of *Helen*, parsed into rhetorical periods, cola and commata, and an analysis of the syllabic rhythm. The text is followed by a short description of the rhythm features (according to the method described in Part II), from the level of a period, to a colon, word and syllable (whereas accents are regarded

separately). The description is followed by an analysis of problematic, or most eminent, rhythm features in each period.<sup>2</sup>

Part IV presents a choice of the most important results of the analysis of rhythm features in respect of two goals: to demonstrate possibilities for the description of prose rhythm, which studies not only the syllabic structure of the text, but a collection of syntactic, lexical and stylistic features; and to illustrate the main principle of (Gorgias') prose rhythm: variability and change. Although most of the aspects, described in Part III, which did not give definite results, are ignored in Part IV, it tries to explain why it has occurred in some cases.

The final part of the dissertation includes two appendixes (the description of quantitative and accentual rhythm; and several tables and charts with statistics on selected rhythm features), a bibliography, a summary of the dissertation in Estonian, as well as the CV of the author.

## PART I. THE PROBLEM: HOW TO STUDY PROSE RHYTHM

### 1. RHYTHM IN POETRY AND PROSE: PROBLEMS AND DEFINITIONS

#### 1.1. Two approaches to the definition of rhythm

In order to have a basis for the study of rhythm in poetic texts (e.g. poetry and poetical prose), we need to discuss briefly the definition of rhythm and metre. Metre, as equated with verse form and the principle of regularity in rhythm, has been the main criteria for distinction between poetry and prose. During the history of literary studies these two notions have often been mixed and merged, but generally in the theory of poetics (as reflected in modern manuals), two groups of definitions of rhythm prevail. The crucial notion for both is regularity depending whether or not (or in what degree) this is regarded as the basis of rhythm (Molino – Gardes-Tamine 1987: 33, Wellek – Warren 1956: 163).

#### 1.2. The definition of rhythm through metre

The first group of definitions of rhythm is based on the principle of regularity (considered as metre). According to this, rhythm is defined as a recurrence of (identical or similar) configurations of elementary units, usually regarded as a binary system (short-long, accentual-non-accentual, arsis-thesis). Some definitions distinguish further inborn and irregular natural rhythm and regular poetical rhythm, which is achieved by the use of metres (Brogan 1993g, c). The irregularities are explained either as deviations from underlying (regular) patterns or as realisations of these patterns (which create poetic tension).

In antiquity, Aristotle regarded the absence of metre as characteristic to prose, which had its own rhythm (*Rhet.* III.8, 1408b). Later the opposition of metre and rhythm was applied by Dionysios from Halicarnassus for distinguishing between prose and poetry and for the discussion of prose rhythm.<sup>3</sup> In the study of Greek poetry, this approach is reflected in definitions, such as: *The art of metrics is the means by which a regular pattern is imposed upon the natural rhythm of language in a work of literature* (Maas 1962: 1).<sup>4</sup> Or, for Marleen van Raalte metre is a special characteristic of rhythm, defined as invariable recurrence of identical groups (of prominent and not-prominent auditory stimuli), so in the case of metre there would be strict regularity, and in the case of rhythm a recurrence without strict regularity (Raalte 1986: 3).

In modern theory, rhythm is often defined as a realisation (surface structure) of underlying and abstract (and more regular) structure, i.e. metre. The idea of

underlying structure has been described by Jakobson as verse design (i.e. a metrical scheme or scheme of surface), embodied in verse instances (corresponding to a scheme of analysis of a singular verse) and performed in verse delivery (Jakobson 1987: 78–79, cf. Küper 1988: 102–134).<sup>5</sup> This approach is common in the statistical analysis of stichic verse, which tends to seek symmetry.<sup>6</sup> Trying to apply the generic relationship of metre and rhythm (or the basic scheme and its realisation) to the analysis of other types of Greek poetic texts, we realise that it is not very helpful in the analysis of Greek melic poetry.<sup>7</sup> The same is even clearer for prose, where it is impossible to reduce rhythm to the symmetrical underlying structures.

However, the evident absence of regularity in prose rhythm (or in melic poetry) does not mean that there are no underlying rhythmic principles. The description of such principles in Greek poetical prose, as well as the discussion of means for their study, follows in Parts II–IV.

### 1.2.1. Binary opposition and equivalence

Most theories of metre define all verse-forms as based on the opposition of primary elements (*stoicheia*), which in the case of ancient Greek metre correspond to long and short (or accentuated and non-accentuated) syllables or positions of syllables (see Grotjahn 1979: 38). This opposition has already been defined in ancient treatises on Greek music and poetry (Hephaestion, *Enchiridion* or Aristides Quintilianus, *De musica* 1.20),<sup>8</sup> whereas in the case of Greek quantitative metre the long syllable has been equated with two shorts through the notion of an elementary time unit (*mora*), which corresponds to a short syllable.<sup>9</sup>

How can a binary system be a foundation for analysing Greek prose rhythm? At first it is possible to speak of the alternation of short and long (or accentuated and non-accentuated) syllables in the case of quantitative (or accentual) clausulae and even whole passages of continuous text. Further, if we admit that syllables and feet are a foundation of Greek linguistic rhythm, speech rhythm could be explained through a binary opposition between *arsis* and *thesis* in a foot (see Devine – Stephens 1994: 93–101, 118–128 and Küper 1988: 233–244). The practice of applying the notion of feet to the description of Greek prose rhythm has a long history in Greek rhetorical theory (from Aristotle to Ps-Longinus), which described and explained the function of different metrical feet in Greek prose style.<sup>10</sup>

In the case of syllable-counting rhythm (as in syllabic verse or sometimes in rhetorical prose) it is difficult to apply binary schemes (see Part I.3.2.1, II.6.1–2, IV.2). In the case of isosyllabism the primary elements of rhythm (syllables) are identical, whereas the number of such elements per rhythm unit is what matters. The studies on French poetry have demonstrated that in such cases there are other constitutive elements, as caesura or rhyme, which should be taken in

account in the description of rhythm (see Guiraud 1953: 27 in Grotjahn 1979: 40). Constituents other than syllable numbers or the regularity of stress are important in free verse as well (Lilja 2002).

We can illustrate the possibilities of applying or non-applying binary descriptions of rhythm in the case Gorgias, *Helen* P.13a (DK 82 B 11.vii):

(EX 1) **καὶ λόγῳ καὶ νόμῳ καὶ ἔργῳ**

Here a colon is composed of three parallel rhythm units (commata) of 3 syllables each. These commata are divided from each other by anaphora and homoeoteleuton (in bold, see Part II.4.4, 5.2), their accentual pattern is identical (/7. ; /7. ; /7. ), but the quantitative pattern differs slightly (—∪— twice and —? — once, see II.6.4). At first glance the rhythm does not seem to be based primarily on binary structures, as the syllable-count gives patterns of three. But at the same time several alternations occur: of short and long and of stressed and unstressed syllables, as well as an alternation of accentual peaks and syllables, which rise to these peaks or descend from them, or an alternation of lexical and non-lexical words (see analysis in Part III). This colon is immediately followed by three other cola, forming a complex colon in Gorgias, *Helen* P.13a (DK 82 B 11.vii):

(EX 2) **λόγῳ μὲν αἰτίας, νόμῳ δὲ ἀτιμίας, ἔργῳ δὲ ζημίας**

EX 2 is an expanded form of the preceding colon and is similarly based on triple rhythms, although no more strictly isosyllabic (units of 6+7+6 syllables). Together with the preceding triplet it can be regarded as a pair. The oppositions are of the same kind as in EX 1: alternation of short and long (∪ — ∪ — ∪ x, ∪ — ∪∪ — ∪x, — — — — ∪ x), stressed and unstressed (7. / . 7. ; 7. / . . 7. ; 7. / . 7. ) syllables, or content and function words (CWFWCW, CWFWCW, CWFWCW).

We have seen emerging symmetrical patterns, which are based on repetition, but which are neither completely binary nor perfect. It leads to the presupposition that in phrase rhythm, which regards the number and length of adjacent cola (proximity rhythm), it is more important to look for the distinctions between two-fold and three-fold (or four-fold) groups and short, intermediate and long units, not binary patterns.

### 1.2.2. Regular vs. irregular and statistics

The rhythm in Greek poetry has often been described by an approach which seeks exact repetition and symmetry of the constituents (Küper 1988: 124–134). Most Greek stichic verse types can be analysed as being composed of (approximately) equal basic sequences, or being split into similar *metra*, combinations of short and long syllables (Maas 1962: 38). The repetition of *metra* in Greek verse has been explained in two ways: as a reflection of original

underlying symmetrical structure or as a result of the process of regularisation and a tendency of a verse to a certain symmetry which is rapidly growing from the archaic into the classic period and the metrical theory of Hellenistic period.<sup>11</sup>

This approach serves well the purposes of computer-based vertical statistics, which describes Greek stichic verse. The verse in this case is perceived as composed of two (or more) cola with a structural boundary (caesura) in the middle of the verse (Raalte 1986: 18). But the occurrence of different caesurae which divide the hexameter or iambic verse into two unequal halves, disturb the ideal picture of underlying symmetry of 6 feet or 3 meters.<sup>12</sup> Similarly there are several non-symmetrical verse types among Greek lyric verse, which are not easy to explain in terms of recurrence and symmetry.<sup>13</sup> Greek metrical theory has applied a term 'logaeodic' ('speech-like song') to such types of lyric verse, leaving them out of the group of "proper verses".<sup>14</sup>

A statistical approach has appeared to be useful in the study of Greek prosody, e.g. the role of clitics in the formation of word groups (see Devine – Stephens 1994). But statistics, oriented on generalisation and abstraction ('metre'), take no account of how these rhythms are perceived by the ear in the course of time. The problem for studies of prose rhythm is that statistics are generally concerned with the vertical, not the horizontal axis, and the paradigmatic, not the syntagmatic.<sup>15</sup> When the study of paradigmatic schemes uses only the notions of symmetry and binary schemes, it becomes impossible to describe rhythm types which rely on ambiguity, changes of recognisable patterns and repetitions which are not exact. Therefore studies of prose rhythm or lyric or syllabic verse (or free verse) have to rely more on those definitions of rhythm which avoid the notion of 'metre'.

The discussion of measurable and non-measurable brings the ancient opposition between metricians and rhythmicians back again, but it also proves the usefulness of studies in the psychology of music (especially perception) in literary studies (Küper 1988: 76–92, 119–138, cf. Herrnstein Smith 1968).

### **1.2.3. Constraints and constitution of rhythm**

It is possible to reduce the opposition between prose and most verse rhythms to the basic opposition between regular and irregular, where the constitutive element of metre (seen as poetic rhythm) is a regularly repeated syllable pattern. This regularity in verse rhythm (quantitative, accentual or other) is most important for the constitution of rhythm. At the same time it functions as a powerful constraint reducing (or limiting) the variation in sentence structure, word rhythm, sound echoes etc.

Now, regularity, the most important rhythm constraint, cannot be applied to all kinds of poetry, e.g. free verse or the new dithyramb. Secondly, there are other, different constraints in rhythmic prose (and in poetic prose generally). One of the most important constraints in prose rhythm is, paradoxically, the

absence of any rhythmic constraint. This, the need to avoid symmetry and exact (or at least large-scale) repetition has been stated already by Aristotle in *Rhetoric* III.8.3 (1408b),<sup>16</sup> although the notion of constraint (*vinctus*) itself appears later, in Roman rhetoric (Cicero *De or.*3.48 184, Quintilianus 9.4.77, cf. Lausberg 1960: 481).

Aristotle's discussion of periodic style in *Rhet.* III.9.1–3 (1409a) reveals some other constraints of prose rhythm. He remarks that in periodic style the units of phrase rhythm (περίοδος) correspond to the units of thought; accordingly, the demand of completed thought has been regarded as a constraint in composition. The same is valid for Aristotle's definition of periodic style (κατεστραμμένη), regarded as having binary character (cf. Chiron 2001: 68–71).<sup>17</sup>

Another problem is the relation of the constitutive elements of rhythm and the constraints. The number of different constitutive elements in prose rhythm (or free verse) is great, including different parallelism figures, structural and sound repetitions, syntax, sense etc. (Lilja 2002, Nordmann 2002, Hruschovsky 1964, Lotman 1970, Tufte 1971, Lösener 1999, and Part II.4, 5). But although the number of constitutive elements in these rhythm types is great, their importance as a constraint factor is small (being in inverse ratio). The reason is that these elements appear as constitutive only occasionally and for a brief period, and disappear into the background soon after their recognition as constitutive. Therefore in contrast with some types of (metrical) poetry, the constitutive elements of prose rhythm do not usually develop into constraints, although it can occasionally happen in the case of end rhymes, anaphora etc.<sup>18</sup>

### **1.3. Rhythm as a configuration of elements in movement**

#### **1.3.1. Linearity**

The other approach in the study of rhythm defines rhythm as a succession of different recognisable configurations of syllables, either repeated or not, or as “a sequence of events perceptible as a distinct pattern, capable of repetition and variation” (Brogan 1993g: 1066–1067). This is in accordance with the meaning and the ancient etymology of ‘rhythm’ (ῥυθμός, from ῥέω) as a “configuration of elements in movement” (Benveniste 1966: 327, Sandoz 1971: 68) or a “flow” (Leeman 1963: 150).<sup>19</sup> It is important for this approach to acknowledge the absence of the constraint of metre (except in special cases) and the complexity of rhythm, as virtually everything should be regarded as its component (Meschonnic 1982: 145–272, Dessons – Meschonnic 1998, cf. Küper 1988: 176–252).

This approach, regarding rhythm as a movement, has been most useful for the study of prose rhythm, which otherwise could not even be defined as rhythm

(Wellek – Warren 1956: 163–166), since prose rhythm does not rely (at least not much) on pre-established and easily recognisable structures.<sup>20</sup> It is also applied to the study of Greek lyric metres, where the asymmetrical distribution of longs and shorts gives to different types of lyric verse their characteristic quality.<sup>21</sup> In the study of lyric poetry and music it makes it possible to see the connection of rhythm with tempo, which can be implied from the analyses in the works of ancient rhetoricians and from the practice of music (West 1992: 153–159).

The second definition of rhythm brings out one of its most important characteristics: rhythm is a sequence, which happens in time, and is from its nature linear.

### 1.3.2. Variation

The chapter on constraints has already mentioned the absence of rhythm constraints and the general rarity of several other constraints in prose (Ch.1.2.3). This is due to the general complexity of prose rhythm, where almost everything can be constitutive. In ancient rhetorical treatises the pleasure of variation (μεταβολή) has already occurred in Aristotle *Rhet.*I.11.20 (1371a). In post-Aristotelian Greek and Roman rhetorical theory variation belongs generally under the virtues (ἀρεταί) of speech and is connected to ornament (Lausberg 1960). In some contexts the variation (μεταβολή) can be understood as a deviation or a figure of correction, close to deviation (πλαγιότης), see Ps-Demetrios *De eloc.* 104 and 148.<sup>22</sup>

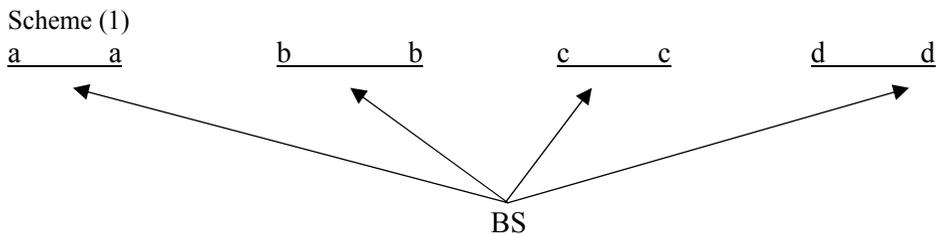
Variation in rhythm has been defined negatively as the absence of regularity (Ch.1.2). In connection to rhythm, the notion is found in ancient rhetorical theory in the context of the discussion of different clausula types (Lausberg 1960: 473 and 485–487). In the context of the opposition ‘metre’ vs. ‘rhythm’ variation can be defined in two ways: either as a deviation (or realisation) of an abstract schema or as a development (or a change) of a given pattern. In the first definition, it is the vertical axis which matters for the schema; for the second definition it is the horizontal axis, i.e. time. These approaches are discussed in the next chapter.

## 2. PRINCIPLES IN RHYTHM AND THEIR DESCRIPTION

### 2.1. Repetition and variation: stati(sti)cs or dynamics

As in the definitions of rhythm, the approach to the two basic principles of poetry is twofold. It concerns repetition and variation (Bowra 1962: 2, 62–80). When we define rhythm as a realisation of a basic structure, we have to find these two principles on various levels. The basic structure, which remains unchanged (on paradigmatic axis), is therefore by definition always repeated, whereas in the surface structure (for which linearity and therefore the syntagmatic axis are important) the exact repetition of the basic structure is not obligatory, and it might even be considered as something to avoid (as it would result in a monotonous rhythm).<sup>23</sup>

Greek stichic quantitative verse allows equation, the substitution of one long syllable by two shorts (and vice versa), whereas in some metres there are so-called anceps-positions, i.e. the positions where either a short or a long syllable can occur. Therefore the underlying metrical scheme or basic rhythm can be realised in many different rhythmical patterns, whereby the schematic form may even not be prevalent, but occurs only as one possible rhythmical realisation of the line (Allen 1973: 108–112). The descriptions of verse regard any difference from the ideal (i.e. basic) structure as a deviation (or variation), see the following scheme:



This approach focuses on the variation between different elements of surface structure and the basic scheme (i.e. **BS** to **aa**, **BS** to **bb** etc.), not seeking to establish patterns of change, leading from **aa** to **bb**, **bb** to **cc** etc. The interest of research lies in the study of the tension between rhythm and underlying metre (cf. Brogan 1993b: 770–771). This mismatch between an abstract basic structure and an actual surface structure (or its realisations) has triggered research on the so-called secondary rhythms.<sup>24</sup> However, very often all these abstract patterns are not perceived by the (untrained) ear, but only by the eyes of scholars, who count the percentages. The recurrent elements of composition (e.g. verses with exactly identical rhythmic shape) are usually not recognised because they occur too far from each other.

Another approach does not reduce the rhythm instances to basic structures, but studies the hierarchically equal rhythm units in a temporal sequence:

Scheme (2)



For this type of study, it is the passage of **aa** to **bb**, and **bb** to **cc** etc. and the variation of rhythm which matters, whereas rhythm is regarded as constantly changing.<sup>25</sup> In the case of the study of secondary rhythms, this approach regards the horizontal axis, not (only) studying the frequency of one or another realisation (surface structure), but also (and primarily), whether this realisation has established itself for the ear of listener. (It is difficult to study the reactions of an ancient listener; the criterion of recognition can be, for example, a repetition of a certain rhythm in close proximity).

For example, we can speak of established (or establishing) secondary rhythm pattern, when several verse instances with the same structure occur in a row: e.g. hexameters with the first feet realised by a spondaic verse or iambic trimetre with 1st or 6th position realised by double short syllables. Such blocks of repeated verses are called metrical clusters, and the study of the dynamics of such secondary rhythm patterns is called cluster-metrics.<sup>26</sup> Together with other studies on the dynamics and the development of rhythm patterns, cluster metrics reveals several principles, which create (Greek) prose rhythm or the rhythms of Greek melic poetry. These are the establishing and the reanalysis of rhythm patterns.

## 2.2. Establishing rhythm patterns by repetition

One or another rhythm configuration, a word or a syntactic structure can occur several times in one work (a poem, a speech etc.). The frequency of certain elements or combinations often characterises one or another author. For example, de Groot has given statistics of different syllable configurations (UU;U—U;—U—;—UU— etc.) for different Greek authors, whereas he has demonstrated, that these figures are not random, but indeed characteristic to certain authors (de Groot 1919: 1–9). In order to recognise a repetition of such characteristics immediately and by ear, they have to occur close to each other (as a proximity rhythm). Next to a close distance, there are other factors which influence the perceptibility of certain configurations. When a repeated element is already well established, repetition can be recognised at some distance, otherwise (e.g. for “a naive listener”), the pattern has to be repeated several times in a row (Herrnstein Smith 1968: 52). For example, in order to recognise in Greek tragedy a repetition of an iambic line with a resolution in the 6th position (see Scheme 3), it is not necessary to repeat it several times or in lines following each other immediately, because the rhythm of iambic trimetre (and its most frequent realisations) is well established and the number of different

resolutions (which could blur the perception) is not very great (at least in early tragedy):<sup>27</sup>

Scheme (3)

— — ∪ —    — ∪∪ ∪ —    ∪ — ∪ —  
 ∪ — ∪ —    — — ∪ —    — — ∪ —  
 — — ∪ —    ∪ ∪∪ ∪ —    ∪ — ∪ —

It is more difficult to recognise metrical clusters in hexameter verse, because the flexibility of Greek hexameter is greater and the whole-verse clusters are not very frequent. In such cases we expect the repetition to occur at least in three consequent lines in order to be recognised as such, e.g. the beginning of Homer, *Iliad* 1.1–5:

Scheme (4)

— ∪∪ — ∪∪ — — — — ∪∪ — ∪∪ — x  
 — ∪∪ — — — — ∪∪ — — — — ∪∪ — x  
 — — — — — — — — — ∪∪ — ∪∪ — x  
 — — — — — — — — — ∪∪ — ∪∪ — x  
 — — — — — ∪∪ — ∪∪ — ∪∪ — ∪∪ — x

In the *Iliad*, the first foot of a hexameter is spondaic from v.3 to v.9. But as other positions are realised differently, the repetition of the spondaic beginning of a verse can become recognised as a pattern only after it has been established, possibly after its third appearance. In Greek choral lyric the variety of already existing patterns is not great (except maybe in aeolic verse), in most cases the rhythm has to be established every time by repetition (e.g. through the strophe-antistrophe system or in monostrophic poems (Steinrück 2007: 114–124).

In the case of Greek prose, we have different levels of rhythm: counting syllables, words or even phrases (or phrase structure). In order to recognise repetitions on every level, we need different markers, as e.g. in Gorgias, *Helen* P.13a (DK 82 B11.vii, cf. Part III):

(EX 3)

ἄξιός οὖν	4+	
ὁ μὲν ἐπιχειρήσας βάρβαρος βάρβαρον ἐπιχείρημα	2+	5+3+3+5= [22]
καὶ λόγῳ καὶ νόμῳ καὶ ἔργῳ	3+3+3	= 9
λόγῳ μὲν αἰτίας, νόμῳ δὲ ἀτιμίας, ἔργῳ δὲ ζημίας	6+7+6	
	τυχεῖν·	+2 = [21] (30)
ἢ δὲ βιασθεῖσα	6	
καὶ τῆς πατρίδος στερηθεῖσα	5+4=9	(=15)
καὶ τῶν φίλων ὀφραμισθεῖσα	4+5=9	
πῶς οὐκ ἂν εἰκότως	6	(=15) (30)
ἐλεηθεῖη μάλλον	7	
ἢ κακολογηθεῖη;	7	(=14)

In a syllable-counting prose rhythm, new configurations do not occur several times, but only twice or thrice. At first a double repetition of phrases of 8 syllables and 2 words in a chiasmic structure (ἐπιχειρήσας βάρβαρος βάρβαρον ἐπιχείρημα), is followed by two triple repetition patterns (at first units of 2 words, both of 3 syllables, then units of 3 words, of 6, 7 and 6 syllables correspondingly), contrasted to each other in length (cf. Ch.1.2.1). It is followed by a combination of double (9+9 syllables and 4+4 words) and triple (3 cola of similar structure) repetition and another double repetition (7 syllables and 2 words).

Yet, any person familiar with ancient Greek can easily recognise these repetitions without being a specialist on prose style. Why? It is perceptible, because they are supported by other constituents of prose rhythm, mainly different repetition figures.

### 2.3. Rhetorical figures as constituents of rhythm

In order to establish a rhythm pattern, it is not the elements, which should be repeated, but the configurations. In the examples of iambic trimetre and hexameter given above (Scheme 4), it is not enough to repeat certain elements (a short or a long syllable), but these elements have to occur in a certain context: next to another short or another long syllable, and in a certain position in a line.

In order to recognise a rhyme, the repetition of a similar ending has to occur in certain positions in the verse, in interaction, otherwise we do not recognise it as such (see Brogan 1993f: 1054 and Zhirmunsky 1985). Whereas in poetry it is the position (in an already established structure as a verse or a colon) which helps to constitute and recognise a rhyme (a sound repetition), in prose rhythm it is vice versa: the repetition of sounds or grammatical structures (e.g. cases, order of phrase constituents) helps recognise a rhetorical colon as a unit of construction (sometimes it is not possible or useful to distinguish further levels, i.e. words and commata).

Studies dedicated to rhythm in poetry usually discuss the types of syllables or verses (lines), and it is often the same in the case of Greek prose. However, other different categories, such as phrasing and sentence structure, organisation of thought, as well as syntax and style (including rhetorical figures) should be regarded here (Nordmann 2002: 159–171, cf. Tufte 1971). Therefore the role of rhetorical figures as constituents of prose rhythm is one of the main issues in the following analyses (cf. Part II.4; III.2).

Most rhetorical figures studied in the following parts are based on parallelism or other types of repetition (Fehling 1969).<sup>28</sup> For example, in the passage from Gorgias, EX 3 in the preceding sub-chapter, the repetition in syllable-counting rhythm (*parisisis*) is easily recognisable due to the parallel

occurrence of other repeated units: the number of words, initial anaphora of connectors and a similar phrase structure (*parison*), which helps to create end-rhymes resulting from inflexion, etc. Within this frame, a slight alteration in syllabic rhythm from 6 to 7 and back to 6 syllables can be recognised as a variation within the same pattern.

However, rhetorical devices as criteria can cause problems in analysis: the number of different elements, which help to constitute the rhythm, is great, and the indications given by these elements may contradict each other. In the example from Gorgias, discussed above (EX 3), the rhythm structures, which appear in the end, are more difficult to recognise:

(EX 4)

ἡ δὲ βίασ <u>θειῖσα</u>	6		
καὶ τῆς πατρίδος στερη <u>θειῖσα</u>	<b>5+4=9</b>	(=15)	
καὶ τῶν φίλων ὀρφανισ <u>θειῖσα</u>	<b>4+5=9</b>		
πῶς οὐκ ἂν εἰκότως	6	(=15)	(30)
ἔλεη <u>θείη</u> μᾶλλον	<b>7</b>		
ἢ κακολογ <u>ηθείη</u> ;	<b>7</b>	(=14)	

This whole passage could be analysed as strictly isosyllabic, composed of two great complexes of 15 syllables and then of one small pair of units of 7 syllables. In its end this division is supported by a match in the numbers of words per unit (two), whereas the analysis of prosody and syntactic structures supports the division (see Part III.2), but homoeoteleuton (rhyming word-ends, underlined) gives indications against it. Similarly, in the beginning, the division of syntactic structures does not completely match the division into rhythmic cola as the second unit of 15 syllables is divided into two parts by a passage from the subject phrase (three parallel participial clauses, ending with homoeoteleuton) to the verb phrase (beginning with an interrogative particle).

This phenomenon introduces the next characteristic of rhythm, eminent in Greek prose: its ambiguity. This is accompanied by flexibility and the need to reanalyse emerging rhythm patterns after each new element. It is discussed in the next chapter. However, rhetorical figures are not only important in order to recognise the basic units of phrase rhythm, rhetorical cola. The distribution and frequency of these figures themselves is constitutive of rhythm as well.<sup>29</sup>

## 2.4. Continuity, flexibility and epiploke

### 2.4.1. Epiploke in Greek lyric poetry

Irregular rhythm can be described as flexible and constantly changing. In lyric poetry certain configurations of syllables may change gradually into new patterns, without very clear limits between the ‘old’ and the ‘new’ configu-

ration. This very usual type of rhythm constitution in archaic Greek lyric poetry is called *epiploke* (Cole 1988). For example, a dactylo-anapestic line may become bacchio-cretic (see Cole 1988: 157):

Scheme (5)  $\cup\cup\text{—}\cup\cup\text{—}\cup\cup\text{—}\cup\cup\text{—}\underline{\cup\cup\text{—}\cup\cup}\cup\text{—}\text{—}\cup\text{—}$

The syllables in the transitional segment (underlined) are in such cases reanalysed according to the new pattern ( $\cup\text{—}\cup$ ) as a realisation of a baccheus ( $\cup\text{—}\text{—}$ ) and not as a part of a string of anapestic metres ( $\cup\cup\text{—}$ ). The system is not different in several lyric stanza forms, where the two last lines can be united into one by synapheia. For example, this kind of redefinition is the reason for several possible descriptions of the end of the Sapphic stanza:

Scheme (6)

$\text{—}\cup\text{—}\text{x}\text{—}\cup\cup\text{—}\cup\text{—}\text{x}\text{—}\text{—}\cup\cup\text{—}\text{x}$	(sapphic hendecasyllabus, adoneus)
$\text{—}\cup\text{—}/\underline{\text{x}\text{—}\cup\cup\text{—}\cup\text{—}}/\underline{\text{x}\text{—}\cup\cup\text{—}\text{x}}$	(creticus, aceph. glyc., aceph. pher.)
$\text{—}\cup/\underline{\text{—}\text{x}\text{—}\cup\cup\text{—}\cup}\text{—}\text{—}\underline{\text{—}\text{x}\text{—}\cup\cup\text{—}\text{x}}$	(trochee, pher., pher.)

The 3rd and the 4th line of the Sapphic stanza are here presented according to the ancient colometry in the first line and according to the modern colometry below it (see e.g. Voigt 1971: 15).<sup>30</sup> The synapheia, linking the two lines, opens the possibility of redefinition, whereas the whole passage is understood as a creticus, an acephalous glyconic and the shorter form of it, acephalous pherecratean verse. It would even be possible to describe it formally as in the third line of the scheme, but this is not done because of the rules of prosody (see Irigoin 1956).

Cole's theory of rhythmic *epiploke* can be applied to prose, as it is even more susceptible to changes than poetry. This is explained below, in Ch.2.4.3.

## 2.4.2. Ambiguity in syntax and punctuation

Ambiguity has been considered as an important poetic device in poetic texts (Stanford 1939 concerning Greek literature, Lotman 1970, Ch.4 concerning Russian literature and theory). In Greek lyric poetry, ambiguity (together with the possibility of redefinition) is one of the devices of construction, e.g. in the famous passage from Sappho, Fr.1.7–9:

(EX 5) ἔκλυες, πάτρος δὲ δόμον λίποισα χρῦσιον ἦλθες // ἄρμ' ὑπασδεύξαισα,

In EX 5 the adjective *χρῦσιον* ('golden') could be read as belonging to the preceding noun ('house') or to the following noun ('chariot'), see Tzamali 1996: 51–55, Slings 1991. We cannot decide whether this ambiguity is voluntary or not. However, there are other such cases, where the sentence pattern has

similarly to be reanalysed in the course of time, because new information on the sentence structure has been added.

The passage in Aristotle's *Rhetoric* III.5.6 (1407b) stresses the need for clarity and indicates one source for its lack:

(EX 6) ὅλως δὲ δεῖ εὐανάγνωστον εἶναι τὸ γεγραμμένον καὶ εὐφραστον· ἔστιν δὲ τὸ αὐτὸ· ὅπερ οἱ πολλοὶ σύνδεσμοι οὐκ ἔχουσιν, οὐδ' ἂ μὴ ῥᾶδιον διαστίξαι, ὡσπερ τὰ Ἡρακλείτου. τὰ γὰρ Ἡρακλείτου διαστίξαι ἔργον διὰ τὸ ἄδηλον εἶναι ποτέρῳ πρόσκειται, τῷ ὕστερον ἢ τῷ πρότερον, οἷον ἐν τῇ ἀρχῇ αὐτῆ τοῦ συγγράμματος· φησὶ γὰρ “τοῦ λόγου τοῦδ' ἐόντος ἀεὶ ἀξύνετοι ἄνθρωποι γίνονται”· ἄδηλον γὰρ τὸ ἀεὶ, πρὸς ποτέρῳ <δεῖ> διαστίξαι.

EX 6 illustrates the tradition of ambiguity, connected to the so-called obscurity of Heraclitus' work (Mouraviev 2002: 9–133, Stanford 1939: 15). In this passage Aristotle states one of the reasons for this ambiguity: the great number (or the absence) of connectors (here concerning an adverb ἀεὶ). In Ps-Demetrios *De elocutione* 191–192, Heraclitus' obscurity is already regarded as a result of the looseness of diction, due to the absence of connectors (Chiron 1993: 122). Generally the discussion of ambiguity in ancient rhetorical treatises occurs in the context of clarity versus obscurity. There it is usually regarded as negative and its poetical qualities are neglected. According to ancient rhetoricians there are three reasons for ambiguity, two of them arriving from the meanings of words (due to homonymy and prosody, i.e. differences in accentuation) and the third from parsing difficulties (Stanford 1939: 16–24).<sup>31</sup> It is mainly the third with which this study is concerned.

### 2.4.3. Redefinition of syllabic rhythm

In another example from Gorgias we can see syntactic and rhythmic redefinition of certain elements, see *Helen*, P.2 (DK 82 B11.i):

(EX 7)

ἄνδρα δὲ	καὶ γυναῖκα	3 + 4 = 7	
καὶ λόγον	καὶ ἔργον	<u>3 + 3 = 6+</u>	
καὶ πόλιν	καὶ πρᾶγμα	<u>3 + 3 = 6</u>	(=12+)
χρῆ			1 = 13
τὸ μὲν ἄξιον ἐπαίνου	ἐπαίνωι τιμᾶν,	8 + 5	= 13
τῷ δὲ ἀναξίωι	μῶμον ἐπιτιθέναι·	6 + 7	= 13
ἴση γὰρ		3 +	
ἀμαρτία	καὶ ἀμαθία	4 + 5 = 9	= 12
μέμφεσθαί τε	τὰ ἐπαινετὰ	4 + 5 = 9	
καὶ ἐπαινεῖν	τὰ μωμητά.	4 + 4 = 8	

This period is full of tiny parallel commata. The syllabic rhythm emerges at first in pairs of (almost) isosyllabic opposites (of 3 and once 4 syllables) which create (almost) isosyllabic cola (of 7, 6 and 6 syllables). After the appearance of two complex cola of 13 syllables (τὸ μὲν ἄξιον... ἐπιτιθέναι), the last two pairs of initial commata and the following monosyllabic comma are reanalysed as a complex colon of 13 syllables (καὶ λόγον ... χρῆ). These three relatively long complex cola of 13 syllables are followed by another complex colon (ἴση ... ἄμαθία) of approximately the same length, 12 syllables. However, as a result of changing rhythmic surroundings, a new reanalysis occurs: when this complex colon is followed by two cola of respectively 9 and 8 syllables, it is reanalysed as a comma of 3 syllables (ἴση γάρ) and a colon of 9 syllables (ἀμαρτία καὶ ἄμαθία).

This type of redefinition scheme is from one side parallel to the *epiploke* in lyric poetry (as the units of syllabic rhythm get a new interpretation according to the changing context), from the other side (as the phrase rhythm has much in common with the syntax) it is connected to the ambiguity in syntax, emerging as a result of the choice or of the order of words. (Part IV.3.2.2–3).

## 2.5. The levels of construction in prose and poetry

Prose rhythm and verse rhythm are difficult to compare because of the “regularity” criterion in established poetical norms. The analysis of the form of a poem is often reduced to the recognition of different configurations of syllables (which may contradict the syntactic or discursive organisation); the analysis of the form of a prose work follows the disposition of thought (the discursive pattern). The reason for this incompatibility is in the study of poetry, which focuses on elementary units, syllables (or positions), whereas the analysis of other levels of the construction of poetical works (words, phrases etc.) would reveal more analogies than differences.

In the analysis of poetry the constituents of rhythm (metre) have been divided into metric constituents (as metrical segment and verse, which arise only through poetry) and glottic constituents (which are founded in language and exist outside of poetry as well), see Jakobson – Lotz 1979: 161. These two levels are presented as a hierarchical system, presenting a systematic homology between elements on both axes (cf. the scheme in Brogan 1993b: 774):

### Scheme (7)

discourse	paragraph	sentence	clause	phrase	word	morpheme	syllable	phoneme
poem	stanza/paragraph	line	hemistich	measure	foot	arsis/thesis	position	sound
				metron/colon		lift/dip		

However, a question arises, whether this equation of a metron and a colon can be useful for the description of Greek verse, as well as the distinction of a

hemistich and a colon (in Greek and Roman poetry a hemistich usually corresponds to a colon). The same question can be asked about the hierarchic distinction of the clause and the phrase or the syllable and the morpheme on the level of syntax. And when we seek correspondences between these constituents, even more problems rise.<sup>32</sup> These glottic constituents, syllable, word, phrase-member and phrase and the totality of a poem (or a discourse) as parts of a word-rhythm have been analysed in poetry as constitutive or at least autonomous elements.<sup>33</sup> Imitating the scheme by Jakobson – Lotz 1979: 165, the constituents of poetic rhythm can be represented as following:

Scheme (8)

	<u>metric segment/colon/verse/(complex) period</u> /strophe	
	<u>comma/ colon/ complex colon/ period/ complex period</u>	
<b>syllable</b>	word/ <u>clitic group/minor phrase /major phrase/(complex) sentence</u>	<b>totality</b>
	<u>word/clause/phrase/sentence/period</u>	

The four lines of this scheme represent four domains of study, which may or may not overlap. They all share two categories (given in bold): the syllable as an elementary, but not independent (i.e. not constitutive) element and the totality of a text (a poem, a speech etc.). In between every line of the scheme corresponds to one domain.

The 1st line corresponds to the system used for the description of verse (and not of prose, except for some authors as de Groot 1919). It differs from the other three by the absence of criteria which are important for the others, e.g. the syntax and the sense (but it has to regard the rules of prosody, i.e. linear syntax). The 2nd line corresponds to the system of rhetorical units, which are usually applied to the analysis of prose. This is the domain of phrase rhythm, closest to prosody (regarding linearity), but not equal, as the rules of metrics (syllable, quantity or accent counting) or of syntax (i.e. dependence structures without regard to linearity) can be applied to it from time to time. The 3rd line corresponds to prosodic units, which has overlaps with the domain of rhetorical (phrase) rhythm, but differs from it with greater stress on syntactic congruence and the lesser role of syllabic rhythms. However, it is very difficult to study in the case of a dead language such as ancient Greek (see Devine – Stephens 1994). The 4th domain corresponds to syntax in the traditional sense: i.e. the system of dependence grammar, which shares criteria with the domains of prosody and rhetoric (as the word-groups in both are often formed according to the rules of grammatical dependence), but cannot be equated with them, because it is not interested in linearity.

Although for each domain the same number of constituents (five) has been given in hierarchical order, there is no one-to-one correspondence between them, and the hierarchies are not constant. For example, the smallest rhetorical unit, a comma can correspond both to a word and a clitic group in prosody, and a verse can correspond to both a rhetorical colon and a period (cf. Scheme 7,

Ch.2.5.2. and Part IV.3.2.3). The reason for these mismatches is that on the first three levels the main criterion of distinction between these units (metrum, colon, verse etc.) is the length, which can be a very subjective and changing factor. It depends on the length of the totality of the text: we cannot use completely matching sets of units for the description of a haiku or an elegiac distich and Homer's *Iliad*. Because of the relativity of the length, most rhythmic constituents can be equated under certain circumstances to their closest neighbours. For example, a metric segment can be equal to a metrical colon, a metrical colon to a verse, a verse to a period, a period to a strophe.<sup>34</sup> Usually a triple division is applied (words underlined in the scheme), therefore the problem does not always appear, only when sub-categories need to be added for a more accurate description (cf. Scheme 9 and Ch.2.5.2).

Although this scheme alone cannot explain the problems of different rhythm types, it indicates a direction for the research: the study of interplay between these levels.

### 2.5.1. Colon, verse and period in ancient theory

The notions of a colon and a period occur in ancient theories of metrics and rhetoric. Ancient metrical theory indicates how to distinguish between a colon, a verse and a period. The criterion is length: the colon does not have to exceed 18 (or 25) moras, the verse 3–4 syzygias (i.e. 30 moras) and the period is longer still.<sup>35</sup> Modern verse theory uses three criteria for distinguishing these units: word-end in the case of a verse and a period (occasionally a colon as well), as well as *brevis in longo* and a hiatus. The occasional equation of the period, the verse and the colon may be a result of the textual tradition of ancient lyric poetry. In the Alexandrian library poems were written by lines (*stichos*, meaning 'verse' as well), which can correspond to a period (iambic, trochaic or hexameter verse can be analysed as three or six metra, or two cola, forming one period), as well as to a colon (as in the case of aeolic cola or the odes of Pindar, see West 1982).

In the case of ancient rhetoric the problem is not much different, except that the theory has not been very much developed and the number of different hierarchical constituents of rhythm (for different styles) is smaller. The rhetorical theory began with only two units (period and colon), but soon the third (comma) was added to the system by Ps-Demetrios *De eloc.* (cf. Chiron 2001: 57–116). (See also Part II.3.2.)

## 2.5.2. Linearity and analysis of phrase rhythm

Another source of problems in finding compatible categories for the description of different levels of text lies in the concept(s) of a sentence in the traditional syntax of Greek (and Latin). The notion of a sentence is traditionally based on word dependence and hierarchic structures (which sometimes ignore the aspect of linearity). As the level of prosody lies somewhere between rhetoric and syntax, the units of prosody: the clitic group, the minor phrase and the major phrase can be regarded as corresponding (at least partially) to Greek phrase rhythm units (the comma, the colon, the period), although the criterion of length is more important in rhetoric than in prosody (cf. Devine – Stephens 1994).

The relevant syntactic units (corresponding to the prosodic units) for this study are: **word**, **phrase** and **sentence**, which have been claimed as always relevant in modern poetics (cf. Lotz 1968: 139). A sentence in the traditional sense (a more or less complete sense-unit marked by the typographic criteria of a full stop in modern printed editions) may correspond to two different notions from different hierarchic levels: a) a rhetorical period (more or less corresponding to a complex sentence); b) a simple sentence corresponding to a verb phrase.<sup>36</sup> At the same time, a rhetorical colon can also correspond to two different notions: a) a simple sentence (i.e. the upper level of syntactic category); b) a phrase (main and subordinate clause from complex sentences or a subject or an object clause, a participial or an infinitive clause etc). The correspondences can be presented as following:

Scheme (9)

SYNTAX	PROSODY	RHETORICS	METRICS
paragraph/complex sentence	period (complex)	period/period complex	triad/strophe/stanza/ period
sentence	period/major (/minor) phrase	(sub-)period/colon complex/colon	stanza/ verse/period
clause	major/minor phrase	colon	verse/colon
phrase/clause	minor phrase/appositive group	colon/comma	metron/colon/feet
word	word/appositive group	comma	metron/feet

The scheme does not take into account exceptional cases, where a sentence can be equal to an enclitic group or a word or a comma (in one-word questions, rhetorical exclamations etc.), because, in Gorgias, *Helen*, which is analysed below, such cases do not occur.

## **3. THE STUDY OF PROSE RHYTHM**

### **3.1. Three approaches in the study of Greek prose rhythm**

The study of Greek prose rhythm has taken different directions, as already mentioned in the preceding chapters. The main difference in these approaches is in their subject: the study of prose rhythm can either be regarded as equal to the study of prose metre (and be made with the same tools and almost the same objectives as the study of poetry), or it has to aim at something different. The first school departs from the aesthetics of the material, focusing on the recognition of certain rhythm configurations. It is usually oriented at statistics and has to cope with all the difficulties which prose presents to this type of research (see Part I.3.2).

It is not quite exact to name the second approach a school, as it is not homogenous. Here it refers to an approach, which departs from the aesthetics of structure, having broader goals and focusing more on the interaction of different possible constituents of prose rhythm, including those coming from rhetoric. As in the studies of prose metre, the peak of such studies was towards the end of the 19th and the beginning of the 20th century; the end of the 20th century has brought some special studies, but no works of a broad scope. The founders of this kind of study are Friedrich Blass (Blass 1887–1898, 1901) and Eduard Norden (in 1909, 1913).

It would be profitable for the study of Greek prose rhythm to take what seems useful from both approaches and enlarge it with other criteria, as proposed for prose rhythm in other languages (Meschonnic 1982, Nordmann 2002). The studies or remarks concerning this type of prose rhythm occur usually under the label of stylistics or poetics, for example by Kenneth Dover (Dover 1997). This dissertation aims to demonstrate that style and syntax do not have lesser rhythmic functions than syllable configurations (see Part IV.2, 3).

### **3.2. The study of Greek prose metre**

#### **3.2.1. Types and domains of Greek prose metre**

As mentioned above, the study of prose metre (as metrics in the case of poetry) focuses on the recognition of certain configurations of syllables and their characteristics: the quantity and the accents, or (rarely) the number of syllables in a rhythmic colon (see de Groot 1919). The history of Greek literature covers more than a thousand years, during which Greek has developed from a language having a melodic accent and vowel quantities into a dynamic accent language without quantities (Schwyzer – Debrunner 1988 I: 174–180, Devine – Stephens 1994: 215–216). Therefore the studies of prose rhythm (as the studies of

metrics) are concentrated on syllable quantities, when it concerns the period from the archaic period to the Roman empire (Batchelet – Massini 1980, Blass 1901, McCabe 1981) and accents, when it concerns the literature of late antiquity and Byzantine period (Meyer 1891, Dewing 1910, Hörandner 1981). As the time (and place) of the disappearing of vowel quantities and the emergence of dynamic stress is not entirely clear, research on Greek prose metre in late antiquity has to be focused on the study of both: the accent and the vowel quantitative pattern. This is the case of the author of *ethopoiiai* from 4th century BC or later, so-called Severus from Alexandria, in whose work both systems (as well as anaphora, which has a rhythmic function at the beginnings of cola) are important (Steinrück 2005).

The number of studies dedicated to Greek prose metre is very small (especially when compared to the number of studies concentrated on *numeri* in Latin prose) and the peak of interest remains towards the end of the 19th and the beginning of the 20th century (see overview in Skimina 1937).<sup>37</sup> The study of prose metre has always received influence from metrics, because both disciplines use the same tools. Lately studies in Greek metrics, relying on Devine and Stephens's *Greek Prosody* (Devine – Stephens 1994) have started to ask, whether next to the quantitative nature of archaic Greek metre during the Archaic, Classical and even Hellenistic period, the accent as intonation pattern could have some role (Lascoux 2003, Lukinovich 2005).<sup>38</sup> Their work raises a question, whether the studies of prose metre should not start to use these results as well and to study the accents without connecting them to syllables (and regarding them as a contour instead).<sup>39</sup>

We can divide the study of Greek prose metre into two different approaches according to the domains where the rhythm is applied. The more current approach focuses on the study of metrical (or rhythmical) clausulae, studying typical rhythm configurations, which occur in the ends of cola or periods (Meyer 1891, Dewing 1910, Norden 1913, Skimina 1937, Sandbach 1939, Hörandner 1981, Klock 1987). Ch.3.2.2 discusses the problems of this approach. Another approach (discussed in Ch.3.2.3) regards syllabic rhythm in the whole text (Blass 1901, de Groot 1919, Batchelet – Massini 1980), occasionally adding the discussion of rhetorical figures (Blass 1897, Klock 1987, Steinrück 2004a). There is a third possibility, to focus on the study of phrase melody (intonation contour), but due to the absence of sources it is very difficult to study (cf. Devine – Stephens 1994 and Ch.3.2.4).

### **3.2.2. The problems of the study of clausulae in Greek prose**

Whether it is true or not, the ancient authors refer to Thrasymachos as the inventor of prose rhythm, and Gorgias and Isocrates as using it in their works.<sup>40</sup> The first preserved treatise to discuss prose rhythm in some length is Aristotle's *Rhetoric* III.8.1–7 (1408b). He discusses several metres, which he considers

becoming in prose (when used without excessive regularity), as well as rhythms which should be avoided. Aristotle even distinguishes rhythm types, which are suitable for the beginnings or for the ends of periods. The next authors to discuss these questions in some length are Ps-Demetrios *De eloc.* 39–43 and Dionysios from Halicarnassus *De comp.* 17–18. Both discuss the suitability of several rhythms for one or another character, without speaking explicitly about clausulae. The discussion of clausulae appears only in Roman rhetorical treatises by Cicero, especially *Orator* 207–226 and Quintilian IX.4.64–111, but they do not exclude the rhythm in other parts of a period as well.<sup>41</sup>

Greek theory therefore gives no ground to equate the rhythm in clausulae with prose rhythm (at least when archaic and classical periods are concerned). If we still decide to study clausulae separately, three other problems arise:

- 1) How long (i.e. consisting of how many syllables) should these studied clausulae be? Some authors study prose clausulae from four to eight syllables (Hörandner 1981, de Groot 1919), including only certain most frequent configurations. Others suggest that it is sufficient to study only the last four syllables from the end (Steinrück 2004a, 2005, de Groot 1919). As all studies regard the final syllable as indifferent (due to its pre-pausal position), the amount of possible patterns is not very great.
- 2) In what type of ends should these clausulae occur? Should it be a period-end, marked by a final stop in the editions (Hörandner 1981, Meyer 1891) or should we regard smaller units (ends of sub-periods or cola) as well and regard a repetition of a configuration in proximity as most important criteria (Steinrück 2004, 2005)? The latter seems more justified for the analysis of *Helen* by Gorgias, where both types of clausulae occur occasionally, but the ones occurring in proximity are more frequent (Part IV.2.1, 3).
- 3) In statistics, should we study the frequency of certain “well-known” syllable configurations (i.e. — ∪ ∪ x, — ∪ — x, ∪ ∪ ∪ x, — ∪ ∪ — x etc.) in general (Meyer 1891, Hörandner 1981, others) or should we register the repetitions of any combination, as long as it occurs in close proximity (Steinrück 2004a, 2005)?

Ancient Greek authors on oratory have not dedicated special studies on clausular rhythm in Greek prose.<sup>42</sup> This study will explain it by demonstrating that the percentages of perceptible (i.e. repeated) rhythm patterns are even less in the clausulae than period-internally (Part IV.2; App.I, II.C). However, it does not mean that such rhythm, when it occurs, is less perceptible than configurations in the middle of the period or cola: in period- and colon-end, there are supplementary factors (rhetorical figures), which help to hear the rhythm. From the other side, we can see that repetition of the rhythm in clausulae is more frequent at adjacent colon-ends than at period-ends. This may indicate that these authors did not use clausular rhythm intentionally, but that it resulted from syntactic parallelism (Part IV.2.1.1–3).

### **3.2.3. The study of continuous rhythm and the ratios of primary elements**

Other researchers focus on the analysis of continuous text (see Blass 1897, de Groot 1919, McCabe 1981). Usually these studies do not seek to recognise certain metres from poetry, as was done by ancient rhetoricians and sometimes by modern scholars (e.g. Mouraviev 2002: 253–264), but study the personal style of the author in question. The analyses, which focus on the work in its totality, do not usually regard the context, i.e. the position in the period, proximity of other syllables etc. Such stylo-metric analyses have been important for proving the authenticity and date of certain works, e.g. Demosthenes (McCabe 1981, Blass 1887–1898) or Plato (Richter 1910: 232–274, de Groot 1919: 59–82).

As rhythm often emerges from the opposition of different types of elements (short-long, accentuated-non-accentuated), in non-symmetrical rhythm types, the possibility to evaluate and compare different authors (or the dynamics of a work in one author) can be achieved by calculating the ratios of these elements for a given author. For Greek it has been done by de Groot 1919, who studied the rows of different syllable configurations by taking samples of 8 following syllables. The method can be simplified, as in the studies on free verse by Hruschovsky 1954, regarding syllable stress ratio (cit. in Lilja 2002: 258). Analogous studies have sought avoidances of one or another syllable configuration. One of them is known as the Law of Blass, according to which Demosthenes does not as a rule use more than 2 short syllables in a row (see Blass 1893: 105 and McCabe 1981 for exceptions).

In the following study, ratios of different kinds of primary elements have been brought out, but no general statistics have been made, as there is no control sample from other authors to compare to. However, for example, the ratio of syllables occurring in configurations of accentual rhythm and syllables occurring in accentual rhythm patterns could be most important for the study of authenticity. And, if it could be demonstrated that more syllables in Gorgias (or Heraclitus, Themistios, Severianus from Alexandria or Plautus) occur in quantitative patterns than accentual patterns, we could claim that the nature or his (their) rhythm is quantitative and not accentual or vice versa.

### **3.2.4. The study of musical fragments as a source for phrase intonation**

The analysis of accentual rhythm should not be confined to the count of accentuated syllables, especially in the case of pitch accent, where the intonation peak must not coincide with syllable boundaries (Lukinovich 2005, Lukinovich – Steinrück 2007). Because of the absence of recordings it is impossible to study

directly the intonation contours of ancient Greek. However, some information of the principles governing phrase intonation in Ancient Greek have been revealed by the study of Greek musical fragments, as well as comparative studies (Devine – Stephens 1994). They rely on a hypothesis that the melody of Ancient Greek musical fragments corresponds to the intonation contour of Greek sentences, emerging from Greek melodic accent (Winnington-Ingram 1955: 64–73, West 1992: 64–73, Devine – Stephens 1994). The hypothesis gets support from the study of some Delphic hymns; in the case of several other musical fragments the question remains open (West 1992: 64–73).

However, the analysis of Greek musical fragments has confirmed the hypothesis of the initial rise and terminal fall of intonation of Greek sentences (Devine – Stephens 1994: 429–455), see e.g. DAM 18 (Pöhlmann 1970):<sup>43</sup>

(EX 8)

Σ Ζ Ζ Κ Ι Ζ Ι                      Κ Ι Ζ Ι Κ Ο    Σ Ο Φ  
*ῥσον* ζήης, φαίνου, μηδὲν ὄλωσ σὺ λυποῦ.  
 Σ Κ Ζ Ι                      Κ Ι Κ Σ Ο Φ    Σ Κ Ο Ι Ζ Κ Σ Σ Σ Χ  
*πρὸς ὀλίγον ἐστὶ τὸ ζήν*, τὸ *τέλος* ὁ χρόνος ἀπαιτεῖ.

In this example, the initial rise of minor 3rd or more is marked by italic, the final falls of the same range with bold, demonstrating how the same general rising and falling contour is repeated throughout the fragment (including smaller rises and falls as well). In this fragment, the melody can be analysed into notes, which arrive at, stand on or descend from an intonation peak. The analysis of melody can be compared to a lexical analysis regarding word types (cf. Part II.3.1), which gives following results. 1) The accentuated syllable of every content word corresponds to an intonation peak in melody (cf. Devine – Stephens 1994). 2) Every intonation peak in melody corresponds to a content word or otherwise emphatic word. 3) The distribution of intonation peaks per colon is equal: two for the first two and three (including the copula) for the second two cola (the syllables corresponding to peaks in melody are underlined). The usual order is function word, followed by content word, but occasionally two content words can follow each other immediately.<sup>44</sup> This fragment reveals two more principles: 1) that every one of four rhetorical cola (corresponding to major phrases) has its own intonation contour; 2) every content word, as well as function words, which might be called emphatic (e.g. adverb ὄλωσ) form their own intonation contours with their own peak within the large pattern.

If we believe the hypothesis that in ancient Greek music melody followed the intonation of the spoken phrase, we might change our approach to the analysis of “accentual rhythm”: it might not be the syllable (accentuated or not), which is important, but accentual peak of a word or a word-group (whether it lies on a certain syllable or at a boundary). However, at the current state of research it is not yet possible to make any conclusions.

### 3.3. The studies on the rhythm in Heraclitus by Serge Mouraviev

#### 3.3.1. Accentual and quantitative rhythm in Heraclitus

As stated above, the mainstream of studies on Greek prose metre (based on the studies of poetry) agrees without any doubt that until the development of a dynamic accent in late antiquity the nature of Greek prose metre was quantitative. On the basis of the theory of the development of European verse by Mikhail Gasparov, according to whom Greek poetry was originally syllabic (cf. Gasparov 2003: 44), Serge Mouraviev has developed a hypothesis, according to which the prose rhythm of Heraclitus is mainly of syllabo-tonic nature (Mouraviev 2002, based on his earlier studies). According to him Heraclitus' prose is composed in strophes of independent rhythmic organisation, each corresponding to a period (as a syntactic unit) and divided into cola (which correspond at the same time to verse in poetry and clause or phrase in syntax). These cola are composed of primary elements,<sup>45</sup> in the opposition of strong and weak (i.e. accentuated and non-accentuated) syllables, whereas in every colon the strong elements are separated by equal number (1, 2, 3 to 5) of weak elements (Mouraviev 2002: 229–234).

In the discussion of the importance of colon in Heraclitus' rhythm, Mouraviev follows the edition of Heraclitus by Miroslav Marcovich (Marcovich 1967, 2001). Relying on Blass' practice of analysis, Marcovich published the fragments of Heraclitus in prose colometry, thus making the isosyllabic or quasi-isosyllabic patterns evident. Mouraviev has added a new idea, the symmetry of accentual patterns, and he has proposed a new colometry with metrical analyses in his work, concerning the poetics of Heraclitus (Mouraviev 2002: 235–252). Mouraviev's method can be explained with the help of the following example, Heraclitus' Fr. 99 DK: εἰ μὴ ἥλιος ἦν, ἔνεκα τῶν ἄλλων ἄστρον εὐφρόνη ἂν ἦν, which has been re-edited and analysed by him:

(EX 9)

εἰ μὴ ἥλιος ἦν,	ο ο X ο ο X	6
ἔνεκα τῶν ἄλλων ἄστρον	X ο O ο X ο X ο	8
εὐφροσύνη ἂν ἦν.	ο ο X ο ο X	6 (pro 5)

Like several other researchers, Mouraviev does not occasionally register the gravis accents (here on particles, underlined syllables), explaining it as a suppression of original accent (“virtualisation”, Mouraviev 2002: 230). However, this is problematic in the light of *opinio communis* that in Heraclitus there should be a pitch accent: it has been argued that gravis does not indicate a non-accentuated syllable, but only lowered pitch (Devine – Stephens 1994: 181), therefore there would not be a contrast between accentuated vs. non-

accentuated, but a rise to the peak and a descent. In other places he ignores the accents on articles and replaces some accents to more convenient places on his analyses (see in bold, colon 2), explaining it as a secondary accent (Mouraviev 2002: 230). Sometimes he uses the existing rhythm pattern in order to change the text (bold, colon 3) and to achieve exact symmetry.

However, Mouraviev has demonstrated, that in Heraclitus there is a certain symmetry in rhythm patterns, although it seems preferable to admit that it is not always exact: in EX 9 every colon has 2 content words (or at least a content word and an emphatic function word, either copula or deictic, see Part II.3.1) and the distribution of accent peaks in the ends of all three cola is symmetric. Mouraviev studies the quantitative rhythm as well, looking for the feet, which occur in Greek poetry, and concludes that quantitative patterns are not prevailing (without giving exact statistics, see Mouraviev 2002: 255–264).

### 3.3.2. Sound repetition (parechesis) in Heraclitus' work

Sound repetitions can be studied in different ways, for example broadly, as parechesis (sound play) or strictly as alliteration (cf. Part II.5.3–4). Alliteration in Greek has been sometimes declared as non-existent (see Diels 1914: 767 and Fehling 1969: 78–80, who is very categorical on the subject). The reason lies mainly in some definitions of alliteration which (according to its role in Germanic poetry) regard it as a repetition of the word-initial consonant in stressed syllables (Adams 1993: 36–38), thereby excluding the possibility of studying it in the cases of ancient Greek with its moving pitch accent. It has been additionally claimed that the notion is absent in ancient Greek and Roman rhetoric (Fehling: 1969: 78–80). However, even if the standard notion used in poetry (see Adams above) would not find its match in ancient rhetoric, it does not exclude the discussion of sound repetition, regarded more widely. This is discussed in late writings as *ὁμοιοπρόφορον* (concerning word initial position, Lausberg 1960: 478, 885) and *παρομοίωσις* in rhetorical writings from Aristotle's *Rhet.* III.9.9 (1409a) onwards, where it is discussed as sound repetition in general with other figures of Gorgias under the notion of period (Margolin 1992: 406–413, Cope 1877 III: 105–107 and Chiron 2002: 60–61, 182–183 on Ps-Demetrios *De eloc.* 25). Several modern studies have demonstrated the importance of sound repetition in Greek poetry and prose (Stanford 1967, Denniston 1960, Lilja 1968, Steinrück 1994. Cf. Steinrück 1991: 1–8, 108).

One of the most important parts in Mouraviev's study on Heraclitus concerns sound echoes. He uses Fontanier's notion, *consonance* for the recurrence of phonic elements, which occur in identical or close positions (Mouraviev 2002: 265). This corresponds roughly to Aristotle's wide notion of *παρομοίωσις*. Although the rhythm is usually connected with an idea of beat, these recurrences have their own rhythm (patterns of recurrence). Mouraviev

regards the repetition in adjacent words or words in adjacent cola, given that their position is similar, as in parison (cf. Part II.4.1–3). His study of sound repetitions is not restricted to the study of alliteration or homoeoteleuton, but includes the sound-repetitions which occur word-internally as well, given that they occur in recognisable configurations (Mouraviev 2002: 267–268), e.g. his analysis of Heraclitus’ Fr. 30 DK (Mouraviev 2002: 272):

(EX 10)

... ἄλλ’ ἦν ἀεὶ καὶ ἔστιν καὶ ἔσται πῶρ ἀείζων... **a-ê-aje-kaj est-kaj estaj**

Or in another example, Heraclitus’ Fr. 90 DK (here according to Mouraviev 2002: 273, pro: πυρός τε ἀνταμοιβή τὰ πάντα):

(EX 11)

πυρός ἀνταμείβεται τὰ πάντα καὶ πῶρ ἀπάντων ... **pyr-ant-p.ant- k- pyr ha.pant-**

This approach enables us to regard as constitutive the repetition of the combination [ant] at the beginning of the word ἀνταμείβεται and in the middle of πάντα and ἀπάντων, which otherwise could not be registered. But it also reveals problems concerning the study of different types of sound echoes, the nature of sounds, which could be considered as repeated (ἦ and ε) in EX 10.

There are two possibilities for the study of sound repetition (or only alliteration). The first approach (see Lilja 1968: 35–51, Denniston 1960) regards repetitions of same phonemes. Mouraviev (cf. also Steinrück 1991) studies the sound repetition more widely, as the repetition of “phemes” (distinctive characteristics together with variants) and phones (including phonemes at allophones, Mouraviev 2002: 266).

This means that word-initial spiritus asper is equated with aspirates [kh], [ph], and [th] as pHEME [h] (aspiration, Mouraviev 2002: 265–266, cf. Schwyzer – Debrunner 1988 I). As the Ionian dialect (the language of Heraclitus’ fragments) is characterised by psilosis (loss of word-initial aspiration) it seems problematic to study aspiration separately. E.g. in Heraclitus’ Fr. 54 DK:

(EX 12) ἁρμονίη ἀφανῆς φανερῆς κρείττων **h.a-n-ê a.phan.ês phan.ês**

Here Mouraviev considers as repeated both the aspiration and initial [a], whereas others have considered only [a]-repetition, regarding the word-initial aspirate as lost because of psilosis (Mouraviev 2002: 268 and 273 vs. Lilja 1968: 47 n.46). The same problem occurs in the discussion of plosives, as the difference in sonority or aspiration is not regarded, but only labiality or dentality e.g. Heraclitus’ Fr. 52 DK:

(EX 13)

Πόλεμος πάντων μὲν πατήρ ἐστι, πάντων δὲ βασιλεύς **p- pa-t- m- pat-e- pa-t d- ba-**

Here we can see that not only [pa-] and [ba-] are regarded as repeated (plosives and labials), but the repetition of labiality [m-] and [p-, ph-, b-] is also included (Mouraviev 2002: 273, vs. Lilja 1968: 47).

Although at first this seems to enable us to regard all types of sound repetition, there is still the problem of perceptibility. This is discussed in connection to context and position below.

### **3.3.3. The position and perceptibility**

The study of the role of sound repetitions in the work by Heraclitus or any other Greek author is closely connected to the problem of the possible perception of these repetitions and to the question of the author's intention to repeat (volition). Intention is a great issue for Fehling, who tries to prove, that the frequencies of certain consonants or vowels in ancient Greek are so great, that most repetitions could not be avoided and it should be considered as pure coincidence (Fehling 1969: 78–80). Several other authors (Rudberg 1940, Lilja 1968) have classified some alliterations as 'volitional' and some as casual, failing to give any positive criteria for the recognition (or exclusion) of an author's intention. Therefore in this study the author's intention is not discussed.

Some criteria can be used in order to argue that some repetitions can be perceived better than others. One of these is the occurrence of the repetition in a prominent position, i.e. verse-end, colon-end in the case of a rhyme or at the beginning of a verse or a colon or adjacent words (having a cohesive function) in the case of alliteration (in a broad sense, as the repetition of a word's initial sound).

Here the position is a basis which helps to perceive the repetition (cf. Steinrück 1991, 1994). The analogy of position, where sound-repetitions occur, can be explained as a similar context. But similarity of context occurs in a broader sense as well, i.e. in the case of syntactic parallelism, rhetorical figures or elsewhere (Lotman 1970, Ch.5). The phonological organisation of text can be studied by searching for shared phonemes in certain textual units. E.g. Lotman 1970 (Ch.5) analysing a poem by M. Tsvetajeva brings out from 1 to 6 shared phonemes in different words. Mouraviev in his study of Heraclitus is focused on smaller numbers of shared sounds in word-initial positions.<sup>46</sup>

### 3.4. Phrase-rhythm and word-rhythm

#### 3.4.1. Word-rhythm as basic principle and means for variation

In prose, word rhythm (or word-counting rhythm) has been discussed as a peculiarity of parison, parallelism of phrases with identical structure (cf. Part IV.2.3). But word rhythm is not peculiar only to prose, in poetry the saturnian verse is often explained as based on word rhythm, as counting word accents (Pighi 1970: 329–338, cf. Montadon 2003). The same principle can be found in Christian Greek verse of late antiquity, e.g. the poetry of Romanos Melodos. However, in Greek quantitative, quantitative-syllabic and accentual verse systems (see Lotz 1968), the word-rhythm is not a primary constituent. (Mostly) in stichic verse word rhythm provides secondary rhythm patterns and the role of syntax is to create the counterpoint of verse and phrase (Soubiran 1988: 166). Word rhythm helps to focus on the sense, as we have seen from the study of clusters of three words in Greek iambic trimetre or of Greek hexameter verses composed of 4 words (Marcovich 1984, Agosti 2008). Thus in verse-types, where the elementary unit is a syllable, the phrase-rhythm is secondary, whereas in prose the syllabic rhythm is secondary.

In syllabo-quantitative aeolic poetry there are almost no means for the variation of the structure by different rhythmical realisations of the given underlying pattern, the only means to it is syntax (cf. Saporta 1968: 82–93). This is created by a clash between syntactic and metrical units, which has often been explained as emphatic and expressive by commentators or students of *enjambement*, especially in the case of stichic poetry (Bassett 1926). However, research with the methods of cognitive linguistics has brought changes into the understanding of word rhythm there (see Part IV.3.1.1).

#### 3.4.2. The study of prose rhythm as form and style

It is always difficult to define ‘form’. Hereby the shape of a text is meant, including the division of text into greater units (from prooimion to recapitulation), as well as everything concerning style. Several studies on style and syntax have understood style not only as a means for expressing character, but also as something closely connected to rhythm (Trenkner 1960, Dover 1997, Meschonnic 1982, Tufte 1971). Stylo-metry can be useful here, as it studies the frequency of one or another type of stylistic features, constructions, word type and order or syntax type or other form characteristics (e.g. the types of rhetorical period). The possibilities to create rhythm through different choices concerning style are numerous. Three of them will be discussed in next chapters.

### 3.4.2.1. *The usage of connectors (function words)*

The exact classification of particles, connectors, adverbs, article, pronoun etc. is in respect of their rhythmic function secondary, it is sufficient to treat them all as ‘function words’ (cf. Devine – Stephens 1994 and Part II.1–3). Function words have already interested students of Greek syntax for more than a century, especially the role of particles and pronouns in syntax.<sup>47</sup> However, they regard the role of word type for rhythm and discourse tempo as well, as this theme already interested the ancient rhetorical writers. Next to the issue of clarity and parsing (see Ps-Demetrios *De eloc.* 56, Chiron 2002: 245), the usage of particles is included among questions of style under two rhetorical figures: the absence of connectors (*asyndeton*, *brachylogy*) and the abundance of connectors (*polysyndesmos*). The notion of a connector is broad and can include adverbs and several particles (e.g. Aristotle, *Rhet.* III.5.6, 1407b, cf. Chiron 2002: 243–244). The absence of connectors (*asyndeton* or *διάλυσις*, see Chiron 2002: 191) characterises a concise style and can therefore include the absence of different function words. It gives speech a character of grandeur, vehemence, vivacity and augmentation.<sup>48</sup> The opposite figure, an abundance of connectors (*polysyndeton*, *synapheia*, see Lausberg 1960: 245, Chiron 2002: 191–192) is understood as the opposite, i.e. peculiar to a simple (and quiet) style. The discussion of connectors is linked to the problems of parsing the text, as told above (Ch.2.4.2, cf. Chiron 2002: 245): the greater the number of connectors, the greater the number of cola (Fehling 1969: 116).

In the analysis of style and tempo, it has been agreed and proven that whereas *asyndeton* gives the text conciseness and rapidity, *polysyndeton* slows down the pace of discourse and is more suitable for narration (Trenkner 1960). This is demonstrated by counting the ratios of function and content words in the following (Part IV.1.4).

### 3.4.2.2. *The choice of sentence types: periodic vs. unperiodic style*

The opposition between two styles: *λέξις εἰρομένη* (sentence types, connected with the help of *συνδεσμοί*) and *κατεστραμμένη* (in periods) in Aristotle *Rhet.* III.9 (and his tradition) is crucial for the analysis of prose rhythm. Here Aristotle defines the basic units of prose rhythm, colon and period. Moreover, we already find here the discussion of several other constituents of prose rhythm: different sound and word repetitions. We see that the choice between two types of syntax is closely connected to the issue of clarity (in periodic style), which is easier to achieve in binary well-balanced periods (cf. Chiron 1999). In late antiquity the discussion of balanced periods was broadened by the discussion of the order of thought, tension and relaxation in *protasis* and *apodosis*; in practice, the choice between periods consisting of multiple parallel cola and periods which use circular structures, is important as well (Steinrück 2004ab).

For modern scholars, sentence types and style are connected to speech rhythm (Tufté 1971, Trenkner 1960, Fränkel 1955, Norden 1913). As the discussion of period and colon was connected to problems concerning connectors and parsing in ancient rhetorical writings, it points the way for the following analysis. It discusses under prose rhythm the division of period into cola, e.g. the number of cola or sub-periods for a given text part, or the number of indivisible units (see Part IV.2.3).

### 3.4.3. The study of prose rhythm as pragmatics: chunking

Previous chapters have already mentioned the question of discourse pace: How to achieve a rapid or slow tempo by the choice between periodic or non-periodic style? How do the connectors and particles influence speech tempo? But prose rhythm is connected to the pragmatic aspect of grammar as well: word choice and order, sentence type and other things can facilitate or hinder the quick passage of information and therefore create a discourse rhythm.

The application of the methods of cognitive linguistics to Homeric studies has changed our understanding of *enjambement*. In both stichic poetry and choral lyrics there is no actual overlap over verse boundary between information units and metrical units. On the contrary, the division of the sentence into phrases has one purpose: to give the listener the essential information in the easiest possible way. Such chunking of the sentence into several small information units (which may correspond to rhetorical cola) enables effective transmission of thought (i.e. it is important for clarity), but at the same time it gives discourse a good tempo in progressing and continuation (Bakker 1990, 1997a, Slings 2000). In the study of prose, rhetorical figures (parallelism, anaphora, chiasmus) have been declared as an important device for chunking information (Slings 1997, see Part II.4, IV.1.5, IV.1.7).

Word order (including discontinuous patterns) in Greek syntax has pragmatic reasons, helping to indicate topic and focuses (Dik 1995, Devine – Stephens 2000), but their parsing role, which smoothes the pace of discourse, is not less important. Nor could the choices in word order be without rhythmic function (Fraser 2004). Modern study of pragmatics, which has more elaborate categories than only topics and focuses (e.g. contrastive focuses and topics) can certainly explain the role of syntactic parallelism (and figures relying on parallelism) for discourse tempo: the easier to understand the sentence, the faster the speech. The study of deixis could be also useful, revealing the order and tempo of the discourse. The same is valid for the role of word repetition. E.g. sometimes in Herodotus the verbs (or other catch-words) from one sentence are repeated at the beginning of the following one, thus, ensuring cohesion between sentences, but also contributing to a good tempo (Trenkner 1960). Another question could be answered by applying pragmatics: how does

*figura etymologica* influence discourse pace and speech rhythm, will it be smoother, slower, more emphatic etc.?

### 3.5. Rhythm in thought and strategies of composition

Although the study of rhythm in ancient rhetoric seems to be connected to style (*lexis*) exclusively, the problems concerning the clarity of speech suggest that we should not forget the discussion of sense. Shouldn't we understand the strategies of speech not only in terms of narration or logic, but also in terms of rhythm or movement (as Meschonnic 1982)? Text type influences the choice of syntax and word order; a repetition or a variation of a theme, analogy or opposition as argument types, expansion or suspension in the narration all contribute to discourse rhythm. Different strategies of speech correspond to certain text types (and thence to certain rhythmic constructions): epic poetry has been used more for large-scale narration, lyric poetry for expression of sentiments and group communication (Gentili 1988) and a speech uses different strategies than a theoretical treatise.<sup>49</sup> If we assume that every text has a purpose, then every text component has to fulfil it. The strategies of fulfilling the purpose of the text are connected to the discussion of the *διανοία* (*dispositio*) part of the composition in rhetorical writings. Here the rhythm of the whole composition is discussed in Part IV.1.

Another question brings us back to separating different levels in text. We could see poetic discourse as consisting of two levels, rhythm (metre) and semantics (see Cohen 1966), but it would mean equating syntax and semantics and deprive us of many possibilities to see how syntax gives meaning to the words, but can also change them (see Levin 1962, Lotman 1970, Tufte 1971). In the philosophic approach to text rhythm, the analysis of elementary units (creating the incompatibility of the analyses of poetry and prose) has been left aside and the rhythm is defined only as a movement of word (as language, Meschonnic 1982, Dessons – Meschonnic 1998: 28). However, here this approach is not followed, in order to find a method which enables an analysis of the elements of rhythm in verse, as well as in prose.

## Conclusion to Part I

This part indicated the main theoretical problems concerning the analysis of prose rhythm, giving an overview of the research in this field and seeking a foundation for the following description of my method of analysis, the analysis itself and its results (following in Part II–IV). It claims that the scope of the study of Greek prose rhythm should be larger than it has usually been, and that it should include much that has been considered as belonging to syntax, semantics or stylistics.

The multiplicity of fields of research, discussed in Part I, indicates that especially in the study of prose rhythm, the interaction of different domains and features (sound-play, syllabic or phrase rhythm, choice of words etc.) is crucial. Three important characteristics should be repeated once more: the temporal condition of rhythm, its linearity and the importance of its perception on horizontal axis, i.e. in time.

This implies another characteristic of rhythm: its constantly changing (moving) nature. In the course of time and with the aid of memory and recognition of known patterns this movement might cause reanalysis of already established patterns (discussed under *epiplotke*).

And at last, although we cannot dismiss the importance of syllable, quantities or accents for prose rhythm, we should not forget that rhythm in prose is more about words, and especially phrases (rhetorical cola) and periods, which means that parsing is extremely important (and is therefore discussed at length in Part II).

## Notes to Introduction and Part I

<sup>1</sup> This, practical reason is the result of my teaching at the University of Tartu.

<sup>2</sup> Part III contains the text and its description, which could have been presented in the appendixes (as the analyses of accentual and quantitative rhythm), however, in order to maintain the logical order from principles of study to the results, it is presented in Part III. As Part III presents at the same time the descriptions of other features, which are not used for later analysis (as well as the parsed text of Diels – Kranz edition of Gorgias, *Helen*), it can be used as a database for future research or read separately as a commentary on phrase rhythm.

<sup>3</sup> See Dionysios from Halicarnassus, *De compositione verborum* 17.1, 15.10, 25.1, 9–10 and 26.3–4 with a commentary in Aujac – Lebel 1981: 20–21, 211. The distinction *metre* vs. *rhythm* became important in ancient musical theory with the studies of Aristoxenos, *Elementa Rhythmica* (see Pearson 1990, Laloy 1904 and Aujac-Lebel, *loc.cit.*). The distinction between *metrikoi kai rhythmikoi* is elaborated in Aristides Quintilianus, *De musica* 1.18 (cf. Barker 1989: 442–443 n. 206 and West 1992: 245)

<sup>4</sup> However, P. Maas does not seem to understand regularity as something strictly symmetrical.

<sup>5</sup> For Greek poetry, see e.g. West 1982.a: 18–25. This distinction can be brought back at least to Nietzsche 1912: 320: *der Rhythmus ist ein Versuch zur Individuation..., die Form des Werdens, überhaupt die Form der Erscheinungswelt*. The application of his principles to the study of Greek poetry distinguishes *Basis-schema* of marked and non-marked elements, *Schema*, the usual scheme in metrical handbooks, which try to give all the possibilities and *Versschema*, the description of a given verse (Sicking 1993: 43).

<sup>6</sup> See Raalte 1986: 3–16, especially p.6 and n.19 p.309–400 with discussion. The approach is well applicable to Greek stichic verse-types as iambic trimetre (or tetrameter) or hexameters or trochaic tetrameter and anapaestic dimeter, but also dactylic tetrameters. With dochmiacs it is more difficult, because syncopation (suppressed position) has to be postulated.

<sup>7</sup> Attempts to bring these metres to common prototypes have been made by Nagy 1990: 439–464.

<sup>8</sup> In Consbruch 1906 and Winnington-Ingram 1963: 40–41. In late antiquity we find accentual verse as well, which is in modern theory similarly presented as a binary system. For overview, see Brogan 1993b: 768–69.

<sup>9</sup> For *πρῶτος χρόνος* as mora, see Aristoxenos, *Elementa Rhythmica* 2.10–18 and West 1992: 245.

<sup>10</sup> According to this approach, the seemingly non-binary patterns are explained as due to the suppression of arsis. For the discussions of metre in prose by Greek rhetorical authors, see e.g. Arist. *Rhet.* 1408–9a, Ps-Demetrios *De eloc.* 6, 38–43, 179–189 (with discussion in Chiron 2001: 263–274 and Chiron 1993: 119–120), Dionysios from Halicarnassus, DCV 17–25 (see also Aujac-Lebel 1981: 20–28), cf. Cicero, *Orator* 168–203.

<sup>11</sup> Martin West stresses: the fact that caesura falls within the metrum reflects the real structure of the verse which coincide with the analysis by metra (West 1982.a: 6). G. Nagy interprets the middle caesurae in iambic trimetres as reinterpretation of older pattern 4/8 into 7/5 (Nagy 1990: 443). The arguments against Nagy come mainly from history of versification, e.g. Gentili 1977 and Steinrück 2003 concerning the process of regularisation (metricalisation) of stichic verse.

<sup>12</sup> For the role of caesurae, see the preceding note and Lukinovich – Steinrück 2004. Another problem is that vertical statistics tend to ignore statistically “small” (ignoring its importance in its context of occurrence) and to reduce the opposition between statistically “prevalent” and “insignificant” figures to binary schemes like: 101011, where high percentages correspond to 1 and lower ones to 0.

<sup>13</sup> In Hephaestion, *Encheiridion* (Consbruch 1906), Tzetzes, *De metris Pindaricis* (Drachmann 1925) and the metrical scholia to Pindar (Tessier 1989) the description of lyric metres is based on the notion of feet or dipodes (*syzygia*). It is reflected in modern editions of Pindar by Schroeder 1923 (where the metrical schemes are furnished with the number of theses in every line) and Puech 1958 (CUF edition). In the end of the 18th century it was understood, that such descriptions do not always reflect the rhythmical movement of the poem (cf. Boeckh 1811).

<sup>14</sup> It has been claimed that aeolic verse must be of non-Greek origin, as it would be an exception to the rules, which govern marked and unmarked elements (Raalte 1986: 10–14 and n.26 p. 403). According to these rules no more than two marked elements can occur consecutively and similarly, and after no more than two unmarked elements a marked element must occur.

<sup>15</sup> For the application of these notions, see Lotman 1970 (Ch.5) and Jakobson 1970.

<sup>16</sup> The theory has been developed further in Dionysios from Halicarnassus (DCV 11.22), who connects the rhythmic constraint with the effect of unaltered pronunciation, where the quantities of syllables are “as they are in actual pronunciation”, see Chiron 2001: 67.

<sup>17</sup> See the discussion by Chiron 2001: 73–76 on the development of Aristotle in Ps-Demetrios *De eloc.* 1–8, where the same rules (*εὐσύνοπτον*, binarity) are applied on the level of colon. Although sometimes periodic style has been equated with hypotaxis, I do not see a reference to syntactic constraints here. For the problem, see Fowler 1982, Chiron 1999 and Steinrück 2004b.

<sup>18</sup> Such constraints occur in exceptional cases, for example *prose rythmée*. The function of such devices, foregrounding or actualisation has been the object of the studies dedicated to rhythm in its complexity (see Havránek 1964: 10 in Grotjahn 1979: 66, and Mukařovský 1964: 20).

<sup>19</sup> To the ancient etymology of ῥυθμός from ῥέω, see Chantraine 1999: 979, Sandoz 1971: 68–77 and 119–129, versus Frisk 1970 ii: 664–665.

<sup>20</sup> The tendency to establish patterns could be seen in the gradual development of recognisable clause-ends (cf. Skimina 1937: 13, de Groot 1919: 108–146 and Dihle 2001).

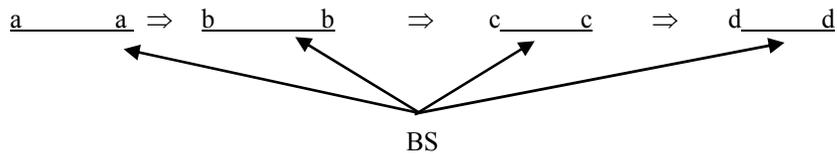
<sup>21</sup> Cf. West 1982.a: 24 and West 1992: 133–135, versus Raalte 1986: 15.

<sup>22</sup> For the discussion of variation in Ps-Demetrios incl. the scheme of usage (or norm) vs. deviation, see Chiron 2001: 190–192, 200–201 and 237–238.

<sup>23</sup> For paradigmatic axis and repetition, see Jakobson 1960, Levin 1962, Lotman 1970 (Ch.5) or Lotman 2001: 50.

<sup>24</sup> I.e. statistically more prevalent realisations of underlying pattern, see Grotjahn 1979: 24 (Chatman 1965), cf. also Raalte 1986: 2.

<sup>25</sup> The third schema of analysis links these two patterns, but as we cannot prove that prose rhythm has a comparable basic structure, it is only a theoretical possibility:



<sup>26</sup> For the application of cluster-metrics, see Steinrück, *Vers und Stimme* (to appear). For the study of the development of rhythm patterns, see Steinrück 2007: 114–124.

<sup>27</sup> This is one of the most frequent resolution types in Greek tragedy (Raalte 1986: 134–137).

<sup>28</sup> Although in the history of rhetorical studies the classification of different types of repetition has been one of the main issues (see e.g. Lausberg 1960 or Frédéric 1985), it is not considered as important in the context of this study.

<sup>29</sup> For the function of rhetorical figures in the rhythm of narration, see Novikov 2004. She has demonstrated, that in Achilles Tatios, *Leucippe and Kleitophon* the frequency of rhetorical figures depends from text type (narration, direct speech, etc.), influencing the pace of narration. Therefore the statistics concerning the frequency of rhetorical figures is not brought out in this study, dedicated to one, homogenous text.

<sup>30</sup> These configurations of syllables may be described in various ways, due to the variety of colon types in Greek lyric poetry, see e.g. West 1982a: 29–34 and Cole 1988: 125–143.

<sup>31</sup> There are some rhetorical figures: εἰρωνεία and ἀμβολία, where ambiguity in sense is intentional, but this does not concern stylistic (or syntactic) ambiguity.

<sup>32</sup> For example: the probable homology of the morpheme and the arsis and the thesis (or the word and the foot), occasionally on other levels as well. Brogan refers to Wesling and Lotman as his source without exact reference, cf. Lotman 1970 (Ch.6) or Lotman 2001 passim. For the difficulties in determining the boundaries and hierarchies of

syntactic units (or with terminology), see Devine – Stephens 1994: 209, 409 or Barri 1997: 8–12 (for Greek) or Berendonner 1990, Béguelin 2002 (modern spoken French).

<sup>33</sup> Next to rhythm-creating factors of poetry, which fulfil certain rhythmical tendencies, there are autonomous elements, which do not create the rhythm, but shade, enrich and colour it, see Jakobson 1979: 131.

<sup>34</sup> There are two main principles of organisation of ancient Greek poems (songs): they are composed either in verses or in strophes, i.e. either by repetition of similar fundamental units (usually verses, occasionally cola) or by moulding these units (cola, verses) into greater complex sub-units (periods, strophes) of the totality of text, whereas these sub-units can in their turn be repeated. According to this there are three types of poem structure in Greek poetry: stichic, i.e. in constantly recurring verses (of the same type); strophic, i.e. by means of longer and more complex metrical structures, which are usually repeated; and (so-called) free or astrophic composition (Cf. West 1992: 208. Modern theory of poetry uses principally the same division, e.g. Molino – Gardes-Tamine 1988: 74–76).

This division: strophic vs. stichic is not without problems, because the same fundamental and elementary units may occur in different types of poems, where they have different hierarchic positions. E.g. both stichic and astrophic poems consist of repeated verses or cola (as fundamental units), but many verse types can also be analysed as being composed from two cola (appearing this time as sub-units of a fundamental unit), as in Scheme A.

Scheme

- |    |  |    |   |
|----|--|----|---|
| A. | colon + colon (=verse)<br>verse + verse+ ... verse<br>poem | B. | verse = colon + verse = colon + ... verse = colon<br>poem |
|----|--|----|---|

In epic poems (Scheme A), colon is only a counterpart of a fundamental unit (almost every hexameter verse is composed of two cola, i.e. hemistichs). Therefore these cola have, hierarchically, a lower position in the totality of a poem than aeolic cola in the beginning of Rhodian *Swallow Song* PMG 848 (Scheme B), which represent the same hierarchical level (fundamental units) of the poem as the iambic trimetres, occurring in its end (both correspond to a verse).

Scheme

- |    |  |    |  |
|----|--|----|--|
| C. | 4 x verse + 4 x verse<br>strophe + +<br>poem | D. | 6 x colon + 6 x colon<br>strophe + +<br>poem |
|----|--|----|--|

Analogously in an alphabetical scolion GRDF 7, 8 (Scheme C), which is composed in myric hexameters ('mousetails', hexameters with iambic 6th foot, see West 1982a: 173–174), a verse, as a counterpart of a fundamental construction unit (strophe) has the same hierarchical position as colon in Corinna's fragment PMG 654 (Scheme D).

The problem is complicated with strophes, too. In the case of so-called monostrophs (e.g. *Scolia Attica*), a small stanza corresponds to a poem. At the same time in the poetry of Alcaeus (Fr. 34 Voigt) the same small stanza, followed by others is a fundamental construction unit of a poem. And the strophe itself can be only a counterpart of a triad as in case of Pindar's triadic poems.

Therefore a verse and a colon as composition units have different hierarchic positions (and therefore functions) according to the poem type. In the comparison of different text types, these hierarchical differences have to be taken into account.

<sup>35</sup> Hephaistion, *Peri poiematon* 1.1 (Consbruch 1906: 62.16–63.3) and Anon., *Scholia B in Hephaistionem* 4 (Consbruch 1906: 262), see also Koster 1953: 16. West 1982a: 5–6 limits a colon with 12 syllables and metrum with 3–6 syllables.

<sup>36</sup> Especially in texts of the archaic period it is not easy to say whether we deal with the parts of a complex sentence, i.e. the main and subordinate clause, or with two independent simple sentences. These small sentences fall (due to their shortness) under the category of rhetorical colon (Devine – Stephens 1994: 409).

<sup>37</sup> Cf. Hörandner 1981, Steinrück 2005, Steinrück 2004b: 119–135, Mouraviev 2002.

<sup>38</sup> Both unpublished doctoral dissertations, which have been presented during various seminars and conferences in France, Italy and Switzerland. For Latin poetry, the idea of interaction of quantity and accent is familiar, although the number of studies on this theme is not great and the peak of interest for the theme remains in the time before the World War II (see e.g. the studies of Sturtevant or Fränkel from the beginning of the 20th century, cf. Sturtevant 1919, 1921, 1923, Fränkel 1928). However, the direction of these studies is entirely different, as the approach of Lascoux and Lukinovich is against interpreting one or another syllable (segment) as an eminent position and takes into regard the trans-segmental nature of Greek accent.

<sup>39</sup> Cf. studies of the intonation contours of free verse, inspired by Jakobson (Lilja 258: 2002).

<sup>40</sup> For information on Thrasymachos, Gorgias, Isocrates, as well as Ephoros, Naucrates, Theodectes, Theodoros from Byzantion, see Rufinus *GL* VI 573, 22 Keil. For the discussion and references to other treatises, see McCabe 1981: 10–41.

<sup>41</sup> For Ps-Demetrios and Theophrastos' influence on him, see Chrion 2001: 263–272. For Cicero, see McCabe 1981: 17, 36 and Leemann 1963: 152–154. Cicero and Quintilianus admit that clausulae (connected to pauses) can occur in very different locations: in the ends of periods (cola), beginnings and ends of periods (or cola), within all cola of one period or throughout a colon.

<sup>42</sup> This discussion appears in late antiquity by Ps-Castor from Rhodos and a Byzantine rhetor and philosopher Joseph Pinaros Racendytes (Steinrück 2004a: 142–143).

<sup>43</sup> See Devine – Stephens 1994: 430–1 for more examples from Delphic hymns.

<sup>44</sup> In the first colon and (maybe not as a hazard) co-occurring with a heavy syncopation (in an iambic dimetre with a scheme of analysis:  $\cup - . - . - . -$ ).

<sup>45</sup> 'Temps' in Mouraviev 2002: 230. These can be understood as primary elements, the notion  $\pi\rho\acute{\omega}\tau\omicron\varsigma$   $\chi\rho\acute{o}\nu\omicron\varsigma$  occurs in Greek musical theory for elementary unit (cf. n. 9 above).

<sup>46</sup> He discusses separately only the combinations from 1 to 3, although he does not fail to note other cases during his analyses (Mouraviev 2002: 266 and following).

<sup>47</sup> See Kühner – Gerth 1904, Wackernagel 1920, Denniston 1960, 1996, Dover 1997, Rujgh 1971, Rijksbaron 1979, Trenkner 1960, Bakker 1993, Fraenkel 1964, 1965, Hajdu 1989, Des Places 1929, Sicking – Ophuisen 1993.

<sup>48</sup> See e.g. the article in Aristotle, *Rhet.* III.6.6, 1407b cf. Cope 1877 III: 67–68 and Aristotle, *Rhet.* III.6.6, 1407b and III.13.2–4, 1413b; Ps-Demetrios *De eloc.* 53–54, Dionysios from Halicarnassus *DCV* 22.6 and Blasberg 1992: 1156.

<sup>49</sup> See *Schildernde Stil* and *Erörternde Stil* in Fränkel 1960: 51–76, and different styles of predication (*Ego-Stil*, *Du-Stil*, *Partizipalstil*, *Relativstil*) in Norden 1913: 143–207.

## **PART II.**

# **GREEK PROSE RHYTHM: PRINCIPLES, TOOLS, PROCEDURES**

### **1. THE PRINCIPLES OF ANALYSIS: COHERENCE, DEMARCATION, ECONOMY**

We have seen in Part I that the principal units in prose rhythm are the rhetorical period and the colon (or its shorter variant, comma), corresponding roughly to syntactic and prosodic units. In order to parse the text into periods and cola, three main principles are used in this study: the principle of coherence within these units, the principle of demarcation between these units and the principle of the economy of the organisation of speech (text), governing both.

It is not difficult to analyse a text into periods and cola by intuition (see e.g. Blass 1901), but such analyses can easily provoke disputes about the correct parsing. In order to minimise the impact of personal and biased judgement, the method of analysis of the text is based on these three principles and followed step by step, as explained below.

#### **1.1. Coherence**

The principle of coherence requires that words which belong together should be analysed as one separate unit (domain). Although ‘belonging together’ is mostly understood in colloquial speech, it can be difficult to decide whether some words form a group or not. Within different phrase rhythm domains (from comma and colon to period and complex period, see Ch.3.2), the prevailing types of coherence may differ (as well as the criteria for establishing them).<sup>1</sup> The coherence within a phrase rhythm domain requires that words belong together either prosodically (forming intonation groups) or syntactically (by grammatical rules of congruence and dependence) or by sense, or by all or by some of them (for correspondence and conflict of prosodico-syntactic units, see Devine – Stephens 1994: 288 and Part I.2.5). The hierarchy of different types of ‘belonging together’ is illustrated in following subchapters.

### 1.1.1. Prosodic coherence: appositive groups

Prosodic coherence is tightest within appositive (clitic) groups (see Ch.2.1). It is so tight that the word-ends within these groups are often not constitutive as boundaries and the word-group functions as if it were one phonological word or “metrical word” (*parola metrica*).<sup>2</sup> In appositive groups prosodic coherence is the main factor for the formation of phrase rhythm units. Usually it cannot be overruled on the level of an appositive group, for example in verse the caesura or verse-end cannot fall within an appositive group.<sup>3</sup>

It is difficult to analyse prosodic coherence on the basis of written texts of a dead language, as we don't actually know how they were pronounced. Therefore it is important to rely on all possible sources for reconstruction, especially verse prosody, as done in Allen's *Vox Graeca* and Devine – Stephens, *Greek Prosody* (Allen 1987, Devine – Stephens 1994). These studies have demonstrated that prosodic coherence usually corresponds to syntactical (grammatical) coherence between so-called host words (usually lexical words) and adjacent appositives (non-lexical or function words), e.g. enclitic or proclitic particles clinging to the main word of a group (Devine – Stephens 1994: 306 and below, Ch.2.1).

Prosodic coherence usually occurs to the left of postpositives (q) and to the right of prepositives (p), whereas the words with a free position (M) can occur before or after the boundary (see Dover 1960 and Ch.2.2). It can be seen in Gorgias, *Helen* P. 2 (DK 82 B 11.I):

(EX 14) ἄνδρα δὲ # καὶ γυναῖκα ##

This example presents two appositive groups: at first ‘Mq’ with a noun ἄνδρα and a postpositive particle δὲ and then ‘pM’ with a prepositive particle καὶ and a noun γυναῖκα, which provide a minimal prosodic boundary (#) to the right of the first and to the left of the second group and a slightly stronger boundary (##) to the right of the second group. From the point of view of phrase rhythm, they form two elementary units (commata) and one colon. The analysis is more complicated when more appositives are attached to one (lexical) word. In a place of the order ‘pMq’ (which is entirely possible, see Dover 1960: 17), the cohesion between the article (p) and the noun (M) is often interrupted by a postpositive particle (q), as in Gorgias, *Helen* P.4 (DK 82 B 11.ii):

(EX 15) τοὺς δὲ # μεμφομένους ##

Because of the general rhythm of the period (principle of economy: the units should neither be too short nor too long), it seems justified to regard EX 15 as one elementary rhythm unit (comma), corresponding to an appositive group, wherein the article and clitic particle form a prosodic word.<sup>4</sup> Here the prosodic word boundary is not strong enough to create a minimal phrase unit boundary,

but in the following example the situation is different, see: Gorgias, *Helen* P.6 (DK 82 11 B.iii):

(EX 16) καὶ ἦν ## ὁ μὲν ##? ἀνδρῶν # κράτιστος ##

In EX 16 the article has a pronominal function and the ‘pq’ combination corresponds to a prosodic word, whereas the whole phrase corresponds to the scheme: p<sup>1</sup>M<sup>1</sup>p<sup>2</sup>q<sup>2</sup>M<sup>3</sup>M<sup>2</sup>. On a higher level these prosodic words form two or three phrase rhythm groups (## indicates colon boundaries and ‘?’ the possible boundary). The same type of phrase, but with less ambiguity in phrase division occurs in Gorgias, *Helen* P.31a (DK 82 B 11.xviii):

(EX 17) ἦ δέ # τῶν ἀνδριάντων # ποίησις ##

Here the insertion of the particle (δέ) allows the creation of a minimal boundary (pq#), followed by another minimal group τῶν ἀνδριάντων (#pM#). All these words together form one minor phrase, corresponding to a rhetorical colon (pqpM<sup>2</sup>M<sup>1</sup>, cf. Ch.3.2).

The study of prosodic coherence involves certain presuppositions. It is usually taken for granted that prosodic domains correspond to syntactical domains. In this case we should speak of prosodico-syntactical coherence, at least in the case of prose.<sup>5</sup>

There are two other prosodic criteria, which are left aside in the following analysis, as they need special studies at first. At first, the accent or intonation contour, which is studied under syllabic rhythm, but not as a criterion for the boundaries of prosodic units. Secondly, the elision, one of the most frequent means of avoiding pauses in poetry, is not studied separately, because in the textual tradition of prose it is very much influenced by changing editorial practices (cf. Ch.3.4.3.3 and 6.1.2.1).

### 1.1.2. Syntactic coherence

In preceding examples (EX 15–17) we have already seen another principle at work. Close syntactic coherence is important for detecting appositive and minor phrases and indicates the continuation of a domain. It results from the rules of grammatical congruence and dependence (Devine – Stephens 1994, cf. Ch.3.3). It means a coherence between a noun and its complements (e.g. adjective, genitive complement), a verb and its direct complement (object); it can be seen in different types of expanded clauses (e.g. prepositional clauses) etc. It is typical in noun-adjective minor phrases, corresponding to rhetorical cola, as in Gorgias, *Helen* P.23b (DK 82 B 11.xv):

EX (18) τὴν δέ (#) τετάρτην # αἰτίαν ## τῶι τετάρτῳ# λόγῳ## διέξειμι. ###

In EX 18 there are other factors, in addition to grammatical congruence, which indicate colon boundaries: different repetition figures and word order (in this case discontinuity between a verb and its complement). Therefore we can regard it as three (two cola and a comma), not two phrase rhythm units.

Hyperbaton (word or clause dislocation) is one of the most sensitive indicators for problems in this domain (cf. Ch.3.3.1). It occurs in cases where words, which belong together by the rules of grammatical congruence (i.e. they are in the same case, gender and number and share syntactical functions), are not adjacent in the phrase and belong to separate phonological units (i.e. different minor phrases). Although dislocation (as a rupture in coherence) indicates the boundaries of appositive groups and minor phrases, syntactical congruence remains important for the formation of higher units: major phrases and periods (corresponding to complex colon and a period), accompanied by unity of sense or structural coherence. But dislocation can also occur within minor phrases, which correspond to a clause (or rhetorical colon), e.g. in Gorgias, *Helen* P.20b (DK 82 B 11.xii):

(EX 19) λόγος γὰρ # ψυχὴν # ὁ πείσας##

The first noun (λόγος) and the participle (ὁ πείσας) both correspond to the subject and form a subject phrase. On the level of appositive phrases they are separated from each other by the second noun (ψυχὴν), a complement (an object) to the participle, according to the scheme:  $M^1qM^{2to1a}pM^{1a}$ .

The syntactic coherence on higher levels depends on the rules of Greek word order and the minimal requirements for a complete phrase or sentence (major phrase, period), including the role of ‘sense’.<sup>6</sup> It can be seen within a complex period and is often connected to parallelism in sense (and structure, see Ch.4). It can be also seen in a rhetorical closure (in a period), when the theme returns or is echoed in the ends of syntactic units.

## 1.2. Demarcation

The principle of demarcation means that words (or word-groups), which do not belong together, are separated by some kind of prosodic boundaries, and that there exist markers indicating such boundaries. Demarcation enables us to recognise domain boundaries and indicates a change in phrase movement (rhythm). Although coherence may be regarded as the underlying principle of clause formation, the analysis of clauses has to depart from demarcation, because the markers for domain boundaries are mostly lexical and therefore easier to find. These are the following main possibilities for demarcation of prosodic and phrase rhythm unit boundaries:

- 1) Lexical markers: various particles, which tend to be located in the second place of the sentence according to the law of Wackernagel (Wackernagel 1953: 1–104), which can be applied to smaller units (rhetorical cola) equally well. It is also important to regard other prepositional words, or words which tend to be situated at the beginning of a clause (Fraenkel 1964, 1965; Dover 1960; Hajdu 1989; Devine – Stephens 1994; Hagel 2004b). It is possible to use particles in two ways: at first as indicators for the disruption, new beginnings. Or by negative evidence, in the case of the absence of a connector at the head, asyndeton (Dover 1960).<sup>7</sup>

The difficulty in applying this law is that it is valid for different types of clauses and that it does not give clear indications for clause hierarchy. For example, the particle δέ occurs at the head of an appositive group (rhetorical comma) in Gorgias, *Helen* P.6 (DK 82 B11.iii):

(EX 20) πατρὸς δέ

In previous examples it has occurred at the beginning of the period (EX 14), the complex colon (EX 15) and the colon (EX 17). Therefore, although it is useful for detecting a phrase rhythm unit boundary, it does not help to distinguish hierarchically more and less significant types of boundaries.

- 2) Change and rupture in syntactic constructions (or rhetorical figures), which indicate boundaries (Ch.3.4.3). This includes hyperbaton, the dislocation of phrases and words (cf. Devine – Stephens 2000 and Ch.3.3.1), as detached words and phrases can become independent rhythm units (see EX 19 and Part III.2, under P.20b).
- 3) Graphic and prosodic clues: punctuation or hiatus between phrase boundaries (Devine – Stephens 1994: 420–424). The graphical evidence (mostly punctuation) has not been taken into regard during this study, and it will therefore be left out for further discussion (which must follow thorough and systematic studies of manuscript evidence).<sup>8</sup> As we lack the aspect of the living voice, the pauses are not studied separately, but hiatus and its possible function as a marker of phrase boundaries will be discussed (Ch.3.4.3.3).
- 4) Various types of repetition (lexical, morpho-syntactical or sound repetition), which are usually classified as rhetorical or poetical devices (see Ch.4). It can usually be achieved by phrase parallelism (parison), which is often accompanied by different rhetorical figures such as anaphora, homoeoteleuton, epiphora (as well as asyndeton, mentioned above) etc. Here they are studied as phrase rhythm unit markers. However, they do not always indicate different units, but help to create coherence as well, in the case of adjacent units, as in Gorgias, *Helen* P. 7b (DK 82 B 11.iv):

(EX 21) πλείστας δὲ # πλείστοις ## ἐπιθυμίας# ἔρωτος#? ἐνειργόσατο###

Here the occurrence of word-repetition (*polypotton*) and the repetition of the initial vowel (alliteration) together indicate coherence within the unit, where the figure is shared and demarcation between units, which do not share the figure. The coherence of the first colon (minor phrase) is ensured through the connecting particle (M<sup>a</sup>qM<sup>a</sup>) and by the fact that both adjectives belong to preferential words (see Ch.2.2).

In EX 21 (as in some previous ones) it is difficult to decide, whether its last three words (united by e-alliteration) should be regarded as one minor phrase or as two. This leads to the third principle of analysis: economy of speech.

### 1.3. Economy

The principle of economy means that phrase rhythm units should be of perceptible size. Therefore it is very important to make pauses in the speech. It has already been recognised by ancient rhetorical writers, see Aristotle, *Rhet.* 3.9.9:

(EX 22) λέγω δὲ περίοδον λέξιν ἔχουσαν ἀρχὴν καὶ τελευτὴν αὐτὴν καθ' αὐτὴν καὶ μέγεθος εὐσύνοπτον. ἦδεῖα δ' ἢ τοιαύτη καὶ εὐμαθής,

Aristotle and his followers recognised well the importance of having perceptible textual units, discussing it as a requirement of the clarity of speech and stressing the importance of symmetry (Ps-Demetrios *De eloc.* 16).<sup>9</sup>

The principle of economy governs rhythm features such as tempo and the length of the units. In order to understand the differences and similarities in the functioning of poetic and phrase rhythms, the third principle is important, as it governs both systems: poetical rhythm (in verse or rhythmic prose), with a syllable as primary element, and phrase rhythm, where a word can be regarded as a primary element. Its rules can override first two principles, e.g. when an otherwise grammatically coherent text part (e.g. a verb phrase) seems to be too long, the principle of economy comes into action and the phrase is divided into two prosodic (phrase rhythm) domains, for example a verb (phrase) and its complement phrase, as in Gorgias, *Helen* P.35 (DK 82 B 11.xx):

(EX 23) πῶς οὖν χρὴ δίκαιον ἠγήσασθαι τὸν τῆς Ἑλένης μῶμον ... 3 3+4 7

Here phrase rhythm economy (together with word order and grammatical congruence) indicates that the verb and its complement belong to different elementary groups.

Within the principle of economy, two qualities concerning rhythm are important: its linear character (causing difficulties for hierarchical construction of the text) and memory, which helps to overcome the difficulties, caused by

linearity, and creates longer and hierarchically structured textual units and accordingly a more complex phrase rhythm.

#### 1.4. Ambiguity of parsing and the order of study

Prosodic coherence is difficult to recognise, when adjacent or closely situated words belong to different syntactic sub-domains. This occurs sometimes in the case of minor phrases, where the criteria for discerning prosodic coherence are not sufficient, because any two adjacent words do not always belong to one, coherent prosodic domain. For example, a prepositional construction (preposition and a noun) corresponds to an appositive group, but together with modifiers these words already form a minor phrase. And a verb and its complement or the subject can form one prosodic phrase or belong to different units, as in Gorgias, *Helen* P.20a and 32 (DK 82 B 11.xii, xix):

EX (24) τίς οὖν # **αἰτία** # **κωλύει** ## καὶ τὴν Ἑλένην ## ὕμνος # ἦλθεν ###

EX (25) τῶι ? τοῦ Ἀλεξάνδρου # σώματι ## **τὸ** ? τῆς Ἑλένης # **ὄμμα** ## **ἦσθὲν** # προθυμίαν ###

When analysing these examples we need to follow the principle of economy, i.e. the units cannot be too long. Appositive phrases do not usually include more than one lexical word and minor phrases include two or three lexical words (Devine – Stephens 1994: 300sq., incl. p. 307 with exceptions). Both examples present adjacent grammatical subject and verb (in bold), but in EX 24 they belong to one minor phrase, whereas in EX 25 they both have other complements (e.g. verb and direct object, in ἦσθὲν προθυμίαν) and belong to different minor phrases. This is very common in the long periods of Greek rhetorical prose.

Therefore these three principles should be applied together (in order), starting from the search for the indicators for coherence and demarcation, and applying the principle of economy, when the possible places for phrase boundaries are established.

## 2. LEXICAL MARKERS

### 2.1. Appositive words

The basis for the parsing of Greek sentences is the law of Wackernagel, which defines the position of several clitic function words in Indo-European languages on the second place in a group. This law has been elaborated by studies on Greek word order, defining word groups, which have strictly limited positions in a sentence (Wackernagel 1892, Dover 1960). According to the freedom of the words to occur in different positions in a phrase or clause, they can be divided into the following classes (Dover 1960, cf. Hagel 2004b, Devine – Stephens 1994):

M (mobile words) — words (e.g. lexical words, stressed or emphatic function words, see Ch.3.1), which can occur in all positions in the phrase, given that these positions are not occupied;

M<sup>a</sup> (preferential words) — generally mobile words, which tend to occur in the initial position, but can occur also in other positions in a clause (see Ch.2.3);

p (prepositions) — particles, adverbs and pronouns, which are regarded as clitic and which cannot (usually) occur in final positions in a clause, and

q (postpositives) — words, which cannot occur in initial positions in a clause.

Prepositive and postpositive words indicate boundaries (marked by #, ## or ### according to their strength) and the continuation of prosodic units. The parsing of sentences uses as markers the following three word classes: ‘p’, ‘q’, ‘M<sup>a</sup>’.

#### 2.1.1. Prepositives

Prepositives are words which can never end a clause. Such initial words (p) indicate at least a slight boundary at their left (if not preceded by other prepositions). As these words are usually (syntactic or accentual) clitics, they indicate cohesion to their right: #pM# (Dover 1960: 13–14, Devine – Stephens 1994: 357). The prepositives can be divided into five main groups:<sup>10</sup>

##### 2.1.1.1. Connectors and adverbial particles

The group includes: *ἄλλά*, *ἀντάρ* (*ἄτάρ*), *ἤ*, *ἦ*, *καί*, *οὐδέ*, *μηδέ*, *οὐτέ*, *μητέ*, *εἴτε*, whereas *μή* in prohibitive usage is classified separately (Dover 1960: 13). The group could be expanded by other words, as well as combinations with these particles, which occur equally in initial positions, e.g.: *ἦδέ*, *ἰδέ*, *μά*, *νή*, *ἦέ*, *ἦε*, *ὦ*, *εὖ* (in Hagel 2004b: 137),<sup>11</sup> the adversative or continuative *καίτοι* or the emphatic *τοιγάρ*, *τοιγάρτοι*, *τοιγαροῦν* (Denniston 1996: 555–568).

The group is not homogenous, including particles, which occur primarily as connectors (continuative or adversative) and others, which are adverbial, as *ἦ*, a particle of emphasis and nuance, expressing a mode of thought in isolation (cf.

Denniston 1996: xxxix). As adverbial particles, especially when they apply to the sentence as a whole, tend to gravitate to its opening (Denniston 1996: lviii), they can function as markers for the beginning of a word group (left-side demarcation). But sometimes the functions are not easy to distinguish, as in the case of *καί*, which is one of the main connecting particles, but can also occur adverbially (Denniston 1996: 289–327, Trenkner 1960). All these words mark boundaries at their left side and cohesion at their right (as, at least in poetry, they do not occur in positions where caesura could fall between ‘p’ and ‘M’). For example Gorgias, *Helen* P.12 (DK 82 B 11.vii):

(EX 26) πῶς # οὐκ ἄν # εἰκότως ## ἔλεηθείη # μᾶλλον ## ἢ κακολογηθείη; ###

In EX 26 the sentence is reorganised from a simple rhetorical question into a complex coordination structure, where the particle *ἢ* is the main indicator for parsing (it is confirmed by syllabic rhythm, see Part III.2).<sup>12</sup> These particles can give indications for unit boundaries, but not for unit hierarchies. This is clear in the case of *καί*, which connects not only words, appositive groups or rhetorical cola (all in P.10b), but also complex cola (P.21a, P.27) and periods (P.23a, P.30), see the analysis in Part III. Sometimes the coordinating connectors do occur at the beginning of a main clause, as *οὐδέ* in P.14.

### 2.1.1.2. The definite article

In Ancient Greek, the definite article *ὁ*, *ἡ*, *τό* can occur with different functions. In the function of a definite article (and in all cases) it is counted as a prepositive (Dover 1960: 13, cf. Hagel 2004b: 137 n.8). The definite article is proclitic and when it occurs in elementary word-groups of the type ‘pM’, its function is cohesive at the right. However, its cohesive function becomes slighter in cases when it is followed by postpositive enclitics, in utterances of type ‘pq#M’ as in EX 15 above. It is clearer in Gorgias, *Helen* P.6 (DK 82 B 11.iii):

(EX 27) ὁ μὲν διὰ τὸ εἶναι ἔδοξεν

Here the article has a pronominal function and the postpositive particle is in its turn followed by prepositives, indicating a slight beginning. Therefore the example can be analysed as three commata (corresponding to three appositive groups): ‘pq#ppM#M#’, which form one rhetorical colon (corresponding to a major phrase).

In some cases, the insertion of a postpositive ‘q’ can create even more significant boundaries, but even if the immediate cohesion between the article and the noun is disrupted on the level of an appositive group, it remains on the higher levels (e.g. major phrase), as in Gorgias, *Helen* P.21b (DK 82 B 11.xiii):

(EX 28)

πρῶτον μὲν	<u>τοὺς</u>	<u>τῶν μετεωρολόγων λόγους</u> ,	$3+1+7+2 = 3+10$	[=13]
	οἵτινες	δόξαν ἀντὶ δόξης	$5 + 4 = 9$	
		<u>τὴν μὲν ἀφελόμενοι</u>	<u>7</u>	
		<u>τὴν δ' ἐνεργασάμενοι</u>	<u>7</u>	[=23]
	<u>τὰ ἄπιστα</u>	καὶ ἄδηλα φαίνεσθαι	$4+4+3 = 11$	
	<u>τοῖς τῆς δόξης ὄμμασιν</u>	ἐποίησαν·	$4+3+4 = 11$	[=22]

This example demonstrates different types of coherence: at first a simple pair, a definite article preceding the noun (pM#, underlined, lines 1, 5, 6). The following type presents a definite article (in pronominal function), preceding the noun, with a postpositive inserted between them (pq#M#, double underline, lines 3, 4), where the end of the postpositive corresponds to a prosodic word boundary. The third type again presents a definite article preceding the noun, but with a genitive complement between them (ppM#M#, lines 1, 6). In both cases, the first article (τοὺς, τοῖς) in the pair 'ppM#M#' creates the expectation of the following noun, at the same time suppressing a stronger boundary after the genitive complement (cf. EX 25). In such cases, two definite articles, which mark the beginning of a group, double the sensation of a beginning and emphasise it, not releasing the tension (expectation) before the appearance of the second noun.

### 2.1.1.3. Relatives

The group of relatives includes all possible forms of the relative pronouns ὅς, ἧ, ὅ, different relative compounds and indeclinable relatives and their variants arising from elision and assimilation: εἰ, αἰ, ἐπεὶ, ἐπήν, ἥν, ἵνα (iv'), ὅτε, ὅτι, ὅταν, ὄφρα, τόφρα, ὡς (ὡς) (Dover 1960, Hagel 2004b: 137). These words (as well as other words of the same type) occur in clause-initial positions and indicate phrase boundaries. Relative pronouns are easier to analyse from the point of view of clause hierarchy: they occur at the beginning of a relative clause.

It has been claimed, that (at least in poetry) the simple relatives ὅς, ἧ, ὅ are prepositives and therefore indicate continuation to the right of them (Hagel 2004b, Dover 1960, Raalte 1986). However, it can be different in rhetorical prose, as in Gorgias, *Helen* P.6 (DK 82 B 11.iii):

(EX 29)

<u>ὦν</u>			1
ὁ μὲν διὰ τὸ εἶναι ἔδοξεν,	10		
ὁ δὲ διὰ τὸ φάναι ἠλέγχθη,	10		
καὶ ἦν			2
ὁ μὲν ἀνδρῶν κράτιστος	7		
ὁ δὲ πάντων τύραννος.	7		

In EX 29 there is a double repetition of a combination of a short (monosyllabic or bisyllabic) rhythmic pivot and a pair of isosyllabic clauses (see Ch.3.4.1.3, Part IV.3.1). We could analyse the first thirteen words as ‘ppq#ppM#M####’ and ‘pq#ppM#M####’, and the following ten words as ‘pM#pq#M#M###’ and ‘pq#M#M####’. The structural repetition (strengthened by syllabic rhythm and anaphora) demands a reanalysis of the beginning of EX 29 as ‘p#pq#ppM#M####’, assuming a slight boundary after the relative pronoun ὦν.<sup>13</sup> The same occurs in combinations of relatives with other prepositional words, e.g. περὶ ἦς, which constitutes an independent appositive group ‘pp#’ in Gorgias, *Helen* P.3 and P.5.<sup>14</sup>

Sometimes it is difficult to distinguish relative and demonstrative pronouns, as their functions are similar. In Gorgias, *Helen* it occurs sometimes, e.g. P.16c (see Part III.2 and Ch.2.2.3).

#### 2.1.1.4. Prepositions

The group of prepositions (together with their variants) includes: ἀμφί, ἀντί, ἀνά, ἄνευ, ἀπό, διά, ἐν, εἰς, εἰν, ἐκ, ἐν, ἐνί, ἐπί, κατά, μετά, ξύν, σύν, παρά, περί, πλὴν, πρό, πρὸς, ποτί, ὑπέρ, ὑπό (Hagel 2004b: 137). Some of these words do not always function as prepositives (e.g. περί) and some (ἄνευ, ἔνεκα, χάριν and χωρίς) have sometimes been classified as “improper” prepositions and excluded from consideration, due to adverbial usage (Dover 1960: 14).<sup>15</sup> Therefore the group cannot be analysed automatically.

When analysing phrase rhythm it is important to remember that although their cohesion to the right is strong (except in postpositive or adverbial usage), prepositions are weak markers of left-side boundary: they begin appositive groups, but not necessarily greater units, as in Gorgias, *Helen* P. 27 (DK 82 B 11.xvi):

(EX 30)

διὰ τὸν φόβον # ἐξωκίσθη ## τὸν? ἀπὸ τῆς ὕψεως ###  
ἥτις ἐλθοῦσα ##εποίησεν # ἀμελήσαι ###  
καὶ τοῦ καλοῦ # τοῦ? διὰ τὸν νόμον# κρινομένου ###

Here the prepositions (in bold) are twice preceded by definite articles (marked with ‘?’), which refer back to preceding nouns (in italic) and indicate the beginnings of appositive groups. The first of these combinations (underlined)

creates a pivot, which facilitates passage from the main to the relative clause (in a hyperbaton, see Ch.3.3.1 and Part III.2). In these two cases the minor (##) and major phrase (###) boundaries do not immediately precede the prepositions: ‘##ppM#M#? p?ppM#?’’, ‘pM#?’M#M##’ and ‘ppM#p?ppM#M##’. The word type (both are prepositives) ensures prosodic coherence at the beginning of the group. However, the article gets additional emphasis, as the following preposition indicates a new beginning in its turn and thereby slightly diminishes the cohering force of the article, yet without creating a prosodic word boundary before them (as ‘p?p’).<sup>16</sup>

### 2.1.1.5. Negations μή meaning ‘lest’ and the question of negative οὐ

The particle μή is classified as prepositive by Dover only in the case when it means ‘lest’, otherwise it counts (with other negatives) as a preferential word, because it may often end the clause (Dover 1960: 14). Other studies, which analyse verse prosody, classify μή and οὐ as prepositives (Hagel 2004b: 137, Devine – Stephens 1994: 357, 340, Raalte 1986: 165).

In Gorgias, *Helen*, the negation οὐ (οὐκ, οὐχ) can in most cases be regarded as prepositive,<sup>17</sup> introducing commata or cola, as in P.21c (DK 82 B 11.xiii):

(EX 31) τέχνηι γραφεῖς, οὐκ ἀληθείαι λεχθεῖς·

This is clear in the case of negations, which occur in coordinated opposition at the beginnings of cola, e.g. in P. 10b (DK 82 B 11.vi):

(EX 32)

πέφυκε γὰρ οὐ τὸ κρείσσον ὑπὸ τοῦ ἥσσονος κωλύεσθαι,  
ἀλλὰ τὸ ἥσσον ὑπὸ τοῦ κρείσσονος ἄρχεσθαι

Here the negation particle forms an appositive group with a following comparative. Its prepositive nature is confirmed by detachment from the 4-syllable introductory comma (πέφυκε γὰρ) at its left (scheme: Mq# ppM# ppM#M##), which is revealed by syllabic rhythm and parallelism with ἀλλά (see Part III). Cf. P.23a and P. 35 (DK 82 B 11 xix):

(EX 33)

εἰ δ' ἐστὶν ἀνθρώπινον νόσημα  
καὶ ψυχῆς ἀγνόημα,  
οὐχ ὡς ἁμάρτημα μεμπτέον  
ἀλλ' ὡς ἀτύχημα νομιστέον·

In EX 33 the negation οὐχ marks the beginning of a main clause, but the particle is followed by another prepositive, particle ὡς, occurring in anaphora and functioning as a strong marker of a beginning (see Ch. 4.4.1).<sup>18</sup> This gives additional emphasis to the beginning of the colon.

## 2.1.2. Postpositives

Postpositives (q) are by definition words which never occur at the beginning of a clause (Dover 1960: 12). This group includes both prosodic and syntactic enclitics, which usually occur at the second position in a word group (from appositive group to sentence). Therefore we can expect cohesion at their left side and a strong boundary before the word which precedes them (if it is not preceded by prepositives), whereas a weaker boundary occurs after such words, according to schemes: ‘##Mq#’, ‘##pq#’ or ‘##pMq#’. The postpositives (like prepositives) may be followed by other postpositives, in which cases the word boundary at their right is suppressed. The postpositives can be divided into following sub-groups.

### 2.1.2.1 *Connective, emphatic and modal particles*

The group of connective, emphatic and modal particles, such as: μέν, δέ, τε, ἄρα (ρά), αὖ, γάρ, γε, δαί, δητα, θην, μήν (μάν), οὖν (ὄν), περ, the modal particle ἄν with its epic correspondences κε (κα) and in most cases the particle δή (groups i, iv and v in Dover 1960: 12, cf. Hagel 2004b:137), plus their variants. All these particles have greater or lesser connective or emphatic force (see Denniston 1996). For the analysis of phrase rhythm it is important that although most of them occur at the beginnings of sentences or phrases (i.e. higher syntactic units), they can separate the lowest syntactic units, i.e. words as well (in the case of μέν, δέ, τε). As postpositives they are left-bound, but they might at the same time function as weak separators from the right. This is can be seen in Gorgias, *Helen* P.19d (DK 82 B 11.xi):

(EX 34) ἡ δὲ δόξα

As in EX 15 and 27, the postpositive ‘q’, inserted between ‘pM’, which belong together syntactically, constitutes only a weak boundary (pq#M).<sup>19</sup> The boundary is slightly stronger in the case when the postpositive is followed by prepositives (which indicate new beginnings), as in EX 27 above (pq#ppM#). The particles can be followed by other postpositives, forming appositive groups of their own, e.g. in Gorgias, *Helen* P.5 (DK 82 B 11.iii):

(EX 35) ὅτι μὲν οὖν

Here the first possible appositive group boundary (after ‘pq’) is suppressed by the following postpositives (scheme: pqq#) and the words form one intonation group.

### 2.1.2.2. Pronouns

The group includes the clitic pronouns *με*, *μου* (*μεν*), *μοι*, *μιν* (*νιν*), *σφε* and the word *τοι*, which may be regarded as a pronoun or emphatic particle according to the period and dialect (Dover's groups iii and ii).<sup>20</sup> It can be enlarged by pronouns *οί* and *σφι* (which in certain cases may begin a clause) and forms of the 3rd person pronoun, which occur in poetry: *ἔ*, *έθεν*, *έο*, *εύ* (Dover's group vi, Hagel 2004b: 137). The pronoun *αὐτός* in oblique cases and an anaphoric sense belongs here as well, but in cases where it means 'self', it is classified as a preferential word (Dover 1960: 12, 21 and Ch.2.2 below).<sup>21</sup>

In Gorgias, *Helen* *αὐτός*, meaning 'the same', occurs in several places and is classified as a preferential word (see Ch.2.2.5). Two examples of the anaphoric usage of *αὐτός* can be classified as postpositives, P.18b (DK 82 B 11.x) and P.19d (DK 82 B 11.xi):

(EX 36) συγγινομένη γὰρ τῆι δόξει τῆς ψυχῆς ἡ δύναμις τῆς ἐπαιδείης ...  
ἔθελεξε καὶ ἔπεισε καὶ μετέστησεν αὐτήν γοητεῖαι

(EX 37) ἡ δὲ δόξα ... περιβάλλει τοὺς αὐτῆ χρωμένους

In EX 36 anaphoric usage is confirmed by the position of the pronoun after the verb. In EX 37 the pronoun occurs between the prepositive and the verb, not after the verb.<sup>22</sup> In this case it is not regarded as emphatic, as in the case of the following group of indefinite pronouns.

### 2.1.2.3. Clitic forms of indefinite pronouns and adverbs

Another group of postpositives includes un-accentuated (atonic) pronouns, adjectives and adverbs, the impersonal pronoun *τι* and *πως*, *ποτε*, *ποθεν*, *ποι*, *που*, *πω*, enclitic forms of the personal pronoun *σε*, *σου*, *σοι*, oblique forms of personal pronouns *σφεῖς*, *ύμεῖς*, *ήμεῖς* and the temporal adverb *νυν* (Dover, group viii-x, cf. Hagel 2004b: 137). The un-accentuated forms of pronouns and adverbs are usually postpositive and considered un-emphatic, whereas their accentuated forms often fall in the group of preferential words and are considered as emphatic (Dover 1960: 12-13, 21). Actually it is only the position, which tells us how to consider these forms, and therefore an initial *τίς*; *τί*; is always treated as a question (see Dover 1960: 12).

In Gorgias, *Helen*, indefinite pronouns occur mostly as postpositives after a noun (in P.4, P.16c, P.22b, as 'Mq'), but not all of them should be automatically considered as un-emphatic, cf. P.28-P.29 (DK 82 B 11.xvii):

(EX 38) ἤδη δέ τινες ἰδόντες φοβερὰ ... πολλοὶ δέ

The possibility of emphasis is suggested by the position of the indefinite pronoun *τινες* at the beginning of the period (in antithesis: 'few' vs. 'many'), but

as the postpositive δέ does not occur in a deferred position after the pronoun, the latter is classified as postpositive (underlined: ‘M<sup>a</sup>qq# M#M#...Mq#’).

#### 2.1.2.4. Clitic forms of the present tense of the verbs φάναι and εἶναι

Present indicative tense forms of the verbs φάναι and εἶναι are generally considered enclitic and classified as postpositives (Dover 1960: 13, Hagel 2004b: 137).<sup>23</sup> As in the previous group, they do not always occur as clitics: when different forms of φάναι occur in initial or medial positions, they are accentuated and considered as emphatic; when they are postponed they are considered as clitics and un-emphatic. The classification of εἶναι is more difficult and connected to its function as a copula. As a copula it is usually treated as ‘q’, although according to Dover, it might not be equal to other postpositives (therefore he classifies it as ‘M<sup>q</sup>’, see Dover 1960: 13). In Gorgias εἶναι occurs as a postpositive in all cases, its function as a copula is discussed separately (Ch.3.3.3.2).<sup>24</sup>

## 2.2. Preferential words

The group of preferential words includes words which struggle towards the first position in a clause (M<sup>a</sup>), but may be preceded by prepositives. They can be divided into four certain (1–4) and several more problematic groups.

### 2.2.1. Interrogatives

The interrogatives are as a rule situated at the beginning of a sentence or a clause. The group includes the interrogative particle ἦ; pronouns τίς; τί; (with other forms), different adverbial interrogatives, like πῶς; etc. In Gorgias, *Helen* an interrogative occurs in the initial position in P.20a and P.32 (DK 82 B 11.xii, xix):

(EX 39) τίς οὖν αἰτία κωλύει ...;

(EX 40) εἰ οὖν ... τὸ τῆς Ἑλένης ὄμμα ἦσθεν προθυμίαν ... τί θαυμαστόν;

In EX 39 the interrogative pronoun introduces a sentence (cf. P.35), in EX 40 a main clause. In EX 40 it has an additional function, to mark the passage from protasis to apodosis. Analogical postponement of an interrogative occurs in Gorgias, *Helen* P.13a (DK 82 B 11.vii):

(EX 41) ἡ δὲ βιασθεῖσα .... **πῶς** οὐκ ἂν εἰκότως ἐλεηθεῖη μᾶλλον ἢ κακολογηθεῖη;

Here the interrogative (in bold) occurs after a subject clause, which prepares a conclusion (presented in the form of a rhetorical question).<sup>25</sup>

### 2.2.2. Negatives οὐ, μή

Sometimes the negatives are not classified as prepositives, but as preferential words: as adverbs they have a relatively free position in the sentence (Dover 1960: 20–21). However, some studies classify them as prepositives (see Hagel 2004b: 137 and Ch.2.1.1.5). In Gorgias, οὐ cannot always be considered as a strong boundary marker, as it can be preceded by other prepositions, for example in *Helen* P. 7a (DK 82 B 11.iv):

(EX 42) τὸ ἰσόθεον κάλλος, ὃ λαβοῦσα καὶ οὐ λαθοῦσα ἔσχε·

In EX 42 two prepositives (καὶ οὐ, underlined) follow each other (scheme: pM#M## pM# ppM#M##) and strengthen each other's cohesive force (cf. EX 28). In combinations with other particles negations can occur at the second position in a clause, as in EX 41, where the postpositive ἄν is deferred, in order to strengthen the initial πῶς οὐκ.

### 2.2.3. Demonstrative pronouns

Demonstrative pronouns often occur at the beginning of a sentence as S or O, and as anaphoric pronouns they tend to first positions like the relatives (Dover 1960: 65, cf. Ch.3.4.2.1). The Ancient Greek definite article derives from demonstratives, and although relative pronouns have a different origin, in the archaic period all three may get mixed up (cf. Ch.2.1.1.3).<sup>26</sup> Whereas the definite article and the relative pronouns belong to prepositives, the demonstrative pronoun is more flexible and belongs to the group of preferential words, although it occurs rarely in positions other than at the beginning of a word-group.

In Gorgias, all three occur with different functions. Next to its usual function (as a definite article, see EX 37), the article occurs in the function of a 3rd person (EX 29) and a demonstrative (EX 28) pronoun. Most relative pronouns occur in their main function (as relatives),<sup>27</sup> but sometimes it is difficult to distinguish a relative from a demonstrative pronoun, as in *Helen* P.16c (DK 82 B 11.ix):

(EX 43) τὴν ποίησιν ἅπασαν... ὀνομάζω λόγον ἔχοντα μέτρον· **ἦς** τοὺς ἀκούοντας εἰσηλθε

Here the demonstrative pronoun in an anaphoric function (in bold) could be analysed as a relative (see Part III and IV.3.3.2), although the great distance between the noun (underlined) and the pronoun is more in favor of its description as demonstrative than relative. The next example is from *Helen* P.19b – P.19c (DK 82 B 11.xi):

(EX 44) ... οὐκ ἂν ὁμοίως ὅμοιος ἦν ὁ λόγος, ... <οἷς> τὰ νῦν γε

Here the pronoun is usually classified by the editors as relative, but the problem lies more in formal classification than in functions. Both the relative and the demonstrative pronouns mark rhythm (and prosodic) unit boundaries and ensure cohesion between greater textual units. The only problem is whether we should speak about a boundary before a clause (sub-period), as in the case of a relative pronoun; or before a sentence (period) as in the case of a demonstrative pronoun with an anaphoric function; in the latter case, it is uncertain whether the absence of a relative should be described as an asyndeton (see Ch.3.4.2.2). For phrase rhythm, this difference is insignificant.

#### 2.2.4. Connecting words (πρῶτον, ἔπειτα, εἶτα, ὁμως)

The group of preferential words includes different particles and adverbs, which connect successive clauses: πρῶτον, ἔπειτα, εἶτα, ὁμως (Dover 1960: 21). As they mark the passage in text from one episode to another, they have two functions: demarcation (between lower units) and cohesion (on the level of higher units). They are often accompanied by connectors, with which they form appositive groups.

In the phrase rhythm of Gorgias, the combinations of connecting words and appositives often function as introductory or transitional pivots at the beginning of colon.<sup>28</sup> For example in *Helen* P.21b–21d (DK 82 B 11.xiii):

(EX 45) πρῶτον μὲν... δεύτερον δὲ ... τρίτον

In adverbial usage, such adjectives (i.e. πρῶτον) occur in sentence-initial positions, whereas in other functions this is not necessarily so (cf. the polyptoton τὰ πρῶτα τῶν πρῶτων in P.5).

There are some other connecting words, which are not included in the list of preferential words. For example ἀντίκα, which is very usual at beginnings (e.g. in an introductory pivot in P.26), but can occur in deferred positions (cf. Ch.2.3.3).<sup>29</sup>

#### 2.2.5. Other demonstrative and personal pronouns and adverbs

Preferential words include accentuated forms of 1st person personal pronoun, and nominative cases of 2nd person pronouns and the 1st person plural pronoun (their oblique cases are classified as prepositives). Next to it, there are different demonstrative pronouns: οὗτος, τοσοῦτος, τοιοῦτος, τηλικούτος (οὐτοσί), οὕτως (οὐτωσί), ἐκεῖνος, αὐτός ('self'), ὁ αὐτός, ἄλλος ἕτερος, ἀμφότεροι (Dover 1960, groups v–ix, xiv–xvii). After a discussion Dover has included:

ὄδε, τῆδε, ᾧδε, τοιόσδε, τοσόσδε, admitting that the class is not homogenous (including pronouns of purely demonstrative character, and others, which have affinities with logical connectors and personal pronouns, see group xxii in Dover 1960: 20–24). All these words tend to the first position in a phrase, if not preceded by prepositives.

In Gorgias, *Helen* the occurrence of personal pronouns is rare, as he does not address the public in the manner of oral speeches (cf. Dickey 1996). The only occurrence of a personal pronoun is at the beginning of a period, in P.4 (DK 82 B 11.ii), which is echoed in the end of the speech by a 1st person possessive pronoun, in P. 36 (DK 82 B 11.xxi):

(EX 46) ἐγὼ δὲ βούλομαι

(EX 47) ἐμὸν δὲ παίγιον

Whereas in EX 46 the initial position of the personal pronoun corresponds to the expectancy, the possessive pronouns in EX 47 do not belong among preferential words. But although the position of possessive pronouns is free (after or before noun), its initial and explicit usage gives emphasis to the text (Carrière 1960: 12 and 49–50, cf. Schwyzer – Debrunner 1988 II: 202), as confirmed by antithetic structures. The same is valid for ἐπ' ἄλλοτρίων τε in P.16c, analogically in a colon-initial position and antithesis (vs. ἴδιόν τι πάθημα).

Several other adjectives tend to form their own appositive groups, being sometimes accompanied by parallelism figures (e.g. polyptoton or gradation), as in Gorgias, *Helen* P.17 and P. 10b (DK 82 B11.ix, vi):

(EX 48) φέρε δὴ πρὸς ἄλλον ἅπ' ἄλλου μεταστῶ λόγον

(EX 49) καὶ βίαι καὶ σοφίαι καὶ τοῖς ἄλλοις

The analysis of syllabic rhythm in EX 48 confirms that ἄλλος forms two independent commata (cf. Part III.2). In EX 49 (pM#pM#ppM<sup>a</sup>#) ἄλλος ends the gradation as a separate comma and is therefore described as initial, although it is the last word in the period.<sup>30</sup>

Some demonstrative pronouns, which can occur in clause-ends (e.g. ὄδε in cataphoric usage), occur in Gorgias as phrase-initial, see P.5: ὄδε ὁ λόγος, confirming their classification as preferential words. The hyper-determinative character of the pronoun gives them emphasis.<sup>31</sup>

### 2.2.5.1. *Emphasis and demonstrative pronouns in anaphoric function*

In the discussion of demonstrative pronouns the great problem is emphasis, depending on their position. It has been taken for granted that an initial position gives words some emphasis, whereas a postponed position is un-emphatic

(Dover 1960). Anaphoric usages of demonstrative pronouns complicate the question. Should they be considered as un-emphatic, because they refer to the preceding text in the role of topic and convey no salient information? This could be the case of τοιούτων at the beginning of Gorgias, *Helen* P.7a, and P.14 (DK 82 B 11viii):

(EX 50) οὐδὲ πρὸς τοῦτο χαλεπὸν ἀπολογήσασθαι

Here the pronoun (underlined) occurs in an initial position, preceded only by ‘pp’, whereas the analysis of phrase rhythm confirms that the colon continues from οὐδέ το χαλεπόν. The same could be stated for the anaphoric ταῦτα at the beginning of P.16a (EX 54), but it is difficult to believe the absence of emphasis in *Helen*, P.24 (DK 82 B 11.xv):

(EX 51) εἰ γὰρ ἔρωσ ἦν ὁ ταῦτα πάντα πράξας

Here the pronoun begins a participial clause in a context of strong accentual and syllabic rhythm, together with a homoeoteleuton and following alliterations (cf. Part III). It is justifiable to ask, whether it is the complex of rhetorical figures or the postponement of sentence-initial position, which creates the sensation of emphasis, or both. Cf. *Helen*, P.33 (DK 82 B 11.xix):

(EX 52) πῶς ἂν ὁ ἦσσω εἴη τοῦτον ἀπόσασθαι καὶ ἀμύνασθαι δυνατός;

Here the antithesis (‘god’ vs. ‘man’) might provoke the emphasis, otherwise the pronoun seems neutral (cf. Part III). When anaphoric pronouns are postponed, the absence of emphasis seems more certain, see Gorgias, *Helen* P.1 (DK 82 B 11.i):

(EX 53) τὰ δὲ ἐναντία τούτων ἀκοσμία

However, even here the strong antithesis (opposition to the 5 preceding clauses) provokes doubts concerning the lack of any emphasis.

### 2.2.5.2. Cataphoric usage of pronouns

Although demonstrative pronouns and adverbs are classified as preferential words, they can occur in the last position in the clause (Dover 1960: 23). In the latter case their function is often cataphoric, to point forward to the following. It is valid for the only example in Gorgias, *Helen* P.14 (DK 82 B 11.viii):

(EX 54)  
οὐδὲ πρὸς τοῦτο # χαλεπὸν # ἀπολογήσασθαι ##  
καὶ τὴν αἰτίαν # ἀπολύσασθαι ## ὧδε ##

Here the parallelism figures (parison, homoeoteleuton, anaphora) reveal the demarcation from the left of the pronoun, and the following quotation in asyndeton (λόγος δυνάστης μέγας ἐστίν) confirms the demarcation at its right. The pronoun occurs in the role of a pivot, leading from the previous phrase to the next, being slightly isolated from both sides.

### 2.2.6. Temporal and local adverbs

Several accentuated temporal and local adverbs tend to the first position in a clause, belonging thus to preferential words. This group includes: δεῦρο, ἐνταῦθα (ἐνταυθοί, ἐντεῦθεν), ἐκεῖ (ἐκεῖσε, ἐκεῖθεν), νῦν (νυνί, νυνδή) and τότε and can be continued with analogous words (see Dover 1960, groups x–xiii). The positions of such adverbs in Gorgias, *Helen* confirm his analysis, although they tend to begin hierarchically lower groups, e.g. P.8b (DK 82 B 11.v):

(EX 55) τὸν χρόνον δὲ # τῶι λόγῳι # τὸν τότε # νῦν #? ὑπερβάς#

Here two temporal adverbs occur next to each other in opposition, both in separate commata, as confirmed by the analysis of small-scale syllabic rhythm (4+3+3+4 syllables). Although the adverb νῦν is not proclitic, it does not create a strong word boundary at its right ('?' in 'pM<sup>a</sup>#M<sup>a</sup>?M###'). Similarly, in P.19c νῦν forms an appositive group of its own (οἷς τὰ νῦν γε, as 'ppM<sup>a</sup>q') as an introductory pivot to the whole period (see Part III.2).<sup>32</sup>

### 2.2.7. Quantity words

Preferential words include quantity words, although the group is not homogenous: a numeral εἷς, adjectives, meaning 'numerous, more, the most' (πολύς, πλείων, πλείστος), 'all, every' (πᾶς) and their derivations, meaning 'often' (πολλάκις) and 'always, in every way' (πάντως) or other derivations from πάντ- (Dover's xix–xxi and xxiii, Dover 1960: 21–24).<sup>33</sup>

In Gorgias, *Helen* quantity words are represented in numerous examples. The numeral εἷς occurs thrice in the initial position, e.g. P.7b and P.21c (DK 82 B 11.iv and xiii):

(EX 56) πλείστας δὲ πλείστοις... ἐνὶ δὲ σώματι πολλὰ σώματα

(EX 57) εἷς λόγος πολὺν ὄχλον

In both examples (as well as in P.31b) the quantity words in the initial position are opposed to other quantity words (antithesis 'one' vs. 'many'), whereas the

beginnings of rhythm units are marked by quantity words (as confirmed by several other rhythm factors, see Part III.2). As connective words or connectors, quantity words can form appositive groups of their own, e.g. P.26: ὅστε πολλάκις, where the adverb occurs as an introductory pivot preceding a genitive absolute clause. In P.30 and P.29: πολλοὶ δέ (EX 38) the analysis as independent comma is again supported by the context: antithesis and parallelism.

There are some other examples, where quantity words do not necessarily mark the beginnings of commata or cola, as P.6: ὁ δὲ πάντων τύραννος (p q # ? M<sup>a</sup> # M ##, EX 29) or P.24: ὁ ταῦτα πάντα πράξας (p M<sup>a</sup> # M<sup>a</sup> # M ##, EX 51). Here the quantity words are preceded by prepositives (p) and another preferential word (M<sup>a</sup>), which strengthens the sensation of initial position, creating emphasis. The coherence between the article and the noun remains, but prosodic word boundaries (after ‘q’ and ‘M<sup>a</sup>’) give colon rhythmic flexibility. Another problematic example is a deferred quantity word in Gorgias, *Helen* P.7b (DK 82 B 11.iv):

(EX 58) ἔσχον· καὶ ἦκον ἅπαντες

Should the adjective ἅπαντες be regarded as different from other quantity words and not as a preferential word? Another solution is to take into account the parallelism between verb forms and to regard καὶ ἦκον as an independent comma and the whole colon as a series of independent commata (2+3+3 syllables, see the analysis in Part III.2).

### 2.2.7.1. Other numerals

Dover does not include other numerals among preferential words, because their initial position is not fixed. However, in Gorgias, *Helen* some other numerals occur at the beginnings of word-groups, see P.18c and P.23b (DK 82 B 11.x, xv):

(EX 59) δισσαὶ τέχναι εὔρηνται

(EX 60) τὴν δὲ τετάρτην αἰτίαν τῷ τετάρτῳ λόγῳ

In EX 60 the second ordinal (τετάρτῳ) occurs at the beginning of the comma, whereas the first one (τετάρτην) indicates the beginning of the 4th subpart, like connecting words (see Ch.2.2.4). In EX 59 the numeral (δισσαί) occurs at the beginning of a colon, as confirmed by analysis of the rhythm (Part III.2).

### 2.2.7.2. *Quantity words as polyptota*

Quantity words occur frequently in polyptota, as well as some other preferential or prepositive words (see Gygli-Wyss 1966). In Gorgias, *Helen* they occur in P.5, P.19a, P.22b. The problem is, whether the second (and third) word in such word-groups should be explained as occurring in a deferred position, or do they begin new, independent rhythm units. Sometimes the context gives guidelines, as in *Helen*, P.19b and P.19c (DK 82 B 11.xi):

(EX 61): εἰ μὲν γὰρ # πάντες #περὶ πάντων # εἶχον ##

(EX 62) ὥστε #? περὶ τῶν πλείστων # οἱ πλείστοι ##

In EX 61 an introductory pivot (εἰ μὲν γὰρ) is composed of three particles and followed by a clause: πάντες περὶ πάντων εἶχον, emphasised by the polyptoton (πάντες, πάντων). The beginning of the second appositive group (comma) is indicated by the preposition περὶ (underlined in ‘pqq#M<sup>a</sup>#pM<sup>a</sup>#M’), as well as in EX 62 (underlined in ‘p#?ppM<sup>a</sup>#pM<sup>a</sup>#’). When polyptota occur between adjacent words, the division into prosodic units becomes more difficult, see Gorgias, *Helen* P.31a (DK 82 B 11.xviii):

(EX 63) πολλὰ δὲ # πολλοῖς # πολλῶν ##

In this example all three quantity words indicate a beginning by accumulation. In the absence of independent commata every single word becomes an accentual unit with its own peak, giving speech rhythm flexibility (cf. Part III.2).

## 2.3. Pre- and postpositives: coherence and demarcation

### 2.3.1. Elementary groups: #pM#, #Mq#, #pMq#, #M# and combinations of appositives

Elementary word groups contain only one intonation peak, corresponding to an accentual word. A minimal group can consist of one mobile word (M), or a mobile word with a pre- or postpositive (‘pM’, ‘Mq’) or with both (pMq). In all these cases it is possible to speak of maximum coherence, this means that there is no constitutive word-end (i.e. no pause or demarcation of a prosodic domain) after a ‘p’. Analogically, there is no demarcation before a ‘q’ either. Thus the appositive words indicate continuation of a phrase and phrase-rhythm.

However, it is not clear, how great the coherence between a ‘p’ and the following ‘M’ is, and whether this coherence coincides with a boundary-constituting force. And whether there is (at least) a minimal boundary before a ‘p’ and

after a ‘q’? In the case of the elementary groups named above, it is plausible (but not necessarily in complex groups, cf. Ch.2.3.2).

Another question is: can enclitic particles form appositive groups of their own, i.e. is there a minimal group of ‘pq’? Should we classify the particle combinations εἰ οὖν in P.11 (EX 40) or ἢ γάρ in P.9 (or P.12) as independent appositive groups, or as parts of following units, see Gorgias, *Helen* P.9 (DK 82 B 11.vi):

(EX 64) ἢ γάρ Τύχης βουλήμασι

Since by definition a ‘p’ should be followed, and a ‘q’ preceded by another word, the condition for a minimal group can be regarded as fulfilled. The analysis of rhythm is ambivalent in all the preceding cases, as well as in P.24 and P.31a (see Part III). However, there are some other examples, which seem to contradict the classification as independent groups, e.g. the elision in P.21a and rhythm analysis of P.23a (see Part III). At the same time, at least once, a ‘p’ seems to form an independent comma, introducing a sentence in Gorgias, *Helen* P.31b (DK 82 B 11.xviii):

(EX 65)

οὕτω		2
	<u>τὰ μὲν λυπεῖν</u>	4+4
	<u>τὰ δὲ ποθεῖν</u>	6
	πέφυκε τὴν ὄψιν.	

In this example evident parallelism (underlined) in the middle of the period seems to support the analysis, by which the word οὕτω is isolated from both sides by prosodic boundaries. As by definition a ‘p’ cannot occur alone, οὕτω is here classified as adverbial and as a ‘M<sup>a</sup>’. The border between adverbials and several particles is slight (Denniston 1996), therefore they have been referred to as small rhythmic pivots in the following analysis, without exact classification (see Part IV.3.1).

### 2.3.2. Complex intonation groups

The question of the possibility of minimal intonation groups without independent tonic words (i.e. without any ‘M’), is connected to our understanding of prepositive and postpositive word complexes and the cohesion and demarcation occurring in such groups.

In Greek, complex word groups of types: ‘pqM’, ‘ppM’, ‘ppMq’ or ‘Mqq’ etc. are very frequent, especially the word order ‘pqM’ which is very usual in ancient Greek prose and poetry (Hajdu 1989). The rule of disruption of ‘pM’ complex has been defined by Dover: ‘pM’ might be disrupted by a ‘q’, which

belongs to connecting particles, but not others (Dover 1960: 16). We can see it in Gorgias, *Helen* P.13a (DK 82 B 11.vii):

(EX 66) εἰ δὲ βίαι ἠπάσθη ... ἡ δὲ βιασθεῖσα

In EX 66 the group ‘pM’ is disrupted by a postpositive ‘q’ with connecting function, therefore its boundary-constitutive force is slight (‘q’ in ‘pqM#M#’ and ‘pq’M#’). However, the existence of postpositive particles without connective force has been questioned (Denniston 1996, cf. Ch.3.4.2.2).

Usually in Gorgias, *Helen* the mobile (usually lexical) words alternate with clitic (either accentual or syntactic) words. Strings of three consecutive ‘M’s (as in EX 59) are rare and the longest uninterrupted string of ‘M’s includes 5 elements (in P.10a). Therefore we can conclude that clitics function as important word-boundary markers (see the analyses in Part III). Otherwise, the rhythmic functions of word type distribution and word order are studied in connection to the ratio of function-words to lexical words (Ch. 3.1. and Part IV.1.4).

### 2.3.3. Problems of hierarchy: an excursus into γάρ

Cohesion and demarcation problems concerning appositives might be illustrated by the example of the connecting particle γάρ, which is frequent in Gorgias, *Helen* and which tends to occur in chains (see Denniston 1996). It is a ‘q’ and therefore the cohesion at its left is clear. However, the strength of the prosodic boundary at its right is not constant.

In poetry the prosodic boundary after γάρ is usually weak. From 765 examples of the particle in Homer’s *Iliad*, only 3 occur at the verse-end, before the strongest prosodic boundary, although it is more frequent at the caesura. Thus we can conclude that in poetry the role of γάρ is at the same time distinctive (as it occurs on the 2nd position) and cohesive (confirming the rule of Dover of the disruption of the appositive group, given above).<sup>34</sup> In Gorgias, *Helen* the boundaries after γάρ can be classified according to their strength:

1) Phrase-internal (weakest) boundary in ‘pqM’

In Gorgias, *Helen* we cannot find any examples of the possibly weakest boundary, where ‘p’ is a definite article and ‘M’ a noun, which follows immediately after γάρ. In the following examples the boundary is still weak, see *Helen* P.18a and P. 25 (DK 82 B 11x, xv):

(EX 67) αἱ γάρ ἔνθεοι διὰ λόγων ἐπαιδαί

(EX 68) ἃ γάρ ὀρώμεν, ἔχει φύσιν

In EX 67 there is a strong prosodic and syntactical coherence between the article (p) and the adjective, following γάρ (**‘p q # ? M # p M # M # #’**, the article and the noun are in bold, the noun and its complements underlined). In EX 68 the relative pronoun is a direct object to the verb (strong syntactical coherence), which immediately follows the ‘q’ (**‘p q # ? M # M # M # #’**, the verb and its complement are in bold). However, the absence or presence of a boundary is not clear in Gorgias, *Helen* P.8a (DK 82 B 11.v):

(EX 69) τὸ γὰρ #? τοῖς εἰδόσιν ἃ ἴσασι λέγειν

Here the ‘p’ (definite article) and the words following ‘q’ are not attached to each other syntactically, as the article refers to the infinitive λέγειν or to the whole phrase (**‘p q p M p M M’**, the words immediately attached to each other are in bold). Therefore the boundary is weaker, as in P.20a (τὸ γὰρ τῆς πειθοῦς ἐξήν) and below, under Group 6.

## 2) Phrase-internal (less weak) boundary in ‘M q M’

In the following examples the disrupted group is a minor phrase. Phrase-internal boundaries can occur not only between the noun and its function-word specifier, but also between the noun and its preceding complements, as in P.10a and P.2 (DK 82 B 11.vi, i):

(EX 70) θεοῦ γὰρ προθυμίαν ἀνθρωπίνῃ προμηθίαι ἀδύνατον καλύειν.

(EX 71) ἴση γὰρ ἁμαρτία καὶ ἁμαθία (μέμφεσθαί τε ...)

In EX 70 the noun is anticipated by its genitive complement (**‘M q # M # #...’**). As the prosodic boundary falls within a minor phrase, we cannot be sure whether the initial word forms an independent rhythm unit (a comma) or not. EX 71 presents an adjective complement to a noun (**‘M q # M # p M # #...’**, the nouns and the complement are underlined). As the syntactic function of the adjective is not at once evident, the possible boundary can be classified as slightly stronger.

## 3) Phrase-internal boundary in ‘M q (p) M’

The next group contains examples where the initial ‘M’ is a complement to a noun with a definite article preceding it. These are interrupted minor phrases (noun phrases, participial clauses). However, the initial word is separated from the rest of the phrase not only by a ‘q’ (indicating a word-end), but also a ‘p’ (indicating a new beginning) or an ‘M’, which is not attached to it syntactically. This occurs in Gorgias, *Helen*, P.27 and 20b (DK 82 B 11.xvi, xii):

(EX 72) ἰσχυρὰ γὰρ #? ἢ συνήθεια τοῦ νόμου διὰ τὸν φόβον ἐξωκίσθη

(EX 73) λόγος γὰρ #? ψυχὴν ὁ πείσας, ἣν ἔπεισεν, ἠνάγκασε

EX 72 and EX 73 present an adjective (ἰσχυρά) and a noun (λόγος, cf. the participle in EX 36) in a predicative position, which enables us to speak of a prosodic (and rhythmic) unit boundary (although analysis reveals coherence on the level of greater units, see Part III). The dislocation has a pragmatic function (to indicate focus, important points in argument). EX 72 and EX 73 demonstrate the importance of rhythm for interpretation: the focus is indicated by creating a small-scale rhythm by using boundary-constituting particles.

4) Slight phrase-end boundary in ‘pqp...’, ‘pM<sup>a</sup>’ or ‘pM’

A verb in the focus position (Dik 1995) constitutes a boundary in *Helen* P.15 (DK 82 B 11.viii):

(EX 74) δύνονται γὰρ καὶ φόβον παῦσαι καὶ λύπην ἀφελεῖν

In EX 74 the verb (‘Mq#pM#M##pM#M##’, underlined) is followed by two infinitive object phrases, introduced by ‘p’. As in P.10b (EX 42), we have a strong minor phrase boundary, which is marked by the following ‘p’ or ‘M<sup>a</sup>’. Although the following infinitive phrases do not exceed the limits of a rhetorical colon, the comparison with P.21a-d reveals that object phrases can easily be as long as whole periods (there is as yet no example for γάρ).

5) Stronger phrase-end boundary, in: ‘pqpM’

Examples include initial verbs, occurring in apodosis: P.34 and P.6 (DK 82 B 11.xix, iii):

(EX 75) ἦλθε γάρ#?, ὡς ἦλθε, τύχης ἀγρεύμασιν, οὐ γνώμης βουλευμάσιν

(EX 76) δῆλον γὰρ #? ὡς μητρὸς μὲν Λήδας, πατρὸς δὲ τοῦ μὲν γενομένου θεοῦ

Here the appositive group (comma) is equal to a major phrase boundary (‘Mq##pM...’), because of the following relative phrases. Rhythmically, the pause is slighter than in the previous group, as these commata form greater units (see Part III).

6) Problematic group: ‘pq’ or ‘M<sup>a</sup>q’ as introductory pivots

As mentioned above, sentence introductions can cause parsing problems. These might be divided into two groups. The first one includes *Helen*, P.22b and P.13b (DK 82 B 11.xiv, vii):

(EX 77) ὥσπερ γὰρ ? τῶν φαρμάκων ... οὕτω καὶ τῶν

(EX 78) ὁ μὲν γὰρ ? ἔδρασε δεινά, ἡ δὲ ἔπαθε·

Here we can see that although rhythmically these introductions might occur as independent units (see Part III.2), syntactic coordination regards the boundaries

after ‘q’ as weak: we can analyse the period as consisting of two parallel parts: C1+C1 (‘pq’pM...pp’p..’ and ‘pqq’MM’, ‘pq’M’). Therefore it is plausible to analyse the beginnings as independent appositive groups (commata). In such cases we have either to adjust the analysis of rhythm according to syntax or to admit the possibility of clashes between syntax and rhythm (or prosody).

Another group includes sentence introductions without coordination, either after a connecting particle (εἰ γάρ, see EX 51) or some other connecting word. For example Gorgias, *Helen* P. 19b and P.26 (DK 82 B 11.xi, xvi):

(EX 79) εἰ μὲν γὰρ # πάντες περὶ πάντων εἶχον

(EX 80) ἀντίκα γὰρ #? ὅταν πολέμια σώματα ... ὀπλίσηι κόσμον

Here the introduction is followed by a preferential word in EX 79 (and polyptoton), therefore it might be understood as independent appositive group ‘pqq#’. In EX 80 the connecting word (ἀντίκα) might be classified as a ‘p’ or a ‘M<sup>a</sup>’ (cf. ἦ in EX 64). As it is followed by a relative particle, the boundary before it is strong. In both cases, the pause after the connecting word gives a slight emphasis to the following, which is important for the clarity and correct understanding of the text.

### 3. PHRASE RHYTHM UNITS, SYNTAX AND SENSE

#### 3.1. Words as phrase rhythm elements

##### 3.1.1. Word (WD): main types and principles of count

The primary element of rhythm in Greek speech is a word (Devine – Stephens 1994). For the analysis of rhythm (flow of text), the words are classified into two types: words which can form an appositive group or minor phrase of their own, and words, which cannot do so. This classification is based with some modifications on Devine and Stephens’ distinction of content words (CW) or lexical words and function words (FW) or non-lexical words in their *The Prosody of Greek Speech* (Devine – Stephens 1994: 291).

The quantitative analysis of phrase rhythm has to include word count. In Part III the word count (WD) indicates the number of words in every period, whereas every graphically distinguished unit in Diels’ text of Gorgias, *Helen* is counted as a separate word.<sup>35</sup> Round brackets after the number of words indicate information concerning the distinction between word types, including the number of content and function words, emphatic function words and word type distribution (see Ch.3.1.2–5), as well as information on factors influencing the

word count (textual problems etc.). In square brackets information concerning word rhythm and relevant rhetorical devices is included.

Due to the rules of Greek prosody the short final vowels of monosyllables can be elided before the initial vowel of the following word and a monosyllabic word ending with a vowel (or diphthong) might be melted together with a following word beginning with a vowel as a crasis.<sup>36</sup> In the cases of elision or crasis monosyllabic words cease to correspond to a separate syllable, but they are still registered in statistics under word count, whereas the round brackets after it include remarks concerning word count problems, as for example in the description of P.4: WD 28 (CW 16, FW 12; WTDI 1.3; 1 crasis; 1 delendum). This period is described as including 28 words, 16 content words and 12 function words, with a ratio of 1.3. Once in this period a crasis occurs (τᾶληθές) and there is one textual problem, affecting the word count: the [ῆ] at the head of the last colon has been marked as *delendum* by the editors, but left in the text (cf. Part III.2). Therefore it has been counted as a separate word.

### 3.1.2. Content words (CW)

The group of content words includes nouns, verbs, adjectives and many adverbs (all expressing referential meaning, e.g. temporal and quantity adverbs); personal pronouns in their stressed form, adjectival pronouns with referential meaning (e.g. πάντες, πολλοί etc.), the word ‘to be’ in its non-copulaic forms (i.e. other forms than the present indicative sg.3 and pl.3). The copula γίνονται in P.18a is classified as a content word (and not as an emphatic function word, cf. Ch.3.1.4). The position of CW in the phrase is not fixed, as some of them belong to ‘M’ (mobile words) and some are ‘M<sup>a</sup>’ (preferential words; see Ch.2.1 and 2.2 above).

Devine and Stephens’ division has been applied here with some modifications. At first, as the verb εἶναι does not appear as an auxiliary verb in Gorgias, *Helen*, most of its forms (except when it is a copula) are counted as content words. The second difference appears in the treatment of pronouns, which are important for the coherence of text and understanding, but also for emphasis. When personal pronouns appear in stressed forms, they are counted as content words.<sup>37</sup> Other pronouns (especially indefinite and relative pronouns) have been classified as a rule as function words (or emphatic function words in the analysis of rhythm).

The classification, which departs from word classes, is problematic, especially in the case of certain adverbs and adjectives. For example, ἄλλος (in all forms) is analysed as a function word (demonstrative adjective), but the possessive adjective derived from it is classified as a content word, see Gorgias, *Helen* P.16c (DK 82 B.11.viii):

(EX 81) ἐπ' ἄλλοτριῶν τε πραγμάτων καὶ σωμάτων ... ἴδιόν τι πάθημα

Here the antithesis to ἴδιος confirms that the adjective ἀλλοτρίων should be classified as a content word (i.e. that both adjectives belong to the same category). Similarly, the quantity adjective ἄπασαν in P.16c (EX 43) is classified as a content word. All verbs (except copula) have been counted as content words, although in P.17 the imperative φέρε δῆ (EX 48) has the function of interjection (Schwyzer – Debrunner 1988 II: 601) and is closer to an emphatic function word.

### 3.1.3. Function words (FW)

The group of function words includes determiners, modal and auxiliary verbs, negatives, most pronouns, conjunctions, different particles and several adverbs. Among the function words there are many indeclinable words which indicate syntactic information concerning single words or phrase structure. Although most FW are appositive (‘p’, ‘q’) or preferential words (M<sup>a</sup>), the words with free position (M) are not excluded. The group includes copulas, e.g. in Gorgias, *Helen* P.15 (DK 82 B 11.viii):

(EX 82) λόγος δυνάστης μέγας ἐστίν

In EX 82 the beginning of the period is counted as three content words and one function word, copula ἐστίν (cf. Part III.2). The same is valid for εἰσί in P.30. However, when the verb ‘to be’ it is not postpositive (as is usual), it can be classified as an emphatic function word in the analysis of word rhythm (see below). Emphasis is important for the classification at the beginning of *Helen*, P.4 (DK 82 B 11.ii):

(EX 83) ἐγὼ δὲ βούλομαι λογισμὸν τινα

The pronoun ἐγὼ is classified as a CW, because it is in a stressed position and clearly referential, whereas the indefinite pronoun τινα is classified as a function word.

The group of FW includes a sub-group: next to un-emphatic function words (in the analysis of words rhythm described as FW) some function words, which occur in detached or preferential positions, become emphasised. In the analysis of word rhythm these words are classified as emphatic function words (EFW, see next chapter).

### 3.1.4. Emphatic function words (EFW)

Ch. 3.1.2 stated that in the case of several adverbs and the verbs ‘to be’ and ‘to say’, it is the position in the sentence, which decides, whether they are analysed

as “neutral” or “emphasised”. We can see this in Gorgias, *Helen* P. 3 (DK 82 B.ii):

(EX 84) τοῦ δ' αὐτοῦ ἀνδρός

The pronoun αὐτοῦ is analysed as a function word, because it appears in the attributive position (between the article and the noun), does not form an appositive group (or minor phrase) of its own and is a complement to the noun ἀνδρός. However, its position as a preferential word in the head of the period (sentence) influences the phrase rhythm. Therefore it has been classified as EFW, belonging to the group which includes content words and emphatic (and tonic) function words (CEW, cf. Ch.6.3). The same interpretation is applied to the αὐτήν in P.18b (EX 36), as it is in an eminent position in the end of the series in gradation: ἔθελξε καὶ ἔπεισε καὶ μετέστησεν. This is valid for other pronominal adjectives as well, e.g. ἄλλοις in the end of P.10b (again ending the gradation).... καὶ τοῖς ἄλλοις (EX 99) and in P.7a (DK 82 B 11.iv):

(EX 85) ἐκ τοιοῦτων δὲ γενομένη

Interrogative pronouns are classified as function words, but for phrase rhythm they are classified as emphatic words (belonging to CEW), because they are stressed, form their own appositive groups and have a rhythmic and rhetorical function, cf. the relatives introducing indirect questions at the beginning of *Helen*, P.8a (DK 82 B 11.v):

(EX 86) ὅστις μὲν οἶν καὶ δι' ὅτι καὶ ὅπως .... οὐ λέξω

The same is valid for the word ἐστίν when it occurs close to the beginning of the half-period in P.33.

### 3.1.5. Word type distribution (WTDI) and word rhythm

The ratio of content (or lexical) and function words is expressed by the index of word type distribution (WTDI). The value of WTDI is given in round brackets after the number indicating the total number of words in the period. For example in P.1 the description takes into account both word types, which have different roles in the creation of phrase rhythm: WD 21 (CW 13, FW 8; WTDI 1.6). Together with other features, this index characterises phrase rhythm, especially the tempo and flexibility of speech: the greater the number of particles, the more fluent the speech (cf. Part IV.1.4).

Everything concerning rhythm on the level of single words and their connections to other words is given in square brackets, information concerning the links to other periods in {} brackets, as in the description of P.4: WD 28 (...) [PLPT 4, RP.WD 2]{REF to P.1–3}. Word rhythm appears not only in the

distribution and dynamics of word types, but also in repetition figures. Therefore these are indicated in the analysis (e.g. in P.4 there are 2 word repetitions and 4 polyptota).<sup>38</sup>

Word count might seem (especially as accents are studied separately) superfluous for the study of prose rhythm. However, it is important, because the basis of periodic style, the figure of parison, is based on word count (Ch.4.2.2).<sup>39</sup> It is equally important to study this parameter from the historical and comparative aspect of the evolution of rhythm, in order to see whether words, as such, could have made any impact on the evolution of accentual rhythm in Greek. In order to estimate the importance of word rhythm among other rhythm characteristics, an index of word rhythm involvement is used (WD.RI). This index shows the number of words in a period, which are involved in rhythmic configurations. In order to estimate better the importance of word type, the numbers of content words and all words together are given separately.

## **3.2. Colon, comma and period as phrase rhythm units**

### **3.2.1. The colon (Cl) and the comma (Cm)**

#### ***3.2.1.1. Description and count of cola and commata***

In Aristotle, *Rhetoric* III.9.3 the colon is the smallest constitutive rhythm unit and the only one next to period. Later ancient rhetorical writers added another elementary unit, a comma (Ps-Demetrios *De eloc.*9, Chiron 2002: 78). Modern scholars have referred to a comma as *Kurzcolon* (Fraenkel 1964, 1965, Hajdu 1989), indicating that there is no essential difference between the two. One of the criteria in distinguishing between a colon and a comma is their length in syllables (Lausberg 1960); for Ps-Demetrius, a colon is characterised by the same features as a period, therefore it is a unit of sense, whereas comma is not (Chiron 2002: 75–79).

However, if phrase rhythm units are to be regarded as equivalents to prosodic and syntactical units, some additional criteria need to be used. At first, these units should be elementary, i.e. not to include counterparts which could form an independent comma of their own. Then a prosodico-syntactic criterion is applied, regarding whether these elementary units can form a minor phrase (including at least two content words as independent rhythm units) or not. Consequently the elementary units are defined as following:

Colon (Cl) — smallest independent prosodic unit, which is greater than an appositive group, contains at least two intonation peaks (usually two content words, e.g. noun with its complement, verb and direct object etc.; sometimes a content word can be replaced by an emphatic function word) and is not divided into clearly marked subunits (cf. Lausberg 1960: 365);

Comma (Cm) — smallest independent prosodic unit, which corresponds to an appositive group, i.e. contains one content word (or emphatic function word) with clitics, or several clitics which belong together.

These elementary units can in their turn be united into complex cola, subunits which immediately follow the period (cf. Part I.2.5). The division can be demonstrated by the analysis of Gorgias, *Helen* P.1 (DK 82 B 11.i):

(EX 87) Κόσμος πόλει μὲν εὐανδρία.... τὰ δὲ ἐναντία τούτων ἀκοσμία

The first and last word (κόσμος and ἀκοσμία) of the period, being rhythmically (and prosodically) independent, are counted as the smallest elementary units (commata). These two commata form complex cola together with adjacent elementary units, which (being longer) are classified as cola: Κόσμος + πόλει μὲν εὐανδρία = complex colon, and τὰ δὲ ἐναντία τούτων + ἀκοσμία = complex colon. The description of the whole period on the level of colon count is consequently: COL 4 (Cl 6, Cm 2).

### 3.2.1.2. Problems of colon counting

In the description and analysis of Part III.2, the colon count indicates the number of complex cola in a given period. After the number of complex cola, the numbers of their smallest indivisible sub-parts, cola and commata, are given in round brackets. This indicates the syntactic and rhythmic flexibility of a period, which is equally characterised by different rhetorical figures (see IV.1.7).

The count of elementary units is usually simple. The problems can be illustrated with the help of Gorgias, *Helen* P.6 (DK 82 B 11.iii):

(EX 88) ὁ μὲν διὰ τὸ εἶναι ἔδοξεν

There are two possibilities for classification: 1) to follow the particles, which indicate possible elementary unit boundaries. If we agree that the particle μὲν is non-connective (cf. Denniston 1996), take into account the boundary-marking function of a hiatus (Ch.3.4.3.3.) and analyse the prepositional complement to the verb (διὰ τὸ εἶναι) as an elementary unit, this major phrase could be described as three commata, each corresponding to an appositive group; or 2) to use the principle of economy and describe the colon (because of its short length) as an elementary (indivisible) rhythm unit, corresponding to a major phrase (as below, in Part III.2).

The division of periods into complex cola might be difficult, especially when periods do not rely on parallelism and the sentences are long and complex. The ambiguous role of comma (Fraenkel's *Kurzcolon*) is often the reason for this: sometimes it is clear that they should be counted as belonging to their adjacent cola to the left or to the right, but sometimes it is not clear. Although most of the time only one figure is given for the number of complex cola, it could in

some cases be contested because of the flexibility of the boundaries of syntactic units.

Several problems in parsing are connected to amplification. Amplification can be achieved: 1) by using more or longer words in every following elementary unit, 2) by adding elementary units to the end of every following unit (which is problematic for the analysis of clausular rhythm, see Part IV.3.1.2.2); or 3) by expanding elementary units from inside. The example for the third possibility is Gorgias, *Helen* P.20b (DK 82 B 11.xii):

(EX 89)

λόγος γὰρ ψυχὴν ὁ πείσας,		3+2+3 = 8
ἦν ἔπεισεν, ἠνάγκασε		4 + 4 = 8
καὶ πιθέσθαι τοῖς λεγομένοις		4 + 5 = 9
καὶ συναινέσαι τοῖς ποιουμένοις.		5 + 5 = 10
ὁ μὲν οὖν πείσας	ὡς ἀναγκάσας ἀδικεῖ,	5 + 5 + 3 = 13
ἡ δὲ πεισθεῖσα	ὡς ἀναγκασθεῖσα <u>τῶι λόγῳ</u>	5 + 6 + 3 = 14+
	<u>μάτην</u> ἀκούει κακῶς. 7	

The last colon (ὡς ἀναγκασθεῖσα... ἀκούει κακῶς) is expanded from inside, resulting in two phrase rhythm units (cola). The period is still counted as 6 complex cola, although the last one of them is much longer than the others (21 syllables).

### 3.2.2. The period (PER)

#### 3.2.2.1 Description and count of periods

According to ancient rhetorical theory, a period is the basic textual unit and is usually divided into subparts (cola), which are characterised by sound and rhythm devices (figures of Gorgias); it has a complete sense and may be ended with a rounding.<sup>40</sup> Another, modern criterion, which could help to distinguish periods and cola, is syntactic completeness. If a period has to correspond to a syntactically complete utterance in the modern sense, many short sentences should be counted as periods, not cola. And the opposite: long and syntactically incomplete phrases should be described as complex cola, not periods (although in ancient theory they might have counted as periods because of their length). We see again a difference between a prosodic period (for which the syntactic completeness is important) and a rhythmic and rhetoric period (where syntax in the modern sense is not important), discussed in Part I.2.5.<sup>41</sup> In order to avoid the clash between different domains of analysis, in the following analysis a period corresponds to independent syntactic units (but not necessarily to the smallest independent syntactical unit), i.e. it corresponds to a sentence or a complex sentence.<sup>42</sup>

In this dissertation, a period is regarded as a minimal textual unit and independent phrase rhythm domain. The period count (PER) in Part III.2 indicates the number of periods (or complex periods) and their sub-periods in every given text unit. As the period is the basic unit of the analysis, the number of periods analysed at a time is always one (1), the number of sub-periods is included in round brackets. Periods can be simple or complex.

For example: P.1 of Gorgias, *Helen* (see Part III.2) is analysed as a simple period, because its rhythmic and syntactic characteristics (closure by polyptoton, underlying antithesis) point to one whole: PER 1 [CLO :ANT, :PLPT; SY.VE :Ma.ABS.COP 2 ...] {CONN to P.2 ...}. From the point of view of syntax it could be analysed as a nominal sentence, consisting of two subparts (coordinated, without copulas), but not as two separate sentences. The information, important for the description and parsing of the period, is given in square brackets on the line of the period count. This includes e.g. the number of verbs and their types, closure figures etc. (see Ch.3.3). This information is followed by additional remarks concerning the connections to other periods in {} brackets.

Period (2) is analysed as a complex period consisting of two sub-periods, which correspond to two sentences in a modern sense: PER 1 (1+1) [CLO :HOM, :PAR; ...]{ADD to PER 1}. The number of sub-periods is given in round brackets after the number of periods. In the editions, the end of the first sentence (sub-period) is marked by *stigma*, not full stop (period), but it is not the main criterion for considering both sentences as one complex, the main ground is rhythm, as well as sense (repeated notions). These rhythm features are indicated in square brackets following the number of periods. The information concerning the connections to other periods or higher textual units is given in {} brackets.

It is not always easy to know when and where a period or a colon begins and where it ends. The criteria for parsing often come from phrase rhythm devices, and they are indicated in square brackets after the period count, in some cases (when it concerns the parsing of a period into cola) on the level of description of cola as well. In the description of period level, the numbers of the occurrences of rhetorical figures are not given.<sup>43</sup>

### **3.2.2.2. Division and types of period: circle, parallel, simple**

A period can be divided into different types according to its complexity. Here greater structures have been added for the analyses, as period complexes or complex periods, which can correspond to several grammatical sentences. The basic period (corresponding to a complex sentence) can be divided into different sub-units: complex cola, cola, and commata.

However, according to their inner structure, there are other types of period: circular structures, corresponding to enthymemata and hypotactic structures in complex sentences (protasis-apodosis),<sup>44</sup> closed periods in parallel structures

(i.e. in antithesis or structural parallelism), closed undivided periods (i.e. consisting of one colon), which all correspond to the periodic style, *κατεστραμμένη*, described by Aristotle. Three period-types are distinguished in Ps-Demetrios, *De eloc.*: simple or undivided (*περίοδος μονόκωλος*), periodic (*κατεστραμμένη*) and un-strained (*διαλογική περίοδος*). The function of undivided periods can be interpreted as transitional, already in the example of such periods by Demetrios *De eloc.*17.3: the introduction to Herodotos, *Histories* (See Part IV.1.5.3.4).<sup>45</sup> Another type, a gnomic period (*γνώμικη περίοδος*), which occurs in Hermogenes *De inv.*4.3 is discussed under (Ch.3.3.3.2).

In the un-periodic style we meet yet another, open type of period, which does not have a near and visible closure and is usually not discussed as such (see Steinrück 1997, Steinrück 2004ab). The choice of period type influences the general rhythm of the discourse and is discussed in Part IV.1.5.

### **3.3. Syntax and sense as indicators for domain boundaries**

#### **3.3.1. Discontinuity in word order and hyperbaton (HYP)**

One of the most important functions of discontinuity (hyperbaton) is to indicate the boundaries of syntactic units (Marcovich 2006). Its role has been demonstrated as focalisation of salient information (Devine – Stephens 2000). In this thesis all kinds of discontinuity between a noun and its epithet (or the verb and object etc.) are regarded as hyperbaton.<sup>46</sup>

We have seen that the markers of boundaries of prosodic units do usually not indicate the hierarchy of these units (Ch.2). We could conclude from it that such clear hierarchy does not exist. But we can also look for signs of such hierarchies in the coherence between words in clauses or phrases, i.e. accordance between a noun and an adjective, a predicate and a subject, a verb and direct object etc. When these words are adjacent, the accordance indicates the continuation of the prosodic domain. When they are separated by words belonging to other groups (i.e. in hyperbaton), the accordance indicates the existence of another, higher domain. Paradoxically, the hyperbaton, which belongs by its definition to discontinuity, becomes a strong cohesive device.<sup>47</sup> For example, when a grammatical object and verb are separated by the subject (*OSV* or *VSO*), we have one rhythm unit (minimal sentence), which consists of three elements (words, as O, S, V). But in the case of continuity (e.g. *S OV* or *OV S* word order) we have a complex rhythm unit (minimal sentence), which consists of two elementary units, S + OV (where the latter can be analysed in its turn as composed of two elements).

In Gorgias such discontinuity is not very frequent between cola, but more often between words in a colon, whereas a sort of rhythm pattern is created, where every single word becomes salient, e.g. in *Helen*, P8b (DK 82 B 11.v):

(EX 90) τὸν χρόνον δὲ τῷ λόγῳ τὸν τότε νῦν ὑπερβάς

In EX 90 a direct object phrase is disrupted by a complement to the verb, whereas the object is disconnected from the verb by an adverb (creating an antithesis). Discontinuity can occur on the level of the order of protaseis and apodoseis in complex phrases, often in connection with circular patterns in word order, as in *Helen*, P.23a (DK 82 B 11.xv):

(EX 91)

καὶ  
ὅτι μέν, εἰ λόγῳ ἐπέισθη, οὐκ ἠδίκησεν, ἀλλ' ἠτύχησεν, εἴρηται·

Here the onion pattern in the order of relative and main clauses helps to create a rhythm pattern which culminates with the final verb (see Ch.3.2.2.2).

### 3.3.2. Circular patterns in word order

In the case of poetry the boundary-marking function of word order has been claimed, especially in the case of hyperbaton, by interlocking word order and framing (Conrad 1990: 12–15, Steinrück 1997, Marcovich 2006).

It is not clear how to explain the rhythmic function of onion-type word order, as in: art 1 – art 2 – noun 2 noun 1 (cf. Ch.2.1.1.2). In such cases the absence of function words between lexicals helps to create an accumulation of accentual peaks and rhythmic tension. Such a combination of coherence and discontinuity helps to stress every single word in a phrase, e.g. in Gorgias, *Helen* P. 24 (DK 82 B 11.xv):

(EX 92) τὴν τῆς λεγομένης # γεγονέναι # Ἡ ἀμαρτίας # αἰτίαν.

The circle is formed by an onion type word order (scheme: art 1 art 2 part 2 – O inf 2 noun 2 noun 1), where the continuity between the participle complement and the noun is disrupted by the infinitive *γεγονέναι* (a complement to the participle). The syntactic disruption is accompanied by a gap in prosody, a hiatus between the infinitive and noun 1. The same can be seen in *Helen*, P.22b (DK 82 B 11.xv):

(EX 93) ἄλλους ἄλλα χυμοὺς ἐκ τοῦ σώματος ἐξάγει

Here the discontinuity between the noun and its adjective complement is created by inserting the subject between them (forming a polyptoton), and the whole object phrase is separated from the verb by a preposition phrase (scheme: adjO1, adjS, nounO1, prep.compl., V). The pattern is similar in P.21b (τοὺς τῶν μετεωρολόγων λόγους in EX 28).

### 3.3.3. Syntactic parameters in rhythm (SY)

Syntactic parameters, which influence the formation of phrase rhythm, are marked in square brackets in the description of the period, after the information concerning the parsing.<sup>48</sup> In order to see how the match or mismatch between rhetorical and syntactic units works, all personal verb forms or their absences (ABS) have been registered separately according to their type: copula (COP), impersonal verb (IMPS), personal verb (VE) and position: main clause (Ma), relative (Rel) clause (Cl), place in the sub-parts of a period. The results of the analysis of the influence of syntax type on the rhythm of the discourse are presented in Part IV.1.5.

Another syntactic device, which is regularly used by Gorgias, but not described separately in this dissertation, is diathesis: the opposition between active and passive voice.

#### 3.3.3.1. Personal verb forms (VE)

The frequency and nature of verb forms is one of the parameters characterising phrase rhythm. This study concentrates on the occurrence or absence of personal verb forms (see Part IV.1.5), seeking to explain, for example, whether (or how) the rhythm in P.1 with its complex antithesis and missing verb forms differs from the rhythm in P. 12, where 9 of the 13 content words are verb forms. Although the cola in phrase rhythm correspond very often to participial or infinitive clauses, the separate study of the usage of infinitive and participle verb forms has been left for the future.

In order to better analyse the type of syntax, the number of personal verb forms in every sentence is given in the line of the period count. The position of the verb, in the main clause (Ma) or relative clause (Rel) is registered as: PER 1 [...SY :ABS.COP Ma 1; :Rel.VE 2] in P.3, where the main clause is characterised by a missing copula and the relative clause by personal verb forms. The impersonal verb forms (IMPS) are registered as well, e.g. in P.2 (Ch.3.3.3.3).

#### 3.3.3.2 Copula and gnomic syntax (COP)

The count of copulas (missing or expressed) helps us to understand the dynamics of the text. It is known to be frequent in gnomic syntax (Schwyzer – Debrunner 1988 II: 623), which in its turn is an important strategy in ancient rhetoric (Aristotle). Here the count of copulas reveals how the choice between

nominal syntax and other phrase types interacts with the construction of the argument (Part IV.1.5).

In word counting rhythm (cf. Ch.3.1.1) the copulas are classified as emphatic function words and not as content words. Different verbs can function as a copula (e.g. πέφυκε, cf. Schwyzer – Debrunner 1988 II: 624). Here all personal unstressed present forms of the verb εἶναι are classified as copulas, as well as γίνονται in P.18a. The problem is, whether the past tense forms of εἶναι and γίνομαι should be classified as copulas as well, e.g. in Gorgias, *Helen* P.3 (DK 82 B 11.ii):

(EX 94)

ὁμόφωνος καὶ ὁμόψυχος	γέγονεν
ἢ τε τῶν ποιητῶν ἀκουσάντων πίστις	
ἢ τε τοῦ ὀνόματος φήμη, ὃ τῶν συμφορῶν μνήμη	γέγονεν.

Here the occurrence of perfect tense precludes the analysis of γέγονεν as a copula. The criterion is the same for πέφυκε in P.10b and εὔρηνται in P.18c (EX 59). The dynamics and role of the copula in the discourse rhythm are discussed in Part III.2 and IV.1.5.2.1.

### 3.3.3.3. Impersonal verb forms (IMPS)

The distinction between personal verb forms and copulas (either explicit or missing) brings to mind another word type, impersonal verb forms. In Gorgias, *Helen* several impersonal verb forms have special functions, for example χρή in P.2 and δεῖ in P.16ab (DK 82 B 11.viii–ix):

(EX 95)

ταῦτα δὲ	ὥς οὕτως ἔχει	δείξω·	3+5+2 = 10
δεῖ δὲ	καὶ δόξει δεῖξαι	τοῖς ἀκούουσι·	<u>2+5+5</u> = 12

In EX 95 the combination of δεῖ and δείξω helps us to understand the function of impersonal verb forms as auto-reference to the speaker's tasks (see Ch.3.4.4, Part IV.1.5). The syntactic parallelism between two period parts helps us to see that impersonal verbs have the same role as deictics, i.e. to create elementary phrase rhythm units as EFW.

### 3.3.4. Parsing: rhetoric (rhythm) versus grammar (syntax)

Sometimes the parsing of text into rhythm units has to ignore the indications given by grammatical criteria. This happens mostly in the case of so-called interlocked word order, where the words, belonging together by rules of grammatical dependence, are dislocated (Slings 1997, Marcovich 2006). See for example Gorgias, *Helen* P.26 (DK 82 B 11.xvi):

(EX 96)

ὅταν πολέμια σώματα	S: 2+7
[καὶ] <u>πολέμιον ἐπὶ πολεμίοις</u>	O:CV 5+6 =11
ὀπλίσει <u>κόσμον</u>	V:O 3+2 = 5+
<b>χαλκοῦ καὶ σιδήρου,</b>	CO+CO <u>2+4</u> =6 =11
τοῦ μὲν ἀλεξήτριον	<u>8</u>
τοῦ δὲ προβλήματα,	6

Here the VO phrase (πολέμιον... σιδήρου) is reanalysed not according to syntactic functions, but regarding rhetorical figures: polyptoton in line 2, isocolon between line 2 and lines 3–4 and between the end of line 3–line 4 (in bold) and line 5 (Cf. Ch.3.3.1).

### 3.4. The movement within and between the domains

Every text and its subparts can be described through its beginning or closure, or the parts which remain between them. Every part: the beginning, the closure and the main body of text, has its own characteristics (described already in Aristotle's *Rhetoric* and its ancient followers). For the following analysis, these special functions are important at first because they help to recognise the domain boundaries on the level of the period. Secondly, these special functions correspond to the dynamics of the whole text (as argumentation), and are therefore discussed separately as well.

#### 3.4.1. Closure (CLO)

##### 3.4.1.1. The function and the description of a closure

In the analysis of a text or its sub-parts, it is important to recognise closures. There are many special features and figures, indicating, or possibly indicating, the closure (see Herrnstein Smith 1968 or Roberts – Dunn – Fowler 1975). These indicators of closure occur usually in the ends of greater text units (a poem, a stanza), but often it is possible to apply them to the analysis of smaller text units (a paragraph, a period) as well. Occasionally the closural figures might be missing and the closure indicated only by the following beginning, e.g. following asyndeton or introductory pivots (CLO: FOLL.ASY, PIV, see Ch.3.2.1, 3.4.2.2).

A great number of rhetorical figures can occur in closures. But most of these figures do not always indicate a closure (they might occur in other places as well), whereas a closure is almost always marked by the occurrence of one or several such figures. For example, in Gorgias, *Helen* the closure is often marked by parison and isocolon, which can otherwise occur in the middle of a period. In

Ch.3.4.1.2–3 a list of all closural devices, studied in Part III.2 is presented with a discussion of those of them which do not appear in Ch.4.

### 3.4.1.2. *Figures with occasional closural functions: combination*

Closure is often characterised by rhythm figures, which are based on repetition (see Ch.4). Very often these figures can work in both ways: generating the rhythm and the impression of continuity throughout the period, or indicating the closure, when their dynamics is somehow different (in this case it is named a non-structural device, see Herrnstein Smith 1968: 155). Their special functions are revealed, mostly, when they occur in combinations (cf. Ps-Demetrios, *De eloc.* 268).

For example, P.1 (EX 87) reveals a circle structure (RING), which is achieved by the repetition of the same word-stem (κόσμ-ος and ἄ-κοσμ-ία) or a polyptoton (PLPT) at its beginning and in the end, an antithesis, which is the basis of the whole period (ANT), and a hiatus as a prosodic marker of a boundary (HIAT), see Part III.2. Neither of these figures (except hiatus, see Ch.3.4.3.3) is exclusively characteristic of closure, but together they create an impression of it. The impression of closure can also be achieved by litotes or other types of word repetition (see Ch.3.4.1.3), or just by word order, as in EX 91.

In another example, the closure is achieved by another combination of figures: chiasmus (CHI), structural parallelism or a parison (PARIS) and homoeoteleuton (HOM), accompanied by polyptoton and almost isosyllabic structures, see Gorgias, *Helen* P.2 (DK 82 B 11.i):

(EX 97)

ἴση γὰρ			3 +	
ἄμαρτία	καὶ ἄμαθία		4 + 5	= 9
μέμφεσθαί τε	τὰ ἐπαινέτᾳ		4 + 5	= 9
καὶ ἐπαινείν	τὰ μωμητά.		4 + 4	= 8

Next to these figures, there are other markers of closure, for example isocolon (ISOC), combined with parison, homoeoteleuton and anaphora (ANA) in P. 6 (EX 29). All these figures function as closure markers because of a preceding change (absence of these figures or difference in pattern, see Herrnstein Smith 1968).

Other figures, which may mark the endings, are discussed below, as auto-reference (Ch.3.4.4), asyndeton (Ch.3.4.2.2), hiatus and rhythm change (both in Ch.3.4.3).

### 3.4.1.3. *Special figures of closure*

Several stylistic and rhetoric figures in Gorgias, *Helen* indicate only closure and do not occur otherwise. Some of these devices belong to the domain of syntax



### c) Syntax (SY): a sentence and a period

Sometimes a closure can be characterised only by the completeness of a sentence: either it is a minimal sentence (having all required parts, i.e. S, V (or Pd) and O in the case of transitive verbs), or a complex sentence with protasis and apodosis or two coordinated parts. Usually the change of grammatical subject indicates the beginning of a new sentence, corresponding to a rhetorical period, e.g. in P.32 and P.33, P.29 and P.30, P.23a and P.23b, P.19b and P.19c. However, sometimes the boundaries of a sentence and a period do not match. For example, P.21a-d is described as 4 complex periods, but only one sentence, whereas in P.16ab there are two grammatically complete sentences, which form only one period. (See Part III.2).

### d) Litotes (LIT)

Litotes occurs only a few times during this speech, always in the end of the period and usually in combination with other figures,<sup>50</sup> see Gorgias, *Helen* P.5 (DK 82 B 11.iii):

(EX 100)

ἡ γυνή      περὶ ἧς      ὅδε ὁ λόγος,  
οὐκ ἄδηλον      οὐδὲ ὀλίγοις.

In EX 100 litotes (underlined) is combined with anaphora and sound-play (Herrnstein Smith 1968: 160–164), whereas the interaction between these figures strengthens the closure.

### e) Epiphora (EPIPH), epanalepsis (EPAN)

Closure can be achieved by other repetition figures: the repetition of final words in the adjacent periods (epiphora) or the repetition of the same word at the beginning and in the end of the period (epanalepsis, concatenation), see Ch.4.4. The latter is characteristic to the beginning as well. These figures are close to polyptoton and other types of word repetition. In Gorgias, *Helen* the occurrences of such figures are rare: see EX 94, where epiphora between the middle and the end of the period functions as a closure (cf. also P.7b in Part III.2).

## 3.4.2. Beginning (BEG)

The beginnings of periods are marked by different figures or their combinations, which mark beginnings only occasionally (Ch.3.4.2.1), or by rhetorical figures, syntactic or lexical devices, which at least in Gorgias, *Helen* occur only at the beginnings (Ch.3.4.2.2).

### 3.4.2.1. Occasional lexical markers and figures at the beginning of a period

Beginnings are usually indicated by different lexical markers, although only a few of them are characteristic to the beginnings only. Sometimes a period begins with special introducing words or phrases, called introductory pivots (PIV), e.g. ὅτι μὲν οὖν in Gorgias, *Helen* P.5 (EX 35). Such pivots are often composed of grammatical and logical connectors, forming independent rhythm units, see Part IV.3.1. Several words, which tend to occur at the beginning of a period, belong to prepositive and preferential words (Ch.2.1–2). Although they can begin smaller units as well, some of them (e.g. οὖν or γάρ) occur in particle combinations, which usually indicate the beginnings of greater units (Denniston 1996).

Initial anaphoric pronouns usually indicate the closure of the preceding part and the beginning of a new period (Führer 1967, cf. Ch.2.2.3). In Gorgias, *Helen*, this occurs for example in P.16a ταῦτα δέ (EX 95). The beginning can be indicated by auto-referential phrases (AUTOREF) as well (Ch.3.4.4). For example, P.8a (ὅστις μὲν οὖν καὶ δι' ὅτι καὶ ὅπως ἀπέπλησε τὸν ἔρωτα τὴν Ἑλένην λαβών, οὐ λέξω, see EX 86) presents a combination of auto-reference with aposiopesis, introductory pivot (ὅστις μὲν οὖν) and another initial figure: anaphora (ANA, Ch.4.4.1).<sup>51</sup> In Gorgias this is the only example of such parallelism in the period-initial position.

### 3.4.2.2. Asyndeton (ASY)

The absence of a connector, asyndeton can mark a beginning of a period (sentence),<sup>52</sup> as in the end of the speech in Gorgias, *Helen* P.36 (DK 82 B 11.xxi):

(EX 101)

ἀφείλον τῷ λόγῳ  
ἐνέμεινα τῷ νόμῳ  
ἐπειράθην καταλῦσαι

ἐβουλήθην γράψαι

δύσκειαν γυναικός,  
ὄν ἐθέμην ἐν ἀρχῇ τοῦ λόγου·  
μώμου ἀδικίαν  
καὶ δόξης ἀμαθίαν,  
τὸν λόγον  
Ἑλένης μὲν ἐγκώμιον,  
ἐμὸν δὲ παίγνιον.

In EX 101 asyndeton occurs at the beginnings of four concluding sentences of the speech (corresponding to sub-periods of a complex period). On the level of greater text parts (EX 101), asyndeton is characteristic to epilogues (cf. Aristotle, *Rhet.* III.19.6, 1420a). Asyndeton is common between greater syntactic units (interperiodically) or period-internally.<sup>53</sup>

Asyndeton in Greek language has been regarded as a rudiment of Indo-European.<sup>54</sup> In ancient rhetorical theory it was discussed under brachylogy, see Arist. *Rhet.* III.12.4 (1413b–1414a) and *Rhet.* III.19.6 (1420), cf. Lausberg 1960: 353–355. In the following analysis, two types of asyndeton are distinguished,

having different functions: stylistic or intra-periodic asyndeton (rare in Gorgias, *Helen*, cf. P.18b), which was studied already in antiquity and gives an illusion of rapidity and strength (especially when presenting verb forms or lists of nouns). The second, an inter-periodic asyndeton (occurring in *Helen*) functions in the first place as a negative marker of a new element (at the beginnings of new text parts, quotations or direct speech). This type of asyndeton can be described as asyndeton *par rupture* (which marks the passage from one type of discourse to another) or a formal asyndeton.<sup>55</sup>

### 3.4.3. Change, continuation and other markers of textual unit boundaries

#### 3.4.3.1. Change in rupture

Period and colon boundaries can often be indicated by different types of changes.<sup>56</sup> This can be explained as a rupture on unit boundaries: together with a new unit, new rhythm or new syntax type begins. For example, the beginning of a new period or colon might be indicated by a change in rhythm pattern (RH.CH), as between P. 4 and P.5. P.4 is formed of 4 isosyllabic complex cola, each consisting of 2 cola and 14 syllables, whereas in P.5 we find complex cola, which are composed from a greater number and shorter commata, which are unequal in length (see Part III.2). But the change may occur only in syntactic structures: e.g. the whole P.1 is a nominal sentence without copula, relying on parallel (coordinated) structures, whereas P.2 begins with different ACI constructions, depending from the impersonal verb χρή.

#### 3.4.3.2. Change in anticipation

Change (cf. καμπή, συστροφή in Ps-Demetrios) can function as an anticipation of the end or as a transition figure (Herrnstein Smith 1968),<sup>57</sup> see Gorgias, *Helen* P.7b (DK 82 B 11.iv):

(EX 102)

οἱ μὲν πλούτου μεγέθη,	7	
οἱ δὲ εὐγενείας παλαιᾶς εὐδοξίαν,	13	
οἱ δὲ ἀλκῆς ἰδίας εὐεξίαν,	11	
οἱ δὲ σοφίας ἐπικτήτου δύναμιν	12	
	ἔσχον·	2
	καὶ ἦκον <u>ἅπαντες</u>	3+3 = 6
ὕπ' ἔρωτός τε φιλονίκου	9	
φιλοτιμίας τε ἀνικῆτου.	10	

The beginning of EX 102 reveals four parallel SO phrases, ended by a verb, which forms an independent rhythm unit (comma) and could indicate closure (as a clausula). However, this comma is continued by another one (with another verb form). The change in rhythm and syntax indicates that the following two parallel preposition phrases are indeed a closure.

### 3.4.3.3. *Hiatus (HIAT) as a rupture*

The function of a hiatus in Greek prosody is not entirely clear. In ancient rhetorical theory it was either prohibited (in the school of Isocrates), ignored (by stoics), or recommended for stylistic effects, in order to achieve the illusion of vehemence or grandeur.<sup>58</sup> Modern theory knows two functions of hiatus: at first, a hiatus, which occurs at period-ends or colon boundaries in a pausal function, without producing special stylistic effects (Devine – Stephens 1994: 254–255). This type of hiatus was not studied by ancient rhetorical theory. And secondly, a period-internal hiatus, which has already been regarded as a stylistic device with (possibly) emphatic force by ancient rhetorical theory, as well as some modern authors (Pearson 1975, 1978).<sup>59</sup>

According to this double function, both types of hiatus in Gorgias, *Helen* are registered separately: a) the pausal hiatus (HIAT), which occurs at period or colon boundaries, e.g. in *μεγέθη* **H** οἱ *δέ* in P.7b (EX 102) or the second hiatus in EX 103 (in bold); b) possibly emphatic colon-internal hiatus (INT.HIAT), underlined in *Helen* P.9 (DK 82 B 11vi):

(EX 103) ἡ βίαι H ἀρπασθειῖσα **H** ἡ λόγοις πεισθειῖσα

In X 103 (and other places) final short vowels have been classified as being in graphic hiatus. The problems concerning the study of this phenomenon are explained below.

#### a) The problem of elision

P.5 (EX 100) presents two examples of hiatus from the ends of adjacent cola, so-called graphic hiatuses or clashes between a short final vowel and initial vowel (or diphthong): ὄδε **H** ὁ λόγος, and οὐδὲ **H** ὀλίγοις. In most modern studies, dedicated to hiatus, they would not be classified as such, because of the possibility of elision of final short vowels (Dover 1997). However, the analysis of quantitative rhythm supports the explanation of these examples as hiatus: the cola end by same rhythm patterns (UUHUUx and —UHUUx) (where ‘ppM’ and ‘pM’ are disrupted by a hiatus), whereas supposing an elision of a short final vowel (ὄδ’ and οὐδ’) would give us un-symmetrical ends (UUUx and —UUx). This, colon-internal hiatus could yet be described as a boundary-hiatus, as it helps to create appositive groups. In order to be able to study different types of word junction graphical hiatus (when it occurs in editions) has been

taken into account. The number of disputable syllables is given in round brackets on the line of syllable count, e.g. P.10b: SYL 69 (1 elided).

### **b) Problems of appositive group**

The clash of vowels within an appositive group is regarded as nearest to word-internal hiatus (Devine – Stephens 1994: 253–254), therefore it is here not counted as a hiatus. This choice relies on the practice of Isocrates, who avoids hiatus totally, but allows examples like *περὶ ἦς* (cf. EX 100). Therefore the occurrences of vowel clashes between ‘p’ and ‘M’, e.g. *καὶ ἀμαθία* and *τὰ ἐπαινετά* in P.2 (EX 97) are not counted as hiatus and are not reflected in the statistics. The question is similar in other types of appositive groups, like *τὰ δὲ ἐναντία* in P.1. As here ‘pM’ is interrupted by ‘q’, which is a connective (see Ch.2.3.2), this vowel clash is regarded as appositive group internal and not classified as a hiatus. This and other examples like *πράγματι δὲ ἀρετή* in P.1 occur with appositive words (as ‘MqM’), which function as a glue between content words and do not have strong pausal functions.

Therefore in this dissertation, only these vowel clashes have been classified as a hiatus, which occur colon-internally between content words or emphatic function words: either between two CWs or EFWs, between a CW and EFW (or vice versa), or between a CW/EFW and following FW (but not vice versa).

## **3.4.4. Auto-reference (AUTOREF)**

### **3.4.1.1. Auto-reference as a transition figure**

Auto-reference means the remarks of the author (speaker or enonciateur, cf. Calame 1986, Jakobson 1968: 353) in the 1st person, concerning himself and his activity, and giving information about his intentions. When it occurs at the boundaries of paragraphs and other sub-parts of the text, it indicates the beginnings of arguments, passages to conclusions etc., being one of the clearest markers of transition between textual units. Although there is a general agreement concerning auto-reference’s transitional character (Lefkowitz 1963, 1991: 55–56, Schadewaldt 1928: 300), the phenomenon is referred to differently: ‘frame’ (Herrnstein Smith 1968: 101) or ‘1st person statements’ (Mullen 1982, Lefkowitz 1963, 1991).

In Gorgias, *Helen* auto-reference occurs mostly at the beginning of periods (P.8a, P.8b or P.4), which at the same time occur in the ends of the sub-parts of the speech, indicating thus a transition on different levels (between periods or parts of the speech). Sometimes a whole period can function as an auto-referential transition, e.g. P.17 (EX 48) or P.23b (EX 18). This is more thoroughly explained in Part IV.1.5, which presents the role of auto-reference in the dynamics of the whole speech.

### 3.4.1.2. Problems concerning auto-reference

The remarks of the speaker in 1st person singular, concerning his activity are classified as auto-reference in the following analyses.<sup>60</sup> However, all 1st person plural statements are not automatically considered as such, for example Gorgias, *Helen*, P.25 (DK 82 B 11.xv):

(EX 104) ἄ γὰρ ὁρῶμεν, ἔχει φύσιν

In EX 104 the verb ὁρῶμεν does not refer to a specific activity of the author; it is a general remark on the author and the public together and therefore not considered as auto-reference.

The notion of auto-reference should not be limited to 1st person verb forms; in several cases this notion has been enlarged.

1) Implicit auto-reference occurs in general remarks on the role of the orator, with the impersonal verb forms χρή (P.2) and δεῖ (P.16ab, EX 95).<sup>61</sup> It is seen also in 3rd person singular medium verb form, in Gorgias, *Helen* P.30 (DK 82 B 11.xvii):

(EX 105)  
καὶ τὰ μὲν δειματοῦντα πολλὰ μὲν παραλείπεται, ὅμοια δ' ἐστὶ τὰ  
παραλειπόμενα οἷάπερ <τὰ> λεγόμενα.

The author refers to many scary things, which he leaves untold in a figure of omission.

2) The function of verbal adjectives in P.11 (ἀναθετέον and ἀπολυτέον) and P.33 (μεμπτέον and νομιστέον) is close to the function of impersonal verb forms. As they occur in the ends of the sub-parts of the text and refer to the tasks of speaker (proposing a conclusion to his public and indicating what has to be done), they are analysed as auto-reference.

3) The so-called *Ich*-deixis in ὅδε ὁ λόγος, P.5 (EX 100, cf. Schwyzer – Debrunner 1988 II: 208) here refers to the author (i.e. his speech) and is analysed as auto-reference.

4) Another possible auto-reference occurs in rhetorical questions, e.g. P. 32 (DK 82 B 11.xix):

(EX 106) εἰ οὖν ... τί θαυμαστόν;

Here (as in P.14 and P.33) questions present a conclusion to the public, but are not considered as auto-reference, because they can include both the public and the speaker. This is close to other conclusive remarks, like in P.12: δῆλον ὅτι, which are not considered as auto-reference either.

## 4. RHETORICAL/STYLISTIC MEANS

### 4.1. Structural parallelism and repetition

In Ancient Greek parallelism is most important for the organisation of text: for syntax, its coordinating and antithetical structures (Denniston 1960), for argumentation (Lloyd 1966) and for rhetoric, because several rhetorical figures are based on parallelism (Fehling 1969). Curiously, a notion of parallelism does not occur in the rhetorical treatises until Eustathios in the 12th century. There are two main principles for defining parallelism, either on the basis of semantics or on the basis of form (Ostrowitz 2003: 546–552).<sup>62</sup> The first relies on the repetition of the same idea, whereas the grammatical form of both utterances is not important. This is the source of all arguments from analogy (see Lloyd 1966). The second relies on parallelism in structure and has been equated with several rhetorical figures: parison, exaequatio etc. (Ostrowitz 2003: 546–552 and below). This will be discussed in connection to the problems it presents for analysis and through the figures based on it. As concerns repetition, it is the foundation of most rhetorical style figures (σχήματα τῆς λέξεως), including parallelism as structural repetition (Fehling 1969, van Groningen 1958).

In the following analysis the occurrences of parallelism are indicated on two levels. On the level of the period, the occurrence of parallelism is indicated whenever it has a distinctive function (indicating a closure or a beginning, or being an underlying construction device for the whole period). For example in P. 8a the introduction of parallel cola in the end functions as a closure (CLO:PAR). However, when parallelism has no distinctive function, it is not registered in the description on the level of periods, but on the level of cola (by indicating the number of occasions when cola participate in parallel constructions).

#### 4.1.1. Problems in analysis and count

The statistical analysis of parallelism is difficult for two reasons: at first, several rhetorical figures are based on parallelism, whereas different figures (parallelism, parison, antithesis etc.) may coincide and overlap, and it is therefore difficult to avoid a double count.<sup>63</sup> Secondly, there is an overlap of different levels of textual units: commata, cola, complex cola and periods, which in turn causes a double count. Therefore, in order to simplify analysis and to be able to compare the roles of different rhetorical figures, it is not the number of the whole structures of antithesis or parallelism that is indicated (because one series of parallel phrases may have 2, another one 5 members), but the number of participations of different cola in these structures (see also below).

#### **4.1.1.1. *Overlap of figures based on parallelism***

Parallelism is the basis of the following figures, studied here: phrase parallelism (corresponding to correlative and/or additive structures in syntax and sense), antithesis, chiasm, parison, anaphora (with epiphora and epanaphora, Ch.4.2), homoeoteleuton (Ch.5.2). Gradation and isocolon are usually based on parallelism as well (but might not be, cf. P.4 and P.29 in Part III.2 and Ch.4.3).

In this study the first and basic principle for the classification of parallelism figures is the distinction between antithesis and parallelism, i.e. parallelism with semantic and structural opposition or distinction (structural antithesis, cf. Ch.4.1.4) and parallelism without it (other cases). Therefore every case of structural parallelism is classified according to its sense either as antithesis or parallelism. This is not easy, as semantic opposition (classified as antithesis) is close to simple distinction (classified as parallelism), therefore double criteria, sense and structure, have been used (cf. Denniston 1960, Fehling 1969). For example in P. 1 (EX 107): *πρόγματι δὲ ἀρετή, λόγῳ δὲ ἀλήθεια* is classified as structural and semantic antithesis and registered as such twice: as 2 cola participating in antithesis (under colon count) and 2 opposed words (under word count, which gives additional features). However, in P. 2 (EX 7) *καὶ λόγον καὶ ἔργον* is not counted as structural antithesis, because it has been presented as a complementary pair (it is registered as 2 cola participating in parallel structures under colon count), whereas the semantic opposition is registered under the word count (see Part III.2).

Other figures based on parallelism are at first classified as parallelism or antithesis, and then as chiasmus, parison etc. Therefore the total number of cola, occurring in parallel structures is equal to the sums of the occurrences of antithesis and the occurrences of (other) parallel figures, e.g. in P.1 it is 14 according to the description: COL ... [ANT 10, PAR 4].

#### **4.1.1.2. *Overlap of units***

Another problem for the quantitative analysis of parallelism is that the same elementary commata and cola can occur as counterparts of other complex cola, whereas the number of participations of these elementary cola in parallel structures surpasses often the number of elementary cola itself. For example in Gorgias, *Helen* P.13a, a period composed of 9 complex cola and 16 elementary cola and commata is described as 4 antithetic and 13 parallel cola; and P.2 is analysed as composed of 8 complex cola and 16 elementary commata and cola, whereas 2 cola participate in antithetical and 15 in parallel phrases. One example of this description is Gorgias, *Helen* P.1 (DK 82 B 11.i):

(EX 107)

Κόσμος	πόλει μὲν εὐανδρία,	2 + 7 = 9
	σώματι δὲ κάλλος, ψυχῆι δὲ σοφία,	6 + 6 = 12
	πράγματι δὲ ἀρετή, λόγῳι δὲ ἀλήθεια·	7 + 7 = 14
	τὰ δὲ ἐναντία τούτων ἀκοσμία.	8 + 4 = 12

Period (1) is composed of 4 complex cola (each corresponding to one line in the lay-out) and 8 elementary cola and commata. These are analysed as 10 antithetical cola (Κόσμος πόλει μὲν... vs. τὰ δὲ... ἀκοσμία (5+1 cola); σώματι δέ... vs. ψυχῆι δέ...; πράγματι δέ... vs. λόγῳι δέ ...) and 4 parallel cola (πόλει μὲν... and σώματι δέ...; σώματι... σοφία and πράγματι... ἀλήθεια). Here the number of occurrences of cola in different parallelism figures again surpasses the number of elementary cola (14 vs. 8), indicating the importance of parallelism and the high flexibility of phrase rhythm (see below).

#### 4.1.2. The flexibility of phrase rhythm

The number of the occurrences of the subparts of a period (cola) participating in different parallelism figures indicates the flexibility of phrase rhythm. The immediate counterparts of a period are complex cola (they correspond to cola, which form shorter periods in the examples, found in ancient rhetorical treatises). Complex cola can (but must not) be identical with elementary units, cola and commata. For example in EX 107 the elementary rhythm units (cola, commata) and the immediate counterparts of the period (complex cola) are not identical. However, the pair of parallel cola in the end of EX 33 corresponds to immediate counterparts of the period (complex cola).

As many important rhythmic phenomena occur simultaneously on (or between) different hierarchic levels of phrase rhythm, an index of flexibility, showing the ratio of the number of immediate subunits of the period to elementary subunits, could be useful (see Table 6 and Part IV.1.7). But the rhythmic flexibility of one or another period is revealed even more by a comparison of the number of complex cola, the number of its elementary sub-parts and the number of certain phrase rhythm features (i.e. anaphora or homoioteleuton): usually the number of phrase rhythm features surpasses the number of complex cola and even elementary cola and commata, as in EX 107 above.

### 4.1.3. Parallelism in argument: different syntaxes

#### 4.1.3.1. Structural and syntactic parallelism in coordinated structures

By its definition, parallelism has to occur either in sense or structure (Ch.4.1). For ancient Greek, it is usual that the parallelism in sense is accompanied by parallelism in syntactic structures, e.g. in coordinating structures like: μέν ... δέ, οὗτος ... ὡς etc. (Schwyzer – Debrunner 1988 II: 553–600, 633; Carrière 1960: 119–133, 140–146; Denniston 1996), which is frequent in Gorgias as well. These are one of the most frequent types of Greek complex period. Another type of a period, based on a so-called hypotactical sentence (composed of protasis and apodosis) is not classified under parallel figures. However, some examples reveal how problematic this division of syntax can be, e.g. Gorgias, *Helen* P.14 (DK 82 B 11.viii):

(EX 108)

εἰ δὲ λόγος	<u>ὁ πείσας</u>	4+3 = 7	
	<u>καὶ τὴν ψυχὴν ἀπατήσας,</u>	8	[=15]
οὐδὲ πρὸς τοῦτο χαλεπὸν	<u>ἀπολογήσασθαι</u>	5+3+6 = 14	
	<u>καὶ τὴν αἰτίαν ἀπολύσασθαι</u> ...	10	[=24]

EX 108 presents a conditional sentence, which therefore cannot be classified as syntactic coordination (Schwyzer – Debrunner 1988 II: 633–689). However, the main phrase in apodosis begins with a correlative οὐδέ, which answers to the δέ in protasis (cf. Denniston 1996) and both halves correspond to each other in structure, according to the following scheme:

Scheme (10)

IF ... EL1a (HOM1) & EL 1b (HOM1), THEN... EL 2a (HOM2) & EL 2 (HOM2)

Both sentence-parts present two coordinated elements (EL1ab, EL2ab), which end in homoeoteleuta (HOM1, HOM2). Although grammatical forms and word types are different, the constructions reveal analogy, as the protasis and the apodosis are both in the form of nominal sentences with a subject, a predicative and a by explicative sentences (introduced by γάρ) missing copula (SøPd), and the predicatives are both nominal verb forms with accusative singular feminine complements.

#### 4.1.3.2. Parallelism and analogy. Structural vs. syntactic

The clash in EX 108 between sense and rhythm from one side and syntactical (formal) structures from the other side can be explained as a clash between two axes: paradigmatic and syntagmatic.<sup>64</sup> The reason for this is that parallelism (or analogy) is not (and has not to be) accompanied by similarity (or coordination)

in sentence structure; or vice versa, coordinating sentence structure should not be accompanied by parallelism in sense.<sup>65</sup>

The problem can be illustrated by the following example, an enthymema (see Kennedy 1991), which consists of two halves, Gorgias, *Helen* P.13b (DK 82 B 11.vii):

(EX 109)

ὁ μὲν γάρ	ἔδρασε δεινά,	ἡ δὲ ἔπαθε·	3+5+5
δίκαιον οὖν	τὴν μὲν οἰκτῖραι,	τὸν δὲ μισῆσαι.	4+5+5

The chiasmic antithesis (ὁ μὲν ... ἡ δέ, τὴν μὲν .... τὸν δέ) and the parallelism in syllabic rhythm prevent the analysis of these two sentences as two periods (cf. Part III.2). On the level of sense there are correspondences as well:

Scheme (11)

HE DID BAD (he-bad), SHE SUFFERED (she-sufferer from bad) =>  
SHE SHOULD BE PITIED (as sufferer-from bad) and HE HATED (as bad)

The conclusion to the rhetorical syllogism is achieved by using an implicit second premise (it was presented in P.13a): bad should be hated, sufferers from bad pitied. Because of evident parallelism on the levels of sense and phrase rhythm, EX 109 is described as one period, whereas it is analysed as two sentences because of the change of the grammatical subject.

There are even more difficult examples of a clash between sentences and rhetorical periods, for example the second half of the sentence, introduced by the explicative γάρ in the end of P.2 (EX 7). These cases are described as parallelism when the analogy in sense is supported by rhetorical figures, but not otherwise.<sup>66</sup>

#### 4.1.3.3. Description of different types of parallelism

Structural parallelism can occur according to 5 simple types, presented on Scheme 12, although not all of them occur in Gorgias, *Helen*.

Scheme (12)

- 1) aba'b' only in period-parts, e.g. at the beginning of P.7b
- 2) (ab a'b') q only in period-parts, e.g. in the second sub-period of P.20b
- 3) q (aba'b') P.22a
- 4) (ab) q (a'b') no exact match in Gorgias, cf. (aa')q(bb') in P.18c
- 5) q (ab a'b') q P.18a, 19d

The first type of structural parallelism occurs in parison, i.e. isomorphically, where the same structure of sentences is repeated from the beginning to the end (aba'b'). However, it is possible to use introductory, closing or central pivots, according to No.2–4 (Lausberg 1960: 366–367, see Aristotle, *Rhetoric* III.9). In

the last type of structural parallelism (No.5) the central (parallel) part is framed by introductory and closing pivots.

All these structures can be classified as periods, but whereas No.1–3 occur more in parallelism or antithesis, No.4–5 correspond to circular structures.

#### 4.1.4. Antithesis (ANT)

Antithesis (opposition) is very important as an argumentation strategy (Lloyd 1996) and has already been explored as such in Aristotle, *Rhetoric* II.19.1 (1392a, cf. Cope 1877 ii: 179). At the same time it is included among the style figures as one of the possibilities for organising the period.<sup>67</sup> Ancient Greek rhetorical treatises started to distinguish antithesis between cola as a structural device (among σχήματα τῆς λέξεως) and antithesis between words as a figure of sense (among σχήματα τῆς διανοίας) and modern studies follow this practice (Lausberg 1960: 389–393, Fehling 1969: 295–307, Villwock 1992). In this dissertation antithesis is studied from three aspects:

- 1) Structural antithesis (opposition in sense, accompanied by syntactic parallelism)<sup>68</sup> is described under the count of cola, where all occurrences of cola participating in one or another antithetical structure are indicated. This means an occasional parallel count in the case of complex antithetic structures. For example, P.1 (EX 107) is composed of 4 complex cola, 6 elementary cola and 2 commata, whereas these 8 elementary units participate on 10 occasions in different oppositions (4 on the level of complex cola and 6 on the level of period).
- 2) Antithesis on the level of sense (semantics), without corresponding parallel structures.<sup>69</sup> Opposed notions can occur in different antithetic (or parallel) constructions; therefore it is useful to distinguish the number of words which are in semantic opposition, and the number of constructions, based on these words. For example, in P.1 (EX 107) the number of antithetic word pairs is only 6, although the number of participations in antithetic structures is 10. The number of antithetic words is indicated in the description of word level.
- 3) Structural antithesis is indicated in the description on period level, whenever it has a function of closure or introduction, or occurs as the underlying structural device for the whole period.

The problems of count can be demonstrated with Gorgias, *Helen*, P.12 (DK 82 B 11.viii):

(EX 110)

ὁ <μὲν> ἀρπάσας	ὡς ὑβρίσας	ἠδίκησεν,	4 + 4 + 4
ἠ δὲ ἀρπασθεῖσα	ὡς ὑβρισθεῖσα	ἔδυστύχησεν.	6 + 5 + 5

In EX 110 two antithetic complex cola in parison are each composed of 3 commata, whereas the corresponding cola are opposed to each other as well. The problem is, how it should be described: as 2 antithetic units on the level of complex cola or 6 antithetic units on the level of commata or 8 antithetic units (regarding both levels together)? In order to be able to study the complexity of Gorgias' rhythm structures, all possibilities are counted here, whereas on the level of word count 6 opposed words are registered.<sup>70</sup> Opposition in semantics is connected to another type of antithesis, the opposition of diathesis (i.e. of active and passive voice), which is not studied separately here (but frequently used by Gorgias, see Part III.2).

## 4.2. Other figures of structural parallelism

### 4.2.1. Chiasmus (CHI)

Chiasmus, the change of order of members in parallel phrases (abb'a') is another figure of parallelism. Although the notion (*chiasmus*) is missing in antiquity, the device itself is discussed in later treatises as *commutatio* (Lausberg 1960: 893, 395–397). It has been demonstrated that chiasmus is important for the parsing of the argument and constructing parallel periods or antithesis (Slings 1997).

Chiasmus occurring in Gorgias, *Helen* is described on the level of cola. It can form strings, e.g. in P.2 (EX 97) 6 cola form chiasmic structures and in P.6 (EX 76) 8 cola. Occasionally chiasmus functions as a closural figure, e.g. in P.13b (EX 109) or P.2 (EX 97), or as a cohesive device between periods (e.g. a chiasmus combined with polyptoton between P.5 and P.6), but due to its relative rareness it is not studied separately here.

### 4.2.2. Parison (PARIS)

Parison, isocolon or pariosis are notions which refer to syntactical parallelism, where in both parts the members of sentence occur in similar positions and forms. Parison is usually (and here) understood as the parallelism of cola with the same number of words and more or less the same sentence structure (and word order) in cola of approximately the same length. It is connected to paromoiosis (cola with similar endings), homoeoteleuton or homoeoptoton, as well as paronomasia or anaphora (Lausberg 1960: 359–374). Although in parison the cola might have the same number of syllables (as isocolon, Ch.4.3.1), it is rarely so in Gorgias, *Helen*.<sup>71</sup>

Parison usually requires the exact repetition of sentence structure, but it can occur in antithesis, e.g. in P.12 (EX 110) the first part of parison is from three isosyllabic (4 syllables each) commata: ὁ <μὲν> ἀπράσας | ὡς ὑβρίσας |

ἠδίκησεν, whereas the corresponding part uses slightly longer commata (6+5+5 syllables), in gradation: ἡ δὲ ἀρπασθεῖσα | ὡς ὑβρισθεῖσα | ἐδυστύχησεν. Some other examples are more problematic to classify, e.g. Gorgias, *Helen* P.21c (DK 82 B 11.xiii):

(EX 111)

<u>εἰς λόγος</u>	<u>πολὸν ὄχλον</u>	<u>3+</u>	
	ἔτερψε καὶ ἔπεισε	<u>4 = 7</u>	
	<u>τέχνη γραφεῖς,</u>	<u>3+4 = 7 (11)</u>	
	<u>οὐκ ἀληθείαι λεχθεῖς·</u>	<u>4+</u>	
		<u>7 = 11</u>	

EX 111 is analysed as three parallel structures (6 cola or commata participating in parallelism or antithesis):

- 1) Between the first two cola there is an analogy of position (QUANT – NOUN, QUANT – NOUN), although the words belong to different word classes (a numeral and an adjective) and have different grammatical functions (a subject and an object), therefore it is counted as a parison (and an antithesis).
- 2) The second pair is composed of two verbs (each forming a comma) and is too short to be counted as parison (but it is registered as parallelism).
- 3) The third pair of cola reveals parallelism in syntactic constructions and word classes (both: NOUN dat., PART pass. nom.), and it is not too short. Although the second half of the period begins by negation, which does not have any corresponding elements in the first half, it is registered as a parison (and antithesis), cf. Part IV.2.3.

### 4.3. Parallelism and repetition in syllabic rhythm

#### 4.3.1. Isocolon (ISOC)

As the invention of isocolon is attributed to Gorgias, it has to be studied separately.<sup>72</sup> Here isocolon is understood strictly as repetition of adjacent cola having the same number of syllables, without the requirement of structural parallelism. Although parison (structural parallelism) and isocolon usually occur together, there are some exceptions, as in Gorgias, *Helen* P.4 (see Part III.2) and P.29 (DK 82 B 11.xvii):

(EX 112)					
πολλοὶ δὲ	ματαίους πόνοις	3 + 5 =	8		
	καὶ δειναῖς νόσοις		5	=	13
	καὶ δυσιάτοις μανίαις		8		
		περιέπεσον·	5	=	13 [26]
οὕτως εἰκόνας	τῶν ὀρωμένων πραγμάτων	5 + 8		=	13
ἢ ὄψις ἐνέγραψεν	ἐν τῷ φρονήματι.	3+4+6		=	13 [26]

In EX 112 the period is divided into 4 complex cola of 13 syllables each (or two half-periods of 26 syllables). There is no exact parallelism in syntactic and rhythm units, but the parsing corresponds to minor phrase and appositive group boundaries.

### 4.3.2. Gradation (GRA)

Gradation, the repetition of increasing cola is one of the most important devices of phrase rhythm in Gorgias. It can be studied from the point of view of word and phrase rhythm as adding commata or words to each following colon, or from the point of view of syllabic rhythm as adding syllables to each following colon. In rhetorical theory the notion (*gradatio*, *klimax*) has been used for the phenomenon of concatenation (*epiploke*), which binds adjacent periods by word repetition at the end of the first and at the beginning of the next period (Lausberg 1960: 913, 246–247, 315–317). The phenomenon, described in modern authors as gradation (*Steigerung*) had the names, such as bicolon (tricolon, tetracolon) auctum or incrementum, referring to the practice of ending sentences (periods) by augmenting the last colon. Usually gradation is a strong clausal phenomenon and therefore it has already been described under period description (cf. Part IV.1.6). Although more often the notion refers to rising progressions, both rising and diminishing progressions can be described as gradatio (*klimax*), e.g. in Ps-Demetrios *De eloc.*270 (see Chiron 2001: 196). However, diminishing progressions remain less well studied, especially their connections with the usage of clausulas.<sup>73</sup>

When gradation occurs as augmentation in cola, it is achieved either by adding word(s) to each of the following members in a row (especially to the last one), as ἔθελξε καὶ ἔπεισε καὶ μετέστησεν αὐτήν in P.18b (EX 99) or syllables, as in P.12 (EX 110), or commata, words and syllables as in the last period of the speech, P.36 (EX 101). Diminution can occur as well. For example, Gorgias, *Helen* P.2 (EX 97) ends in a chiasmic parison, where the first colon has 9 and the second one 8 syllables. In syllabic rhythm it has been registered as [SL.RI :GRA], belonging to gradation.

For analysis of the flexibility of phrase rhythm, these different types of gradation have been described under colon count. For example in the analysis of P.12 altogether 10 occurrences of gradation are registered. It can be asked

whether it is justified to describe small differences in syllable numbers (4 and 5, 8 and 7 etc.) as a gradation. The analysis of different types of gradation combinations (Part IV.2.3.3) reveals the necessity of regarding syllable numbers.<sup>74</sup>

## 4.4. Parallelism and word repetition

Different types of word repetition, usually connected to syntactic parallelism (but sometimes not) appear in ancient rhetorical writings under various names. The tradition of connecting these repetition figures to syntactic parallelism and periodic structure begins with Aristotle, *Rhetoric* III.9. Usually this type of repetition of words marks colon boundaries and has a cohesive function within a text, as it creates connections between periods or between cola within a period (Slings 1997). Below two types of repetition are distinguished: periodic word-repetition, where repeated words occur on period or colon boundaries (Ch.4.4.1–2), and un-periodic (usually period-internal) word-repetition, where repeated words do not occur on boundary positions, but within a period or a colon (Ch.4.4.3).

### 4.4.1. Anaphora (ANA)

Anaphora, the repetition of a word occurring at the beginning of a phrase (colon, comma and period) is typical to ancient Greek from the very beginning (Fehling 1969, van Groningen 1958, Norden 1913). In ancient rhetorical writings the figure occurs under different names (*epanaphora*, *anaphora*, *repetitio*).<sup>75</sup> For the study and statistical research of anaphora, some further distinctions in its definition have to be made. The problems can be demonstrated by an example from Gorgias, *Helen*, P.3 (DK 82 B 11.ii):

(EX 113) ὁμόφωνος καὶ ὁμόψυχος γέγονεν

In EX 113 two adjacent commata include compound adjectives with the same initial part (ὁμό-). Could it be described as an anaphora? The same problem occurs with the repetition of a prefix and preposition in P.22b (ἐκ τοῦ σώματος ἐξάγει)? Here both cases are classified as partial anaphora (ANA.PT), whereas prosodic variants of words at the beginnings of phrases are counted as (full) anaphora, e.g. οὐκ and οὐδέ in P.5 (EX 100) or εἶθ', εἴτε in P.35.<sup>76</sup>

The second problem is, whether EX 113 should be described as an anaphora at all. By the definition of anaphora the words in initial positions should be repeated, but the very first position in the second comma is filled by a connector (καί) and not by the repeated ὁμό-. Here EX 113 and other similar cases are classified as anaphora, because καί is a prepositive (p) forming an appositive

group with the following *ὁμόψυχος*, which is the nucleus of the group. Otherwise, connectors such as *καί* or others are counted as anaphora only when they are at the beginnings of cola or commata, the same is valid for definite articles (especially in the function of pronoun), see P.7b *οἱ μὲν... οἱ δέ* (EX 102). Partial and full anaphoras are close to other types of word-repetition, for example the polyptoton in P.19a (*ῥοιοὶ δὲ ῥοιοὺς περὶ ῥοίων*).

Another, interlocking type of anaphora occurs between complex cola following each other (as: a-----b----- a'-----b'-----), see Gorgias, *Helen* P.20b (DK 82 B 11.xii):

(EX 114)

ὁ μὲν οὖν πείσας	ὥς ἀναγκάσας ἀδικεῖ,
ἢ δὲ πεισθεῖσα	ὥς ἀναγκασθεῖσα τῷ λόγῳ... ἀκούει

Here the particle *ὥς* occurs in the same position in both cola, forming an anaphora similar to the anaphora at the beginnings of half-verses (x----a--b--y/x'----a--b'--y'). The repetition is coincidental with adjacent polyptota (in antithesis) and parison; therefore it can be regarded as functional.

## 4.4.2. Other types of periodic word repetition

### 4.4.2.1. Epiphora (EPIPH)

Epiphora (or epistrophe), the repetition of a word at the ends of adjacent cola is not very frequent in ancient rhetorical theory (Lausberg 1960: 321-322), although it can occur in ancient Greek (Fehling 1969: 320). Epiphora can be combined with anaphora as a sympleke (Ch.4.4.2.2). It is close to homoeoteleuton and is not distinguished from it (as *paromoiosis*) in Aristotle's *Rhetoric* III.9.9 (1410a). As every epiphora corresponds to homoeoteleuton, but not vice versa, the repetition of final words is not registered as homoeoteleuton in the description, in order to avoid a double count (Ch.5.2). In Gorgias, *Helen* epiphora is rare. It can be found in P.3 (EX 94) *γέγονεν* and in P.7a (DK 82 B 11.iv):

(EX 115) ἐκ τοιούτων δὲ γενομένη	ἔσχε
τὸ ἰσόθεον κάλλος,	
ὁ λαβοῦσα καὶ οὐ λαθοῦσα	ἔσχε·

In EX 115, however, due to the complexity of the analysis of phrase structure (see Part III.2) it is difficult to distinguish epiphora from epanaphora (cf. Part IV.3.2.3.1).

#### 4.4.2.2. *Symploke*

Symploke (*complexio*) is the repetition of the initial and the final words in two consecutive periods or cola (as: a.....b a'.....b', Lausberg 1960: 321-322). Symploke in a strict sense does not occur in Gorgias. However, when the repetition in endings is understood not as an exact repetition of a final word, but as a similarity of sounds (cf. Fehling 1969: 116), it can be found in several periods, e.g. *Helen* P.27 (DK 82 B 11.xvi):

(EX 116)    **καὶ τοῦ** καλοῦ                    **τοῦ διὰ** τὸν νόμον κρινομένου  
                 **καὶ τοῦ** ἀγαθοῦ                    **τοῦ διὰ** τὴν νίκην γινομένου.

Although there is no exact repetition of the final words in this example, most of the vowels in both final words are the same (in bold), creating the same impression.

#### 4.4.2.3. *Epanadiplosis (EPANADIPL)*

*Epanadiplosis* (or *epanaphora* or *epanalepsis*), *prosapodosis (reditio)* or *kyklos* is the repetition of the same word at the beginning and in the end of a period (or complex colon) or at the beginning and in the end of two consecutive periods (Lausberg 1960: 317–318). Although the framing of cola with similar words is not unusual in ancient poetry and prose (Fehling 1969: 320, Steinrück 1997 for *kyklos*, as well as Conrad 1990), the notion itself is not clearly fixed in ancient rhetorical writings.<sup>77</sup> There are no clear examples of epanadiplosis (*kyklos*) on the level of period in Gorgias, *Helen*. On the level of cola we can see framing in P. 34 (DK 82 B 11.xix):

(EX 117) ἦλθε γάρ,            ὡς ἦλθε

However, as the two repeated verbs are separated only by appositive words, this does not leave a very strong impression of framing two units and seems closer to anadiplosis (repetition of adjacent words). According to the analysis of the rhythm (see Part III.2), EX 115 might be classified as epanadiplosis (inside a period).

In Gorgias, analogous framing occurs only in combination with a polypoton, e.g. *Κόσμος ... ἀκοσμία* in P.1 (EX 107). In the case of longer adjacent (complex) periods such repetitions might not occur at the very first position, for example Gorgias, *Helen* P.31a and P.31b are united into one complex period through the repetition of the comma *καὶ σωμάτων* at the beginning of P.31a and in the end of P.31b. All such repeated words tend to form appositive groups of their own and function as flexible junctures.

#### 4.4.2.4. Concatenation (CONC)

Concatenation (in ancient theory also *epiploke*, *gradatio*, *klimax*, see Lausberg 1960: 913, 315–317) is the repetition of the same word in the end of one period and at the beginning of the following (scheme: .....a a'.....).<sup>78</sup> By structure it can be classified as a type of chiasmus (Ch.4.2.1). It is close to the repetition of adjacent words and it can be referred to with the same notions: *palillogia*, *anadiplosis* or *reduplicatio* (Lausberg 1960: 312–313).

Concatenation belongs to the development of narration in Herodotos (Trenkner 1960: 64–65); in Gorgias' *Helen*, which relies on argumentation, it is therefore rare. It occurs between the periods and is usually connected to polyptoton. One series of such concatenation occurs between P.17 and P.18c: P.17.... λόγον; P.18a αἱ γὰρ ἔνθεοι διὰ λόγων ... γίνονται; P.18b συγγινομένη ... γοητεΐαι; P.18c γοητείας δέ. There are some examples which are close to polyptoton or word-play: ... γυναικῶν, ἡ γυνή ... in P.5, and ... προβήσομαι καὶ προθήσομαι ... in P.8b (cf. EX 116, where the role of sound repetition is equally important).

### 4.4.3. Un-periodic word repetition and polyptoton

#### 4.4.3.1. Notion and problems of study

In the above-named types of word repetition the repeated words occurred either at the beginning or in the end of rhetorical (syntactic) units. In the other, un-periodic type of word repetition, the position of the word is not so important. Here the word can occur as a simple repetition (Ch.4.4.3.2) or as a polyptoton (Ch.4.4.3.3). Otherwise the repetition can be divided into full (i.e. where whole words are repeated) or partial (in the case of prepositions, prefixes or word-stems) repetition. Although the repetition of clitic particles, connectors or articles might have a stylistically important function, they are considered as less important for phrase rhythm and not taken into account here (except where they are structurally important, i.e. occurring on period-boundaries).<sup>79</sup>

Another problem in studying word repetition and polyptoton is the distance between repeated words: the function of the repetition is different, when it occurs between words which are distant from each other in one period or even cross-periodically (in keyword repetition, see below), or between words which occur in close proximity to each other or are adjacent (in *Kontaktstellung*, see Gygli-Wyss 1966 and Fehling 1969).

#### 4.4.3.2. Simple un-periodic word-repetition (WD.RP)

Simple un-periodic word-repetition occurs in cases where a word is repeated within a period in the same form (prosodic variants such as elisions are counted as repetition). The focus is on lexical words; although most particles are

excluded from the study of repetition, prepositions are studied, as being close to adverbials and occurring sometimes in composita. Cross-periodic word repetition is registered separately as keywords (see below).

Ancient rhetorical studies discussed un-periodical word repetition only in the case of immediately adjacent words as *palilogia* (*iteratio*), *epanalepsis* (*repetitio*), *anadiplosis*, *epizeuxis* (Lausberg 1960: 312–314). Although anadiplosis does not occur between adjacent cola or periods, it can be asked whether it should be classified as un-periodic, because these repetitions constitute new commata. In Gorgias, *Helen* such repetitions are almost non-existent. In EX 117 above, repeated verb forms are separated from each other only by appositive words (ΜϩρΜ). Examples like P.35 ἔπραξεν ἃ ἔπραξε (cf. P.9) are even closer to anadiplosis and form clearly independent minor phrases, whereas the relative pronoun between two verbs functions as a glue, joining two verbs into one colon.<sup>80</sup>

Keyword repetition or repetition of lexical words after great distances (e.g. near the beginning and the end of the period or in adjacent periods) performs other functions: instead of forming short phrases, it sustains the coherence of the period (or between periods). E.g. the repetition of different forms of the word λόγος in *Helen*, P.17–22b, especially in P.21a-d ensures coherence in the text part discussing the power of speech (see Part IV.1.3).

In Gorgias the words are not often repeated in the same form during the period, polyptoton is much more common, as if by the style rule, which forbids the use of the same case (stated by Ps-Demetrios *De eloc.* 65, see Chiron 2001: 192). A problem for statistics is how to classify the combinations of word repetition and polyptoton. For example in Gorgias, *Helen* P.10b the comparatives τὸ κρείσσον and τὸ ἥσσον are repeated several times. In order to avoid a double count, the repetition is, in such cases, classified as part of a polyptoton in the description of cola (as 7 PLPT) and the number of exactly repeated words is indicated in the word level description (as 5 WD, see Part III.2).

#### 4.4.3.3. Polyptoton (PLPT)

Polyptoton, the repetition of a word-stem, could be analysed in a strict sense as occurrences of a word in different cases (Gygli-Wyss 1966, Lausberg 1960: 325–345, Fehling 1969). Presently this notion has been enlarged as much as possible, in order to include all possible repetitions of word-stem and word-parts (e.g. prepositions).

Analysis poses two major problems: the connection of polyptoton to sound repetition (cf. Ch.5) and the role of the distance between the repeated word-stems. Repetition in adjacent words has a rhythm-building function, forming minor phrases and giving a cumulative effect, see [καὶ] πολέμιον ἐπὶ πολέμοις in P.26 (EX 96). Polyptoton occurring within greater distances is more important for textual cohesion: ensuring the closure of a period (Κόσμος ... ἄκοσμία in P.1, EX 107) or cohesion between different periods by repeating

the same keywords from period to period, e.g. in P.18a–c (Trenkner 1960: 64–65, Part IV.1.3 and IV.3.2.2). When polyptoton is regarded only in its strict sense and in contact positions (as Gygli-Wyss 1966), these functions of stem repetition remain ignored.<sup>81</sup> Therefore information on inter-periodic keyword repetition is included in {} brackets.

Problems concerning the enlarged notion of polyptoton can be demonstrated with Gorgias, *Helen* P.14: **λόγος, ἀπατήσας, ἀπολογήσασθαι, ἀπολύσασθαι** are analysed as 5 polyptota: 2 stems (**λόγ-**) and 3 word-parts (PT). It is close to *figura etymologica* (λόγος ... τοῖς λεγομένοις... λόγῳ), which has been considered as important in polyptoton (Gygli-Wyss 1966). The problem is connected to the analysis of partial repetition. Whereas prepositions and prefixes are counted as polyptota, a question arises, what to do with privative ἄ- in P.21b: τὰ ἄπιστα καὶ ἄδηλα? And should the word-play in *Helen*, P.25: ὀρώμεν, ὄψεως be regarded as polyptoton? Although here neither of these examples is classified as a polyptoton in Part III.2, the influence of synonymy and sound-repetition cannot be excluded.<sup>82</sup>

## 5. SOUND REPETITION

### 5.1. Two types of sound repetition

General problems with the analysis of sound repetition are already explained above, Part I.3.3.2–3. As regards Gorgias, *Helen*, sound repetition is divided into two types: alliteration (described by the numbers of its occurrences) and sound repetition in general, sound echo or parechesis (not registered systematically). For the study of both types, two factors are important: at first, the domain of its influence (i.e. the distance between the words, which share sound patterns). And secondly, the quality of phonemes, which can be perceived as repeated.

### 5.2. Homoeoteleuton (HOM)

Homoeoteleuton (HOM), the similar ending of consecutive phrases, can be classified as a sound figure. At the same time its function is to parse the text into small phrase rhythm units: rhetorical periods and cola. In this context it is present (as παρομοίωσις) in ancient rhetorical theory from Aristotle, *Rhetoric* III.9.9 (1410) onwards. Homoeoteleuton can occur in ancient theory under the names of ὁμοιόπτωτον (*simile casibus*), where words share case endings, or homoeoteleuton in a broader sense (part of παρομοίωσις), where the word endings are similar, but grammatical forms can differ (Lausberg 1960: 361–

364). Although every occurrence of epiphora is homoeoteleuton as well (Ch.4.4.2.1), its rare examples in Gorgias, *Helen* are not registered as homoeoteleuta, in order to avoid a double count. For example in P. 9 two commata end with an epiphora, and 5 cola with a homoeoteleuton, which means that there are 7 phrase rhythm units, which are ended by sound repetition.

Homoeoteleuton often accompanies parison (syntactical parallelism, see App.II Charts 6 and 7), therefore the words occurring in homoeoteleuton in Gorgias, *Helen* are usually in the same case or verb form. Sometimes the endings of different grammatical forms may coincide, as in P.18c: *δισσαὶ τέχναι εὐρηνται* (EX 59). This example is classified as one indivisible colon, therefore these similar endings are not counted as homoeoteleuton (if it were classified as two commata, there would be a homoeoteleuton between *τέχναι* and *εὐρηνται*). The same period reveals another problem in the description, caused by appositive words. For example, P. 18c *γοητείας δὲ # καὶ μαγείας* is not analysed as homoeoteleuton, because the boundary of the appositive group occurs after the postpositive particle.<sup>83</sup>

The last problem concerns orthographical practices: the hiatus between words can be avoided with a movable nu. See Gorgias, *Helen* P. 28 (DK 82 B 11.xvii):

(EX 118) ἀπέσβεσε καὶ ἐξήλασεν ὁ φόβος

In EX 118 the word-ends do not coincide graphically. It can be assumed that a re-syllabification over phrase boundary (σε-ν ὁ) takes place, therefore giving as similar word-endings (σε-ν). However, this re-syllabification would diminish the importance of the prosodic boundary in this place and accordingly the function of homoeoteleuton as the prosodic boundary marker.<sup>84</sup> It is not counted as a homoeoteleuton for this reason, and also because the usage of a movable nu is an orthographic principle, which does not regard actual pronunciation.<sup>85</sup>

## 5.3. Alliteration (ALL)

### 5.3.1. General problems and working definition

The problems concerning alliteration or its non-existence in Ancient Greek were explained above (Part I.3.3.1–2). At first it has to be remembered that the criteria for distinguishing between intentional and unintentional alliteration do not exist. Sometimes unintentional alliteration has been equated with grammatically obligatory alliteration, which occurs between the article or preposition and noun, main word and postpositive enclitics etc. (Fehling 1969 and Lilja 1968: 46–47), but there are still no reasons to consider such

alliterations as unintentional. Yet, it is difficult to consider as hazard examples like Gorgias, *Helen* P.15 (DK 82 B 11.viii):

(EX 119) **σ**μικροτάτ**ω**ι **σ**ώμα**τ**ι

In order to decide better, whether the alliteration in Gorgias, *Helen* could be considered as an independent sub-type of sound echo, I have studied it separately according to traditional criteria, considering as alliteration the repetition of initial phonemes (vowels or consonants) of adjacent content words or emphatic function words. Again, it is not the occurrences of this figure that are counted, but the number of elements participating in it. This gives the possibility of considering different types of alliteration in statistics together and comparing the strength of this figure in different places. For example, *Helen*, P. 16ab (EX 95): **δ**είξ**ω**· **δ**εῖ **δ**ὲ καὶ **δ**όξ**η** **δ**εῖξ**αι** is counted as 4 words in alliteration and not as one occurrence of alliteration (see also Part III.2). The polyptoton between adjacent words is counted as alliteration as well: *Helen*, P.31b: **π**ολλ**ὰ** δὲ **π**ολλ**οῖς** **π**ολλ**ῶν** is a triple alliteration and a triple polyptoton.<sup>86</sup>

Another problem is the choice between the study of colon-external (between the initial words of adjacent cola) and colon-internal alliteration. S. Mouraviev has studied both, considering colon-internal alliteration more important (Part I.3.3.2). Here both are registered together, when it concerns the levels of comma and colon. However, the repetitions of initial phonemes of greater textual units (periods, sub-periods and complex cola, incidentally also longer cola) are left out as non-constitutive because of the long distance occurring between them.

## 5.3.2. Special problems concerning the study of alliteration

### 5.3.2.1. *Word type, contour and distance*

In the following, several principles of analysis are explained more thoroughly.

1) In this dissertation, those sound repetitions, which occur between appositive words and nouns, have been excluded from the study of alliteration as being close to word-internal sound repetitions. This excludes from alliteration examples like Gorgias, *Helen* P. 8b: τὴν **τ**ροίαν, P.2: **τ**μᾶν, **τ**ῶι and some prepositions. Accordingly, **δ**είξ**ω**· **δ**εῖ **δ**ὲ καὶ **δ**όξ**η** **δ**εῖξ**αι** in P. 16ab (EX 95) is counted as 4 not 5 alliterating words, see also P.19b (DK 82 B 11.xi):

(EX 120) **π**άν**τ**ε**ς** **π**ε**ρ**ὶ **π**άν**τ**ω**ν**

EX 120 is described as having two elements in alliteration. Strict following of this rule is not unproblematic. For example, **σ**ώμα**τ**α **σ**υνήγα**γ**ε**ν** in P.7b is counted as alliteration (the verb begins with a prefix **σ**υν-, whereas a

preposition **συν** would be ignored). Correspondingly, **ἐνέγραψεν ἐν** in P.29 and **ἐθέμην ἐν** in P.36 are not counted as alliterating.<sup>87</sup>

These problems can be illustrated by Gorgias, *Helen* P.2: **καὶ πόλιν καὶ πρῶγμα**, where two content words are preceded by connectors in anaphora (underlined). It is registered as 2 alliterating words, as the word-pair seems to occur because of the alliteration (see Part III). However, it could be counted as a repetition of 4 consecutive sounds: k-a-i-p.... k-a-i-p (cf. the analysis of Heraclitus' Fr. 42 in Mouraviev 2002: 272 vs. Lilja 1968: 47).

2) Emphatic function words are not excluded from the analysis, for example *Helen*, P.17: **πρὸς ἄλλον ἀπ' ἄλλου** (EX 48) is classified as double alliteration (and polyptoton).

3) Another question is, whether past verb forms, beginning with an augment should be excluded as grammatically inevitable. However, word order in ancient Greek is flexible, the position of verbs (belonging to 'M') in a phrase is free. Therefore Gorgias, *Helen* P.18b (EX 99): **τῆς ἐπωιδῆς ἔθελξε καὶ ἔπεισε** is counted as a triple alliteration.

4) The exclusion of appositive function words from the analysis is connected to another problem: should the content words, when they are separated by function words, always be counted as being in alliteration (see EX 120 or EX 99 above). For example, *Helen* P.8a: **λαβών, οὐ λέξω** is counted as a double alliteration, although the alliterating words belong to different commata. In another example, P.7a **ὁ λαβοῦσα καὶ οὐ λαθοῦσα** two participles are counted as being in alliteration, although they are separated by two appositives. There are other cases, where the distance between two content words is longer, e.g. Gorgias, *Helen* P.20b (DK 82 B 11.xii):

(EX 121) ...τοῖς ποιουμένοις. ὁ μὲν οἶν **πέισας** ὡς **ἀναγκάσας** ἀδικεῖ.

However, in EX 121 **ποιουμένοις** and **πέισας** are separated by sub-period and a sentence boundary, therefore this (with other similar examples) is not regarded as alliteration.

The problem of restrictions, excluding grammatically inevitable sound repetitions (between the appositives and nuclei) is connected to the problem of enclisis in Greek prosody. Adjacent words form appositive groups or minor phrases, which share intonation contours (Devine-Stephens 1994, Lascoux 2003), therefore the prosodic boundary between the nucleus and the clitic is very weak, and in poetry such clitic groups behave as one prosodic word (Ch.2). In the following analyses it is assumed that the beginnings of these nuclei could be perceived: for example, Gorgias, *Helen* P.2 (EX 97) ends with a chiasmic *figura etymologica*: **τὰ ἐπαινετὰ καὶ ἐπαινεῖν**. As *figura etymologica* is a subtype of polyptoton, we can assume, that alliteration is perceived together with it, although the initial consonants of the appositive groups (**τὰ, καὶ**) are different.

However, at the present time there are not many studies available on the intonation contours of ancient Greek (Devine – Stephens 1994, Lascoux 2003, Steinrück 2003, Lukinovich – Steinrück 2007) and the results of the study of alliteration in Gorgias, *Helen* were not sufficient, therefore the question of alliteration is left open.

### 5.3.2.2. Phonemes

In Part III.2, the following choices have been made concerning the analysis of phonemes:

1) Vowel type. Every vowel is registered separately, including short and long [o] and [e] vowels, which differ in quality (Allen 1973). Therefore P.23a: ἐπέισθη, ἠδίκησεν is not registered as alliteration. For [a], [i] and [y] vowels the length of vowel is not important.

2) Diphthongs. All diphthongs are analysed as composed of two vowels. Accordingly word-initial [ε]-diphthongs are registered as word-initial [ε]-s, and word-initial [α]-diphthongs as word-initial [α]-s. Therefore P.6: διὰ τὸ εἶναι ἔδοξεν, P. 19c εὐπόρως ἔχει, and P.3: αὐτοῦ ἀνδρός (EX 126) are analysed as alliterations.<sup>88</sup>

3) Consonant combinations. In consonant combinations only the first sound is registered. Combinations of two consonants, which are written with one letter are analysed as composita: [ψ=πς] and [ξ=κς]. Accordingly P.14: ὁ πείσας καὶ τὴν ψυχὴν ἀπάτησας is counted as alliteration.

4) Plosives. In some studies of sound repetition the plosives of the same column (dentals, labials, gutturals) are studied together, without distinctions (Mouraviev 2002). Here aspirates, voiced and voiceless plosives are all analysed as different sounds. Accordingly, Gorgias, *Helen* P.11: τῆι Τύχηι καὶ τῶι Θεῶι is not registered as repeated dental and P.15: φόβον παῦσαι not registered as alliterating (for sound play, see Ch.5.4 and Part III.2).

5) Spiritus. In Ancient Greek, the force of initial (as well as intervocalic) spiritus is weak. Its disappearance had already begun in the epoch of mycenaean and occurred sporadically in several dialects (Scmitt 1977, Buck 1955). Attic Greek or the Dorian dialects of Gorgias' homeland might have preserved spiritus slightly better; therefore the difference in spiritus is taken into account. Accordingly, Gorgias, *Helen* P.2 ἀμαρτία καὶ ἀμαθία is not registered as alliteration (ha-a), although the phonic echo is evident (words share 5 phonemes and a dental), see also P.7b (DK 82 B 11.iv):

(EX 122) ἐπιθυμίας ἔρωτος ἐνεργάσατο, ἐνί

EX 122 is counted as triple (not quadruple) alliteration, although the repetition of [e] is well established.<sup>89</sup>

Although initial spiritus is considered as a feature precluding alliteration, it is not considered as a stable initial phoneme (due to its instability, referred to above), therefore P.7b: ἤκον ἅπαντες (he-ha) is not classified as alliteration.

## 5.4. Parechesis – sound play

Sound play or parechesis, including sound repetition in general, is not studied separately in this dissertation, although it is occasionally discussed in Part III.2. Following examples serve to demonstrate that it is worthy of a separate study (cf. Part I.3.3.2).<sup>90</sup>

1) Some types of sound repetition are close to rhetorical figures, as symploke or concatenation (Ch.4.4.2). In P.22 (EX 116) symploke is achieved with the repetition of similar sounding participles: κρινομένου-γινομένου, the same occurs by concatenation in P.8b: προβήσομαι καὶ προθήσομαι..., where two words differ by only one sound. Similar sound-repetition marks colon boundaries in P.9 (βουλήμασι-βουλεύμασι), P.18a (ἐπαγωγοί-ἀπαγωγοί) and other places.

2) Sound repetition can occur in combination with alliteration, as in Gorgias *Helen* P.13b (DK 82 B 11.vii):

(EX 123) ἔδρασε δεινά .... δίκαιον οὔν

Here the repetition of [δ] in the first half of the period anticipates and prepares the beginning of the conclusion (δίκαιον). The combination of alliteration, parechesis, polyptoton (whole word and word-part) and anaphora, as well as parison can be seen in P. 19c (DK 82 B 11.xi):

(EX 124) <> τὰ νῦν γε  
 οὔτε μνησθῆναι τὸ παροιχόμενον  
 οὔτε σκέψασθαι τὸ παρόν  
 οὔτε μαντεύσασθαι τὸ μέλλον  
 εὐπόρως ἔχει·  
 ὥστε περὶ τῶν πλείστων οἱ πλείστοι  
 τὴν δόξαν σύμβουλον τῆι ψυχῇ παρέχονται.

In EX 124 sound and word repetition follows closely the structure of the period: it is framed by repetition of the prefix παρ-, which in combination with anaphora frames cola (=lines) No.2 and No.3. Polyptoton (ἔχει, παρέχονται) marks the ends of the first and the second subperiod. Several cola are marked by alliteration and/or sound repetition: [μ] in Col.4, [ε] in Col.5 and [π] in Col.6 (together with polyptoton).

4) Parechesis occurs as a structural device in Gorgias, *Helen*, P.16c (DK 82 B 11.ix):

(EX 125)	καὶ φρίκη περίφοβος καὶ ἔλεος πολύδακρυς καὶ πόθος φιλοπενθής,	<b>phr-k prphbs</b> <b>ls pldkrs</b> <b>pths philpnths</b>
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In EX 125 some repetitions lead from colon to colon (e.g. ε, ζ, π, ο), whereas some are specific to one colon, as the combination of [φ] and [ρ] to Col. 1, [λ] and [ς] to col. 2 and [π], [θ] and [ς] to Col.3. Here the structural function of parechesis is supported by interaction with anaphora and parison.

5) Some examples of sound-repetition, like ὄδε ὁ λόγος ..... οὐδὲ ὀλίγοις in P.5 (EX 100) reveal that the joy of sound-play can bring along rare combinations of figures.

Scheme (13) hode ho logos            11/7+4- oude oligois 10/7+3-

Both cola in Scheme 13 have correspondingly 11 and 10 sounds, from which 7 are repeated in the same position and 4 and 3 not (see Lotman 1970, Ch.5 for the method), whereas in the first part all sounds are repeated somewhere, and in the second part only one sound [ou = ū] is not repeated at all. When we add repetition in the numbers of syllables, the penultimate accent in both parts, the pattern of the last four syllables (UUUX), anaphora and litotes, we see how the sound-play is strengthened by interaction (see Part III.2).

## 6. RHYTHM IN SYLLABLES

### 6.1. Prose metrics and the study of syllables (SYL)

Prose rhythm is often characterised by its flexibility: the division of period into cola, the role of different repetition figures, the number of words in cola etc. In this approach, the element of prose rhythm is a word. Traditionally, more studies have been dedicated to prose metrics, where the element of rhythm is a syllable. As stated in Part I.3, there are three possibilities for prose metre or rhythm in syllables: syllabic (or isosyllabic) rhythm, which is based on the number of syllables in a colon; accentual rhythm, which is based on the order of accentual and non-accentual syllables; and quantitative rhythm, which is based on the order of short and long syllables. Although the history of the figure isocolon indicates that Gorgias' works use syllabic rhythm (Ch.4.3.1), the importance of accents and quantities cannot be excluded. Therefore all three are analysed in Part III.2. For example, the description of syllabic rhythm of P.1 is as follows: SYL 47 (elidable 3)[SL.RI: ISOS 26/47, :+GRA 41/47, :+CTR 47/47; QU.RI: All 21/47, :CLA 16/47; AC.RI :All 17/47, :Niv 36/47, :CLA 12/16]{GRA in P.2}.

In this example, the syllable count indicates firstly the number of syllables (47) in a given period (based on the edition of Diels). It is followed by features characterising Gorgias' prose metre in square brackets. However, the inconsistency of editorial technique in ancient and modern times gives several problems (discussed below). Therefore, after the number of syllables in a period, the information concerning the count (the number and type of problematic syllables, here 3) is given in round brackets.

The role of each rhythm type can be measured by indexes of the rhythmic involvement or rhythmic engagement of different textual features. For the description of syllabic rhythm involvement, a special index is used as well (RI, see Ch.6.1.1 and 6.2–6.4).<sup>91</sup> This indicates separately the number of syllables engaged in (iso)syllabic rhythm (SL), quantitative rhythm (QU) and accentual rhythm (AC), the connections to other periods are indicated in {here gradation in syllabic rhythm}. More explanations to all of this are given below; see also Part IV.2.1 for the results of the analysis.

### 6.1.1. Indexes of rhythmic involvement (RI)

In order to understand, which principle of syllabic rhythm (counting syllables, accents or quantities) can be considered as the foundation of Gorgias' prose metrics, indexes of rhythmic involvement have been introduced in this dissertation, which reveal how many syllables (of a studied unit) participate in one or another type of rhythm.<sup>92</sup> For this, two procedures have been used. At first, the continuous text of *Helen* was analysed in its totality and all symmetrical configurations were registered, whereas all configurations, which were based on repetition of their elements (i.e. cola with similar syllable numbers and repeated patterns of short and long or accentuated or non-accentuated syllables) were considered as symmetrical. Then, the number of syllables involved in such symmetrical configurations was compared to the total number of syllables in a period. The result was an index of isosyllabic, accentual or quantitative rhythm (RI). As in Hellenistic times and late antiquity the theory of clausular rhythm emerged; the clausulae were studied separately with an analogical method (see Ch.6.5).

Therefore rhythmic involvement or engagement of syllables is demonstrated by the usage of indices (I), which are equal to the result of a division of the number of syllables participating in certain rhythm patterns (X) by the total number of syllables in the unit(s) in question (Y):

Scheme (14)

$I = X/Y$  {X= number of syllables involved in rhythm patterns; Y= total number of syllables in the unit}.

In the descriptions of Part III.2 these indices are not given as results of divisions, in order to leave the procedures of the analysis more transparent. As a supplement to these two main characteristics, analogous indices for the rhythmic load of words and accents have been introduced as well (cf. Part IV.2.1).

## 6.1.2. Problems concerning description and syllable count

### 6.1.2.1. Elision

Elision, or the loss of final short vowels before the initial vowel of the following word, is one of the most frequent devices used to avoid a hiatus. In poetry short final vowels are usually elided within the verse, and (mostly) not elided at the verse boundary (West 1982, Devine – Stephens 1994). In prose, the question of elision is more complicated and less studied (Devine – Stephens 1994, esp. p.256–271). Editorial practice regards all final short syllables as liable to elision and the differences in manuscripts are usually neither taken into regard nor registered. Because of this, the studies of hiatus never focus on final short vowels and take elision either as granted in a rapid speech flow or as impossible to study (Dover 1997). As this study is not dedicated to hiatus and elision in Gorgias, but to prose rhythm in general, the distinctions between graphical hiatus in short and a hiatus in long final vowels is not made, and both are studied as a hiatus.<sup>93</sup> In order to get an idea how much the possibility or occurrence of elision could influence the statistics, the syllables are indicated in round brackets after a syllable count, as following:

1) Elided. This indicates the number of elided short final vowels (in the edition by Diels). In such cases re-syllabification over the word boundary takes place (Devine – Stephens 1994: 235–253). As a result, syllables are lost and are not counted in the description, as in the first colon of Gorgias *Helen* P.3 (DK 82 B 11.ii):

(EX 126) τοῦ δ' ἀντοῦ ἀνδρός

In EX 126 as a result of the elision one syllable is lost and there are 5 syllables (not 6). It is registered in the row of syllable count as: SYL 69 (1 elided), which means that the total number of syllables in the whole period is 69, whereas one elided syllable is not counted.

2) Elidable. The number of elidable syllables indicates how many short final vowels (in Diels edition) could be elided before the initial vowel of the following word, but are not. In Gorgias the syllables are usually left unelided at phrase boundaries, apparently because of editorial tradition, but it is not a rule without exceptions. As regards the syllable count, syllables with elidable final short vowels are counted. For example in P.2, τῶι δὲ ἀναξίωι the particle δέ occurs in a position where elision could take place. As it is not elided, the

syllable has been counted and the occurrence registered, as: SYL 47 (elidable 1). This indicates that P.2 is composed of 47 syllables, from which 1 could be deleted because of elision, but is not.

Such short final vowels, which are never elided, have not been registered separately: some prepositions, e.g. (περὶ ἧς) in P.3, monosyllabic relative pronouns or the articles, which cannot occur in crasis (see below).

### 6.1.2.2. Crasis, *declinatio Attica* and other

There are other, less frequent phenomena which could affect the syllable count: a crasis (another device for avoiding hiatus at the word boundary); a synizesis (vowel contraction within a word), and problems concerning the possibility of word-internal vowel contraction in the case of *declinatio Attica*.

1) Crasis, vowel contraction across the word boundary is not frequent (Devine – Stephens 1994: 266–268). It can affect both final short and long vowels, but it usually affects only definite articles, connector καί, and prohibitive particle μή (which is not indicated by orthography and therefore impossible to study in the case of prose). In Gorgias it is very rare.

2) *Declinatio Attica*. In Attic prose it is not clear, how to syllabify in the case of *declinatio Attica* and other combinations of [εω].<sup>94</sup> Whereas in poetry there is a possibility of variation (metrical liberty) and the exact number of syllables is usually indicated by metre, there are no clear guidelines for prose, as for example in Gorgias, *Helen* P.21b (EX 28 above):

τὸς	<u>τῶν μετεωρολόγων λόγους,</u>	1+7+2 = 1+9= 10
	<u>οἵτινες δόξαν ἀντὶ δόξης</u>	5 + 4 = 9

It is possible to read [εω] as one syllable and analyse the two underlined cola as isocola (which would be supported by the context, where two more pairs of isocola follow, see Part III.2). At the same time it can be analysed as two separate syllables, as has been the usual practice for the analysis of this speech (cf. P. 25: διὰ δὲ τῆς ὄψεως, which is counted as 7 syllables).

## 6.2. Syllable-counting rhythm (SL)

The importance of syllable-counting (isosyllabic) rhythm in Gorgias, *Helen* is measured by the index of rhythmic engagement (SL.RI).<sup>95</sup> Here two different grades of isosyllabic rhythm are given. The index of an isosyllabic rhythm indicates firstly the number of syllables involved in isosyllabic constructions (in adjacent cola) in comparison to the total number of syllables in the period, as e.g. in P.1 [ :ISOS 26/47]. It is never quite clear whether isocolon in Greek prose rhythm refers to cola with exactly the same number of syllables, or to cola with approximately the same number of syllables (Ch.4.3.1). Therefore a

second index with weaker criteria of isosyllabism is used, called the index of proximity rhythm (or gradation), as it occurs often in gradations, see P.1 [:GRA 41/47]. This index gives the number of syllables, occurring in approximately isosyllabic cola (with a permitted range of variation of +/-1 syllable in units shorter than 10 syllables and +/-2 in units longer than 10 syllables).

Next to variation and repetition, the third important rhythm principle is contrast. Therefore first the third type of syllabic rhythm index was used, which included all syllables occurring in contrastive patterns as well. As this index in Gorgias, *Helen* is always equal or close to 1, e.g. in P.1 [: CTR 47/47], these results are not presented in the description in Part III.2. However, the fact that such an index was almost always equal to one is important. This means that as in poetry, prose has rhythm as well, even at the level of syllables.

## 6.3. Accent count (ACC) and accentual rhythm

### 6.3.1. Problems and principles

Accents do not belong to the diminishing hierarchy of textual units from period to syllable. The main domain of tonal organisation is a word, since ancient Greek has word accent (and usually every word has one accent). In the time of Gorgias, the Greek accent was a pitch accent, with no clear contrast between accentuated/non-accentuated, except rising and falling contours (Devine – Stephens 1994). The importance of a syllable was probably less than later, in the time of the dynamic accent. Therefore, in Part III.2 accents have been described according to two approaches: 1) as a characteristic of syllables, through the index of the involvement of syllables in accentual rhythm patterns; and 2) as a characteristic of words, on a separate row (ACC), which gives the numbers of accentuated words and indicates how many of these occur in symmetrical patterns. This double procedure has been used in order to find out whether the study of accentual rhythm in Gorgias should rely on syllables or on words (see Part IV.2).<sup>96</sup>

For the analysis, different questions need to be decided: whether the difference between three types of graphical accents should be retained (in this dissertation they are not retained); whether the influence of proclisis and enclisis should be considered, etc. (in this dissertation they have been considered on the level of adjusted accentual patterns, marked with :Niv). In the description (App.I) all syllables are marked as tonic and atonic and the entire text of Gorgias, *Helen* is rewritten with the following signs:

(.) – atonic syllable, (/) – gravis accent, (7) – acute and circumflex accent.

There is one more feature which deserves to be studied in Greek prose rhythm, an “accent clash” or the coincidence of accentual peaks in adjacent syllables,

between two content words, as e.g. in EX 111: εἶς λόγος (77.) and πολὺν ὄχλον (/7.). This phenomenon occurs very rarely in Gorgias, usually in passages which refer to important ideas (e.g. P.19a). Because of the absence of a developed method, it is not included in the description, although it is referred to in the analysis of Part III.

### 6.3.2. Accentual rhythm indexes (AC.RI)

The indexes of accentual rhythm are more complex than the index for isosyllabic rhythm. The accentual rhythm index (AC.RI) indicates the total number of syllables, which participate in symmetric accentual patterns, see P.1 [AC.RI :ALL 17/47], the number of syllables which occur in symmetrical patterns in adjusted analysis, see P.1 [AC.RI :Niv 36/47] and the number of syllables which occur in accentual clausulae, see P.1 [AC.RI :CLA 12/16]. The problems of analysis can be explained with the help of Gorgias *Helen*, P.12 (DK 82 B 11.vii):

(EX 127)	εἰ δὲ βίαι ἠρπάσθη	. / 7 . . 7 .	7 syl
	καὶ ἀνόμως ἐβιάσθη	/ . 7 . . . 7 .	8 syl
	καὶ ἀδίκως ὑβρίσθη,	/ . 7 . . 7 .	7 syl

EX 127 includes three cola in parison (but not perfect isocolon), framed by homoeoteleuta and anaphoras. The description of accentual rhythm presents following problems:

1) Domain I. It is important to decide whether the rhythm is studied in the entire period in a continuous flow (so-called horizontal or linear repetition), or according to colon boundaries (vertical repetition). In the first case only 12 from 22 syllables of EX 127 would occur in symmetrical patterns (underlined). It seems more reasonable to search for repetition between parallel cola. This would give triple repetition of the same clausula ..7. in colon-ends and twice the similar beginning: /7. (in Col.2 and Col.3), and a total number of 19 syllables (out of 22), which occur in symmetric accentual patterns.

2) Domain II. In late antiquity several treatises discussed the rhythm in clausulae (Part I.3.2.2). In EX 127, all 12 syllables occurring in the clausulae are symmetric, having acute accents in the same position. The description in Part III.2 reveals that the index of clausular rhythm is sometimes more significant (i.e. closer to 1) than the rhythm indexes for the continuous text. The reason could be in sentence parallelism and the closeness of the intonation contour in parallel phrases: it is always falling (Devine – Stephens 1994).

3) Syllabotonicity. According to S. Mouraviev, the rhythm of Heraclitus is syllabotonic, where some accents can be suppressed and secondary accents can emerge in positions with no original accent. The accents in syntactic clitics

(different particles) are most liable to this readjustment. Using the practice of readjustment, EX 127 could be reanalysed as following:

Scheme (15)	. ' 7 . . 7 .		7 syl
	/ . 7 . s . 7 .	or: ' . 7 . . . 7 .	8 syl
	' . 7 . . 7 .		7 syl

On Scheme 15 ‘s’ notes a secondary and ‘’ a suppressed accent. According to this adjustment, the 22 syllables of this example (or 21 of 22) belong to symmetric accentual patterns: including 20 on the horizontal level, and 2 more, added from the vertical level (the .7. endings).

4) Words. In EX 127, all content words share intonation contours, they are paroxytona (having acute accents on penultima). We can describe accentual rhythm on the level of words as 100% symmetrical, because every colon has the same number of accentuated content words and function words in the same position: ACC 9 (CW 6, FW 3) [AC.RI: CW 6, ALL 9]. This example with a very high index of word rhythm comes from a parison (see Part IV.2.1).

## 6.4. Quantitative rhythm (QU)

### 6.4.1. Problems of analysis: syllables in text flow

The first problem in the study of quantitative rhythm in prose concerns the method: should the same rules apply to prose as for poetry, or not? This includes different decisions, concerning the treatment of elisions, glides (metrical shortening of final long vowels before the following vowels), the problem of re-syllabification (in the question of closed final syllables, including *muta cum liquida*) etc.

In poetry the re-syllabification of closed final syllables over word boundary is the usual practice. For example, the syllable pattern  $\check{U}C\#V$  is reanalysed as  $\check{U}-C(\#)V$ . This means that a closed syllable with a short vowel ( $\check{U}C$ ), which (prepausally) can occur in positions where a long syllable is needed, occurring in a text flow before a following vowel is reanalysed as an open short syllable ( $\check{U}-CV$ ), see Devine – Stephens 1994. The metre indicates that in poetry such re-syllabification takes place. Guidelines for the analysis of prose are found in ancient theory.

Dionysios from Halicarnassus DCV 18.3–7 presents some analyses of Greek prose rhythm, which reveal, how he analyses quantitative patterns. A passage from Thucydides II.35 reveals that he analysed a combination of  $\check{U}C\#C$  as a long syllable: νόμῳ τὸν λ(όγον) ( $\cup \text{---}$ ), as well as  $\check{U}C\#V$  in: ὡς καλὸν ἐπὶ τοῖς ( $\text{---} \cup \text{---} \cup \cup \text{---}$ ). The analysis of another passage, from Plato’s *Menexenos* 236d in DCV 9–13 reveals that there is no certainty. *Muta cum*

liquida is analysed as not closing the syllable, and  $\check{U}C\#V$  is analysed as long in:  $\xi\rho\gamma\omega \mu\acute{\epsilon}\nu \eta\mu\acute{\iota}\nu$  ( $\cup$  — — —), but soon, *muta cum liquida* is analysed as closing the syllable:  $\tau\acute{\alpha} \pi\rho\sigma\eta\kappa\omicron\nu\tau\alpha \sigma\acute{\phi}\iota\sigma\iota\nu$  (—  $\cup$  — —). Dionysios himself refers to the possibility of re-syllabification, saying that the beginning of  $\sigma\acute{\phi}\iota\sigma\iota\nu \alpha\acute{\upsilon}(\tau\omicron\hat{\iota}\varsigma)$  could be analysed as an anapaest ( $\cup\cup$  —) or a baccheus ( $\cup$  — —).

In Part III.2 some rules of poetry are applied, admitting re-syllabification over the word boundary and regarding ‘mcl’ as a changing factor, see Gorgias, *Helen* P.24 (DK 82 B 11.xv):

(EX 128)  
 $\epsilon\acute{\iota} \gamma\acute{\alpha}\rho \xi\epsilon\rho\omega\varsigma \eta\eta\nu \quad \acute{\omicron} \tau\alpha\upsilon\tau\alpha \pi\acute{\alpha}\nu\tau\alpha \pi\rho\acute{\alpha}\xi\alpha\varsigma, \quad 2+3 + 7 \quad = 12$

In EX 128 the alliteration at the word-beginning is the reason for reading *muta cum liquida* as word-initial and therefore not closing the preceding syllable. Therefore the words are syllabified  $\tau\alpha\upsilon\tau\alpha$ - $\tau\alpha$ -  $\pi\acute{\alpha}\nu$ - $\tau\alpha$ -  $\pi\rho\acute{\alpha}\xi\alpha\varsigma$  (with the analysis —  $\cup$  —  $\cup$  — —).

#### 6.4.2. Quantitative rhythm indexes and equivalence patterns

The existence of quantitative rhythm in prose can be tested by using indexes of rhythmic involvement. Quantitative rhythm can be measured on two levels: on the level of the period in continuous text flow<sup>97</sup> and in clausulae, where it occurs according to Cicero.<sup>98</sup>

The first index is equal to the number of all the syllables participating in quantitative rhythm patterns, compared to the number of all syllables in a period, e.g. in P.1, SYL 47 [...QU.RI: ALL 21/47]. This means that 21 of 47 syllables in P.1 are participating in a quantitative rhythm pattern: (the first colon can be interpreted as iambic, there is a repetition of  $\cup\cup\cup$  — in the end of the 2nd complex colon and the first colon of the 3rd complex colon, a reprisal of iambic rhythm in the end, see Part III.2).

The second index gives the number of syllables occurring in quantitative clausulae, compared to the number of syllables in all clausulae (4 syllables in each), see P.1: [QU.RI : CLA 16/24]. This index of clausular rhythm is very high for Gorgias: 16 syllables (4 clausulae) of the total of 24 (6 clausulae) are involved in quantitative patterns.

The last problem concerns equivalence between metrical feet, found in prose and in different verse types, which is ignored in my analyses, see *Helen* P.12 (EX 127):

$\epsilon\acute{\iota} \delta\acute{\epsilon} \beta\acute{\iota}\alpha\iota \eta\rho\pi\acute{\alpha}\sigma\theta\eta$	— $\cup\cup$ — — H? — —
$\kappa\alpha\acute{\iota} \acute{\alpha}\nu\omicron\mu\omega\varsigma \xi\beta\acute{\iota}\alpha\sigma\theta\eta$	— H? $\cup\cup$ — $\cup\cup$ — —
$\kappa\alpha\acute{\iota} \acute{\alpha}\delta\acute{\iota}\kappa\omega\varsigma \acute{\upsilon}\beta\rho\acute{\iota}\sigma\theta\eta,$	— H? $\cup\cup$ — — — —

These three cola are not analysed as a row of 22 syllables, which participate in a dactylic sequence (with occasional contraction of double shorts into long, which can occur in poetry, because the rhythm patterns are well established there).<sup>99</sup> Neither could it be analysed as repeated clausulae, because the quantitative pattern changes in Col.2 (cf. Ch.6.5).

## 6.5. Clausulae (CLA)

The problems concerning the study of clausulae were briefly discussed in Ch.3.2.2. Although there is a testimony from Cicero, *Orator* 63, according to whom his public was able to recognise and applaud remarkably good clausulae (Steinrück 2004b: 129–133), the question of perceptibility is not entirely clear. The main reason concerns the domain: should only period-ends be regarded as clausulae (as is traditional in analysis), or should we study the colon-ends as well? The next problem is the length of the clausulae: should we study clausulae of different lengths or only the 4 last syllables of each unit in which the last syllable is indifferent (as de Groot 1919, Steinrück 2004b)? The problem of clausulae is connected to analysis of a period into complex cola. For example, Gorgias, *Helen* P.13 (DK 82 B 11.vii):

(EX 129)

ἄξιός οὖν	— UU —	7. 7
ὁ μὲν ἐπιχειρήσας βάρβαρος βάρβαρον ἐπιχείρημα	U — — x	.7. .
καὶ λόγῳ καὶ νόμῳ καὶ ἔργῳ	— — — ? —	. / 7.
λόγῳ μὲν αἰτίας, νόμῳ δὲ ἀτιμίας, ἔργῳ δὲ ζημίας	— — U —	/ . 7.
τυχεῖν·	U —	. 7
ἢ δὲ βιασθεῖσα	U — — x	. . 7.
καὶ τῆς πατρίδος στερηθεῖσα	U — — x	. . 7.
καὶ τῶν φίλων ὀφρανισθεῖσα	U — — x	. . 7.
πῶς οὐκ ἂν εἰκότως	U — U x	. . 7.
ἐλεηθεῖη μάλλον	— — — x	7. 7.
ἢ κακολογηθεῖη;	U — — x	. . 7.

In EX 129 it is not easy to say where the clausulae (the ends of complex cola) are, which should be analysed. The problems follow:

1) The occurrence of initial and final pivots (commata ἄξιός οὖν and τυχεῖν). Whereas the initial pivot is recognisable because of its position, the final one is problematic. Should we analyse as clausula the syllables preceding it, or should it be included in the clausula? Here neither choice would result with a repetition between adjacent commata on quantitative and accentual levels; but if we choose to regard the pivot as part of the clausula, there would be a frame with an initial pivot on the accentual level (7..7). In the case of ambiguity, a parallel possibility is given in round brackets in the description.

2) The length of units. Col.3 is composed of three very short commata (3 syllables each). Should we still study the 4 last syllables of the colon as a clausula? If not, where is the boundary, over which the length of colon is enough in order to permit the study of clausulae? For example, the ends of Col.6–8 share quantitative rhythm patterns, whereas the repetition is even more remarkable on the level of accents. In such cases, the existence of parison has been taken as a criterion of independent colon (ending with a clausula), therefore even the end of Col.6 is included in the description of clausulas.

3) The choice between the study of accentual and quantitative clausulae. This is decided in favour of both. The hypothesis concerning the connection of clausula and parison, is studied separately (Part IV.2.1.2).

4) The problem, whether to study clausulas in period-ends is decided in favour of registering this feature in {} along with other characteristics, which are not studied separately; the occurrences of all clausula-types in period-ends are presented in tables A and B, in App.II.C.

As a result, the method of research concerning clausulas is as follows in this study: the last 4 syllables of every period, colon and (parallel phrases) even comma have been marked (except when the comma was shorter than the 4 syllables required for a clausula). Then all the clausulas of the same level, which existed in proximity (parallel phrases), have been marked with an \*.<sup>100</sup> The whole description is presented in Appendix I and Appendix II.C.

As a result, I feel that we can confirm the absence of clausular rhythm as a prevailing rhythm characteristic in Gorgias, *Helen*, therefore it is not discussed in length in Part IV. This does not mean that there are no clausulas at all; however, the clausular rhythm is much more insignificant than other syllabic rhythm types (see Part IV.2.1.2).

## Conclusion to Part II

This part explains the criteria and procedures for the analysis of different prose rhythm characteristics and the problems associated with them, before proceeding to the analysis, presented in Part III.2.

The poetic features of literary texts can be analysed from many points of view. This approach regards the text as a hierarchically organised complex of different layers: semantic, syntactical and phonological. In the search for strict criteria, the results and procedures of modern research have been combined with information coming from ancient testimonies, giving preference to decisions which allow less ambiguity in analysis. Ancient testimonies and modern research supported the initial presupposition that all Gorgianic figures (isosyllabism, antitheton, homoeoteleuta, paromoiosis, parison) should be analysed as components of rhythm.

In order to analyse these features, the text has to be parsed into phrase rhythm units: periods, commata and cola; the primary element of phrase rhythm is a word (Ch.3). For parsing, three different principles: coherence, demarcation and economy have been applied, whereas the focus is on phrase rhythm (rhetorical) units, which are distinguished from syntactic and prosodic units (Ch.1, Ch.3). Within phrase rhythm units, phonological and syntactic coherence on different levels is taken into account (Ch.1, Ch.3). The most important markers of the boundaries of phrase rhythm units are lexical markers, mostly different particles and connecting words (Ch.2). Another, not less important group of markers for phrase rhythm units is rhetorical figures, which participate in the construction of rhythm, because they are often based on structural parallelism (Ch.4).

Although prose rhythm is revealed mostly as word rhythm, often in parallel phrases, a method for the study of rhythm in syllables (Ch.6) and phonic echoes (Ch.5) is presented as well.

## Notes to Part II

<sup>1</sup> See Devine – Stephens 1994: 303–455, Peabody 1975: 118–121 and 386–394.

<sup>2</sup> Gentili 1982: 10 *essi formano una sola “parola” col nome al quale sono unite e si dicono prepositive ... e postpositive...* Word in metrics has been defined as an accentual unit including proclitics and enclitics (Lotz 1968: 147). M. van Raalte does not count the word-ends within appositive groups as potentially-structural (versus Schein 1979, cf. Koster 1953: 51) and gives a list of word-ends (after articles, prepositions etc.) which are not counted in her statistics (Raalte 1986: 162–165). The problems of this division are discussed by S. Hagel, who explains why both word-end types should be considered, regarding their different functions, and gives an exhaustive list of appositives (Hagel 2004b: 136–137).

<sup>3</sup> Appositive groups do not begin immediately before the verse-end, in order to avoid the verse boundary falling within the group. At the main caesura the situation is almost the same, cf. Devine – Stephens 1994, Raalte 1986, Hagel 2004ab and West 1982: 25–26 (who gives a short list of appositives, which cannot be divided by metrical boundaries from the main word), Westphal 1868: 106 and Maas 1962: 84–89.

<sup>4</sup> The studies on verse prosody, Raalte 1986: 164–165 and Devine – Stephens 1994: 312–375 indicate that in such cases a boundary might occasionally occur.

<sup>5</sup> In the case of prose it can be easily accepted, in the case of ancient Greek poetry the assumption, that phonological and syntactical units overlap, does not work. If we assume that one line (verse or period) is phonologically coherent (as the elisions, synizeses and the avoidance of hiatus within a line seem to prove) and that at least some demarcation (a pause) between the lines occurs (as proved by the incidences of hiatus at metrical boundaries and the avoidance of word-overlap between metrical units), we might expect some correspondence between syntactic and metric (prosodic) units. On the contrary, there is a tendency in Greek poetry to avoid exact coincidence of major syntactical and phonological boundaries (*enjambement*), but it can be proven, that on the basis of minor phrase or appositive group the boundaries are always co-incidental

(see Bakker 1997a). Moreover, the clash between these units can be used as a stylistic device, see Conrad 1990 on Sappho and Horace.

<sup>6</sup> This is the criterion for a complete sentence from Aristotle *Rhet.* III.9 onwards; see the discussion in Peabody, n.1 above.

<sup>7</sup> The linguistic function of asyndeton (especially between sentences) has been in the shadow of the discussion of its rhetorical functions, although the former should come first. See Dover 1997, Päll 2005: 332 and Päll 2007.

<sup>8</sup> See Devine – Stephens 1994: 390–402, 420–422 (on punctuation in inscriptions and the treatise of Nikanor); Threutte 1980 (on inscriptions) and Steinrück 1997: 29–30 (on Nikanor), as well as Friedländer 1850 (the edition of Nikanor, *Peri Iliakes stigmēs*).

<sup>9</sup> For ancient writers, see Chiron 2002: 73–91. Perceptibility is one of the main points in the distinction between two types of text construction: a serial style (εἰρομένη) and a periodic style (κατεστραμμένη), see Steinrück 2004b, Steinrück 2007 to appear. For parsing (especially major phrases), see Devine – Stephens 1994: 409–420.

<sup>10</sup> In order to reduce the number of groups and focus on the types that are important for this study, I have made slight changes in Dover's division.

<sup>11</sup> For ἰδέ see Hagel 2004b. It can be left out here as specific to epic poetry.

<sup>12</sup> The particle ἦ is problematic in Gorgias, *Helen*, P.4 (DK 82 B 11.ii): ἐγὼ δὲ βούλομαι λογισμὸν τινα τῷ λόγῳ δοῦν τὴν μὲν κακῶς ἀκούουσιν παῦσαι τῆς αἰτίας, τοὺς δὲ μεμφομένους ψευδομένους ἐπιδείξας καὶ δείξας τάληθες [ἦ] παῦσαι τῆς ἀμαθίας. Here the reason is imperfect text (cf. Part III.2).

<sup>13</sup> Other similar examples from Gorgias are: P.7b (demonstrative function), P.16c, and P.33, where the relative ὅς is followed by the deferred relative εἰ in a textually problematic passage.

<sup>14</sup> Or Gorgias, *Helen* P.8a (DK 82 B 11.v): ὅστις μὲν οὖν καὶ δι' ὅτι καὶ ὅπως ἀπέπλησε τὸν ἔρωτα ..., where the pronouns occur in clause-initial positions in triple anaphora.

<sup>15</sup> Like ἄμα, in Heraclitus, Fr. 92 DK: ἀλλ' ἄμα συνίσταται καὶ ἀπολείπει καὶ πρόσεισι καὶ ἄπεισι.

<sup>16</sup> The boundary-constituting force of such double articles can be illustrated with the help of some examples from poetry. However, I have not found examples from Homer, and the ones in tragedy are relatively rare and occur either at the beginning (between the 1st and the 2nd position) or in the end (between the 9th and 10th position) of the verse, e.g. Eur. Fr.102: σοφώτεροι γὰρ συμφορὰς τὰς τῶν πέλας, Eur. *Herc.*309: τὰς τῶν θεῶν γὰρ ὅστις ἐκμοχθεῖ τύχας, Eur. *Phoen.*393: τὰς τῶν κρατούντων ἀμαθίας φέρειν χρεῶν, Soph. *Phil.*1306: τοὺς τῶν Ἀχαιῶν ψευδοκίρκακας, κακοὺς. Aristoph. *Plut.*683–4: Κἀγὼ νομίσας πολλὴν ὀσίαν τοῦ πράγματος// ἐπὶ τὴν χύτραν τὴν #? τῆς ἀθάρης ἀνίσταμαι is rather exceptional at caesura penthemimeres. Longer quotations here and further are from electronic TLG.

<sup>17</sup> E.g.: in P. 7a, P.21c, P.8a etc.

<sup>18</sup> The assimilation of the final consonant of οὐκ and elision in the end of ἀλλά could indicate prosodic coherence, but as elisions and assimilations result from the tradition of orthography and editorial practices, these indications are ignored in my analysis.

<sup>19</sup> The word-end constitutive force might be suppressed by elision, but we do not have examples for it in Gorgias, *Helen*, see P.2 (and the discussion in Part III.2).

<sup>20</sup> Throughout this dissertation I refer to 'clitics' in the traditional sense, i.e. to words which in our textual tradition are regarded as losing their accents to the host word. And

I regard as unaccentuated those words which in our textual tradition have no accents written on them, without any regard to their claimed actual pronunciation in antiquity. For this, see Lukinovich – Steinrück 2007.

<sup>21</sup> This corresponds to Dover's group vii of postpositives. The pronoun *αὐτός* is usually not treated as postpositive in the analysis of poetry.

<sup>22</sup> Both are translated by 'it', see MacDowell 1982: 25, Kennedy 1991: 286, although in EX 36 it is not entirely clear what the reference is.

<sup>23</sup> Corresponding to Dover's groups x and xi.

<sup>24</sup> 3rd singular imperfect in: P.3, P.8b, 19b and P.24, and present optative in P.33, present indicative forms in P.18c, P.30, P.33.

<sup>25</sup> There are other examples, see P.33, where the question occurs after a relative clause, and EX 40, where it occurs after a conditional clause (cf. Part IV.1.5.2.2). The practice is similar in poetry, cf. Pindar Ol.9.30 where the interrogative particle tends to a verse-initial position (but similarly after the relative is introduced): Β ἐγένοντ'· ἐπεὶ ἀντίον / πῶς ἄν τριόδοντος Ἕ-/ρακλέης σκύταλον τίναξε χερσίν... ; // The tendency to the verse-initial position is similar in Pindar N. 5.15, where it has the role of introducing indirect speech (in ACI): .... αἰδέομαι μέγα εἰπεῖν / ἐν δίκᾳ τε μὴ κεκινδυνευμένον, / πῶς δὴ λίπον εὐκλέα νᾶσον, / καὶ τίς ἄνδρας ἀλκίμους δαίμων ἅπ' Οἰνῶνας ἔλασεν // The general tendency in poetry is, in these cases, to the coincidence of sentence-initial and verse-initial position.

<sup>26</sup> Originally it was a strong anaphoric, close to a demonstrative, see Chantraine 1999: 831, Meillet 1964: 376–7, Meillet – Vendryes 1924: 570, Chantraine 1963: 166ff, 276–279, cf. Wackernagel 1920: 75–109. As we have a third type of pronoun, which enables deictic shifts, we could establish another triple hierarchy regarding deixis: deixis (demonstratives in direct reference), anaphora (demonstratives in anaphoric function), subordination (relative pronouns), all based on the same pointing gesture, whereas there is an ambiguity between external (deixis) and internal (anaphora) reference, see Calame 2004: 421. The difference between all three in syntactic coherence: the demonstratives are more loosely bound by word order than the anaphorics or the cataphorics (which refer to certain preceding or following elements of text) and the relatives are fixed at the first position (Páll 2005).

<sup>27</sup> It occurs as a personal pronoun in P. 6, P.13b and P.22b, as a demonstrative in P.13b, P.21b, P.22b and P.26, and P.31b. P.22b: τὰ μὲν νόσου τὰ δὲ βίου παύει is complicated because of the ambiguity of syntactic function (object or subject). For relative pronouns, see P6, P.7ab, P.8a, P.9, P.15, P.25, P.36 etc.

<sup>28</sup> E.g. in: P.6, P.9, P.8a, P.10b, P.12, P.13a, P.19c, P.22b, P.23a, P.24 and P.28.

<sup>29</sup> Its connective value should be reconsidered, because it occurs often in asyndeton at the beginning of the sentence as demonstrative anaphoric pronouns (cf. Carrière 1983: 117, Bizos 1981: 258). The cases of deferred position are numerous, but they still tend to begin minor phrases (if not sentences) as temporal and local adverbs. See Homer, *Il.* 6.308; 9.135, 227, 519; 19.20, 352; 21.359; 23.129, 552, 593 and others, cf. Humbert 1954: 368–369.

<sup>30</sup> The occurrence of *αὐτός* ('self') is difficult. In P.3, 22a, 20a it occurs in constructions, which according to Dover should be described as: 'pqMM', 'pqMpMM' (*αὐτός* corresponding to 'M'), or 'pMqMM' (cf. P.22a: τὸν αὐτὸν δὲ λόγον ἔχει).

<sup>31</sup> Cf. Schwyzler – Debrunner 1988 II: 25. It occurs in a cataphoric function before asyndeton e.g. in Hdt.1.199 and 6.86. For other usages, compare e.g. Hdt.1.196: Νόμοι

δὲ αὐτοῖσι οἶδε κατεστᾶσι. Ὁ μὲν σοφώτατος ὅδε κατὰ γνώμην τὴν ἡμετέραν, where it has to be considered as the beginning of the group. The usual postponed positions occur emphatically at the beginnings of new appositive groups, e.g. Hdt. 8.142: πάντα ἐπιθρέψειν, ἔστ' ἂν ὁ πόλεμος ὅδε συνεστήκη, Plato, *Apol.* 34 and 38b. See also Carrière 1960: 39–40, Schwyzer – Debrunner 1988 II: 208–209 (on *Ich*-deixis) and Ch.3.4.4 (on auto-reference)

<sup>32</sup> Such deictic adverbs (in direct deixis) are rare in Gorgias. The reason might be in the openly written character of his speech: he refers to his activity of composition as writing in P.36 and does not address his public directly as is usual in public speeches. (Although Greek rhetoric was meant for oral performance, speeches were often prepared in written form, which does not exclude direct deixis. However, in Gorgias, *Helen* the direct address to the public is missing and the deictics are rare. Therefore I suppose that the speech was written in order to be read (probably from the manuscript) before listeners, but not for a performance on a public occasion before a certain public, for which it could have been learned by heart at first.

<sup>33</sup> Such adjectives are less strictly bound to nouns (Devine – Stephens 1994) and in lyric poetry they occur often adverbially in neuter forms as complements to the sentence, otherwise they can stand for a group (e.g. πολλοί). Their preferential position is confirmed by the tendency that in poetry they usually begin rhythm units (a stanza or a verse), see Päll 2005.

<sup>34</sup> From the total of 42 occurrences of γάρ in the 1st book of Iliad, 5 occur at caesuras (e.g. 1.589, 356=507, 1.342). It can occur in verse-ends, see: Il.24.401: ἠῶθεν γάρ, Il.21.331: ἄντα σέθεν γάρ, Il.16.335: ἔγχεσι μὲν γάρ. Otherwise it helps to create word-boundaries after prepositives e.g. Il.21.434: ἄρχε· σὺ γὰρ γενεῆφι νεώτερος· οὐ γὰρ ἔμοιγε.

In tragedy the picture is different. 7 from a total of 114 occurrences of γάρ in Sophocles, *Antigone* occur in a verse-end, all in *enjambement*, but only two after prepositive words, τὸ γάρ in Ant. 67 and 238. Other examples occur after preferential words (Ant.651: τί γάρ, Ant. 1342: πάντα γάρ) or words, which have a function of focus in the sentence, as Ant.989: τοῖς τυφλοῖσι γάρ, Ant.1023: Ἀνθρώποισι γάρ, and Ant. 1103: συντέμνουσι γάρ. In the case of a verse-internal position we see re-syllabification over the word-boundary, as Ant.639: Οὕτω γά-ρ, ᾧ- παῖ, χρῆ διὰ στέρνων ἔχειν or Ant. 184: Ἐγὼ γά-ρ, ἴσ-τω Ζεὺς ὁ πάνθ' ὀρών ἀεὶ. In such cases the cohesive role of this particle becomes more evident.

<sup>35</sup> Graphical criterion (blank space) is problematic because of the disputable orthography of several clitics, which may (or may not) form composita. At the present moment it is as yet the only possibility for achieving a clear and controllable analysis.

<sup>36</sup> In Gorgias, *Helen* crasis occurs only once, in P.4.

<sup>37</sup> The clitic forms of personal pronouns should be counted as function words. However, they do not occur in Gorgias, *Helen*.

<sup>38</sup> These repetitions and polyptota appear in the description of cola, where they contribute to the construction of phrase rhythm.

<sup>39</sup> Cf. Cic. *De orat.* 2.xiii.56: “Thucydides ... ita creber est rerum frequentia, ut verborum prope numerum sententiarum numero consequatur...”

<sup>40</sup> See Chiron 2002: 68–74, Chiron 1999, Steinrück 1997: 4–50 and Dräger 2003.

<sup>41</sup> In Gorgias, *Helen*, short sentences do not occur, therefore the question is theoretical. The shortest independent and complete sentence is P.23b, which could correspond to a

period, being alone. However, it forms a complex period together with P.23a (see Part III.2).

<sup>42</sup> Problems in the analysis of large-scale phrase rhythm will not be removed by it, see e.g. to P.8ab in Part III.2.

<sup>43</sup> Because the number of rhetorical figures, which indicate the beginning and the end of the period is, as a rule, equal to the number of periods, which is one in every case. The number of cola (or words) involved e.g. in antithesis or polyptoton could be greater, but as these are already indicated under colon count, they are not duplicated. There is a small group of rhythm characteristics, figures, which are not defined through the boundaries of rhythm (or syntactic) units. For the sake of convenience, I call them period-internal (or colon-internal), although they may occasionally occur at boundary positions (i.e. including one word, which is situated at the beginning or in the end of a rhythm unit). The number of such figures, where the clause-internal position has to be taken into consideration separately, is small. Therefore, the study of polyptota, word repetitions and alliteration does not take into account, whether these repetitions occur within one rhythmic unit (i.e. in period-internal or colon-internal position) or involve boundary positions. See Ch.4.4.3.1.

<sup>44</sup> *Enthymema* is the common point for coordinated (“paratactic”) and subordinated (“hypotactic”) structures. For the discussion of it in rhetorical treatises, see Chiron 1993: lxx–lxxxiii.

<sup>45</sup> For discussion of the composition of the period, see Chiron 1999: 116–130. Cf. Arist. *Rhet.* 1409b: ἀφελῆ δὲ λέγω τὴν μονόκωλον and Dem. *De eloc.* 17.3: ... μονόκωλος περίοδος γίνεται, καθάπερ ἢ τοιάδε· Ἡροδότου Ἀλικαρνασῆος ἱστορίας ἀπόδεξις ἦδε.

<sup>46</sup> I do not rely on the classification by Marcovich 2006, according to whom the cases, in which verb and object are separated only by the subject, do not belong under hyperbaton.

<sup>47</sup> See Marcovich 2006: 131, Hummel 1993: 443. The way to this position is pointed out in works by Sulzer 1981, Conrad 1990.

<sup>48</sup> Additional information concerning the connection to other periods is occasionally added in {} brackets, e.g.: {SY.ADD to P.1}. This reflects the additive nature of the connection between the first two periods of the speech in P.2.

<sup>49</sup> Similar practices are usually discussed under hyperbaton in the case of prose (Marcovich 2006, Devine – Stephens 2000).

<sup>50</sup> Litotes is not used systematically by Gorgias, cf. P.5, P.18b, P.19b and P.20c. Its position in the rhetorical system of antiquity is not clearly established (Lausberg 1960: 304).

<sup>51</sup> Anaphora, parallelism and aposiopesis can occur as part of a priamel in the beginning of an entire text, for example a poem (Rice 1992: 16–18, Race 1982).

<sup>52</sup> See n.7 above. The definition of asyndeton should include the distinction, whether it is to be regarded as a total absence of connectors (in this case sentences, beginning with anaphoric pronouns, should not fall under asyndeton), and whether several particles (μέν, γε, δέ) are regarded as deprived of any connecting function. Asyndeta, occurring with initial demonstrative pronouns in anaphoric function at the head of sentences are very frequent. They have a strong cohesive role (as they refer backwards), see Ehlich 1983: 93, Carrière 1983: 117, Bizos 1981: 258, Kühner – Gerth 1904 : 343, Denniston 1954: xlv and Denniston 1952: 109. Their role in the organisation of the discourse

rhythm is important too, because they tend to occur at the beginnings of rhythm units (e.g. strophes or stanzas in poetry or periods and sub-periods), see Päll 2005.

<sup>53</sup> See Denniston 1960. Aristotle's example is period-internal, not inter-periodic (i.e. not from the beginnings of periods). The theory of Aristotle is elaborated by Ps-Demetrios, *De eloc.* 192 (Chiron 2001: 297, 1993: 122), whereas Demetrios' example of asyndeton (*De eloc.* 268) comes from the beginnings of cola and is connected to the discussion of the concentration of rhetorical figures (cf. Chiron 1993: 74).

<sup>54</sup> Meillet – Vendryes 1924: 579, Schwyzer – Debrunner 1988 II: 630–632, Carrière 1983: 116.

<sup>55</sup> For asyndeton *par rupture*, see Hummel 1993 : 369–376, for formal asyndeton, see Denniston 1954: xliii, Denniston 1952: 100 sqq., cf. *scheinbar* in Kühner – Gerth 1904: 339–341.

<sup>56</sup> As the aim of this study is to study rhythm on the level of the period, inter-periodic relationships are usually left aside. These are registered in the case of structural parallelism between adjacent periods (PAR), or syntactic addition (ADD), i.e. when the following period is linked to the preceding one, but the preceding one could be regarded as self-sufficient, e.g. {SY.ADD to per.1} in P.2.

<sup>57</sup> This practice has been more thoroughly studied in the case of greater structural units, whole poems or strophes (Herrnstein Smith 1968), but it is similar in Gorgias' longer periods. Similar practice is referred to with the notions of *κομπή* and *συστροφή* in Ps-Demetrios *De eloc.* 10, 17, which mark the period-end by a change in rhythm and by a closure and focusing (Chiron 2001: 80–82, Chiron 1993: 164, 174).

<sup>58</sup> See Dionysios from Halicarnassus, *Isocr.* 2.4, *DCV* 22–23, 28 (the prohibition of hiatus), Ps-Demetrios, *De eloc.* 68–74, Quint.9.4.33–36 and Chiron 1993: lxxxi–lxxxv, as well as Chiron 2001: 258–263.

<sup>59</sup> For modern analysis of hiatus in different Greek authors, see Dover 1997: 177–178.

<sup>60</sup> For more, see Lefkowiz 1963, 1991.

<sup>61</sup> This practice is very common in transitional parts of speeches by Greek orators.

<sup>62</sup> The triple division by Ostrowitz: semantical, syntactical and quantitative (in the number of syllables in parallel cola) parallelism can be reduced to a double division: sense and form.

<sup>63</sup> See Novikov 2004 for the discussion of these problems.

<sup>64</sup> See Levin 1962, Lloyd 1966.

<sup>65</sup> These cases were first studied by Aristotle as false antitheton, see *Rhetoric* III.9.

<sup>66</sup> For statistics it would be useful to distinguish between parallelism in sense and parallelism which uses both sense and syntactic structure (or parallelism, which uses only syntactic structures, but not analogy in sense).

<sup>67</sup> In Aristotle's *Rhetoric* III.9.7–8 (1409b) and later authors, e.g. Cicero, *Or.* 166–167: *semper haec, quae Graeci ἀντίθετα nominant, cum contrariis opponuntur contraria, numerum oratorum necessitate ipsa efficiunt, etiam sine industria. Hoc genere antiqui iam ante Isocraten delectabantur et maxime Gorgias, cuius in oratione plerumque efficit numerum ipsa concinnitas* (cf. also 219).

<sup>68</sup> Antithetic structures (*μὲν-δέ, οὐκ-ἀλλά* etc.) without opposition in sense do not occur in Gorgias, *Helen* and are therefore not studied here.

<sup>69</sup> Antithesis without structural parallelism would be classified mostly as a figure of sense. It is possible to distinguish antithesis in sense and antithesis in the meaning of words, without structural parallelism, see Anon. *Rhet.ad Alex.* 1435b (cf. Chiron 2002:

169). However, the example given there as antithesis in words (διδότω γὰρ ὁ πλούσιος καὶ εὐδοκίμων τῶ πένητι καὶ ἐνδεεῖ), would in this dissertation be classified as a special case of parallelism (analogy in structure without syntactical parallelism, accompanied by opposition in words).

<sup>70</sup> In order to register complex antitheta, it is for example possible to distinguish antitheta with two or three opposed members (Fehling 1969: 44).

<sup>71</sup> Sometimes distinctions have been made between parison as a parallelism in sentence structure, isocolon (i.e. adjacent cola having the number of syllables) and pariosis (or almost exact isocolon), whereas in the case of pariosis the number of syllables is +/-1 in the case of cola shorter than or equal to 10 syllables, whereas in complex cola of 11–20 syllables, the difference can be +/-2 (Novikov 2004). Although I approved this distinction three-four years ago, I find now that in most cases the same phenomenon can be better explained as gradation.

<sup>72</sup> Cf. Radermacher 1951. In order to study better the exact rhythmic repetition and proximity rhythms, the distinction (see preceding note) should be made in a statistical research, but not without a sound theoretical foundation and the study of textual tradition.

<sup>73</sup> There are clear parallels from poetry, where a verse-group (stanza, strophe) often ends with a shorter (or syncopated) version of one or another verse type as a clausula, e.g. Sapphic stanza by an adoneus, series of glyconeis by a pherecratean verse, iambic or anapaestic dimeters by their syncopated forms. Cf. Herrstein Smith 1968, West 1982: 52–53, 99–106.

<sup>74</sup> For statistical analysis, some distinctions between different gradation types should be made, as otherwise in syllabic rhythm almost every pair of adjacent commata (if not isosyllabic) could be explained as a gradation (see Part IV.2.1.1).

<sup>75</sup> Since Ps-Demetrios, *De eloc.* 61, 268 and Ps-Longinos, *De subl.* 20.1 (see Chiron 2001: 188, Lausberg 1960: 318–320 and Blasberg 1992).

<sup>76</sup> The repetition of the connector is connected to polysyndeton (Trenkner 1960: 23–26).

<sup>77</sup> The notion of epanaphora has sometimes been used for anaphora (Chiron 2001: 188, Lausberg 1960: 318–320). There are clashes in modern theory as well, e.g. Evans – Brogan – Halsall 1993 regard it as epanalepsis of two types: 1) word repetition inside one period (e.g. *παῦσαι* in P.4); 2) framing a period (or two adjacent periods) with a repeated word.

<sup>78</sup> I do not use the notion *epiploke* for concatenation, because I use it in another sense, see Cole 1988 and Ch.I.2.4.1, IV.3.

<sup>79</sup> For example, the choice between corresponsive (where the first is preparatory and the second connective) and additive καὶ may have rhetorical (including rhythm) reasons: see P.16c, where there are 5 corresponsive occurrences of καὶ and 2 more in completive pairs. Another possible case for rhythm studies could be the choice between καὶ and μέν-δέ structures (see Trenkner 1960).

<sup>80</sup> Cf. the role of interposed prepositions in preposition phrases (Marcovich 2006).

<sup>81</sup> It cannot be registered because of the final stop between P.18b and P.18c. According to this criterion the repeated words occur in different periods, although they immediately follow each other.

<sup>82</sup> Cf. Novikov 2004, who regards such cases under word-play.

<sup>83</sup> The sound echo is still evident. This procedure was different in the case of anaphora, where appositive words did not preclude analysis of the repetition between the nuclei of appositive groups (Ch.4.4.1). However, in the case of anaphora the repetition occurs between word-beginnings (containing stems) or whole words, which are semantically important.

<sup>84</sup> See Devine – Stephens 1994: 32–84, 234–253 for re-syllabification and movable nu. For movable nu as an orthographic principle, see West 1973: 86, 66.

<sup>85</sup> If we take re-syllabification as granted, another problem would appear. Gorgias, *Helen* P.20a ἦ-ν ἔ-πει-σε-ν, ἦ-νάγ-κα-σε could be analysed either as a homoeoteleuton (relying on resyllabification, in bold) or alliteration (ignoring the difference between words beginning with spiritus asper and spiritus lenis, underlined).

<sup>86</sup> The present system of description does not reveal how many examples of alliteration are coincidental with polyptoton. In special studies concerning alliteration, a sub-type (alliteration in polyptoton) should be distinguished.

<sup>87</sup> In Gorgias, *Helen* these are the only examples of prepositions in such positions.

<sup>88</sup> These differences in quality should be registered in special studies dedicated to sound repetition, but presently no further distinctions have been made.

<sup>89</sup> The counter-argument for ignoring this difference could be found in the etymology of Helen's name, which has sometimes been explained through ἑλεος (cf. Aischylos, *Agamemnon*). But this proves only, that the Greeks heard the similarity of sounds, which can be studied under sound repetition in general, and not under alliteration.

<sup>90</sup> For the analysis of phonic echoes in Greek, see Steinrück = Petra Tergum 1991: 1–6, 108 and more generally Stanford 1967; cf. also Mukažovsky 1964.

<sup>91</sup> In the analysis of Gorgias' prose rhythm it is important to regard rhythmic engagement on two levels: the level of syllables (as the nature of Gorgias' rhythm is often syllabic) and the level of cola, which is characteristic to prose rhythm in general.

<sup>92</sup> This index could be very useful for the comparison of Gorgias to other prose authors or even poetry. For example, in late antiquity or in the case of combined verse systems (especially in late antiquity and/or concerning Latin poetry beginning with saturnian verse or Plautus) it is not always clear, which rhythm type should be considered as principal.

<sup>93</sup> The study of Isocrates' prosody has demonstrated that he tries to avoid even the possibility of elision (i.e. the occurrence of short finals before a following vowel), therefore it would be not unreasonable to register such occurrences in Gorgias as well. I rely here on the statistics of an unpublished study.

<sup>94</sup> It is part of the general problem concerning the contraction of syllables in the development of Greek language and its different dialects.

<sup>95</sup> Cf. Cic. *Ad Her.*4.28: *In hoc genere saepe fieri potest, ut non plane par numerus sit syllabarum et tamen esse videatur, si una aut etiam altera syllaba est alterum brevius, aut si, cum in altero plures sunt, in altero longior aut longiores, pleniores aut pleniores syllabae erunt, ut longitudo aut plenitudo harum multitudinem alterius adsequatur et exaequet.*

<sup>96</sup> See Mouraviev's studies, according to which Heraclitus' rhythm is syllabotonic and based on a stress accent (see Ch.I.3.3). For a long time, pitch accent has not been studied as an element of Greek verse rhythm (see now Lascoux 2003 and Lukinovich 2005), and its character in prose has been ignored as well, probably because of the lack of symmetrical syllable patterns (intonation contours would probably give us more). It

is curious that in Greek poetry syllabo-tonic verse systems (i.e. verse systems based on the configurations of accentuated and non-accentuated syllables) have emerged relatively lately (and maybe only because of the influence of other languages and their verse systems). The reason might be that accentual rhythm using pitch is in Greek based more intonation contour, not alternation of accentuated and un-accentuated syllables (see Steinrück-Lukinovich 2007 and Steinrück 2007b).

<sup>97</sup> Where it should not be found, see e.g. Arist.*Rhet.*III.8.2–3 (1408b): περαίνεται δὲ ἀριθμῶ πάντα· ὁ δὲ τοῦ σχήματος τῆς λέξεως ἀριθμὸς ῥυθμὸς ἐστίν, οὗ καὶ τὰ μέτρα τμήματα· διὸ ῥυθμὸν δεῖ ἔχειν τὸν λόγον, μέτρον δὲ μὴ ποίημα γὰρ ἐστίν. ῥυθμὸν δὲ μὴ ἀκριβῶς· DH *De Demosth.*50.41: οὐ γὰρ ἐστὶ λέξις οὐδεμία Δημοσθένους, ἥτις οὐκ ἐμπεριείληφε ῥυθμοὺς καὶ μέτρα τὰ μὲν ἀπηρτισμένα καὶ τέλεια, τὰ δ' ἀτελῆ, τοιαύτην ἐπιπλοκὴν ἔχοντα ἐν ἀλλήλοις καὶ οὕτως συνηρμοσμένα, ὥστε μὴ δῆλον εἶναι, ὅτι ἐστὶ μέτρα. Cf. *ibid.* 50.43, *De comp.* 25.44, Ps-Demetrios, *De eloc.*39.5 and 180.

<sup>98</sup> See Cicero, *De orat.* 3.173: *versus enim veteres illi in hac soluta oratione propemodum, hoc est, numeros quosdam nobis esse adhibendos putaverunt: interspirationis enim, non defetigationis nostrae neque librariorum notis, sed verborum et sententiarum modo interpunctas clausulas in orationibus esse voluerunt*; and e.g. *Orator* 199: *cadere tantum numerose oportere terminarique sententiam*. *Orator* 40.174–176 refers to Thrasymachos, Gorgias and Isocrates as the first ones to use *numeri*, cf. *ibid.* 59 (on Demosthenes) and 230. For practice, see Blass 1901, Klock 1987, Steinrück 2004b: 129–162, Steinrück 2006.

<sup>99</sup> In poetry the analysis of this example as dactylic would be impossible on other grounds: a hiatus (marked by ‘H?’) is avoided verse-internally (by elision or metrical shortening) and a verse cannot be divided in exactly two halves (see West 1982).

<sup>100</sup> I did not analyse separately clausulae which were not adjacent, unless they were syntactically parallel or connected by rhetorical figures.

## PART III. THE ANALYSIS OF GORGIAS, *HELEN'S ENCOMIUM*

### 1. COUNTING RHYTHM IN GORGIAS

#### 1.1. Gorgias in ancient and modern criticism

In the beginning of Greek rhetorical prose there is an author whose work is as near to poetry as possible without being it: Gorgias, *Encomium of Helen* (further: *Helen*). Gorgias himself does not mention other differences between prose and poetry (*poiesis*) than metre (*Helen* 9); his style has been referred to as “poetical” already by Aristotle, *Rhet.* III.1.9 (1404a); his prose has been compared to the dithyrambs by Dionysios from Halicarnassus.<sup>1</sup> Gorgias’ style has often been condemned as excessive, because he does not hide his use of poetical figures, some critics find him dry or puerile and the so-called mannerist rhetoric of the *Encomium* has even caused doubts in Gorgias’ authorship.<sup>2</sup> For the authors who analyse the prose style of Gorgias, his poetical quality seems to consist in the use of different rhetorical figures, named after him (Buchheim 1996: 1026, 1029).

The analysis following in Part III.2 hopes to demonstrate that this speech reveals perfect mastering of both qualities for which Gorgias has ever been renowned: the dialectical argumentation and the figures of style (especially rhythm figures), which occur in an almost excessive way and in constant interaction. Gorgias’ style has been described as “mannerist”, but mannerism usually affects only the surface and does not penetrate into other, hierarchically higher (or deeper) levels of sense. However, in this speech the interaction between different layers of language, rhetorical figures and meaning is constant, whereas the form is in the service of the thought.

This dissertation studies Gorgias, *Helen* not only because of the poetic qualities of this speech: the history of Ancient Greek rhetoric knows Gorgias as the inventor of several rhetoric figures, which are now called by his name *schemata Gorgieia*.<sup>3</sup> Many scholars during the 19th and 20th century have demonstrated the use of Gorgianic figures before Gorgias (in poetry and prose)<sup>4</sup> and it has even been asked, why did the Greeks ascribe this invention to him?<sup>5</sup> It may be the result of his love for these figures, which represent different forms of repetition and syntactical parallelism. The Gorgianic figures have been interpreted as a fundament of prose rhythm both by the ancient tradition of rhetoric and by modern philology, and correspond well to our task: the study of the phrase rhythm.<sup>6</sup>

## 1.2. Text, references, order of display

All analyses in Part III.2 follow the text of the edition of Diels – Kranz, *Fragmente der Vorsokratiker*, paragraph by paragraph. In several occasions, where the text of Diels is not satisfying from the point of view of phrase rhythm or other reasons, his readings have been discussed, but not replaced. The replacement would not have been justified, as the aim of the present research is to establish the principles of study of (Gorgias') prose rhythm, and not the best sounding text of Gorgias, *Helen*. This position might seem too purist in these cases where Diels' readings or emendations seem unfortunate from the point of view of rhythm whereas the transmitted text would give a good rhythm as well as a sound sense. But since the principles of Gorgias' prose rhythm are not yet clear, it is better to avoid overdoing with figures (as suggested by Donadi 1985: 480). And if the poor condition of our text would blur slightly the statistics, it would still remain trustworthy, being achieved on a basis of an unaltered text, without emendations in a wished direction.

As told above, the basis of the analysis is Diels' text and his division into paragraphs (corresponding to complex periods, see Part II.3.2.2). However, in some places Diels' division has been neglected in favour of a new parsing, which has been done according to the principles and method described in Part II. Whenever it concerns a choice between two *lectiones* of the textual transmission, indicated in the critical apparatus, the text given by Diels is underlying, even if his choice could be criticised. Diels' deletions and insertions have been ignored in following cases: 1) when a word (words) has been marked as *delendum* by Diels, but left in the printed text, his deletion has not been taken into regard; 2) when a word (words) occurring in the text is marked as insertion by Diels, it is ignored. Thus the basis of the analysis remains always manuscript text, as presented by Diels.

The references to *Helen* are given either according to the division of paragraphs in Diels – Kranz 1952, as traditional, or according to the division into periods, presented in Part III.2, in the case of analysis and cross-references to it. In Part III.2 the text of Diels has been parsed into textual units from the subparts of the speech to paragraphs, mainly relying on the division by Diels and other editors (Immisch 1927, Donadi 1982, MacDowell 1982: 12, Kennedy 1991: 284–288). These greater textual units have been further parsed into basic textual units, i.e. the periods, and the smallest phrase rhythm units, the cola and the commata. The analysis is displayed as following: every subpart of the speech is introduced at first by general remarks (to each part of the speech and the paragraph); then its text is presented in the parsed form (including the analysis into cola and commata and the analysis of syllabic rhythm). Every independent text unit is followed by a description of its important characteristics, according to different levels of textual units in diminishing order (from

periods to cola, commata and words) followed by supra-segmental units, important for the rhythm, the syllables and the accents.

Although the higher textual units (i.e. the sub-parts of the speech and the paragraphs or the period complexes) are discussed in the analysis, they are left out from the description, which has been given only for the level of the period.<sup>7</sup> The reason is the difficulty of establishing criteria, compatible with the ones used for lower levels (i.e. shorter textual units). Paragraphs could be defined as more or less coherent textual (sense) units, with added criterion of perceptible length, but it is not enough for correct statistics. Therefore the highest (i.e. longest) unit studied below is a period, which corresponds to the smallest independent textual unit. The description of every period is followed by descriptions of its sub-parts: complex cola (including their sub-parts, cola and commata), and elementary textual units, words. The description ends with two supra-segmental characteristics, which are important for rhythm: syllables and accents. The order is as follows (for explications, see Part II):

1) After the abbreviated name of each rhythm unit, the figures indicating the number of its occurrences in given unit are presented, e.g. in P.1: PER 1, COL 4, WD 21, SYL 47, ACC 21. This number is always 1 (one) in the case of a period (because each period is described separately), but it is greater for other levels: for example P.1 includes 4 complex cola, 21 words, 47 syllables and 21 graphic accents.

2) The characteristics of rhythm are given in different types of brackets after these figures, according to the type of each textual unit.

2a) Figures and remarks in round brackets () include information, which is important for the count of rhythm units: the number of sub-periods and the number of indivisible cola and commata in a period; and several features which affect the statistics, e.g. the number of syllables, which could be elided, but are not, or the number of elided syllables.

2b) The square brackets [] include information concerning rhetorical and rhythmic features which are important for the division of a period or which create phrase rhythm, as well as rhythmic load indexes, i.e. figures which indicate the participation of syllables, accents etc. in different rhythm patterns.

The features of phrase rhythm are presented in [] brackets after the numbers characterising colon count. This description includes the figures, based on the combinations of commata and cola, meaning that the intermediate units (cola which are formed of commata and form complex cola) are analysed as well, not only the greatest and the elementary units (i.e. complex cola and commata). For example the description of P.1: COL 4 (Cl 5, Cm 3) [ANT 10.... ] means that the period as a whole is divided into 4 complex cola, which are composed 5 simple (indivisible) cola and 3 commata, and that different phrase rhythm units occur 10 times in antithesis (see the analysis below). The greater the numbers characterising phrase rhythm features are in comparison with the numbers of complex or elementary cola, the greater the rhetorical and the rhythmical intensity of the speech is.

2c) { } brackets include information concerning the connections of phrase rhythm units of each level to adjacent periods. For example the occurrences of repeated words (keywords) in other periods are indicated on the level of words, the continuation of large-scale syllabic rhythm on the level of syllables, and figures occurring between adjacent periods on the level of cola.

In Part III.2 a thorough description of each period is given, beginning with greater subdivisions (text levels) and continuing with characteristics peculiar to each of them. Each description is followed by the discussion, which explains the description and analyses most important phrase rhythm features of a period. In order to avoid analysing phrase rhythm as something which is separated from the contents of the speech, the thematic development of every sub-part of the speech and every paragraph is discussed at first.

## 2. ANALYSIS OF GORGIAS, *HELEN*

The *Encomium of Helen* is composed of: a) an introduction in two (general and specific) parts; b) an argument in four parts and c) a recapitulation in two parts (specific and general).

### **I. Introduction (DK 82 B 11.i–v)**

#### **Introduction A (DK 82 B 11.i–ii)**

In the beginning of the introduction to *Helen's encomium* Gorgias enumerates different topics of epideictic speeches, concerning beautiful, praise- and blameworthy and stressing the values of 5th century Athens:<sup>8</sup> the city is adorned by good men, and (their) soul, body, deeds and words are made beautiful respectively by beauty, wisdom, manliness and truth (P.1). Almost the same list (men and women, words and deeds, cities and situations) appears among the topics of praise or blame in P.2. The subject of the speech, Helen, is not yet mentioned, but the frame for the discussion of her love-story is traditionally political.<sup>9</sup> After the reference to these topics, which reappear later in the speech as keywords (cf. Part IV.1.3), Gorgias defines two principal types of epideictic speeches by stating that praiseworthy has to be praised and blameworthy blamed, not vice versa (P.2). This statement is a foundation of Gorgias' strategy: his whole speech seeks to prove that Helen cannot be considered blameworthy, as there is somebody/something else to blame and that therefore she should be praised.<sup>10</sup> This distinction of only two options (someone can either be praised or blamed) is in correspondence with the existence of two current titles of this speech in the tradition (*Apology of Helen* or *Helen's Encomium*, cf. DK 82 B 11.viii and xxi). The mistake in the choice of right topic (i.e. praising undeserving subjects) is referred to as a mistake and lack of

education in the end of P.2 (ἵσση γὰρ ἀμαρτία καὶ ἀμαθία).<sup>11</sup> Although the deceptiveness of word is an important topic later in this speech, Gorgias states in the beginning that the main virtue of speech (i.e. adornment, for which it should be praised) is truthfulness.<sup>12</sup>

In the beginning of the second paragraph (DK 82 B 11.ii) Gorgias states that the same man (i.e. himself) should reveal the truth concerning Helen and refute the false accusations.<sup>13</sup> Helen has traditionally been the object of blame of the poets, their public and public memory (cf. P.3). Following Stesichoros and Herodotos, Gorgias opposes himself to the mainstream of this tradition<sup>14</sup> and promises to reveal the truth, to end the mistakes and the ignorance and to prove that Helen is not guilty (in P.4). Thus he bases his strategy on the claim that he is telling the truth.

The first four periods (corresponding to Paragraphs I–II in Diels' edition) form a whole from the point of view of syntax: a series of general remarks concerning the speech and praise- and blameworthy is expressed without using personal verb forms. This is followed by a 1st person auto-reference in P.4, which is the first personal verb form in a main clause in the whole introduction (cf. Part.IV.1.5).

## I.

Paragraph I in Diels' edition corresponds to two sentences, both ending with a full stop. P.1 and the beginning of P.2 are based on polar expressions (σώματι-ψυχῆι, πράγματι-λόγῳι, ἄνδρα-γυναῖκα, λόγον-ἔργον and πόλιν-πράγμα), which present the topics of epideictic speeches. Most of them occur in both periods as keywords (ἄνδρα, λόγον, πόλιν, πᾶγμα), ensuring the connection between the periods (Part IV.1.3.2). Syntactically these periods are connected by the particle δέ, which is a normal connector between greater syntactic units (Denniston 1996: 162), whereas a hiatus between them functions as a weak separator (Part II.3.4.3.3). The paragraph can be regarded as a period complex, constructed of two periods: P.1, which is rounded up with an antithesis and a polyptoton (κόσμος-ἄκοσμία), and P.2, which is based on stating and rephrasing the functions of 'praise and blame'.

The rhythm of Paragraph I is based on parallelism and antithesis. The cola and the commata are organised by function words (except at the beginning and in the end of P.1 and in the middle of P.2, see below). The rhythmic engagement of words and syllables is high in both periods, but the index of isosyllabic rhythm is slightly higher in P.2. This asymmetry is balanced by higher density of phrase rhythm devices in P.1. The rising gradation of P.1 is balanced with falling gradation in P.2. The indexes of accentual and quantitative rhythm are high, as well as the numbers characterising sentence parallelism.

I.

(1)

<u>Κόσμος</u>	πόλει μὲν εὐανδρία,	2 + 7	= 9
	σώματι δὲ κάλλος, ψυχῆι δὲ σοφία,	6 + 6	= 12
	πράγματι δὲ ἀρετή, λόγῳι δὲ ἀλήθεια.	7 + 7	= 14
	τὰ δὲ ἐναντία τούτων <u>ἀκοσμία</u> .	8 + 4	= 12

### Description (1)

PER 1 [BEG :PAR; CLO :ANT, :HIAT, :RING (PLPT); SY.VE :Ma ABS.COP 6]{CONN to P.2}

COL 4 (Cl 5, Cm 3) [ANT 10, PAR 4; GRA 5, HOM 2, ISOC 4, PARIS 5; PLPT 2; RING 1]{PAR to Per.2}

WD 21 (CW 13, FW 8; WTDI 1.6) [ANT 6; PLPT 2; WD.RI :CW 12/13, :All 15/21] {REF to Κόσμος, ἀκοσμία in P.26, πόλει in P.2; εὐανδρία cf. εὐ- in P.7b (3x), 16c, 19cd, 21 d, ἄνδρα in P.2, 3, 5, 6, 7b, 31a, 32; σώματι in P.7b (2x), 15, 16c, 22ab, 26, 31a (2x), 31b, 32; κάλλος in P.7a, 27; ψυχῆι in P.3, 14, 16c, 18bc, 19c, 20b, 21a, 22ab, 25, 26, 32, 33; σοφία in P.7b, 10b, cf. 21d; πράγματι in P.2, 16c (2x), 29, 31b (cf. ἔπραξε in P.9 (2x), 24, 35); ἀρετή NONE; λόγῳι in P.2, 4 (2x), 5, 8b (2x), 9, 13a (3x), 14 (2x), 15, 16c (2x), 17, 18a, 19ab, 20b (2x), 21a, 21b (2x), 21c (2x), 21d, 22a (2x), 22b, 23ab, 35, 36 (3x), cf. λέξαι in P.3, 8a, λέγ- in P.6, 8a, 20b, 24, 30, cf. ἐλέγξαι in P.3, 6, 21c; ἀλήθεια in P.4, 21c; ἐναντία NONE (ἀντί in P.21b); ἐν- in P.7, 15, 18a, 21bcd, 28, 29, 31b (2x), 36 (2x), cf. 25; τούτων in P.14, 33}

SYL 47 (elidable 3) [SL.RI :ISOS 26/47, :GRA 41/47; AC.RI : ALL 17/47, :Niv 36/47, :CLA 12/16; QU.RI :All 21/47, :CLA 16/24]{GRA in P.2}

ACC 21 (CEW 14, FW 7) [AC.RI :CEW 14/14, :All 15/21]

Period (1) is based on parallelism (parison and antithesis), whereas antithetical structures and pairs of antithetical notions coincide. The period begins with five parallel clauses (cola), which are juxtaposed, using neutral μέν-δέ structures in a nominal sentence without copula (Denniston 1996: 369–372, Trenkner 1960: 22). Each of these clauses expresses different virtues of polis and they are opposed to the 6th clause, expressing negative qualities (unnamed). The division into cola is marked by particles and other function words, except after κόσμος, where the emphatic accent clash brings the keyword and the opposition in focus.<sup>15</sup> The first colon (πόλει μὲν εὐανδρία) is isolated, expressing the values of polis as reflected in their men in ensemble (cf. above, n.8). It is followed by complementary pairs, as usual in polar expressions, whereas less frequent πράγματι-λόγῳι in the place of more usual ἔργῳι-λόγῳι refers to citizen's political activity as a whole (Kemmer 1903: 212–217, 238–240), in accordance with the focus on city values. However, its occurrence can be explained by other reasons as well: isosyllabism (7 syllables in parallel cola) and the tendency to construct parison with words of the same formation type (as a parallel to σώματι, which occurred in the same position in the preceding colon pair).

The index of isosyllabic rhythm is not very high, but approaching to 1 on the level of proximity rhythms, i.e. gradation (Part II.4.3.2). The indexes of accentual and quantitative rhythm are relatively high, partly because of interaction with homoeoteleuta, but maybe also because of the initial position of this period.<sup>16</sup> There is a strict symmetry in word rhythm: each of Col.1–5 includes two content words, the initial and the final comma one CW, whereas the function words function as a buffer between them. In Col.6, the anaphoric demonstrative *τούτων* seems to have an emphatic accent (Part II.2.2.5).

The sound devices (homoeoteleuta) are not numerous, although their percentage in colon-ends is high (75%). In addition, the end of the 3rd complex colon, *ἀλήθεια* might be perceived as echoing the homoeoteleuta in *-ία*, but as the repetition does not exactly match on the levels of word formation, accents and writing, it is ignored in the description.

(2)				
	<u>ἄνδρα</u> δὲ	καὶ <u>γυναῖκα</u>	3 + 4	= 7
	καὶ <u>λόγον</u>	καὶ <u>ἔργον</u>	3 + 3	= <u>6</u>
	καὶ <u>πόλιν</u>	καὶ <u>πράγμα</u>	3 + 3	= <u>6</u> (=12)
χρῆ			<u>1</u>	= <b>13</b>
	τὸ μὲν <u>ἄξιον ἐπαίνου</u>	<u>ἐπαίνοι</u> τιμᾶν,	8 + 5	= <b>13</b>
	τῷ δὲ <u>ἀναξίῳ</u>	<u>μῶμον ἐπιτιθέναι</u>	6 + 7	= <b>13</b>
ἴση γὰρ			3 +	
	ἁμαρτία	καὶ ἁμαθία	4 + 5	= <b>9</b>
	<u>μέμφεσθαί</u> τε	τὰ <u>ἐπαινετά</u>	4 + 5	= <b>9</b>
	καὶ <u>ἐπαινεῖν</u>	τὰ <u>μωμητά</u>	4 + 4	= <b>8</b>

### Description (2)

PER 1 (1+1) [CLO.INT :ISOC, :HIAT; CLO :HOM, :PAR; SY.VE :IMPS + ABS.COP; CONN.INT :γάρ]{CONN to P.1, P.3}

COL 8 (Cl 5, Cm 11) [ANT 2, PAR 15; ANA 5, CHI 6, GRA 6, HOM 6, ISOC 13, PARIS 12; ALL 6, PLPT 9]{ISOC +1 to P.3}

WD 37 (CW 21, FW 16; WTDI 1,85) [ANT 14; WD.RI :CW 21/21, :All 20/37] {REF to ἄνδρα in P.1, 3, 5, 6, 7b, cf. 21a, 32; γυναῖκα in P.3, 5 (2x), 36; λόγον in P.1, 4 (2x), 5, 8b (2x), 9, 13a (3x), 14 (2x), 15, 16c (2x), 17, 18a, 19ab, 20b (2x), 21a, 21b (2x), 21c (2x), 21d, 22a (2x), 22b, 23ab, 35, 36 (3x), cf. λέξαι in P.3, 8a, λέγ- in P.6, 8a, 20b, 24, 30, cf. ἐλέγξει in P.3, 6, 21c; ἔργον in P.13a (2x), 15, cf. 7b, 15, 21b, 31a (2x), 31b; πόλιν in P.1; πρᾶγμα in P.1, 16c (2x), 29, 31b (ἔπραξε in P.9 (2x), 24, 35); χρῆ in P.21a, 35, cf. χρωμένους in P.19d; ἄξιον, ἀναξίῳ in P.10a, 13a; ἐπαίνου, ἐπαίνοι, ἐπαινετά, ἐπαινεῖν NONE; ἐπιτιθέναι cf τιθέναι P.8b, 11, 36; ἐπι-ἐπ-ἐφ in P.4.7b (3x), 8b, 13a (2x), 15, 16c, 18a (2x), 18b, 26; τιμᾶν cf. P.7b, 13a; μῶμον, μωμητά in P.35, 36; μέμφεσθαί in P.3,4, 33; ἴση cf P.7a; ἁμαρτία in P.18c, 24, 33; ἁμαθία in P.4, 36, cf. μαθεῖν in P.21a}

SYL 75 (46+29; elidable 2) [SL.RI :ISOS 60/75, :GRA 75/75; AC.RI :All 51/75, :Niv 58/75, :CLA 16/32; QU.RI :All 33/75, :CLA 16/40]{ISOS +8 to P.3}

ACC 37 (CW 21, FW 16)[AC.RI :CW 18/21, :All 16/37; :CLA 6/8]

Period (2) is composed of two sentences (sub-periods), from which the second explains the first one. Both sub-periods begin with a juxtaposition of cola, composed of short antithetic pairs of commata, and they end with two parallel cola, which express similar ideas on praise and blame, using chiasmic structures (Part II.4.2.1).

The period begins with two pairs of complementary polar expressions (man-woman, word-deed), which refer to the subjects of praise and blame. These are followed by another pair: καὶ πόλιν καὶ πρῶγμα ('and polis and its activity'). Here the phrase rhythm automatism gains power over the sense: the second member is neither antithetical nor complementary to the first and is superfluous (ἔργον 'deed' already occurred in the preceding pair). This might be the influence of the practice of epideictic speeches, mentioned above. But there are other functions as well: to proceed with isosyllabic rhythm, to form alliteration, and to ensure the connection to the first period by the repetition of important notions.<sup>17</sup>

The cola at the beginning and in the end of this complex period are separated by different function words, although the index of word type distribution indicates a high percentage of content words. This occurs because of the end of the first sub-period, where the function words are absent and the sub-parts of the complex colon are separated by a hiatus and a polyptoton (ἄξιον ἐπαίνου Ἡ ἐπαίνωι τιμᾶν). A reversal of the positions of direct and indirect object (AG.D.Inf vs D.A.Inf) in the following complex colon (τῶι δὲ ἀναξίωι Ἡ μῶμον ἐπιτιθέναι) is anticipating the chiasmic word-order of the second sub-period. Isosyllabic rhythm is supported by double antithesis: in notions and sentence structure.

The syllabic rhythm in general seems unbalanced, as the lengths of the sub-periods are not equal. However, in the period as a whole the placement of cola and commata is perfectly symmetrical: 3 shorter cola are followed by a comma, then two long (isosyllabic) cola occur in the centre, followed by a comma and 3 shorter cola of approximately the same length. The same symmetry is repeated in word rhythm (regarding content words): 6 one-word commata (or two-word cola) are followed by a pivotal word, two cola of respectively 4 and 3 words, another pivotal comma of one word and again 3 two-word cola (or 6 one-word commata). A slight misbalance in the centre at the word ἀναξίωι brings the focus on Gorgias' task: to find another culprit in the place of Helen. In the end of the first sub-period the text is uncertain: the manuscript readings differ and some scholars have argued for aorist in the place of present infinitive (see ἐπιθεῖναι in Donadi 1982: 7). However, the syllabic rhythm (isosyllabic cola of 13 syllables) seems to be a solid argument for the present text: such parallel cola are typical to period-ends in Gorgias, *Helen* (Part IV.1.6.2). The strategy of summarising adjacent commata and cola and preparing the following isosyllabic cola occurs here for the first time, but will be seen on several occasions later in the speech (Part I.2.4.3, IV.2.2).

Most commata in this period have one accentual peak, as they are composed of one content word and an appositive particle (or particles). The usage of connecting particles is varied and corresponds to the circular structure in rhythm (smaller cola – longer cola – smaller cola): at the beginning a connector καί is used almost emphatically in polysyndeton (cf. Trenkner 1960: 11), the antithesis in the middle is coordinated by the relatively neutral and usual μέν-δέ, whereas the second sub-period uses at first the connector καί between parallel words and then τε καί for presenting ‘praise-blame’ again, but as a complementary pair (Denniston 1996: 369–370, 289 and 514–515).

A pun can be found in the end of the period: ἴση γὰρ ἀμαρτία καὶ ἀμαθία μέμφεσθαί τε τὰ ἐπαινετὰ καὶ ἐπαινεῖν τὰ μωμητὰ, ‘to praise blameworthy and to blame praiseworthy is equivalent to mistake and ignorance’.<sup>18</sup> The word ἴση might occur here as a hidden auto-reference and refer not only to the equivalence of certain words or deeds, but to the similarity (e.g. equal length) of these words: both words (ἀμαρτία and ἀμαθία) have the same number of syllables (four), accentual peaks in the same position (paroxytona), they are composed of the same vowels and almost the same consonants, only their quantitative patterns are slightly different. Moreover, although the final clauses of this period (μέμφεσθαί τε τὰ ἐπαινετὰ καὶ ἐπαινεῖν τὰ μωμητὰ) are not strictly isosyllabic, they use parison (repeated syntactic structure), which means that they are equivalent (ἴση) from the syntactic point of view.

## II.

Paragraph II is added to Paragraph I by the connective particle δέ at the beginning of P.3 and by lexical echoes (μεμφομένου, τὰληθές, λόγῳ, ἀμαθίας). It is based on the antithesis ‘the same man’ (P.3) vs. ‘I’ (the *enonciateur*, or the addresser<sup>19</sup>, P.4), which is formal, as the reference to the orator includes the reference to Gorgias (as orator) himself. The principal opposition of this paragraph is ‘man’ vs. ‘woman’ (orator, a man, who can blame and free from blame, and Helen, a woman who is blamed and can be freed from blame). The paragraph ends with Gorgias’ program for the speech: 1) to compose an argument; 2) to free Helen from blame and accusation; 3) to refute those who blame her and demonstrate their mistakes and 4) to demonstrate the truth and free the listeners from ignorance. P.4 refers back to the keywords of P.2 and P.3 (blame and mistake), thus ensuring the coherence of the whole introduction (see Part IV.1.3). The interest for the truth is not something that Gorgias or sophists have been credited at the first place; however, his strategy of argumentation is based on two mutually excluding opposites, therefore Gorgias’ claim, that *opinio communis* is mistaken, leads to the conclusion that his speech is right.

Although the ends of P.3 and P.4 are marked by different figures of closure, the link between them is ensured by the connective δέ and lexical echoes (ἀκούειν and μέμφεσθαι). The index of syllabic rhythm is high in both



I.2.4 and IV.3). These cola and commata occur in the function of pivots, which can be joined to adjacent cola (commata) either from the left or from the right. For example, one of the verbs γέγονεν, either in the middle of P.3 or in its end might seem superfluous. However, similar repetition of ἔσχε in P.7 indicates that it should not be deleted as irregular. In P.3, γέγονεν forms an independent accentual unit (comma) of 3 syllables, the same length as the commata at the boundary of the main and the relative clause (γυναιῖκα and περὶ ἧς). As the preceding pivots, it can be added to the preceding and the following cola, forming units of 9, 12 or 15 syllables. The insertion of this comma makes the syllabic and phrase rhythm flexible, as in Pindar's dactyloepitrites, where the *anceps interpositum* serves as a pivot between two metrical cola (cf. Maas 1962: 40, Steinrück 2007: 80 and Part IV.3.2). Using pivotal commata is Gorgias' strategy for introducing relative clauses. It is close to Homeric practice of *enjambement* of runover words, which gives greater flexibility to the rhythm and helps to avoid monotony. As in verse, such runovers or pivots occupy space (time) until the next clause has a convenient beginning-point and serve as a transition (or a filler) and a set-up for the following sentence (Part IV.3.1.1).

Lessened attention to syllabic rhythm may be the result of focusing the attention on the argument, where Gorgias opposes the common memory (*opinio communis*) and his own position by using allusion on the popular etymology of Helen's name.<sup>20</sup> However, the attention to word rhythm (accentual and quantitative patterns) is high, especially on the level of independent accentual units or accentual peaks (in content words). It is accompanied by analogy in phrase structures (gen.compl. preceding the noun subject) and an increase in word-play: exact repetitions (cf. P.7, P.9 and P.31), polyptota and sound play.

#### (4)

ἐγὼ δὲ βούλομαι		5+
<b>λογισμὸν</b> τινα	τῶι <b>λόγωι</b> δοῦς	5 + 4 = 14
<u>τὴν μὲν κακῶς ἀκούουσαν</u>	<u>παῦσαι</u> τῆς αἰτίας,	8 + 6 = 14
<u>τοὺς δὲ μεμφομένους</u>	<u>ψευδομένους ἐπιδείξας</u>	6 + 8 = 14
καὶ <b>δείξας</b> <u>τάληθες</u>	[ῆ] <u>παῦσαι</u> τῆς ἀμαθίας.	6 + 8 = 14

#### Description (4)

PER 1 [CLO :PAR; SY.VE :Ma 1]{ANT to P.3}

COL 4 (Cl 6, Cm 3) [ANT 2; CHI 2, HOM 2, ISOC 4; PLPT 4, RP.WD 2; SO.RP 2;

RH.CHI.4]{ANT +1 to P.3}

WD 28 (CW 16, FW 12, WTDI 1.3; 1 crasis, 1 delendum) [ANT 4; PLPT 4, RP 2, SO.RP 6; WD.RI :CW 14/16, :All 0/28]{REF to ἐγὼ NONE, in ἐμόν P.36; βούλομαι in P.21a, 36, cf. βούλ- in P.9 (2x), 19c, 34; λογισμὸν, λόγωι in P.1, 2, 5, 8b (2x), 9, 13a (3x), 14 (2x), 15, 16c (2x), 17, 18a, 19ab, 20b (2x), 21a, 21b (2x), 21c (2x), 21d, 22a (2x), 22b, 23ab, 35, 36 (3x), cf. λέξαι in P.3, 8a, λέγ- in P.6, 8a, 20b, 24, 30, cf. ἐλέγξαι in P.3, 6, 21c; τις, τι in P.16c, 22b, 28; τίς, τί in P.20a, 32; cf. 8a (3x); δοῦς in P.32; κακῶς in P.20b (&), 22b, κακ- 13a; ἀκούουσαν in P.3, 16bc, 20b (&), 22b; παῦσαι, παῦσαι in P.15, 22b; αἰτίας in P.8b, 11, 13a, 14, 20a,

23b, 24, 35, cf. 10a (2x); μεμφομένους in P.2, 3, 33, cf. P.2, 35, 36; ψευδομένους in P.19a; ἐπιδείξας, δείξας in P.16ab, cf. 21d, δόξα in P.16b, 18bc, 19cd, 21b (3x), 21d, 36, δόξ- P.7b; δοκέω in P.6; ἐπι-ἐπ-ἐφ in P.2 (5x), 7b (3x), 8b, 13a (2x), 15, 16c, 18a (2x), 18b, 26; τάληθές in P.1, 21c; ἀμαθίας in P.2, 36, cf. μαθεῖν in P.21a}

SYL 56 (1 crasis)[SL.RI :ISOS 56/56; AC.RI :All 14/56, :Niv 18/56, :CLA 8/16; QU.RI :All 22/56, :CLA 0/16]

ACC 26 (CW 16, FW 10) [AC.RI 0]

Period (4) is composed of a sentence core (ἐγὼ δὲ βούλομαι), which is expanded with several participial and infinitive clauses. It reveals strictest isosyllabism, which can be found only in P.29 (cf. P.20a). However, this analysis is possible only according to the readings given by both main manuscript branches and against the deletion proposition of some editors.<sup>21</sup> The deletion of the particle [ἦ] seems justified from the point of view of syntax and meaning. But the occurrence of a connector would be in accordance with Gorgias' practice to introduce a great number of different particles, functioning as separators between the cola and the commata.<sup>22</sup> In this case [ἦ] should be replaced by the emendation proposed by Laskaris [καί] and followed by MacDowell 1961: 120–121, MacDowell 1982: 20 and Donadi 1982: 9 or by an alternative: [ἦ] (cf. Schwyzer – Debrunner 1988 II: 564–565).

The first complex colon follows a triple rhythm pattern (beginning with commata of 5, 5 and 4 syllables), but after the end of the participial clause new complex cola follow, which repeat the syllabic rhythm (14 syllables) of the first complex colon. These complex cola are based on double rhythm in cola and commata of 8 and 6 syllables. Each of the complex cola in the series answers to the preceding one, using one or another repetition figure: an antithesis (κακῶς ἀκούουσιν, μεμφομένους), a combination of antithesis and chiasm (ψευδομένους ἐπιδείξας, καὶ δείξας τάληθές), sound repetition, mostly achieved by using words of the same formation type (μεμφομένους-ψευδομένους, αἰτίας- ἀμαθίας), word repetition, or homoeoteleuton combined with antithesis (παῦσαι τῆς αἰτίας, [ἦ] παῦσαι τῆς ἀμαθίας).

This multiple isocolon serves as a recapitulation to the general part of the introduction of the speech. The general statement about beauty and blame has ended and the goal of the speaker is stated. Gorgias returns to it again in the end of the speech (P.36).

### **Introduction B (DK 82 B 11.iii–v)**

In the second part of the introduction Gorgias describes his subject, Helen. In P.5 he mentions two principal aspects, which are usually praised in eulogies: her noble nature (here: beauty) and her ancestors.<sup>23</sup> Gorgias reverses this order, dedicating P.6 to Helen's noble ancestors (according to the myth her father was either king Tyndareus or Zeus himself), P.7a to her beauty and P.7b to its impact on different distinguished men. These are characterised by different

positive features: richness, noble origin, force and wisdom, strengthening the praise of Helen by analogy.<sup>24</sup> Although these periods are usually given as two paragraphs in the editions (DK 82 B 11.iii–iv), from the point of view of argument they form a whole.

This short praise of Helen is continued by Gorgias' remarks, which refer to his plans and orator's tasks in general. In P.8a he interrupts his narration with a figure of omission (ὅστις μὲν οὖν... οὐ λέξω), explaining that the pre-history of the Trojan war is already known to everyone and could therefore not give pleasure. This statement of *delectatio* or *τέρψις* as a goal of his speech transfers the traditional goal of poetry (pleasure) to rhetoric, in opposition to the practical goal of court speeches, *πίστις*.<sup>25</sup> In P.8b Gorgias rephrases the figure of omission (ὑπερβάς... ἐπὶ τὴν ἀρχὴν τοῦ μέλλοντος λόγου προβήσομαι ... 'I'll go further to the beginning of my intended speech') and adds more explanations of his strategy, promising to name the real reasons (i.e. real culprits) of Helen's voyage to Troy. He uses the argument from the probable (*εἰκός*), which is one of the earliest references to it in rhetorical theory and practice.<sup>26</sup> Gorgias has already stated that the common opinion on Helen is mistaken (in P.4) and promised to prove her innocence by indicating other, more probable culprits. This is continued in the part of proofs, concerning divine will, rape, persuasion and sight. Every proof uses the same tactics, which is later known as *status qualitatis* (*ποιότης*): he admits the deed, but stresses that she did not act from her free will (*ἀκούσιον*, ἐξ ἀνάγκης), asking for pardon and/or trying to shift the guilt to another culprit (*μετάστασις*).<sup>27</sup>

Regarding rhythm, the first (Paragraph I–II) and the second (Paragraph III–IV) part of the introduction are symmetric. In both, the initial periods (P.3–4 and P.5–6) reveal relatively strict patterns of syllabic rhythm, in the middle (P.3 and P.7a) the syllabic rhythm is slightly blurred and in the ends it returns in a very strict manner (P.4 and P.7b). The usage of syntax type is parallel to it: the nominal sentences without copulas occur in the beginning and the middle, but in the period-ends the personal verb forms appear in main clauses (P.4, P.7), see Part IV.1.5. There is a certain interaction between the rhythm and the argument, but it may lose its importance in the cases where the argument becomes complex (P.3, P.7a), in order to help focus the attention on the subject. The end of the introduction, P.8a and P.8b seems to be connected syntactically and rhythmically more to P.9, which begins the part of the proofs (see Part IV.1.2).

### III.

Paragraph III of the editions of *Helen* corresponds to two complex periods, which are connected by sense and word-echoes, forming a chiasmic structure (οὐκ ἄδηλον and δῆλον) at the junction. Syntactically P.6 is introduced as an explanation to the preceding period (P.5, see Denniston 1996: 58–59). The initial comma of P.5 ὅτι μὲν οὖν introduces a subordinate clause in protasis, enabling a connection between the preceding part of the speech and the

following. Although its function is to stress the actuality of expressed facts, οὖν has connective value as well, introducing a new step in argumentation (Denniston 1996: 416, Part IV.3.2).

The syntax in P.5 and in the main clause of P.6 is gnomic (nominal sentences without copulas),<sup>28</sup> which corresponds to the function of the paragraph: to give indisputable arguments and present Helen's character favourably (Part IV.1.5.2.1). The opposition 'men' vs. 'women' connects periods with another chiasmic pattern, at the same time referring back to the beginning of the introduction (P.2 and P.3). Although P.5 uses isosyllabism, it relies mostly on proximity rhythms and circle patterns, whereas P.6 is based on parisa and isocola. The length of cola and the frequency of parallelism rise towards the paragraph end (P.6), as usual in final textual units.

III.

(5)

ὅτι μὲν οὖν	<u>φύσει</u> καὶ <u>γένει</u>	4 + 2+3	= 9
τὰ <u>πρῶτα</u> τῶν <u>πρώτων</u>	<u>ἀνδρῶν</u> καὶ <u>γυναικῶν</u>	<u>3 + 3</u> + <u>2+4</u>	= 12
ἡ <u>γυνή</u> περὶ ἧς	ὅδε ὁ <u>λόγος</u> ,	<u>3 + 3</u> + 5	= 11
οὐκ ἄδηλον	οὐδὲ <u>ὀλίγοις</u> .	4 + 5	= 9

**Description (5)**

PER 1 [CLO :LIT, :PAR, :RING (RH), :SO.REP; SY.VE :Ma ABS.COP 1, :Rel ABS.COP 2]{FOLL in P.6}

COL 4 (Cl 1, Cm 10) [PAR 8; ANA 2, GRA 6, HOM 5, ISOC 4, PARIS 6; ALL 4, PLPT 4, SO.RP 2; INT.HIAT 2]{ISOC +1 to P.6, CHI (2x) to P.6}

WD 24 (CW 10, FW 14; WTDI 0.7) [ANT 2; PLPT 4; RP 2; WD.RI :CW 10/10, :All 24/24]{REF to φύσει in P.22a, 25, cf. πέφυκε in P.10b, 31b; γένει in P.7b, cf γέν- in P.6, 7a, 8b, γέγον- in P.3 (2x), 24, γίν- in P.18ab, 27; πρῶτα, πρώτων in P.10a, 21b; ἀνδρῶν in P.1, 2, 3, 6, 7b (root in 31a, 32); γυναικῶν, γυνή in P.2, 3, 36; περὶ in P.3, 5, 16c, 19abcd, 29; ὅδε NONE; λόγος in P.1, 2, 4 (2x), 8b (2x), 9, 13a (3x), 14 (2x), 15, 16c (2x), 17, 18a, 19ab, 20b (2x), 21a, 21b (2x), 21c (2x), 21d, 22a (2x), 22b, 23ab, 35, 36 (3x), cf. λέξαι in P.3, 8a, λέγ- in P.6, 8a, 20b, 24, 30, cf. ἐλέγξαι in P.3, 6, 21c; οὐκ in P.7a, 8a, 10b, 13a, 14, 19b, 19c (3x), 21c, 23a, 24, 25, 33, 34 (2x), 20a (?); ἄδηλον in P.21b, cf. P.6, 12; ὀλίγοις NONE}

SYL 41 (2 elidables) [SL.RI :ISOS 18/41, :GRA 41/41; AC.RI :All 23/41, :Niv 30/41, :CLA 0/16; QU.RI :All 12/41, :CLA 8/16]

ACC 21 (CEW 12, FW 9)[AC.RI :CEW 12/12, :All 10/21]

Period (5) corresponds to a complex sentence with two subordinate clauses in protasis and a main clause in apodosis; all three are in the form of nominal sentence without copula. The usage of gnomic syntax supports Gorgias' claim that Helen has the noblest nature and origin (Part IV.1.5.2.1). The division of the period into complex cola depends from the particles and the structure of cola (parallelism and/or sound figures). The function words play the role of a buffer (cf. Part IV.1.4), prevailing over the content words (index 0.7).

The division of the second complex colon is ambiguous and presents a clash between rhetorical and syntactical units: according to rhythm (isocolon), analogy with the preceding colon (pair of complementary notions) and sound figures (polyptoton) it should be parsed into two cola: τὰ πρῶτα τῶν πρώτων | ἀνδρῶν καὶ γυναικῶν. According to prosody and syntax the parsing would be different, as τῶν πρώτων ἀνδρῶν can form a minor phrase. This ambiguity is confirmed by the parallelism with the 3rd complex colon, where the relative clause begins at the same place as the comma with a genitive complement in the 2nd complex colon. This clash of rhythmic and syntactic boundaries is close to the practice in poetry, especially as the noun ἡ γυνή has the same functions as the runover words in epic poetry (Part IV.3.1.1).

Parallelism occurs in P.5 only on the level of commata. The indexes of accentual and quantitative rhythms are low inter-periodically and in clausulae. However, the accentual pattern of the last two syllables of the ends of complex cola is close to myuric hexametres of late antiquity, where verses end with paroxytona or perispomena (cf. West 1982: 173–174). This renews the question, whether it is justified to regard the last four syllables of every colon as a clausula, in the place of two or three final syllables.

The period ends with word- and sound-play. The 6th and the 8th colon (ὄδε ὁ λόγος and οὐδὲ ὀλίγοις) share similar sound-patterns: they have the same number of syllables, the hiatus, intonation peaks and all consonants occur in the same position, as well as some vowels. The sound parallelism is strengthened by double litotes and an anaphora (οὐκ ἄδηλον οὐδὲ ὀλίγοις) in Col.7 (cf. Part II.3.4). The function of litotes is double: to avoid an abrupt and short period-end by supporting the parallelism, and to create a pivot, which functions as a ground for the following argument: οὐκ ἄδηλον is resumed at the beginning of the P.6 with a positive statement (δῆλον γὰρ ὥς), which gains more affirmative force from the contrast to preceding double negation.<sup>29</sup>

(6)

δῆλον γὰρ	ὥς		3+1= 4
	<u>μητρὸς</u> μὲν	Λήδας,	5+
		<u>πατρὸς</u> δὲ	3 = 8
		τοῦ μὲν <u>γενομένου</u> θεοῦ,	2+4+2= 8
		<u>λεγόμενου</u> δὲ θνητοῦ,	4+3 = 7*
		<u>Τυνδάρειω</u> καὶ <u>Διός</u> ,	4+3 = 7(+)
ῶν			1 [=8]
	<u>ὁ</u> μὲν διὰ τὸ <u>εἶναι</u> ἔδοξε,	<b>10</b>	
	<u>ὁ</u> δὲ διὰ τὸ <u>φάναι</u> ἠλέγχθη,	<b>10</b>	
καὶ ἦν			2
	<u>ὁ</u> μὲν <u>ἀνδρῶν</u> κράτιστος	<b>7</b>	
	<u>ὁ</u> δὲ <u>πάντων</u> τύραννος.	<b>7</b>	

### Description (6)

PER 1 [CLO :ISOC, :PAR; SY.VE: Ma ABS.COP 1, :Rel.VE 2, COP 1]{PLPT, ISOS to P.5}

COL 8 (Cl 7, Cm 6) [ANT 10; ANA 4, CHI 8, HOM 6, ISOC 8, PARIS 6; ALL 2; INT.HIAT 2]{ISOC +1, CHI, PLPT +1 to P.5}

WD 41 (CW 19, FW 22; WTDI 0.86) [ANT 6; WD.RI :CW 14/18, :All 32/41]{REF to δῆλον in P.12, cf. P.5, 21b; μητρός NONE; Λήδας NONE; πατρίδος in P.13a; γενομένου in P.7a, 8b (cf 5, 7), cf. γίν- in P.18ab, 27, γεγονέναι in P.3 (2x), 24; θεοῦ in P.9, 10ab, 11, 33 (2x), cf 7a, 15, 18a, 33 (1x), 35; λεγομένου in P.3, 8a (2x), 20b, 24, 30; cf. ἠλέγχθη; θνητοῦ NONE; Τυνδάρεω NONE; Διός NONE; διά- in P.8ab, 10a, 16c, 18a, 21c, 23b, 24, 25, 27 (3x), 35; εἶναι NONE, cf. ἦν in P.8b, 19b, 24, cf. 18c, 30, 33 (2x); ἔδοξεν cf. δόξα in P.16b, 18bc, 19cd, 21b (3x), 21d, 36, δόξ- P.7b, δείκνυμι in P.4 (2x), 16ab, cf. 21d; φάναι NONE, cf. φήμη in P.3; ἠλέγχθη in P.3, 21c; ἀνδρῶν in P.1, 2, 3, 5, 7b (root in 31a, 32); κράτιστος NONE; πάντων in P.7b, 19b (2x), 24, 35, cf. 16c; τύραννος NONE}

SYL 71 (1 not synizesis) [SL.RI :ISOS 64/71 :GRA 68/71; AC.RI :All 34/71, :Niv 43/71, :CLA 8/36; QU.RI :All 8/71, :CLA 8/32]

ACC 36 (CW 23, FW 13)[AC.RI :CEW 18/23, :All 20/36]

Period (6) is a complex sentence, which begins with a very short nominal main clause without copula in protasis and is continued by subordinate clauses, which are expanded with parallel constructions. The period is connected to P.5 by explicative particle and keyword repetition (chiasm in -δῆλ- and root λεγ-). It is entirely based on a combination of chiasm and antithesis, corresponding to the double nature of Helen's ancestry. The principal chiasm was anticipated in P.5 and at the junction of P.5 and P.6. It begins with τοῦ μὲν γενομένου θεοῦ and proceeds through the opposition between a god (G) and a man (M) in 4 antithetic pairs: G vs. M : M vs. G : G vs. M : M vs. G. This antithesis is supported by the opposition of being and being told (λεγομένου). In the second half of the period this opposition is rephrased as 'being' vs. 'telling' (φάναι), reminding of Gorgias' interest in the perceptibility of the world.<sup>30</sup>

The analysis of syllabic rhythm depends on the interpretation of textual tradition. According to the editors and tradition A (our text) there is one father, who was allegedly a mortal, but actually a god, whereas tradition X retains in the second colon (τοῦ δὲ λεγομένου θνητοῦ) the same sentence structure as in the first, thereby presenting two father candidates (the mortal one, as told vs. the real one, the god).<sup>31</sup> The rhythm cannot give any definite solution: the first (our) reading can be analysed as two isocola of 8 and two of 7 syllables, followed by a monosyllabic comma (as in several other parts of this speech), whereas the second reading, by adding this comma to the preceding colon, can be analysed as 4 isocola of 8 syllables. As the first analysis presents a contrast between the isocolon and the preceding comma, which occurs twice in this period, it should be preferred.

In P.6 the hiatus (cf. P.5) participates in rhythm again. It functions as a separator between words (commata) in the same phrase-internal position in

adjacent cola: ὁ μὲν διὰ τὸ εἶναι Ἡ ἔδοξεν and ὁ δὲ διὰ τὸ φάναι Ἡ ἠλέγχθη. The parsing function of the hiatus is supported by homoeoteleuta (-vαι.) and parallelism in sentence structure (parison). In the last pair of cola this segmentation of longer rhythm units into elementary ones (i.e. single words) occurs slightly differently, by using rhyming word-ends and without hiatus.

#### IV.

Paragraph IV is presented in the editions as two periods, marked by a stigme in the middle and a full stop in the end. The paragraph can be interpreted as one complex sentence, as the grammatical subject of the main clause does not change in P.7a and P.7b, and because of several word echoes (e.g. ἔσχε, ἔσχον) and a continuation in syllabic rhythm. Actually, the sentence complex is larger, as P.7a brings back the grammatical subject (Helen) of P.5, which had been suppressed in P.6; the coherence between Par.III and Par.IV is supported by an anaphoric pronoun (ἐκ τοιούτων) at the beginning of P.6.<sup>32</sup>

P.7a and P.7b are characterised by multiple usage of word and sound repetition, although they have different sentence structures. As closure figures appear only in the end of P.7b, P.7a (being relatively short with its 29 syllables) can be interpreted as an introduction to it.

#### IV.

##### (7a)

ἐκ τοιούτων δὲ γενομένη		9 (+)		[9]
	ἔσχε	2 +	=11	[11]
τὸ ἰσόθεον κάλλος,		7	= 9	
ὁ λαβοῦσα καὶ οὐ λαθοῦσα		4 + 5(+)	= 9	
	ἔσχε·	2	=11	[20]{18}

##### Description (7a)

PER 1 [BEG :ANAPHR; CLO :EIPPH; SY.VE :Ma 1, :Rel 1] {REF to P.6}

COL 3 (Cl 1, Cm 5)[PAR 2; EIPPH 2, HOM 2, ISOC 3; ALL 2, RP.WD 2; INT.CLO :HIAT 2; RING 1]{ISOC+1 to P.7b; PLPT+1 to P.7b}

WD 14 (CW 7, FW 7; WTDI 1) [WD.RI :CW 6/7, :All 8/14] {REF to ἐκ in P.20a, 22b (3x), 23b, 26, 27, 28 (2x), 31a; τοιούτων NONE; γενομένη in P.6, 8b, εὐγενείας in P.5, cf. γίν- in P.18ab, 27, γεγονέναι in P.3 (2x), 24; ἔσχε, ἔσχε in P.7b, 8a, 16ac, 19b, 19c (2x), 20a (2x), 22a, 25, 31a, 33; ἰσόθεον cf. ἰσό- P.2; θεο- in P.6, 9, 10ab, 15, 11, 33 (3x), 35, 18a; κάλλος in P.1, 27; λαβοῦσα in P.8a; οὐ in P.5 (2x), 8a, 10b, 13a, 14, 19b, 19c (3x), 21c, 23a, 24, 25, 33, 34 (2x), 20a?; λαθοῦσα NONE}

SYL 29 (elidable 1) [SL.RI :ISOS 27/29; AC.RI :All=Niv 25/29, :CLA 8/12; QU.RI :All 14/29, :CLA 0/12]

ACC 12 (CEW 8, FW 4)[AC.RI :CEW 8/8, :All 8/12]

Period (7a) is a complex sentence, which is composed of a main clause in protasis and a relative clause in apodosis. The division into complex cola is difficult, as the interplay between cola and commata gives changing rhythms. In

the first interpretation, the period begins with three perfect isocola, followed by one-word comma (9+9+9+2 syllables), whereas the analysis into cola is supported by the occurrence of hiatus at colon boundaries. However, as soon as the second ἔσχε is added to the end of the 3rd complex colon, it enables us to reanalyse the period as a circle, where cola, based on epiphora (repeated ἔσχε in the ends) surround the centre (τὸ ἰσόθεον κάλλος ‘god-like beauty’), whereas the circular pattern occurs in syllabic rhythm as well (11+7+11 syllables). It is difficult to decide which interpretation is right. The second one (introductory colon + two cola with epiphora) can be reanalysed again as units of 11 and 18 syllables, from which the latter (the end of P.7a) is repeated in the beginning of P.7b (a complex colon of 18 syllables). However, the analysis of syllabic rhythm as a gradation of decreasing complex cola (respectively 20, 18, 15, 12 syllables) from one period to another is equally possible.

The ambiguity and the redefinition of phrase rhythm characterise this passage, as Gorgias’ prose in general (cf. Part I.2.4.1, IV.3). Here the restructuring of phrase and syllabic rhythm anticipates the rhythm of the following period. As *epiplotke* in Greek verse can change the rhythm pattern, we can see the analogy: P.7a is pointing backwards with the anaphoric pronoun (τοιούτων) and forwards to the following period with word echoes (ἔσχον) and rhythm, whereas the *epiplotke* supports its transitory function.

(7b)

<u>πλείστας</u> δὲ <u>πλείστοις</u>	ἐπιθυμίας ἔρωτος	ἐνειργάσατο,	5 + 8 + 5 =	18
ἐνὶ δὲ <u>σώματι</u>	<u>πολλά</u> <u>σώματα</u>	συνήγαγεν	6 + 5 + 4 =	15
ἀνδρῶν ἐπὶ <u>μεγάλοις</u>	<u>μέγα</u> φρονούντων,		2 + 5 + 5 =	12 [45]
ὦν			1	[1]
οἱ μὲν πλούτου <u>μεγέθη</u> ,			7	
οἱ δὲ <u>εὐγενείας</u> παλαιᾶς <u>εὐδοξίαν</u> ,			13	(20)
οἱ δὲ ἀλκῆς ἰδίας <u>εὐεξίαν</u> ,			11	
οἱ δὲ σοφίας ἐπικτήτου δύναμιν			12	
	ἔσχον		2	(25) [45]
	καὶ ἤκον <u>ἅπαντες</u>		<b>3+3 =</b>	6
ὑπ’ ἔρωτός τε <u>φιλονίκου</u>			9	
<u>φιλοτιμίας</u> τε <u>ἀνικῆτου</u> .			10	(25)

#### Description (7b)

PER 1 [INT.CLO :HIAT, :PAR; SY.VE :Ma 2, :Rel 2]{CONN to P.7b}

COL 10 (Cl 11, Cm 8) [ANT 3, PAR 10; ANA 4, CHI 4, GRA 16, HOM 6, ISOC 2, PARIS 8; ALL 11, PLPT 7+9 PT, RP.WD 2; SO.REP 5; INT.CLO :HIAT 2; RING 1] {ISOC to P.7a, GRA to P.8}

WD 48 (CW 32, FW 16; WTDI 2) [ANT 5; WD.RI :CW 32/32, :All 33/48] {REF to πλείστας, πλείστοις in P.19c (2x); ἐπιθυμίας cf. προθυμίαν in P.10a, 32; ἔρωτος in P.8a, 24, 31b, 32, 34, cf. 35; ἐνειργάσατο in P.15, 21b, 31a (2x), 31b, cf. ἔργον in P.2, 13a (2x), 15; ἐν- in P.1, 15, 18a, 21bcd, 28, 29, 31b (2x), 36 (2x), cf. 25; ἐνὶ in P.21c, 31a; σώματι, σώματα in P.1, 15, 16c, 22ab, 26, 31a (2x), 31b, 32; πολλά in P.16c, 21c, 26, 29, 30, 31a, 31b (3x); συνήγαγεν NONE, cf. ἄγ- in P.10b, 22b,

cf. 18a (2x), 21c, cf. συμ-, συν- in P.3, 19c, 20b, 27; ἀνδρῶν in P.1, 2, 3, 5, 6 (cf. 31a, 32); μεγάλοις, μέγα, μεγέθη in P.15; φρονούντων cf. P.28, 29; πλούτου NONE; εὐγενείας, εὐδοξίαν, εὐεξίαν cf. εὐ- in P.1, 16c, 19cd, 21d; cf. δείκνυμι in P.4, 16ab, 21d, δόξα in P.16b, 18bc, 19cd, 21b (3x), 21d, 36, δοκέω in P.6; παλαιᾶς NONE; ἀλκῆς NONE; ἰδίας in P.16c; σοφίας in P.1, 10b, cf. 21d; ἐπικτητήτου NONE, cf. ἐπι-ἐπ-ἐφ- in P.2 (5x), 4, 8b, 13a (2x), 15, 16c, 18a (2x), 18b, 26; δύναμιν in P.10a, 15 (2x), 18b, 20a, 22a, 33 (2x); ἔσχον in P.7a (2x), 8a, 16ac, 19b, 19c (2x), 20a (2x), 22a, 25, 31a, 33; ἦκον NONE; ἅπαντες in P.6, 19b (2x), 24, 35, cf. 16c; φιλονίκου, φιλοτιμίας, ἀνικητήτου cf. φιλο- in P.13a, 16c, 21d, τιμ- in P.2, 13a; -νίκου in P.27}

SYL 116 (elidables 3, elided 1) [SL.RI :ISOS 6/116, :GRA 116/116; AC.RI :All 62/116, :Niv 69/116, :CLA 40/40; QU.RI :All 12/40, :CLA 8/40]

ACC (CEW 38, FW 8) [AC.RI :CEW 33/33]{ACC GRA in P.7a; 7bWD}

Period (7b) is a complex sentence, connected to P.7a with a continuative δέ (cf. Denniston 1996: 162–165). It begins with two paratactically connected sentences (complex cola). The second sentence is expanded with a relative clause in apodosis, introduced by a monosyllabic pivot (relative ὧν, cf. Part IV.3.1). The relative clause is constructed as a series of parallel clauses. The cola are asymmetric in length, especially at the beginning of the period, and grow into long sub-periods of 18 or even 27 syllables. It can be explained as a mimetic device: this period discussed the great number of Helen's lovers and the greatness of their deeds; correspondingly the cola become oversize and asymmetric. The usage of connectors is varied: the parallel sentences at the beginning are linked by δέ, which might be classified as a weak adversative because of the opposition ('many' vs. 'one') in sense; in the relative clause, the parallel cola are connected by a continuative μέν-δέ (cf. Denniston 1996: 162–167), whereas in the parisa of the period-end the connector within a preposition phrase is a corresponsive τέ... τέ (which joins the clauses in prose, Denniston 1996: 503–504).

Towards the end of the period the large-scale parallelism gives way to parison and finally pariosis returns as a closure (Part IV.1.6). The analysis of syllabic rhythm depends on the manuscript tradition concerning the elision of final short vowels. If all possible elisions were realised, the analysis would reveal only slightly more symmetrical cola (of 8, 12, 10, 12, 8 and 2x9 syllables). At the same time, the word-rhythm is almost perfect: at first a descending pattern in two long parallel cola (each composed of commata of 3 + 2 + 1 words) and then following parisa. Moreover, while the isosyllabic and quantitative rhythm is in the background, the ends of cola have the same intonation pattern (i.e. accents) throughout the period. Thus the absence of one prevailing rhythm type (isosyllabic, quantitative) is compensated by another (accentual clausulae, cf. Part IV.2.1.2). This does not exclude the analysis of the whole period (excluding the monosyllabic pivot in the middle) as one symmetrical large-scale rhythm pattern (Part IV.2.2.3).

This period reveals that Gorgias does not use all possible repetition types and rhythms at the same time. In P.7b the antithesis and the isocolon are almost totally absent, but this absence is compensated by occurrences of parison and other figures. This leads to the conclusion that the occurrence of several rhetorical figures (e.g. polyptota and isocola) in Gorgias is generally complementary, i.e. one of these figures occurs (or is prevalent), but not both (or all) at the same time.

The period ends in a combination of polyptoton, parison and chiasm: ὕπ' ἔρωτός τε φιλονίκου φιλοτιμίας τε ἀνικῆτου. It characterises the suitors of Helen through passion and love for honour and, for the first time in this speech, introduces the theme of love.

## V.

Paragraph V is presented in the editions as two sentences (periods), both ending with a full stop. The first of them (P.8a), introduced by ὅστις μὲν οὖν (cf. P.5) is a complex period, composed of two independent complex sentences in the modern sense, linked by the explicative γάρ. The second “sentence” of Diels’ text, P. 8b, is connected to P.8a by a connective particle δέ and completes its thematic development (the parallel is supported by paratactic μέν-δέ structure). However, as the grammatical subject changes in the second part of P.8a, the return to the auto-reference and the 1st person indicates the beginning of a new sentence in P.8b.

Periods (8a) and (8b) reveal the nature of Gorgias’ large-scale syllabic rhythm. They are neither based on phrase rhythm nor on parallelism figures, and their complex cola are long and not separated by particles. Yet, the absence of parallelism is compensated by other lexical and sound figures (polyptota, antitheses, homoeoteleuta). On the level of macro-rhythm these periods can be analysed as one pattern, where the units of syllabic rhythm do not coincide with rhetorical and syntactical phrases, but overlap them. As a consequence of a reanalysis (rhythmic *epiploke*), the complex phrases of 11+17+12+11 (P.8a) and 14+15+9+19 (P.8b) syllables are redefined as two period complexes of 11+14+15 syllables, followed by two periods of 14 syllables (P.8ab together, see Part IV.2.2.2).

Although according to the analysis of syntax, P.8a and P.8b are classified as two periods, the lexical repetition (λέγειν, πίστις /εἰκὸς ἦν) and the parallelism in thought (the aposiopesis οὐ λέξω and ὑπερβῶς) indicate that they belong to one macro-structural (textual) unit.

V.

(8a)

ὅστις μὲν οὖν	καὶ δι' ὅτι καὶ ὅπως	4 + 4 + 3	= 11
ἀπέπλησε τὸν ἔρωτα	τὴν Ἑλένην λαβῶν,	8 + 6	= 14
	οὐ λέξω·	3+	
τὸ γὰρ τοῖς εἰδόσιν	ἃ ἴσασι λέγειν	6 + 6 (=12)	= 15
πίστιν μὲν ἔχει,		5 +	
τέρψιν δὲ οὐ φέρει.		6	= 11

### Description (8a)

PER 1 (1+1)[BEG :PAR; CLO :PAR; SY.VE :Ma 3, :Rel 2; CONN.INT γάρ]{PAR to P.8b}

COL 5 (Cl 4, Cm 7) [ANT 2, PAR 3; ANA 2, CHI 4, GRA 6, HOM 2, ISOC 4, PARIS 2; ALL 2, PLPT 4+2PT; RING 1]{ISOC + 4 to P.8b}

WD 30 (CW 12, FW 18; WDTI 0.67) [PLPT 6; WD.RI :CW 11/12, :All 30/30]{REF to ὅστις, δι' ὅτι, ὅπως cf. τίς, τί; in P.20a, 32; τις, τι in P.4, 16c, 22b, 28; cf. πῶς in P.8a, 13a, 21a, 33, 35; διά- in P.6, 8b, 10a, 16c, 18a, 21c, 23b, 24, 25, 27 (3x), 35; ἀπέπλησε NONE, cf. ἀπ-, ἀφ- in P.11, 14 (2x), 15 (2x), 17, 18a, 21b, 27, 28, 31a, 33, 36, cf. ἀπατ- 14, 18c; ἔρωτα in P.7b (2x), 24, 31b, 32, 34, cf. 35; Ἑλένην in P.3, 8b, 11, 20a, 32, 35, 36; λαβῶν in P.7a; οὐ in P.5 (2x), 7a, 10b, 13a, 14, 19b, 19c (3x), 21c, 23a, 24, 25, 33, 34 (2x), 20a (?); λέξω, λέγειν in P.3, 6, 20b, 24, 30; cf. ἠλέγχθη in P.3, 6, 21c; εἰδόσιν, ἴσασι in P.20a, 28; πίστιν in P.3, 21d, cf. 21b; ἔχει in P.7a (3x), 16ac, 19b, 19c (2x), 20a (2x), 22a, 25, 31a, 33; τέρψιν in P.21c, 22b, 31a; φέρει in P.17}

SYL 51 (elided 1) [SL.RI :ISOS 20/51, :GRA 34/51; AC.RI :All 10/51, :Niv 26/51, :CLA 0/20; QU.RI :All 25/51 (jambic), :CLA 8/20]{ISOS +21 (=100%) to P.8b}

ACC 27 (CEW 15, FW 12)[AC.RI :CW 14/15, :All 24/27]

Period (8a) corresponds to two sentences (sub-periods). The first sentence begins with a subordinate clause in protasis, introduced by triple indefinite interrogatives in anaphoric function (Dover 1960), and is followed by a short apodosis (verb λέξω with negation particle). It is followed by an explicative sentence, which is expanded with a relative clause from the middle and ends with two opposed VO-phrases.

The analysis of syllabic rhythm reveals a clash between the small-scale (corresponding to syntactical and rhetorical units) and the large-scale level (which overlaps period boundaries). On the large scale, the main clause of the first sentence of P.8a (οὐ λέξω) should be reanalysed and regarded together with the following explanation (τὸ γὰρ τοῖς εἰδόσιν... λέγειν) and the beginning of P.8b, whereas the main clause of the preceding sentence (οὐ λέξω) introduces an isocolon. It is impossible to know the intentions of Gorgias, but the contrast between a long (25 syllables) relative clause and a short (3 syllables) main clause should be perceptible. Thus the comma (οὐ λέξω) can be explained as a pivot, connecting two parts of the complex period, which in rhythm can be analysed together with both of them. As the whole paragraph is

based on the figure of omission, it is not inappropriate to focus on οὐ λέξω by means of rhythm and central position.

Although the main figure of Gorgias, *Helen* is parallelism, circular structures can emerge: here, surrounded by parallelism, a chiasmic polyptoton occurs (λέξ- εἶδ- ἴσ- λέγ-). This small circle connects the main clause of the first sentence and the beginning of the second sentence, coinciding with the large-scale rhythm pattern (cf. above). The word order supports it by forming another circle: the noun phrase (grammatical subject) τὸ γὰρ τοῖς εἰδόσιν ἃ ἴσασι λέγειν corresponds expanded from inside with a complement to the infinitive (participle as an indirect object) and with a relative clause. These figures (*praeteritio*, circle) anticipate another, greater circle in P.8b (cf. Part IV.2).

(8b)

τὸν χρόνον δὲ τῷ λόγῳ τὸν τότε	νῦν ὑπερβᾶς	4 + 3+3+ 4	=14
ἐπὶ τὴν ἀρχὴν τοῦ μέλλοντος λόγου	προθήσομαι,	5 + 6+ 4	=15
	καὶ προθήσομαι	5 +	
	τὰς αἰτίας,	4 +	
	δι' ἧς	2+ (11)	
εἰκὸς ἦν γενέσθαι		+3/3+ (6)	[=14/]
τὸν τῆς Ἑλένης εἰς τὴν Τροίαν στόλον.		5 + 6 (11)	[/=14]

#### Description (8b)

PER 1 [CLO :AUTOREF; SY.VE :Ma 2, :Rel.COP 1]{CONT to P.8a}

COL 4 (Cl 5, Cm 6) [ANT 3; ANA 2, CHI 2, GRA 4, HOM 4, ISOC 6; ALL 2, PLPT 4+2 PT; HYP 1]{ISOC + 2 to P.8a}

WD 32 (CW 17, FW 15; WTDI 1.1) [ANT 3; PLTP 6; WD.RI :CW 8/17, :All 14/32] {REF to χρόνον in P.28; λόγῳ, λόγου in P.1, 2, 4 (2x), 5, 9, 13a (3x), 14 (2x), 15, 16c (2x), 17, 18a, 19ab, 20b (2x), 21a, 21b (2x), 21c (2x), 21d, 22a (2x), 22b, 23ab, 35, 36 (3x), cf. cf. λέξαι in P.3, 8a, λέγ- in P.6, 8a, 20b, 24, 30, cf. ἐλέγξαι in P.3, 6, 21c; τότε NONE; ὑπερβᾶς, προθήσομαι NONE, ὑπερ- NONE, cf. προ- in P.10a (2x), 19b, 26, 32; νῦν in P.19c; ἐπι-ἐπ-ἐφ in P.2 (5x), 4, 7b (3x), 13a (2x), 15, 16c, 18a (2x), 18b, 26; ἀρχὴν in P.36, cf. 10b; μέλλοντος in P.19bc, 26; προθήσομαι cf. τίθημι in P.2, 11, 36; αἰτίας in P.4, 11, 13a, 14, 20a, 23b, 24, 35, cf. 10a (2x); διὰ- in P.6, 8a, 10a, 16c, 18a, 21c, 23b, 24, 25, 27 (3x), 35; εἰκὸς in P.13a, cf. P.29; ἦν in P.6, 19b, 24, cf. εἶναι P.6, 18c, 30, 33 (2x); γενέσθαι in P.6, 7a, (cf 5, 7), cf. γίν- in P.18ab, 27, γεγονέναι in P.3 (2x), 24; Ἑλένης in P.3, 8a, 11, 20a, 32, 35, 36; εἰς in P.16c, 22b; Τροίαν NONE; στόλον NONE}

SYL 57 (1 elided) [SL.RI :ISOS 34/57, :GRA 57; AC.RI :All 20/57, :Niv 41/57, :CLA 8/20; QU.RI :All 30/57 (iambo-trochaic), :CLA 12/20]{SL.RI :ISOS +23 (=100%) to P.8a, ?CONT. ISOC to P.9}

ACC 56 (CW 17, FW 16) [AC.RI :CW 7; :All 21, :GRA 26]

Period (8b) corresponds to a complex sentence. It begins with an asymmetric main clause, composed of two verb phrases, from which the first is long and introduced with a participial clause, and the second is shorter and extended by a relative clause in apodosis. The connector at the head of the sentence is

postponed after the noun (τὸν χρόνον δέ) instead of being in the second place after the article. This cannot be regarded as abnormal (Denniston 1996: 185–187) and might occur to help focus on the beginning (reference to past times).

The period is characterised by the absence of *parisa*. It might be explained with speech economy: the passage announces the following introduction (ἀρχή) to the part of the proof, which gives the reasons (αἰτίας), why Helen went to Troy. In order to prevent distracting the attention of the public of Gorgias by rhetorical figures and rhythm, the ideas are presented without many ornamental figures, whereas he draws attention to his words by changing the rhythm. Therefore this pause or vacuum in the occurrence of already usual figures can be interpreted as a preparation for the following.<sup>33</sup>

However, this explanation seems too easy. Although the *parison* is absent, Gorgias uses other figures: circular rhythm patterns combined with a chiasm, a polyptoton and sound echoes, as well as antithesis and almost mimetic hyperbaton. The introductory participial clause is the first reference to hyperbaton as a technical term.<sup>34</sup> Another hint at the technical terminology is in the promise to propose the reasons (προθήσομαι) for Helen's departure, which points towards the following part of the prothesis (*propositio*).<sup>35</sup>

In syllabic rhythm there is a tendency to use many appositive groups of approximately the same length, whereas the absence of phrase parallelism makes parsing of this period difficult. The final position of verb forms in the first two cola allows us to see the beginning as a continuation of the rhythm pattern of P.8a, forming a symmetrical construction, which is composed of two complex periods (each of 11, 14 and 15 syllables).

The end of the period can be analysed either as a pair of 14-syllable units (καὶ προθήσομαι ... εἰκὸς ἦν and γενέσθαι ... εἰς τὴν Τροίαν στόλον), which is in accordance with the usual practice in period-ends (see Part IV.1.6.2); or as a circle, composed of cola of 11, 6 and 11 syllables (καὶ προθήσομαι... δι' ἧς, εἰκὸς ἦν γενέσθαι, τὸν ... στόλον), which is slightly more corresponding to the syntactic division (different object phrases surrounding the sentence core). It is difficult to decide which description is more pertinent. This absence of a clear-cut rhythm pattern signals continuation and is typical to pivotal periods, which lead to next textual sub-parts. That it is indeed so, is revealed in the beginning of P.9.

## **II. Proofs (DK 82 B 11.vi–xix)**

The part of the proofs is divided into four principal arguments, which differ greatly in length. It is introduced by *propositio* in P.9, which gives the outlines of the following proofs (see below). The first two proofs, concerning divine forces and violence, are discussed very briefly in P.10a–P.11 and P.12–P.13 (DK 82 B 11.vi–vii). The principal, 3rd proof, concerning the power of *logos* (speech) is discussed in P.14–P.22 (DK 82 B 11.viii–xiv) and ends by a closure in P. 23ab, the first half of Paragraph XV. However, Gorgias does not end his speech with this, but adds the 4th proof, which is shorter than the 3rd proof, but

still long enough to balance it (both are approximately 6 paragraphs long). The 4th proof is dedicated to the power of love and sight, and concludes by returning to the theme of beauty, which was expressed in the introduction, thus preparing the conclusion, which follows in P.35–P.36 (DK 82 B 11.xx–xxi), underlining the four-fold division of the speech.

## VI.

### Proposition (DK 82 B 11.vi)

Paragraph VI of Diels' edition presents two sub-parts of Gorgias, *Helen*: the *propositio* (*prothesis*) in P.9, which introduces the following proofs, and the 1st proof (P.10–11). The proposition states the reasons (αἰτίαι) for Helen's voyage to Troy, as promised earlier (P.4): triple divine forces (fate, gods and necessity), violence and persuasion by words. The period-end has been emended by the insertion of a third parallel phrase, which makes love the last reason. However, although this emendation seems to bring the proposition into balance with the following proofs, it is unnecessary (see the analysis below).

By its contents (it presents the list of following topics) P.9 belongs clearly to the beginning of the new sub-part, as evident from ancient rhetorical treatises.<sup>36</sup> At the same time, it is linked to the preceding auto-referential announcement (P.8b) by a postpositive explicative γάρ, which is in its turn followed by the first argument (P.10ab–P.11), whereas the closural figures occurring in P.9 indicate only that it is an end (either of the introduction or of an independent sub-part).<sup>37</sup> The explanatory γάρ can point to both directions, being either postpositive or anticipatory (Denniston 1996: 58–70), but ἢ γάρ could be referring more to the left (closing the introduction) than right (introducing the proofs, see Denniston 1996: 284).

Although these periods correspond to different parts of the speech (proposition and 1st proof), on the level of smaller subparts (paragraphs and periods) and in syntax the coherence is strong. Thus, as in several other places, the segments of macro-syntax (parts of the speech) and micro-syntax (paragraphs and periods) do not coincide. This is in accordance with the transitory character of the period.<sup>38</sup>

### Proposition

#### VI.

#### (9)

ἢ γάρ	<i>Τύχης βουλήμασι</i>	2 +	6 =	8	
	<i>καὶ θεῶν βουλεύμασι</i>			7	[=15]
	<i>καὶ Ἀνάγκης ψηφίσμασιν</i>			8	(23)
ἔπραξεν ἃ ἔπραξεν,		3 + 1 + 3 =		7	[=15]
	<i>ἢ βίαι ἄρπασθεῖσα,</i>			7	
	<i>ἢ λόγοις πεισθεῖσα,</i>			6	(20) [43]
	<ἢ ἔρωτι ἀλοῦσα>.			(7)	

### Description (9)

PER 1 [CLO :HIAT, :PAR; SY.VE :Ma 1, :Rel 1]{CONT. of P.8b}  
COL 6 (Cl 5, Cm 3) [ANT 2, PAR 5; ANA 4, EPIPH 2, GRA 3, HOM 5; ISOC 4, PARIS 5; PLPT 2; RP.WD 2; CLO.INT :HIAT 1] {ISOC+2 with P.10a}  
WD 19 (CW 12, FW 7; WTDI 1.7) [PLPT 2, RP.WD 2; WD.RI :CW 12/12, :All 15/19] {REF to Τύχης in P.11, 34, cf. 12, 16c, 19d, 23a, 33; cf. τυγχάνειν in P.13a, 25; to βουλήμασι, βουλεύμασι in P. 19c, 34; βούλομαι in P.4, 21a, 36, θεῶν in P.6, 10ab, 11, 33 (2x), cf 7a, 15, 18a, 33 (1x), 35; Ἀνάγκης in P.20a, 20b (3x), 21c, 34, 35 (2x); ψηφίσμασιν NONE; ἔπραξεν, ἔπραξεν in P.24, 35 (2x), cf. πράγμα in P.1, 2, 16c (2x), 31b; βίαι in P.10b, 12 (2x), 13a, 20a, 35; ἀρπασθεῖσα in P.12 (3x), 20a, 35; λόγοις in P.1, 2, 4 (2x), 5, 8b (2x), 13a (3x), 14 (2x), 15, 16c (2x), 17, 18a, 19ab, 20b (2x), 21a, 21b (2x), 21c (2x), 21d, 22a (2x), 22b, 23ab, 35, 36 (3x), cf. λέξαι in P.3, 8a, λέγ- in P.6, 8a, 20b, 24, 30, cf. ἐλέγξαι in P.3, 6, 21c; πεισθεῖσα in P.14, 18b, 19a (2x), 20a, 20b (5x), 21ac, 22b, 23a, 35}  
SYL 43 (synzesis abs. 1) [SL.RI :ISOS 37/43, :GRA 43/43; AC.RI :All 20/43, :Niv 32/43, :CLA 20(24)/24; QU.RI :All 20/43, :CLA 20/24] {ISOS +6 (=100%) with P.10a}  
ACC 19 (CW 12, FW 7) [AC.RI :CW 12/12, :All 15/19]

Period (9) corresponds to a complex sentence, which begins with triple parallel phrases, presenting divine forces (in the function of complements to the verb) as the reason for Helen's deeds. This *tricolon auctum* is followed by a short colon, which corresponds in syntax to the main and the relative clause, which are connected by the repetition of the verb ἔπραξεν. The grammatical subject (unexpressed) of these verbs is Helen. The figures of omission (of P.8ab) find a continuation, as it is not explicitly told, what she had done. The main clause is expanded by adding two parallel clauses (ἤ... ἤ...), which present passive participles with complements, adding two more possible culprits: the violence and the speech. It is in accordance with Gorgias' strategy to present Helen not as an agent, but as a sufferer and a victim of the injustice, committed by others.

The most difficult textual problem of this passage is its end, where an emendation <ἤ ἔρωτι ἀλοῦσα> is supported by most editors.<sup>39</sup> Although the speech has four parts (discussing divine will, rape, persuasion and love arisen by sight), which are resumed in the four parallel recapitulations in P.35, this addition is superfluous. As love is a god (see P.33, DK 82 B 11.xix), it is already included in the group of divine forces, mentioned in the beginning of the period. Moreover, P.35 is not a good parallel because of its asymmetry: it presents the first three reasons of Helen's deeds as the real cause (as dative agents), but the 4th reason, love is presented differently, through a passive participle (ἐρπασθεῖσα, see the analysis to P.35), therefore there is no need to seek a symmetrical construction in P.9.<sup>40</sup>

The remaining argument for the emendation, apparently strong, is in the phrase parallelism. The speech is divided into four parts: the will of gods, the violence of Paris, the magic of words and Helen's love for Paris (the sight) and the editors have tried to balance the initial three cola (corresponding to the first

reason) with another triple (corresponding to the remaining three reasons); this leaves the verbs ἔπραξεν ἃ ἔπραξεν in the middle and gives a beautiful symmetry of 3+1+3 cola. However, ternary parallelism is very rare in Gorgias, *Helen* (cf. Part IV.1.6) and does not occur in period-ends.<sup>41</sup> Moreover, the emendation would spoil the existing perfect homoeoteleuton (in the ends of all 5 cola), by continuing it with a non-rhyming colon.

Although the syllabic rhythm is in the background, as often in the case of *parisa*, it ensures the connection to the following period on the level of macro-rhythm: the total number of syllables in P.9 is equal to P.10a (43 syllables in each), and is connected to P.10a by a rising gradation in complex cola.

### **Proof 1 (DK 82 B 11.vi)**

The first proof is presented as a small enthymema. It uses the argumentation tactics from the opposites,<sup>42</sup> being based on the contradiction ‘god’ vs. ‘man’, which appeared in P.6. In the beginning (P.10a) Gorgias states in a gnomic form his thesis: only the guilty party should be accused, adding the explanation, that god’s will cannot be fought by men. P.10b presents the premises: 1) the weaker force cannot fight the stronger, and is inevitably overpowered and ruled by the stronger; 2) by nature the god is stronger than the man. The conclusion follows in P.11, stating that if the cause is the god and fate, Helen should be freed from bad fame. This argument is asymmetrical in comparison to the presentation of three divine forces in P.9: it presents mainly gods and eventually fate, but leaves out the inevitability (ἀνάγκη).<sup>43</sup>

The proof corresponds to three rhetorical periods. It uses explicative syntax as typical in rhetorical syllogisms (Kennedy 1991: 40). The anticipation of the conclusion (P.10a) is followed by explicative sentences (introduced by γάρ), the conclusion is presented in P.11. Although in the editions P.10a belongs to Par.VI (which began with P.9), it is marked as a new beginning by transitory εἰ μὲν οὖν (cf. Denniston 1996: 470–472).

The rhythm pattern (long complex cola) is the same in P.10a and P.10b. On the large scale, the rhythm of previous periods is continued: P.9 ends with a colon complex of 20 syllables, P.10a presents sub-periods of 21 and 22 syllables and P.10b complex cola of 18 and 15 syllables, but the change in argument is accompanied by the change in syntax.

#### **(10a)**

εἰ μὲν οὖν	διὰ τὸ πρῶτον,	3+5= 8	
	ἄξιός αἰτιᾶσθαι	7+6=13 (21)	
	ὁ αἰτιώμενος·	7+8+	
<u>θεοῦ</u> γὰρ προθυμίαν	<u>ἀνθρωπίνῃ</u> προμηθίαι	7 = 22 [43]	
	ἀδύνατον κωλύειν.		

#### **Description (10a)**

PER 1 (1+1) [BEG :AUTOREF, :PIV; CLO :CLA; SY :ABS.COP 2]{BEG of subpart}  
 COL 4 (Cl 4, Cm 3) [ANT 2; PARIS 2; ALL 3, PLPT 2 + PT 2; INT.CLO :HIAT 2]  
 {ISOC TOT. to P.9}

WD 17 (CW 10, FW 7; WTDI 1.4) [ANT 2; PLPT 2, RP.WD 2; WD.RI :CW 6/10; :All 14/17]{REF to δία- in P.6, 8ab, 16c, 18a, 21c, 23b, 24, 25, 27 (3x), 35; πρῶτον in P.5 (2x), 21b; ἄξιος in P.2 (2x), 13a; to αἰτιῶσθαι, αἰτιώμενος cf. P.4, 8b, 11, 13a, 14, 20a, 23b, 24, 35; θεοῦ in P.6, 9, 10b, 11, 33 (2x), cf 7a, 15, 18a, 33 (1x), 35; προθυμίαν in P.32, cf. -θυμίαν P.7b, προ- in P.8b (2x), 19b, 26, 32; ἀνθρωπίνη in P.10b, 33; προμηθία NONE; ἀδύνατον in P.7b, 15 (2x), 18b, 20a, 22a, 33 (2x); κωλύειν in P.10b, 20a}

SYL 43 [SL.RI :ISOS 0/43, :GRA 43; AC.RI :All 28/43 (cont), :Niv 31/43 (cont), :CLA 16(20)/24; QU.RI :All 19/43, :CLA 12/24]{ISOS +43 (100%) to P.9}

ACC 16 (CW 10, FW 5) [AC.RI :CW 6, :All 4]

Period (10a) is composed of two nominal sentences (sub-periods) without copulas (as usual for introductions), linked by the explicative γάρ. The phrase parallelism is missing and Gorgias uses the adding style, the εἰρομένη.<sup>44</sup> The absence of parallelism figures (parison, anaphora, homoeoteleuton etc.) brings the focus on the theme: the shift of the responsibility from a human being to a god. As in other thematically important periods, the index of word type distribution favours content words (especially in the second sub-period).

The two occurrences of hiatus at minor phrase boundaries (αἰτιῶσθαι Ἡ ὀ αἰτιώμενος and ἀνθρωπίνη προμηθία Ἡ ἀδύνατον κωλύειν) confirm that in Gorgias the function of hiatus is to mark (or create) word group boundaries. The polyptota and the antithetical notions form their own minor phrases without exact syntactic parallelism (cf. Part IV.2.4). Clausular rhythm analysis reveals that the repetition of patterns occurs in adjacent elementary cola and not on the level of complex cola. According to the syllable count, this period is of the same length as P.9 (43 syllables), and on the level of complex cola the rhythm continues in a gradation to P.10a and later into P.10b (see Part IV.2.2.2).

(10b)

πέφυκε γάρ	<u>4</u>	
<u>οὐ τὸ κρείσσον ὑπὸ τοῦ ἥσσονος κωλύεσθαι,</u>	4 + 10 = 14	[=18]
<u>ἀλλὰ τὸ ἥσσον ὑπὸ τοῦ κρείσσονος ἄρχεσθαι</u>	5 + 9 = 14	
<i>καὶ ἄγεσθαι,</i>	<u>4</u>	[=18]
<i>καὶ τὸ μὲν κρείσσον ἠγείσθαι,</i>	1 + 7	
<u>τὸ δὲ ἥσσον ἔπεσθαι.</u>	7	[1+14]
<u>θεὸς δ' ἀνθρώπου κρείσσον</u>	7	
<i>καὶ βίαι καὶ σοφίαι</i>	3 + 4(=7)	
<i>καὶ τοῖς ἄλλοις.</i>	4	[=18]

#### Description (10b)

PER 1 (1+1) [CLO.INT :ISOC, :PAR; CLO :GRA/CLA; :RH.CH; SY.VE :Ma 1 + ABS.COP 1] {REF to P.10a}

COL 6 (Cl 5, Cm 8) [ANT 8, PAR 5; ANA 7; CHI 4 (WD), GRA 5, HOM 7, ISOC 10, PARIS 7; ALL 4; CLO.INT :HIAT 1; RING 2 (SL.RH)] {ISOC 2 to P.11}

WD 38 (CW 17, FW 21; WTDI 0.8) [ANT 9; RP :CW5, :PLPT 7; WD.RI :CW 14/17, :All 34/38] {REF to πέφυκε in P.31b, cf. φύσις in P.5, 22a, 25; οὐ in P.5 (2x), 7a,

8a, 13a, 14, 19b, 19c (3x), 21c, 23a, 24, 25, 33, 34 (2x), 20a (?); κρείσσον, κρείσσονος, κρείσσον, κρείσσον NONE; ἥσσονος, ἥσσον, ἥσσον in P.33; κωλύεσθαι in P.10a, 20a; ἄρχεσθαι in P.8b, 36; ἄγεσθαι in P.7, 22b, cf. 18a (2x), 21c; ἡγεῖσθαι NONE, cf. P.35; ἔπεσθαι NONE; θεός in P.6, 9, 10a, 11, 33 (2x), cf. 7a, 15, 18a, 33 (1x), 35; ἀνθρώπου in P.10a, 33; βίαι in P.9, 12 (2x), 13a, 20a (2x), 35; σοφία in P.1, 7b, cf. 21d; ἄλλοις in P.16c, 17 (2x), 22b (3x)}  
 SYL 69 (0+1 elided) [SL.RI :ISOS 64, :RING 69/69; AC.RI :All 37/69, :Niv 52/69, :CLA 12/24; QU.RI :All 32/69, :CLA 16/24]{ISOC 18 to P.11}  
 ACC 36 (CEW 18, FW 18)[AC.RI :CEW 18/18, :All 24/36]

Period (10b) is composed of two sentences (sub-periods), ending with full stops. The first sub-period presents two antithetical pairs of cola, based on the motive of force (and anticipating the second argument). This antithesis is supported by parallelism in phrase structure (parison). The syntax strengthens the argument ἐξ ἀνάγκης: the opposition ‘the stronger leads and the weaker yields’ appears in the first pair as a passive construction. In the second pair the force of the infinitives is active, the medio-passive infinitive forms continue, forming a series of 5 homoeoteleuta and supporting the argument with diathesis. The second sub-period gives a second premise of the enthymema in a form of nominal sentence, as usual in Gorgias, when he states indisputable facts (see P.1–3 and Part IV.1.5.2). It abandons the structural antithesis, but returns to the opposition ‘gods’ vs. ‘men’. With a gradation it prepares the conclusion of P.11, at first in syllables (καὶ βίαι καὶ σοφία, 3+4) and then by adding an article (καὶ τοῖς ἄλλοις).

The whole period is structured according to the strictest syllabic rhythm. In the first sub-period the introductory comma πέφυκε γάρ (4 syllables) is continued by two opposed isocola (of 14 syllables each). To this pair, a comma καὶ ἄγεσθαι (4 syllables) is added, which balances the first complex colon of 18 syllables. This adding short parallel commata to the ends of long cola is typical for Gorgias (cf. P.7b and P.8b). Here its function is double: in syllabic rhythm it closes the circle (4+14+14+4 syllables) and in syntax it functions as a transition to the rephrasing of the idea ‘stronger leads’ – ‘weaker yields’ in the second antithetical pair. It is in the form of parison (isosyllabic cola of 7 syllables each), following the introductory comma (connector καί). The exact symmetry in syllabic rhythm is accompanied by exact repetition in word-count. The syllabic rhythm is continued in the second sub-period: in its beginning two more cola of 7 syllables appear, forming a complex colon of 14 syllables and concluded by a clausula (καὶ τοῖς ἄλλοις) of 4 syllables. These two together resume the initial rhythm (18 syllables again) in a frequent closure type, where the return to the original rhythm after a deviation indicates a closure (see Hernstein Smith 1968: 44).

This clausula confirms certain considerations concerning the analysis of word rhythm in Gorgias. A three-word colon θεὸς δ' ἀνθρώπου κρείσσον is balanced by three commata καὶ βίαι καὶ σοφία καὶ τοῖς ἄλλοις, every one

of them composed of one nucleus and an appositive (or two in the last comma). The pronoun ἄλλοις does not differ from the content words in its power to form rhythm units, and has to be classified as an emphatic function word, which has the same value in rhythm as the content words (cf. Part II.3.1.4).

The strict syllabic rhythm in this period is accompanied by (relatively) high indexes of quantitative and accentual rhythm. The reason can be found in syntactical parallelism, which causes similar intonation contours and (sometimes) quantitative patterns too. The circular pattern in the syllabic rhythm pattern is resumed in P.11, a conclusion to Proof 1.

(11)	εἰ οὖν	τῆτι Τύχητι καὶ τῶτι θεῶτι	$2+3+4 = 9$
		<u>τὴν αἰτίαν ἀναθετέον,</u>	$\frac{4+5}{5} = 9 [=18]$
	[ἦ] τὴν Ἑλένην	<u>τῆς δυσκλείας ἀπολυτέον.</u>	$\frac{4+5}{5} = 9 [=14]$

#### Description (11)

PER 1 [CLO :PAR; SY :ABS.COP 2]{CONCL to P.10a}  
 COL 2 (Cl 2, Cm 4) [ANT 2; PAR 2; GRA 3, HOM 2, ISOC 4, PARIS 2; ALL 2; RING 1]{ISOC +1 to P.10b}  
 WD 16 (CW 7, FW 9; WTDI 0.77) [SYM 0; WD.RI :CW 4/7, :All 6(16)/16]{REF to Τύχητι in P.9, 34, cf. 12, 16c, 19d, 23a, 33; cf. τυγχάνειν in P.13a, 25; θεῶτι in P.6, 9, 10ab, 33 (2x), cf. 7a, 15, 18a, 33 (1x), 35; αἰτίαν in P.4, 8b, 13a, 14, 20a, 23b, 24, 35, cf. 10a (2x); ἀναθετέον cf. τιθέναι in P.2, 8b, 36; cf. ἀνα-NONE; Ἑλένην in P.3, 8ab, 20a, 32, 35, 36; δυσκλείας in P.36, cf. δυσ- in P.16c, 29; ἀπολυτέον in P.14, cf. καταλῦσαι in P.36, cf. ἀπ-, ἀφ- in P.8a, 14 (2x), 15 (2x), 17, 18a, 21b, 27, 28, 31a, 33, 36, cf. ἀπατ- 14, 18c}  
 SYL 32 (non deleted 1) [SL.RI: ISOS 27/32, :GRA32/32; AC.RI :All 22/32, :Niv 32/32, :CLA 8/8; QU.RI :All 8(0)?/8, :CLA 8(0)?/8<sup>1</sup>]{SL.RI + 5 to P.10b}  
 ACC 15 (CW 7, FW 8)[AC.RI :CW 4/7, :All 6/15]

Period (11) presents the conclusion of Proof 1 as one sentence. However, the analysis of its structure is not clear because of problems in textual transmission. The coordinated paratactic connectors of the manuscripts (ἦ ... ἦ) have been declared unsatisfactory,<sup>45</sup> because of the mutually excluding opposition of two acts (**either** to blame the fate and gods **or** to free Helen from bad fame), in the place of a causal relation in a conditional sentence: **if** to blame... , **then** to free... (Schwyzer – Debrunner 1988 II: 682–688). Although the emendation propositions in modern editions all favour the interpretation as a conditional sentence, the manuscript text: ἦ οὖν... ἦ... can be defended. At first, it uses a conclusion structure, which is frequent in the arguments of philosophers.<sup>46</sup> Another reason is the use of a verbal adjective, which indicates that something

<sup>1</sup> Depending from the quantity of [v] in ἀπολυτέον, which cannot be verified with certainty.

has to be done (Schwyzer – Debrunner 1988 II: 409–410), referring thus to Gorgias’ defence strategy (Part II.3.4.4). Proposing a choice between alternatives would not be inappropriate in a passage which expresses the transition between two proofs: thus, EITHER the gods should be accused (which has already been done), OR (if this is not the case), Helen has to be freed from blame, i.e. another argument should follow (and indeed will occur in P.12). The structure of the period would correspond to the structure of P.9 (at first one, triple reason and then a choice between two alternatives) and to similar presentations of speech strategies in Aristotle and Plato.<sup>47</sup>

The change of text does not affect much the analysis of rhythm. P.11 is entirely composed of short commata of 4 and 5 syllables. These commata form 3 cola of 9 syllables, whereas a short interposed comma presents Helen’s name, thus bringing the subject of this speech into focus. Large-scale rhythm repeats the rhythm pattern of the preceding period (18 syllables), but later the whole period can be reanalysed as a pattern of cola of 9, 9, 5 (4) and 9 syllables, whereas the deviation from the initial rhythm and the return to it confirms the closure (as in P.10b). P.11 is based on a type of parallelism, where the second parts of complex cola correspond to each other, whereas the correspondence in initial parts is less (scheme: ab: cb’). Parallelism marks the closure of a textual unit as usual in this speech (Part IV.1.6).

In the next argument (the violence of Paris) the rhythm pattern changes slightly, underlining the shift from one proof to the next. The foundation of Gorgias’ strategy: the interference of external force, remains, but now he will concentrate on the human, not the divine.

### **Proof 2 (DK 82 B 11.viii)**

#### **VII.**

The second proof from probability exploits a new reason, the violence of Paris. It corresponds to paragraph VII of Diels’ edition and is composed of three periods (P.12, P.13a and P.13b). The introduction of the proof is parallel to Proof 1 and is correlated to it by particles (εἰ μὲν in P.10, εἰ δέ in P.12). Moreover, the structure of the argument is similar: both proofs are divided into two longer and one short period and use the argument from the opposites.

The theme has been announced in P.9 and P.10b (βίαι), stressing that Helen’s actions were involuntary, using the argument of external force and making an appeal for pity, more or less according to Gorgias’ contemporary court practice.<sup>48</sup> The proof is based on the opposition: Helen vs. Paris with corresponding antithetical structures. The opposition is repeated in the same order from period to period, ending with a chiasmus: P.12 Helen (as in P.11b)-Paris-Helen; P.13a Paris-Helen; P.13b Paris-Helen, Helen-Paris. In P.12 and P.13a an opposition of diathesis occurs: active forms are used for Paris (an agent) and passive forms for Helen (a sufferer).<sup>49</sup> This opposition of diathesis is presented as a clear (δηλον) testimony of Helen’s innocence. Thus the conclusion of the argument (P.13a) does not have to deal with the problem of

guilt (this is already clear), but with the punishment: it is natural (πῶς οὐκ ἂν εἰκότως, a new reference to probability) that Helen should be free from blame and pitied and Paris punished. It rephrases the end of the conclusion of Proof 1 in a form of a rhetorical question (cf. Part IV.1.5.2.2).<sup>50</sup>

In Proof 2 the done or suffered deeds and their consequences are presented as a triple parallelism, whereas the antithesis between the doer and the sufferer corresponds to binary structures. The conclusion of Proof 2 in P.13b does not add anything new to the argument, but is required for balance, as it restructures preceding ternary patterns into a binary structure ('he' vs. 'she'), which is more suitable for a closure (cf. Part IV.1.6).

## VII

(12)

εἰ δὲ				2(+)	
	βίαι ἠρπάσθη			5	
	καὶ ἀνόμως ἐβιάσθη			8	
	καὶ ἀδίκως ὑβρίσθη.			7	[22]
δῆλον ὅτι				4	
	ὁ <μὲν> ἄρπασας	ὡς ὑβρίσας	ἠδίκησεν.	4 + 4 + 4 = 12	[16]
	ἢ δὲ ἄρπασθεῖσα	ὡς ὑβρισθεῖσα	ἐδυστύχησεν.	6 + 5 + 5	=16

### Description (12)

PER 1 [CLO :ISOC, :PAR; SY :Ma.ABS.COP 1, :Rel 5]{FOLL to P.13a}

COL 5 (CI 3, Cm 8) [ANT 2; PAR 3; ANA 4, GRA 10, HOM 9, ISOC 8, PARIS 5; PLPT 10; CLO: HIAT.INT 3; HIAT.INT 1]

WD 23 (CW 13, FW 10; WTDI 1.3) [ANT 8; PLPT 10; WD.RI :CW 12/13, :All 22/23] {REF to βίαι, ἐβιάσθη in P.9, 10b, 13a, 20a (2x), 35; ἠρπάσθη, ἄρπασας, ἄρπασθεῖσα in P.9, 20a, 35; ἀνόμως in P.13a (2x), 27 (2x), 36; ἀδίκως, ἠδίκησεν in P.13b, 20b, 23a, 35, 36; ὑβρίσθη, ὑβρίσας, ὑβρισθεῖσα NONE; δῆλον in P.6, cf. P.5, 21b; ἐδυστύχησεν in P.9, 11, 16c, 19d, 23a, 33, 34; cf. τυγχάνειν in P.13a, 25}

SYL 54 (elidable 4) [SL.RI :ISOS 32 (54)/54, :GRA 54/54; AC.RI :All 47/54; :Niv 51/54, :CLA 24/24; QU.RI :All 38/54, :CLA 8(16alt)/24]

ACC 18 (CW 13, FW 5) [AC.RI :CW 12/13, :All 13/18]

Period (12) corresponds to one complex sentence. Its pattern is symmetrical: a conditional clause in the beginning, another subordinate clause in the end, leaving the main clause (one word: δῆλον) in the middle. The gnomic syntax of the main clause indicates that the conclusion of this proof, anticipated in the second subordinate clause, is undisputable (cf. Part IV.1.5.1–2).

In phrase rhythm an important role is on two pivots (εἰ δὲ and δῆλον ὅτι), which introduce the argument: the triple parallelism of the beginning (where each colon is composed of two words) gives a condition, which is rephrased as a conclusion (two antithetical cola, each composed of three words) in the end. The triple rhythm of this period corresponds to the parallel in Proof 1 and P.9. The argument is based on the opposition, expressed with the choice of diathesis

(Helen-passive vs. Paris-active), and although it is a conditional clause, the conclusion is not achieved through logical argumentation, but through using corresponding grammatical constructions: IF she was unlawfully abused (ἀδίκως ὑβρίσθη, passive), THEN it is clear that the abuser acted unlawfully (ὁ ὑβρίσας ἠδίκησεν, active). In later theory this argumentation type can be seen in Aristotle's topos from different grammatical forms of the same word, in *Rhet.* II.23.2 (1997a).

The analysis of syllabic rhythm is difficult because of the blurred textual tradition. The manuscripts present a text of the second sub-period of P.12, which can be analysed as four isocola of 4 syllables, whereas the proposed emendation <μέν> would spoil the isosyllabic rhythm pattern (but not the syntactic parallelism and word-rhythm of the isocolon). A difficulty is presented by elidable final short syllables (at colon boundaries and within cola). Another text problem concerns the disjunctive particle ἢ, occurring in some manuscripts, whereas Diels and other editors have preferred the other variant (ὡς).<sup>51</sup> Equivalence instead of choice might seem more logical (Schwyzer – Debrunner 1988 II: 565–566, 577–578), but it is in Gorgias' manner to construct the proof as a series of examples, which present a choice between possibilities. The usage of disjunctive ἢ and a binary paradigm might be better suited for this. However, this does not affect the analysis of rhythm.

The quantitative rhythm prevails during the first 38 syllables of the period, at first it could be interpreted as a dactylic (in the first sub-period), then as a trochaic (in the beginning of the second subperiod) sequence according to the equivalence patterns, used in poetry (see Part II.6.4.2).<sup>52</sup> The source for these rhythms is parison, which brings along accentual patterns as well. In the end of the period the syllabic rhythms remain in the background, as the word-by-word antithesis of active and passive verb forms becomes important.

The connection to the following period is achieved by the repetition of the only two keywords, which have remained “unused” in several polyptota of this period: ἀνόμως and ἐδυστύχησεν, which reappear in P.13a.

(13a)

ἄξιός οὖν		4+	
ὁ μὲν ἐπιχειρήσας βάρβαρος βάρβαρον ἐπιχείρημα		2+	5+3+3+5=6+16[22]
καὶ λόγῳ καὶ νόμῳ καὶ ἔργῳ			3+3+3 = 9
λόγῳ μὲν αἰτίας, νόμῳ δὲ ἀτιμίας, ἔργῳ δὲ ζημίας			6+7+6
	τυχεῖν·	+2	= [21] (30)
ἢ δὲ βιασθεῖσα			6
καὶ τῆς πατρίδος στερηθεῖσα			5+4=9 (=15)
καὶ τῶν φίλων ὀφραμισθεῖσα			4+5=9
πῶς οὐκ ἂν εἰκότως			6 (=15) (30)
ἐλεηθεῖη μᾶλλον			7
ἢ κακολογηθεῖη;			7 (=14)

### Description (13a)

PER 1 (1+1) [CLO.INT :CLA; CLO :HIAT, :PAR; SY :Ma.ABS.COP 1+ :VE 2] {to P.13b}  
COL 9 (Cl 7, Cm 10) [ANT 4, PAR 9; ANA 5, CHI 2, GRA 10, EPANA 2, HOM 9, ISOC 11; PARIS 8; ALL 4, PLPT 4+PR 2; RP.WD 6; HYP 1, RING 2]  
WD 43 (CW 23, FW 20, WTDI 1.15) [WD.RI :CW 23/23, :All 35/43] {REF to ἄξιος in P.2, 10a; ἐπιχειρήσας, ἐπιχείρημα NONE, cf. ἐπι-ἐπ-ἐφ- in P.2 (5x), 4, 7b (3x), 8b, 15, 16c, 18a (2x), 18b, 26; βάρβαρος, βάρβαρον NONE; λόγῳι, λόγῳι, κακολογηθεῖη in P.1, 2, 4 (2x), 5, 8b (2x), 9, 14 (2x), 15, 16c (2x), 17, 18a, 19ab, 20b (2x), 21a, 21b (2x), 21c (2x), 21d, 22a (2x), 22b, 23ab, 35, 36 (3x), cf. λέξαι in P.3, 8a, λέγ- in P.6, 8a, 20b, 24, 30, cf. ἐλέγξαι in P.3, 6, 21c; νόμῳι, νόμῳι in P.12, 27 (2x), 36; ἔργῳι, ἔργῳι in P.2, 15, cf. 7b, 15, 21b, 31a (2x), 31b; αἰτίας in P.4, 8b, 11, 14, 20a, 23b, 24, 35, cf. 10a (2x); ἀτιμίας cf. τιμ- in P.2, 7b; ζημίας NONE; τυχεῖν in P.25, cf. P.9, 11, 16c, 19d, 23a, 33, 34; βιασθεῖσα in P.9, 10b, 12 (2x), 20a (2x), 35; πατρίδος NONE, cf. πατρός in P.6; στερηθεῖσα NONE; φίλων cf. φιλ- in P.7b (2x), 16c, 21d; ὀρφανισθεῖσα NONE; πῶς in P.8a, 13a, 21a, 33, 35; οὐκ in P.5 (2x), 7a, 8a, 10b, 14, 19b, 19c (3x), 21c, 23a, 24, 25, 33, 34 (2x), 20a (?); εἰκότως in P.8b, cf. 29; ἐλεηθεῖη in P.15, 16c; κακολογηθεῖη cf. κακ- in P.4, 20b, 22b}  
SYL 96 (1 elidable) [SL.RI :ISOS 69/96, :GRA 86/96; AC.RI :All 51/96, :Niv 55/96, :CLA 20/39 (28?/40); QU.RI :All 38/96 (46/96[10]), :CLA 20/36 (28/40)]  
ACC 40 (CEW 24, FW 16) [AC.RI :CEW 23/24, :All 31/40]

Period (13a) corresponds to two sentences (sub-periods) of 48 and 44 syllables in antithesis: ‘he’ (Paris) vs. ‘she’ (Helen), although there is no symmetry in the syntactic structures of the sub-periods. The initial gnomic main clause (ἄξιος οἶν) is followed by an introductory ὁ μὲν in a subject phrase, which is continued by two series of three complements to a verb and an infinitive. Then a balancing adversative ἢ δέ (Denniston 1996: 165, 369–371) is introduced (at the point, which later will be reanalysed as a beginning of the second sub-period), and followed by three feminine passive participial clauses (βιασθεῖσα etc.) in the function of coordinated grammatical subjects. Up to this point, there are no indications for the end of the first sentence. After the third participial clause, a beginning of a question is introduced (πῶς οὐκ ἂν εἰκότως) and continued with a new verb, which demands a reanalysis of the second sub-period as a rhetorical question; the latter functions in the same way as nominal sentences or exclamations (assertion, see Part IV.1.5.2.2). Another reanalysis occurs at the end of the period: the question, which could end after the first verb form (ἐλεηθεῖη), is continued with particles of disjunction (μᾶλλον ἢ) and another verb (κακολογηθεῖη). Thus the expected phrase boundary moves from the place after the verb one word further, between the connectives.<sup>53</sup> The reason for the postponement of question particles and the left-side dislocation of subject phrases (cf. Devine-Stephens 2000, Marcovich 2006) comes from pragmatics: to connect the question particles closer to the verb and to focus again the attention, which has been lessened during long parallel phrases.

The triple rhythm prevails in the list of three types of punishments and their form (by word, by law and by deed) in the first sub-period and in three different sufferings in the second sub-period. This is framed by double rhythms in introductory subject phrase, based on a chiasmic *figura etymologica*, and in the pair of verbs, which end the rhetorical question and the whole period. A comma, single-word pivot (infinitive τυχεῖν) is left in the middle, referring again to Helen as a passive agent. Most complex cola are constructed as parisa, whereas word counting rhythm is in the foreground (see Part I.2.2). The augmentation occurs not only between the 1st, 2nd and 3rd complex colon (i.e. vertically, in the written text), but the added infinitive (τυχεῖν) constitutes a gradation on the horizontal axis as well, in the 3rd complex colon (cola of 6+7+(6+2) syllables). This pivot balances the introductory pivot (ἄξιος...) and facilitates the transition to the second sub-period (Part IV.3.1.2). The second sub-period uses combined parison and gradation in triple cola. Expansion and addition make parsing difficult: 16 elementary units of this period could be analysed for example as 5, 9, 10 or even 14 cola (Part IV.3). The present analysis combines the syntax and the rhythm. Accentual and quantitative rhythm patterns appear between adjacent commata, because of syntactic parallelism, whereas the exact analysis of isosyllabic rhythm depends on the interpretation of a possible elision in Col.3.

Although the sentences are linked by coordinating particles, their logical connection is causal, as the rhetorical question presents a conclusion: if he..., <then> why shouldn't she...? Phrase rhythm is in interaction with the argument: the first sub-period (bad deeds of Paris) is based on the expansion, the second sub-period (Helen's role of victim) on diminishing gradation. The large-scale syllabic rhythm is continued into P.13b.

### (13b)

<u>ὁ μὲν γὰρ</u>			3+	
	<u>ἔδρασε δεινά,</u>	<u>ἦ δὲ ἔπαθε·</u>	<u>5+5</u>	= 13
δίκαιον οὖν			4+	
	<u>τὴν μὲν οἰκτῖραι,</u>	<u>τὸν δὲ μισῆσαι.</u>	<u>5+5</u>	= 14

### Description (13b)

PER 1 (1+1) [CLO :CHI, :HIAT, :PAR; SY :Ma.VE 2 + ABS.COP 1]{EXPL of P.13a}  
 COL 2 (Cl 1, Cm 5) [ANT 4, PAR 2; CHI 2, GRA 2, HOM 2, ISOC 4, PARIS 2;  
 CLO.INT :HIAT 1]  
 WD 16 (CW 6, FW 10; WTDI 0.6) [WD.RI :CW 6/6, :All 16/16]{REF to ἔδρασε  
 NONE; δεινά in P.29; ἔπαθε in P.16c (2x); δίκαιον in P.12 (2x), 20b, 23a, 36;  
 οἰκτῖραι NONE; μισῆσαι NONE}  
 SYL 27 (elidable 1)[SL.RI :ISOS 20/27, :GRA27/27; AC.RI :All 10/27, :Niv 14/27,  
 :CLA 8/16; QU.RI :All 18/27, :CLA 8/16]  
 ACC 14 (CW 6, FW 8) [AC.RI :CW 6/6, :All 6/14]

Period (13b) is composed of two sentences (sub-periods) and is introduced by an explanatory γάρ (Denniston 1996: 58, cf. Part II.2.3.3). Its first sentence rephrases concisely what has been already told (Paris committed bad deeds and Helen was a sufferer), but using active voice for both (the first time for Helen since P.9). The second sub-period is a nominal sentence without copula, used again as a conclusion that it is just (δικαίον οἶν) to pity Helen. It is based on the same opposition Paris vs. Helen, in parallelism, which is based on analogy in form without exact repetition of syntactic structures (see Part IV.2.4).

The analysis of elementary rhythm units is difficult because of the coordination reduction in the co-referential object in the first sentence (cf. Gaeta – Luraghi 2001: 91). The analysis of syntactic units as S1V1O + S2V2 $\emptyset$  + Pd(V) $\emptyset$ + O2 + O1 does not match the analysis of rhythm exactly: the period could be analysed as six commata abb' + cdd', where the first and the second sub-period are of similar length (13 and 14 syllables), and the ends of both parts (bb' and dd') form perfect isocola (each 5+5 syllables). This type of parallelism has already occurred in P.11. As the syllabic rhythm could be partly destroyed by a simple elision in the first sub-period, its importance must not be over-estimated. Accentual and quantitative rhythm patterns are the result of the syntactic parallelism, which is accompanied by word-counting (2 sub-periods, each of 5 function and 3 lexical words).

The parallelism in the structure of argument and the rhythm confirm that P.13a and P.13b form one, complex period. The short parallel cola and keyword repetition confirm the function of this period: to close the second argument and proceed to the next one.

### **Proof 3 (DK 82 B 11.viii–xv)**

The third, the principal proof in this speech is also the longest (P.14–P.23a). Its main subject is the power of speech and it is divided into following sub-parts and arguments:

I. 1) the power of *logos* and its influence on the soul and opinions (two definitions of speech and poetry), DK 82 B 11.viii–ix (P.14–17);

2) the power of speech in incantations and in magic, which influence the soul and the opinions through art and deception, DK 82 B 11.x (P.17–18);

3) the role of persuasion and deception, the multiplicity of opinions and the similarity of persuasion to violence; a preliminary conclusion: if persuasion is similar to violence, she did not act of her own free will and should be pitied, not blamed, DK 82 B 11.xi–xii (P.19–20);

II. 4) three examples of persuasion, presented by a metaphor of a battle, where one side wins and another is subdued, DK 82 B 11.xiii (P.21a–d);

5) the power of speech, where the influence of words on the soul is equal to the influence of drugs on the body, DK 82 B 11.xiv (P.22);

6) the conclusion: she did not act of her own free will, but was subdued by the power of *logos*, DK 82 B 11.xv (P.23a).

This argument is presented as an independent part of the speech (cf. P.9 and P.35), although as a proof it has to be classified as a forcible action (ἐξ ἀνάγκης) as were the preceding ones. It is not clear whether this corresponds to an already existing legal theory and practice or not; the main reason for the development of this argument in defence of Helen might be Gorgias' attachment to his own theory of the influence of speech.<sup>54</sup> Gorgias analyses the emotive apparatus, bringing out the mutual connection of the soul and the body in the context of hearing, leaving the next part, Proof 4 for the discussion of the influence of sight.<sup>55</sup>

**First sub-argument: the role of words and the definition of poetry (DK 82 B 11.viii–ix)**

The first sub-argument introduces Proof 3 and presents three main points: 1) word is an agent and the cause of Helen's deeds; 2) persuasion influences the soul (psychagogic qualities); 3) persuasion deceives (P.14). The end of P.14 announces the first definition of the speech, following in P.15. From the very beginning it anticipates the conclusion (that persuasion should be classified as a forcible action), because the word/speech (λόγος) is defined as a great and a powerful ruler (δυνάστης), which can perform great deeds with its small body: 1) remove fear and 2) sorrow; and 3) bring happiness and 4) compassion (pity). The list of emotions is presented as a symmetrical structure in parison, whereas the structure of the argument is based on chiasmus, as the first and last (fear-pity) and the middle ones (sorrow-happiness) go together. Actually, fear and pity are neither opposites nor complementary, but the repetition in P.16c and in Aristotelian *Poetics* 1453a proves that it is already an established pair (see also below). The speech is described as having a tiny and invisible body, either as a parallel to the soul-body opposition from the beginning (P.1–2) or as a reflection of Gorgias' own theory of αἴσθησις<sup>56</sup> or the teachings of his teacher Empedokles.<sup>57</sup>

The following period (P.16ab) is pivotal, indicating the end of the 1st definition and introducing the following one, the definition of ποίησις as a measured speech (P.16c). The interpretation of ποίησις can vary: it has been understood either as 'poetry' (i.e. verse), leading to the modern definition of poetry as measured speech, or as 'verbal art' (i.e. poetry and rhetoric together).<sup>58</sup> Although the works of Gorgias seem to be in favour of the second interpretation, i.e. classifying (rhetorical) prose with poetry as measured speech, it seems that he makes distinctions between two types of ποίησις, by giving parallel sets of examples: at first for λόγος (speech, elsewhere described as 'written') and then for ποίησις (having λόγος, reason, as something to be heard). The first part of the definition, concerning measure, has nothing to do with Gorgias' alleged goal of defending Helen. The second part of the definition describes the influence of ποίησις (as a parallel for the influence of λόγος in P.15) and enumerates the passions awakened in the souls of listeners through

the word: 1) fear; 2) compassion; and 3) longing. Fear and pity have already appeared in P.15 and have an important place in Aristotle's *Poetics*. The third member in this list, 'sorrowful longing' (πόθος φιλοπενθήας) prepares the passage from the discussion of the power of words ('hearing') to the discussion of the influence of love ('sight') on the soul (DK 82 B 11.xviii),<sup>59</sup> because in both, feelings (πάθημα) are most important. The second definition seems even less suitable for the defence of Helen, although it formally continues the first premise of rhetorical syllogism.<sup>60</sup> The sub-part ends with P.17, a pivot, leading to the following example.

The sub-argument is constructed according to the scheme: introduction (subject) – example – pivot – example – pivot (and next example). Gorgias' examples for the influence of words have a double nature: they are presented as a proof that words can influence persons forcibly, but he seems to be more concerned with the influence of his own words and their ability to arouse emotions, like pity for the sufferer (Helen).

The division of the text into paragraphs in the editions does not coincide with the analyses of syntax and rhythm. Period (16ab) has been divided between two paragraphs: P.16a ends Diels' Par.VIII and P.16b begins Diels' Par. IX. These two periods should be analysed as one complex sentence, which functions as an introduction to P.16c (see below).

### VIII.

Paragraph VIII is composed of two periods. P.14 begins the 3rd proof of Helen's innocence (concerning speech), which is presented as corresponding to Proofs 1 and 2 (being introduced with coordinating εἰ δέ). The end of P.14 introduces with a cataphoric pronoun a definition (P.15), which begins in quotation form with asyndeton. The reduced importance of different rhythm devices can be explained with the need to stress the meaning. The definition is parallel to the one which follows in Par. IX and anticipates it.

### VIII.

#### (14)

εἰ δὲ λόγος	ὁ πείσας	4+3 = 7	
	καὶ τὴν ψυχὴν ἀπατήσας,	8	[=15]
οὐδὲ πρὸς τοῦτο χαλεπὸν	ἀπολογήσασθαι	5+3+6 = 14	
	καὶ τὴν αἰτίαν ἀπολύσασθαι	10	[=24]
	ὧδε.	2	

#### Description (14)

PER 1 [CLO :FOLL.ASY, :PIV (CATAPHR); SY :ABS.COP :Ma 1, :Rel 1]{REF to P.15 }

COL 4 (Cl 2, Cm 5) [ANA 2 (alt), GRA 4, HOM 4, ISOC 2, PARIS 2; ALL 5, PLPT 2 + PT 3, WD.PLAY 5; INT.CLO.HIAT 1]

WD 19 (CW 8, FW 11; WTDI 0.73) [WD.RI :CW 8/8, :All 18/19] {REF to λόγος, ἀπολογήσασθαι in P.1, 2, 4 (2x), 5, 8b (2x), 9, 13a (3x), 15, 16c (2x), 17, 18a, 19ab, 20b (2x), 21a, 21b (2x), 21c (2x), 21d, 22a (2x), 22b, 23ab, 35, 36 (3x), cf.

λέξει in P.3, 8a, λέγ- in P.6, 8a, 20b, 24, 30, cf ἐλέγξει in P.3, 6, 21c; cf. ἀπ-, ἀφ- in P.8a, 11, 15 (2x), 17, 18a, 21b, 27, 28, 31a, 33, 36; πείσας in P.9, 18b, 19a (2x), 20a, 20b (5x), 21ac, 22b, 23a, 35; ψυχὴν in P.1, 3, 16c, 18bc, 19c, 20b, 21a, 22ab, 25, 26, 32, 33; ἀπατήσας in P.18c; οὐδέ in P.5 (2x), 7a, 8a, 10b, 13a, 19b, 19c (3x), 21c, 23a, 24, 25, 33, 34 (2x), 20a (?); πρὸς in P.17, 21a, 22a (2x); τοῦτο in P.1, 33; χαλεπὸν in P.24; αἰτίαν in P.4, 8b, 11, 13a, 20a, 23b, 24, 35, cf. 10a (2x); ἀπολύσασθαι in P.11, cf. καταλύσαι in P.36; ᾧδε NONE}

SYL 41 [SL.RI :ISOC 16/41, :GRA 39/41; AC.RI :All 24/41, :Niv 35/41, :CLA 16/16<sup>1</sup>; QU.RI :All 16/41, :CLA 16/16<sup>1</sup>]

ACC 17 (CEW 10, FW 7)[AC.RI :CEW 10/10, :All 8/17]

Period (14) is a complex sentence, composed of a conditional clause in protasis and a main clause in apodosis, both presented as nominal sentences without copula, in accordance with their position at the beginning of sub-part of the speech (Part IV.1.5.2.1). The conditional clause indicates a new reason: the word persuades (ὁ πείσας) and deceives the soul (καὶ τὴν ψυχὴν ἀπατήσας) and the apodosis presents a conclusion: it would be easy (a litotes: ‘not difficult’, see Part II.3.4.1) to find pardon and be free from accusations. The apodosis begins with οὐδέ, which is not very frequent,<sup>61</sup> but can be explained either as a duplication of the particle δέ, which introduced the protasis (cf. Denniston 1996: 183–185) or as emphatic or additive (cf. Denniston 1996: 197–199) or both. In either case it has a rhythmic function: to balance and to coordinate the first and second sub-periods (cf. Part II.4.1.3.1).

The period is based on a gradation in syllabic rhythm: the words, the commata and the cola in apodosis are longer than the corresponding parts in protasis. However, the word-counting rhythm, which accompanies the parison, reveals an exact balance between the sub-periods: the number of words in both of them is the same (3+2+4 words). The parallelism is accompanied by homoeoteleuta, as well as quantitative and accentual clausulae.

The only word left out of the rhythm patterns is the cataphoric ᾧδε in the end, functioning as a transitory pivot. As it is added to a series of cola with similar endings (clausulae and homoeoteleuta), and separated from the end of the last parallel clause by a hiatus, it has not been counted as a clausula, but as a free pivot (cf. Part IV.3.1.2).

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<sup>1</sup> The final deictic has not been counted as clausula, but as a free pivot, otherwise the clausula count would indicate 8/16.

(15)

<u>λόγος</u> <u>δυνάστης</u> <u>μέγας</u> <u>ἐστίν</u> ,	9
ὃς <u>σμικροτάτω</u> <u>σώματι</u>	8+6 = 14
<u>καὶ</u> <u>ἀφανεστάτω</u>	10 [=33]
<u>θειότατα</u> <u>ἔργα</u> <u>ἀποτελεῖ</u>	4+
<u>δύναται</u> γάρ	5+
<u>καὶ</u> φόβον <u>παῦσαι</u>	6 (=15)
<u>καὶ</u> λύπην <u>ἀφελεῖν</u>	8
<u>καὶ</u> χαρὰν <u>ἐνεργάσασθαι</u>	8 [= 16] [=31]
<u>καὶ</u> ἔλεον <u>ἐπαυξῆσαι</u> .	

### Description (15)

PER 1 (1+1) [BEG :ASY; CLO :ISOC, :PAR; SY :COP Ma 1, :VE.Ma 1, Rel 1; CONN.INT γάρ]{PAR to P.16c}  
COL 7 (Cl 7, Cm 2)[ANT 4, PAR 4; ANA 4, HOM 2, ISOC 2; ALL 5, PLPT 2 + PT 2, SO.PL 8; INT.HIAT 2; RING 1]{ISOC to P.16a}  
WD 26 (CW 18, FW 8; WTDI 2.25) [ANT 10, PLPT 2 + PT 2; WD.RI :CW 14/19, :All 12/26]{REF to λόγος in P.1, 2, 4 (2x), 5, 8b (2x), 9, 13a (3x), 14, 16c (2x), 17, 18a, 19ab, 20b (2x), 21a, 21b (2x), 21c (2x), 21d, 22a (2x), 22b, 23ab, 35, 36 (3x), cf. λέξει in P.3, 8a, λέγ- in P.6, 8a, 20b, 24, 30, cf. ἐλέγξει in P.3, 6, 21c; δυνάστης, δύναται in P.7b, 10a, 18b, 20a, 22a, 33 (2x); μέγας in P.7b (3x); ἐστίν in P.18c, 30, 33 (2x), cf. P.6 (2x), 8b, 19b, 24; σμικροτάτω NONE; ἀφανεστάτω NONE, cf. φαίνεσθαι 21b; σώματι in P.1, 7b (2x), 16c, 22ab, 26, 31a (2x), 31b, 32; θειότατα P.6, 7a, 9, 10ab, 11, 18a, 33 (3x); 35; ἔργα in P.2, 13a (2x), cf. 7b, 21b, 31a (2x), 31b; ἀποτελεῖ NONE, cf. τελείως in P.31a, cf. ἀπ-, ἀφ- in P.8a, 11, 14, 17, 18a, 27, 28, 31a, 33, cf. ἀπατ- in P.14, 18c; φόβον in P.16c, 22b, 27, 28 (2x); παῦσαι in P.4, 22b; λύπην in P.18a, 22b, 31b; ἀφελεῖν in P.21b, 36; χαρὰν NONE; ἐνεργάσασθαι in P.7b, 21b, 31a (2x), 31b, cf. ἔργον in P.2, 13a (2x), 15; ἐν- in P.1, 7, 18a, 21bcd, 28, 29, 31b (2x), 36 (2x), cf. 25; ἔλεον in P.13a, 16; ἐπαυξῆσαι NONE; ἐπι-ἐπ-ἐφ in P.2 (5x), 4, 7b (3x), 8b, 13a (2x), 16c, 18a (2x), 18b, 26}  
SYL 64 (2 elidables)[SL.RI :ISOS 16/64, :GRA 64/64; AC.RI :All 10/64, :Niv 12/64, :CLA 0/28; QU.RI :All 18(30?)/64, :CLA 0/28]  
ACC 64 (CW 18, FW 8)[AC.RI :CW 8/19, :All 12/64]

Period (15) corresponds to two sentences: a nominal sentence with a relative clause in apodosis, explaining the predicative (δυνάστης), and a following explanatory sentence, introduced by δύναται γάρ and followed by four parallel phrases.<sup>62</sup> The period is dedicated to the impact (δύναμις) of speech, which can be seen in a polyptoton δύν-, brought to the centre of attention at first as a focus and then as an emphatic topic.<sup>63</sup> In the first sentence a copula ἐστίν occurs (which is rare in this speech), smoothing the transition to the relative clause (cf. Part IV.3.1.2). Its role in the word count is ambiguous: without it the first sub-period can be described as composed of three times three content words and parallel to the second sub-period, which has 9 content words, otherwise the number of words in the beginning would be different in comparison to the following cola. In either way, the index of word type distribution is high, corresponding to the importance of the subject (see Part IV.1.4, II.3.1.5).

In word-counting rhythm another figure, a small circle appears: the coordinated adjectives surround the noun (ὄς σμικροτάτῳ σώματι καὶ ἀφανεστάτῳ) in Col.2 of the first sub-period, resembling more the word-order in poetry rather than prose (cf. Sulzer 1961). The second, added superlative (καὶ ἀφανεστάτῳ) might hint at Gorgias' theory of perception, but its function in rhythm is important: to balance the antithetic pairs, 'mighty' (μέγας) vs. 'smallest' (σμικροτάτῳ) and 'most invisible' (ἀφανεστάτῳ) vs. 'most godly' (θειότατα). Because of hyperbaton in the word order, alliteration σμικροτάτῳ σώματι appears. In this period it is closely connected to parechysis: σμικροτάτῳ σώματι is preceded by μέγας, which shares its consonants [σμ]. In the second sub-period parechysis interacts with the division of text into parallel cola, as every colon is distinguished by different repetitions: at first labials [ph, b, p] and [o]: φόβον παύσαι, then [e], [l] and [p, ph]: λύπην ἀφελεῖν, [r], [g, kh] and [a]: χαρὰν ἐνεργάσασθαι and back to [e], [l] and [p]: ἔλεον ἐπαυξήσαι. The triple use of different superlatives and infinitive forms [-τατ-, -σαι] strengthens the impression of multiple phonic echoes (cf. Part II.5.3–4).

The absence of elision has its role in the syllabic rhythm<sup>64</sup> and is connected to the so-called expressive hiatus, which is rare in Gorgias, *Helen* (see Part II.3.4.3.3). It occurs between the final content words of the first sub-period: θειότατα Ἡ ἔργα Ἡ ἀποτελεῖ. The context of antithesis and the stress on the power of speech is in favour of this interpretation: hiatus (a gap in a word flow) slows down the pace and brings every single word into focus.

The usage of rhetorical figures changes together with the argument: the first sub-period does not use many repetition figures, relying on word antithesis (cf. Part II.4.1.4). The second sub-period is based on parallelism (parison) and is accompanied by several rhetorical figures, as well as syllabic and word rhythm. The only word not included in the parallel phrases of the second sentence is its initial verb (δύναται), which pragmatically is an emphatic topic (being predictable) and an important keyword of the period and the whole part.

## IX.

Paragraph VIII in modern editions ends with P.16a and Paragraph IX begins with P.16b. Exceptionally, the sub-periods (P.16a and P.16b) are numbered here, in order to discuss better the division problems. These appear because of the clash between macro-syntactic and micro-syntactic (corresponding to rhythm) units, which is characteristic to pivotal parts as P.16ab. Here the transition to the next example is combined with auto-reference, whereas the anaphoric pronoun ταῦτα refers to the preceding and οὕτως in cataphoric function together with the future 1st verb δείξω ('prove', 'demonstrate') refers to the following example. These functions are usual, as the initial anaphoric marks the closure of preceding part and the cataphoric points to the following, so it is a pivot, which points in two directions (Part II.3.4.1.3).

P.16a would be self-sufficient as a pivot alone, but P.16b adds two keywords concerning Gorgias' speech strategy, which become important in the following sub-parts: the use of δόξα as a proof (P.18–19) and *hearing* as the medium of speech (vs. *sight* in the last argument). P.16c gives a second definition of verbal art, discussing the influence of speech. It is a long complex period, followed by another pivot, P.17, which leads to new examples in Par.X.

(16a)

ταῦτα δὲ ὥς οὕτως ἔχει δειξῶ·  $3+5+2 = 10$

IX.

(16b)

δεῖ δὲ καὶ δόξῃ δεῖξαι τοῖς ἀκούουσι·  $2+5+5 = 12$

**Description (16ab)**

PER 1 (1+1) [CLO :FOLL.ASY; SY :Ma VE 1, :IMPS 1, :Rel VE 1; CONN δέ]{REF to P.16c};

COL 2 (Cl 1, Cm 5)[PAR 2; GRA 2, ISOC 4; ALL 4; PARON 4; PLPT 2; SO.PLAY 2; CLO.INT :HIAT 1]

WD 13 (CW 6, FW 7; WTDI 0.86) [WD.RI :CW 0/6, :All 10/13] {REF to ταῦτα in P.24; οὕτως in P.28, 29; ἔχει in P.7a (3x), 8a, 16c, 19b, 19c (2x), 20a (2x), 22a, 25, 31a, 33; ἀκούουσι in P.3, 4, 16c, 20b, 22b; δειξῶ, δεῖξαι in P.4, 16ab, 21d, δόξῃ in P.4, 16b, 18bc, 19cd, 21b (3x), 21d, 36, cf. δόξ- P.7b, δοκέω in P.6; δεῖ NONE, cf. δέον in P.3}

SYL 22 (elidable 1) [SL.RI :ISOS 14/22, :GRA 22/22; AC.RI :All=Niv 16/22, :CLA 0/8; QU.RI :All 8/22, :CLA 8/8]

ACC 12 (CW 8, FW 4) [AC.RI :CW 8/8; :All 10/12]

Period (16ab) corresponds to two sentences (sub-periods), both very short. P.16a is a complex sentence with a short subordinate clause, which divides the sub-period into three rhythm elements (commata). P.16b corresponds to a simple sentence, but it copies the form of the sub-period by setting the infinitive phrase (καὶ δόξῃ δεῖξαι) in the middle, in the same position where the subordinate clause occurs in P.16a. Syntactically P.16a and P.16b are independent: the 1st person verb form in P.16a is followed by an impersonal δεῖ in P.16b. This impersonal verb form functions as an auto-reference concerning the orator's tasks, adding nuances or specifying the subject<sup>65</sup> and can be analysed as a parenthesis. The sub-period is introduced with a connective δεῖ δέ, with almost the same force as the explicative γάρ in parenthetical sentences or phrases and can be explained as necessary in order to balance the rhythm of both sub-periods.

The rhythm is not exactly isosyllabic, the second sub-period augments and balances the first one, but there is correspondence in the quantitative clausulae (⊔ — — x). The period prepares the following definition, referring to it as a proof by key-words, which share sounds (δειξῶ, δόξα, δεῖξαι), whereas the polyptoton (δειξῶ, δεῖξαι) is strengthened by alliteration (δεῖ, δεῖξῶ). As in

other transitional periods, the number of parallelism figures is low. The connection to the following period (P16c) is ensured by the keyword: ἀκούουσι, which is repeated in P.16c, expressing the oral character of the speech.

(16c)

τὴν ποίησιν ἅπασαν					
	<i>καὶ</i> νομίζω	<i>καὶ</i> ὀνομάζω	4+5 =	$\frac{7}{9}$	
		<i>λόγον</i> ἔχοντα μέτρον·		$\frac{7}{7}$	[=23]
ἦς	τοὺς ἀκούοντας εἰσῆλθε		1 + 5+3 =	$\frac{9}{7}$	
	<i>καὶ</i> φρίκη περίφοβος			$\frac{7}{7}$	
	<i>καὶ</i> ἔλεος πολύδακρυς			<b>8</b>	
	<i>καὶ</i> πόθος φιλοπενθήης,			<b>7</b>	[=31]
<u>ἐπ' ἄλλοτρίων τε</u>	<u>πραγμάτων</u> καὶ <u>σωμάτων</u>		6 + 3 + 4 =	13	
	<u>εὐτυχίαις</u> καὶ <u>δυσπραγίαις</u>		4 + 5 =	9	[=22]
<u>ἰδιόν τι πάθημα</u>			4 + 3 =	7	
διὰ τῶν <i>λόγων</i>	<i>ἔπαθεν</i> ἢ <i>ψυχῆ</i> .		5 + 6 =	11	[=18]

**Description (16c)**

PER 1 [BEG :ASY; CLO :PLPT; SY :Ma.VE 2, :Rel.VE 2]{PAR to P.15}

COL 10 (Cl 8, Cm 8) [ANT 2, PAR 7; ANA 5, HOM 6, ISOC 4, PARIS 7; ALL 2; PLPT 6, SO.PL 5; RING 2]

WD 41 (CW 25<sup>1</sup>, FW 16; WTDI 1.56) [ANT 6; PLPT 6; WD.RI :CW 22/25; :All 40/41] {REF to ποίησιν in P.31a, cf. ποιητῶν in P.3, ποιεῖν in P.20b, 21b,d, 27; ἅπασαν in P.6, 7b, 19b (2x), 24, 35; νομίζω in P.33; ὀνομάζω cf. P.3; λόγον, λόγων in P.1, 2, 4 (2x), 5, 8b (2x), 9, 13a (3x), 14, 15, 17, 18a, 19ab, 20b (2x), 21a, 21b (2x), 21c (2x), 21d, 22a (2x), 22b, 23ab, 35, 36 (3x), cf. λέξει in P.3, 8a, λέγειν in P.6, 8a, 20b, 24, 30 and ἐλέγξει in P.3, 6, 21c; ἔχοντα in P.7a (3x), 8a, 16a, 19b, 19c (2x), 20a (2x), 22a, 25, 31a, 33; μέτρον NONE; ἀκούοντας in P.3, 4, 16b, 20b, 22b; εἰσῆλθε cf. ἦλθον in P.20a, 27, 34 (2x); cf. εἰσ- in P.8b, 22b; φρίκη NONE; περίφοβος NONE, cf. φόβος in P.15, 22b, 27, 28 (2x); cf. περί in P.3, 5, 19abcd, 29; ἔλεος in P.13a, 15; πολύδακρυς NONE, cf. πολύ- in P.7, 21c, 26, 29, 30, 31a, 31b (3x); πόθος in P.31b; φιλοπενθήης NONE, cf. φιλο- in P.7b, 13a, 21d; ἐπι-ἐπι-ἐφ- in P.2 (5x), 4, 7b (3x), 8b, 13a (2x), 15, 18a (2x), 18b, 26; ἄλλοτρίων in P.10b, 17 (2x), 22b (3x); πραγμάτων, δυσπραγίαις in P.1, 2, 29, 31b, cf. ἔπραξε in P.9 (2x), 24, 35 (2x); δυσ- in P.29, cf. δυσκλείας in P.11, 36; σωμάτων in P.1, 7b (2x), 15, 22ab, 26, 31a (2x), 31b, 32; εὐτυχίαις in P.19d, cf. P.9, 11, 23a, 33, 34; cf. τυγχάνειν in P.13a, 25; cf. εὐ- in P.1, 7b (3x), 19cd, 21d; δυσπραγίαις NONE, cf. πραγ-; ἰδιόν in P.7b; τις, τι in P.4, 22b, 28; τίς, τί in P.20a, 32; cf. 8a (3x); πάθημα, ἔπαθεν in P.13b; διά- in P.6, 8ab, 10a, 18a, 21c, 23b, 24, 25, 27 (3x), 35; ψυχῆ in P.1, 14, 18bc, 19c, 20b, 21a, 22ab, 25, 26, 32, 33, cf. 3}

SYL 94 (elided 1)[SY.RI :ISOS 54/94, :GRA 94/94; AC.RI :All=Niv 50/94, :CLA 20/40; QU.RI :All 34/94, :CLA 16/40]

ACC 38 (CEW 25, FW 12) [AC.RI :CEW 22/25; :All 35/38]

<sup>1</sup> ἄλλοτρίων has been counted as a content word, see Part II.3.1.2.

Period (16c) can be analysed as one complex sentence with a relative clause in apodosis. However, in the edition a stigma occurs before ἦς and therefore the pronoun is classified as a demonstrative and the whole period as two sentences. It is difficult to decide which classification is “correct”, as both pronouns have an anaphoric and cohesive function (see Part II.2.1.1.3, 2.2.3). From the point of view of rhythm and the argument this question is not important, as both parts form a complex period, which has to be analysed as a whole.

The example in period (16c) is parallel to P.15 (the influence of poetry on the soul). As is usual for a quotation, it begins with an asyndeton (Part II.3.4.2.2). The definition of poetry does not add anything essential in defence of Helen: Gorgias is elaborating his first premise on the power of speech, which affects the soul through emotion (πάθημα). As the focus is on a theoretical discussion of αἴσθησις, the percentage of content words is high (1.56, see Part IV.1.4). The word rhythm is based on parison, which causes some syllabic and accentual rhythm patterns as well. The period can be analysed as 4 or 3 sub-periods, which are composed of similar elementary rhythm units (cola of 7 and 9, later of 8 and 7 syllables). In the middle of P.16c these cola usually contain two content words and one (or two) function word(s), whereas the latter have a cohesive function.

Word rhythm and phrase rhythm interact with sound figures: the anaphoras and the homoeoteleuta. Parechesis begins with the repetition of word-stem in νομίζω and ὀνομάζω and it supports phrase rhythm most in the second sub-period: at first in the repetition of labials, [r] and [i] in φρίκη περίφοβος, then [p] together with [l] and [y] in: ἔλεος πολύδακρυς, and at last the labials, [th] and [o] in πόθος φιλοπενθής (Part II.5.4)

The weight of the content words has already been mentioned above. The steps in the argument from poetry to its influence (feelings) are coordinated by several connective particles. The stress is on parallelism, which is confirmed by the appearance of the corresponsive καί ... καί (Denniston 1996: 323–324).<sup>66</sup> Although Gorgias seems to be occupied primarily with his favourite subject: the influence of speech, several keywords (σωμάτων, ἔπαθεν, ψυχῆ, πόθος) prepare other premises, which are more concerned with the defence of Helen.

(17)  
 φέρε δὴ πρὸς ἄλλον ἀπ' ἄλλου μεταστῶ λόγον. 3+3+3+3+2 = 14

#### Description (17)

PER 1 [CLO: AUTOREF; SY :VE.Ma 2] {REF to P.18a}

COL 1 (Cl 1, Cm 3) [ANT 2; ISOC 3; ALL 2, PLPT 2]

WD 8 (CW 3, FW 5; WTDI 0.6<sup>1</sup>) [WD.RI :CW 0/5, :All 8/8] {REF to φέρε in P.8a; πρὸς in P.14, 21a, 22a (2x); ἄλλον, ἄλλου in P.10b, 16c, 22b (2x); ἀπ-, ἀφ- in P.8a, 11, 14 (2x), 15 (2x), 18a, 21b, 27, 28, 31a, 33, 36, cf. ἀπατ- 14, 18c; μεταστῶ

<sup>1</sup> As the period is short, the percentage is much influenced by the fact that pronouns are not counted.

in P.18b, cf. στη- in P.22b, 28, cf. μετ- in P.18b, 21bd; λόγον in P.1, 2, 4 (2x), 5, 8b (2x), 9, 13a (3x), 14, 15, 16c (2x), 18a, 19ab, 20b (2x), 21a, 21b (2x), 21c (2x), 21d, 22a (2x), 22b, 23ab, 35, 36 (3x), cf. λέξει in P.3, 8a, λέγ- in P.6, 8a, 20b, 24, 30, cf. ἐλέγξει in P.3, 6, 21c} {REF to P.16c, 18a}  
 SYL 14 (elided 1) [SY.RI: ISOS 12/14; GRA: 14/14; AC.RI :All 0/14, Niv: 6/14, :CLA 0/4; QU.RI :All 0/14, :CLA 0/4]  
 ACC 7 (CEW 5, FW 2) [AC.RI :CEW 4/5, :All 4/7]

Period (17) is a simple sentence, introduced by the particle δή, which has a connective function (Denniston 1996: 236–240). According to ancient theory P.17 could be classified as undivided or a one-colon period (περίοδος μονόκωλος) and its function is transitional (Part II.3.2.2). This function is strengthened by the exhortative φέρε δή, which occurs often as an introductory pivot in Attic orators. Here its function is purely pragmatical, although it has been classified as a content word (cf. Part IV.3.1.2).<sup>67</sup>

The period is short and based mainly on word rhythm: it begins with three appositive groups, each composed of one content word or expressive function word and one prosodic or syntactic enclitic, and it ends with a colon, which through auto-reference leads to the following period. Antithesis is connected to polyptoton (see Gygli-Wyss 1966: 51–77) and stresses the turning point in the argument.

### **Re-statement of the argument: magic, speech and deception and the preliminary conclusion to Proof 3: the violence of speech (DK 82 B 11.x–xii)**

Paragraph X and Paragraph XI (P.18a–19d) present the next sub-part, discussing different types of speech, whereas Paragraph XII gives the preliminary conclusion to it. The pattern of composition is the same as in the preceding sub-parts: after the auto-referential introduction (P.17) a definition of the next genre of verbal art follows (P.18a–c), introduced by an explicative γάρ. Par.X prepares the second premise, at first in P.18a by reintroducing already familiar arguments, i.e. that speech (now incantations) gives pleasure and removes sorrow (cf. P.15), whereas magic is referred to as divine (ἔνθεος), connecting this argument to the first proof (divine powers).<sup>68</sup> Then in P.18b and P.18c by adding a new detail: incantations affect the soul by deceiving the opinions and by causing mistakes (cf. P.2 and P.4), which reappears in Par.XI. Magic and incantations are defined as a double *technē* (P.18c), possibly as a reflection of Gorgias' teachings.<sup>69</sup>

Par.XI explains the variability of δόξα (cf. P.2–4), reflecting again discussions in philosophy.<sup>70</sup> By demonstrating the power of words to form different opinions and influence behaviour, Gorgias can again present Helen as a passive sufferer, who is not responsible for her deeds (P.19). In P.19bc a triple division of speech types is introduced, concerning knowledge and opinions on the past, the present and the future. This division reappears as a basis of the

division of speech types in Aristotle's *Rhetoric*;<sup>71</sup> however, Gorgias does not develop this theme in P.21, where he discusses different types of speeches.

Par.XII continues the argument concerning the power of words. It is based on a thesis, that speech is powerful and therefore its influence should be equated with violence. This brings together all three reasons from P.9: *necessity*, *force* and *speech*. The conclusion is that Helen should not be regarded as guilty (P.20b). The transmitted text is in a very poor condition and P.20a can be understood on the basis of P.20b, which seems to give an explicative résumé of it, more or less as following: Helen might have lost her mind because of the power of persuasion, which has the same force as violence.

## X.

Paragraph X in Diels' edition can be described as one period complex, where each period (P.18a–P.18c) corresponds to one sentence. These periods are knit together by concatenation: the repetition of keywords (or word-stems) in the end of the period and at the beginning of the following period.<sup>72</sup> These repeated keywords are isolated from the rhythm patterns and do not participate in phrase and syllabic rhythm, where the main principle is parallelism (isosyllabism and parison).

The period introduces a complex argument by defining the word magic (cf. P.22ab and Furley 1993). Gorgias sees it as a double art (*techne*), which works through the mistakes of the soul and the deception of the opinion. Accordingly the whole complex period is based on double constructions, corresponding to his two key-words (the soul and the opinion).

## X.

(18a)

αἱ γὰρ ἔνθεοι διὰ λόγων ἐπαιδαὶ	5+7	[=12]	
<u>ἐπαγωγοὶ ἡδονῆς,</u>	<u>ἀπαγωγοὶ λύπησ</u>	4+3+ 4+2	[=13]
	γίνονται·		3

### Description (18a)

PER 1 [CLO :PIV; SY :Ma.COP 1]{CONT in P18b}

COL 2 (Cl 3, Cm 2) [ANT 2; GRA 4, HOM 2, ISOC 2, PARIS 2; ALL 2, PLPT 2+PT 2; CLO.INT :HIAT 1; HIAT.INT 1; ASY 2, RING 1]{PLPT 2 to P.18b; CHI to P.18b}

WD 11 (CW 8, FW 3; WTDI 2.7) [ANT 4; PLPT 4; WD.RI :CW 4/8, 8/8 (RING), :All 10/11]{REF to ἔνθεοι cf. P.6, 7a, 9, 10ab, 11, 15, 33 (3x), 35; ἐν- in P.1, 7, 15, 21bcd, 28, 29, 31b (2x), 36 (2x), cf. 25; διὰ in P.6, 8ab, 10a, 16c, 21c, 23b, 24, 25, 27 (3x), 35; λόγων in P.1, 2, 4 (2x), 5, 8b (2x), 9, 13a (3x), 14, 15, 16c (2x), 17, 19ab, 20b (2x), 21a, 21b (2x), 21c (2x), 21d, 22a (2x), 22b, 23ab, 35, 36 (3x), cf. λέξει in P.3, 8a, λέγ- in P.6, 8a, 20b, 24, 30, cf. ἐλέγξει in P.3, 6, 21c; ἐπαιδαί in P.18b; ἐπαγωγοί, ἀπαγωγοί cf. ἀγ- in P.7b, 10b, 22b, cf. 21c; ἐπι-ἐπ-ἐφ- in P.2 (5x), 4, 7b (3x), 8b, 13a (2x), 15, 16c, 18b, 26; cf. ἀπ-, ἀφ- in P.8a, 11, 14, 15, 17, 21b, 27, 28, 31a, 33, 36, cf. ἀπατ- in P.14, 18c; ἡδονῆς NONE, cf. ἡδεῖαν in P.31a;

λύπης in P.15, 22b, 31b; γίνονται in P.18b, 27, γέν- in P.6, 7a, 8b (cf 5, 7),  
γεγονέναι in P.3 (2x), 24}  
SYL 28 [SY.RI :ISOS 14/28; GRA: 25/28; AC.RI :All(=Niv) 0/28, :CLA 0/8; QU.RI  
:All 8?/28, :CLA 0/8]{QU.RI.CLA to P.18b}  
ACC 10 (CW 8, FW 2) [AC.RI :CW 8 (Ri), : ALL 4/10]

Period (18a) corresponds to a sentence with a coordinated double predicative. It is marked with a middle stop (*stigma*) in its end in the editions (probably because of the development in P.19b). The syntactic form of the argument is slightly different in comparison with parallel examples, as the nominal sentence ends with a copula (γίνονται). Although the weaker form of the gnomic syntax might be seen as diminishing its argumentative value (cf. Part IV.1.5.2), it is needed for the rhythmical balance of the period (cf. P.10b, where the balance is achieved by augmentation) and the cohesion between periods (concatenation, which leads to P.18b).

In the middle of the period two parallel phrases (based on antithetic pairs) are juxtaposed in asyndeton (Part II.3.4.3.3). This type of asyndeton (intraperiodic) is rare in Gorgias and might be explained with the focus on content words (WTDI is above 2). The more or less functional γίνονται helps to balance the period (it is classified as a content word, though, see Part II.3.1). The period is not based on isosyllabic structures, but stresses word rhythm: the number of particles is small in proportion to content words; the antithetic pair in the middle is accompanied by asyndeton, repeated phrase structure, homoeoteleuton and polyptoton. The argument continues in P.18b.

### (18b)

συγγινομένη γὰρ	τῆι δόξει τῆς ψυχῆς	$\frac{6}{4} + \frac{3+3}{4} = 12$
	ἢ δύναμις τῆς ἐπιδόξης	$\frac{4}{3} + \frac{4}{7} = 8$ [=20]
ἔθελεξε	καὶ ἔπεισε καὶ μετέστησεν αὐτὴν	$\frac{3+1+3}{4} + \frac{7}{7} = 14$
	γοητεία.	4 [=18]

### Description (18b)

PER 1 [CLO :PIV; SY.VE :Ma 3]{CONT of P.18a, to P.18c}  
COL 3 (Cl 2; Cm 5) [PAR 5; ANA 2, GRA 5, HOM 4, ISOC 6; ALL 3; RING 1]  
{PLPT 2 to P.18a, 3 to P.18c; CHI to P.18a, P.18c}  
WD 17 (CW 9, FW 8; WTDI 1.1) [WD.RI :CW 8/9, 9/9 (RING), :All 16/17]{REF to  
συγγινομένη in P.18a, 27, γέν- in P.6, 7a, 8b (cf 5, 7), γεγονέναι in P.3 (2x), 24;  
δόξει in P.4, 16b, 18c, 19cd, 21b (3x), 21d, 36, cf. δόξ- P.7b; δείκνυμι in P.4,  
16ab, 21d, δοκέω in P.6; ψυχῆς in P.1, 3, 14, 16c, 18c, 19c, 20b, 21a, 22ab, 25, 26,  
32, 33; δύναμις in P.7b, 10a, 15 (2x), 20a, 22a, 33 (2x); ἐπιδόξης in P.18a, cf. ἐπι-  
ἐπ-ἐφ- in P.2 (5x), 4, 7b (3x), 8b, 13a (2x), 15, 16c, 18a (2x), 26; ἔθελεξε NONE;  
ἔπεισε in P.9, 14, 19a (2x), 20a, 20b (5x), 21ac, 22b, 23a, 35; μετέστησεν in P.17,  
cf. στη- in P.22b, 28, cf. μετ- in P.17, 21bd; αὐτὴν cf. αὐτ- in P.3, 19d, 20a, 22a,  
cf. 26; γοητεία in P.18c, 22b}  
SYL 38 [SY.RI :ISOS=GRA 34/38; AC.RI :All 10/38, :Niv 14/38, :CLA 0/8; QU.RI  
:All 16/38, :CLA 0(8)/8]{QU.CLA to P.18a, P.18c}  
ACC 16 (CEW 10, FW6) [AC.RI :CEW 10/10, :All 12/16]

Period (18b) corresponds to one sentence, ending with a full stop and introduced by an explicative γάρ (to P.18a). It could be analysed as two complex cola, corresponding to a subject phrase and a verb phrase. However, as in other periods, which are based on gradation, the unambiguous parsing of it into sub-periods or complex cola is difficult: it is not clear, whether the end of first complex colon (ἡ δύναμις τῆς ἐπωιδῆς) and the added pivot (γοητεῖαι) should be analysed as clausulae, or the first of them and the third of the phrases in gradation (μετέστησεν αὐτήν). The keywords are focused by gradation in the case of three verb forms, which express the influence of the word on the soul (Part II.4.4.2.4, IV.3.1.2.1).

The syllabic rhythm appears on the small scale: the adjacent words in the cola follow the same syllabic patterns from τῆι δόξῃ to ἔπεισε. Although the second complex colon is slightly longer than the first one (20 and 18 syllables), the rising gradation patterns between commata and cola (3+3, 4+4, 3+4+7) create an impression of augmentation, whereas it is strengthened by a temporary switch from double to triple rhythm patterns (three verbs). The function words regain their importance (WTDI is only slightly over 1) and we can observe an emphatic usage of pronouns, when the pronoun αὐτήν is added to the row of verbs, destroying a homoeoteleuton, producing an isocolon and preparing the final word γοητεῖαι ('with incantation'). Both, the initial pivot and γοητεῖαι are excluded from repetition patterns, but the latter is important for the argument and leads to P.18c through concatenation.

### (18c)

γοητείας δὲ καὶ μαγείας	δισσαὶ τέχναι εὐρηνται,	5+4 + 4+3	= 16
αἶ εἶσι		3 +	
ψυχῆς ἀμαρτήματα	καὶ δόξης ἀπατήματα.	7+1+7	= 18

### Description (18c)

PER 1 [CLO :HIAT, :PAR; SY :Ma.VE 1, :Rel.COP 1; SY.CONN δέ]{CONN to PER 18a,b}

COL 2 (Cl 3, Cm 3) [PAR 4; GRA 4, HOM 4; CLO.INT :HIAT 1; INT.HIAT 1]{PLPT 3 to P.18c}

WD 14 (CW 9, FW 5; WTDI 1.8) [WD.RI :CW 6/9; :All 14/14]{REF to γοητείας in P.18b, 22b; μαγείας NONE; δισσαὶ NONE; τέχναι in P.21c, 34; εὐρηνται NONE; εἶσι in P.6 (2x), 8b, 19b, 24, 30, 33 (2x); ψυχῆς in P.1, 3, 14, 16c, 18b, 19c, 20b, 21a, 22ab, 25, 26, 32, 33; ἀμαρτήματα in P.2, 24, 33, cf. ἀμαρτία in P.36; δόξης in P.4, 16b, 18b, 19cd, 21b (3x), 21d, 36, cf. δόξ- P.7b; δέικνυμι in P.4, 16ab, 21d, δοκέω in P.6; ἀπατήματα in P.14, cf. ἀπ-, ἄφ- in P.8a, 11, 15 (2x), 17, 18a, 21b, 27, 28, 31a, 33, 36}

SYL 34 [SY.RI :ISOS 0/34, :GRA 34/34; AC.RI :All 17/34, :Niv 21/34, :CLA 8/8 (12/16); QU.RI :All 16/34 (da), :CLA 0/2(4)] {QU.CLA 1 to P.18b; AC.CLA 1? to P.19a}

ACC 13 (CEW 10<sup>1</sup>, FW 4) [AC.RI :CEW 10/10, CW :6/9, :All 12/13]

<sup>1</sup> Including enclitic copula.

Period (18c) corresponds to a complex sentence, composed of a main clause in protasis and a relative clause in apodosis. In several other periods the basic propositions, which have to be taken as proven, are presented in the form of nominal sentences without copulas; here a copula εἶσι occurs in the relative clause, whereas εὐρηγνται is close to it by its function. The verbs (V) occur in the middle of the period and have a rhythmic function, forming a chiasmus with initial and final parallel phrases (scheme: aa'cVdV'bb').

The word rhythm is most eminent in the colon, which refers to double τέχνη, focusing the three content words with a colon-internal expressive hiatus and the absence of function words. This colon is characterised by a strong quantitative rhythm (a series of long syllables) as well. Exact syllabic repetition is absent in P.18c and the parallelism takes the form of a parison, whereas accentual rhythm patterns and parechesis are the result of the repetition of words belonging to same formation types (γοητείας-μαγείας, ἁμαρτήματα-ἀπατήματα).

## XI.

Paragraph XI Diels can be described as a period complex, which corresponds to 4 periods and 3 (or four) sentences, ending with a full stop (P.19a–d). Its first period continues the syllabic rhythm of P.18c, as well as the theme. The period complex is one of the longest in the speech and its argument is developed in four stages: P.19a states that the number of persons using different false speeches is great; P.19b adds that if everybody had the same knowledge of past, present and future, the speeches could not be different; P.19c adds another point and concludes: the knowledge is not the same, therefore a lot of people need opinion as an advisor for their souls; and P.19d returns to P.19a and P.18 by adding that opinion, being false and deceptive, brings false and deceptive happiness. Although the period takes the form of rhetorical syllogism, the conclusion (that people need δόξα as an advisor) does not follow strictly from preceding statements.

It seems that here the logical argument is supplemented by rhetorical figures, especially polyptoton, which is the principal figure in Par.XI: P.19a includes one triple and one double polyptoton; P.19b a double polyptoton at the beginning and in the end;<sup>73</sup> P.19c a double polyptoton at the beginning and P.19d a double polyptoton. As in the shortest periods, in the longest the syllabic rhythm is also absent. The absence of phrase and syllabic rhythm is compensated by the repetition of words and sounds, which create their own rhythms.

The transmitted text presents difficulties for the understanding and parsing in the end of P.19b and the beginning of P.19c (see below). These periods are connected by their theme, as they both discuss the instability of opinion and the three types of knowledge, concerning the past, the present and the future. P.19b is a complex sentence, presenting in *irrealis* (εἰχον) a condition, which is not realised: οὐκ ἄν ... ἦν ('if everyone had the same knowledge, the speeches would not be alike'). An opposition follows in P.19c, expressing the real

situation and its consequences in the indicative (τὰ νῦν γε οὐτε ... εὐπόρως ἔχει): nobody can have exact knowledge in the present time, therefore everyone has to rely on δόξα (cf. MacDowell 1982: 38). The argument continues through P.19d into Par. XII.

XI.

(19a)

ὄσοι δὲ ὄσους	περὶ ὄσων	3+2 + 4	= 9	
καὶ ἔπεισαν	καὶ πείθουσι	δὲ	4 + 5	= 9
	ψευδῆ λόγον	πλάσαντες.	4 + 3	= 7
				[=18]
				{=25}

**Description (19a)**

PER 1 [CLO :PIV; SY :VE.Ma 2]{CONT.RH to P.19b}

COL 3 (Cl 1, Cm 5) [PAR 5; ANA 2, ISOC 2; ALL 5, PLPT 5, SO.PL 3]{HOM to P.19b, ISOC with P.18c}

WD 13 (CW 5, FW 8; WTDI 0.6 (pro 1.6)) [PLPT 5; RH.ENG :CW 2/5, :All 10/13]{REF to ὄσοι, ὄσους, ὄσων NONE; περὶ in P.3, 5, 16c, 19bcd, 29; ἔπεισαν, πείθουσι in P.9, 14, 18b, 20a, 20b (5x), 21ac, 22b, 23a, 35; ψευδῆ in P 4; λόγον in P.1, 2, 4 (2x), 5, 8b (2x), 9, 13a (3x), 14, 15, 16c (2x), 17, 18a, 19b, 20b (2x), 21a, 21b (2x), 21c (2x), 21d, 22a (2x), 22b, 23ab, 35, 36 (3x), cf. λέξει in P.3, 8a, λέγει in P.6, 8a, 20b, 24, 30, cf. ἐλέγξει in P.3, 6, 21c; πλάσαντες NONE}

SYL 25 (elidable 1) [SL.RI :ISOS 18/25, :GRA 25/25; AC.RI :All(=Niv) 0/25, :CLA 0/8(12); QU.RI :All 0/25, :CLA 0/8(12)]{SL.RI :ISOS 25/25 with P.19b}

ACC 13 (CEW 8, FW 5) [AC.RI :CEW 8/8, :All10/13]

Period (19a) corresponds to one sentence with coordinated verb phrases. It is introduced by the connective particle δέ and continues the motive of deception and the oscillation between double and triple rhythms (cf. P.18c): at first in a triple polyptoton ὄσοι, ὄσους, περὶ ὄσων, and then in a double polyptoton, forming a completive pair (past and present) καὶ ἔπεισαν καὶ πείθουσι. The occurrence of several polyptota corresponds to the idea of this period: the great number of different deceptive speeches.

The word type distribution is in favour of function words, which are in some cases emphatic, as in the polyptoton (ὄσος), and play an important role in word rhythm. However, the main point of the period (ψευδῆ λόγον πλάσαντες) is expressed in a colon, which lacks function words. The polyptoton (ὄσοι δὲ ὄσους περὶ ὄσων) helps us understand that here the connective particles and other function words function as glue or a transition between content words. The particle combination καὶ ... δέ can be explained with Denniston as denoting something like ‘on the other hand’ or marking a new, but distinct element (Denniston 1996: 199–201). However, the particle δέ occurs at the colon boundary. We can suppose a weak pause after it, which “smooths” the passage from one colon to another.<sup>74</sup>

The syllabic rhythm is difficult to analyse because of the possibility of elision. The beginning of the last colon is characterised by an “accent clash”, the occurrence of two content word accents in adjacent syllables (ψευδῆ

λόγον), which seems to be avoided in Gorgias by the usage of appositive particles (cf. Part II.6.3). The repetition of [p] in the polyptoton (ἔπεισαν, πείθουσι), is continued in the last colon, which combines [p] and [l] sounds: ψευδῆ λόγον πλάσαντες and is resumed in the following period (P.19b).

(19b)

εἰ μὲν γὰρ	πάντες	περὶ πάντων	εἶχον	3 + 2 + 4 + 2 = 11	[=18]
	τῶν <τε>	παροισχόμενων	μνήμην	8*	
	τῶν τε	παρόντων	<ἔννοιαν>	5*	
	τῶν τε	μελλόντων	πρόνοιαν,	5 + 3 = 8	
οὐκ ἂν ὁμοίως	ὁμοίος	ἦν	ὁ λόγος,	5 + 4 + 3 = 12	{=44}

### Description (19b)

PER 1 [CLO :LIT; SY :Ma COP 1, :Rel.VE 1]{CONT of P.19a, in P.19c}

COL 4 (Cl 4, Cm 4) [PAR 3; ANA 3, GRA 6, ISOC 4; ALL 4, PLPT 4+PT 2, SO.PL 5]{HOM, ISOC with P.19a}

WD 24 (CW 12, FW 12; WTDI 1) [WD.RI :CW 12/12, :All 24/24]{REF to πάντες, πάντων in P.6, 7b, 24, 35, cf. 16c; περὶ in P.3, 5, 16c, 19acd, 29; εἶχον in P.7a (3x), 8a, 16ac, 19c (2x), 20a (2x), 22a, 25, 31a, 33; παροισχόμενων in P.19c; μνήμην in P.3, μνη- in P.19c; παρόντων in P.19c, 28 (2x), cf. P.26; cf. παρ-, παρα- in P.19c (3x), 28, 30, 31a, 32, 34; μελλόντων in P.8b, 19c, 26; πρόνοιαν NONE, cf. προ- in P.8b (2x), 10a (2x), 26, 32; οὐκ in P.5 (2x), 7a, 8a, 10b, 13a, 14, 19c (3x), 21c, 23a, 24, 25, 33, 34 (2x), 20a (?); ὁμοίως, ὁμοίος in P.3 (2x), 20a, 30; ἦν in P.6, 8b, 24, cf. εἶναι P.6, 18c, 30, 33 (2x); λόγος in P.1, 2, 4 (2x), 5, 8b (2x), 9, 13a (3x), 14, 15, 16c (2x), 17, 18a, 19a, 20b (2x), 21a, 21b (2x), 21c (2x), 21d, 22a (2x), 22b, 23ab, 35, 36 (3x), cf. λέξαι in P.3, 8a, λέγ- in P.6, 8a, 20b, 24, 30, cf. ἐλέγξαι in P.3, 6, 21c}

SYL 44 (not inserted 4) [SL.RI :ISOS 26/44, :GRA 44/44; AC.RI :All 26/44, :Niv 35/44, :CLA 8/16; QU.RI :All 0/44, :CLA 0/16]

ACC 19 (CEW 12, 7 FW) [AC.RI :CEW 12/12, :All 19/19]

Period (19b) corresponds to a sentence, which begins with a conditional clause, expanded by three object phrases. Both the protasis and the apodosis use irrealis, expressing the impossibility of having adequate information about the world.<sup>75</sup> The emendations by Reiske have been accepted by Diels and others, because of the achieved symmetry in parallel phrases (concerning past, present and future events), corresponding to P.19c. It is difficult to argue against the need for this emendation, as parison in word-to-word correspondences is typical for Gorgias (Part IV.2.3). However, in order to give another point of view, these emendations are not taken into regard in the analyses.

The rhythm in general oscillates between double (polyptota) and triple (parison) patterns, which were introduced in P.19a. In the syllabic rhythm alternation of cola and commata of 5 and 8 syllables can be observed. The phrase rhythm is in interaction with homoeoteleuta and parechesis in [p], [m] and [n] consonants, whereas the prevailing vowels are [a]-s in the first and [o]-s in the second half of the period.

P.19b ends with a litotes and another polytoton (οὐκ ἄν ὁμοίως ὁμοιος ἦν), which has been emended several times.<sup>76</sup> As in another example of litotes in a period-end (P.5), a close connection to the following period can be observed. The litotes οὐκ ἄν ὁμοίως is a comment on the actual situation (‘not like presently’), which is discussed fully in P.19c, and therefore it should not be deleted as unnecessary. As a whole, P.19c continues the variations on the plurality of different deceptive speeches. Its triple rhythm is resumed in the following period.

(19c)

<οἷς <sup>1*</sup> > τὰ νῦν γε	4	
οὔτε μνησθῆναι τὸ παροϊχόμενον	5+6 = 11	
οὔτε σκέψασθαι τὸ παρόν	5+3 = 8	
οὔτε μαντεύσασθαι τὸ μέλλον	6+3 = 9	
εὐπόρως ἔχει·	5	[=37]
ὥστε περὶ τῶν πλείστων οἱ πλείστοι	2 + 5 + 3 = 10	
τῆν δόξαν σύμβουλον τῆι ψυχῆι παρέχονται.	3+3+3+4 = 13	

#### Description (19c)

PER 1 [CLO :HIAT; SY :VE.Ma 1, :Rel 1]{CONN to P.19d }

COL 5 (Cl 6, Cm 4)[PAR 5; ANA 3, HOM 3; ALL 8, PLPT 4 + PT 3; CLO.INT :HIAT 2; RING 1]{PAR to P.19b}

WD 30 (CW 15, FW 15; WTDI 1) [WD.RI :CW 14/15, :All 24/30] {REF to νῦν in P.8b; οὔτε, οὔτε, οὔτε in P.5 (2x), 7a, 8a, 10b, 13a, 14, 19b, 21c, 23a, 24, 25, 33, 34 (2x), 20a (?); μνησθῆναι cf. μνήμη in P.3, 19b; παροϊχόμενον in P.19b, cf. παρ-, παρα- in P.19b (2x), 28, 30, 31a, 32, 34; σκέψασθαι NONE, παρόν in P.19b, 28 (2x), cf. P.26; μαντεύσασθαι NONE; μέλλον in P.8b, 19b, 26; εὐπόρως NONE, cf. εὐ- in P.1, 7b (3x), 16c, 19d, 21d; to ἔχει, παρέχονται in P.7a (3x), 8a, 16ac, 19b, 20a (2x), 22a, 25, 31a, 33; περὶ in P.3, 5, 16c, 19abd, 29; πλείστων, πλείστοι in P.7b (2x); δόξαν in P.4, 16b, 18bc, 19d, 21b (3x), 21d, 36; δείκνυμι in P.4, 16ab, 21d, δοκέω in P.6, δόξ- P.7b; σύμβουλον NONE, cf. βούλ- in P.4, 21a, 36, cf. P.9 (2x), 19c, 34; cf. συμ-, συν- in P.3, 7b, 20b, 27; ψυχῆι in P.1, 3, 14, 16c, 18bc, 20b, 21a, 22ab, 25, 26, 32, 33}

SYL 60 (1 elidable) [SY.RI :ISOS 0, :GRA 47/60; AC.RI :All 16/60, :Niv 20/60, :CLA 0/20; QU.RI :All 50 (da), :CLA 8/20]

ACC 28 (CW 15, FW 13) [AC.RI :14/15, :All 12/28]

Period (19c) is composed of two sub-periods, but its syntactic analysis is difficult because of the problems in textual transmission. At the beginning of the period the editors see either a simple opposition or a relative connection to P.19b, neglecting usually the version of manuscripts A tradition ἦ τὰ νῦν γέ (an emphatic particle).<sup>77</sup> But the reading of the initial prepositive affects the interpretation of the connection between P.19b and P.19c (as one complex

<sup>1</sup> Emendation in Diels' text, does not affect syllable count.

sentence or two), not the discourse rhythm, as in both cases there is a triple division of events according to the time and a polyptoton.

The first sub-period is composed of three parallel phrases, introduced and ended by short pivots (a scheme: paa'a"q). The second sub-period gives a conclusion, using the form of a simple undivided period. It is introduced by ὥστε, which can be classified either as an adverb or a relative connector (without changing the analysis of the rhythm or the meaning).<sup>78</sup> The syllabic rhythm is not based on isocola or clear accentual patterns, but the quantitative rhythm can be interpreted as dactylo-spondaic (see Appendix II). The sound echoes are multiple from the homoeoteleuta, repetitions of [p] and [m], alliteration to a polyptoton.

(19d)

ἡ δὲ δόξα	<b>σφαλερὰ</b>	<b>καὶ ἀβέβαιος</b>	οὐσα	4+ $\frac{3+5}{2} = 14$
	<b>σφαλεραῖς</b>	<b>καὶ ἀβεβαίους</b>	εὐτυχίαις	$\frac{3+5}{2} + 4 = 12$
		περιβάλλει τοὺς αὐτῆι	χρωμένους.	4 + 6 = 10

#### Description (19d)

PER 1 [BEG :PIV; SY.VE :Ma 1]{CONT to P.19ac}

COL 3 (Cl 3, Cm 3) [PAR 6; ANA 2 (int); GRA 3; PLPT 4]

WD 15 (CW 9, FW 6; WTDI 1.5)[WD.RI :CW 6/9, :All 12/15] {REF to δόξα in P.4, 16b, 18bc, 19c, 21b (3x), 21d, 36, cf. δόξ- P.7b; δείκνυμι in P.4, 16ab, 21d, δοκέω in P.6; σφαλερὰ, σφαλεραῖς NONE; ἀβέβαιος, ἀβεβαίους NONE; οὐσα in P.20a; εὐτυχίαις in P.16c, cf. τυχ- in P.9, 11, 23a, 33, 34; cf. τυγχάνειν in P.13a, 25; εὐ- in P.1, 7b (3x), 16c, 19c, 21d; to περιβάλλει NONE, cf. περί in P.3, 5, 16c, 19abc, 29; αὐτ- in P.3, 18b, 20a, 22a, cf. 26; χρωμένους NONE, cf. χρή in P.2, 21a, 35}

SYL 36 [SL.RI :ISOS 0, :GRA 36/36; AC.RI :All=Niv 24/36 (int), :CLA 8/12; QU.RI :All 25/36 (ion), :CLA 8/12]{QU.RI :CLA 1/1 to P.20a}

ACC 14 (CEW 10, FW 4) [AC.RI :CEW 9/10, :All 12/14]

Period (19d) is a simple sentence, ending with a full stop. It is introduced by a short pivot (a noun phrase as a subject) and finished by a verb phrase. The centre of the period is composed of two expanded cola, corresponding to a participial clause (attached to the subject) and a predicate complement phrase. Although there is no correspondence in cases, the parallelism emerges from the analogy in position and polyptoton, as both cola are based on the same adjectives (σφαλερὰ, ἀβέβαιος) in the same positions.

The importance of the syllabic rhythm is small, but the word rhythm reveals symmetrical patterns: the initial pivot is followed by three cola of 4 words (content words and the emphatic function word αὐτῆι). When we analyse the introductory pivot as part of the first complex colon, the whole period reveals a diminishing gradation pattern, whereas the final colon functions as a closure to the period.

## XII.

Paragraph XII is composed of two rhetorical periods, connected by an explicative particle, each corresponding to two sentences. In both periods one sentence (the first in P.20a, the second in P.20b) presents a conclusion, and the other an explication (the second in P.20a, the first in P.20b).

The paragraph presents an intermediate conclusion to Proof 3, using parallel structures (cf. Part IV.1.6). As before (cf. P.12–P.13b), it relies on the opposition of diathesis, presenting the speech (or the speaker) in active forms as an agent and Helen in passive forms as a sufferer. The reference (cf. P.19a) to Peitho ('Persuasion') in P.20a reappears and becomes an important keyword in the multiple polyptota of P.20b (and later in P.21).

## XII.

### (20a)

τίς οὖν αἰτία κωλύει		5+ 3+	
καὶ τὴν Ἑλένην		5	= 13
	ὕμνος ἦλθεν	4+	
	ὀ-μοί-ω-ς ἄ-ν οὐ-νέ-α-ν οὐδσαν	3+6	= 13
ὥσπερ εἰ βιατήριον	βία ἠρπάσθη.	8+5	= 13
τὸ γὰρ τῆς πειθοῦς ἐξῆν	ὁ δὲ νοῦς	7 + 3	= 10
καίτοι εἰ ἀνάγκη	ὁ εἰδῶς ἔξει μὲν οὖν,	6+ 3 + 4	= 13
τὴν δὲ δύναμιν	τὴν αὐτὴν ἔχει.	5 + 5	= 10

### Description (20a)

PER 1 (1+1) [CLO.INT :PLPT; SY :MaVE 4, ABS.COP 1, :Rel VE 1, ABS.COP 1]  
{ CONN to P.20b}

COL 6 (Cl 6, Cm 6) [ISOC 8; PLPT 2; WD.PL 5; INT.CLO :HIAT 3; INT.HIAT 1]

WD 40 (CW 20, FW 20; WTDI 1) [PLPT 2, WD.PL 5?; WD.RI :CW 6/9, :All 22/22]{REF to τίς; in P.32; τις, τι in P.4, 16c, 22b, 28; cf. 8a (3x); in ὀ-μοί-ω-ς to P.19a to αἰτία in P.4, 8b, 11, 13a, 14, 23b, 24, 35, cf. 10a (2x); κωλύει in P.10ab; Ἑλένην in P.3, 8ab, 11, 32, 35, 36; ὕμνος NONE; ἦλθεν in P.16c, 27, 34 (2x); ὀ-μοί-ω-ς ὄμο- in P.3 (2x), 19b (2x), 30; ἄ-νοῦ-νέ-α-ν in οὐ?- in P.5 (2x), 7a, 8a, 10b, 13a, 14, 19b, 19c (3x), 21c, 23a, 24, 25, 33, 34 (2x); οὐδσαν in P.19d; βιατήριον, βία in P.9, 10b, 12 (2x), 13a, 35; ἠρπάσθη in P.9, 12 (3x), 35; πειθοῦς in P.9, 14, 18b, 19a (2x), 20b (5x), 21ac, 22b, 23a, 35; ἐξῆν NONE, cf. ἐκ, ἐξ in P.7a, 22b (3x), 23b, 26, 27, 28 (2x), 31a; νοῦς NONE, cf. 28, 33; ἀνάγκη in P.9, 20b (3x), 21c, 34, 35 (2x); εἰδῶς in P.8a, 28; ἔξει NONE; δύναμιν in P.7b, 10a, 15 (2x), 18b, 22a, 33 (2x); αὐτὴν cf. αὐτ- in P.3, 18b, 19d, 22a, cf. 26; ἔχει in P.7a (3x), 8a, 16ac, 19b, 19c (2x), 22a, 25, 31a, 33}

SYL 72 [SL.RI :ISOS 72/72; AC.RI :All 34/72, :Niv 44/72, :CLA 16/24; QU.RI :All 22/72, :CLA 8/24]

ACC 35 (CEW 20, FW 15) [AC.RI :CEW 9/20, :All 6/35]

Period (20a) is composed of two sentences (sub-periods), ending with a full stop and both with very corrupt text. The first sub-period corresponds to a complex

sentence, presented as a rhetorical question, and concluded by one or two relative phrases in apodosis. The second sub-period corresponds to a complex sentence, as indicated by the relative connectors in the middle, but it is not entirely clear which nouns and verbs from the 5th colon should be classified as belonging to the relative, and which ones to the main clause. Its rephrasing in P.20b gives some directions for understanding.

The first textual problem concerns a phrase (anacoluth ὕμνος ἦλθεν ὁμοίως), which could be understood as gloss or as a commentary by Gorgias.<sup>79</sup> In the end of the same complex colon the problems result from possible re-syllabification over word boundary: it is not clear, whether ἄ-νοῦν-νέ-α-ν οὐ-σαν should be read as: ἀνοῦν νέαν οὔσαν or: ἄν οὐν ἐὰν οὔσαν. In the second sub-period, Diels' text: ὁ εἰδῶς ἔξει μὲν οὐν should be interpreted as: ὁ εἰδῶς ἔξει μὲν νοῦν or: ὁ εἰδῶς ἔξει μὲν οὐκ. Although in both cases the reference to the mind (νοῦς) is not certain, it is tempting because of the parallel to Proof 4, where persons are described as losing their minds because of sight (P.28).<sup>80</sup> In Col.5 it is not clear, whether Gorgias refers to ἔξις or uses future forms from the verb ἔχω.<sup>81</sup> The polyptoton (ἔξει, ἔχει) is linked by parechesis to the preceding ἐξῆν. We can observe the emphatic usage of function words in Col.6, where it is stressed that the force of persuasion should be equated to the force of violence. The other polyptoton (βιατήριον βία) is dubious, although the parallel with P.13a gives some support to this interpretation.<sup>82</sup>

Could the analysis of rhythm help to solve at least some of these problems? In the syllabic rhythm the initial triple isocolon (complex cola of 13 syllables) is followed by three complex cola of respectively 10, 13 and 10 syllables, so that the initial sequence can be reanalysed as two isocola of 13 syllables and a double sequence of cola of 23 (13+10) syllables. The result is a 100% syllabic rhythm engagement, which could be an argument for preserving the manuscript text as much as possible.

(20b)

λόγος γὰρ ψυχὴν ὁ πείσας,	3+2+3	= 8
ἦν ἔπεισεν, ἠνάγκασε	4 + 4	= 8
καὶ πιθέσθαι τοῖς λεγομένοις	4 + 5	= 9
καὶ συναινέσαι τοῖς ποιουμένοις.	5 + 5	= 10
ὁ μὲν οὐν πείσας	5 + 5 + 3	= 13
ὡς ἀναγκάσας ἀδικεῖ.		
ἢ δὲ πεισθεῖσα	5 + 6 + 3	= 14
ὡς ἀναγκασθεῖσα τῷ λόγῳ		
μάτην ἀκούει κακῶς.	7	[=21]

#### Description (20b)

PER 1 (1+1) [CLO :GRA, :PIV; SY :Ma.VE 3, :Rel 1]{CONN to P.20a}  
 COL 6 (Cl 5, Cm 7) [ANT 4, PAR 4; ANA 4 (int), GRA 4, HOM 4, ISOC 9; ALL 6, PLPT 11; CLO.INT :HIAT 2; HYP 1]  
 WD 33 (CW 17, FW 16; WTDI 1.06) [WD.RI :CW10/17; :All 24/33]{REF in λόγος, λόγῳ in P.1, 2, 4 (2x), 5, 8b (2x), 9, 13a (3x), 14, 15, 16c (2x), 17, 18a, 19ab, 21a, 21b (2x), 21c (2x), 21d, 22a (2x), 22b, 23ab, 35, 36 (3x), λεγομένοις in P.3, 6, 8a

(2x), 24, 30; cf. ἠλέγχθη in P.3, 6, 21c; ψυχὴν in P.1, 3, 14, 16c, 18bc, 19c, 21a, 22ab, 25, 26, 32, 33; πείσας, ἔπεισεν, πιθέσθαι, πείσας, πεισθεῖσα in P.9, 14, 18b, 19a (2x), 20a, 21ac, 22b, 23a, 35; ἠνάγκασε, ἀναγκάσας, ἀναγκασθεῖσα in P.9, 20a, 21c, 34, 35 (2x); συναινέσαι NONE, cf. συμ-, συν- in P.3, 7b, 19c, 27; ποιούμενοις in 21bd, 27; ποίησις in P.16c, 31a, ποιητῶν in P.3; ἀδικεῖ in P.12 (2x), 13b, 23a, 35, 36; μάτην NONE, cf. ματαίους in P.29; ἀκούει in P.3, 4 (&), 16bc, 22b, κακῶς in P.4 (&), 22b, in κακο- P.13a}

SYL 69 (1 elidable) [SL.RI :ISOS 41/69, :GRA 62/69; AC.RI :All 35/69, :Niv 49/69, :CLA 8/24(28); QU.RI :All 24/69, :CLA 0/24]

ACC 28 (CEW 18, FW 10) [AC.RI :CEW 15/18; :All 18/28; SYM :18/28]

Period (20b) corresponds to two sentences (sub-periods), ending with a full stop. The text is intact, revealing an almost perfect parallelism in phrase rhythm and constructed as a gradation from the beginning to the end. The first sub-period is based on isosyllabism and parallelism. A slight hyperbaton (disconnected syntax) is used in forming appositive groups (commata) in the first colon, which correspond to the appositive groups (based on verb forms) in the second colon. It prepares the equation of persuasion and force, which is stated in the second sub-period together with the conclusion that the word (or the speaker) is guilty and that Helen should not be blamed. The arrival at the conclusion is achieved mostly through syntax and position analogies, not through a logically valid conclusion. The second sub-period is based on parison, combined with antithesis and gradation, whereas the argument uses opposition between the active and passive verb forms. The augmentation in the last colon is so ample that from the point of view of the syllabic rhythm its end could be classified as a separate colon (cf. Part II.3.2.1.2).

Although in many periods of this speech a polyptoton and a strong phrase rhythm seem to be complementary, both appear here. The first sub-period begins with a polyptoton and ends with parallelism (as usual, cf. Part IV.1.6). In the second sub-period polyptota occur in the opposition of active and passive verb forms in antithetic cola. The exact analysis of syllabic rhythm is problematic because of one possible elision, but its position at the colon boundary supports analysis as a hiatus. P.20a allows observation of some main principles of isosyllabism, rising from syntactic parallelism (parison): often the parts (commata), corresponding to each other are exactly isosyllabic (the ends of Col.3 and Col.4, the ends and beginnings of Col.5 and Col.6) because they use the same grammatical forms (e.g. τοῖς λεγομένοις and τοῖς ποιούμενοις), whereas sometimes one comma is slightly longer or shorter than the corresponding one in another period because of the difference between word-stems (e.g. καὶ πιθέσθαι and καὶ συναινέσαι). Another co-product of syntactic parallelism is a symmetry in accent patterns, which is almost perfect during the first parallel cola and vanishes during the last ones, which are based on the augmentation and the opposition of active and passive voice.

### **Examples about δόξα and medicines, and the conclusion to Proof 3 (DK 82 B 11.xiii–xiv)**

Paragraph XIII and Paragraph XIV proceed with the discussion of persuasion and the influence of speech on the soul. In Par.XIII Gorgias states that persuasion moulds the soul through δόξα, bringing three examples of the power of the word as proof: 1) natural science, where unseen and incredible things emerge before the eyes of δόξα; 2) the court or politics, where speech can convince and please the masses without truth; and 3) philosophy, where the swiftness of thought makes the credibility of δόξα easily changeable. Proving by analogy and by examples is a well-known practice in Aristotle's rhetorical theory, where examples are a part of πίστεις.<sup>85</sup> Gorgias' discussion of the role of δόξα (forming opinions) is not indispensable for the issue of Helen's guilt; however, it is an important theme for pre-Socratic philosophy, whereas the themes discussed in Par.XIII reflect the education program of 5th century sophists (χρῆ μαθεῖν).<sup>84</sup>

Par.XIV presents an example, which functions as a second premise to the rhetorical syllogism, preparing the conclusion. It states that the influence of the word on the soul can be compared to the influence of medicine on the body, whereas the word has the same power as medicine through enchanting and sorcery. This conclusion has often been taken as a generalisation of the whole art of speech and the role of poetry in Greek culture.<sup>85</sup> But this is also a preparation and a parallel to the last proof, where the role of the body becomes more important (cf. Par.X).

The conclusion of this argument (P.23a) comes abruptly and with a clash between the macro- and micro-textual, i.e. syntactic and rhythm units: on the level of syntax and rhythm, P.23a is closely connected to the introduction of the following part, P.23b, which according to the editors belongs to Par.XV (see also below).

### **XIII.**

Paragraph XIII presents the first half of a complementary example of the power of persuasion, to be continued in Par.XIV. Typically for Greek referring syntax it is constructed as a multiple period, based on accusative constructions.<sup>86</sup> The paragraph can be analysed as one complex sentence, which begins with a double protasis (two subordinate clauses), continuing with a short main clause with impersonal verb (χρῆ μαθεῖν) and completed by three direct object constructions, each expanded with different subordinate and participial clauses and corresponding to one period. The paragraph is divided into four parts both internally (by its subject) and externally (by references: firstly, secondly, thirdly, cf. Part II.2.2.4).

The rhythm is based on parallelism and antithesis from one side and isocolon from the other side. Isocola provide the rhythmic cohesion of the whole period complex: the last cola (commata) of different (sub)-periods are isosyllabic with

the initial commata of following periods, forming rhythmic pivots, which link the periods from P.21a to P.21d.

### XIII.

#### (21a)

ὄτι δ' ἡ πειθῶ	προσιοῦσα τῶι λόγῳι	5 + 7 = 12	
καὶ τὴν ψυχὴν ἔτυπῶσατο	ὅπως ἐβούλετο,	9 + 6 = 15	
χρῆ μαθεῖν		3	[=30]

#### Description (21a)

PER 1 [CLO :PIV; SY :Ma.IMPS 1, :Rel 2]{FOLL in P.21b–d}

COL 2 (Cl 3, Cm 2) [GRA 2, HOM 2; ALL 4; CLO.INT :HIAT 1]{+ISOC 1 to P.21b}

WD 15 (CW 8, FW 7; WTDI 1.14) [WD.RI :CW 6/8, ALL 0/15]{REF to πειθῶ in P.9, 14, 18b, 19a (2x), 20a, 20b (5x), 21c, 22b, 23a, 35; προσιοῦσα NONE, cf. πρὸς in P.14, 17, 22a (2x), cf. διέξιμι in P.23b; λόγῳι in P.1, 2, 4 (2x), 5, 8b (2x), 9, 13a (3x), 14, 15, 16c (2x), 17, 18a, 19ab, 20b (2x), 21b (2x), 21c (2x), 21d, 22a (2x), 22b, 23ab, 35, 36 (3x), cf. λέξει in P.3, 8a, λέγ- in P.6, 8a, 20b, 24, 30, cf. ἐλέγξει in P.3, 6, 21c; ψυχὴν in P.1, 3, 14, 16c, 18bc, 19c, 20b, 22ab, 25, 26, 32, 33; ἔτυπῶσατο in P.25; ὅπως cf. πῶς in P.8a, 13a, 33, 35; ἐβούλετο in P.4, 36, cf. βούλ- in P.9 (2x), 19c, 34; to χρῆ in P.2, 35, cf. χρωμένους in P.19d; μαθεῖν NONE, cf. ἀμαθία in P.2, 4, 36}

SYL 30 (elided 1, elidable 1) [SL.RI :ISOS 0/30; GRA: 27/30; AC.RI :All 12/30, :Niv 21/30, :CLA 0/8 (8/12); QU.RI :All 27/30 (sp+an, ia), :CLA 8/8 (12/12)]{SL. RI :ISOS 3/30 with P.21b}

ACC 13 (CW 8, FW 5) [AC.RI :CW 6/8, :All 4/13; :SYM 8/13]

Period (21a) does not correspond to a complete sentence, as it is continued with different direct object phrases in P.21b–P.21d. However, although this period is relatively short, it could correspond to a complete sentence: here the infinitive object μαθεῖν takes noun phrases as direct objects (in P.21b–P.21d), but an object phrase ὄτι δ' ἡ πειθῶ, which introduces the period, could be sufficient as its only complement.<sup>87</sup> The syntax is similar to the examples of Parry's unperiodic enjambement in Homer: although a verse (here a period) presents all the essential parts of a complete sentence, it is continued, and the listener understands it only after the beginning of the following verse (here: period), cf. Part IV.3.1.2.<sup>88</sup> The function of the short final colon is close to the role of adoneus in Sapphic stanzas: as a closure to a period, it functions as a pivot, which leads forward.<sup>89</sup> Corresponding to the pivotal function of P.21a, the syntactic parallelism is missing, although the ends of two subordinate phrases are marked by homoeoteleuton (resulting from the final position of the verb).

The syllable count presents two problems. In Diels' edition the final vowel of the particle δέ is elided: ὄτι δ' ἡ πειθῶ. It enables us to describe the quantitative rhythm in the beginnings of Col.1 and Col.2 as anapaestic.<sup>90</sup> We could observe symmetry in the intonation pattern as well, but only by regarding the accents of the function words and the accents of the following content words

as combined into clitic groups (e.g. τῶι λόγῳι as having an intonation peak on the first syllable of λόγῳι, as: (7 7 . , cf. Part II.6).

(21b)

πρῶτον μὲν	τοὺς τῶν μετεωρολόγων λόγους,	3+1+7+2 = 3+10 [=13]
	οἵτινες δόξαν ἀντὶ δόξης	5 + 4 = 9
	<u>τὴν μὲν ἀφελόμενοι</u>	<u>7</u>
	<u>τὴν δ' ἐνεργασάμενοι</u>	<u>7</u> [=23]
τὰ ἄπιστα καὶ ἄδηλα φαίνεσθαι	4+4+3 = 11	
τοῖς τῆς δόξης ὁμμασιν ἐποίησαν·	4+3+4 = 11	[=22]

**Description (21b)**

PER 1 [CLO :PAR, :RP.WD; SY.VE :Rel 1]{CONT of P.21a, PAR to P.21cd}

COL 6 (Cl 3, Cm 6) [ANT 2, PAR 2; ANA 2, HOM 2, ISOC 4; ALL 2, PLPT 5, RP.WD. 2]{+ISOC 1 to P.21a}

WD 26 (CW 13, FW 13; WTDI 1) [WD.RI :CW 13/13, :All 24/26]{REF to πρῶτον in P.5 (2x), 10a; μετεωρολόγων, λόγους in P.1, 2, 4 (2x), 5, 8b (2x), 9, 13a (3x), 14, 15, 16c (2x), 17, 18a, 19ab, 20b (2x), 21a, 21c (2x), 21d, 22a (2x), 22b, 23ab, 35, 36 (3x), cf. λέγ-, λέξι in P.3, 6, 8a (2x), 20b, 24, 30, cf. ἐλέγξει in P.3, 6, 21c; cf. μετ- in P.17, 18b, 21d; δόξαν, δόξης, δόξης in P.4, 16b, 18bc, 19cd, 21d, 36, cf. δόξ- P.7b; δείκνυμι in P.4, 16ab, 21d, δοκέω in P.6; ἀντί (root in P.1); ἀφελόμενοι in P.15, 36; cf. ἀπ-, ἀφ- in P.8a, 11, 14, 17, 18a, 27, 28, 31a, 33, cf. ἀπατ- in P.14, 18c; ἐνεργασάμενοι in P.7b, 31a (2x), 31b, cf. ἔργον in P.2, 13a (2x), 15; ἐν- in P.1, 7, 15, 18a, 21cd, 28, 29, 31b (2x), 36 (2x), cf. 25; ἄπιστα cf. P.3, 8a, 21d; ἄδηλα in P.5, cf. P.6, 12; φαίνεσθαι NONE, cf. ἀφανεστάτωι P.15; ὁμμασιν in P.31a, 32; ἐποίησαν in P.20b, 21d, 27; ποίησις in P.16c, 31a, ποιητῶν in P.3}

SYL 58 (elided 1, nonelided 1; no synizesis 1) [SL.RI :ISOS 36/58, :GRA 55/58; AC.RI :All 28/58, :Niv 32/58, :CLA 16/24; QU.RI :All 35/58 (da+sp+ia), :CLA 16724]

ACC 25 (CW 15, FW 10)[AC.RI :CW 15/15 (RING), :All 10/25; SYM :All 12/25; :CLA.AC.POS 6/6]

Period (21b) continues P.21a by adding a direct object to its final verb μαθεῖν. The object is presented as a minor phrase (colon), which is expanded by a relative clause, whereas the latter is, in its turn, expanded with participial and infinitive constructions. The object phrase is marked as the first element in a series by the particle μὲν at its beginning (cf. Denniston 1996: 369). The whole period is based on different types of parallelism and isosyllabism.

The syllable count presents problems. The elision in: τὴν δ' ἐνεργασάμενοι (in the context of syntactic parallelism, an anaphora and a homoeoteleuton) allows us to count a perfect isocolon. Another problem results from a possible synizesis in μετεωρολόγων. If [εω] is counted as one syllable, the result would be another pair of isocola (of 9 syllables). With this choice the quantitative rhythm in Col.1 could not be analysed as dactylo-spondaic. Here the possibility of synizesis is not taken into account and all occurrences of [εω] are counted as

two syllables (Part II.6.1.2.2). The accentual rhythm pattern is occasionally produced by sentence parallelism, as in three adjacent cola: τὴν μὲν ... φαίνεσθαι (/ . . . 7 . . . , / . . . 7 . . . , † 7 . . . † 7 . . . 7 . . . ). Quantitative rhythm can be analysed as dactylo-spondaic in Col. 1, and as syncopated iambs in Col.2, whereas in the end of the period it appears only in the clausulae.

The function of the polyptoton is cohesive in this period: the keyword δόξα ('opinion') occurs in both sub-periods and returns in P.21d, in accordance with the subject: the role of speech.

(21c)

δεύτερον δὲ	τοὺς ἀναγκαίους διὰ λόγων ἀγῶνας,	4 +5 + 7	[= 16]
ἐν οἷς		2	
εἰς λόγος		3+	
	<u>πολὺν ὄχλον</u>	<u>4</u> = <u>7</u>	
	ἕτερω καὶ ἔπεισε	<u>3+4</u> = <u>7</u> (11)	[= 16]
	<u>τέχνη γραφεῖς,</u>	4+	
	<u>οὐκ ἀληθείαι λεχθεῖς</u>	7 = 11	

### Description (21c)

PER 1 [CLO :LIT, :PAR; SY.Ma ø, Rel.VE 2]{FOLL in P.21d, PAR to P.21b,d}

COL 3 (Cl 5, Cm 4) [ANT 4, PAR 2; GRA 2, HOM 4, ISOC 6, PARIS 4; PLTP 2; ASY 1]{ISOC 1 to P.21.d}

WD 21 (CW 14, FW 7; WTDI 2)[WD.RI :CW 10/14, :All 6/21] {REF to δεύτερον NONE; ἀναγκαίους in P.9, 20a, 20b (3x), 34, 35 (2x); διὰ- in P.6, 8ab, 10a, 16c, 18a, 23b, 24, 25, 27 (3x), 35; λόγων, λόγος in P.1, 2, 4 (2x), 5, 8b (2x), 9, 13a (3x), 14, 15, 16c (2x), 17, 18a, 19ab, 20b (2x), 21a, 21b (2x), 21d, 22a (2x), 22b, 23ab, 35, 36 (3x), cf. λέξις in P.3, 8a, λέγ- in P.6, 8a, 20b, 24, 30, cf. ἐλέγξαι in P.3, 6, 21c; ἀγῶνας NONE, cf. ἄγω in P.7b, 10b, 22b, cf. 18a (2x); ἐν- in P.1, 7, 15, 18a, 21bd, 28, 29, 31b (2x), 36 (2x), cf. 25; εἰς in P.7b, 31a; πολὺν in P.7, 16c, 26, 29, 30, 31a, 31b (3x); ὄχλον NONE; ἕτερω in P.8a, 22b, 31a; ἔπεισε in P.9, 14, 18b, 19a (2x), 20a, 20b (5x), 21a, 22b, 23a, 35; τέχνη in P.18c, 34; γραφεῖς in P.29, 36, cf. 31a; οὐκ in P.5 (2x), 7a, 8a, 10b, 13a, 14, 19b, 19c (3x), 23a, 24, 25, 33, 34 (2x), 20a (?); ἀληθείαι in P.2, 4; λεχθεῖς in P.3, 6; cf. λεγομένοις in P.3, 6, 8a (2x), 20b, 24, 30}

SYL 43 [SL.RI :ISOS=GRA 43/43; AC.RI :All 14/43, :Niv 24/43, :CLA 0/12(8/20); QU.RI :All 16(28)/42, :CLA 8/12(16)]{QU.RI :CLA 4/4 to P.21d}

ACC 19 (CW 14, FW 5)[AC.RI :CW 10/14, :All 8/19; SYM :CLA 2/4, :WD 13/21]

Period (21c) is the third period in the complex and is constructed according to the same pattern as the preceding one (P.21b). It begins with a direct object phrase, which is expanded by a complex relative phrase. After a long introductory colon the period is divided into small commata, based on parallelism or antithesis.

The rhythmic weight of every word and syllable is heavy, as the number of function words is low (WTDI is 2) and the focus is on different keywords from the whole speech. Two antithetic pairs refer to the great impact of the word

(‘one word’ vs. ‘many persons’) and its nature (‘written with skill’, ‘not spoken with truth’), surrounding a pair of verbs, which express the nature of verbal art: to bring happiness and to persuade (cf. P.8a). It is not clear how to understand Gorgias’ opposition of written and spoken words: is he distinguishing forensic and court oratory by reference to the written and deceptive word or is it just a general comment on persuasion and pleasure? The adjective ἀναγκάϊους (‘forceful’) might refer to forensic or court oratory, but it is not a usual *terminus technicus* for it; it could have been chosen as a connecting keyword, in order to refer to Gorgias’ plan of the speech (in P.9).<sup>91</sup>

The paragraph poses no textual problems, which enables us to compare different rhythm types. Quantitative rhythm patterns appear mainly in the ends of long complex cola, but Col.1 could be described as syncopated trochaic, and Col.2 as dactylo-trochaic. Accentual rhythm appears in adjacent commata as repeated intonation contours (acute accents on antepenultima or penultima in adjacent words or cola). In Col.2 an accent clash between content words occurs: εἶς λόγος πολλὸν ὄχλον, whereas the accents falling on adjacent syllables form one prolonged intonation peak (as: 7 7 ., . / 7 .). An interaction with a strong antithesis suggests expressive usage (cf. Part II.6.3.2).

In syllabic rhythm, the division of P.21c into small (2 to 7 syllables) commata results in a multiplicity of patterns: the initial complex colon of 16 syllables is followed by another complex colon of the same length, composed of cola and commata of 2+7+7 syllables. This establishing series of cola of 7 syllables is interrupted by a short comma of 4 syllables and the period ends with a colon of 7 syllables, thus confirming the end. However, when a colon of 11 syllables appears at the beginning of P.21d, the end of P.21c can be reanalysed as a pair of isocola of 11 syllables, and we can observe another example of phrastic epiploke (cf. Part IV.3.2).

(21d)

τρίτον <δὲ> φιλοσόφων λόγων ἀμίλλας,	2? + 4 + 2 + 3 = 11 {21c}
ἐν αἷς δείκνυται καὶ γνώμης τάχος	2 + 3 + 5 = 10
ὡς εὐμετάβολον ποιοῦν τὴν τῆς δόξης πίστιν.	8 + 6 = 14 [=35]

#### Description (21d)

PER 1 [CLO Ø; SY :MAø, :Rel.VE 1]{CONT to P.21c}

COL 3 (Cl 4, Cm 3) [GRA 2, ISOC 2, PARIS 6]{ISOC 1 to P.21c}

WD 17 (CW 11, FW 6, 1 not counted; WTDI 1.8) [WD.RI :CW 10/11; :All 10/17]{REF to τρίτον NONE; φιλοσόφων NONE, cf. σόφ- in P.7b, 19b, cf. φιλο- in P.7b, 13a, 16c; λόγων in P.1, 2, 4 (2x), 5, 8b (2x), 9, 13a (3x), 14, 15, 16c (2x), 17, 18a, 19ab, 20b (2x), 21a, 21b (2x), 21c (2x), 22a (2x), 22b, 23ab, 35, 36 (3x), cf. λέξαι in P.3, 8a, λέγ- in P.6, 8a, 20b, 24, 30, cf. ἐλέγξαι in P.3, 6, 21c; ἀμίλλας in P.32; ἐν- in P.1, 7, 15, 18a, 21bc, 28, 29, 31b (2x), 36 (2x), cf. 25; δείκνυται cf. δείξ- in P.4, 16ab, δόξης in P.4, 16b, 18bc, 19cd, 21b (3x), 36, cf. δόξ- P.7b; δοκέω in P.6; γνώμης in P.34, cf. ἀγνόημα P.33; τάχος NONE; εὐμετάβολον NONE; cf. εὐ- in P.1, 7b (3x), 16c, 19cd, cf. μετ- in P.17, 18b, 21b; ποιοῦν in P.20b, 21b, 27, cf. ποίησις P.16c, 31a, ποιητῶν P.3; πίστιν in P.3, 8a, cf. 21b}

SYL 35 (not counted 1) [SL.RI :ISOS 16/35, :GRA 35/35; AC.RI :All=Niv 16/35, :CLA 8/12; QU.RI :All 0/35, :CLA 0/12]{SL.RI :ISOS 29/35 to P.21c; QU.RI :CLA +4/4 to P.21c}  
 ACC 15 (CW 11, FW 4)[AC.RI :CW 8/11, :All 6/15; SYM :WD 7/15, :CLA 3/3]

Period (21d) is close to the two preceding periods in its construction, as it begins with a direct object phrase, completing P.21a and is continued by an expanded relative phrase. However, this period is considerably shorter than the preceding ones and not based on parallelism. The reference to the third type of speeches defines philosophical discussions as fights (where the credibility of δόξα is changed, cf. P.19d), thus preparing his final conclusion, equating the force of speech and violence.

Although the period does not use syntactic parallelism, its division into three (complex) cola is indicated by different particles and supported by clausulas in rhythm. The absence of parallel structures could be explained as a mimetic device: as the word is described as swift and the proof as quickly changing, the missing parallelism could help to create the impression of rapidity (as parallel structures often slow down the discourse pace).

#### XIV.

In Par.XIV the list of speech types is interrupted by a supplementary example, introduced by the connective particle δέ and word-play on two senses of λόγος.<sup>92</sup> The example equates the power of words on the soul with the power of medicines on the bodies.

The period complex corresponds to two sentences (periods), finished with a full stop. As often in conclusions, it is based on parallelism (cf. Part IV.1.6). The integrity of the period is supported by a concatenation of keywords and rhythm (see below). This paragraph connects two parts of the speech, referring to the analogy of the soul and the body and preparing the discussion of the role of bodies and their impact on the soul in Proof 4.

#### XIV.

(22a)

τὸν αὐτὸν δὲ λόγον ἔχει		<b>4 + 4 = 8</b>
ἢ τε τοῦ λόγου δύναμις	πρὸς τὴν τῆς ψυχῆς τάξιν	<b>8 + 7 = 15</b>
ἢ τε τῶν φαρμάκων τάξις	πρὸς τὴν τῶν σωμάτων φύσιν.	<b>8 + 8 = 16</b>

#### Description (22a)

PER 1 [CLO :ISOC, :PAR; SY :Ma.VE 1]{FOLL in P.22b}

COL 5 (Cl 5, Cm 0)[ANT 2, PAR 2; ANA 4 (int), CHI 2, HOM 4 (int), ISOC 6, PARIS 4; PLPT 4; CLO.INT :HIAT 1]

WD 25 (CW 10; FW 15; WTDI 0.66) [PLPT 4; WD.RI :CW 10/11, :All 25/25]{REF to αὐτὸν in P.3, 18b, 19d, 20a, cf. 26; λόγον, λόγου in P.1, 2, 4 (2x), 5, 8b (2x), 9, 13a (3x), 14, 15, 16c (2x), 17, 18a, 19ab, 20b (2x), 21a, 21b (2x), 21c (2x), 21d, 22b, 23ab, 35, 36 (3x), cf. λέξαι in P.3, 8a, λέγ- in P.6, 8a, 20b, 24, 30, cf. ἐλέγξαι in

P.3, 6, 21c; ἔχει in P.7a (3x), 8a, 16ac, 19b, 19c (2x), 20a (2x), 25, 31a, 33; δύναμις in P.7b, 10a, 15 (2x), 18b, 20a, 33 (2x); πρὸς in P.14, 17, 21a; ψυχῆς in P.1, 3, 14, 16c, 18bc, 19c, 20b, 21a, 22b, 25, 26, 32, 33; τάξιν, τάξεις NONE; φαρμάκων in P.22b (2x); σωματῶν in P.1, 7b (2x), 15, 16c, 22b, 26, 31a (2x), 31b, 32; φύσιν in P.5, 25, cf. πέφυκε in P.10b, 31b}

SYL 39 [SL.RI :ISOS 32/39, :GRA 39/39; AC.RI :All 18/39, :Niv 22/39, :CLA 0/12; QU.RI :All 24 (ia+tro)/39, :CLA 0/12]{QU.RI :CLA +4/12 to P.22b}

ACC 23 (CEW 11, FW 12)[AC.RI :CEW 8/11, :All 18/23; SYM :WD 15/25, :CLA 2/5]

Period (22a) corresponds to a simple sentence, composed of an introductory colon (a verb phrase) and following complex cola (coordinated subjects and verb complements). Parallelism is strengthened by antithesis, anaphora and homoeoteleuton, which occur not only between the beginnings and ends of complex cola, but also between their corresponding counterparts (scheme: aba'b') as in some types of verse.<sup>93</sup> A chiasm and a polyptoton connect the first and the second complex colon as well (scheme: abb'a').

Syntactic parallelism (as a parison) produces some accentual and quantitative patterns, as well as isocola. It serves as part of the argument, establishing the equivalence between the power of words and the force of medicine, as well as their objects: the soul and the body.

(22b)

ὥσπερ γὰρ τῶν <b>φαρμάκων</b>	3+4	= 7	(7)	
<b>ἄλλους ἄλλα</b> χυμούς <b>ἐκ</b> τοῦ <b>σώματος</b> <b>ἐξάγει</b> ,	6+ 5+ 3	= 14	21	
καὶ <b>τὰ</b> μὲν νόσου <b>τὰ</b> δὲ βίου <b>παύει</b> ,	1+4+4+2	= 11	(25)	[=32]
οὕτω καὶ τῶν λόγων	<b>6</b> +		17	
<b>οἱ</b> μὲν ἐλύπησαν,	<b>6</b>	= (12)		
<b>οἱ δὲ</b> ἔτερψαν,	5+			
<b>οἱ δὲ</b> ἐφόβησαν,	6	= 11	17	
<b>οἱ δὲ</b> εἰς θάρσος κατέστησαν τοὺς ἀκούοντας,	9+5	= 14	(25)	
<b>οἱ δὲ</b> πειθοῖ τινα κακῆν τὴν <b>ψυχὴν</b>	8+ 3	= 11		
<b>ἐφαρμάκευσαν</b>	5+			
καὶ <b>ἐξεγοήτευσαν</b> .	7	= 12	(23)	[= 50]

### Description (22b)

PER 1 [CLO :CLA, :PAR, :RING (PLPT); SY :Ma.VE 8]{CONT in P.23a}

COL 5/10 (C1 5, Cm 10)[ANT 6, PAR 6; ANA 7, GRA 5, HOM 10+2 int, ISOC 8, PARIS 7; PLPT 4 + PT3; CLO.INT :HIAT 1; RING 2]

WD 49 (CW 19, FW 30; WTDI 0.63) [ANT 6; WD.RI :CW 11/19, :All 39/49]{REF to φαρμάκων, ἐφαρμάκευσαν in P.22a; ἄλλους, ἄλλα in P.10b, 16c, 17 (2x); χυμούς NONE; ἐκ, ἐξ- in P.7a, 20a, 23b, 26, 27, 28 (2x), 31a; σώματος in P.1, 7b (2x), 15, 16c, 22a, 26, 31a (2x), 31b, 32; ἐξάγει in P.7, 10b, cf. 18a (2x), 21c; νόσου in P.29, 33; βίου NONE; παύει in P.4, 15; λόγων in P.1, 2, 4 (2x), 5, 8b (2x), 9, 13a (3x), 14, 15, 16c (2x), 17, 18a, 19ab, 20b (2x), 21a, 21b (2x), 21c (2x), 21d, 22a (2x), 23ab, 35, 36 (3x), cf. λέξαι in P.3, 8a, λέγ- in P.6, 8a, 20b, 24, 30, cf. ἐλέγξαι in P.3, 6, 21c; ἐλύπησαν in P.15, 18a, 31b; ἔτερψαν in P.8a, 21c, 31a; ἐφόβησαν cf. P.15, 16c, 27, 28 (2x); εἰς in P.8b, 16c; θάρσος NONE; κατέστησαν

NONE, cf. στη- in P.17, 18b, 28, cf. μετ- in P.17, 18b, 21b; ἀκούοντας in P.3, 4, 16bc, 20b; πειθοῖ in P.9, 14, 18b, 19a (2x), 20a, 20b (5x), 21ac, 23a, 35; τι in P.4, 16c, 28; τίς, τί in P.20a, 32; cf. 8a (3x); κακῆι in P.4 (&), 20b (&), κακο- in P.13a; ψυχῆν in P.1, 3, 14, 16c, 18bc, 19c, 20b, 21a, 22a, 25, 26, 32, 33; ἐξεγοήτευσαν in P.18bc}

SYL 93 (3 elidable) [SL.RI :ISOS 20 (64)/93, :GRA 93/93; AC.RI :All 44/9, :Niv 67/93, :CLA 12/20(24/40); QU.RI :All 29/93, :CLA 8/20(16/40)]{QU.RI :CLA +4/20 to P.22a}

ACC 41 (CEW 21, FW 20) [AC.RI :CEW 7/21, :All 28/49; SYM :WD 11+11/19+30, :CLA 11/16]

Period (22b) is a correlative sentence, which compares the impact of medicine to the power of words. Although the second part (sub-period) is much longer, the structure of both parts is the same: both begin with an introductory colon (complement to the subject) of 4 words, which is followed respectively by 2 and 5 parallel phrases. The first sub-period is based on word rhythm, polyptota and circle structures and the second sub-period on augmentation. Next to the parallelism, antitheton (in construction and in sense) is very strong.

Some cola use a poetic interlocking word-order, in: ἄλλους ἄλλα χυμούς... ἐξάγει and a pair of cola is framed by one-word pivots: καὶ τὰ μὲν νόσου, τὰ δὲ βίου παύει.<sup>94</sup> The word order produces something close to an *enjambement* (cf. Part IV.3.1) in the second sub-period. In εἰς θάρσος κατέστησαν a possible colon-end is indicated by a homoeoteleuton, but then the attention of the public is focused on the medium of speech (the spoken word) by adding: τοὺς ἀκούοντας. The expansion of the last complex colon in the period-end is achieved by inserting complements to the verb and adding a short clausula (καὶ ἐξεγοήτευσαν) to the end, in order to connect the argument to the preceding example of incantations (P.18).

The analysis of syllabic rhythm is difficult, because the period is segmented into several elementary cola and commata, which form different phrase rhythm patterns, whereas the rhythm type could be described as triadic (aab) or as a circular structure ('pabcbaq', cf. Part IV.2.2.1). The quantitative rhythm is not important, but occasionally accentual patterns emerge as a result of parallelism, homoeoteleuta and anaphora.

Although this period is not presented formally as a conclusion (which follows in P.23a), it resumes the principal points of Proof 3. Antithetic phrases repeat most of the previously discussed forms of word's influence: bringing delight and sorrow (cf. P.15, P.18a and P.16c), fear and bravery (cf. P.16c and P.15 as negation). But the final and the most important point is the impact of evil persuasion on the soul. This is the basis for the conclusion in the following period (P.23a, Par.XV in the editions), which refers to Helen again.

#### **Proof 4 (DK 82 B 11. xv–xix)**

Proof 4 states that love is the 4th reason for Helen's deeds, concluding that she should be not considered guilty, because of love's power over her. However, the main focus is on the power of sight and the impact of the body on the soul, presenting a parallel to Proof 3 (concerning the power of speech and hearing).

Par.XV is introduced with a pivot phrase (P.23ab), which concludes the preceding, and introduces the following sub-part. We can again observe a clash between macro- and micro-textual units (or between the division of text on one side and syntax and phrase rhythm on the other side). In P.24 love is presented as the fourth reason for Helen's deeds and P.25 explains it with the impact of sight, which affects the soul. The power of sight is proven by a series of examples. Par.XVI and Par.XVII present sight as producing fear and affecting the orderly and lawful state of mind. In P.26 sight brings fear to souls in times of war and as a result lawful conduct and the values of the polis are forgotten (P.27). The reason for the loss of the mind is fear and suffering because of different mental pictures (Par.XVII, P.28–29). The example of fear is finished by another pivot, based on the figure of omission (P.30). As in the preceding examples, this proof relies heavily on word-play.

Par.XVIII discusses the role of sight in the visual arts. Bodies and colours have their impact on sight through pleasure, bringing sorrow, longing and love (P.31). This statement closes the circle of Proof 3 and Proof 4 and brings the discussion back to the subject of the speech in Par.XIX, concluding: if Alexander's beautiful body made Helen fall in love, she should not be considered as guilty (P.32–P.34). The whole argument seems unbalanced in comparison to the initial program of Gorgias, stated in P.9. Although love is explicitly mentioned as the fourth reason for Helen's deeds, the main subject of this argument is sight.<sup>95</sup>

#### **XV.**

Par.XV begins with a typical pivot (P.23ab), which links two proofs. P.23a is introduced with a connective particle (καί) which presents a climax to the whole part (Denniston 1996: 291–293) and gives a conclusion, as often occurs in the narrative oral style or the clausal formulae in the ends of subchapters (Trenkner 1960:36–37, cf. P.30). P.23b opens the next, 4th proof with an explicit auto-reference. However, through syntactic coordination and other features (μέν-δέ, parallels in the period construction and rhythm, *verba dicendi* in the ends) both parts belong closely together.

Love is presented as the reason for Helen's deeds immediately after the introduction (in P.24), but it is not the central theme of the next paragraphs. Gorgias begins another example, explaining the influence of sight on the soul in P.25. The only hint at the connection between love and sight is the remark on φύσις.

XV.

(23a)

καὶ	ὅτι μὲν,	1+3 +	
	εἰ λόγῳ ἐπέισθη,	6	= 10
	<u>οὐκ ἠδίκησεν</u>	5 + 5	= 10
	<u>ἀλλ' ἠτύχησεν,</u>	εἴρηται·	3
			[=23]

**Description (23a)**

PER 1 [CLO :RING; SY :VE.Ma 1, :Rel 3]{CONT in P.23b}

COL 1(3) (C1 1, Cm 4){ANT 2; HOM 2, ISOC 4; CLO.INT :HIAT 1; RING 1}{ISOC +1 to Per 23b}

WD 11 (CW 5, FW 6; WTDI 0.8) [WD.RI :CW 5/5, :All 10/11]{REF in λόγῳ in P.1, 2, 4 (2x), 5, 8b (2x), 9, 13a (3x), 14, 15, 16c (2x), 17, 18a, 19ab, 20b (2x), 21a, 21b (2x), 21c (2x), 21d, 22a (2x), 22b, 23b, 35, 36 (3x), cf. λέξαι in P.3, 8a, λέγ- in P.6, 8a, 20b, 24, 30, cf. ἐλέγξαι in P.3, 6, 21c; ἐπέισθη in P.9, 14, 18b, 19a (2x), 20a, 20b (5x), 21ac, 22b, 35; οὐκ in P.5 (2x), 7a, 8a, 10b, 13a, 14, 19b, 19c (3x), 21c, 24, 25, 33, 34 (2x), 20a (?); ἠδίκησεν in P.12 (2x), 13b, 20b, 35, 36; ἠτύχησεν in P.33, cf. P.9, 11, 16c, 19d, 34; cf. τυγχάνειν in P.13a, 25; εἴρηται NONE}

SYL 23 (1 elided) [SL.RI :ISOS=GRA 20/23; AC.RI :All 6/23, :CLA 8/12; QU.RI :All 16/23, :CLA 12/12]{SL.RI.ISOS :8 to P.23b; QU.RI :CLA 1/1 to P.23b, AC.RI :CLA 1/1 to P.23b}.

ACC 8 (CW 5, FW 3) [AC.RI :CW 5/5, :All 8/8; SYM :WD 5/8, :CLA 5/5]

Period (23a) corresponds to a complex sentence, which is linked to P.22b by the particle καί, and to P.23b by coordinating particles (μὲν... δέ). The sentence begins with two subordinate clauses in protasis and is concluded by a main clause (a single-word pivot). The whole pattern is constructed as an onion (abcb'a'), where the main clause (καὶ ... εἴρηται) surrounds the temporal clause (ὅτι μὲν... ἀλλ' ἠτύχησεν) and the conditional clause (εἰ λόγῳ ἐπέισθη), referring to the subject of the speech, Helen, is in the middle (cf. Part IV.2.2.3).

The sub-period is relatively short and its interlocked word-order disturbs the analysis of complex cola and clausular rhythm. The first and second colon are isosyllabic (10 syllables), whereas Col.2 is in its turn composed of two antithetic isocola (5+5 syllables), which enables reanalysis of the beginning of this period as echoing the end of P.22b (15 syllables). The whole period corresponds to the end of P.22b (23 syllables each). Accentual and quantitative patterns result from the parallelism.

The proportion of content and function words is almost equal, the segmentation of a period into more and more elementary units helps to focus attention on every single content word (whereas the frequency of verbs is remarkable: 4 of 5 content words are verbs). In the end of P.23a, an auto-referential verb (εἴρηται) functions as a pivot and leads to the second half of the period (P.23b). Whereas the rhythm in P.23a rises in a gradation, a reflected falling gradation can be observed in P.23b. A redefinition of the last two commata of P.23a as one complex results in the continuation of the syllabic

rhythm in P.23b (units of 8 syllables), strengthening the connection of the two periods.

(23b)

τὴν δὲ τετάρτην αἰτίαν	5+3 = 8
τῶι τετάρτῳ λόγῳ	6+
διέξειμι.	4 [= 18]

**Description (23b)**

PER 1 [CLO :GRA, :HIAT; SY :Ma.VE 1]{CONT of P.23a}

COL 1 (Cl 2, Cm1) [GRA 3; PLPT 2]{CONT of P.23 a: ISOC+1}

WD 8 (CW 5, FW 3; WTDI 1.67)[WD.RI :CW 4/5, :All 8/8]{REF to τετάρτην, τετάρτῳ NONE; αἰτίαν in P.4, 8b, 11, 13a, 14, 20a, 24, 35, cf. 10a (2x); λόγῳ in P.1, 2, 4 (2x), 5, 8b (2x), 9, 13a (3x), 14, 15, 16c (2x), 17, 18a, 19ab, 20b (2x), 21a, 21b (2x), 21c (2x), 21d, 22a (2x), 22b, 23a, 35, 36 (3x), cf. λέξει in P.3, 8a, λέγ- in P.6, 8a, 20b, 24, 30, cf. ἐλέγξει in P.3, 6, 21c; διέξειμι NONE, cf. διά- in P.6, 8ab, 10a, 16c, 18a, 21c, 24, 25, 27 (3x), 35, cf. ἐκ, ἐξ- in P.7a, 20a, 22b (3x), 26, 27, 28 (2x), 31a, cf. προσιοῦσα in P.21a}

SYL 18 [SL.RI :ISOS 0/18 (8/18), :GRA 18/18; :All 12/18, Niv 18/18, AC.RI :CLA 4/4; QU.RI :All 9/18, :CLA (4/4)]{SL.RI.ISOS +8 to P.23a; QU.RI :CLA 1/1 to P.23a, AC.RI :CLA 1/1 to P.23a}

ACC 8 (CW 5, FW 3)[AC.RI :CW 4/5, :All 8/8; SYM CLA 0/3, :WD 7/8]

Period (23b) is a short simple sentence (sub-period), added to its preceding counterpart (P.23a) by a coordinating particle. Although their syntactical structures are different, phrase rhythm is based on the same pattern in both: fragmentation into elementary units (commata, marked by a polyptoton) and gradation, leading to a verb.

Syllabic rhythm serves as a bridge between P.23a and P.23b. The quantitative rhythm cannot be described without ambiguity, but the accentual patterns seem overwhelming (up to 100% of the syllables), changing from dactylic to trochaic and back again, without syntactic parallelism. Both sentences (P.23a and P.23b) proceed at a good pace: the antithesis, beginning with a negation (P.23a) and the polyptoton (P.23b) enable us to proceed with the argument quickly.

The indication of the number of the proof seems at first out of pattern, as Proofs 1–3 were not introduced by their numbers in order. This counting continues the development of Proof 3 (a list of three types of speeches). Thus the continuation of the count helps to knit Proof 3 and Proof 4 closely together (although they are already connected through their shared interest in perception).

(24)

εἰ γὰρ	ἔρωσ ἦν	ὁ ταῦτα πάντα πράξας,	2+3 + 7	= 12		
	οὐ χαλεπῶς διαφεύζεται		4+5	= 9		
	τὴν τῆς λεγομένης	γεγονέναι	ἀμαρτίας	αἰτίαν.	6+4+7	=17

#### Description (24)

PER 1 [BEG :HIAT 1; CLO: RING; SY :Ma.VE 1, :Rel.COP 1]{BEG}

COL 3 (Cl 4, Cm 1) [GRA 3; ALL 2; SO.PL 2; INT.HIAT 1; RING 1]

WD 17 (CW 10, FW 7; WTDI 1.4) [WD.RI :CW 10/10, :All 8/17]{REF to ἔρωσ in P.7b (2x), 8a, 31b, 32, 34, cf. 35; ἦν in P.6, 8b, 19b, cf. εἶναι P.6, 18c, 30, 33 (2x); ταῦτα in P.16a; πάντα in P.6, 7b, 19b (2x), 35, cf. 16c; πράξας in P.9, 35 (2x), cf. πράγμα in P.1, 2, 16c (2x), 31b; οὐ in P.5 (2x), 7a, 8a, 10b, 13a, 14, 19b, 19c (3x), 21c, 23a, 25, 33, 34 (2x), 20a (?); χαλεπῶς in P.14; διαφεύζεται cf. διά(-) in P.6, 8ab, 10a, 16c, 18a, 21c, 23b, 25, 27 (3x), 35; λεγομένης in P.3, 6, 8a (2x), 20b, 30; cf. ἠλέγχθη in P.3, 6, 21c; ἀμαρτίας in P.2, 18c, 33; αἰτίαν in P.4, 8b, 11, 13a, 14, 20a, 23b, 35, cf. 10a (2x); γεγονέναι in P.3 (2x), cf. γέν- in P.6, 7a, 8b (cf 5, 7), cf. γίν- in P.18ab, 27}

SYL 38 [SL.RI :ISOS 0/38, :GRA 29/38; AC.RI :All 24/38, :Niv(ad) 31/38, :CLA 0/12; QU.RI :All 26/38, :CLA 0/12]{?}

ACC 14 (CEW 11, FW 3)[AC.RI :CEW 0/11, :All6/14; SYM :CLA 0/3; :WD 12/17]

Period (24) corresponds to a complex sentence, beginning with a conditional clause in protasis and ending with a full stop. Gorgias mentions the 4th reason (ἔρωσ) for Helen's deeds at once, presenting it as a real agent by the choice of a diathesis (active participial clause). The end of the period refers to the beginning of the speech (P.2–4), but love is presented in a different manner: in the beginning it was aroused by Helen (P.7), now (cf. P.32–35) Helen is in love.

The period is not based on parallel structures and syllabic rhythm. This lack is compensated by the quantitative and accentual rhythm: the quantitative rhythm follows iambic patterns and the accentual rhythm might be described as trochaic and dactylic. Each single word becomes important in the intonation patterns (evident already from the relatively high WTDI), as the intonation contour of the content words is more or less the same in the whole period: in Col.1 there is a series of bisyllabic paroxytona, and in Col.3 all content words (four in a row) are paroxytona.

Another important structural device is the circular word order in the end. The so-called golden pattern of word order abcba (here: **a** τὴν an article to the noun; **b** τῆς λεγομένης an article to the genitive complement and a genitive complement; **c** γεγονέναι an infinitive complement to the preceding participle; **b** ἀμαρτίας a genitive complement; **a** αἰτίαν a noun) found its perfection in Latin poetry.<sup>96</sup> Here the word order (in interaction with a hiatus) brings the infinitive γεγονέναι to the centre and focuses on the doubt in the validity of the accusations ('that the so-called mistake indeed happened'), cf. Part IV.2.2.3.

(25)

ἃ γὰρ ὁρῶμεν,	ἔχει φύσιν	5 + 4 = 9
	οὐχ ἦν ἡμεῖς θέλομεν,	7
	ἀλλ' ἦν ἕκαστον ἔτυχε·	8
διὰ δὲ τῆς ὄψεως	ἢ ψυχῆ	7 + 3 = 10
	κἂν τοῖς τρόποις τυποῦται.	4 + 3 = 7

**Description (25)**

PER 1 (1+1) [CLO :HIAT 1; SY :Ma.VE 2, :Rel.VE 3]{CONN to P.24, γάρ}  
COL 5 (Cl 3, Cm 9) [ANT 2; ANA 2 (int), GRA 6, ISOC 6, PARIS 2; ALL 2]  
WD 24 (CW 11, FW 13; CTDI 0.85, crasis 1) [WD.RI :CW 10/11, :All 12/24]{REF to  
ὁρῶμεν in P.29; ἔχει in P.7a (3x), 8a, 16ac, 19b, 19c (2x), 20a (2x), 22a, 31a, 33;  
φύσιν in P.5, 22a, cf. πέφυκε in P.10b, 31b; οὐχ in P.5 (2x), 7a, 8a, 10b, 13a, 14,  
19b, 19c (3x), 21c, 23a, 24, 33, 34 (2x), 20a (?); ἡμεῖς NONE; θέλομεν NONE;  
ἕκαστον NONE; ἔτυχε in P.13a, cf. P.9, 11, 16c, 19d, 23a, 33, 34; διὰ- in P.6, 8ab,  
10a, 16c, 18a, 21c, 23b, 24, 27 (3x), 35; ὄψεως in P.26, 27, 29, 31ab; ψυχῆ in P.1,  
3, 14, 16c, 18bc, 19c, 20b, 21a, 22ab, 26, 32, 33; κἂν cf. ἐν- in P.1, 7, 15, 18a,  
21bcd, 28, 29 (2x), 31b (2x), 36 (2x); τρόποις NONE; τυποῦται in P.21a}  
SYL 41 (elided 1, crasis 1, decl.att 1)[SL.RI :ISOS 0/41, :GRA 41/41; AC.RI :All 12,  
:Niv 27/41, :CLA 0/20; QU.RI :All 16(+3)/41 (ia), :CLA 0/20]  
ACC 19 (CEW 11, FW 8) [AC.RI :CEW 8/11, :All 6/19; SYM :CLA 0/5; :WD 11/24]

Period (25) corresponds to a complex sentence, composed of two more or less independent parts (sub-periods), which are linked by a connective particle (δέ). The first sub-period begins with a short relative clause in protasis, followed by an equally short main clause in apodosis and a pair of relative clauses, forming an antithesis (cf. P.23ab). It states that everything, that is seen, has its own nature (φύσις), which does not depend on the wish of the person who regards it. The role of fate (ἔτυχε) is presented in antithesis to a wish (θέλομεν),<sup>97</sup> in accordance with Gorgias' principle argument that Helen's deeds should be pardoned as involuntary. The theme of nature is not elaborated in this speech, although it is anticipated in the reference to the usual themes of eulogy in the beginning (P.5). The second sub-period relates the nature of things to the soul through sight, mentioning its impact (τυποῦται) on the habits (τρόποις) of the soul.<sup>98</sup>

Parallelism occurs only in the antithesis which refers to the problem of free choice, which is important for the argument. It is not clear, whether ὁρῶμεν, ὄψεως should be classified as polyptoton, but the analogy in position and meaning interact with the similarity in sound. The count of syllabic, quantitative and accentual rhythm is difficult because of parallel variants (ἐ-θέλομεν), elisions or craseis (ἀλλ', κἂν) and Attic declination (ὄψεως), as each time another variant gives another number of syllables (cf. Part II.6.1.2).

## XVI.

Paragraph XVI is a period complex, composed of two periods, each corresponding to a complex sentence, which is added as a complementary explanation to the preceding argument and ends with a full stop. They present the example of war, where the sight of the enemy produces fear and dissolves the power of law and the virtues of the polis. It is possible that war belonged among stock examples for the power of fear. Referring to the possibility that fear can make one forget the law, Gorgias appeals to the topos of the pardonable and the absence of intention in Helen's unlawful conduct. The reference to καλοκαγαθία (P.27) reminds us of the opening of the speech, connecting the practice of epideictic speeches of Gorgias' time and tradition, to include Helen's story in a discussion of polis values (see the comm. to P.1–P.2).<sup>99</sup>

## XVI.

(26)

αὐτίκα γὰρ	4	
ὅταν <u>πολέμια σώματα</u>	2 + 7	(=13)
[καὶ] <u>πολέμιον ἐπὶ πολεμίοις</u>	1+4 + 6	(= 11)
ὀπλίσηι κόσμον	3+2 = 5	
χαλκοῦ καὶ σιδήρου,	2+4 = 6	(=11) [=35]
<u>τοῦ</u> μὲν ἀλεξητήριον	8	
<u>τοῦ</u> δὲ προβλήματα,	6	(=14)
εἰ θεάσεται ἢ ὄψις,	5+3 = 8	
<u>ἐταράχθη</u> καὶ <u>ἐτάραξε</u> τὴν ψυχὴν,	4 + 5 + 3 = 12	(20) [=34]
ὥστε πολλάκις	5	
κινδύνου τοῦ <u>μέλλοντος</u>	7	(=12)
<ὡς> <u>ὄντος</u>	2	
φεύγουσιν ἐκπλαγέντες.	7	(= 9) [=21]

### Description (26)

PER 1 [CLO :GRA; SY :Ma.VE 2, :Rel.VE 3]

COL 8 (CI 7, Cm 9) [ANT 4, PAR 4; ANA 2, ISOC 6, HOM 4; ALL 6, PLPT 5, SO.PL 2; CLO.INT :HIAT 1; RING 1]

WD 37 (CW 21, FW 16; WTDI 1.3) [ANT 6; WD:RI :CW 21/21; :All 25/37]{REF to αὐτίκα NONE, cf. αὐτ- in P.3, 18b, 19d, 20a, 22a; πολέμια, πολέμιον, πολεμίοις NONE; σώματα in P.1, 7b (2x), 15, 16c, 22ab, 31a (2x), 31b, 32; ὀπλίσηι NONE; κόσμον in P.1 (2x); ἐπι-ἐπ-ἐφ in P.2 (5x), 4, 7b (3x), 8b, 13a (2x), 15, 16c, 18a (2x), 18b; χαλκοῦ NONE; σιδήρου NONE; ἀλεξητήριον NONE, cf. P.32; προβλήματα NONE, cf. προ- in P.8b (2x), 10a (2x), 19b, 32; θεάσεται in P.31a; ὄψις in P.25, 27, 29, 31ab; ἐταράχθη ἐτάραξε NONE; ψυχὴν in P.1, 3, 14, 16c, 18bc, 19c, 20b, 21a, 22ab, 25, 32, 33; πολλάκις in P.7, 16c, 21c, 29, 30, 31a, 31b (3x); κινδύνου NONE; μέλλοντος in P.8b, 19bc; ὄντος cf. παρόν in P.19bc, 28 (2x); φεύγουσιν in P.35; ἐκπλαγέντες NONE, cf. ἐκ, ἐξ- in P.7a, 20a, 22b (3x), 23b, 27, 28 (2x), 31a}

SYL 90 (elidable 1, undeleted 1, uninserted 1) [SL.RI :ISOS 46/90, :GRA 78/90; AC.RI :All 37/90, :Niv 56/90, :CLA 8(+8)/32; QU.RI :All 33/90, :CLA 8/32]

ACC 35 (CW 21, FW 14)[AC.RI :CEW 21/21, :All 30/35; SYM :CLA 2/8; :WD 16]

Period (26) corresponds to one long complex sentence. It begins with a short comma, which functions as an introduction, and is continued by two subordinate clauses in protasis. The first of these, a temporal clause repeats several keywords of the speech (κόσμος, σώματα), combined with a polyptoton (cf. P.19) and circular structures, and ends with parallel cola (τοῦ μὲν ἀλεξήτριον, τοῦ δὲ προβλήματα). From the point of view of syntax, the interpretation of this pair of cola is ambiguous: either as postponed added complements to the first object (κόσμον), or as anticipated direct objects to the following conditional clause (εἰ θεάσεται...). This conditional clause indicates the medium of influence, the sight, and is continued by a main clause, which is based on the opposition of passive and active verb forms and refers to one of the most important keywords of the speech, the soul. The nature of the impact of sight is described as shattering (in accordance with the asymmetrical construction of this period?) and the soul is presented as a passive sufferer, similarly to the presentation of Helen in previous proofs.<sup>100</sup> The result: fear and escape is mentioned in a consecutive clause, which completes the period.

As with other long complex periods, P.26 is difficult to parse: parallelism, isosyllabic rhythms, sound- and stem-repetitions and tropes give indications contrary to strictly grammatical relationships (Part IV.3.2.2). The emendation proposals (the deletion of καί and the insertion of ὥς) are problematic too. In the first complex colon the interlocking word order leaves the verb in the centre, preceded by the triple polyptoton of the adjective πολέμιος. The particle καί at the beginning of the object phrase is important in maintaining the two isocola of 11 syllables (and in accordance with the function of this particle before intensive adjectives, marking the degree or a climax, cf. P.28 and Denniston 1996: 37–320). With the insertion of ὥς, the genitive construction: ‘as the future is in threat, they run’ would get a new meaning: ‘they flee from the future-/arriving danger as if it were present’.<sup>101</sup> This insertion does not affect the syllabic rhythm of the period (ending with a gradation), but without it reanalysis of the final cola of P.26 and the first two cola of P.27 would enable observation of a complex isocolon of 21 syllables, smoothing the passage from one period to another.

In this speech, which seeks to find the real culprit and where the play on the opposition of passive and active diathesis is one of the most important construction elements, it is strange to find another reference in an impersonal manner: φεύγουσιν (‘they flee’). According to the official code of honour, the soldier had no right to run away, as we know from Greek elegy.<sup>102</sup> The hint to a presumably usual, although officially unacceptable, way of conduct functions here as a support to the argument, which seeks the pardonable. Thus the example achieves two goals: to ask pardon for Helen and to discuss Gorgias’ own theories concerning perception.

(27)

ἰσχυρὰ γὰρ	ἡ συνήθεια τοῦ νόμου	4+5+3 = 12
διὰ τὸν φόβον ἐξωκίσθη	τὸν ἀπὸ τῆς ὄψεως,	5+4+7 = 16
ἥτις ἐλθοῦσα	ἐποίησεν ἀμελήσαι	5 + 8 = 13
καὶ τοῦ καλοῦ	τοῦ διὰ τὸν νόμον κρινομένου	4 + 10 = 14
καὶ τοῦ ἀγαθοῦ	τοῦ διὰ τὴν νίκην γινομένου.	5 + 10 = 15

### Description (27)

PER 1 [CLO :HIAT, :PAR; SY :Ma.VE 1, :Rel.VE 1]{FOLL P.26 γάρ}

COL 5 (CI 5, Cm 5) [ANT 2, PAR 2; ANA 4 (int), GRA 5, HOM 4 (int), ISOC 2 (int);

ALL 2, PLPT 2, SO.PL 4; CLO.INT :HIAT 1; HYP 1, RING 2]

WD 34 (CW 15, FW 19; WTDI 0.8) [ANT 2, PLPT 2, RP.WD 3; WD.RI :CW 15/15, :All 34/34]{REF to ἰσχυρὰ NONE; συνήθεια NONE, cf. συμ-, συν- in P.3, 7b, 19c, 20b; νόμου, νόμον in P.12, 13a (2x), 36; ἐξωκίσθη NONE, cf. ἐκ, ἐξ- in P.7a, 20a, 22b (3x), 23b, 26, 28 (2x), 31a; διὰ- in P.6, 8ab, 10a, 16c, 18a, 21c, 23b, 24, 25, 35; φόβον in P.15, 16c, 22b, 28 (2x); cf. ἀπ-, ἀφ- in P.8a, 11, 14, 15, 17, 18a, 21b, 28, 31a, 33, 36, cf. ἀπατ- in P.14, 18c; ὄψεως in P.25, 26, 29, 31ab; ἐλθοῦσα in P.16c, 20a, 34 (2x); ἐποίησεν in P.20b, 21bd; ποιήσις in P.16c, 31a, ποιητῶν in P.3; ἀμελήσαι NONE; καλοῦ cf. κάλλος in P.1, 7a; κρινομένου NONE; ἀγαθοῦ NONE; νίκην NONE, cf. νικ- in P.7b (2x) γινομένου in P.18ab, γέν- in P.6, 7a, 8b (cf 5, 7), γεγονέναι in P.3 (2x), 24}

SYL 70 (elidable 1, decl.att 1, poss.crisis 1)[SL.RI :ISOS 20/70, :GRA 70/70; AC.RI :All 29/70, :Niv 49/70, :CLA 12/20; QU.RI :All 35/70 (ia+), :CLA 8/20]{AC.RI :CLA 1/1 to P.26, :ISOS 21 to P.26}

ACC 33 (CW 15, FW 18)[AC.RI :CW 15, :All 28/33; SYM :CLA 3/5 (6/10), :WD 22/34]

Period (27) corresponds to a complex sentence with a main clause in protasis and a relative clause in apodosis. It uses interlocked word-order (disconnected syntax) and parallelism. The prepositional phrase (διὰ τὸν φόβον), expressing the agent in the passive main clause receives a complement (τὸν ἀπὸ τῆς ὄψεως), which is postponed until after the verb. This creates a pivot, enabling us to proceed to the relative clause without ambiguities and helps to focus on the sense: it is sight, which causes all problems. As with other ends of greater textual units P.27 is concluded by parallel structures (a parison), coinciding with sound and rhythm figures between the beginnings, the ends and the sub-parts of complex cola (scheme: aba'b').

Gorgias develops the idea of the influence of sight on moral conduct, which affects the standard polis values of the 5th century (καλοκαγαθία). The sources of καλοκαγαθία are the law (stressed by a polyptoton νόμου, νόμον, framing the period) and victory. Although it might reflect Gorgias' theories, this unusual pair could be a result of rhythm and sound echoes (e.g. exact match of the accentual and quantitative patterns of these words). Word rhythm and symmetrical positions of intonation peaks are central in this period, as revealed by repetition of word groups of 2, 4, 6 and 8 words.

The analysis of syllabic rhythm types is hindered by problems concerning crasis, elision, declinatio Attica. In isosyllabic rhythm a continuation of rhythm patterns occurs: the beginning of the main clause resumes the rhythm of the end of P.27. This is accompanied by the repetition of keywords and accentual clausulae, which occur in period-ends.

## XVII.

Paragraph XVII presents a preliminary conclusion, describing the influence of sight and fear: they produce loss of mind (P.28) and other sufferings (P.29). It ends with another omission figure: the statement that several other scary things are unmentioned (P.30). Par.XVII is connected to Par.XVI by a connector and several keywords, including the combined references to present and future tenses (P.26: μέλλοντος, ὄντος and P.28 παρόντος).

Par.XVII forms one period complex, composed of three periods, each corresponding to a sentence, ending with a full stop in Diels' edition. The link between P.28 and P.29 is ensured by a connector and the antithesis 'some' vs. 'many', whereas P.30 is presented as a continuation and climax of P.29. The sentence structure of P.28 and P.29 is similar and there is a gradation in sense: from some to many persons, who suffer because of frightening sight. Sight is characterised as writing images into the soul (P.29), which connects this example to the following one in Par. XIX (discussing the visual arts).

## XVII.

(28)

ἤδη δέ τινες	ιδόντες φοβερὰ	5 + 6	[=11]
καὶ τοῦ παρόντος	ἐν τῷ παρόντι χρόνῳ	5 + 7 = 12	
	φρονήματος ἐξέστησαν·	4 + 4 = 8	[=20]
οὕτως ἀπέσβεσε	καὶ ἐξήλασεν	2 + 4 + 5 = 11	
	ὁ φόβος τὸ νόημα.	7	[=18]

### Description (28)

PER 1 (1+1)[CLO :PIV; SY :Ma.VE 3]{CONT of P.26–27, to P.29–30}

COL 3 (Cl 4, Cm 4)[ANT 2, PAR 2; GRA 6, HOM 2; PLPT 4 + PT 2, SO.PL 2; RING 2]

WD 22 (CW 11, FW 11; WTDI 1)[ANT 6; WD.RI :CW 8/12, :All 8/22]{REF to τινες in P.4, 16c, 22b; τίς, τί in P.20a, 32; cf. 8a (3x); ιδόντες in P.8, 20a; φοβερὰ, φόβος in P.15, 16c, 22b, 27; παρόντος, παρόντι in P.19bc, cf. P.26, cf. cf. παρ-, παρα- in P.19b (2x), 19c (3x), 30, 31a, 32, 34; ἐν- in P.1, 7, 15, 18a, 21bcd, 29, 31b (2x), 36 (2x), cf. 25; χρόνῳ in P.8b; φρονήματος in P.29, cf. P.7b; ἐξέστησαν NONE, cf. στη- in P.17, 18b, 22b, cf. ἐκ, ἐξ- in P.7a, 20a, 22b (3x), 23b, 26, 27, 31a; οὕτως in P.16a, 29; ἀπέσβεσε NONE, cf. ἀπ-, ἀφ- in P.8a, 11, 14, 15, 17, 18a, 21b, 27, 31a, 33, 36, cf. ἀπατ- in P.14, 18c; ἐξήλασεν NONE, cf. ἐκ, νόημα NONE, cf. P.20a, 33}

SYL 49 [SL.RI :ISOS 8/49, :GRA 49/49; AC.RI :All 22/49, :Niv 28/49, :CLA 0(Niv8)/12; QU.RI :All 16/49, :CLA 0/12]

ACC 19 (CW 11, FW 8)[AC.RI :CW 6/11, :All 16/19; SYM :CLA 2/3 (6/10), :WD 16/22]

Period (28) corresponds to two sentences (sub-periods), which are connected paratactically, whereas the second sentence is an explication of the first. P.28 is added to the preceding sentence complex by the combination of an adverb and a particle ἤδη δέ, which marks the beginning of a new example. The word order uses a circular pattern, in which the verbs are situated in the centre, framed by subject and object phrases. The verb and the direct object are separated by the grammatical subject in the period-end (VSO), thereby creating a colon, which consists of the grammatical subject and object (ὁ φόβος τὸ νόημα). Another circular pattern arises, when the verb complement phrase (καὶ τοῦ παρόντος φρονήματος ἐξέστησαν) is expanded by the insertion of an adverbial clause ἐν τῷ παρόντι χρόνῳ (a polyptoton), focusing on the meaning: the present moment.

The impersonality of the reference is continued (τινες), as the argument is based on human nature in general, pardonable excuses, and not the prescribed moral conduct (cf. P.26). The repetition of different prefixes (παρ-, ἐξ-, ἀπ-) and a polyptoton (παρόντος) underline the threat, hidden behind the parallelism in structure: present sensibility could be expelled by fear. The sound play (φρονήματος, νόημα) is based on repeating words of the same formation type.

The discontinuous word order seems to support regularity in the distribution of accentual peaks: paroxytona, then proparoxytona and again paroxytona. However, quantitative and syllabic rhythm patterns are almost missing. The period uses the same syntax pattern as P.29 and is connected to it by antithesis ('some' vs. 'many').

(29)

πολλοὶ δὲ	<i>ματαίαις</i>	<i>πόνοις</i>	3 + 5 =	8	
	<i>καὶ δειναῖς</i>	<i>νόσοις</i>		5	= 13
	<i>καὶ δυσίατοις</i>	<i>μανίαις</i>		8	
		<i>περιέπεσον</i>		5	= 13
οὕτως εἰκόνας	τῶν ὀρωμένων	πραγμάτων	5 + 8		= 13
ἢ ὅψις ἐνέγραψεν	ἐν τῷ φρονήματι.		3+4+6		= 13

#### Description (29)

PER 1 (1+1)[CLO :PLPT; SY :MaVE 2]{FOLL of P.28 to P.30}

COL 4 (Cl 5, Cm 4)[PAR 3; ANA 2, CHI 2, GRA 3, HOM 2, ISOC 4; PLPT :PT 2, SO.PL 3; HYP 1, RING 1]

WD 22 (CW 14, FW 8; WTDI 1.75)[WD.RI :CW 14/14, :All 10/22]{REF to πολλοὶ in P.7, 16c, 21c, 26, 30, 31a, 31b (3x); *ματαίαις* NONE, cf. in P.20b; *πόνοις* NONE; *δειναῖς* in P.13b; *νόσοις* in P.22b, 33; *δυσίατοις* NONE, cf. *δυσ-* in P.16c, cf. *δυσκλείας* in P.11, 36; *μανίαις* NONE; *περιέπεσον* NONE, cf. *περί* in P.3, 5, 16c, 19abcd; *οὕτως* in P.16a, 28; *εἰκόνας* in *τὸ ὀρωμένων* in P.25; *πραγμάτων* in P.1, 2, 16c (2x), 31b, cf. *ἔπραξε* in P.9 (2x), 24, 35 (2x); *ὅψις* in P.25, 26, 27, 31ab;

ἐνέγραψεν cf. γράφειν in P.21c, 36, cf. P.31a; ἐν- in P.1, 7, 15, 18a, 21bcd, 28, 31b, 36 (2x), cf. 25; φρονήματι in P.28, cf. P.7b}  
 SYL 52 [SL.RI :ISOS 52/52; AC.RI :All=Niv 22/52, :CLA 0/16; QU.RI :All 23/52 (ia+tro), :CLA 0/16]{AC.RI :CLA 1/1 to P.30}  
 ACC 20 (CW 14, FW 6)[AC.RI :CW 14/14, :All 10/20; SYM :CLA 0, :WD 13/22]

Period (29) corresponds to a complex sentence, composed of two simple sentences (sub-periods) in correlation. P.29 is parallel to P.28 in syntactic structure, sense, and patterns of word order. The first sub-period forms a circle where the introductory and the closing pivot (corresponding to a subject and a verb) frame three parallel cola. These cola occur in a gradation structure, where the first two cola are isosyllabic, whereas the second colon contains one word (a connector) more than the first one, and the third colon has the same number of words as the second one, but is longer by some syllables (cf. Part IV.2.3).

The period is analysed as four completely isosyllabic complex cola (cf. P.4), whereas both sub-periods are isosyllabic (26+26 syllables) as well. As the first sub-period uses a gradation in its centre, the second sub-period with its longer phrases restores stability in the rhythm. The content words are situated in symmetrical patterns, although some of them seem to be used in parallel phrases only for the sake of parallelism (ματᾶις πόνοις etc.). The following period (P.30) brings this argument to the culmination.

(30)

καὶ	τὰ μὲν δειματοῦντα	πολλὰ μὲν παραλείπεται,	1 + 6 + 8 = 15
	ὅμοια δ' ἐστὶ	τὰ παραλειπόμενα	5 + <u>7</u> = 12+
		οἷάπερ <τὰ> λεγόμενα.	3 + 4 = <u>7</u>

### Description (30)

PER 1 [CLO :CLA, :HIAT; SY :MaVE 2]{REF to P.28: RING}  
 COL 3 (Cl 3, Cm 2) [GRA 2, HOM 2, ISOC 2; ALL 2. PLPT 2; INT.CLO :HIAT 2]  
 WD 14 (CW 7, FW 7; WTDI 1)[WD.RI :CW 6/7, :All 13/14]{REF to δειματοῦντα NONE; πολλά in P.7, 16c, 21c, 26, 29, 31a, 31b (3x); παραλείπεται, παραλειπόμενα NONE, cf. παρ-, παρα- in P.19b (2x), 19c (3x), 28, 31a, 32, 34; ὅμοια in P.3 (2x), 19b (2x), 20a; ἐστὶ in P.6 (2x), 8b, 15, 18c, 19b, 24, 33 (2x); οἷάπερ NONE; λεγόμενα in P.3, 6, 8a (2x), 20b, 24; cf. ἠλέγχθη in P.3, 6, 21c}  
 SYL 34 (elided 1, not inserted1)[SL.RI :ISOS 14/34, :GRA 33/34; AC.RI :All=Niv 22/34, :CLA 12/12; QU.RI :All 14/34 (tro+ia), :CLA 0/12]{AC.RI :CLA 1/1 to P.29}  
 ACC 14 (CW 7, FW 7)[AC.RI :CW 6/7, :All 10/14; SYM :CLA 3/3; :WD 6/14]

Period (30) corresponds to a complex sentence, which is composed of two coordinated parts (sub-periods). It is added to P.29 by the particle καί, introducing the conclusion with a climax (cf. P.23a). The period is difficult to parse. Gorgias introduces the sentence by double μέν, where the first particle is introductory, referring generally to all scary things (δειματοῦντα), and the second particle distinguishes the group of omitted scary things, correlating it

(ὄμοια δ' ... οἴάπερ) to preceding periods (cf. Denniston 1996: 384–386). These particles help to distinguish the phrase rhythm units (cola), which form a complex rising gradation, as a closure of the sub-part (cf. Part IV.1.6). P.30 functions as a pivot, leading to the following example, correspondingly the parallel structures are missing.

The textual problems of P.30 (insertion of an article) do not affect analysis of the syllabic rhythm (the gradation pattern would be only slightly altered). But the end of the period seems abrupt and falling short of something. This can be explained with mimesis: the period uses the figure of omission (παραλείπεται), which might result with the choice of elliptic syntax.

### **XVIII.**

Paragraph XVIII is a period complex, composed of two periods (four sentences) in correlation. It presents a new example of the influence of sight on the soul, which is introduced with the adversative ἀλλὰ μὴν (see Denniston 1996: 341–347), as is often in philosophical texts, when they present new premises. The construction of Par.XVIII is parallel to Par.XVII (P.28 and P.29–P.30): its parts (P.31a and P.31b) are presented as consecutive sentences, although the following sentence complex is longer than the preceding one.

P.31a presents an example of the visual arts and the pleasure they give to sight. The influence of sight on the soul is discussed in P.31b, which presents a conclusion to both preceding examples (Par.XVII and Par.XVIII). It is a counterpart to the discussion of the influence of speech in Proof 3 and refers again to sorrow and longing, aroused by sight, in the soul. P.31a and P.31b are both concerned with the role of bodies in this process, possibly as a reflection of Gorgias' views on the theory of perception.<sup>103</sup> At the same time it refers again to the opposition of 'mind' vs. 'body', which is one of central arguments of this speech (cf. P.32).

The parsing of these two periods is complicated because of punctuation problems and some difficulties in analysis of the syntax. P.31a is presented in the editions as one coordinated sentence, ending with a full stop; whereas P.31b is presented as two sentences, ending with full stops, although its structure is similar to the structure of P.31a. Both periods are connected by different word repetitions. Thus P.31ab corresponds to one complex structure.

## XVIII.

## (31a)

ἀλλὰ μὴν

οἱ γραφεῖς	$\frac{3+}{3} = 6$
ὅταν ἐκ πολλῶν <u>χρωμάτων</u> καὶ <u>σωμάτων</u>	$\frac{2+6+4}{2+6+4} = 12$
ἔν <u>σῶμα</u> καὶ <u>σχῆμα</u>	$\frac{3+3+}{3+3+} = 14$
τελείως ἀπεργάζονται,	$3+5 = 14$
τέρπουσι <i>τὴν ὄψιν</i>	6 [=38]
ἡ δὲ τῶν ἀνδριάντων ποίησις	10
καὶ ἡ τῶν ἀγαλμάτων <u>ἐργασία</u>	$1+10 = 11$
θέαν ἡδεῖαν παρέσχετο τοῖς ὄμμασιν.	$5+4+4 = 13$ [=34]

**Description (31a)**

PER 1 (1+1) [CLO :GRA, :PIV; SY :Ma.VE 2, :Rel 1]{RING with P.31b}

COL 5/7? (Cl 7, Cm 6)[ANT 2, PAR 8; CHI 2, GRA 6, HOM 4, ISOC 4, PARIS 4; ALL 2; PLPT 4; RING 1]

WD 34 (CW 19, FW 15; WTDI 1.3)[WD.RI :CW 18/19, :All 28/34]{REF to γραφεῖς NONE, cf. γράφειν in P.21c, 29, 36; πολλῶν in P.7, 16c, 21c, 26, 29, 30, 31b (3x); χρωμάτων NONE; ἔν in P.7b, 21c; σωμάτων, σῶμα in P.1, 7b (2x), 15, 16c, 22ab, 26, 31b, 32; σχῆμα NONE; τελείως NONE, cf. ἀποτελεῖ in P.15; ἀπεργάζονται, ἐργασία in P.7b, 21b, 31b, cf. ἔργον in P.2, 13a (2x), 15; cf. ἀπ-, ἀφ- in P.8a, 11, 14, 15, 17, 18a, 21b, 27, 28, 33, 36, cf. ἀπατ- in P.14, 18c; τέρπουσι in P.8a, 21c, 22b; ὄψιν in P.25, 26, 27, 29, 31b; ὄμμασιν in P.21b, 32; ἀνδριάντων (root in P.1-3, 5, 6, 7b, 32); ἀγαλμάτων NONE, ποίησις in P.16c, ποιητῶν in P.3, ποιεῖν in P.20b, 21bd, 27; θέαν in P.26; ἡδεῖαν NONE, cf. ἡδονῆς in P.18a; παρέσχετο in P.7a (3x), 8a, 16ac, 19b, 19c (2x), 20a (2x), 22a, 25, 33, cf. παρ-, παρα- in P.19b (2x), 19c (3x), 28, 30, 32, 34}

SYL 72 [SL.RI :ISOS 12/72, :GRA 72/72; AC.RI :All 35, :Niv 37, :CLA 0/20(28); QU.RI :All 24 (ia+), :CLA 0/20(8/28)]{QU.RI :CLA 1/1 to P.31b}

ACC 29 (CW 19, FW 10)[AC.RI :CW 18/19, :All 10/29; SYM :CLA 0 (4/10); :WD 11/34]

Period (31a) corresponds to a complex sentence, composed of two coordinated parts (sub-periods) discussing the pleasure, given to the eyes by the work of sculptors and painters. The first sub-period is constructed as a circle, with a temporal clause between the subject and predicate clauses. The temporal clause uses antithesis, which is based on a parison, achieved through structural analogy, cf. Part IV.2.4). The result is a circular pattern, where two short introductory pivots are balanced with two slightly longer verb-clauses in the end. The second sub-period corresponds to a sentence with two coordinated subject clauses, concluded by a verb phrase, parallel in sense to the end of the first sub-period. As the subject clauses rephrase the same idea in parison, their sole function seems to be the balancing of the first sub-period, being of approximately the same size (38 and 34 syllables) and beginning with parallelism. None of the three final cola is segmented into commata, in order to give the impression of a quietly rising gradation.

The isosyllabic rhythm, quantitative and accentual patterns are in the background. Occasional isocola and slight gradation are absent in the case of the antithesis: ‘many’ vs. ‘one’, where the latter colon is remarkably shorter, either as an intended mimetic device or coincidentally. The accent clash in ἔν σῶμα, might strengthen this impression. The evaluation of clausular rhythm is difficult, as always in the case of circular patterns (cf. Part IV.3.2.3.3).

P.31a can be analysed as the beginning of the example, which is continued in P.31b, where both periods are moulded into one complex by syntax and the repetition of keywords.

(31b)

οὕτω		2		
	<u>τὰ μὲν λυπεῖν</u>			
	<u>τὰ δὲ ποθεῖν</u>	4+4	=8	
	πέφυκε τὴν ὄψιν.	6		[=16]
	<b>πολλὰ δὲ πολλοῖς</b>	3+2+		
	<b>πολλῶν</b>	2	=7	
	ἔρωτα καὶ πόθον	3+3+5	=11	
	πραγμάτων καὶ σωμαίων.	3+4	=7	[=25]

#### Description (31b)

PER 1 (1+1)[CLO : CLA, :GRA; SY :Ma.IMPS 1+VE 1]{RING with P.31a}

COL 2 (Cl 2, Cm 8)[ANT 2, PAR 2; ANA 2, GRA 2, HOM 4, ISOC 4, PARIS 2; ALL 5; PLPT 5; RING 2]{+ISOC 2 to P.32}

WD 21 (CW 12, FW 9; WTDI 1.3)[WD.RI :CW 12/12, :All 17/21]{REF in λυπεῖν in P.15, 18a, 22b; ποθεῖν to in πέφυκε in P.10b, cf. φύσιν in P.5, 22a, 25; ὄψιν in P.25, 26, 27, 29, 31a; πολλά, πολλοῖς, πολλῶν in P.7, 16c, 21c, 26, 29, 30, 31a; ἔρωτα in P.7b (2x), 8a, 24, 32, 34, cf. 35; πόθον in P.16c; ἐνεργάζεται in P.7b, 21b, 31a (2x), cf. ἔργον in P.2, 13a (2x), 15; ἐν- in P.1, 7, 15, 18a, 21bcd, 28, 29 (2x), 36 (2x), cf. 25; πραγμάτων in P.1, 2, 16c (2x), 29 (ἔπραξε in P.9 (2x), 24, 35); σωμαίων in P.1, 7b (2x), 15, 16c, 22ab, 26, 31a (2x), 32}

SYL 41 [SL.RI :ISOS 14/41, :GRA 39/41; AC.RI :All 26/41, :Niv 28/41, :CLA 0/8 (8/20); QU.RI :All 18/41(ia), :CLA 0/8]{SL.RI :ISOS +18 to P.32; QU.RI :CLA 1/1 to P.31a}

ACC 21 (CW 12, FW 9)[AC.RI :CW 12/12, :All 17/21; SYM :CLA 0/5 (4/7), :WD 13/21]

Period (31b) corresponds to a consecutive sentence, which is composed of two coordinated parts (sub-periods). In the first sub-period the verb (πέφυκε) is connected to a pair of infinitive clauses, whereas the object τὴν ὄψιν (‘the sight’) is placed in the end. The second part poses some interpretation problems. It begins with a polyptoton *πολλὰ δὲ πολλοῖς πολλῶν*, where the neuter plural (*πολλὰ*) is usually analysed as a grammatical subject (Donadi 1982: 16–19, MacDowell 1982: 29) or the whole sentence as impersonal (Kennedy 1991: 288). However, in this kind of polyptoton *πολλὰ* is usually adverbial (Gygli-Wyss 1966: 31–32, 47–48), which would suit better in this context. The object of the first sub-period (τὴν ὄψιν) would be in the role of the (unexpressed)

grammatical subject in the second sub-period, in accordance to the subject of the whole proof: the influence of sight. The final position of τὴν ὄψιν in the first half of the period supports the interpretation of it as the logical (and grammatical) subject of the second half.

The period is parallel to P.28–30. There is no parallelism in rhythm patterns, but both periods use circular patterns in the structure (framing central parallel commata with pivots), placing the verbs as well as the references to its main topic, sight, in the centre. Although the sentence structure (a consecutive sentence) indicates that the period presents a conclusion to the proof, this is not logically grounded, as the preceding example on the influence of sight did not mention sorrow, longing or love (however, it is parallel to examples in Proof 3). Thus, the parallelism in construction and keyword repetition fill the gap in the argument (Part IV.1.6).

The importance of parallelism in P.31b is small, but the occurrences of sound and word-repetitions are frequent, especially [p] and [e] sounds and in the polyptota. The small parallel commata in the end of P.31b function as a closure to the whole example (together with P.31a). Isosyllabic rhythm is in the background and accentual rhythm occurs in coincidence with the parison, but the description of clausular rhythm is difficult because of the circular structures. The movement in syllabic rhythm in the end of the period (interchange of cola of 7+11+7 syllables) is continued in P.32, thus achieving a smooth passage to the conclusion.

## XIX.

Paragraph XIX is a conclusion to Proof 4. P.32 is a preparation, gathering the keywords of the whole part; P.33 presents a conclusion, using rhetorical questions, and P.34 functions as a pivot, leading to the recapitulation of the whole speech in Paragraphs XX and XXI.

The first rhetorical question in P.32, its continuation and comment in P.33 (generalisation of the situation) are given as one sentence complex, whereas P.34 relies more on parallel structures, according to its function as a conclusion.

## XIX.

(32)

εἰ οὐδὲν	<u>τῶι τοῦ Ἀλεξάνδρου σώματι</u>	2+9	= 11
	<u>τὸ τῆς Ἑλένης ὄμμα</u>	7+	
	<u>ἠσθὲν προθυμίαν</u>	6	= 13
	<u>καὶ ἄμιλλαν ἔρωτος</u>	7+	
	<u>τῆι ψυχῆι παρέδωκε,</u>	7	= 14
	τί θαυμαστόν;	4	

### Description (32)

PER 1 [CLO :PIV; SY :Ma.ABS.COP 1, :Rel.VE 2]{CONT in P.33}

COL 2/5 (Cl 5, Cm 2)[ANT 2, PAR 4; GRA 3, ISOC 2; CLO.INT :HIAT 1; RING 1]{ISOC +2 to P.31b}

WD 20 (CW 11, FW 9; WTDI 1.2) [WD.RI :CW 10/11, :All 18/20]{REF to Ἄλεξάνδρου NONE, cf. ἄνδρα in P.1–3, 5, 6, 7b, 31a, cf. P.26; σώματι in P.1, 7b (2x), 15, 16c, 22ab, 26, 31a (2x), 31b; Ἑλένης in P.3, 8ab, 11, 20a, 35, 36; ὄμμα in P.21b, 31a; ἡσθέν NONE; προθυμίαν in P.10a, cf. -θυμίαν in P.7b; προ- in P.8b (2x), 10a (2x), 19b, 26; ἄμιλλαν in P.21d; ἔρωτος in P.7b (2x), 8a, 24, 31b, 34, cf. 35; ψυχῆι in P.1, 3, 14, 16c, 18bc, 19c, 20b, 21a, 22ab, 25, 26, 33; παρέδωκε cf. δούς P.4, cf. παρ-, παρα- in P.19b (2x), 19c (3x), 28, 30, 31a, 34; τις, τι in P.4, 16c, 22b, 28; cf. 8a (3x); θαυμαστόν NONE}

SYL 42 (elidable 1)[SL.RI :ISOS 14/42, :GRA 38/42; AC.RI :All=Niv 22/42, :CLA 0/8 (8/20); QU.RI :All 20/42, :CLA 0/8]{SL.RI :ISOS+18 to Per.31b}

ACC 19 (CEW 12, FW 7)[AC.RI :CEW 12/12; :All 14/20; SYM :CLA 0/3(2/6), :WD 13/19]

Period (32) corresponds to a compound sentence, beginning with a subordinate clause in protasis and followed by a short apodosis in the form of a rhetorical question. The function of the subordinate clause corresponds more to a subject clause than a conditional clause (εἰ οὖν=ὅτι), but the choice of connectors is the result of parallelism with other periods presenting conclusions. The subordinate is composed of two coordinated verb phrases and a subject clause (τὸ τῆς Ἑλένης ὄμμα, ‘the eye’, placed between the first verb and its complement clauses), and is based on the antithesis: ‘body’ vs. ‘soul’. The pattern of the period is at the same time circular and parallel, according to the scheme: (p; datComp; S; VO1; conn OgenComp; IO V2; SPred=q), with two pivots framing parallel clauses, occurring in the centre.

The protasis states the fourth reason for Helen’s deeds: yearning for Alexander’s body, felt by Helen’s eye, which brought love into her soul. This occurs in place of the conclusion to the rhetorical syllogism, whereas the following main clause, a rhetorical question (‘why should one wonder?’) without copula is given as its confirmation, like other statements, which do not need proving (cf. Part IV.1.5). The body-soul antithesis is accompanied by another opposition: Helen (as soul) vs. Alexander (as body). Yet, even here, the actual wrongdoer is not Helen, but her eye (which influences her soul). The argument is psychological: it is human behaviour and has to be pardonable.

The accentual patterns emerge between adjacent words, but not in clausulae (as there is no parison). The period is based on a rising gradation and ends with a contrast, produced by the small pivot phrase (the main clause), which leads to the following period (P.33).

(33)

ὅς			1	
<u>εἰ μὲν θεός &lt;ὄν ἔχει&gt;</u>	<u>θεῶν θείων</u>	<u>δύναμιν,</u>	4 + 7	= 11
πῶς ἂν ὁ ἦσσαν εἶη	τοῦτον ἀπόσασθαι		7 + 6	= 13
	καὶ ἀμύνασθαι	δυνατός;	5 + 3	= 8 [=33]
<u>εἰ δ' ἐστίν</u>	<u>ἀνθρώπινον νόσημα</u>		3 + 7	= 10
	καὶ ψυχῆς ἀγνόημα,		7	
	οὐχ	ὡς ἀμάρτημα μεμπτέον	1 + 8	= 9
	ἀλλ'	ὡς ἀτύχημα νομιστέον	1 + 9	= 10 [=36]

### Description (33)

PER 1 (1+1) [CLO :GRA, :PAR; SY :Ma.COP 1 + ABS.COP 2, :Rel ABS.COP 1+ COP 1]{CONT to P.32}

COL 6/7 (Cl 6, Cm 8)[ANT 4, PAR 6; ANA 4 (int), GRA 6, HOM 6, ISOC 4, PARIS 4; ALL 5; PLPT 7; CLO.INT.HIAT 1; RING 1]

WD 33 (CW 18, FW 15; WTDI 1.2)[WD.RI :CW 18/18, :All 24/33]{REF to θεός, θεῶν θείων in P.6, 9, 10ab, 11, 15, 35, cf. 7a, 18a; δύναμιν, δυνατός in P.7b, 10a, 15 (2x), 18b, 20a, 22a; πῶς in P.8a, 13a, 21a, 35; ἦσσαν in P.10b (3x); ἐστίν, εἶη in P.6 (2x), 8b, 15, 18c, 19b, 24, 30; τοῦτον in P.1, 14; ἀπόσασθαι NONE, cf. ἀπ-, ἀφ- in P.8a, 11, 14, 15, 17, 18a, 21b, 27, 28, 31a, 36, cf. ἀπατ- in P.14, 18c; ἀμύνασθαι NONE; ἀνθρώπινον in P.10ab; νόσημα in P.22b, 29; ψυχῆς in P.1, 3, 14, 16c, 18bc, 19c, 20b, 21a, 22ab, 25, 26, 32; ἀγνόημα NONE, cf. 20a, 28; γνώμη in P.21d, 34; οὐχ in P.5 (2x), 7a, 8a, 10b, 13a, 14, 19b, 19c (3x), 21c, 23a, 24, 25, 34 (2x), 20a (?); ἀμάρτημα in P.2, 18c, 24; μεμπτέον in P.2, 3, 4, cf. 2, 35, 36; ἀτύχημα in P.23a, cf. P.9, 11, 16c, 19d, 34; cf. τυγχάνειν in P.13a, 25; νομιστέον in P.16c; ἔχει P.7a (3x), 8a, 16ac, 19b, 19c (2x), 20a (2x), 22a, 25, 31a, 33}

SYL 69 (elided 2)[SL.RI :ISOS 14/69, :GRA 69/69; AC.RI :All 42/69, :Niv 43/69, :CLA 16/24; QU.RI :All 26/69, :CLA 24/24]{SL.RI :ISOS +19 to P.34}

ACC 25 (CEW 19, FW 6)[AC.RI :CEW 18/19, :All 16/25 SYM: CLA 6/7; :WD 23/33]

Period (33) corresponds to a complex conditional sentence, composed of two antithetical parts, connected with coordinating particles (μὲν-δέ) and expanded with parallel phrases. The period begins with the relative pronoun ὅς, representing the grammatical subject of this sentence (ἔρωσ, cf. P.32). The pronoun is used as a demonstrative in anaphoric function, at the same time introducing the period and referring to the grammatical subject.

Textual problems arise partly because of three missing copulas, but they do not hinder analysis of the syllabic rhythm, as the period is based on syntactic parallelism (parison) and a slight gradation. The emendation proposals suggest insertions: ὄν ἔχει or ἔχων (Donadi 1982: 16, MacDowell 1982: 28, 42). These emendations would result in isosyllabic rhythm patterns or a clearer sense, but they would destroy the triple polyptoton in adjacent words (cf. P.31b: πολλὰ δὲ πολλοῖς πολλῶν) and are not indispensable from the point of view of syntax. The syllabic rhythm is insignificant, but quantitative and accentual patterns emerge as a result of full parison: the adjacent cola have exactly the same syntactic structure, whereas the words are not only in same case, but of similar

formation types (-ημα, verbal adjectives) as well. This results in a greater number of homoeoteleuta and accentual and quantitative clausulae.

As the period concludes Proof 3, the role of the rhetorical question and nominal clauses without copula is again remarkable, supporting Gorgias' statement (Part IV.1.5).

(34)

ἦλθε γάρ,	ὡς ἦλθε,		<b>3+3 = 6</b>
<u>τύχης ἀγρεύμασιν.</u>	<u>οὐ γνώμης βουλεύμασιν.</u>		<b>6+7 = 13</b>
<u>καὶ ἔρωτος ἀνάγκαις.</u>	<u>οὐ τέχνης παρασκευαίς.</u>		<b>7+7 = 14</b> [=33]

**Description (34)**

PER 1 [CLO :GRA, :PAR; SY :Ma.VE 1, Rel.VE 1]{CONT to P.33}  
 COL 2/5 (C1 4, Cm 2)[ANT 4, PAR 2; ANA 2, EPAN 2, HOM 4, ISOC 6, PARIS 4;  
 WD.RP 2; ASY 2]{ISOC +1 to P.34}  
 WD 15 (CW 10, FW 5; WTDI 2)[WD.RI :CW 10/10, :All 15/15]{REF to ἦλθε, ἦλθε in  
 P.16c, 20a, 27; τύχης in P.9, 11, cf. 12, 16c, 19d, 23a, 33; cf. τυγχάνειν in P.13a,  
 25; ἀγρεύμασιν NONE; οὐ in P.5 (2x), 7a, 8a, 10b, 13a, 14, 19b, 19c (3x), 21c,  
 23a, 24, 25, 33, 20a (?); γνώμης in P.21d, cf. ἀγνόημα in P.33; βουλεύμασιν in P.9  
 (2x), 19c; βούλομαι in P.4, 21a, 36; ἔρωτος in P.7b (2x), 8a, 24, 31b, 32, cf. 35;  
 ἀνάγκαις in P.9, 20a, 20b (3x), 21c, 35 (2x); τέχνης in P.18c, 21c; παρασκευαίς  
 NONE, cf. cf. παρ-, παρα- in P.19b (2x), 19c (3x), 28, 30, 31a, 32}  
 SYL 33 [SL.RI :ISOS 33/33; AC.RI :All=Niv 12/33, :CLA 0/8 (8/20); QU.RI :All 8/20,  
 :CLA 0/8(8/20)]{QU.RI :ISOS 14 (incl) with P.35}  
 ACC 12 (CW 10, FW 2)[AC.RI :CW 10/10, :All 6/12; SYM :CLA 0/3 (2/6); :WD 8/15]

Period (34) corresponds to a compound sentence, beginning with a one-word main clause and a comparison, and finishing with parallel complement clauses. It is connected to P.33 by an explicative particle (γάρ) and it partly resumes the conclusion of Proof 3 (cf. P.33). As a result of the interaction with parallelism and repetition, its function as a closure is easily recognisable. But its character as a closure is double, since it repeats several keywords of the whole part of the proofs (fate, inevitability, love, force), preparing thus the recapitulation of the whole speech. It uses again the argument of the pardonable, stressing the involuntary nature of Helen's deeds. The motives, which characterise voluntary action: planning (γνώμης), the will (βούλευμα), art or intricacy (τέχνης) and preparation (παρασκευή) are denied.

The period is presented as a continuation of P.33, which is confirmed by the large-scale syllabic rhythm (P.34 includes 33 syllables, which is approximately the same length as in both sub-periods of P.33).

### **The recapitulation (DK 82 B 11.xx–xxi)**

Paragraphs XX and XXI (P.35–P.36) conclude the whole speech (as prepared by P.34). P.35 summarises, in four parallel participial clauses, all four proofs in reverse order: beginning from Proof 4 and moving towards Proof 1. This résumé is partly parallel to the introduction of the proofs in P.9: it repeats three or four of the reasons, given for Helen’s conduct in P.9: *θεία ἀνάγκη* (corresponding to the gods and ἀνάγκη in P.9 and Proof 1), *βία* and *λόγος* (as in P.9, Proof 2 and Proof 3), whereas the reference from P.9 to *τύχη* is omitted here (although it occurs in P.34). The reference to love, which is absent from the manuscript text in P.9 (and added to it by most editors), is added here (as well as to P.34). The period refers to the preceding proofs and their introduction, P.9 by resuming the formula of omission (*ἔπραξεν ἃ ἔπραξε*), by which Helen’s deeds were excluded from discussion. The conclusion refers back to P.2: Helen should not be reproached (*μῶμος*) and should be free from all accusations.

The references to preceding arguments are followed by a final recapitulation in P.36, where Gorgias resumes in four periods his own program, referring to his previously stated goals (cf. P.4) and adding a supplementary one: he has written an eulogy of Helen and an amusement for himself. An explicit reference to the encomium is new, but not unexpected, as the speech began with encomiastic *topoi* (see commentary to P.1–5). And although the last word of this speech (*παίγνιον*, a ‘toy’) seems to diminish its importance, we might remember how important such speeches concerning love are in certain dialogues of Plato before condemning it as merely a rhetorical showpiece.<sup>104</sup>

### **XX.**

Paragraph XX Diels corresponds to one period (P.35). Its four-fold parallelism (see above) has been taken as a ground for emendations in P.9, but it is not perfect. The reference to preceding proofs, presented by four feminine passive participles, is syntactically not homogenous. The passive aorist participle *ἔρασθεῖσα*, which refers to the last proof (the one, which was not referred to in P.9) has no complement, expressing the agent, whereas the others, referring to other proofs (corresponding to P.9) have dative complements of the agent. Proof 4 refers to Helen as falling in love herself, what means that she is the actor and not some external agent; therefore P.35 should not be taken as a ground for emendations in P.9. The conclusive statement (that the reproaches are unjust) is again presented in the form of a rhetorical question.

XX.

(35)

πῶς οὖν χρή	$\frac{3}{7} + 7 (=14)$
δικαίον ἡγήσασθαι τὸν τῆς Ἑλένης μῶμον,	$2 + 5 = 7$
ἥτις <i>εἴτ'</i> ἐρασθεῖσα	<b>7</b>
<i>εἴτε</i> λόγῳ πεισθεῖσα	<b>8</b>
<i>εἴτε</i> βίαι ἀρπασθεῖσα	$9+5 = 14$
<i>εἴτε</i> ὑπὸ θείας ἀνάγκης ἀναγκασθεῖσα	$3+4 = 7$
<i>ἔπραξεν ἃ ἔπραξε,</i>	<b>10</b>
πάντως διαφεύγει τὴν αἰτίαν;	<u>10</u>

### Description (35)

PER 1 [CLO :GRA, :FOLL.ASY, :RING; SY :Ma.IMPS 1, :Rel.VE 3]

COL 6/8 (Cl 6, Cm 5)[PAR 4; ANA 4, GRA 4, HOM 6; ISOC 6, PARIS 2; WD.RP 2+ PLPT 2; CLO.INT :HIAT 4 ; RING 1]

WD 30 (CW 18, FW 12; WTDI 1.5) [WD.RI :CW 15/18, :All 9/30]{REF to πῶς in P.8a, 13a, 21a, 33; χρή in P.2, 21a, cf. χρωμένους in P.19d; δίκαιον in P.12, 13b, 20b, 23a, 35, 36; ἡγήσασθαι NONE, cf. P.10b; Ἑλένης in P.3, 8ab, 11, 20a, 32, 36; μῶμον in P.2, 36, cf. P.2, 3, 4, 33; ἐρασθεῖσα cf. in P.7b (2x), 8a, 24, 31b, 32, 34; λόγῳ in P.1, 2, 4 (2x), 5, 8b (2x), 9, 13a (3x), 14, 15, 16c (2x), 17, 18a, 19ab, 20b (2x), 21a, 21b (2x), 21c (2x), 21d, 22a (2x), 22b, 23ab, 36 (3x), cf. λέξαι in P.3, 8a, λέγ- in P.6, 8a, 20b, 24, 30, cf. ἐλέγξει in P.3, 6, 21c; πεισθεῖσα in P.9, 14, 18b, 19a (2x), 20a, 20b (5x), 21ac, 22b, 23a; βίαι in P.9, 10b, 12 (2x), 13a, 20a (2x); ἀρπασθεῖσα in P.9, 12 (3x), 20a; θείας in P.15, 33 (1x), cf. P.6, 9, 10ab, 11, 33 (2x), cf. P.7a, 18a; ἀνάγκης, ἀναγκασθεῖσα in P.9, 20a, 20b (3x), 21c, 34; ἔπραξεν, ἔπραξε in P.9, 24 (πράγμα in P.1, 2, 16c (2x), 31b); πάντως in P.6, 7b, 19b (2x), 24, cf. 16c; διαφεύγει NONE, cf. φεύγω in P.26, cf. διά- in P.6, 8ab, 10a, 16c, 18a, 21c, 23b, 24, 25, 27 (3x); αἰτίαν in P.4, 8b, 11, 13a, 14, 20a, 23b, 24, cf. 10a (2x)}

SYL 70 (elided 1, elidables 4)[SL.RI :ISOS 42/70, :GRA 65/70, :RING 70/70; AC.RI :All 44/70, :Niv 52/70, :CLA 16/24(32); QU.RI :All 35/70, :CLA 16/24 (20/32)]{QU.RI :CLA+1 to P.34}

ACC 30 (CEW 19, FW 11)[AC.RI :CEW 17/18, :All 9/30; SYM :CLA 4/7; :WD 15/30]

Period (35) corresponds to a compound sentence, beginning with a main clause in the form of a rhetorical question (presented as a conclusion with πῶς οὖν) and continued by a relative clause. The relative clause is in its turn expanded by four parallel passive participles, which begin conditional clauses, and another, very short relative clause. The pattern is circular: abcc'c'"Cdb (**a** – the main clause; **b** – Pivot 1, introducing the first relative clause; **c** participial conditional clauses; **C** – the verb, concluding the conditional clause; **d'**– the relative clause, referring to Helen's deeds; **b'**– the verb and complement, concluding the first relative clause). The pattern in sense is circular as well: the references to Helen's innocence frame the centre, which describes her acts.

These circles are accompanied by circular patterns in syllabic rhythm: the period is framed by phrases of 10 syllables, preceded by complexes of 21

syllables, whereas in the centre a colon of 8 syllables occurs. But for listeners it is probably more important to observe the gradation and contrast between shorter and longer cola. Accentual patterns result from parallel phrases, as well as (occasionally) quantitative rhythm. The central figure of the period is parallelism, which presents the main points of Gorgias' arguments in the form of classical tetracolon auctum.

## XXI.

Par.XXI in Diels' edition, corresponding to P.36 concludes the speech by returning from rhetorical questions to auto-reference. The paragraph corresponds to one sentence complex with four independent juxtaposed sentences, whereas each of them begins with an asyndeton.<sup>105</sup>

## XXI.

### (36)

ἀφείλον τῷ <b>λόγῳ</b>	δύσκειαν γυναικός,	6 + 6	= 12
ἐνέμεινα τῷ νόμῳ	ὄν ἐθέμην ἐν ἀρχῇ τοῦ <b>λόγου</b> .	7+4+6	= 17
ἐπειράθην καταλῦσαι	μώμου <b>ἀδικίαν</b>	8 +6	
	καὶ δόξης <b>ἀμαθίαν</b> ,	7	[=21]
ἐβουλήθην γράψαι	τὸν <b>λόγον</b>	6+3	
	Ἑλένης μὲν <b>ἐγκώμιον</b> ,	8	
	ἔμὸν δὲ <b>παίγνιον</b> .	6	[=25]

### Description (36)

PER 1 (4x1)[CLO :GRA, :PAR; SY :Ma.VE 4, :Rel.VE 1]

COL 4/10 (CI 10, Cm 1)[PAR 8; GRA 4, HOM 4+4(int), PARIS 8; ALL 2, PLPT 3+PT 2; CLO.INT :HIAT 2; ASY 4]

WD 31 (CW 22, FW 9; WTDI 2.4)[WD.RI :CW 16/22; :All 6/31]{REF to ἀφείλον in P.15, 21b, cf. ἀπ-, ἀφ- in P.8a, 11, 14, 17, 18a, 27, 28, 31a, 33, cf. ἀπατ- in P.14, 18c; λόγῳ, λόγου, λόγον in P.1, 2, 4 (2x), 5, 8b (2x), 9, 13a (3x), 14, 15, 16c (2x), 17, 18a, 19ab, 20b (2x), 21a, 21b (2x), 21c (2x), 21d, 22a (2x), 22b, 23ab, 35, cf. λέξαι in P.3, 8a, λέγ- in P.6, 8a, 20b, 24, 30, cf. ἐλέγξαι in P.3, 6, 21c; δύσκειαν in P.11, cf. δυσ- in P.16c, 29; γυναικός in P.2, 3, 5 (2x); ἐνέμεινα NONE; cf. ἐν- in P.1, 7, 15, 18a, 21bcd, 28, 29 (2x), 31b (2x), cf. 25; νόμῳ in P.12, 13a (2x), 27 (2x); ἐθέμην cf. τιθέναι in P.2, 8b, 11; ἀρχῇ in P.8b, 10b; ἐπειράθην NONE; καταλῦσαι NONE, cf. ἀπολύσασθαι in P.11, 14; μώμου in P.2, 35, cf. P.2, 3, 4, 33; ἀδικίαν in P.12 (2x), 13b, 20b, 23a, 35; δόξης in P.4, 16b, 18bc, 19cd, 21b (3x), 21d, cf. δόξ- P.7b, δείκνυμι in P.4, 16ab, 21d, δοκέω in P.6; ἀμαθίαν in P.2, 4, cf. μαθεῖν in P.21a; ἐβουλήθην in P.4, 21a, 36, cf. βούλ- in P.9 (2x), 19c, 34; γράψαι in P.21c, 29, cf. 31a; Ἑλένης in P.3, 8ab, 11, 20a, 32, 35; ἐγκώμιον NONE; ἔμὸν cf. ἐγώ in P.4; παίγνιον NONE}

SYL 75 [SL.RI :ISOS 12/75, :GRA 63/75; AC.RI :All 28/75, :Niv 42/75, :CLA 0/16 (20+12/40); QU.RI :All 32/75, :CLA 0/16(40)]

ACC 30 (CW 22, FW 8)[AC.RI :CW 16/22, :All 16/30; SYM : CLA 0/4(7/11), :WD 15/31]

Period (36) is a period complex, composed of four periods, each corresponding to a sentence (although not one of these ends with a full stop in Diels' edition) and beginning with an asyndeton. These asyndeta mark the beginnings of sub-periods, especially their first cola, which interact with each other, in a combination of homoeoteleuta, parison and sound echoes (repetition of initial vowels or words of the same formation type). The parallelism between the sub-periods in sentence construction (parison) is evident, although not perfect. The syllabic rhythm lacks isosyllabic structures, as the whole period is constructed as a rising gradation (tetracolon auctum), which continues to the last and paradoxical (an amusement and eulogy, instead of apology) pair of cola (cf. Part IV.3.2.3).

### Notes to Part III

<sup>1</sup> DH *Letter to Gnaeus Pompeius* 2.13.8, the comparison of Plato to Gorgias and the criticism of his excessive usage of poetical devices (= 2.2 in Aujac 1992: 85). In Aristotle's *Rhetorics* the dithyrambic preludes are connected with continuous or serial style, whereas Gorgias could more easily be the example of periodic or complex style; in Dionysios the ground for comparison is the choice of the words and the usage of poetic schemata.

<sup>2</sup> For the *opinio communis* concerning the authenticity of *Helen*, see e.g. Jebb 1893 i: cxxiii–cxxv, Norden 1913, MacDowell 1982 and Donadi 1982. The authorship of *Helen* has been disputed by Friedrich Blass in the first edition of his *Attische Beredsamkeit* (Blass 1868: 65–72), although in the second edition he was for the authorship of Gorgias (Blass 1887: 68, 72, 75). For the criticism of Gorgias' excessive usage of rhetorical figures, see Diod.12.53.4, Dionysios from Halicarnassus, *De Demosthene* 4.22, *DCV* 12.39, Pseudo-Longinus 3.2.2 etc. The moderns have not been less severe, e.g. Blass 1887: 64–65.

<sup>3</sup> At first by Dionysios from Halicarnassus *De Dem.*5.5 (Aujac 1988: 56), who may be the first who used this name, see Noël 1999: 204–207. Diodorus Siculus 12.53.4 is the earliest to name Gorgias as the first user of several style figures: *antitheta*, *isocola*, *parisa* and *paromoia* (*homoioteleuta*) (= AS VII.32), cf. Radermacher 1951: 52–57.

<sup>4</sup> See Blass 1887: 66–67, Norden 1913, Rudberg 1942, Fehling 1969 and Buchheim 1996: 1026.

<sup>5</sup> One answer is that this ascription has arisen as the criticism of Asianist style, which modified the reproaches to Gorgias for his bad taste in the use of metaphors (already by Aristotle) and the reproaches for his excessive and demonstrative use of anthiteta, parisa and homoeoteleuta (Noël 1999: 193–4, 203).

<sup>6</sup> See Van Groningen 1958, Fehling 1969, Norden 1913. For Blass 1887: 66 these figures substitute in prose the metre and the rhythms of poetry; see also MacDowell 1982: 18–19.

<sup>7</sup> The rhythm of the text in its totality and its greater sub-parts is revealed in the thematic development or the pace of narration, not (or not only) in the first place in phrase rhythm features.

<sup>8</sup> The main function of epideictic rhetoric is defined as the praise of beauty (Lausberg 1960: 130), cf. Arist. *Rhet.* II.22.8 (1396a): ἐπαινοῦντες ἢ ψέγοντες εἴ τι καλὸν ἢ αἰσχρὸν ὑπάρχει, stressing that the topics should be found from the opposites. The definition of beautiful and the list of virtues, which have to be praised, are given in several places: Arist. *Rhet.* I.9.3–5 (1366ab): ... ἀνάγκη τὴν ἀρετὴν καλὸν εἶναι· ... μέρη δὲ ἀρετῆς δικαιοσύνη, ἀνδρεία, σωφροσύνη, μεγαλοπρέπεια, μεγαλοψυχία, ἐλευθεριότης, φρόνησις, σοφία. and *Rhet.* II.11.1 (1388b): τὰς τε ἀρετὰς εἶναι τοιαύτας, ..., οἷον πλοῦτος καὶ κάλλος ..., οἷον ἀνδρεία σοφία ἀρχή ... καὶ ὧν ἔπαινοι καὶ ἐγκώμια λέγονται, cf. *Rhet.* I.5.4 (1360b) and Arist. *Rhet.* I.9.33 (1367b), which stresses the importance of deeds: δεῖ οὖν τὰς πράξεις ἐπιδεικνύναι... τὸ δ' ἐγκώμιον τῶν ἔργων ἐστίν (τὰ δὲ κύκλω εἰς πίστιν, οἷον εὐγένεια καὶ παιδεία...). τὰ δ' ἔργα σημεῖα τῆς ἕξεως ἐστίν. For the discussion of Gorgias' epideictic oratory, see Pelliccia 1992: 66–67 and Buchheit 1960: 27–38.

<sup>9</sup> For example in Homer, *Iliad* 3.154, Alcaeus Fr. 283 Voigt (presenting Helen as the person who brought destruction on Troy and death for the soldiers), Sappho Fr.16 Voigt (where the military structures and love for one's family as military and social side of the polis are opposed to individual beauty and love), and Alcaeus Fr. 42 Voigt (where Helen, as the woman who neglected her husband and brought destruction to Troy is opposed to Thetis, who married Peleus lawfully and gave birth to Achilles, the destroyer of Troy). For the discussion of the political background of these poems, see Page 1955: 275–281, Rösler 1980: 221–240, for the connections to Gorgias, see Race 1989, Pelliccia 1992: 63sq.

<sup>10</sup> For the patterns of argumentation, based on two options, see Lloyd 1966: 116. Although Gorgias begins with epideictic themes and calls the speech finally eulogy, the middle part of it is more consistent with apologies of legal speeches (see the criticism by Isocrates, or.10.13–14). According to Gorgias' strategy his long apology serves to prove that Helen has to be praised, because she is not guilty.

<sup>11</sup> As these remarks do not refer to Helen, they could be reflecting the rhetorical theory and practice or moral philosophy of Gorgias or of his time. The topic of the mistake in argument and the lack of education is undeveloped in ancient rhetorical theory (cf. Arist. *Rhet.* II.12.8, 1389b), although this pair occurs in Platonic corpus, *Crat.* 420d: παρὰ τὴν βούλησιν ὄν, τὸ περὶ τὴν ἀμαρτίαν ἂν εἴη καὶ ἀμαθίαν, *Prot.* 357d-e and *Hipp.maj.* 290 a. Gorgias has been considered as a founder of a theory of deception on the basis of three of his fragments: the references to ἀπάτη later in this speech (DK 82 B 11.viii, x, here P.14 and P.18c), a fragment on theatre (DK 82 B 23) and the treatise *On the non-existent* (DK 82 B 3), see Verdenius 1981 and MacDowell 1982: 13–15. In this speech, ignorance and mistake are connected to δόξα (P.36 and P.18c).

<sup>12</sup> Plato, *Phaedr.* 267a criticised Gorgias for the lack of truth, but here Gorgias departs from the statement that he is speaking truth, cf. MacDowell 1982: 33. His strategy concerning the truth can be explained by Arist. *Rhet.* I.1.12 (1355a), which states that truth and justice are stronger by nature: χρῆσιμος δὲ ἐστὶν ἡ ῥητορικὴ διὰ τε τὸ φύσει εἶναι κρείττω τάληθῆ καὶ τὰ δίκαια τῶν ἐναντίων.

<sup>13</sup> This reminds the speeches in favour of both sides (*antilogiai*) by sophists. Protagoras is known as the author of the treatise *Antilogiai* (*Contradictory arguments*), DK 80 B 5, which has been lost, thus most of the literature on the genre is based on the anonymous 5th century treatise *Dissoi logoi* (DK 83) and on Antiphon's *Tetralogies* (Cole 1991: 75–76, 99).

<sup>14</sup> See the testimonies in Hdt.2.115–120, Plato, *Phaedr.*243ab and the Palinody of Stesichoros, fr.189–199 (with the discussion in Davison 1968: 196–225).

<sup>15</sup> In the end of the period, the demonstrative pronoun τούτων, used emphatically before ἀκοσμία, might achieve a similar result. For emphatic function words, see Part II.3.1.4.

<sup>16</sup> See Arist. *Rhet.*III.8.6 (1409a) sqq. on rhythm at the beginnings and in the ends of periods.

<sup>17</sup> The text is different in main branches of the manuscripts (Heidelbergensis X does not have a καί before πράγμα). Untersteiner 1967 and Bona 1974 seem to prefer it, see Paduano 2004: 89, whose preference is not clear. MacDowell 1982: 33 is in my opinion right, when he thinks that Gorgias is mainly seeking an even number of nouns here.

<sup>18</sup> The discussion of puns and word-play is not very common in scholarly literature, see most lately, Steinrück 2004a: 10–22 (on puns and word-play in Eunapios from Sardes).

<sup>19</sup> See Calame 1986 and Jakobson 1968: 353. Gorgias begins his speech at first as an anonymous orator and then refers to himself with a 1st person pronoun. During the whole speech he never leaves the mask of an orator, whereas the reference to the ideal orator (τοῦ δ' αὐτοῦ ἀνδρός) corresponds to the references to the Muse in poetry.

<sup>20</sup> A reference to the popular etymology of Helen's name occurs in Aischylos, *Ag.*681–698. For the discussion, see MacDowell 1982: 34.

<sup>21</sup> At least according to the printed editions the readings should be as given. The crasis of τάληθές could be a result of an editorial practice, but together with another editorial decision, the deletion of ἦ it would paradoxically give two isocola as well (of 6 syllables each).

<sup>22</sup> Compare τε ... καί in P.2, 3 etc.

<sup>23</sup> See Arist. *Rhet.* II.15 (1390b): εὐγενείας μὲν οὖν ἦθος ἔστι τὸ φιλοτιμότερον εἶναι... ἔστι δὲ εὐγενὲς μὲν κατὰ τὴν τοῦ γένους ἀρετὴν, γενναῖον δὲ κατὰ τὸ μὴ ἐξίστασθαι τῆς φύσεως. For φύσις, see also *Rhet.ad Alex.* 7.7, 11.3 and Menander *Rhetor Peri epid.*371.14 (with Russell-Wilson 1981: xix–xxvii).

<sup>24</sup> These are important topics for speeches in ancient rhetorical theory, see wealth, noble origin, power, wisdom in Arist. *Rhet.* II.111–13 (1388b–1390b).

<sup>25</sup> For the discussion of Gorgias' role in this context, see Gentili 1988: 54–55. *Delectatio* does not find its place in the system of rhetorical theory before Quint. *Inst.* 12.10.59, although it is present in the poetics from the beginning: see Arist. *Poet.*1448b (Ch. 4.6), 1453b (Ch. 14.5) and Lausberg 1960: 140–144 and 590–592. For pleasure coming from novelty, see Arist. *EN* 1175 (with *Rhet.*1379a). The importance of pleasure (especially of sounds) is stressed in the treatises of late antiquity: e.g. DH *De Lysia* 3, DCV 2–3 and 10–11, Ps.-Dem. *De eloc.*180–182 and Ps.-Long. *De subl.*39.1. For Gorgias it is important elsewhere as well, see DK 82 B 23.

<sup>26</sup> The argument from εἰκός is attributed to Teisias in Plato, *Phaedr.*273ab and it has been amply used by Antiphon (Reding 1985: 232–237). To εἰκός in Korax, *Techne*, see Arist. *Rhet.*II.24.11 (1402 b), cf. Cole 1991: 82–82, 96–97 and Rapp 2002: 191–199. For the origins of εἰκός in judicial speeches, see Reding 1985: 214, Gigon 1936: 109 and Blass 1868 I: 22.

<sup>27</sup> These topics are developed in the stasis theory, which is much later and can be brought back to Hermagoras, 3rd or 2nd century BC.

<sup>28</sup> For γνώμη in ancient rhetorical theory, see Arist. *Rhet.* II.21.1–16 (1394–1395); an example of a gnomic period is given by Herm. *Inv.* 4.3: ... ἔστι δὲ γνωμικὴ περίοδος αὕτη “τὸ γὰρ εἶδ’ πράττειν παρὰ τὴν ἀξίαν ἀφορμὴ τοῦ κακῶς φρονεῖν τοῖς ἀνοήτοις γίνεται”.

<sup>29</sup> οὐκ ἄδηλον occurs frequently as a pivot (in the end or in the introduction of a statement) in argumentative or explicative texts (e.g. oratory or philosophy).

<sup>30</sup> For ‘being’ and ‘telling’, cf. DK 82 B 3. See also Donadi 1982: 11 (*perche lo diceva, veniva confutato*), Kennedy 1991: 284 (*was disproved*) vs. Immisch 1927: 13 (*fama*), MacDowell 1982: 21, 35 (*was reputed because he said he was*).

<sup>31</sup> On such pairs of twins with double fathers, see Steinrück 1999.

<sup>32</sup> See Dover 1960 and Part II.2.2.5.1. For the cohesive function of anaphorics and deixis, see Päll 2005: 339–340, cf. Ehlich 1983.

<sup>33</sup> For such pauses in certain stylistic devices, see Steinrück, *Vers und Stimme* (to appear). For a change, signalling something, see Herrnstein Smith 1968.

<sup>34</sup> Although not yet with a verbal adjective, which occurs for a rhetorical figure for the first time in Platon, *Prot.* 343e. Lausberg 1960: 252–253, 357–358 gives the definitions, which are found only in late handbooks, not the prehistory of the notion. MacDowell 1982: 35 translates ‘skipping’ and comments the interlacing, but not the technical term. Kennedy 1991: 285 takes another direction and understands it as *exceeding the time of introduction* (referring to the possible meaning of *logos* in Arist. *Rhet.* 1409b, III 9.6, cf. Kennedy 1991: 241 vs Cope 1877 III: 100), but this interpretation leaves entirely out the opposition τὸν χρόνον ... τὸν τότε ...νῦν (‘then’-‘now’) and the parallelism with preceding figure of omission in P.8a.

<sup>35</sup> This word-play is commented by Immisch 1927: 15, and indicated in the translation by Kennedy 1991: 284 (*propose...proposition*).

<sup>36</sup> For example Arist. *Rhet.* III.16.1 (1416b) and *Rhet. Ad Alex.* 30.2. Both authors tell that the narration (here corresponding to proofs) should start by concise enumeration of the facts.

<sup>37</sup> The introduction of the following period (P.10a), εἰ μὲν οὖν does not add much: in Gorgias, *Helen* such introductions occur at the beginnings of greater textual units and their main function is transitional (cf. Denniston 1996: 470–473 and Kühner – Gerth 1904 II: 157).

<sup>38</sup> The practice of combined closure (e.g. a résumé of what has been told) and beginning (e.g. the list of the following points) occurs often as a cohesive element in the beginnings of the subparts of greater analytical works, e.g. in Arist. *Rhet.* II.1.1 (1377b), III.1.1 (1403b).

<sup>39</sup> Except Untersteiner 1967, who has defended the unemended text.

<sup>40</sup> This corresponds in the stasis theory to a shift within the stasis of quality: the shift of guilt to another person is changed for seeking pardon.

<sup>41</sup> Cf. Immisch 1927: 12, who states that Gorgias’ rhythm is always binary, but supports still the emendation (ibid.: 19–20).

<sup>42</sup> See Arist. *Rhet.* II.19–20 (1392–1396a), Lloyd 1966 and Gomperz 1912.

<sup>43</sup> This reappears in the recapitulation, P.35 (DK 82 B 11.xx). A parallel for divine necessity occurs in *Rhet. ad Alex.* 1.12: ... ἐξ ἀνάγκης θείας ἢ ἀνθρωπίνης. In Aristotle, the necessity is one of external forces, distinguished from the fate and not connected to the gods, see *Rhet.* 1368b: ... τῶν μὲν οὖν μὴ δι’ αὐτοὺς τὰ μὲν διὰ τύχην πράττουσι τὰ δ’ ἐξ ἀνάγκης, τῶν δ’ ἐξ ἀνάγκης τὰ μὲν βία τὰ δὲ φύσει,

ὥστε πάντα ὅσα μὴ δι' αὐτοὺς πράττουσι, τὰ μὲν ἀπὸ τύχης τὰ δὲ φύσει τὰ δὲ βία. ὅσα δὲ δι' αὐτούς, καὶ ὧν αὐτοὶ αἴτιοι. The same couple occurs in Agathon (quotation in Arist. *Rhet.* 1392b), but in Gorgias, *Helen* the φύσις does not occur in the discussion before P.31b (DK 82 B 11.xviii). The usage of the topos of necessity in oratory is very clear, see e.g. Antiphon, *De choreuta* 25.2: Ἐπίστασθε δὲ, ὦ ἄνδρες, ὅτι αἱ ἀνάγκαι αὐταὶ ἰσχυρόταται καὶ μέγισταί εἰσι τῶν ἐν ἀνθρώποις, καὶ ἔλεγχοι ἐκ τούτων σαφέστατοι καὶ πιστότατοι περὶ τοῦ δικαίου.

<sup>44</sup> Cf. Steinrück 2004b, Chiron 1999, Fowler 1982 and Trenkner 1960 (all very different).

<sup>45</sup> The εἰ οὖν ... [ἦ] in Diels at the beginnings of the clauses is an emendation of ἦ ... ἦ of the manuscripts, the deletion proposition coming from Dobree; εἰ ... ἦ is proposed by MacDowell 1982: 22 (and Buchheim 1989: 6), and εἰ ... καὶ by Reiske and Donadi 1982: 9, 13.

<sup>46</sup> As a counter-argument: according to the electronic TLG ἦ οὖν ... ἦ can be found in 8 parallel examples by Aristotle (incl. *Probl.* 865a.17 with double verbal adjective), in 15 examples only by Alex.Phil *Comm. in Arist. Met.* (not regarding his other works); it can occur in orators as well, e.g. in Dem. *Phil.* 4, *Lib. Decl.* 1.40 etc.

<sup>47</sup> For Aristotle, see the preceding note. The only two examples by Plato involve a discussion of speech strategy, see *Gorg.* 482b, and *Rep.* 350e, otherwise he uses conclusive questions like: Ἡ οὖν... ἦ... ; (16 examples presenting a choice).

<sup>48</sup> See Arist. *Rhet.* 1386a and 1416a (III 15.3) and Antiphon *Tetr.* 2.21: Ὑπὸ δὲ σκληρᾶς ἀνάγκης βιαζόμενος, καὶ αὐτὸς εἰς τὸν ὑμέτερον ἔλεον, ὦ ἄνδρες δικασταί, καταπεφευγῶς δέομαι ὑμῶν for the appeal for pity.

<sup>49</sup> For this topos (πρὸς ἄλληλα), see Arist. *Rhet.* II.23.3 (1397), Cope 1877 II: 241.

<sup>50</sup> There are other references to the first argument, most evidently the opposition of violence and unlawful conduct vs. bad fortune (ἐδυστύχησεν), which might seem strange without parallels in P.9 and P.11.

<sup>51</sup> It occurs in both cola in A and once in X, see Donadi 1982.

<sup>52</sup> The rhythm demonstrates, why the present text: εἰ δὲ βίαι — ∪ ∪ — — — — (as in P.9 and 35) should be retained and not replaced by an emendation proposal βίαίως, which would destroy the quantitative rhythm pattern.

<sup>53</sup> Caesurae in verse, which fall as a rule between μάλλον and ἦ prove that it is the right place for a prosodic boundary, see e.g. Eur. *Ion* 1216: ἀπερυθριάσαι μάλλον ἦ σχεῖν πράγματα. The only exceptions I have managed to find are two trimetres where μάλλον ἦ occurs in the very end of the verse: Soph. *Oed.* 585 and Timocr. Fr. 12.1 Kock (cf. Raalte 1986: 218–221 for the monosyllables at verse-end).

<sup>54</sup> On Gorgias' theory of speech, see MacDowell 1982: 12–16, Reding 1985: 212–219, Paduano 2004: 61–72.

<sup>55</sup> He is the first to rationalise the whole emotive apparatus, see Havelock 1963: 145–164.

<sup>56</sup> For Gorgias' sceptical gnoseology, see DK 82 B 3.81 and Reding 1985: 213–216. A parallel can be found in Democritus, Fr. 135.65–66: πᾶν τὸ σῶμα τὸν ψόφον εἰσιέναι, καὶ ὅταν εἰσέλθῃ διὰ τῆς ἀκοῆς διαχεῖσθαι κατὰ πᾶν, ὥσπερ οὐ ταῖς ἀκοαῖς, ἀλλ' ὄλωι τῶι σώματι τὴν αἴσθησιν οὖσαν.

<sup>57</sup> His teacher's theories might have influenced his choice of argument, cf. Empedocles, DK fr. 3.14–18:

ἀλλ' ἄγ' ἄθρει πάσῃ παλάμῃ, πῆι δῆλον ἕκαστον,  
 μήτε τιν' ὄψιν ἔχων πίστει πλέον ἢ κατ' ἀκουήν  
 ἢ ἀκοὴν ἐρίδουπον ὑπὲρ τρανώματα γλώσσης,  
 μήτε τι τῶν ἄλλων, ὀπόσῃ πόρος ἐστὶ νοῆσαι,  
 γυίων πίστιν ἔρυκε, νόει δ' ἦι δῆλον ἕκαστον.

See the discussion of Empedocles in Mourelatos 1985: 622 and Reding 1985: 227–228.

<sup>58</sup> For *poiesis* as the art of speech in a large sense (poetics and rhetorics together), not only verse, see Hamburger 1957 and Brogan c, h. The nature of Gorgias' rhythm, which is based on counting, is in favour of the larger definition, in theory we can find proof from the discussion of rhythm in Arist. *Rhet.* III.3.8 (1408b–1409a), Cope 1877 III: 82–91. Gorgias' examples could be interpreted as defining at first oratory and then poetry, or giving at first a concrete, case-specified example and then a more general one. The editors and translators of Gorgias have supported both interpretations: as poetry (Mac Dowell 1982: 37 and Kennedy 1991: 286 referring to the criticism in Arist *Poet.* 1.10–12) and as the art of speech (Donadi 1982: 13 *poesia nel suo complesso* and Paduano 2004:93, following Romilly 1975: 8).

<sup>59</sup> For longing (πόθος) as aroused by sight (ὄψις) of artworks (pictures or sculptures) of persons, but not giving pleasure, see Xenophon, *Symp.* 4.22.

<sup>60</sup> See the definition of tragedy in Arist. *Poet.* 1452: ἐστὶν· ἡ γὰρ τοιαύτη ἀναγνώρισις καὶ περιπέτεια ἢ ἔλεον ἔξει ἢ φόβον (οἴων πράξεων ἢ τραγωδία μίμησις ὑπόκειται), cf. *Poet.* 1453, 1456, *Rhet.* 1354 and 1386. For the place of power and fear in speeches, cf. *Exc. var.* (Walz 1823–1836 VII: 33): Ὅτι ἔργον ῥήτορος, ὡς φησι Θεοδέκτης, προομιάσασθαι πρὸς εὐνοίαν, διηγῆσασθαι πρὸς πιθανότητα, πιστώσασθαι πρὸς πειθῶ, ἐπιλογίσασθαι πρὸς ὀργὴν ἢ ἔλεον.

<sup>61</sup> Gorgias introduces apodosis with οὐδέ in DK 82 B 3.70 and 74 and DK 92 B 11.III too.

<sup>62</sup> For examples and the classification of so-called fork-periods, where coordinated clauses share another component of the phrase (type: qaba'b' or aba'b'q or even abqa'b'), see Lausberg 1960: 366–374.

<sup>63</sup> There is as yet no method for the analysis of rhythm emerging as a result of occurrences of different pragmatic functions. Such a method could be based on the analysis of the syntactic structure of the sentence, combined with rhetorical figures.

<sup>64</sup> If the words were pronounced with an elision, we would have two halves with exactly the same number of syllables (31).

<sup>65</sup> See e.g. the usage of δεῖ in Isocr. *Paneg.* 173.1 or Dem. *Erot.* 1.2.

<sup>66</sup> It is not clear, whether the particle τε coordinates here the complements in a noun phrase πραγμάτων καὶ σωμάτων, the relative phrases (ἦς ... εἰσηλθε and ἴδιόν τι ... ἔπαθεν ἢ ψυχῇ) or the main phrases (τὴν ποίησιν ἅπασαν καὶ νομίζω καὶ ὀνομάζω and ἴδιόν τι ... ἔπαθεν ἢ ψυχῇ). However, this ambiguity should not be considered as a mistake, but a typical feature of Gorgias' style.

<sup>67</sup> For φέρε δῆ, see e.g.: Dem. 18.106, 267; 19.234, 251, 20.26 and 30.25.

<sup>68</sup> See Plato *Ion* 533e: πάντες γὰρ οἱ τε τῶν ἐπῶν ποιηταὶ οἱ ἀγαθοὶ οὐκ ἐκ τέχνης ἀλλ' ἐνθεοὶ ὄντες and Ps-Long. *De subl.* 13.2. For enchantment through pity and fear (by poets or by orators), see Reden 1995: 45–50, Havelock 1963: 145–164 and Gentili 1988: 54.

<sup>69</sup> *Techne* occurs two more times in this speech, referring to the art of words in general, cf. the opposition of art and truth (P.13), and art and ἀνάγκη (P.19).

<sup>70</sup> See Parmenides DK Fr.1.53 DK, Fr.8.51–52 and Arist. *Rhet.* III.1.5 (1404a): ἄλλ' ὅλης οὔσης πρὸς δόξαν τῆς πραγματείας τῆς περὶ τὴν ῥητορικὴν· ...ἐπεὶ δ' οἱ ποιηταί, λέγοντες εὐήθη, διὰ τὴν λέξιν ἐδόκουν πορίσασθαι τὴν δόξαν, διὰ τοῦτο ποιητικὴ πρώτη ἐγένετο λέξις, οἷον ἡ Γοργίου... Cf. *Rhet. ad Alex.*14.8–9 and Reding 1985: 194–212.

<sup>71</sup> Cf. Arist. *Rhet.* I.3.4 (1358b).

<sup>72</sup> When a polyptoton is regarded only in the strict sense and in contact positions (as Gygli-Wyss 1966), this function of stem repetition remains ignored (it cannot be registered because of the final stop between P.18b and P.18c). Trenkner 1960: 64–65 interpretes the concatenation in Herodotos as an archaic characteristic of λέξεις εἰρομένη, but here its function is to form rounded periods.

<sup>73</sup> Or the beginning, middle and end of P.19b, if we choose to analyse P.19bc as one sentence.

<sup>74</sup> Such rhythmic usage of καί ... δέ can be seen in some other cases as well, e.g. Heracl. Fr. 12 DK, where it helps form a gradation: appositive groups or words of 4 + 5 + 6 syllables after two isocola of 13 syllables.

<sup>75</sup> For interpretations, see Kerferd 1981: 81 and criticism in MacDowell 1982: 38.

<sup>76</sup> MacDowell 1982: 38 does not see the importance of the litotes, which points to the next period (describing the actual situation), and makes emendation proposals. Donadi 1982: 12 prefers to replace the imperfect verb of ms. A (ἦν) with the present participle and finish the period with the verb ἠ<πά>τα, following Blass and Diels. Cf. the next note.

<sup>77</sup> These first words have been emended by Blass as: ἠ<πά>τα νῦν δέ, interpreting the verb as the end of P.19b and the connector between the periods as opposition, Donadi 1982: 12–13 supports it, whereas MacDowell 1982: 24 and 38 prefers to regard the end of P.19b as corrupt and supplies the manuscript readings by: ἀλλὰ νῦν γέ, denouncing his earlier (ingenious) support for manuscript readings, defending ἦ τὰ νῦν γέ (in MacDowell 1961: 121).

<sup>78</sup> See to ὥστε in LSJ, for concluding ὥστε, Schwyzer – Debrunner 1988 II: 679–681.

<sup>79</sup> The possible source of textual problems might be a reference to an external context, Gorgias' doctrine on poetry or rhetoric, or to Greek melic poetry (ῦμος), as he is in polemics with Greek poets about Helen. (A possible line of thought: poetry affects people, like magic incantations, which preclude the thought; could the hymn have affected Helen?)

<sup>80</sup> For discussion and solutions of textual problems, see MacDowell 1982: 15, 39 and Donadi 1982: 14–15. Could the references to the mind come from Gorgias' theory? See Plato, *Gorg.* 466e–467a: ...Οὐκοῦν ἀποδείξεις τοὺς ῥήτορας νοῦν ἔχοντας καὶ τέχνην τὴν ῥητορικὴν... ἡ δὲ δύναμις ἐστίν, ὡς σὺ φῆς, ἀγαθόν, τὸ δὲ ποιεῖν ἄνευ νοῦ ἃ δοκεῖ καὶ σὺ ὁμολογεῖς κακὸν εἶναι· Cf. *Leges* 730c: ὁ δὲ ἄπιστος ᾧ φίλον ψεῦδος ἐκούσιον, ὅτω δὲ ἀκούσιον, ἄνουσ, Arist. *EN* 1096b and *Rhet.* 1326a.

<sup>81</sup> In the first case there would be an opposition between ἔξις and δύναμις, in the second case the opposition of present and future forms. For ἔξεστι in arguments, cf. Antiph. *In nov.*6.3 etc.

<sup>82</sup> It could be a gloss βία for a hapax βιατήριον or a slight corruption, e.g. of βίαι (a dative instead of a nominative). Cf. Donadi 1982: 14–15 and MacDowell 1982: 39.

<sup>83</sup> See Aristotle, *Rhet.* II.20.2 (1393a–1394) and Cope 1877 II: 195 and 1867: 254–256.

<sup>84</sup> For the polemics of Gorgias with Parmenides, see n.70 above, cf. Marrou 1948: 83–96 and Mourelatos 1985: 628–630 on this passage and the education program of the sophists.

<sup>85</sup> For the comparison of rhetoric to medicine, see Plato, *Phaedros* 270b–c; for the discussion of poetry as magic, J. Romilly 1973, 1975, Furley 1993 and Havelock 1963: 145–164 on the body.

<sup>86</sup> E.g. in the beginning of Herodotus, *Histories*.

<sup>87</sup> Cf. e.g. Thuc. 1.40.2, 1.120.2.

<sup>88</sup> See Parry 1929: 203, and Part I.3.4.3, IV.3.1. There are close categories in other authors (“progressive enjambement”, including continuation with relative phrases, see Kirk 1966: 106–107 and “adding enjambement”, see Higbie 1990: 29, “unessential” in Peabody 1975: 393). The problem is that it could also be classified under Parry’s “not harsh necessary”, Peabody’s “essential”, Kirk’s “periodic” or Higbie’s “clausal” class, as all these researchers define the completeness of thought on the basis of a finished sentence. This is opposed to the idea, that only completeness of an information unit is essential (Bakker 1997) and not the dependence structures. For the history of this category, see Dionysios from Halicarnassus, *De comp.* 26, Rhys Roberts 1987: 27.

<sup>89</sup> For adoneus in Sapphic stanzas, see Sappho Fr. 1, v.4, 24, 28 (clausulae), v.8 (pivot).

<sup>90</sup> The suppression of the article τῶι would result in an anapaestic rhythm throughout the whole relative phrase (ὅτι δ' ἡ πειθῶ προσιοῦσα τῶι λόγῳ... ἐτυπώ-σατο).

<sup>91</sup> To ἀναγκαίους for speeches, see Dem. *De cor.* 59.6, DH *De Thuc.* 17 etc. It has been understood as a reference to contests in law-courts, see MacDowell 1982: 39–40 or as belonging to a political context, see Bona 1974: 25 in Paduano 2004: 96.

<sup>92</sup> A play on two senses of one word, occurring in different cases and meanings, has been discussed by ancient rhetorical writers, see Quint. 9.3.69: ... *amari* (inf.)... *amari* (gen.). In Her. 4.14 it is called *traductio*, in Herm. *Peri ideon* 2.5 δριμύτης; it can be discussed as a sub-type of polyptoton or antanaclasis (Lausberg 1960: 333 and Brogan 1993d: 967–968).

<sup>93</sup> Such internal rhymes between a word-end at caesuras and another word-end at caesura and a word at rhyme-end with another word at rhyme end, are called cross-rhymes (rime brisée), see Brogan 1993a: 613–614.

<sup>94</sup> These are similar to the interlocking word order in Pindar (Sulzer 1961, cf. Conrad 1990).

<sup>95</sup> It is clear evidence for Gorgias’ hidden agenda: to present his theory of perception (and emotions), cf. Gorgias, DK 82 B 3.81. It has been stated several times that the main subject of Proof 4 is sight, see e.g. Donadi 1985: 482.

<sup>96</sup> See Sulzer 1961, Conrad 1990, Devine – Stephens 2000, Marcovich 2006. The present type of interlocking word-order rises from the attributive position of the genitive complement.

<sup>97</sup> On involuntary actions, see above, n.43 and Arist. *Rhet.* I.12.14 (1372b): καὶ οἷς ἂν ἐνδέχεται διὰ τύχην δόξαι πράξαι ἢ δι' ἀνάγκην ἢ διὰ φύσιν ἢ δι' ἔθος, καὶ ὅλως ἀμαρτεῖν ἀλλὰ μὴ ἀδικεῖν.

<sup>98</sup> As this idea has no parallels in the speech and does not directly benefit the defense of Helen, it can be explained best as a reference to Gorgias' theory of perception.

<sup>99</sup> We can see the emergence of this notion in Solon's history about the Athenian Tellos, Herodotus, *Histories* 1.30 (in Sappho Fr. 50.2 Voigt it is not clear).

<sup>100</sup> For the shattering (τάραξις) of the soul, cf. Plat. *Resp.* 612c: ... καὶ ἐξέχοντα διὰ τὴν περὶ τὰ χρώματα αὐτὴν πλάνην τῆς ὄψεως, καὶ πᾶσά τις ταραχὴ δῆλη ἡμῖν ἐνοῦσα αὐτῇ ἐν τῇ ψυχῇ ᾧ δὴ ἡμῶν τῷ παθήματι τῆς φύσεως ἢ σκιαγραφία ἐπιθεμένη γοητείας οὐδὲν ἀπολείπει ..., cf. the references to the verb ταρασσῶ in Democr. Fr.298a.4.

<sup>101</sup> We can recognise another reflection of Gorgias' theory of perception in this difficult passage (κινδύνου τοῦ μέλλοντος <ὡς> ὄντος). As in P.24, the existence and possible existence are compared, although the result might be the same.

<sup>102</sup> See Kallinos Fr.1 and Tyrtaeus Fr.6 and Fr.8 G-P vs. Archil. Fr.5 West.

<sup>103</sup> For σχῆμα, see Celentano – Chiron – Noël 2004. For visual arts in later tradition, see Xen. *Mem.*3.10.1–3: ... γραφικὴ ἐστὶν εἰκασία τῶν ὁρωμένων; ... καὶ τὰ παλαιὰ σώματα διὰ τῶν χρωμάτων ἀπεικάζοντες ἐκμιμῆσθε. Cf. Plat. *Resp.* 601b (ἐκ τῶν χρωμάτων δὲ καὶ σχημάτων θεωροῦσιν).

<sup>104</sup> Cf. Plato, *Polit.*288c, Dem. *De eloc.*120. Gorgias' fragment has been condemned because of this by Nestle 1922, Gomperz 1912: 35 vs. Gigon 1936 (see Reding 1985: 194–196).

<sup>105</sup> The role of asyndeton in conclusions is mentioned in the end of Aristotle's *Rhetoric*, see Part II.3.4.2.2.

**PART IV.**  
**RHYTHM IN GORGIAS: DYNAMICS,**  
**CHANGE AND INTERACTION**

**1. Dynamics of text: rhythm and division of the speech**

**1.1. Thematic and rhythmic organisation of Gorgias, *Helen***

The dynamics of the thematic and rhythmic organisation of Gorgias, *Helen* can be revealed in the development of the argument and the rhythm of the repetition of themes and ideas, but the rhythm can be expressed by special rhetorical figures or the underlying structure as well.

Some observations about Gorgias' prose rhythm, made during the analysis in Part III, did not find further elaboration because of the smallness of the corpus and the need for further studies: e.g. the question of the rhythmic function of hiatus (e.g. in P.10a) in Gorgias' prose; or the structural function of sound echoes (e.g. P.15); so-called emphatic accent clashes (e.g. P.1); or the compensatory nature of the distribution of rhetorical figures. Other, numerous features such as polyptoton, anaphora, homoeoteleuton and word repetition were omitted from the statistical analysis, because at the present stage of research, the method of analysis is not definitive enough to show clearly how to study the combination of both their position in a period and their connection to sound repetitions. The choice of prose rhythm features, examined in Part IV, has been made on the basis of eminence (the flexibility of phrase rhythm), existing research tradition (the analysis of prose metre) and applicability for the study of the thematic development of the speech (discourse dynamics).

Although the aim of this dissertation is to study the possibilities for description of rhythm on the level of the period, the study of the dynamics of rhythm in the whole speech helps to improve the method of the study of elementary textual units. Therefore in this chapter the whole speech is described by means of a critical synopsis, in order to compare it in following chapters with the analysis of different speech rhythm characteristics: the repetition of keywords, syntax and word type distribution, auto-reference, phrase and syllabic rhythm etc.

**1.2. The synopsis of Gorgias, *Helen***

According to the thematic analysis, combined with criteria of syntax and rhythm, the entire text of Gorgias, *Helen* can be divided into the following subdivisions (in diminishing order): the totality of the text, the subparts of the text (the introduction, the main part i.e. the proofs, and the recapitulation), the

subdivisions of these subparts (Parts AB of the introduction, the proposition, Proofs I to IV), smaller parts of these subdivisions (e.g. examples I–II in Proof III), the paragraphs (Par.) and the smallest subdivisions, 53 periods (Per.).<sup>1</sup>

All these subdivisions are presented in the synopsis below (Table 1), in order to enable the correlation of different analyses of the dynamics of several speech rhythm features in Gorgias, *Helen*.

**Table (1)**

	I. Introduction
	Part A. Speech and its subjects in general
Par. I	
Per.1 – Beautiful objects	
Per.2 – Objects of praise	
Par. II	
Per.3 – The duty of the orator	
Per.4 – The will of the author	
	Part B. The subject of this speech
Par. III	
Per. 5 – It is generally known, that Helen is the first among women by her nature and origin	
Per. 6 – Helen’s mother is Leda, whereas she has two fathers (a god and a man)	
Par. IV	
Per. 7a – Helen’s beauty	
Per. 7b – The love she arouses	
Par. V	
Per. 8a – Aposiopesis: Helen’s flight to Troy	
Per. 8b – A promise to present probable reasons (εἰκός), for why Helen went to Troy	
	PROOFS
	Proposition
Par. VI	
Per. 9 – The reasons for Helen’s deeds: fate, the gods, inevitability; force or words; <love?>	
	PROOF 1
Per. 10a – If it is the first reason (the gods), she is not guilty	
Per. 10b – Humans cannot resist gods, who are stronger because of their strength and wisdom	
Per. 11 – If the reason is fate and the gods, Helen should be freed from ill fame	
	PROOF 2
Par. VII	
Per. 12 – If Helen was violated, the violator is guilty	
Per. 13a – Therefore Paris should be punished by word, law and deed, and Helen pitied	
Per. 13b – Paris did awful things, whereas Helen suffered	

### PROOF 3

Par. VIII

Per. 14 – If word or speech is guilty, the argument is as following:

Per. 15 – Speech is a mighty ruler: it removes fear and sorrow, brings happiness and pity

Par. IX<sup>2</sup>

Per. 16ab – A promise to prove the preceding thesis through opinion (δόξα)

Explanation A

Per. 16c – πείνησις brings fear, pity and longing, the soul is affected

Per. 17 – A promise of a new proof

Explanation B

Par. X

Per. 18a – Divine incantations bring pleasure and remove sorrow

Per. 18b – They influence the soul through the opinions

Per. 18c – There are twofold incantations (as magic): mistakes of the soul and the deception of opinion

Par. XI

Per. 19a – They persuade by deceptive speech

Per. 19b – If everyone knew the past, the present and the future, the speeches would be similar to each other

Per. 19c – At the present time we don't know the past, present and future, therefore the soul has to rely on the opinion

Per. 19d – The opinion is unstable and brings unstable happiness.

Par. XII

Per. 20a – We can consider Helen as violated, because persuasion has the power of inevitability

Per. 20b – As speech persuaded the soul with its violence, Helen should not be reproached

Par. XIII

Per. 21a – Persuasion makes what it wants of the soul with speech. We have to learn this:

Per. 21b – from natural science, which creates opinions

Per. 21c – from politics, where speech persuades in violent fights

Per. 21d – from philosophy, where the opinions become unreliable

Par. XIV

Per. 22a – The power of speech on the soul is equal to the power of medicine on the body

Per. 22b – Drugs affect the body, speech affects the soul with persuasion, bringing sorrow, happiness, fear and bravery

Par. XV

Per. 23a – Therefore, if she was persuaded, she should be not be considered guilty

### PROOF 4

Per. 23b – Passage to the fourth reason

Per. 24 – If the reason was love, she is not guilty (in the so-called mistake)

Per. 25 – We cannot influence what we see, whereas the sight affects the soul

#### Example A

Par. XVI

Per. 26 – Sight of the enemy's armed bodies drives the soul into disorder and forces persons to flee

Per. 27 – Respect for the law departs because of fear and sight, and the sense of honour (καλοκαγαθία) is lost

Par. XVII

Per. 28 – Therefore persons, who see fearful things, lose their minds

Per. 29 – Many persons have trouble, illness and mania because of things they see, which are written in the mind by sight

Per. 30 – Several other awful things are left untold

#### Example B

Par. XVIII

Per. 31a – Artists and sculptors create bodies, which give happiness and pleasure to sight

Per. 31b – Different things bring sadness to sight and arouse love and longing for things and bodies

Par. XIX

Per. 32 – It is understandable, that her eye saw Alexander's body and it brought love into her soul

Per. 33 – If the reason is the gods, then humans are not guilty; if it is a person, it should not be considered Helen's mistake, but ill fate

Per. 34 – She went to Troy because of fate and the inevitability of love, not as a result of planning and art

#### RECAPITULATION

Par. XX

Per. 35 – Helen cannot be reproached, as she went for love, or was persuaded by speech, or taken by force or forced by divine inevitability

Par. XXI

Per. 36 – Fulfilled tasks: removal of ill fame; fidelity to the initial plan; dissolving the unfairness of blame and the ignorance of opinion, writing a speech as an eulogy and a toy

The synopsis reveals that some divisions into periods, which have been made on the basis of their rhetorical form or syntax, do not entirely match the division of the argument, as in P.21a–d and P.29–30. However, this does not mean that the analysis of the text into periods should be changed automatically: the mismatch between different levels of the text (phrase rhythm, syntax, sense etc.) cannot be removed by preferring one level of rhythm to others.

The textual problem in P.9 (see Part III.2) becomes clearer after examination of the synopsis: the four reasons for Helen's departure to Troy, stated in four proofs (the gods, violence, speech, sight/ love) are reduced step by step to the first two in the conclusions of these proofs. Thus the three reasons, which are stated in the beginning: 1) gods, fate, inevitability, 2) violence, 3) speech (the fourth, love in the edition of Diels has been added by editors) are reduced to the interference of divine forces and violence, so that it becomes possible to apply

the topos ἐξ ἀνάγκης (that Helen's deeds were not of her free will). This enables us to re-formulate the question of editors, concerning this passage ("Why love is not present in the initial list of reasons in P.9?") as follows: "Why speech is added to the list of reasons, presented in P.9?" One possible explanation: Gorgias' preference for parallelism in binary structures in period-ends is discussed below (Ch.1.6), another is even more plausible: the interest in the power of speech is in accordance to his own theories, concerning rhetoric.

### 1.3. Keywords in Gorgias, *Helen*: word rhythm I

#### 1.3.1. The functions and types of the keywords

Keywords, i.e. (content) words, which express the ideas of the speech, reappear frequently in Gorgias, *Helen*, characterising the development of the argument. In *Helen*, Gorgias uses different types of keywords: some of them reappear frequently during the whole speech (as λόγος, 'the word', or ψυχή, 'the soul'), whereas most of them appear only in some subparts or even only their own subpart of the speech (although they might be repeated several times within it). For example, γυνή ('woman') occurs five times in the beginning of the speech (from P.2 to P.5), reappearing in the recapitulation (P.36), whereas ἀμαθία 'ignorance' occurs three times, in the beginning and in the end (P.2, P.4 and P.36). Some of these keywords occur in the speech infrequently and within a great distance, for example ἀμαρτία 'mistake' (P.2, P.18c, P.24, P.33), κάλλος 'beauty' (P.1, P.7a, P.27), ἀλήθεια 'truth' (P.1, P.4, P.21c) or σοφία 'wisdom' (P.1, P.7b, P.10b, cf. P.21d).

The connection between the repetition of keywords and the structure of the speech has already been discussed in Part III.2, concerning the keywords, which are important in the context of Gorgias' theories or the function of this speech; the cohesive function of keyword repetition is discussed in Ch.1.3.2 and Table 2.

Some types of keyword repetition can be considered as non-structural (i.e. the structure of the speech is not based on them), for example φέρω 'to carry' (P.8a P.17), φύσις 'nature' (P.5, P.22a, P.25) or others. Next to the principal keywords of the speech and casual repetitions, there are other content words, which do not seem to have a special function in Gorgias, *Helen* (as they appear only once or twice), but which occur usually as keywords in the context of epideictic and/or forensic speeches, for example in defence speeches (among which *Helen* can be classified). Their function as indicators to the context of the speech (e.g. ἀρετή 'virtue' in P.1) was discussed in Part III.2. These types of non-structural keyword repetition are not presented in Table 2.<sup>3</sup>

According to the dynamics of the repetition of the keywords two principal functions of keywords can be distinguished: 1) macro-structural repetition

(applying to keywords, which are repeated in different parts of the speech within a distance, connecting these parts of the speech or indicating new beginnings) and 2) micro-structural repetition (applying to keywords, which occur in adjacent periods, ensuring cohesion of the speech on the level of periods and paragraphs). Some keywords can have both functions, for example ψυχή, which occurs in different parts of the speech, but almost always in adjacent periods (especially in Proofs 3 and 4, which discuss the psychagogic qualities of perception). Ch.1.3.2 is dedicated to the study of the micro-structural functions of keyword repetition.

### 1.3.2. Micro-structural repetition: keywords and concatenation

The special connecting function of keywords is confirmed by the study of content words, which are repeated several times in this speech. Such keywords are presented in the following table, omitting non-structural and non-connecting repetitions.<sup>4</sup> Below in Table (2) three different types of keywords are distinguished:

1) Keywords, which are repeated several times in one period (corresponding to polyptoton), are marked with the number of their occurrences (e.g.: -kosm- 2 in P.1, axios 2 in P.2);

2) Keywords, which are repeated in adjacent periods, are marked with bold (e.g.: **polis** in P.1 and P.2);

3) Keywords, which are repeated in adjacent paragraphs, are marked with italics (e.g.: *psykh-*, in P.1 and P.3).

All these types can occur in different combinations as well. Occasionally the repetition of a keyword within a sub-part is marked with an \*, for example *soma\** (in P.32, P.31a–P.32). The keywords are presented according to the division of the speech into subdivisions (see the synopsis in Table 1).

Table (2)

## I. Introduction

A. I.	P. 1	<b>polis, aner, pragma, logos, psykh-</b> ,				-kosm- 2
	P. 2	<b>polis, aner, pragma, logos,</b>	<b>gyne,</b>	<b>momos 2, amathia,</b>	axios 2, epainos 4	
II.	P. 3	<b>aner</b>	lexai 2, <b>psykh-</b> ,	<b>gyne, gegonen 2, memphesthai,</b>	<b>akouo,</b>	pauo 2, deik-2
	P. 4	<b>aner</b>	<b>logos</b>	<b>gyne, memphesthai,</b>	<b>akouo, amathia</b>	
Praise						
B. III	P. 5	<b>aner</b>	<b>logos</b>	<b>gyne 2, genos</b>	<b>adelon</b>	prota 2
	P. 6	<b>theos aner</b>	<b>lego,</b>	<b>gignomai,</b>	<b>delon</b>	einai 2
IV	P. 7a	<b>-theos</b>		<b>gen-, eskhe (2), lab-</b>		
	P. 7b		eros 3	<b>eskhe,</b>	<b>dox-, eu- 3, meg- 3,</b>	
				soma 2, pleistos 3, phil- 2, nike- 2		
V	P. 8a		<b>eros, logos 3</b>		<b>lab-, Helene</b>	
	P. 8b		<b>eros, logos</b>	<b>gen-, aitia,</b>	<b>Helene , baino 2,</b>	
Proposition						
VI	P. 9	<b>theos,</b>	prax- 2	<b>bia, tykhe?,</b>	<b>harpazo?, boul- 2</b>	
Proof 1	P. 10a	<b>theos, anthropos,</b>			<b>kolyo</b>	<b>aitiaomai 2</b>
	P. 10b	<b>theos, anthropos,</b>		<b>bia</b>	<b>kolyo</b>	kreisson 4, hesson 3
Proof 2						
VII	P. 11	<b>theos</b>		<b>tykhe</b>	<b>aitia, apolyo</b>	
	P. 12			<b>bia 2,-tykh- anomos,</b>	harpazo 3,hybrizo 2, <b>adik- 2</b>	
	P. 13a		logos 3,	<b>biasth-</b>	<b>nomos 2,aitia,ergon 2, barbar 2,epikheir2</b>	
	P. 13b				<b>dikaion</b>	
Proof 3						
VIII.a.	P. 14		peitho*, <b>logos 2, psykhe?</b>		<b>aitia, apolyo</b>	
	P. 15	<b>theios?</b>	<b>logos</b>	dynamai 2	ergon 2, <b>phobos, eleos, soma,</b>	
IX	P. 16ab	<b>doxa,</b>	deik- 2		<b>akouo</b>	
	P. 16c		prax 2,	<b>logos 2, psykhe</b>	<b>akouo,</b>	path, <b>phobos, eleos, soma,</b>
	P. 17			<b>logos</b>		allos 2
b. X	P. 18a	entheos*	<b>logos</b>	<b>gign-</b>	<b>epode,</b>	ag-2,
	P. 18b	<b>doxa</b>	<b>psykhe</b>	<b>syggign-</b>	<b>epode</b>	<b>goeteia</b>
	P. 18c	<b>doxa</b>	<b>psykhe</b>		<b>goeteia</b>	
XI	P. 19a		<b>peitho2, logos</b>			hosos 3
	P. 19b		<b>logos</b>	<b>paroikhomenon,paron,mellon,ekho,</b>	homoios2	pantes 2
	P. 19c	<b>doxa</b>	<b>psykhe</b>	<b>paroikhomenon,paron,mellon,ekho 2,</b>	pleistoi 2	
	P. 19d	<b>doxa</b>		sphaleros 2, abebaios 2, <b>aute, ousa</b>		
XII	P. 20a		<b>peitho</b>	bia 2	<b>anagke</b>	<b>ekho, aute, ousa</b>
	P. 20b		<b>peitho3 logos/leg3,psykhe</b>		<b>anagkazo3</b>	
XIII	P. 21a		<b>peitho, logos</b>	<b>psykhe</b>		
	P. 21b	<b>doxa 3</b>	<b>logos 2</b>			
	P. 21c		<b>peitho, logos/leg 3</b>		<b>anagkaios</b>	
	P. 21d	<b>deik-doxa,pistis,</b>	<b>logos</b>			
XIV	P. 22a		<b>logos 2 psykhe</b>		<b>soma. taxis 2, pharmakon</b>	dynamis?
	P. 22b	<b>peitho,</b>	<b>logos, psykhe,</b>		<b>soma</b>	<b>pharmakon 2, allos 2</b>
Proof 4						
XV	P. 23a		<b>peitho, logos</b>			tetartos 2
	P. 23b		<b>logos</b>			
	P. 24	eros*	<b>leg-</b>	<b>gegonenai</b>		
	P. 25		<b>psykhe, ophis</b>			
a. XVI	P. 26		<b>psykhe, ophis,</b>	<b>soma*, polemion 3, tarasso 2</b>		
	P. 27		<b>opsis, ginomai, phobos,</b>	nomos 2,		
XVII	P. 28			<b>phobos 2, phronema, paron 2</b>		
	P. 29		<b>horao?, ophis</b>	<b>phronema</b>		
	P. 30		<b>leg-*</b>	paraleipomai 2		
b. XVIII	P.31a			<b>opsis, omma</b>	<b>soma 2, ergazo, polloi</b>	
	P.31b	<b>eros</b>		<b>opsis</b>	<b>soma, ergazetai, polloi 3, pothos 2</b>	
XIX	P.32	<b>eros</b>	<b>psykhe, omma,</b>	<b>soma</b>		
	P.33	<b>theos 3,</b>	<b>psykhe</b>	<b>atykhema</b>	dynamis 2, <b>mempteon?</b>	
	P.34	<b>eros</b>	<b>tykhe,</b>	<b>anagke</b>	<b>elthon2</b>	
Recapitulation						
XX	P. 35	<b>theios</b>	<b>erastheisa, logos</b>		<b>dikaion, anagke 2, pratto 2, momos</b>	
XXI	P.36		<b>logos 3</b>	<b>adikia,</b>	<b>momos</b>	

The results of the analysis (in combination with the analysis of Part III.2) reveal several rules and preferred tendencies in the usage of keywords and keyword repetition:

I. Keywords can be repeated in the same grammatical form or in different grammatical forms as a polyptoton; within a period this repetition has a cohesive function: it closes the period (often as a circle) and/or strengthens its thematic and rhythmic unity.

a. Sometimes such keywords are repeated only within one period and do not occur in adjacent periods or paragraphs; such one-time keyword repetitions occur 47 times (against 30 times, when a keyword is repeated in one period and occurs at least once in its neighbours); usually these repetitions occur as polyptota. This can be explained by the distinctive character of a polyptoton, which ensures the coherence of one period and distinguishes it from the others; in such cases the repetition of keywords is in correspondence with thematic development. For example, P.7b, which develops its own theme (a glimpse into Helen's past), includes 6 such keywords, which are not repeated in close proximity to this period. Three different one-time keywords are repeated in P.13a, but usually there are only one or two such keywords.

b. The frequency of keyword repetition within a period is correlated to the length of the period. In longer periods there are several repeated keywords: two or three, four (in P.2) or even seven (P.7b), whereas the repetition can be absent in shorter periods. From 53 periods only 10 (P.11, 13b, 18b, 21ad, 23a, 24, 25, 29, 32) are without keyword repetition, and all these periods are very short: the longest of them, P.25 includes 24 words and, except in the case of P.29 and P.32, the number of words in such periods is less than 20. The number of periods without keyword repetition could be even less, in the case of counting synonyms, e.g. ὁράω and ὄψις (which occur in P.25 and P.29) or δόξα and δείκνυμι (in P.21d).

II. The repetition of keywords functions as a connection between periods and paragraphs. Keyword repetition between adjacent periods can occur as the rhetorical figure of concatenation (the chain: *gignetai-sygginomene, goeteia-goeteias* in P.18a, P.18b and P.18c, cf. Ch.3.1.2.1 and Part II.4.4.2.4). More usually the following period resumes important keywords from the preceding period without special attention to the position (the beginning or the end), in which they occur.

III. The link between periods is stronger within a paragraph and slighter at paragraph borders. This means that more keywords are repeated in adjacent periods within one paragraph than in adjacent periods, which are separated by paragraph boundaries. For example, P.5 and P.6 (both Par. III) share four keywords (*aner, logos/lego, gignesthai, stem -del-*), whereas P.6 (Par. III) and P.7a (Par. IV) share only two keywords: *theos, gignesthai*. Therefore we can conclude that the function of keyword repetition is at first to ensure connection on the lower levels (within a period and between periods).

IV. At paragraph boundaries the adjacent periods can be connected by keyword repetition, but this repetition may be missing in this position as well. The absence of the repetition of keywords at paragraph boundaries coincides as a rule with the boundaries of greater textual subdivisions.

a. The absence of connection is total, when the following period does not include any keywords from the preceding period or paragraph. This occurs between P.8 and P.9 and can be explained with the very strong boundary between different parts of the speech: P.8 is the end of the introduction and P.9 introduces the part of the proofs. The same happens at the paragraph boundary between P.15 and P.16ab, whereas the latter functions as a transition to a new (and important) example, concerning the function of *poiesis*.<sup>5</sup>

b. The absence of connection is slighter, when a following period repeats keywords from the preceding paragraph, omitting the repetition of keywords from the immediately preceding period. This happens between P.13b and P.14 (with a reference to P.13a), where P.14 is the beginning of Proof 3 and between P.18c and P.19a (with a reference to P.18a), whereas P.19a begins a new example, discussing the great number of persons, who are affected by speech.

V. These rules are violated in two cases, in which the absence of a connection through repetition of a keyword occurs at period-boundaries within a paragraph. The first example occurs between P.29 and P.30 within Par. XVII. This period-boundary can be classified as very weak: P.30 is added to P.29 by the connector *καί*, therefore it might even not be analysed as a separate period (see Part III.2). The second absence of keyword repetition, between P.24 and P.25 can be explained with a mismatch between paragraph and period boundaries from one side and subpart boundaries from the other side: as P.24 (continuing the transition of P.23ab) functions as a preparation for a new argument (concerning sight), which is expressed clearly in P.25, where a whole set of new keywords appears.

VI. Sometimes the repetition of keywords is concentrated into one sub-part with lesser respect to the hierarchy of paragraph and period boundaries. These parts are the introduction (especially P.1–P.4), the proposition (P.9), the end (P.34–36), and also Proofs 3 and 4. For example, P.1 and P.2 (Par. I) share four keywords (*aner, polis, pragma, logos*), similarly P.3 and P.4 (*aner, gyne, mephesthai, akouo*) in Par. II, whereas P.2 and P.3 (belonging to different paragraphs) share three keywords (*aner, gyne, momos/ memphesthai*), and P.1 and P.3 are connected by one repeated keyword (*psykhe*), as is P. 2 and P. 4 (*amathia*). In these periods the cumulating effect of the micro-textual (connecting) function of the repetition of keywords can be observed, in correspondence with the thematic development of the speech.

VII. The micro-textual function of keyword repetition can be connected to the macro-textual function. For example, *memphesthai* (P.2, P.3, P. 4 and P. 33) and *momos* (P.2, P.35, P.36) frame the speech, at the same time occasionally connecting adjacent periods. The same occurs in the case of *amathia* (P.2, P.4, P.36) and *gyne* (P.2, P.3, P.5 and P.36). The repetition of *akouo* (P.3, P.4,

P.16b, P.16c, P. 20b and P.22b) connects adjacent periods and paragraphs, as well as different subparts of the speech, constantly reminding of one of the most important characteristics of the speech (orality and the influence of hearing).

VIII. Although the combination of micro- and macro-textual function is not rare, some keywords in this speech are repeated only within one paragraph, therefore having only a micro-textual function: for example *polis* (seeming to have a central position in P.1) reappears only once, in P.2. The same is valid for the triple repetition: *paroikhomenon- paron- mellon* in P.19b and P.19c and some other examples (e.g. *ousa* in P.19d and P.20a).

IX. Several keywords are repeated in combinations. One such keyword combination is the above-mentioned triplet in P.19bc (occurring together with the fourth: *ekhein*), four key-words are shared by P.1 and P.2 (*polis, aner, pragma, logos*), P.3 and P.4 (*aner, gyne, memphesthai, akouo*), also by P.22a and P.22b (*logos, psykhe, soma, phramakon*) and P.31ab. However, pairs or triplets of repeated keywords are more common than combinations of four words. These keyword combinations can be based on an opposition (for example *aner-gyne* in P.3–4 or *theos-anthropos* in P.10ab) or on a logical connection (*psykhe-opsis* in P.25 and P.26, or *eros-logos-Helene* in P.8a and P.8b), whereas the choice corresponds to the thematic development. Although keyword combinations can occur at paragraph boundaries, they are more common on period boundaries in the middle of a paragraph; in the middle of a paragraph the number of periods in the combination is greater (up to four keywords), whereas on paragraph boundaries these combinations can include only two or three keywords. The repetition of keyword combinations is very rare at sub-part boundaries. The exceptions: the boundaries between Proof 3 and Proof 4, and Proof 4 and the recapitulation are connected by repetition of two keywords. In the first case it is understandable, because P.23ab and P.24 (see Ch.1.3.2 and Part III.2) function as a transition between two sub-parts, whereas P.34 (the end of Proof 4) functions as a preparation for the following recapitulation.

It is possible to conclude that the repetition of keywords is very important both as a micro- and a macro-textual device, whereas the dynamics of the reappearance of most of the presented keywords corresponds to the division of the text into subparts and respects the hierarchy of period-boundaries (from the boundary of sub-part to paragraph and period). However, occasional clashes between micro-textual and macro-textual division can occur, which are expressed by keyword repetitions in those places where they should not occur, according to the division of the speech into subparts.

## 1.4. The dynamics of word type distribution: word rhythm II

In this dissertation, the dynamics of word type distribution is studied by applying an index of word type distribution (WTDI), according to the equation:  $I=CW/FW$ . In this equation, the index (I) is equal to the result of the division of the number of content words (CW) by the number of function words (FW) in a given period. This index is 1 in the case when the numbers of CW and FW are equal.

In this dissertation all WTDI indexes between 1 and 1.4 are considered as a normal level (in 22 out of 53 analysed periods WTDI is between 1 and 1.4). When this index is higher than 1.5, it means that the percentage of CW is remarkably higher in comparison to the percentage of FW. It occurs in 16 (out of 53 periods). The number of periods where the percentage of CW is lower than FW (WTDI <1) is 15 (out of 53 periods). These indexes, illustrating the dynamics of word type distribution (WTD) are presented in the following table (Table 3), where all indexes higher than or equal to 1.5 ( $I>1.5$  or  $I=1.5$ ) are marked in bold (e.g. P.1. **1.6**) and all indexes which are lower than 1 ( $I<1$ ) are marked in italics (e.g.P.5 *0.7*). In order to demonstrate which other textual features accompany or influence the dynamics of WTD, some of them are presented in a table below. This includes remarks on syntax type and the functions of periods, as well as references to the thematic development. The syntax type is analysed either as a gnomic syntax (gnom), corresponding to sentences without personal verb forms or copulas, or as a verbal syntax (VERB/VE), corresponding to sentences, where personal verb forms occur. The description of the periods is given in accordance with the synopsis, but more shortly, whereas the functions of textual subdivisions (transition, conclusion) are added.

**Table (3)**

I. Introduction		P. 19b Gnom/VE speech changes 1
A. I. P. 1 Gnom: things of beauty <b>1.6</b> P. 2 Gnom: things of praise <b>1.85</b>		P. 19c VE soul relies on doxa 1 P. 19d VE the result of doxa <b>1.5</b>
II. P. 3 Gnom: duty of orator 1.1 P. 4. VE: will of the speaker 1.3	XII	P. 20a ??? VE??peitho is power 1 P. 20b VE Helen not guilty 1
Praise		
B. III P. 5 Gnom: Helen as the first <i>0.7</i> P. 6 Gnom/VE her parents <i>0.86</i>	XIII	P. 21a Gnom/VE study peitho 1 P. 21b ø VE wins in science 1 P. 21c ø VE wins in court <b>2</b> P. 21d ø VE wins in philosophy <b>1.8</b>
IV P. 7a VE her beauty 1 P. 7b VE her lovers: description <b>2</b>	XIV	P. 22a VE word equal to medicine <i>0.66</i> P. 22b VE speeches give emotions <i>0.63</i>
V P. 8a VE transition <i>0.67</i> P. 8b VE/Gnom transition 1.1		
Proposition	Proof 4	
VI P. 9 VE theses of the spech <b>1.7</b>	XV	P. 23a VE therefore not guilty <i>0.8</i> P. 23b VE transition to 4th reason <b>1.67</b> P. 24 VE/Gnom if love, not guilty 1.4 P. 25 VE sight afflicts the soul <i>0.85</i>
Proof 1 P. 10a Gnom 1st reason: gods 1.4 P. 10b VE/Gnom gods are stronger <i>0.8</i> P. 11 Gnom: therefore not guilty <i>0.77</i>	a. XVI	P. 26 VE force of sight: fear 1.3 P. 27 VE force of sight: fear <i>0.8</i>
Proof 2	XVII	P.28 VE result of fear 1 P.29 VE troubles of persons <b>1.75</b> P.30 VE/Gnom aposiopesis 1
VII P. 12 Gnom/VE 2nd reason: force 1.3 P. 13a Gnom/VE Helen pitied 1.15 P. 13b VE/Gnom Helen pitied <i>0.6</i>	b. XVIII	P.31a VE artist give happiness 1.3 P.31bGnom/VE sight gives feelings 1.3
Proof 3	XIX	P.32 Gnom/VE she fell in love 1.2 P.33 Gnom therefore not guilty 1.2 P.34 VE concl: went through fate etc. <b>2</b>
VIII.a. P. 14 Gnom 3rd reason: word <i>0.75</i> P. 15 Gnom/VE Word's power <b>2.25</b>		
IX P. 16ab VE/Gnom transition <i>0.86</i> P. 16c VE Definition of poiesis <b>1.56</b> P. 17 VE transition <i>0.6</i>	Recapitulation	
b. X P. 18a Gnom: force of incantations <b>2.7</b> P. 18b VE influence via doxa 1.1 P.18c VE/Gnom incantation's force <b>1.8</b>	XX	P. 35 Gnom/VE concl: no accusations <b>1.5</b>
XI P. 19a VE deceptive speech <i>0.6</i>	XXI	P.36 VE conclusion <b>2.4</b>

The results of the study of word type distribution were contrary to my initial hypothesis that there is a correspondence between the syntax type (cf. Ch.1.5) and the distribution of word types: I had expected to find a correlation between occurrence of gnomic syntax, which is known for its low number of connectors, and a low percentage of function words, corresponding to WTDI at least equal or above 1.5. However, it was not so. The highest WTDI (corresponding to a high percentage of content words and a low percentage of function words) occurred in periods with verbal syntax (10 periods, plus 4 periods with a combination of verbal and gnomic syntax), not in periods using gnomic syntax. And even this correlation is not to be considered as meaningful, because the lowest WTDI (corresponding to a low percentage of CW and a high percentage of FW) occurred similarly in periods, based on verbal syntax (9 periods, plus 3 periods with combined syntax). Therefore it can be concluded that there is no correspondence between the sentence type (verbal syntax vs. nominal/i.e. gnomic syntax) and the ratio of CW and FW.

Although it was not possible to find a clear correlation between WTDI and syntax type, the analysis of correspondences between WTDI and the synopsis of the speech (Table 1) and keyword repetition (Table 2) allows some conclusions:

I. WTDI is highest (above 1.5) in periods which fall on the boundaries of important sub-parts of the speech: the beginning (P.1, P.2), the end (P.34–P.36), the beginnings of sub-parts (P.9) and the beginnings and ends of longer paragraphs (e.g. P.19d, P.21cd, P.18a and P.18c, P.7b).

II. Occasionally WTDI can be very high in periods which occur in the middle of a paragraph (not on paragraph or sub-part boundaries). This occurs in the case of important statements, such as the definitions of the role of speech (P.15) and poetry (P.16c). These important statements can fall on paragraph-boundaries, as in P.15 or in P.7b, which describes the lovers of Helen, or P.18a and P.18c (formulating the role of word magic) or P.21cd (describing the role of words in philosophy and court debates).

III. Important statements with a high WTDI are usually rich in keywords, and could therefore also be described as gnomic statements. This suggests the need for refining the definitions of gnomic syntax and gnomic statement, and for making a new analysis, which could perhaps explain the failure of my initial hypothesis (the possible correspondence between gnomic syntax and a high WTDI). The comparison of Table 2 and Table 3 reveals a correspondence between a low WTDI (corresponding to a great percentage of function words in a period) and a low number of repeated keywords (see P.11, 13b, 16ab, 21a, 23a, 25, 30). However, in some periods a low number of repeated keywords is accompanied by a high WTDI (in P.17, 18c, 21d, 29), therefore another, special study concerning possible connections between the choice of word types and keyword repetition should be made.

IV. Two occurrences of high WTDI occur in the middle of paragraphs, seeming to break Rules I and II. Closer examination of these examples presents another solution. The first of these examples, P.23b is classified as the second

period of Paragraph XV. However, analysis of the syntactic structure and phrase rhythm patterns of P.23a and P.23b, as well as their functions (both are transitional) allows to regard P.23a and P.23b as one period (see Part III.2 and Ch.1.3.2), introducing Proof 4 and thereby confirming Rule I, not breaking it. The second example, P.29 is syntactically connected to P.30. As these two can be regarded as one period, which functions as a closure to the second part of Proof 4, this seeming exception confirms Rule I as well (cf. Part III.2 and Ch.1.3.2). The same is valid for P.21c and P.21d, which could be classified at the same time as important statements.

V. Extremely high indexes of WTD in important passages, corresponding to low percentages of function words asks renewal of the question concerning the function of asyndeton (missing of connectors) or connectors in general. One of asyndeton's functions has been explained as rhetorical, creating an impression of rapidity (Part II.3.4.2.2). In thematically important passages occurrences of asyndeton, as well as the absence or infrequency of function words in general, seem to have an entirely different function: creating a slow tempo and giving weight to every content word (often corresponding to the keywords of the speech). This aspect of word type distribution, as a factor for speech rhythm, needs to be re-examined in the future.

It can be concluded that although the study of word type distribution did not reveal any very clear-cut results, it confirmed that in general the rhythm of the discourse is reflected in the organisation of the argument: slowing down the pace in more important places (by lowering the percentage of connectors) and speeding up in the middle of sub-parts (adding connectors) in order to develop the logical argumentation. It revealed again, that the division of micro-textual and macro-textual units (cohesion on the level of syntax, rhythm, choice of word type) and macro-textual units (corresponding to the thematic development) does not always coincide.

## **1.5. Syntax and rhythm**

### **1.5.1. The dynamics of the choice of sentence type**

In Ch.1.4 it was observed that there is no exact correlation between word type distribution and syntax type. A more thorough study of the distribution of sentence types helps us to understand if there is a correlation between a syntax type and the dynamics of the discourse. Below two syntax types are distinguished: verbal syntax, i.e. sentences including personal verb forms, and gnomic or nominal syntax, including sentences without personal verb forms. In Table (4) every period is described according to its sentence type, including: the number of personal verb forms (VE) in main (Ma) and subordinate (Rel) clauses or in parallel sentence-parts (indicated with +); the number of clauses

with copulas (COP), impersonal verb forms (IMPS) or missing copulas (ABS.COP.), again separately for main and subordinate clauses or for coordinated parts of the sentence. Two supplementary characteristics, the occurrence of auto-reference (ARF) and conclusion ( $\Rightarrow$ ) are added in order to evaluate better the role of different nominal sentences.

**Table (4)**

I. Introduction		P. 19b Ma COP, Rel VE
A. I. P. 1 ABS.COP		P. 19c VE 1+1
P. 2 IMPS/ABS.COP		P. 19d VE 1
II. P. 3 Ma ABS.COP, Rel 2COP	XII	?P. 20a Ma VE 2, Rel 2
P. 4 VE, <b>ARF</b>		P. 20b Ma VE 3, Rel 1
Praise		
B. III P. 5 Ma ABS.COP, Rel ABS.COP	XIII	P. 21a MaCOP+IMPS, Rel VE 2,
P. 6 Ma ABS.COP, Rel 2VE+COP		<b>ARF</b>
IV P. 7a Ma VE, Rel VE		P. 21b $\emptyset$ Rel VE 1
P. 7b Ma VE 2, Rel VE 2		P. 21c $\emptyset$ Rel VE 2
V P. 8a Ma VE 3, Rel 2, <b>ARF</b>	XIV	P. 21d $\emptyset$ Rel VE 1
P. 8b Ma VE 2, Rel COP, <b>ARF</b>		P. 22a VE 1
Proposition		P. 22b VE 2+6
VI P. 9 Ma VE 1, Rel VE 1	Proof 4	
Proof 1 P. 10a ABS.COP 2	XV	P. 23a Ma VE1, Rel 3, <b>ARF</b>
P. 10b VE/COP +ABS.COP		P. 23b VE 1, <b>ARF</b>
$\Rightarrow$ P. 11 ABS.COP 2		P. 24 Ma VE 1 Rel COP
Proof 2	a. XVI	P. 25 Ma VE 1+1, Rel 3
VII P. 12 Ma ABS.COP, Rel VE 5		P. 26 Ma VE 2+1, Rel 2
P. 13a ABS.COP+ VE 2		P. 27 Ma VE 1, Rel 1
$\Rightarrow$ P. 13b VE 2+ ABS.COP	XVII	P.28 VE 1+2
Proof 3		P.29 VE 1+1
a.VIII P.14 Ma		P.30 VE 1+ COP, <b>ARF</b>
ABS.COP,RelABS.COP <b>ARF</b>	b. XVIII	P.31a Ma VE 1+1, Rel 1
P. 15 Ma COP+VE, Rel VE		P.31b Ma IMPS 1+ VE1
IX P. 16ab MaVE+IMPS, Rel VE, <b>ARF</b>	XIX	$\Rightarrow$ P.32 MaVE1 + ABS.COP,
P. 16c Ma VE 2, Rel 2, <b>ARF</b>		Rel VE2, <b>ARF</b>
P. 17 VE 2, <b>ARF</b>		P.33 Ma COP1+ABS.COP 2,
b. X P. 18a COP		Rel ABS.COP 1 + COP 1, <b>ARF</b>
P. 18b VE 3		P.34 Ma VE, 1 Rel 1
P. 18c Ma VE (COP) 1, Rel COP	Recapitulation	
XI P. 19a VE 2	XX	$\Rightarrow$ P. 35 Ma IMPS 1 Rel VE 3,
		<b>ARF</b>
	XXI	P.36 VE 1+1+1+1, <b>ARF</b>

The analysis of syntax types helps to draw following conclusions, concerning at first the problems of nominal syntax in general, and then the rhythmic function of the choice of the syntax type.

Analysis of the distribution of nominal phrases and clauses in this speech enables us to specify the conclusions about nominal syntax, made by Benveniste.<sup>6</sup> According to Benveniste: 1) the nominal phrase is always limited to direct speech (in a speech or a dialogue); 2) it always expresses general truths (as in *gnomai*), enabling to give references with authority, to justify and to persuade (Benveniste 1966: 162–164).<sup>7</sup> Gorgias, *Helen* could be already classified as direct speech because of its genre (a speech); however, although it is presented in 1st person singular, some other characteristics of orality are missing, including the address to the public; therefore its classification is problematic.<sup>8</sup> *Helen* uses nominal syntax on following occasions:

I. Nominal syntax is used for expressing general knowledge, as in P.1–3, which concern the tasks of epideictic oratory or in P.5, which refers to the origin of Helen.

II. Nominal syntax is used in statements, which Gorgias wants to present as general truths, e.g. the statements about the power of incantations and word magic in P.18a and P.18c.

III. Following from the first two functions, nominal syntax is used for conclusions. This can occur only in main sentences (P.11, P.32) and sometimes in combination with auto-reference (P.21a, P.33). Some other concluding statements, which are not automatically classified as auto-reference (Part II.3.4.4) are still close to it, because of the use of nominal syntax and verbal adjectives, which state what should be done by Gorgias and his public (P.11), or because of rhetorical questions (P.32, cf. Ch.1.6). Therefore, if we redefine Benveniste's category of direct speech as a personal statement (including auto-reference), all examples of Gorgias' usage of nominal syntax would fall under this category and Benveniste's own examples from narrative are explained.<sup>9</sup>

The analysis of the rhythmic role of the choice of syntax type is not so satisfying.

IV. Sometimes it can be observed that nominal syntax occurs in closures and the beginnings of sub-parts, i.e. parts where no rapid development of the subject is needed (P.1–3, P.5, P.10ab, P.11, P.14, P.18a, except P.33, which is not a closure); whereas verbal syntax occurs sometimes in these parts of the speech, where logical argument is developed (P.4, P.7a–P.8a, P.20ab, P.21b–d, P.26–28 etc.). However, whereas periods based only on nominal syntax seem to reflect a certain pattern, periods based on only verbal syntax do not. This can be explained with the frequency of verbal syntax (27 periods from 53 periods), therefore it does not have a distinctive function. The analysis is complicated more by 16 periods, which are based on a combination of nominal and verbal syntax.

V. It is possible to observe a development from nominal to verbal syntax during the speech: in the beginning the majority of the periods are based on

nominal syntax, in its middle and towards the end, verbal syntax prevails, although there is a slight return of nominal syntax before the end of Proof 4. This corresponds to the nature of the thematic development: in the beginning we find indisputable statements and short, uncomplicated proofs, whereas from Proof 3 the argumentation becomes complex, which is reflected in the choice of sentence type.

VI. The combinations of nominal and verbal syntax (16 periods) reveal another distinct feature: nominal syntax occurs more often (in 9 cases) in main clauses (which are short) and verbal syntax is left for subordinate clauses or vice versa (4 cases); this enables to use contrastive rhythm patterns. It is possible to use the combination of nominal and verbal syntax in paratactic constructions as well, in the case of complex periods. In most of these cases the main clause, using nominal syntax, has the same functions as referred to in P.IV above, whereas the subordinate clause brings refinements to general statements.

The study of nominal syntax reveals that the construction of speech (the argument) and the choice of syntax types are closely connected. In order to study the dynamics of discourse more thoroughly, it would be important to regard other sentence and clause types (infinitive, participial constructions, expanded subject phrases etc.) as well.

## **1.5.2. Syntax as an argumentation device**

The analysis in Part II.2 revealed that in Gorgias, *Helen* numerous examples of proofs are not based on logical reasoning, but use sentence construction instead, or using sentence construction as a support to logical reasoning. It can be observed that the concluding parts of the proofs use mainly three sentence types: gnomic syntax, rhetorical questions and the opposition of diathesis (combined to antithesis), supplementary focusing in the case of complicated arguments is achieved by circular structures.

### ***1.5.2.1. Gnomic syntax and nominal syntax***

Above (Ch.1.5.1) gnomic syntax was defined as sentence types without personal verb forms, usually in the form of nominal sentences, which can be expanded with subordinate clauses. In the analysis of Gorgias, *Helen* neither the length of these sentences nor the occurrence of connectors has been registered separately.<sup>10</sup> The occurrences of these sentence types are presented in Table (3) and Table (4). It can be concluded that the usage of gnomic (nominal) sentences is one of the foundations of Gorgias argumentation strategy. Gnomic syntax is used mainly for two reasons: 1) to introduce premises for his arguments and/or indisputable facts, which can occur in the function of the premises; and 2) to present conclusions.

For example, Gorgias introduces his argument in Helen's defence with references to her noble nature and origin, both stated in the form of nominal sentences (P.5 and P.6). The foundation of Proof 1 is the statement that the gods may be responsible for Helen's deeds, whereas persons are powerless against them, again as a nominal sentence (P.10a). Gnostic syntax is similarly used for the continuation of the same idea in P.10b and for presenting the conclusion of proof one (P.11), which is another main function of nominal syntax in *Helen*. Many sentences present combinations of nominal syntax (usually in the main phrase) and verbal syntax (in the subordinate clause), whereas nominal main clauses present conclusions or statements of truths, as e.g. in P.10b (πέφυκε γάρ), or P.12 (δῆλον ὅτι) or P.13a (ἄξιος οὖν) and subordinate clauses present additional information. Sometimes these subordinate clauses are based on parallelism, which enables use of the contrast between long parallel relative phrases and a short main clause in order to stress the conclusion and give it additional force.

### 1.5.2.2. Rhetorical questions and diathesis in conclusions

Another form of presenting a conclusion is a rhetorical question (P.13a, P.20a, P.32, P.33 and P.35). Some of these examples (P.32 and P.35, in lesser extent also P.13a and P.20a) reveal the same contrasting principle, as in the case of combined nominal and verbal syntax (Ch.1.5.2.1). In Gorgias, *Helen* the following example presents a combination of rhetorical question and diathesis (opposition 'active' vs. 'passive'), filling the place of an elaborate logical argument, see P.13a (DK 82 B 11.vii):

(EX 130) ἄξιος οὖν ὁ μὲν ἐπιχειρήσας βάρβαρος βάρβαρον ἐπιχείρημα ....τυχεῖν·  
 ἢ δὲ βιασθεῖσα καὶ τῆς πατρίδος στερηθεῖσα καὶ τῶν φίλων ὀρφανισθεῖσα  
 πῶς οὐκ ἂν εἰκότως ἐλεηθεῖη μᾶλλον ἢ κακολογηθεῖη;

All conclusions could be given in the form of a statement. The insertion of a question particle (as a preferential word) in the end of the period in EX 130 strengthens the force of the conclusion, which otherwise is achieved only by opposing active and passive forms. In rhythm, it gives a new starting-point after a long series of parallel phrases. Postponement of the question particle gives rhythmic accents (of new beginnings) in P.32 and P.33 as well.

Another important feature is the opposition of active and passive verb forms, which occurs in the place of a conclusion (or premises) in other periods as well, primarily occurring together with pairs of oppositions 'man' and 'god' or 'man' and 'woman' (in P.10, P.20b or P.12).

### 1.5.3. Period types and their functions

#### 1.5.3.1. Division of periods, parallelism and subordination

In Gorgias, *Helen*, four main types of period can be distinguished. According to ancient rhetorical theories, a period can be composed either in several cola or in one colon (Part II.3.2.4). Or, according to syntactic analysis, a period (corresponding to a sentence) can be either simple or complex, whereas a complex period can be classified either as using coordinating or subordinating connectors.<sup>11</sup> The most numerous of them in *Helen* are complex periods, such as those which occur at the very beginning of the speech (P.1 and P.2). One of the longest complex periods is P.22b (DK 82 B 11.xiv):

(EX 131) ὥσπερ γὰρ τῶν φαρμάκων  
ἄλλους ἄλλα χυμούς ἐκ τοῦ σώματος ἐξάγει,  
καὶ τὰ μὲν νόσου τὰ δὲ βίου πάθει,  
οὕτω καὶ τῶν λόγων  
οἱ μὲν ἐλύπησαν,  
οἱ δὲ ἔτερψαν,  
οἱ δὲ ἐφόβησαν,  
οἱ δὲ εἰς θάρσος κατέστησαν τοὺς ἀκούοντας,  
οἱ δὲ πειθοῖ τιμι κακῆι τὴν ψυχὴν  
ἐφαρμάκευσαν καὶ ἐξεγοήτευσαν.

EX 131 is one of the longest complex periods, based on coordinating connectors and includes 49 words. So-called hypotactic structures are even longer than EX 131, such as the largest period complex in Gorgias, *Helen*, P.21a–P.21d, which includes 79 words. There seems to be no correlation between the length of the period and the organisation of the discourse, except in the case of simple undivided periods (see Ch.1.5.3.4). Otherwise, it can be observed that the choice between coordinating constructions (more apt to use parallelism and syllabic rhythm) and so-called subordinating constructions seems to follow the rhythm of the discourse: in the introduction, as well as Proofs 1 and 2 the sentence type is mainly paratactic, in the more complex argumentative parts (Proofs 3 and 4), where the syllabic and phrase rhythm (see Table 5 and Chart 1) are not so eminent, the connection type is hypotactic.

Some periods present phrase parallelism, which combines “hypotactic” and “paratactic” sentence types, as *Helen*, P.14 (DK 82 B 11.viii):

(EX 132)				
	εἰ δὲ λόγος	ὁ πείσας	4+3 = 7	
		καὶ τὴν ψυχὴν ἀπατήσας,	8	[=15]
οὐδὲ πρὸς τοῦτο	χαλεπὸν	ἀπολογήσασθαι	5+3+6 = 14	
		καὶ τὴν αἰτίαν ἀπολύσασθαι	10	[=24]
		ὧδε.	2	

EX 132 presents a period, beginning with a conditional clause in protasis, which is followed by a main clause in apodosis (scheme: abb'cdd'q), but the classification of its syntax type is complicated, because next to a “hypotactic” connector, a coordinating particle occurs. Another type of difficulty occurs in P. 16c, where it is difficult to classify the pronoun, which could be classified either as a relative or a demonstrative (cf. the analysis in Part III.2). The comparison of these examples with the data on sentence types (Table 4) and parallel structures (Table 5) enabled the drawing of some preliminary conclusions: the type of connector is not so important for phrase and discourse rhythm, as the presence or absence of phrase parallelism: in the first case it is possible to observe a clear phrase rhythm and even syllabic rhythm (without regard to the type of connector); in the second case the phrases can be based on circle structures, which produce entirely different phrase rhythm types.

### 1.5.3.2. Circular structures in a period

Circular structures (κύκλος) are part of the definition of a period in Aristotle (Part II.3.2.2.2). There are several possibilities for achieving circularity. Not every period has been defined as a circle in this dissertation (although it could be done according to the ancient definition). Instead, two types of period are distinguished: 1) periods, which are based on parallel structures (antithesis and parallelism) with a corresponding word order, and 2) periods, which are based on circular patterns in the word order.<sup>12</sup> This does not mean that circular structures cannot occur in periods, based on parallelism. The occurrence of circular structures in periods, based on parallelism, was observed mainly in following cases:

1) A period can be framed by a polyptoton, which occurs at the beginning (or near the beginning) and in the end (or near the end) of the period, as e.g. P. 1 (κόσμος), cf. P.16c or P.28;

2) A combination of circular structure and structural parallelism occur, when parallel phrases are framed with short introductory and closing pivots (see Ch.3.2), e.g. in P. 29 (DK 82 B 11.xvii):

(EX 133)	πολλοὶ δὲ	ματαίαις πόνοις	
		καὶ δεινὰς νόσοις	
		καὶ δυσιάτοις μανίαις	
			περιέπεσον·

The scheme of this period: paa'a' q corresponds to a circle, where (p) and (q) frame parallel cola, which are in the centre. Although in EX 133 the number of such parallel cola is three, this period type occurs more usually with two parallel phrases, e.g. in P. 18a, P.19 or P.22b (scheme: paa'q), but the number of parallel phrases in the middle can be even greater, e.g. four phrases in P.35 (scheme: pp'p"aa'a"a"qq'). Both types of framing produce some balance and articulation in the phrase rhythm, serving as closures and starting-points for new rhythm patterns.

Another type of circularity (close to EX 133) can be achieved with word order or the placement of cola (phrases), as in *Helen* P.32 (DK 82 B 11.xix):

(EX 134) εἰ οὖν τῶι τοῦ Ἀλεξάνδρου σώματι  
τὸ τῆς Ἑλένης ὄμμα  
ἤσθεν προθυμίαν  
καὶ ἀμιλλαν ἔρωτος  
τῆι ψυχῆι παρέδωκε,  
τί θαυμαστόν;

In EX 134 the composition of the whole period is circular: the connector as an introductory pivot (p) and a short nominal main phrase (q) frame the subordinate phrase, where the subject has a central position in the first half (a scheme: pCompSV'O"V"q). Here the circle helps to strengthen the clear contrast between the subordinate clause, using the combination of parallelism and circle, and the final short main clause.

Usually circles in word order occur only in some parts of the period. Smaller circles can be achieved by inserting different complements between the article and the noun, as in P.8b or P.16c, but they are not very frequent in this speech. The most complicated of such examples is in Gorgias, *Helen* P.24 (82 B 11.xv), cf. Part II.3.2.2. Although the position of adjectives between the article and noun (in attribute position) is not interpreted as a focus, other complements (nouns or proper nouns) can get a contrastive focus, as from the example above:

(EX134.a) τῶι τοῦ Ἀλεξάνδρου σώματι τὸ τῆς Ἑλένης ὄμμα

Although this word order cannot always be explained as focusing, there are other examples, which seem to focus proper names or important keywords by a central position (P.3, 8a, P.21bc, P.23b, P.28, P.31a and P.35).

The next type of circular word order corresponds to hyperbaton or disconnected syntax, helping to focus attention on certain aspects or details, e.g. in *Helen* P.15 (DK 82 B 11.viii):

(EX 135) ὃς σμικροτάτῳ σώματι καὶ ἀφανεστάτῳ

Here the central position of the noun σώματι between its adjective complements creates a circle, which brings focus on both complements (participating

in antithesis: ‘great’ vs. ‘small’). In phrase rhythm, circular patterns usually create several different commata (see Ch.1.7.2), which makes rhythm more nervous and staccato-like, in contrast to the smoothness of parallel periods. For analysis of syllabic rhythm, circular patterns pose several problems, because syllabic rhythm patterns emerge more easily in parallel structures.

### 1.5.3.3. A circle and a chiasm

In periods, which are based on parallelism or antithesis, chiasmic structures help to create circularity by using schemes, as ‘abb'a’ in the end of P.2 (EX 97). However, chiasmic structures are not very common and they occur mainly in combination with a polytpton. In such cases a circle can be achieved by the placement of the same stems in the centre of a phrase (or a period), but it can function simply as a link between adjacent periods or sub-periods within a period, e.g.: the root -δηλ- (between P.5 and P.6), or the polytpton γυνή, γυναιῖκα in the middle of P.5).

Chiasmic circles can be formed by expansion, with the insertion of phrases, as in *Helen*, P.4 (DK 82 B 11.ii):

(EX 136)

ἐγὼ δὲ βούλομαι		5+
λογισμὸν τινα	τῶι λόγῳ δοῦς	5 + 4 = 14
τὴν μὲν κακῶς ἀκούουσαν	παῦσαι τῆς αἰτίας,	8 + 6 = 14
τοὺς δὲ μεμφομένους	ψευδομένους ἐπιδείξας	6 + 8 = 14
καὶ δείξας τάληθές	[ἦ] παῦσαι τῆς ἀμαθίας.	6 + 8 = 14

EX 136 presents a period, composed of four isosyllabic complex cola, where the first colon is introductory and cola 2–4 form a circle. This circle can be analysed as an initial chiasmic structure: ἐγὼ δέ... τῶι λόγῳ δοῦς... καὶ δείξας ... παῦσαι τῆς ἀμαθίας (scheme V part part Inf), where two participial phrases occur in the middle, with another chiasmic structure, a pair of antithetic complex cola, inserted into it:

(EX 136a)

τὴν μὲν κακῶς ἀκούουσαν	παῦσαι τῆς αἰτίας,
τοὺς δὲ μεμφομένους	[ἦ] παῦσαι τῆς ἀμαθίας.

As the inserted pair of participial clauses (ψευδομένους ἐπιδείξας καὶ δείξας τάληθές 6 + 8 = 14) forms a chiasm, the impression of a circle is strong, resulting with a scheme of the entire period: ‘pab(cdc'e)e'c’. Analogous combinations of chiasmic and circular structures in a half-period can be found in large-scale syllabic structures as well (Ch.2.2): most of them respect phrase rhythm, as parallelism is the bases of chiasm.

#### 1.5.3.4. *Simple (undivided) period*

Undivided periods (περίοδος μονόκωλος, see Part II.3.2.2) are rare in Gorgias, *Helen* where long complex periods are preferred; however, they have a distinct function. Undivided periods do occur in transitional passages; see P.17 (DK 82 B 11.ix):

(EX 137) φέρε δὴ πρὸς ἄλλον ἂπ' ἄλλου μεταστῶ λόγον.

This period leads (as confirmed by auto-reference and analysis of the speech) from one sub-argument to another. Similar usage can be observed in P.23b, which begins Proof 4, whereas P.23a functions as a closure to Proof 3. The analysis of P.23a and P.23b reveals that simple undivided periods can occur in pairs and form greater, complex periods, based on parallelism (cf. another transition, P.16ab).<sup>13</sup> From the point of view of discourse rhythm, simple periods are in contrast to adjacent complex periods and function as boundary-markers between greater sub-parts of the speech.

## 1.6. The function of parallelism

### 1.6.1. Parallelism and closure

It has been observed in Part III.2 that in Gorgias, *Helen* the principal stylistic device is parallelism. As concerns the dynamics of the speech, one specific function of parallelism is important: its function in and as a closure. The following table illustrates the dynamics of the occurrences of parallelism in closures, together with several closure figures: parison (PARIS), parallelism (PAR), antithesis (ANT), circle (RING), gradation (GRA), isocolon (ISOC), pivot phrases (PIVOT), auto-reference (ARF), whereas parallelism and gradation can be total (TOT), symmetrical or not (NON-SYM), or binary (BIN), ternary (TERN) or combined. These figures are characterised by the number of cola, participating in them.

**Table (5)**

I. Introduction	P. 19b $\emptyset$ pivot?
A. I. P. 1 TOT. PAR+ ANT (1+5) + GRA	P. 19c $\emptyset^*$
P. 2 PARISON*	P. 19d PAR&PIVOT
II. P. 3 <b>BIN/TERN in GRA/PIVOT</b>	XII P. 20a ??? (TEXT)??ISOC
P. 4 TOT. ISOC (4x) NON- SYM. PAR + ARF	P. 20b PAR&PIVOT/GRA
B. III P. 5 PAR	XIII P. 21a $\emptyset$ ARF
P. 6 PARISON + ISOC	P. 21b ISOC
IV P. 7a PAR&PIVOT	P. 21c ANT + ISOC
P. 7b PARISON	P. 21d $\emptyset$
V P. 8a PAR (ANT) ARF	XIV P. 22a PARISON
P. 8b $\emptyset$ ARF	P. 22b PAR 5x+GRA, PAR 2x
Proposition	Proof 4
VI P. 9 PARISON <del>TERN no GRA</del>	XV P. 23a PAR&PIVOT,ARF
Proof 1 P. 10a $\emptyset$	P. 23b $\emptyset$ ARF
P. 10b <b>TERN in GRA</b>	P. 24 $\emptyset$ RING
P. 11 TOTAL PAR (2x)	P. 25 ISOC ? $\emptyset$ ?
Proof 2	a. XVI P. 26 $\emptyset$
VII P. 12 PAR (ISOC+GRA)	P. 27 PARISON
P. 13a BIN + ISOC	XVII P. 28 PAR&PIVOT
P. 13b PARISON+ISOC	P. 29 TOTAL ISOC (4x)*
Proof 3	P. 30 $\emptyset$ ARF
VIII P. 14 PAR&PIVOT ARF	b. XVIII P. 31a <b>TERN/BIN.PAR/GRA</b>
P. 15 PAR (4x), ISOC (2x)	P. 31b PAR
a. IX P. 16ab TOT. PAR. ARF	XIX P. 32 PAR&PIVOT
P. 16c $\emptyset$ ARF	P. 33 PARISON
P. 17 $\emptyset$ ARF	P. 34 PARISON +ISOC
b. X P. 18a PAR&PIVOT	Recapitulation
P. 18b <b>TERN+GRA</b>	XX P. 35 PAR (4x)&PIVOT/GRA <u>ARF</u>
P. 18c PARISON	XXI P. 36 TOT. PAR (4x), PARISON (2x) ARF
XI P. 19a PAR&PIVOT	

The study of closure figures or their absence at final positions reveals several rules and tendencies:

I. Parallelism is the most usual closure of any period; the number of periods not ending with parallelism is small: 12 (from 53), which is 22.6%. This is not surprising, as parallelism is the principal figure in almost every period (see Part III.2).

II. There is a slight difference in the frequency of parallelism figures in different types of endings: the closures of greater textual units (sub-parts) of the speech tend to use more parallelism (88%), as there is only one hierarchically important period-end without parallelism (P.8b). However, no significant difference can be observed between paragraph-ends (80%) and period-ends, which occur in the middle of a paragraph (77%).

III. As stated in Rule II, the absence of parallelism as a closural figure is rare in hierarchically more important period-ends (i.e. the ends of the sub-parts of the speech), coinciding with closures in argumentation, passage to the new subject etc.

a. In these cases the parallelism is usually accompanied by other closure figures, thereby confirming the importance of the end.

b. The only period at a sub-part boundary which ends without parallelism (P.8b), uses a circular structure as a closure, whereas the transition to the next sub-part is indicated by auto-reference at the beginning of the period. As the auto-reference indicates closure, the absence of parallelism is compensated by another figure.

c. In the ends of some other smaller textual units (paragraphs), the absence of parallelism is compensated by auto-reference, indicating a closure or passage to a new theme (P.17 and P.30).

IV. Parallelism and auto-reference are both missing in 5 period-ends, which can occur at the beginnings of greater or smaller sub-parts, where the absence is explained by their initial position in a sub-part (P.10a and P.26).

a. Sometimes the ends of such periods are not clearly marked by syntax, whereas the argument may continue into the following period, as in P.19c, where the argument about *doxa* continues into P.19d and further into P.22a. Sometimes such periods are continued by added explanatory phrases: P.24 ends with a circle structure, whereas P.25 adds explanations to it, and P.10a and P.26 are both followed by periods which begin with explanatory particles.

b. One case of the absence of parallelism and auto-reference occurs in the end of a long period complex (P.21d), which discusses the different influences of speeches. This can be interpreted as a strange exception or as an example of mimesis: in this passage Gorgias describes swiftly changing arguments, and therefore the choice of unstable syntax (i.e. using a period without parallel figures, which produce symmetry) may have a mimetic role.

V. Auto-reference was defined as an author's (speaker's) explicit references to his speech or his activity of speaking (Part II.3.4.4). As observed in Part III.2, auto-reference functions as a transition throughout the whole speech.

a. Auto-reference occurs as a rule only in the ends and at the beginnings of paragraphs and greater sub-parts (10 of 13 occurrences), which are hierarchically more important (e.g. P.4, P.8ab, P.14, P.35, P.36).

b. Inexplicit auto-reference, such as the rhetorical question in P. 32 (at the beginning of the sub-part and presenting a conclusion), impersonal verbs (P.2) or verbal adjectives (P.11 and P.33), occurring in the ends of sub-parts and accompanied by parallelism, confirm this observation.

c. In the case of the greater sub-parts of the speech, auto-reference can occur in two consecutive periods, as P.8a and P.8b (the end of the introduction) and P.23a and P.23b (the beginning of Proof 4). Accumulation of auto-reference occurs with the highest concentration in P.16ab, 16c and 17, Gorgias' definition

of poetry. Assuming that it is indeed his own definition (as he states explicitly), the appearance of auto-reference in a non-transitional period is explained.

VI. Parallelism occurs thrice in period-ends in the form of an isocolon, without parallel syntactic structures. P.29 is constructed as a total isocolon (in the middle of a paragraph), P.21b ends with an isocolon (in the middle of a paragraph and an argument) and in P.25 a dubious isocolon occurs in the end of a paragraph with continued argument.<sup>14</sup> As these period-ends do not occur in the ends of greater textual subdivisions, we have to conclude that the closural function of an isocolon, when it occurs alone, is not very great. But it can occur in combination with other figures, e.g. parison, where the closural force of different figures is combined.

VII. Parallelism in the form of parison (syntactic parallelism) is confined to the ends of more important textual subdivisions: paragraph-ends and sub-part ends (9 of 11 occurrences), therefore its closural function is strong. One occurrence, P.33 occurs just before the end of Proof 4 in P.34, which ends with a parison as well. As P.34 is already partly introducing the recapitulation, we do not have an exception here, but a cumulating of closure figures. Another exception, P.22a could be explained with its position just before the end of Proof 3.

VIII. Parallelism in the period-end occurs in very different forms. The most usual are binary couples, but a period can be ended with a circle or without any apparent figure. Ternary structures or gradation in period-ends are rare (three examples) and they can all be reduced to binary patterns (see Ch.1.6.2).

It can be concluded that parallelism is the most typical type of closure for a period-end, as well as (especially in the form of parison) for greater subparts of the text, whereas the absence of parallelism in period-ends (as well as in the middle of period) is characteristic of transition.

### **1.6.2. Ternary patterns in parallelism**

Ternary patterns in parallelism are rare and they can be divided into two groups, according to their position and structure. The first group includes examples of triple parallelism, which never occur in the ends of periods (P.9, P.12, P.13a, P.16c, P.19bc and P.29). Therefore their function can be explained as ensuring the continuation of rhythmic movement. Most of these examples are from parisa and whereas they occur in the beginnings of periods, the ends of these periods are often balanced by double parallelism (P.9, 12, 13a, 16c) or they can be entirely balanced by another triplet (P.19bc or P.29 in syllabic rhythm).

Another group of ternary parallelism occurs in period-ends and is based on a combination of parallelism and gradation. All three examples of this type (P.10b, P.18b, P.31a) combine syllabic and word-rhythm, and can be reduced to binary or circular patterns. For example P.18b corresponds in syllabic rhythm to a small-scale binary or large-scale circle pattern (scheme: 3+1+3+7 or:

4+28+5+28+4), whereas P.10b corresponds to a circle (cf. 18+18+15+18, cf. Part III.2). In the third example the ternary pattern occurs only in syllabic rhythm, see *Helen*, P.31a (DK 82 B.11.xviii):

(EX 138)

ἡ δὲ τῶν ἀνδριάντων ποίησις	<b>10</b>
καὶ ἡ τῶν ἀγαλμάτων ἐργασία	<b>1+10 = 11</b>
θέαν ἠδεῖαν παρέσχετο τοῖς ὄμμασιν.	<b>5+4+4 = 13</b>

EX 138 presents a second part of P.31a with a clearly rising ternary pattern in syllabic rhythm (10+11+13). A feature very characteristic to Gorgias' phrase rhythm is missing: the text is not easily divisible into small elementary units: **θέαν ἠδεῖαν παρέσχετο τοῖς ὄμμασιν**. These cola occur in a context of parallelism and rising gradation, which can explain the absence of clear division into elementary cola and commata (possible elementary cola are marked with bold and underlining).

EX 138 can be explained as a pair of isocola with a long closing pivot (scheme: aa'q) as in the triple gradation in P.10b. It can be observed (see Part III.2), that the second part of the period balances the first one, which is slightly longer (38 syllables against 34). Therefore the long final pivot and preceding long parallel phrases create the sensation of a balance between these two halves. Therefore the seemingly casual remark by Immisch on Gorgias' usage of ternary patterns gets confirmation: all these ternary patterns could be reduced to binary ones.

### 1.6.3. Analogy of position and parallelism

In Part III.2 it has been observed that in *Helen*, Gorgias arrives often at the conclusion of an argument through skilful use of parallelism figures. Parallelism does not always have to be based on coordinating sentence structures, an analogy of position is sometimes enough, e.g. in P.20b (DK 82 B 11.xii):

(EX139) λόγος γὰρ ψυχὴν ὁ πείσας,	S O Part: S: to persuade=
ἦν ἔπεισεν, ἠνάγκασε	O VE to persuade (=) VE to force
καὶ πιθέσθαι τοῖς λεγομένοις	to be persuaded
καὶ συναινέσαι τοῖς ποιουμένοις. ...	
ὁ μὲν οὖν πείσας ὡς ἀναγκάσας ἀδικεῖ,	S.Part to persuade=force= VE injure
ἡ δὲ πεισθεῖσα ὡς ἀναγκασθεῖσα τῷ λόγῳ μάτην ἀκούει κακῶς.	
S Part to be persuaded=S Part be forced= be unjustly reproached	

In EX 139 the arrival at the conclusion is achieved through grammatical and positional equations. In the first sub-period verbs (VE) in the main (ἠνάγκασε) and the relative (ἔπεισεν) clause share the same object (O), the relative pronoun ἦν, although it does not mean that the actions, expressed by these verbs, are

equal. In the 2nd sub-period both verb forms occur, together with repetition of the previous order as already equated (πείσας ὡς ἀναγκάσας), both in the form of active participles (as grammatical subjects), whereas they are connected to the third verb, a predicate ἄδικεῖ as a conclusion. This conclusion is confirmed by rephrasing this statement in passive, using the same first two verb forms for Helen in the form of passive participles. See also Part II.4.1.3.2 for other examples.

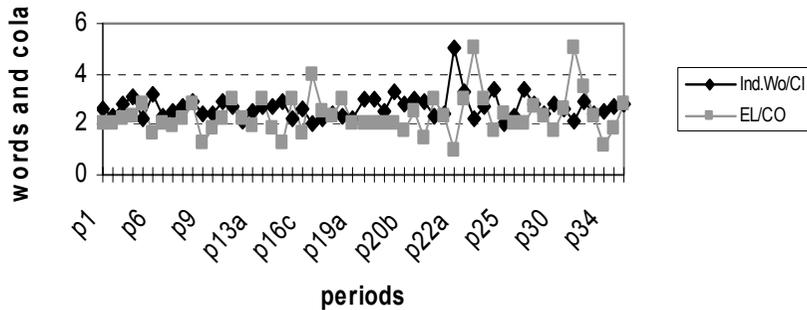
## 1.7. Rhythm in commata

### 1.7.1. The flexibility of rhythm

In late antiquity Gorgias was considered as the most brilliant representative of asianistic style, known for its short and well-sounding commata (Steinrück 2004a). Therefore the division of his periods into cola and commata has to be studied. Paradoxically Gorgias uses not only numerous short cola and commata, but very long complex periods as well (because of this several larger subdivisions: complex colon, period complex and complex period were needed for the description). The number of elementary units in given periods illustrates the flexibility of phrase rhythm. It is studied by means of the index of phrase rhythm flexibility.

The index of phrase rhythm flexibility indicates the ratio of elementary and complex cola in every period ( $I = EICo/CoCo$ ; where  $CoCo$  = complex cola and  $EICo$  = elementary cola), see App. II, Table 6. The minimal index can be 1, corresponding to a period, where every complex colon corresponds to an elementary colon (i.e. a period, which is composed of  $X$  complex cola and  $X$  elementary cola, whereby the index is  $X/X$ ). The minimal index in *Helen* is 1.2, and the maximum is 5, whereas the average index is 2.1. This means that usually every period in Gorgias, *Helen* is divided into  $X$  complex cola, which are composed of 2 elementary cola (or commata). In order to know whether the length of the period is correlated to the flexibility of phrase rhythm, another criterion is added, the correlation between the number of words in a period and the number of elementary units, into which this period is divided. Here the average is 2.7 words for an elementary unit (minimum 2.0, which corresponds to the greatest flexibility and maximum 5.0, which corresponds to the smallest flexibility, see App. II, Table 7). The correlation of these two indexes is presented in Chart 1:

**Chart 1.** Colon flexibility and word count



As can be seen in the chart, there is no systematic pattern or correlation between the length of a period and the number of elementary units in it. This result was revealed contrary to my initial hypothesis and some results of Ch.1–5 (concerning shorter periods, which use simpler syntax). In the beginning of the speech (from P.3–P.15) a slight tendency can be observed, according to which the beginnings of the paragraphs have a slightly greater flexibility of colon rhythm and the ends of paragraph have slightly less rhythmic flexibility (i.e. there are less cola for the number of words). This means that the number of elementary units in paragraph beginnings is greater in comparison to a period's length, whereas the elementary units are correspondingly shorter (including from 2.1 to 2.9 words). However, in the second half of the speech there are several periods where this correspondence does not occur (P.22b, P.24–P.25, P.31b), whereas the end of the speech (P.31–P.36) is characterised by a flexibility index which is close to average (see Table 6 and 7 in App. II). Therefore we have to conclude either that the flexibility of phrase rhythm loses its importance towards the end of the period, or to refine the research methods. The low indexes (i.e. shortness of cola) corresponds to the fame of Gorgias for his short cola and commata.

### 1.7.2. Segmentation

Regarding the flexibility of phrase rhythm, as presented by the dynamics of phrase rhythm flexibility in Table 6 (App. II), a slight correlation can be observed between the number of complex cola in a period and the number of elementary units. These periods which are less flexible on the level of complex cola (i.e. which are undivided, or divided into a small number of complex cola), can be divided into a greater number of elementary units. For example, P.17 (a simple period, cf. EX 137), is divided into 4 commata, and another simple period, P.23a into 5 commata, whereas P.22a is divided into 5 complex cola, which are not divided further (and the index is 1) and P.7b, which is divided

into 10 complex cola, includes 19 elementary units (and the index is 1.9). This means that the lack of flexibility on one level is compensated on another.

As demonstrated above, all elementary commata and cola participate in parallelism structures and phrase rhythm. The phrase rhythm units are often distinguished from each other by lexical markers (different particles); however, often these particles help to form commata and cola, e.g. when they are situated between two mobile words, according to the scheme: ‘MqM’ or ‘MpM’. For example in P.1 postponement of the postpositive particle until after first two words κόσμος πόλει μὲν εὐανδρία and τὰ δὲ ἐναντία τούτων ἄκοσμία helps to analyse these complex cola as two elementary units (κόσμος and πόλει μὲν εὐανδρία), whereas in the beginning of the period two content words with intonation peaks (content word accents) occur next to each other without any appositive words, which could function as a bridge between these two peaks, whereas in the following (πόλει μὲν εὐανδρία) the particle μὲν functions as a connector between the dative complement and the predicative. A similar function can be observed for the particle καί, which participates in forming commata, based on word pairs, as for example ἀπέσβεσε καὶ ἐξήλασεν in EX 141 below.

On several occasions segmentation of the period can blur the analysis of syntax and rhythm. The following example could be classified as bipartite augmentation or tripartite diminution, see Gorgias, *Helen*, P. 30 (DK B 11.xvii):

(EX 140)

καὶ	τὰ μὲν δειματοῦντα	πολλὰ μὲν παραλείπεται,	1 + 6 + 8 = 15
	ὅμοια δ' ἐστὶ	τὰ παραλειπόμενα	5 + <u>7</u> = 12
		οἷάπερ <τὰ> λεγόμενα.	3 + 4 = <u>7</u>

The first μὲν in EX 140 occurs without a corresponding particle, but the second μὲν finds a corresponding particle in the following colon, which is introduced by δέ in Col.2, whereas the last colon (οἷάπερ...) corresponds to Col.2 in its turn. The syllabic rhythm could be analysed as: 15+19, 15+12+7, or 7+(8+5)+(7+7), whereas the last analysis (into 5 elementary cola) is supported by symmetry in word type distribution (scheme: ‘pppM’; ‘M<sup>a</sup>qM’, ‘MqM’, ‘pM’, ‘pM’). If we consider in addition the possibility of a pun (ὅμοια δ' ἐστὶ ‘are alike’, could refer to an equal number of syllables in the last two elementary units), the last interpretation would be the closest. Another example of fragmentation appears in *Helen*, P.28 (DK B 11.xvii):

(EX 141)

ἤδη δέ τινες	ιδόντες φοβερὰ	5 + 6
καὶ τοῦ παρόντος	ἐν τῷ παρόντι χρόνῳ	5 + 7 = 12
	φρονήματος ἐξέστησαν·	4 + 4 = 8
οὕτως	ἀπέσβεσε καὶ ἐξήλασεν	2 + 4 + 5 = 11
	ὁ φόβος τὸ νόημα.	7

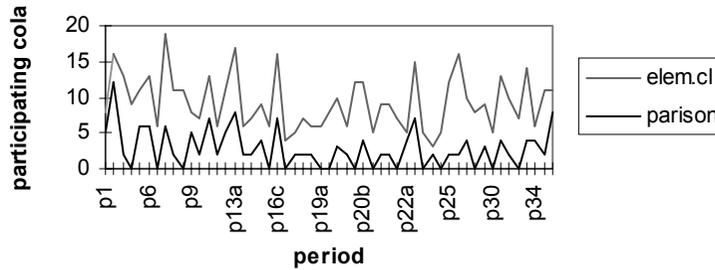
EX 141 corresponds to one period. In its end the grammatical subject and the object form a colon (minor phrase), whereas each of them corresponds to a comma (appositive group). Both nouns remind us of important keywords from the preceding part of the period: φοβερὰ (by polyptoton) and φρονήματος (by synonymy and parechesis). Thus the last colon presents two focuses of the sentence).<sup>15</sup> In the first part of the period, segmentation of the period brings the focus to the most important part of the argument again (by inserting a preposition phrase, creating a polyptoton between the object and its complement τοῦ παρόντος φρονήματος). Elementary units are indicated by the occurrences of homoeoteleuta (τινες ιδόντες) and the verb's initial position, thereby forming a phrase rhythm pattern, in which every single content word happens to occur in a focus (and could be analysed as forming an independent comma).

### 1.7.3. Cola, commata and rhetorical figures in rhythm

The absence of evident systematic patterns in the division of a period into cola and commata<sup>16</sup> is parallel to another feature of phrase rhythm: an absence of a systematic pattern in the occurrences of rhetorical figures. *Helen* of Gorgias is full of different parallelism figures, but their distribution does not seem to follow a systematic pattern at first sight.

A general correlation between phrase rhythm flexibility and the occurrence of rhetorical figures can be found by comparing the frequency of certain parallelism figures and the index of phrase rhythm flexibility. A parison has been chosen as an example below, because it is characteristic of Gorgias prose rhythm. See Table 8, Chart 6 and 7 in App.II and Chart 2 below.

**Chart 2.** Parison and colon flexibility



In Chart 2 a correlation between the number of cola and the occurrence of a parison can be observed: the greater the number of elementary cola and commata, the more occurrences of parison. (This can be valid for other parallelism figures as well). However, a correspondence between the organisation of speech (discourse rhythm) and the dynamics of rhetorical figures is absent. This forces us to ask, why is it absent and what is the role of rhetorical figures in phrase rhythm?

The answer can be found in the primary function of rhetorical figures: they are responsible for parsing the cola and commata, and only then as components of phrase rhythm. Another reason could be found in the compensatory nature of the occurrence of rhetorical figures: it is not important which parallelism figure occurs (as an indicator of colon boundaries or as a basis for phrase rhythm), as long as one of them is there and fulfils the needed function.<sup>17</sup> In order to have a definite answer, further study is needed.

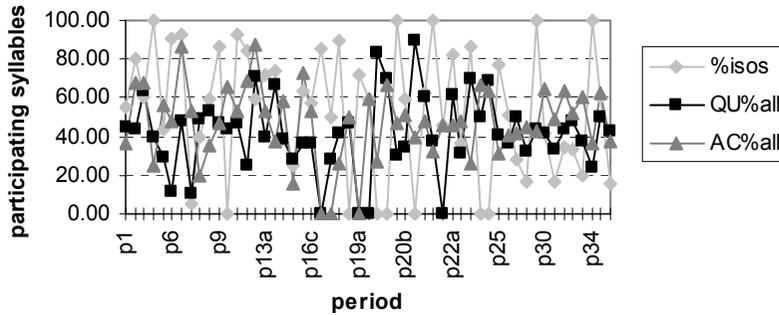
## **2. RHYTHM IN SYLLABLES AND WORDS**

### **2.1. The distribution of syllabic rhythm types**

#### **2.1.1. Rhythm type in general**

Prevalence of one or another metrical rhythm type is revealed by comparison of the syllabic rhythm indices (RI). These indices present the percentages of syllables, which are involved in one or another rhythm type: the isosyllabic, the quantitative or the accentual rhythm (see Part II.6 and App. I), whereas the quantitative and accentual rhythm are studied separately in clausulae as well.<sup>18</sup> Chart 3 presents the percentages of syllables participating in these three rhythm types (cf. Table 9–11 and Chart 8 in App. II).

**Chart 3.** Syllabic rhythm types



As expected for Greek rhetorical prose, the percentage of isosyllabic rhythm in Gorgias' *Helen* is the highest of the three, 51.6% (see Table 9 and Chart 8, App. II). This means that strictly isosyllabic patterns are not dominant, but relatively significant. When proximity rhythms (gradation and close repetition) are added, this percentage rises to 95.5% and with contrast it would be almost 100%. This result should not be neglected as untrustworthy because of the high percentage: the main characteristic of prose rhythm is flexibility and therefore enlarged criteria, which take into regard the main characteristic of prose rhythm, its flexibility, should reveal a 100% involvement of rhythm patterns (if we believe that a-rhythmic prose does not exist).

For quantitative and accentual rhythm patterns the syllable count did not give a clear answer, as to which of them is prevalent and how significant they are: the participation of all syllables in quantitative rhythm patterns is 40.7% and in accentual rhythm patterns 47.8% (cf. Table 10 and Chart 8, App. II). It should be noted that the indexes of these rhythms could be higher, if a different method of study were used, allowing some adjustments in the description of rhythm (and suppressing accents on appositive words, as in the description ‘:Niv’ in Part III.2, see Part I.3.3 and Ch.2.1.3). However, in the time of Gorgias, the Greek language did not have a stress accent (which can be regarded as tied to one accentuated syllable), but a melodic accent (which is a word accent and not tied to one syllable), therefore statistics, based on counting accentuated syllables, cannot bring many results, at least not without refining the method of analysis.<sup>19</sup> As concerns the principles of the study of quantitative rhythm (e.g. a decision, whether to consider  $\cup\text{—}\cup\text{—}$  and  $\text{—}\text{—}\cup\text{—}$  as equivalents or not), this would not change principally the results of the statistical analysis, therefore these differences are not registered and counted here (cf. Ch.2.1.3).

The most disappointing conclusion of analysis of these three types of rhythm is that a correlation between these three rhythm types and the rhythm of discourse or the structure of the argument is missing. For example, isosyllabic periods can occur in paragraph-ends or in the middle of paragraphs, as well as

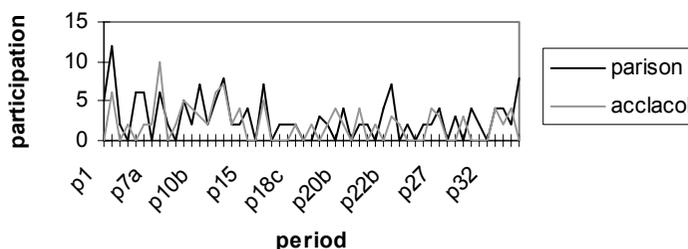
periods without any kind of syllabic rhythm at all. This absence of correlation can be explained either as a confirmation, that there are not any accentual and quantitative rhythm patterns in Gorgias, or as an indication, that there is a mechanism combining all three rhythm types, which needs to be studied with more refined methods.

### 2.1.2. Clausulae in syllabic rhythm

Clausural rhythm can be studied by counting the syllables, participating in repeated rhythm patterns in adjacent colon-ends, in either the quantitative or the accentual rhythm. During the analysis (Part III.2) several periods seemed to reveal a remarkable clausular rhythm, which seemed more evident than the rhythm within cola. However, the results of the analysis of clausular rhythm gave an unexpected result: whereas the involvement of syllables in accentual and quantitative rhythm patterns is above 40 for both the accentual and the quantitative rhythm, in clausulae these figures are smaller: 38.3% for quantitative clausulae and 43.2% for accentual clausulae (see Table 10–11, Chart 9–10 in App.II and APP.II.C). Moreover, as in the case of all three syllabic rhythm types in general, I did not manage to find systematic patterns or a correlation between quantitative and accentual rhythm or a correlation between clausural rhythm and the thematic development of the discourse.

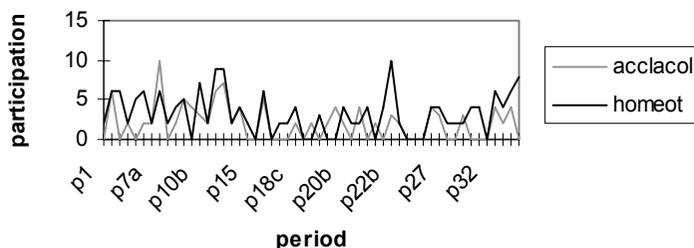
As during the analysis in Part III.2, the accentual clausulae seemed to be the result of sentence parallelism, a parison, the dynamics of the frequencies of clausural rhythm and parison were compared. The results are presented in Chart 4:

**Chart 4:** Parison and accentual clausulae



A slight correlation between the occurrences of parison and accentual clausulae can be observed, as presented in Chart 4. This study of the correlation of rhetorical figures and clausulae can be enlarged by choosing additional features to study, as for example the correlation of clausulae with the occurrences of homoeoteleuton, as presented in Chart 5 (and Table 8 and Chart 7 in App. II):

**Chart 5:** Homoeoteleuton and accentual clausulae



As in the case of parison and accentual clausulae, a correlation can be found between the occurrence of homoeoteleuton and accentual clausulae, although it is slighter. This coincidence can be explained as a result of the parison or phrase rhythm flexibility, cf. Charts 6 and 7 in App. II.

However, the clausular repetition in general is low. The reason for this can be at first explained as the result of the absence of clausular rhythm in the rhetorical practice of Gorgias' time, as it is also not reflected in rhetorical treatises. The second reason for low indices could be the choice of the criteria of study: the count of syllables, marked with graphic accents, not the intonation contour. E.g. in *Helen*, P.1 most of the 7 colon-ends and 4 complex colon ends end with paroxytona (words having an acute accent on the penultimate syllable), see the following scheme (where the clausulae, i.e. the ends of complex cola are underlined):

Scheme (16):

..7.    /7.    /7.    /..7    /7..    ..7.

Symmetry in the distribution of phrase intonation peaks is not registered in these statistics, as the accents on appositive words, which precede the nouns, are not excluded from the count (εὐανδρία, δὲ κάλλος, δὲ σοφία, δὲ ἀρετή, ἀλήθεια, ἄκοσμία), therefore the pattern is not counted as symmetric. There are two possibilities for future analysis: either to admit that syllabic rhythm (except in the case of isosyllabism) has an insignificant role in Gorgias or to refine the criteria of study (concentrating on the study of intonation contours).<sup>20</sup> The occurrences of clausula types, known from late antiquity, are indicated in App.II.C (cf. also App.I).

### 2.1.3. The classification of rhythm types

In order to illustrate the problems in deciding which of the three rhythm types: isosyllabic, accentual or quantitative rhythm, can be considered as structurally

important (i.e. not coincidental) in Gorgias, *Helen*, we can analyse P.12 DK 82 B11.vii):

Scheme (17)

εἰ δὲ βίαι ἠρπάσθη	—	υ	υ	—	—	—
	.	´	7	.	.	7 .
καὶ ἀνόμως ἐβιάσθη	—	υ	υ	—	υ	υ
	´	.	7	.	.	7 .
καὶ ἀδίκως ὑβρίσθη,	—	υ	υ	—	—	—
	.	.	7	.	.	7 .

The beginnings of these three cola could be analysed as quantitative (all begin with a dactylic foot), and the ends as accentual (repeated pattern: . . 7.), whereas there is no strict isosyllabism (the cola are composed of 7, 8 and 7 syllables). In the middle of these cola, slight differences occur, which in the case of quantitative rhythm could be explained as a usual variation, resulting from the equation rule, which regards double short syllables as corresponding to a long syllable. By admitting this equation rule, we get a dactylic rhythm in all three cola. The pattern of accentual rhythm could be described as symmetrical after the application of some adjusting rules: suppressing the accents on appositive words (in Col.1 and Col.3), which results in a catalectic anapaestic pattern (..7..7.), and adding a secondary accent to Col.2, which produces a trochaic rhythm (/7.x.7.), see Part I.3.3. In any case, the ends of Col.1 and Col.3 present accentual adonean patterns (7 . . 7 .) without these adjustments.

At the present moment it has to be concluded, that with the present criteria of study, isosyllabic rhythm is prevalent in Gorgias, although the percentage of strictly isosyllabic cola and commata does not rise much above 50% (which is a very small percentage in comparison to both poetry and proximity rhythms). As for accentual and quantitative rhythm, it has to be concluded that they are either not important or that our criteria of study are not sufficient at the present moment. However, we have seen that in the time, when the stress accent began to emerge in Greek, the prevalent rhythm can differ in the beginnings and in the ends of periods (cf. the analysis of Eunapios and Favorinus in Steinrück 2004a, Steinrück 2005).

Therefore, in the case of Gorgias, we need either to suppose a similar practice i.e. that different types of syllabic rhythm (isosyllabic, accentual and quantitative) work in the same time, or to seek another solution and to interpret the prose rhythm of Gorgias as a word-counting rhythm, based on parison and therefore occasionally causing syllabic rhythm patterns (including isosyllabic, quantitative or accentual). This could be proved in the case of the example, presented above, by counting the content words in every colon, by which we get completely symmetrical pattern (2+2+2), corresponding to the symmetric distribution of intonation peaks: there are two intonation peaks (i.e. content words which form appositive groups) in every colon.

## 2.2. Isosyllabic rhythm patterns

### 2.2.1. Large-scale isosyllabic rhythm and perceptibility

As observed in the preceding chapter and Part III.2, the most prevalent syllabic rhythm type in Gorgias is isosyllabism. Although in Gorgias only some periods are entirely based on isosyllabic rhythm, this small number of examples proves the existence of this rhythm type in his works. The greatest problem in the analysis of isosyllabic rhythm is: if it is based on an exact repetition of the number of syllables in adjacent rhythm units, then how can it be perceived, how long can these units, these isosyllabic cola, complex cola and periods be?

It is better to begin with an example, where the isosyllabic composition of the entire period is beyond doubt, Gorgias, *Helen* P. 29 (DK 82 B 11.xvii):

(EX 142)

πολλοὶ δὲ	ματαίοις πόνοις	3 + 5 =	8	
	καὶ δειναῖς νόσοις		5	= 13
	καὶ δυσιάτοις μανίαις		8	
		περιέπεσον·	5	= 13
οὕτως εἰκόνας	τῶν ὀρωμένων πραγμάτων	5 + 8		= 13
ἢ ὄψις ἐνέγραψεν	ἐν τῷ φρονήματι.	3+4+6		= 13

In EX 142 it can be observed that the analysis of the period into complex cola is based on syntactic division and supported by rhetorical figures (see Part III.2). The same is valid for the isocola in P.4 (see EX 136, Ch.1.5.3.3). The problem of perceptibility is greater in *Helen* P.8b (DK 82 B 11.v):

(EX 143)

τὸν χρόνον δὲ τῷ λόγῳ τὸν τότε	νῦν ὑπερβάς	4 + 3+3+ 4	=14
ἐπὶ τὴν ἀρχὴν τοῦ μέλλοντος λόγου	προβήσομαι,	5 + 6+ 4	=15
	καὶ προθήσομαι	5 +	
	τὰς αἰτίας,	4 +	
	δι' ἃς	2+ (11)	
εἰκὸς ἦν γενέσθαι		+3/3+ (6)	[=14/]
τὸν τῆς Ἑλένης εἰς τὴν Τροίαν στόλον.		5 + 6 (11)	[/=14]

In the middle of Col.1 of EX 143 a perfect isocolon on the level of adjacent commata can be observed, as well as proximity rhythm (gradation) between Col.1 and Col.2, confirmed by the analysis of syntax and phrase rhythm. The remaining part of the period could be analysed as two isocola of 14 syllables, and although it finds some support from the analysis of syntax (the last complex colon of this period corresponds to a direct object phrase), doubt in the perceptibility of it is not removed, as there are no other supporting features for

parsing. Therefore in the description of syllabic rhythm, these syllables were counted as belonging to proximity rhythms (:GRA) between smaller units. The ambiguity of syllabic rhythm seems to be a characteristic of this period, as its second part could be described as a circle pattern as well (11+6+11 syllables).

The third example reveals again that the problem of perceptibility is connected to the problem of ambiguity and the possibility of parallel analyses. Two (or more) equally well founded analyses reveal different patterns of isosyllabism in *Helen* P.22b (DK 82 B 11.xiv):

(EX 144)

ὥσπερ γὰρ τῶν φαρμάκων	3+4	= 7	(7)
ἄλλους ἄλλα χυμοὺς ἐκ τοῦ σώματος ἐξάγει,	6+ 5+ 3	= 14	21
καὶ τὰ μὲν νόσου τὰ δὲ βίου παύει,	1+4+4+2	= 11	(25)
οὕτω καὶ τῶν λόγων	6 +		17
οἱ μὲν ἐλύπησαν,	6	(=12)	
οἱ δὲ ἔτερψαν,	5+		
οἱ δὲ ἐφόβησαν,	6	=11	17
οἱ δὲ εἰς θάρσος κατέστησαν τοὺς ἀκούοντας,	9+5	=14	(25)
οἱ δὲ πειθοῖ τινα κακῆι τὴν ψυχὴν	8 + 3	= 11	
ἐφαρμάκευσαν	5 +		
καὶ ἐξεγοήτευσαν.	7	= 12	(23) [50]

This complex, coordinated period allows parallel analyses of syllabic rhythm, which result in different degrees of isosyllabic rhythm. Depending on the chosen method of analysis, the index of isosyllabic rhythm can indicate very slight (8 syllables out of 93, if only parallel cola and commata are analysed) or very great significance (78 syllables out of 93, when great colon complexes are regarded) or even a 100% involvement (if circular patterns were taken into account), as presented on the following scheme:

**Scheme (18)**

a.	<u>7+14+11+6+6+11+14+8+3+5+7</u>	abcd'd'a'c'b'efga'
b.	21+17+17+25+12	abb'cd
c.	32+12+33+15	aDbc
d.	38+39+15	ABC
e.	7+31+31+8+8+7	abb'cc'a'
f.	7+25+6+6+25+8+8+7	abcc'b'dd'a'

The syllabic rhythm in EX 144 can be analysed as several patterns: either as composed of different unrepeated complex cola (Scheme 18: c and d), or as more or less complex circles (Scheme 18: a, b and e). According to syntax and rhetorical parallelism the pattern should be regarded as slightly more a combination of parallel and circle structures (Scheme 18: e). However, scheme 18a, e and f seem more justified because of the large-scale syllabic rhythm: the

rhythm of the last complex colon (23 syllables) is repeated in the following period (P.23a, see Part III.2).

## 2.2.2. Gorgias as a poet: complex periods and strophic composition

### 2.2.2.1. Complex periods corresponding to Pindaric triads

Gorgias seems to include his own works under his definition of *poiesis* (see Hamburger 1957), therefore we can expect him to use every possible poetic device, including the complex triadic rhythms of Pindar. He uses such rhythms in one of his largest complex periods, *Helen*, P. 7b (DK 82 B 11.iv):

(EX 145)

<u>πλείστας</u> δὲ <u>πλείστοις</u>	ἐπιθυμίας ἔρωτος	ἐνειργάσατο,	5 + 8 + 5 = 18	
<u>ἐνὶ</u> δὲ σώματι	<u>πολλὰ</u> σώματα	συνήγαγεν	6 + 5 + 4 = 15	
	ἀνδρῶν ἐπὶ μεγάλοις	μέγα φρονούντων,	2 + 5 + 5 = 12	[45]
ὦν			1	[1]
οἱ μὲν πλούτου μεγέθη,			7	
οἱ δὲ εὐγενείας παλαιᾶς εὐδοξίαν,			13	(20)
οἱ δὲ ἀλκῆς ἰδίας εὐεξίαν,			11	
οἱ δὲ σοφίας ἐπικτήτου δύναμιν			12	
	ἔσχον		2	(25) [45]
	καὶ ἦκον <u>ἅπαντες</u>		3+3 = 6	
ὕπ' ἔρωτός τε φιλονίκου			9	
φιλοτιμίας τε ἀνικῆτου.			10	(25)

In EX 145 a complex period can be analysed as two sub-periods, whereas the first sub-period corresponds to a complex sentence with a main clause of 45 syllables, and a relative clause of 45 syllables (in four parallel cola), whereas the relative pronoun connecting these two periods is not counted. This is continued by the second sub-period, of 25 syllables (equal to the last two cola of relative clauses (11+12+2)). Thus the following scheme is achieved:

Scheme (19)

$$\begin{aligned}
 18+15+12 &= [45] \\
 <1>7+13+11+12+2 &= [45] = (1+20+25) \\
 6+9+10 &= 25
 \end{aligned}$$

This patterns again allows two possible analyses (in its end), although the analysis of syntax supports the scheme: aa'b (45+<1>+45+25), which corresponds almost exactly to the strophe-antistrophe-epode schema of Pindaric periods (which are often even longer than this period). Therefore the perceptibility of such triadic rhythm patterns should not be doubted any more than the perceptibility of strophic patterns in Pindar's poetry.<sup>21</sup>

This is not the only period which reveals a triadic pattern in its composition, the following EX 146, P.9 can be described as corresponding to a triadic pattern (15+15+13 syllables). Another complex, which covers the whole paragraph, P.8ab, will be discussed below as well (EX 169) as another example of epiploke, phrase rhythm redefinition. Sometimes these patterns can occur in sub-periods, such as P.13a (EX 157, discussed below in Ch.2.3.2.2).

### 2.2.2.2. *Strophic pairs in adjacent periods*

Large-scale syllabic rhythm can occur within one period, as demonstrated above (see also below). Sometimes large-scale syllabic rhythm patterns connect adjacent periods or complex periods, as in P.9 and P.10a, P.24 and P.25 or P.31b and P.32. The first two rhythm complexes occur within one paragraph, which strengthens the interpretation as a strophic pair. In two of these cases, slight differences occur in rhythm pattern, as the latter period is longer by one syllable, see P.24 (38 syllables) and P. 25 (39 syllables) and P.31b (41 syllables) and P.32 (42 syllables). However, a perfect correspondence between two adjacent periods occurs in Gorgias, *Helen* P.9 and P.10a (DK 82 B 11.vi):

(EX 146)

P.9

ἦ γὰρ	Τύχης βουλήμασι	2 + 6 =	8	
	καὶ θεῶν βουλευύμασι		7	[=15]
	καὶ Ἀνάγκης ψηφίσμασιν		8	(23)
ἔπραξεν ἃ ἔπραξεν,		3 + 1 + 3 =	7	[=15]
	ἦ βίαι ἀρπασθεῖσα,		7	
	ἦ λόγοις πεισθεῖσα,		6	(20) [43]
	<ἦ ἔρωτι ἀλοῦσα>.		(7)	

P.10a

εἰ μὲν οὖν	διὰ τὸ πρῶτον,		3+5=	8
	ἄξιος αἰτιᾶσθαι	ὁ αἰτιώμενος·	7+6=	13 (21)
θεοῦ γὰρ προθυμίαν	ἀνθρωπίνῃ προμηθίαι		7+8+	
	ἄδύνατον κωλύειν.		7 =	22 [43]

This perfect match between two complex isosyllabic periods (43+43 syllables) gives additional ground for rejecting the emendation in the end of P.9. This supports the division of this speech into paragraphs (P.9 as the beginning of Par.VI, see Part III.2).

### 2.2.3. Large-scale circular rhythms and closure

In *Helen* many periods are composed as circular structures, which were already partly analysed above (Ch.1.5.3.2–3). Next to circular structures, achieved by the means of syntax and word order, several circular patterns emerge on the level of syllabic rhythm. These patterns can have different functions in prose rhythm by Gorgias.

#### 2.2.3.1. Circular structures in syllabic rhythm

The preceding examples discussed the possibilities of analysing some isocola as corresponding to circular structures. We can observe a combination of two different types of circle in Gorgias, *Helen* P.31b (D.K 82 B 11.xviii):

(EX 147)

οὕτω		2			
	τὰ μὲν λυπεῖν	τὰ δὲ ποθεῖν	4+4	=8	
		πέφυκε τὴν ὄψιν.	6		[=16]
	πολλὰ δὲ πολλοῖς		3+2+		
	πολλῶν		2	=7	
	ἔρωτα καὶ πόθον	ἐνεργάζεται	3+3+5	=11	
	πραγμάτων καὶ σωμάτων.		3+4	=7	[=25]

The first circle occurs in the colon structure and corresponds to the first sub-period of EX 147. It is composed by framing two parallel commata with initial and closing pivots. The second half of the period presents a circle in syllabic rhythm (cola of 7+11+7). The first colon of the circle is formed using a polyptoton (πολλὰ δὲ πολλοῖς πολλῶν), the centre and third part by using a discontinuous pattern in word order: the object phrase ἔρωτα καὶ πόθον is separated from its genitive complement (πραγμάτων καὶ σωμάτων) by the verb.

This example is not the only one. Some other examples reveal parts of periods or entire periods (e.g. the whole sub-period in EX 144), which are constructed according to a circular pattern in syllabic rhythm. One of these, P.35 (EX 180) is discussed in Ch.3.2.3.3.

#### 2.2.3.2. Circular structures as closure

The return to the usual pattern after a change is regarded as a closural figure (Part II.3.4.1, Herrnstein Smith 1968). In syllabic rhythm, this presents a special type of circular structure (a scheme: aaba). On the level of large-scale rhythms it can be observed in Gorgias, *Helen* P. 10b (DK 82 B 11.vi):

(EX 148)

πέφυκε γὰρ		<u>4</u>		
οὐ τὸ κρείσσον	ὕπὸ τοῦ ἥσσοнос κωλύεσθαι,	4 + 10	=14	[=18]
ἀλλὰ τὸ ἦσσον	ὕπὸ τοῦ κρείσσοнос ἄρχεσθαι	5 + 9	=14	
	καὶ ἄγεσθαι,	<u>4</u>		[=18]
	καὶ τὸ μὲν κρείσσον ἠγεῖσθαι,	1 + 7		
	τὸ δὲ ἦσσον ἔπεσθαι.	7		[=15]
θεὸς δ' ἀνθρώπου κρείσσον		7		
καὶ βίαι καὶ σοφίαι		3 + 4(=7)		
καὶ τοῖς ἄλλοις.		4		[=18]

In EX 148 an entire period is based on complex cola of 18 syllables. The first two are formed by adding initial and closing pivots (of 4 syllables) to two complex cola of 14 syllables (4+10 and 5+9). This is continued by a monosyllabic pivot (καί) and a series of 7-syllable cola, which with the addition of the 4-syllable closure are redefined as a complex colon of 15 (1+7+7) and a complex colon of 18 (7+7+4) syllables, and the whole period as composed of complex cola of 18+18+15+18 syllables. The switch from cola of 18 syllables to a colon of 15 syllables predicts the end. EX 148 can be described as an onion pattern in circular rhythm as well, based on the contrast of short and long units (scheme: abcba, 4+28+5+28+4 syllables). Thus again an epiploke (reinterpretation) in syllabic rhythm can be observed (see Ch.3).

Similar examples of the resuming of a rhythm pattern in period ends can be observed in shorter cola, e.g. in P.11, based on cola of 9 syllables (scheme: 9+9+5+9). Several such circles occur in sub-periods, as the second half of P.21c (scheme: 7+7+4+7) or with less exact repetition in P.33 (cola of 10, 7, 9 and 10 syllables). One textually difficult period could be analysed from the point of view of syllabic rhythm as such a circle, see *Helen* P. 19b (DK 82 B 11.xi):

(EX 149)

εἰ μὲν γὰρ	πάντες	περὶ πάντων	εἶχον	3 + 2 + 4 + 2 = 2+8	
	τῶν <τε>	παροιχομένων	μνήμην	8*	
	τῶν τε	παρόντων	<ἔννοιαν>	5*	
	τῶν τε	μελλόντων	πρόνοιαν,	5 + 3 = 8	
οὐκ ἂν ὁμοίως	ὁμοίως	ἦν	ὁ λόγος,	5 + 4 + 3 = 12	{=44}

In EX 149 the end of the protasis (τῶν τε μελλόντων πρόνοιαν) is signalled by the return to the preceding pattern (cola of 8 syllables), whereas the period is continued with the main clause. A similar case occurs in *Helen*, P.6 and P.26 (DK 82 B 11.xvi):

(EX150)			
... ὅταν	πολέμια <u>σώματα</u>		
	[καὶ] πολέμιον ἐπὶ πολεμίῳις		
	ὀπλίσηι <u>κόσμον</u>		<u>3+2</u>
	<u>χαλκοῦ καὶ σιδήρου,</u>		<u>2+4</u>
	τοῦ μὲν ἀλεξητήριον		<u>8</u>
	τοῦ δὲ προβλήματα,		<u>6</u>
	εἰ θεάσεται ἢ ὄψις,		<u>8</u>
ἐταράχθη	καὶ ἐτάραξε τὴν ψυχὴν,		

In EX 150 a pattern: a a b a occurs, where syntactic analysis (object phrase, its complements, following subordinate clause) does not contradict it. Moreover, as in EX 149 here too the change of rhythm marks the end of the subordinate clause before passage to the main clause, which is not signalled by other means.

## 2.3. Parison and word counting rhythm

### 2.3.1. Parison and isocolon

Of the three principal phrase rhythm devices (parison, gradation and isocolon) parison is the most important one in Gorgias, *Helen*. The two main period types, based on parallelism or antithesis can both occur in a form of parison. Usually the parison occurs in cola, which exactly match each other in syntactic structure, word count and sometimes (as isocola) even the number of syllables, for example the end of *Helen*, P.6 (DK 82 B 11.iii):

(EX 151)			
ῶν			1
	ὁ μὲν διὰ τὸ εἶναι ἔδοξεν,	10	
	ὁ δὲ διὰ τὸ φάναι ἠλέγχθη,	10	
καὶ ἦν			2
	ὁ μὲν ἀνδρῶν κράτιστος	7	
	ὁ δὲ πάντων τύραννος.	7	

As observed in Ch.1.6, here too the parison occurs in the end of a period, where it suits well for closures because of its balanced structure. Although here it coincides with an isocolon, this is not the rule. The possibilities of word-count and variations in parison are discussed below.

## 2.3.2. Word-counting rhythm

The prevalence of word rhythm in *Helen* is evident: 72.5% of all words occur in symmetrical structures (and 84.9% of all content words, according to the description in Part III.2). The reasons are explained below.

### 2.3.2.1. Word-count in parison

As already explained above (Part II.3.1, 4.2.2), definitions of parison in antiquity were based on word count. The prose rhythm of Gorgias is very flexible, whereas every period is usually divided into several parallel cola. Accordingly, most parison in Gorgias occur in smaller parallel cola. These cola can be isosyllabic, but more usually they are only approximately of the same length, as in *Helen*, P.19c (DK 82 B 11.xi):

(EX 152)

<οἷς> τὰ νῦν γε	4	4 FW (2EFW+2FW)
οὔτε μνησθῆναι τὸ παροισχόμενον	5+6 = 11	2 FW, 2CW
οὔτε σκέψασθαι τὸ παρὸν	5+3 = 8	2 FW, 2CW
οὔτε μαυτεύσασθαι τὸ μέλλον	6+3 = 9	2 FW, 2CW
εὐπόρως ἔχει·	5	2CW

In EX 152, different features: the syntactic structure, anaphora and homoeoteleuta support parallelism. These are combined with the word count: every one of the three parallel cola is composed of exactly the same number of words. Such parallel cola can be much longer, up to 10 words (cf. P.22a), whereas the number of syllables in such cola is usually not much different (corresponding to isocolon or gradation). However, sometimes slight differences can occur between the first colon and the following cola, see *Helen*, P.12 (DK 82 B 11.vii):

(EX 153)

εἰ δὲ	2+	1+1FW
1 βίαι ἠρπάσθη	5	2CW
2 καὶ ἀνόμως ἐβιάσθη	8	1FW, 2CW
3 καὶ ἀδικῶς ὑβρίσθη,	7	1FW, 2CW

In EX 153 the parison is combined with gradation: Col.2 and Col.3 are longer by one word: a connector καί (or shorter by one word, if we count the introductory pivot εἰ δέ with Col.1). The example can still be classified as a parison, as the syntactic structure (connector+adv.+verb) is repeated and the number of content words is the same. Another example demonstrates that it is justified to distinguish not only content words and function words, but emphatic function words, including demonstratives and other pronouns and adverbs in the role of focus etc., for example Gorgias, *Helen* P.17 (DK 82 B 11.ix):

(EX 154)

φέρε δὴ ἄπρὸς ἄλλον ἄπ' ἄλλου ἄ μεταστῶ λόγον' (1+1)(1+1)(1+1)2

In EX 154 the initial three commata are characterised by the same proportion of word types (CW/ EFW + FW) and number of syllables (3), which is augmented in the last colon (scheme: 'Mq# pM# pM# MM').

We see that the role of different word types in a word-counting rhythm is dependent on the classification of the group of so-called function words. This has to be studied further.

### 2.3.2.2. Word-counting rhythm without parison

Sometimes the word counting rhythm is so prevailing that it can occur without a parison and even in the absence of structural parallelism, as in Gorgias, *Helen*, P.15 (DK 82 B 11.viii):

(EX 155)

λόγος δυνάστης μέγας ἐστίν,	3 CW+1EFW
ὄς σμικροτάτῳ σώματι καὶ ἀφανεστάτῳ	3 CW+2FW
θειότατα ἔργα ἀποτελεῖ·	3 CW
δύναται γὰρ	1 CW+1FW
καὶ φόβον παῦσαι	2 CW+1FW
καὶ λύπην ἀφελεῖν	2 CW+1FW
καὶ χαρὰν ἐνεργάσασθαι	2 CW+1FW
καὶ ἔλεον ἐπαυξῆσαι.	2 CW+1FW

EX 155 can be analysed either as two sub-periods, both containing 9 content words: 3x3 + (1+ 4x2), or two sub-periods with different introductory cola (4+2x3 + 1+ 4x2). Although the first sub-period is not based on parallelism, it is composed of a series of three content words. The copula ἐστίν is not classified as a function word, but as an emphatic function word, which in word rhythm has the same functions as a content word (see Part II.3.1.3.1).<sup>22</sup> Word rhythm is more complex in *Helen*, P.16c (DK 82 B 11.ix):

(EX 156)

τὴν ποίησιν ἄπασαν	2CW+1FW	a
καὶ νομίζω καὶ ὀνομάζω	2CW+2FW	b
λόγον ἔχοντα μέτρον·	<b>3CW</b>	c
ἦς τοὺς ἀκούοντας εἰσήλθε	2CW+2FW	b
καὶ φρίκη περίφοβος	2CW+1FW	a
καὶ ἔλεος πολύδακρυς	2CW+1FW	a
καὶ πόθος φιλοπενθής,	2CW+1FW	a
ἐπ' ἄλλοτρίων τε πραγμάτων καὶ σωμάτων	<b>1CW+2FW; 2CW+1FW</b>	da
εὐτυχίαις καὶ δυσπραγίαις	2CW+1FW	a
ἴδιόν τι πάθημα	2CW+1FW	a
διὰ τῶν λόγων ἔπαθεν ἡ ψυχὴ.	<b>1CW+2FW; 2CW+1FW</b>	da

In EX 156 the principal colon type is composed of two CW and one FW, both in the parallel cola in the middle of the period as well as in other cola, which are not based on parallel structures (corresponding to independent syntax and rhythm units). This colon type is varied with two others: in the first sub-period two cola are composed of 2 CW and 2 FW, framing the only colon in the period, which does not contain FW (λόγον ἔχοντα μέτρον). This pattern-break can be explained by the importance of this colon: Gorgias' definition of art. In the end of the period, the basic 2CW1FW colon type is extended by commata (as if in a mirror), composed of 1CW and 2FW. This is an example of word-rhythm without parison, according to a circular pattern (a scheme: abcbaadada). See also *Helen*, P.13a (DK 82 B 11.vii):

(EX 157)			
ἡ δὲ βιασθεῖσα		<u>6</u>	
καὶ τῆς πατρίδος στερηθεῖσα		5+4= <u>9</u> (=15)	
καὶ τῶν φίλων ὀρφανισθεῖσα		4+5= <u>9</u>	
πῶς οὐκ ἂν εἰκότως		<u>6</u>	(=15) (30)
ἐλεηθεῖη μάλλον		7	
ἢ κακολογηθεῖη;		7	(=14)

In EX 157 the parison is slightly incomplete, in order to achieve an isosyllabic rhythm (100% in this period-end), resulting with a gradation pattern, which will be discussed in Ch.3.2.2.

### 2.3.3. Gradation, word count and isosyllabic rhythm

In Gorgias, *Helen* two principal patterns of gradation occur, one of them in a syllabic rhythm without a parison, another in parison. However, in the case of parisa, a gradation in syllabic rhythm can occur as well. The simplest sub-type of such parisa are cases, where the second colon (or third etc) is one or several syllables longer than the first colon, as in Gorgias, *Helen* P.22a (DK 82 B 11.xiv):

(EX 158)			
ἢ τε τοῦ λόγου δύναμις	πρὸς τὴν τῆς ψυχῆς τάξιν		8 + 7 = 15
ἢ τε τῶν φαρμάκων τάξις	πρὸς τὴν τῶν σωμάτων φύσιν.		8 + 8 = 16

EX 158 is the longest parison in *Helen*, presenting 10 repeated words, whereas the difference in the length of these complex cola is insignificant (only one syllable). This type of parison can be observed in other periods as well, e.g. end of P.7b (EX 140), P.22b (EX 142) and P.35 (EX 143). However, it is more usual to construct a gradation in parison by adding words (and therefore also



## 2.4. Parallelism, analogy and parison

Parallelism has been defined through structural repetition (Part II.4.1). It can be achieved through the repetition of syntactic structures, but parallelism (or antithesis) can be achieved without the exact repetition of sentence structure as well. In the case of the absence of a one-to-one correspondence in grammatical cases, there are other characteristics, which indicate parallelism, for example a more general analogy of the structure (Part II.4.1.3.2).

In parallel structures based on analogy, the phrase structure can be repeated in a more general way, by using the same word classes in the same order. The occurrence of other parallelism figures, such as a gradation and/or homoeoteleuton in these periods confirms that structural analogy, in such cases, replaces syntactic parallelism. This can be observed in *Helen*, P.18b (DK 82 B 11.x):

(EX 162)

συγγινομένη γὰρ	τῆι δόξει τῆς ψυχῆς	$\frac{6}{4} + \frac{3+3}{4}$	=12
	ἡ δύναμις τῆς ἐπωιδῆς	$\frac{4}{4} + \frac{4}{4}$	=8

In EX 162 the genitive complement phrase to the participle in a predicative position occurs in a gradation with a following subject phrase (6 and 8 syllables), whereas the parallelism between these periods is indicated by homoeoteleuton and analogy in word types and their order. Both cola use the same structure:

Scheme (20)    art1' NOUN' 1 art 2 NOUN.gen.COMPLEMENT 1'  
                   art1" NOUN 1" art 2" NOUN.gen.COMPLEMENT 2"

Although the first words of these two cola are in different cases (the first noun phrase is a dative complement to a predicative and the second one corresponds to the subject phrase), the analogy is obvious and the example is classified as a parison. Sometimes this type of parison can be observed in antithesis, for example *Helen*, P. 31a (DK 82 B 11.xviii):

(EX 163)

ἐκ πολλῶν χρωμάτων	καὶ σωμάτων	3+3+4=10syl, 5 words
ἐν ὁμίᾳ	καὶ σχῆμα	1+2+3=6 syl, 4 words

EX 163 represents one of the rare occurrences of diminishing gradation patterns in *Gorgias*. The gradation occurs both on the level of syllable and word count, and might be explained with the sense of the period: the opposition 'many' vs. 'one' (as 'many' is in the first place, the pattern should be diminishing in a proper mimesis). As in EX 162, a correspondence in grammatical structures is absent, as the prepositional phrase functions as a complement to the verb and



The example is similar to EX 162, presenting again a subject phrase and a dative complement to the verb, but keeping the order of word types (art., art., proper name gen., noun). These examples were relatively short; however, structural analogy can be observed in some longer phrases, as the beginning of P.7b (EX 145):

Scheme (22)

CW FW CW (quant.Oacc&quant.dat.Comp)+CW CW (nounO,noun.gen.Comp) CW (verb)  
 CW FW CW (quant.datIO&noun.dat.IO) + CW CW (quant.O, noun.O) CW (verb)

In Scheme 22 we can observe repetition of the general rhythmic structure of adjacent complex cola. Both are parsed into two cola and a final comma (a verb), and the word types in these cola and commata are similar. Although there is a difference in word classes, word formation-types, grammatical cases and syntactic relations, the parison is easily perceived.

This part revealed the main principles of parison in Gorgias: although it is usually based on the repetition of syntactic structures, parallelism can be understood more widely, as an analogy of structure. In both cases, the foundation is a word-counting rhythm.

### 3. EPIPOKE: CHANGE AND REDEFINITION

The preceding parts of this dissertation have revealed that prose rhythm is characterised by constant change. In prose metre (different types of syllabic rhythm) this character results in the absence of clear-cut symmetrical patterns; this can be the reason for another possibility: to redefine rhythm patterns after the context has changed. The same is valid for phrase rhythm, where flexibility and the possibility of redefinition characterise prose rhythm. This part studies more thoroughly different possibilities of change, movement and redefinition in prose rhythm.

#### 3.1. Transition in movement

##### 3.1.1. Discontinuity, enjambement and relative clause

In preceding parts, a comparison has been drawn between a type of word and phrase detachment in Greek prose and enjambement in Greek epic and lyric poetry. Is there anything that could justify searching prose composition for features of *enjambement*, the continuation of a sentence beyond the verse-end into the following verse? *Enjambement* means a clash between metric and syntactic structures, whereas in prose such clashes seem impossible. However,

in both, poetry and prose we have a common phenomenon: the detachment of words or phrases (using hyperbata, appositive or adding syntax) and redefinition of the pauses at colon boundaries, from a (initial) final (in verse-end or in period-end) to an intermediary pause. The function of detached words (runovers) and small phrases in both types of composition is often similar: to create frames or reference-points before the next sentence or convenient beginning-points for the following phrase.<sup>23</sup> Therefore a comparison with poetry is not inappropriate, whereas the types and functions of such phrases (or words) are discussed below.

### 3.1.1.1. *Apposition and detachment before relative clause*

In Gorgias, *Helen*, apposition of words or phrases after a supposed colon-end can occur before relative clauses. This can be observed in *Helen*, P.3 (DK 82 B 11.ii):

(EX 166)

τοῦ δ' ἀπὸ τοῦ ἀνδρὸς		5+
λέξαι τε τὸ δέον ὀρθῶς		3 + 5 = 13
καὶ ἐλέγξαι *** τοὺς μεμφομένους Ἑλένην,	BO1	4 + 8 = 12+
<u>γυναῖκα</u>	BO2	<b>3*</b> = 15
περὶ ἧς		<b>3*+</b>
ὁμόφωνος καὶ ὁμόψυχος		<b>4* + 5* = 12+ (15*)</b>
	γέγονεν	<b>3' (=12) = 15</b>
ἢ τε τῶν ποιητῶν ἀκουσάντων πίστις ...		6' + 6' = 12 (15')

In EX 166 the noun *γυναῖκα* is added as an appositive to the proper name Ἑλένην. At first the predicate phrase (a verb and a direct object) seems to be concluded with Helen's name at BO1, especially since it is the second of two parallel cola (of 13 and 12 syllables) and therefore suitable for an ending. However, after the noun, a relative clause is added and the second complex colon is redefined as including 15 syllables (12+3, in bold) and ending at BO2. The beginning of the relative phrase corresponds to a complex colon, which is again composed of 15 syllables (3+9+3), thereby confirming the redefinition. It can be observed that this small appositive comma is parallel to other 3-syllable commata, for example the following introductory pivot (a preposition with a relative pronoun), which helps to create flexible rhythm patterns.

The function of the transitory pivot is the same as for runover words in epic poetry: to make the passage to the relative phrase smoother; at the same time it presents the second part of the antithesis: 'man' vs. 'woman' (which could occur in poetry as well) Cf. Part II.3.4.1.3. The same antithesis in a different syntactic structure occurs in *Helen*, P. 5 (DK 82 B 11.iii):

(EX 167)

ὅτι μὲν οὖν	φύσει καὶ γένει	4 + 2+3 = 9
τὰ πρῶτα τῶν πρώτων	ἀνδρῶν καὶ γυναικῶν	3 +3 + 2+4 = 12
ἡ γυνή	περὶ ἧς ὅδε ὁ λόγος,	3+3 + 5 = 11
οὐκ ἄδηλον	οὐδὲ ὀλίγοις.	4 + 5 = 9

In EX 167 the noun ἡ γυνή occurs as a postponed subject, not apposition, but its function is still the same: to enable swifter passage to the relative clause and bring out the antithesis ‘man’ vs. ‘woman’. Its position can be classified as deferred and as a focus (Devine-Stephens 2000). The position at the beginning of one of the four parallel complex cola allows us to observe a parallel with runover nouns in epic verse; therefore we have the same question: should we regard it as simple filler (because it could be anticipated) or should we understand it as emphatic because of the deferred position? (cf. Bassett 1926). Other occurrences of relatives in this speech are not preceded by detached words, but these two examples should be enough to explain how this practice works.<sup>24</sup>

### 3.1.1.2. *Pivots before relative clauses*

In Ancient Greek nominal sentence (and in Gorgias) copula can be missing. Therefore the occurrence of copula might sometimes need explanation. In Gorgias, *Helen* the passage to the relative clause is prepared once by a copula, see P.15 (DK 82 B 11.viii):

(EX 168)

λόγος δυνάστης μέγας ἐστίν,	
ὃς μικροτάτω σώματι	καὶ ἀφανεστάτω

In EX 168 the copula occurs after a definition, which presents the foundation of Proof 3: ‘word is an important ruler’ (λόγος δυνάστης μέγας). This is not unusual in nominal syntax and Gorgias (see Part II.3.3.3.2, IV.1.5.2.1). The attention of listeners is focused on this phrase, where every single word is in focus, as there are no function words at all. The following copula helps to create a reference-point, a basis, from which to proceed to the relative clause, thereby giving more flexibility to the rhythm (which has become stiff because of the absence of particles).

The passage to the relative clause can be smoothed with entire phrases, which are usually added with connectors to the preceding part of the sentence, see *Helen*, P.8b (DK 82 B 11.v):

(EX 169)

τὸν χρόνον δὲ τῷ λόγῳ τὸν τότε	νῦν ὑπερβᾶς	4 + 3+3+ 4	=14
ἐπὶ τὴν ἀρχὴν τοῦ μέλλοντος λόγου	προβήσομαι,	5 + 6+ 4	=15
	<u>καὶ προθήσομαι</u>	5 +	
	<u>τὰς αἰτίας,</u>	4 +	
	δι' ἧς	2+ (11)	
εἰκὸς ἦν γενέσθαι		+3/3+ (6)	[=14/]
τὸν τῆς Ἑλένης εἰς τὴν Τροίαν στόλον.		5 + 6 (11)	[/=14]

In EX 169 a pivot is added to a complex colon (sub-period) which could be considered as the end of two parallel cola (of 14 and 15 syllables). The context of this addition is typical: co-occurrence of parallelism, homoeoteleuton and even partial chiasm (----προ... προ...----). Together with the following relative pronoun, the added pivot prepares the penultimate colon of the period (εἰκὸς ἦν γενέσθαι), an important reference to the nature of Gorgias' argumentation (argument concerning the probable, see Part III.2). At the same time this pivot includes one of the keywords of this speech (τὰς αἰτίας 'the reasons'), as with the word 'woman' in P.3 and P.5.

After these examples it can be concluded, that in Gorgias short pivots enable the passage to relative clauses and often contain important keywords of the speech. Sometimes (in the occurrence of copula in P.15, EX 168) the pivots function as fillers, just like Homeric runover words. The analysis of transitory pivots is relatively easy, but sometimes it can produce parsing problems, which are discussed in Ch.3.1.2.

### 3.1.2. Pivots in transition and the problem of clausulae

#### 3.1.2.1. Pivots and concatenation

Before, it has been observed that the repetition of keywords in concatenation functions as a connecting pivot (Ch.1.6, Part II.3.4.1.3). This occurs in the usage of commata or one-word pivots in transitional parts from one period to another, from P.18a to P.18c (DK 82 B 11.x):

(EX 170)

- a . αἱ γὰρ ἔνθεοι διὰ λόγων ἐπωιδαὶ  
ἐπαγωγοὶ ἡδονῆς, ἀπαγωγοὶ λύπης  
γίνονται.
- b. **συγγινομένη γὰρ** τῆι δόξει τῆς ψυχῆς  
ἢ δύναμις τῆς ἐπωιδῆς  
ἔθελξε καὶ ἔπεισε καὶ μετέστησεν αὐτὴν  
γοητείας.
- c. γοητείας δὲ καὶ μαγείας δισσαὶ τέχναι εὕρηνται,  
**αἷ εἶσι**  
ψυχῆς ἀμαρτήματα καὶ δόξης ἀπατήματα.

EX 170 reveals all three possible positions of transitional pivots within one paragraph (all marked in bold): in the end (in a and in b), at the beginning (in b) and in the middle of a period (in c). P.18a–P.18c is the only perfect example of concatenation in Gorgias, *Helen* and has already been discussed above (see Part II.4.4.2.4); however, it serves also to illustrate problems in the analysis of clausulae. The first two periods correspond to the circle type, where initial and final pivots frame the centre, which is based on parallelism. In P.18c the pivot is in the centre (a scheme: aa'bqcc'), whereas this time the pivots which frame the parallel cola are missing and the parallel cola surround the pivot.<sup>25</sup> The function of transitory pivots depends on their position: in the case of framing pivots the function can be balancing the rhythm (P.18b), the final and central pivots clearly have a transitory function. Whereas the central 3-syllabic pivot in P.18b is in contrast with the adjacent parallel cola, final pivots can sometimes, in the end of gradation patterns (as in P.18b, possibly P.18a) function as culminations. This clausal function of transitory pivots is discussed in the next chapter.

### 3.1.2.2. Pivot, addition and the problem of clausulae

As above in the case of transitional pivots before relative clauses, most of these examples present keywords, which are important for the period (P.18a and P.18b), or function as fillers, introducing the following cola. These pivots can often be very short, when they are in contrast with the following or preceding (often parallel) cola, especially in the case of relative pronouns, see P.6 or P.7b. But pivots can correspond to slightly longer phrases as well; in these cases they are usually added with a connector, see *Helen*, P.10b (DK 82 B.11.vi):

(EX 171)

ἀλλὰ τὸ ἦσσον ὑπὸ τοῦ κρείσσονος ἄρχεσθαι	5 + 9	BO1
καὶ ἄγεσθαι,	4	BO2
καὶ τὸ μὲν κρείσσον ἠγγεῖσθαι,	1 + 7	BO3
τὸ δὲ ἦσσον ἔπεσθαι.	7	BO4
θεὸς δ' ἀνθρώπου κρείσσον	7	BO5
καὶ βίαι καὶ σοφίαι	3 + 4(=7)	BO6
καὶ τοῖς ἄλλοις.	4	BO7

In EX 171 the first two pivots, καὶ ἄγεσθαι in BO2 and the connector καὶ in the beginning of Col.3, are transitory,<sup>26</sup> whereas the last one, occurring in a gradation (underlined), functions as a closure. For the study of clausular rhythm it is a great problem, whether to study the clausular rhythm at boundaries BO1 and BO2, or only at BO1 or at BO2, and whether the ends of isosyllabic cola at BO3, BO4, BO5, BO6 should be regarded as clausulae, or the ends at BO3, BO4, BO5 and BO7, or only the ends at BO4 and BO7? Here the gradation pattern gives grounds for regarding BO1–5 and BO7 as clausulae (cf. Part III.2). However, although analysis of clausular rhythm is difficult, the pattern of the repetition of 4 isocola remains perceptible and is even strengthened by the following closural pivot (καὶ τοῖς ἄλλοις). Similar problems can be observed in *Helen*, P. 22b (DK 82 B 11.xiv):

(EX172)

οἱ δὲ εἰς θάρσος κατέστησαν τοὺς ἀκούοντας,		
οἱ δὲ πειθοῖ τινα κακῆν τὴν ψυχὴν		
ἐφαρμάκευσαν		BO1
καὶ ἐξεγοήτευσαν.		BO2

In EX 172 we can observe that the added comma ends a long gradation structure (BO2), being in homoeoteleuton with the preceding, anticipatory colon-end (BO1). As the following period is short, this clausula can be explained as producing a final pause for the long gradation and preparing the passage to the following, rhythmically different period (P.23a).

The final pivots can already belong to word-types, which function as introductory pivots, as in the case of a cataphoric pronoun in P.14 (DK 82 B 11.viii):

(EX 173)				
εἰ δὲ λόγος	ὁ πείσας	4+3 = 7		BO1
	καὶ τὴν ψυχὴν ἀπατήσας,	8	[=15]	BO2
οὐδὲ πρὸς τοῦτο	χαλεπὸν ἀπολογήσασθαι	5+3+6 = 14		BO3
	καὶ τὴν αἰτίαν ἀπολύσασθαι	10	[=24]	BO4
	ᾧδε.	2		BO5

EX 173 can be analysed as a total gradation (two sub-periods of 15 and 26 syllables). In word rhythm the main clause is augmented by the anaphoric πρὸς τοῦτο at its beginning and cataphoric ᾧδε in its end.<sup>27</sup> The analysis of intermediate clausulae is difficult: they could be studied between adjacent parallel commata and cola (πέισας-ἀπατήσας, BO1- BO2, and ἀπολογήσασθαι-ἀπολύσασθαι, BO3-BO4), or between the sub-periods (ἀπατήσας - ἀπολύσασθαι at BO2 and BO4)? Next to this the problem of the final cataphoric has to be solved. If it is regarded as belonging to the preceding colon-end (ἀπολύσασθαι ᾧδε at BO5), the homoeoteleuton in BO3 and BO4 becomes meaningless. Another possibility (preferred here) is to regard this transitory pivot as extra-metrical, i.e. not belonging to any of the adjacent cola.<sup>28</sup>

## 3.2. Epiploke: redefinition in syntax and syllabic rhythm

### 3.2.1. Redefinition in parallelism

#### 3.2.1.1. Redefinition in addition and division

In several periods of Gorgias, *Helen* short cola and commata can be reanalysed as long complex cola. This reanalysis is a result of the influence of a changing context: adjacent long complex cola. This simple type of adding reanalysis has been observed in the example of *Helen*, P. 2 (Part I.2.4.3), where cola of 6+6+1 syllables were reanalysed as a complex colon of 13 syllables. Analogically, a long colon (or complex colon) can be reanalysed in a different context as two shorter units, as occurs in P.11 (DK 82 B.11.vi):

(EX174)				
εἰ οὖν	τῆι Τύχηι καὶ τῶι θεῶι	2+3+4 = 9		
	<u>τὴν αἰτίαν</u> <u>ἀναθετέον,</u>	<u>4+5</u> = 9 [=18]		
[ἦ] τὴν Ἐλένην		<u>5</u> (+)		
	<u>τῆς δυσκλείας ἀπολυτέον.</u>	<u>4+5</u> = 9 [=14]		

In EX 174 the parallelism between the ends of parallel cola triggers the reanalysis of two complex cola of 18 and 14 syllables as a pattern of 9+9+5+9 syllables (cf. Ch.2.2.3.2).

### 3.2.1.2. Rhythmic, rhetorical and syntactic units in redefinition

The redefinition of rhythm units can occur together with a mismatch between syntactic structures, rhetorical cola and phrase rhythm units. This is revealed in Gorgias, *Helen* P.29 (DK 82 B 11.xvii):

(EX 175)

πολλοὶ δὲ	ματαίοις πόνοις	3 + 5 =	8	
	καὶ δειναῖς νόσοις		5	= 13
	καὶ δυσιάτοις μανίαις		8	
		περιέπεσον·	5	= 13
οὕτως εἰκόνας	τῶν ὀρωμένων πραγμάτων	5 + 8		= 13
ἢ ὄψις ἐνέγραψεν	ἐν τῷ φρονήματι.	3+4+6		= 13

The initial analysis of the first sub-period of EX 175 corresponds to a scheme: paa'abqcd (3+5+5+8+5+5+8+7+6 syllables). This sub-period is followed by another period of 26 syllables, composed of two complex cola of 13 syllables. Although the analysis of syntax does not require different analysis and the gradation in phrase rhythm could be analysed as three units, the following two cola (of 13 syllables) demand reanalysis of preceding commata as two complex cola of 13 syllables, thereby resulting in 4 isocola of 13 syllables.

In this example the syntax, rhetorical cola and syllabic rhythm units did not coincide, but there was no obvious clash neither (i.e. the analysis did not contradict phrase and colon boundaries). Greater clashes will be analysed in following sub-chapters.

### 3.2.2. Rhetorical figures vs. syntax and redefinition

It has already been observed that parallelism can be achieved by analogy of position without correlative or coordinating syntactic constructions (Ch.2.4). The rhetorical figures can serve as a guide for possible definition and redefinition of parallel cola and commata, as revealed in Gorgias, *Helen* P.26 (DK 82 B 11.xvi):

(EX 176)

ὅταν πολέμια σώματα	S: 2+7 = 9
[καὶ] πολέμιον ἐπὶ πολεμίοις	O:CV 5+6 (=11)
ὀπλίσηι κόσμον	V:O 3+2 = 5+
χαλκοῦ καὶ σιδήρου,	CO+CO 2+4 =6 (=11)
τοῦ μὲν ἀλεξήτριον	8
τοῦ δὲ προβλήματα,	6

In EX 176 an interlocked word order results in the following pattern: the verb is in the middle of an object phrase, whereas the adjective complement to the object comes before (πολέμιον) and the genitive complement (χαλκοῦ καὶ σιδήρου) after the noun. Although the adjective belongs grammatically together with the noun, it creates its own rhythm unit (of 11 syllables) with the adjacent prepositional clause (ἐπὶ πολεμίοις), as often occurs in polyptota. The first half of the genitive complement could at first be analysed with the preceding noun (κόσμον χαλκοῦ) as one rhythm unit, but the adding of the second part (καὶ σιδήρου) to it triggers a redefinition of the whole group as two cola: ὀπλίσηι κόσμον and χαλκοῦ καὶ σιδήρου, and the whole complex together as one rhythm unit of 11 syllables. The connective particle καί, which marks the beginning of the appositive phrase, at the same time functions as a glue, which unites both genitive complements into one colon and brings the VO phrase core ὀπλίσηι κόσμον into focus. Thus, the circular pattern in word-order, which does not match the division according to the rules of grammar, results in new cola, based on phrase rhythm.

The importance of parison in the analysis of rhythm units is revealed in *Helen*, P.18b (DK 82 B 11.x):

(EX 177)

συγγινομένη γὰρ	6 +
τῆι δόξει τῆς ψυχῆς	3 + 3 =12
ἡ δύναμις τῆς ἐπωιδῆς	4 + 4 =8
ἔθελξε καὶ ἔπεισε καὶ μετέστησεν αὐτήν	3+1+3 + 7=14
γοητεῖαι.	4

In EX 177 the analysis of syntax suggests a first interpretation as a participial clause (συγγινομένη γὰρ... τῆι δόξει τῆς ψυχῆς) of 12 syllables, followed by a short subject phrase (ἡ δύναμις τῆς ἐπωιδῆς) of 8 syllables and a verb phrase (ἔθελξε... γοητεῖαι). The analysis of introductory and final pivots and parison (based on analogy) reveals another possibility for analysis: an introductory pivot, a parison, a gradation, a final pivot (6+14+14+4 syllables).

In these examples, the role of rhetorical figures as a basis for the redefinition of syllabic rhythm patterns has been observed. A refined analysis would reveal more about the function of rhetorical figures in syllabic rhythm.



(EX179)					
ἐπειράθη καταλῦσαι		μόμου ἀδικίαν		8 +6	
		καὶ δόξης ἀμαθίαν,		7	[=21]
ἐβουλήθη γράψαι	BO1	<u>τὸν λόγον</u>	BO2	6+3 =9	
		Ἑλένης μὲν ἐγκώμιον,		8	
		ἔμὸν δὲ παίγνιον.		6	[=25]

In EX 179 the initial colon of the last period of the speech (ἐβουλήθη γράψαι) ends with a slight syntactic boundary at BO1 (confirmed by parallelism with other periods and homoeoteleuta καταλῦσαι, γράψαι). It is followed by a noun (τὸν λόγον), which is a complement to the infinitive γράψαι. The adding of two parallel appositive clauses to the noun τὸν λόγον creates a slight boundary at its right (BO2), before the genitive complement (Ἑλένης). Therefore the noun seems to be slightly isolated from both sides by boundaries, and is brought into focus by them, which is suitable for its role as the most eminent keyword of this speech (cf. Part III.2). The descending parallelism towards the end of the speech (cola of 8 and 6 syllables) suggests a redefinition of ἐβουλήθη γράψαι BO1 τὸν λόγον BO2 as one colon, suppressing the boundary at BO1. This re-interpretation is supported by the analysis of colon-ends: τὸν λόγον and the added appositive phrases Ἑλένης μὲν ἐγκώμιον, ἔμὸν δὲ παίγνιον end with homoeoteleuta; thus a new homoeoteleuton (-ov) replaces the preceding one (-σαι) in the function of a marker of colon and period-end. According to this interpretation the whole speech is completed by a diminishing triple gradation on the level of cola and commata, although on the level of sub-periods and periods, the final sub-period is the culmination of four augmenting periods:

Scheme (24)

A    A    A    A(=A A A)

This example reveals the redefinition of syllabic and phrase rhythm, which results from the redefinition of prosodic units. Analysis of the syllabic rhythm in the end of this speech as a small-scale diminishing gradation pattern enables us to observe once again a clash between different levels of rhythm, as in the large-scale rhythm we find a tetracolon auctum.

### **3.2.3.3. Redefinition and large-scale rhythm: circle and triad**

In preceding chapters it was observed that redefinition can occur on a lower level: in shorter periods and sub-periods or in complex cola. In some cases the redefinition patterns cover entire periods. For example, a large-scale circular structure in syllabic rhythm is formed in Gorgias, *Helen* P.35 (DK 82 B 11.xx):

(EX 180)

πῶς οὖν χρῆ			<u>3</u>
δικαίον ἠγήσασθαι	τὸν τῆς Ἑλένης μῶμον,	<u>7</u> + <u>7</u> =	14
ἦτις <i>εἴτ' ἔρασθεισα</i>		2 + 5 =	7
<i>εἴτε</i> λόγῳ πεισθεῖσα			7
<i>εἴτε</i> βίαι ἀρπασθεῖσα			8
<i>εἴτε</i> ὑπὸ θείας ἀνάγκης ἀναγκασθεῖσα		9 + 5 =	14
<i>ἔπραξεν ἃ ἔπραξε,</i>		3 + 4 =	7
	πάντως διαφεύγει τὴν αἰτίαν;		<u>10</u>

EX 180 reveals a complex period, where the phrase rhythm is based on a combination of parallel structures (tetracolon auctum) in the middle and 2+2 framing pivots. Although the cola seem to be of different sizes, a closer analysis and regrouping reveals a 100%-participation in syllabic rhythm, according to a circular pattern:

Scheme (24)                      3+7+7+7+7+8+**14**+7+10

In the beginning of the period the elementary units are shorter (3, 7 and 7 syllables), whereas the beginning could be analysed as an introductory pivot of 3 syllables and a complex colon (predicative phrase) of 14 syllables. The continuation in parallel cola of 7 syllables reveals that this analysis is not necessary. However, the last two members of the tetracolon auctum and the final two cola trigger the reanalysis of the beginning of the period, resulting in a pattern of (3+7)+7+14 syllables, which leaves a colon of 8 syllables in the centre and ends with three cola of 14+7+10 syllables (a scheme: abcdca). Although the pattern in circular rhythm is perfect and does not contradict colon borders, the resulting syllabic patterns do not match the phrase rhythm units (corresponding to the analysis in EX 180, not Scheme 24), although this could be described as a circle, too (a scheme: ab cccc dde).

Segmentation of periods into small commata and cola can form complex circular rhythm patterns and cause redefinitions of syllabic rhythm in several other cases. Usually these structures do not emerge on the level of an entire period; however, sometimes this can occur, as observed in a complex redefinition case, where all 43 syllables of the period participate, enabling three possible analyses of syllabic rhythm, see Gorgias, *Helen* P.21c (DK 82B 11.xiii):

(EX 181)

δεύτερον δὲ	τοὺς ἀναγκαίους διὰ λόγων ἀγῶνας,	4 + 5 + 7	[= 16]
ἐν οἷς		2	
εἰς λόγος		3+	
πολὺν ὄχλον		<u>4</u> = 7	
ἔτερω καὶ ἔπεισε		<u>3+4</u> = 7 (11)	[= 16]
τέχνη γραφεῖς,		4+	
οὐκ ἀληθεῖαι λεχθεῖς·		7 = 11	

According to the first analysis of EX 181, the period begins with two isocola (an introductory object phrase of 16 syllables, followed by a relative clause of 16 syllables) and ends with an antithetic parison (cola of 4 and 7 syllables). Whereas the beginning of the following period (P.21d: τρίτον...ἑμίλλας) presents a colon of 11 syllables, the end of P.21c is redefined as a complex colon of 11 syllables, and the whole period as corresponding to a triadic pattern, AAB (16+16+11 syllables, cf. Ch.2.2.2.1). The redefinition of the last parison as a colon of 11 syllables triggers another redefinition, which is based on small syntactic units. According to this, the relative clause is to be analysed as an introductory pivot, followed by the subject ἐν οἷς ... λόγος (5 syllables), and as a VO-phrase of 11 syllables (πολὺν ... ἔπεισε), which is in its turn followed by a double participial clause (11 syllables) and the beginning of the following period (11 syllables), according to a scheme: ABCC (16+2+3+11+11). However, a third definition of the relative phrase is possible, which takes into account the first parison, based on analogy and antithesis (εἰς λόγος, πολὺν ὄχλον). According to this, the period ends with a circle pattern, based on a sequence of 7 syllables. It begins with the first parison and a pair of verbs (7+7 syllables), is disrupted with a short participial clause (4 syllables) and is resumed in a final participial clause (7 syllables). This corresponds to a scheme: ABCCDC.

These three possible rhythm schemes of this period can provoke the questions: which of them is an adequate description of the syllabic rhythm of this period? And, is an adequate description of syllabic rhythm possible in the context of competitive and equally founded rhythm schemes? In respect of this period, it has to be understood that these three descriptions do not mutually exclude each other: the second and the third redefinition can be reduced to the initial pattern AAB (as in ABCC, BC=A; and in ABCCDC, BCC=A and DC=B). To answer the second question one needs at first to be reminded of Part I of this dissertation. The nature of prose rhythm (any rhythm) is in movement and this movement occurs in constant change. The search for fixed and unchanging rhythm patterns would contradict this principle. Therefore the description of prose rhythm is adequate, when it can present and explain the multiplicity of its rhythmic structures.

## Conclusion to Part IV

Part IV presents a generalisation and conclusions of several prose rhythm features, described and analysed in Part II.2. At first (Ch.1.2) it presents a summary of the thematic development of the speech and compares it to the analysis of the dynamics of several speech rhythm factors (the analysis of keywords, word-type distribution, syntax and parallelism types and phrase types, phrase rhythm flexibility). It is observed that the construction of the speech is supported by the dynamics of the distribution of several syntactic or lexical characteristics: the distribution of keywords, occurrences of auto-reference, the usage of parallel structures (especially parison), whereas the hierarchy of the division of the speech into sub-parts and smaller subdivisions is respected and even supported by many of these figures (e.g. parison, keyword distribution). It is observed that the principal function of the keywords was to connect periods and to add coherence to the whole speech (on both, micro- and macro-textual levels), usually respecting the hierarchy of the subdivisions of the speech. (Ch.1.3). The study of the distribution of gnomic syntax and auto-reference enabled refinement of the definition of nominal sentences, as referring to a personal context (not only direct speech), as well as stating conclusions. (Ch.1.4). Analysis of the dynamics of the distribution of sentence types did not allow any very important conclusions. A further analysis revealed that nominal syntax, the opposition of diathesis and rhetorical questions occur very often in the conclusions of Gorgias' arguments, where they function as an argumentation device in place of (or next to) logical argumentation. The usage of chiasmic and circle patterns as closures, and simple periods and auto-reference as transitions was observed in this subchapter as well. (Ch.1.5). Analysis of parallelism figures revealed the important characteristic of parison as a closure; in the same chapter it was observed that parison can be based on analogy in the construction of sentences or occur in gradations, where the character of parallel structures is binary and even ternary patterns can be reduced to it. (Ch.1.6). At the same time, the preliminary analysis revealed no systematic pattern in the distribution of several other rhetorical (homoeoteleuta, anaphora, antitheta, circular patterns) or sound figures (polyptota, alliteration). Therefore they were not studied separately in Part IV. The only exception was the correlation between the frequency of rhetorical figures and the number of elementary units in a period: the more elementary units there are, the higher the occurrence of parison, homoeoteleuton etc. (Ch.1.7.3, 2.1.2). These analyses revealed another characteristic of discourse rhythm: sometimes development of the discourse cannot be classified without ambiguity: there are transitory parts, which do not belong strictly to one or another subdivision.

Therefore it can be concluded that the occurrence of rhetorical figures adheres to the function, which they have already (at least implicitly) according to the rhetorical treatises of antiquity: to indicate (and form) boundaries of the

sub-parts (cola) of rhetorical periods. Thus their occurrence is complementary: it is not necessary for all parallelism figures to occur at the same time, it is sufficient to mark period boundaries at least with some of them.

The study of rhythm features on the level of periods in Ch.2 concentrates on two parts: prose metre (i.e. syllabic rhythm) and word-counting rhythm. It is observed that on the level of the period, word rhythm is most important and usually occurs in different types of parison, but can also occur without it (Ch.2.3–4), whereas syllabic rhythm is revealed mostly in isosyllabism, especially when proximity rhythms (mostly gradation) are taken into account (Ch.2.1–2). Accentual and quantitative rhythm reveal less remarkable patterns, which might be the result of their lesser importance, but also because of the insufficiency of the chosen method of study, which is based on syllables bearing accents, and does not take into account the intonation contour. However, before further studies, it can be supposed that the occurrence of syllabic rhythm (as the occurrence of several parallelism figures) is compensatory. The study of syllabic rhythm reveals the existence of large-scale syllabic rhythm patterns (from a sub-period to a paragraph), which are not reflected in the present statistics (Ch.2.2).

Another important feature of phrase rhythm becomes evident: segmentation of a period into a great number of elementary cola and commata, and the restructuring of phrase rhythm by *epiploke*: giving these commata a new rhythmic description due to the constantly changing rhythm. This means, that elementary commata can be regarded as belonging to different, greater units (complex cola), which makes the rhythm flexible and constantly changing. (Ch.3).

## Notes to Part IV

<sup>1</sup> Relying on preceding analyses, e.g. Immisch 1927, MacDowell 1982, Kennedy 1991.

<sup>2</sup> Division according to the thematic development and rhythm organisation; see Part III.2.

<sup>3</sup> The principles of the choice of words need to be studied separately. It is possible that the study of non-structural keyword repetition can reveal more about the preferences and the intentions of the author than the study of structural repetition, because the latter is almost obligatory for achieving a coherent text (cf. Ch.1.3.1) and therefore less influenced by the choices of the author.

<sup>4</sup> The third type of keyword has been omitted in Table (2): keywords, which do not have a micro-textual function, i.e. which occur only within great distances. These keywords are registered in Part III, in {} brackets under the word count (WD). Cf. also Ch.1.5.3.2.

<sup>5</sup> Within P.16ab there is a problem of division: if the new paragraph begins at P.16 (not P.16a), both periods are linked by repetition of the keyword δείξω in P.16a and P.16b. But this does not remove the absence of a link between P.16a and P.15.

<sup>6</sup> Elaborating the studies of Meillet 1906–1908, see also Meillet – Vendryes 1924: 595.

<sup>7</sup> Benveniste's conclusion has been criticised because of a clash between his conclusions and his corpus of examples (Barri 1977: 26). The proposed solution of understanding these sentences as quick, impatient assertions (Barri 1977: 28) does not explain the occurrences of nominal syntax in the *gnomai* and is not valid in the case of Gorgias.

<sup>8</sup> The address is missing because of the written character of this speech, cf. P.36. Moreover, some other usual signs of orality are also missing or rare, such as direct deixis (anaphora, i.e. textual cohesion is important) and short exclamation phrases. See Dickey 1996. Rhetorical questions do occur, but as long phrases and in the function of a conclusion to arguments, without an address to the public (see Ch.1.6 below).

<sup>9</sup> Benveniste's examples, which seem to contradict his conclusions (nominal syntax has to occur in direct speech) can be interpreted as expressions of an author's sentiment and as an appeal to the reader, which are close to direct speech, cf. Hdt.3.82: καὶ ἐν τούτῳ δηλοῖ καὶ οὗτος ὡς ἡ μουναρχίη κράτιστον (part of an argument, presenting a conclusion), Hdt 3.29: Ἄξιός μὲν [γε] Αἴγυπτίων οὗτός γε ὁ θεός (a combination of direct deixis) and Hdt 3.139: ἐς τὴν Αἴγυπτον ἀπίκοντο ..., οἱ μὲν, ὡς οἰκός, κατ' ἐμπορίην.... (a personal remark, commenting on probable reasons for the described event).

<sup>10</sup> Nominal syntax cannot be equated to gnomic syntax, as the latter is very much based on brachylogy, e.g. as in *The Sayings of Seven Wise men*, where the sentences are very concise.

<sup>11</sup> Juxtaposition of sub-periods as in P.36 can be regarded as a sixth type.

<sup>12</sup> Although the correspondence of cola: aa' bb' etc. gives an impression of circularity, these types of circle are not included.

<sup>13</sup> These periods are shortest by the number of words as well: P.23ab (23+18 syllables, 11+8 words), 18c (34 syllables, 14 words, if it is to be regarded as independent), P.17 (14 syllables, 8 words), P.16ab (10+12 syllables, 6+5 words) and P.13b (13+14 syllables, 8+8 words).

<sup>14</sup> In comparison, another total isocolon from P.4 might be given, which uses parallelism, but not in the form of parison (cf. Part III.2). One example, P.20a is difficult textually (although counted here as an isocolon). In another 7 examples, it occurs either together with parison, antithesis or parallelism (or combinations of these). Otherwise the isocolon is not very frequent at the ends of periods within paragraphs, it occurs more often in the ends of paragraphs, but the difference is not great (+2 of connected occurrences).

<sup>15</sup> Whereas the two verbs preceding them correspond to topics (as they are predicted by φρονήματος ἐξέστησαν, see Dik 1995).

<sup>16</sup> Perhaps the question is wrong and we should not seek correspondence between a complex period and its subdivisions, because complex periods are just intermediary sub-parts of the totality of the work. Maybe we should return to shorter periods in the analysis.

<sup>17</sup> The problem in the analysis of Gorgias is probably caused by the smallness of the corpus and the absence of other corpuses for comparison. Therefore, on the basis of one study further statistics on the occurrences of rhetorical figures cannot offer much.

<sup>18</sup> All calculations for this part (see tables in App. II) are made using Microsoft Excel 7.0 for Windows 95.

<sup>19</sup> I refer to current studies on the Greek accent by the members of DAMON (the group for the study of ancient Greek and Roman metrics and rhythmic), M. Steinrück and A. Lukinovich, as well as E. Lascoux, who had already researched this independently before.

<sup>20</sup> For example to look at only the two or three final syllables of cola, as in the poetry of late antiquity and the Byzantine era (see West 1982).

<sup>21</sup> One of the longest triads in Pindar, Olympian I, is composed of 374 syllables (134 in strophe and antistrophe, 116 in epode). It is useful to remind ourselves that although Pindar's strophic rhythm has not always been recognised as triadic, it does not remove its triadic character. Therefore, when such a syllabic repetition pattern can be observed according to the rules of syllable count, we cannot exclude the possibility that they were perceived (moreover, other prosodic features which support syllabic rhythm, such as intonation and pauses have been lost). However, in the statistics I have not counted large patterns like this one.

<sup>22</sup> The verb 'to be' has different roles in word rhythm, in P.30 it could be regarded as an unnecessary constituent for word rhythm, but in P.33 it is necessary.

<sup>23</sup> See, e.g. Higbie 1990: 87, Bassett 1926: 127, 133; Edwards 1966: 141, Bakker 1997.

<sup>24</sup> In another example, P.27 a relative phrase is not preceded by a detached word, but by a preposition phrase, added to the noun as an afterthought or refinement (διὰ τὸν φόβον ἐξωκίσθη τὸν ἀπὸ τῆς ὄψεως), see Part III.2. This example is different from the examples of *enjambement* in poetry: although the addition prepares a passage to the relative phrase, there is no clash with the complex colon boundary.

<sup>25</sup> In the last scheme, 'a' and 'b' correspond to parallel genitive complements to a subject and predicative and 'c' to a predicative and grammatical subject, whereas the verb almost functions as copula.

<sup>26</sup> See Trenkner 1960. The following two connectors function equally as transition, but without a special pivotal function.

<sup>27</sup> Although the grammatical structures do not exactly match, the sub-periods are in parison, as confirmed by the choice and distribution of word types, according to the following scheme:

FW FW CW,            FW CW /FWFW CWCW:  
FW FW EFW CW,        CW /FWFW CWCW: EFW

The correspondences in word types are strengthened by occurrences of anaphora and homoeoteleuton.

<sup>28</sup> A special study is still needed, which could find answers to the problem of transitory clausulae.

## CONCLUSION

This dissertation presents a method for the empirical study of prose rhythm together with an essay of its application (the analysis of Gorgias, *Helen*). It enlarges the field of study of Greek prose rhythm by including numerous characteristics, usually studied only in the case of verse, under syntactic stylistics, or not at all. The main concern of the study is to present a method of description and analysis, which has a foundation in the theory of (Greek prose) rhythm, and which is applicable for statistical analysis. In order to realise these goals, a set of problems was presented in the introduction, whereas the dissertation, which seeks solutions and answers to them, is divided into four parts, corresponding to the theoretical introduction and overview of the research situation, the description and explanation of the research method, an example of its application and the presentation of results.

Part I discusses the theoretical foundations of the study of prose rhythm in general. Ancient Greek rhetorical writers from Aristotle onwards have analysed several issues concerning prose rhythm; however, their more general theoretical approach was the reason why, in the present study, their works have been consulted mainly as a source of inspiration or in order to find a solution in the case of doubt and/or contradictory results. The empirical research of Greek prose rhythm in the modern sense begins in the 19th and the beginning of the 20th century with works by Fr. Blass and E. Norden (on phrase rhythm), and A. de Groot on prose metre (syllabic rhythm structures in prose). The 20th century has not produced many general studies in this field, except S. Mouraviev's study on Heraclitus (I.3.3). Therefore it is necessary to look into the theory of different fields: poetry and poetics, as well as metrics or stylistics, in order to define the theoretical foundations of the study of prose rhythm.

Part I reveals, that whereas movement is essential to rhythm in general by its definition, rhythm in prose is characterised by a constant change in this movement, by variation vs. exact repetition (characterising 'metre' in poetry), and by constantly establishing rhythm patterns and the possibility of the redefinition of these patterns (as *epiploke* in ancient Greek lyric verse), occurring as a result of their linear character (I.2.1–2). It demonstrates the need to regard rhetorical and stylistic figures as constituents of rhythm, especially as in the history of Ancient rhetorical theory these figures are included in the discussion of phrase (I.2.3). This part defines three principal levels of construction in prose and poetry: the level of metrics (with a syllable as a primary element), which has been traditionally the most studied part of Greek prose rhythm; the level of rhetoric (with a word as a primary element and a colon as the principal element of construction) and syntax. It observes that problems in the description and analysis of prose rhythm often emerge from the coincidence and clashes between these levels (I.2.5). The overview of the current state of studies of Greek prose rhythm distinguishes two fields: the

study of prose metre, including syllabic rhythm patterns, accentual and quantitative rhythm (I.3.1–3) and the study of phrase rhythm, based on words (I.3.4). It stresses the need to include the study of the thematic development of the discourse among the components of prose rhythm (I.3.5).

Part I concludes by stating, that the field of research into prose rhythm should be larger than it has usually been, needing a combined study of syllabics and phrase rhythm, rhetorical figures, lexical and syntactic features and sound pattern. These features have to be studied in correlation with the thematic analysis of the speech and the method of study of prose rhythm has to take into account its main organising principles: repetition with variation, change and redefinition (*epiplotke*).

Part II presents a method for the analysis of prose rhythm and its description, beginning from parsing the text into sub-units of phrase rhythm. It presents three different procedures to analyse rhythm in a period: 1) according to syntax and prosody, mostly using function words and grammatical dependence as markers for phrase boundaries; 2) according to the analysis of rhetorical figures (anaphora, homoeteleuton, chiasm, parison etc.) as markers for rhetorical periods, cola and commata; and 3) according to syllabic or word rhythm. The part introduces three principles of the analysis of phrase rhythm units: coherence within these units, the demarcation between these units and economy (which concerns the perceptibility of phrase rhythm units). These three levels can occasionally clash with each other (i.e. the position of phrase boundaries depends on the level), as a result of the flexibility of phrase rhythm; however, this method of analysis is also based on a coincidence of these levels as a criterion. (II.1) The presentation of lexical markers as a criterion for parsing combines theories based on the law of Wackernagel (concerning the places of particles in a phrase) and Dover's theory on word types and their position in phrase. (II.2) The description of the hierarchy of phrase rhythm units presents a method for description of the rhythm features of each level, from the period, the colon and the word to the syllable, including an essay of the description of accentual rhythm. A word is defined as an element of rhythm from two points of view, as carrying an accent, or as having a syntactic function. The division of word types into lexical and function words is enlarged by adding a group of emphatic function words (function words, which occur in emphatic positions and have the same role in word rhythm as lexical words) and an index of word type distribution is introduced for the study of the dynamics of the choice of word type and its function in speech rhythm. (II.3.1) The chapters on the analysis of cola and commata (as elementary phrase rhythm units) explain the problems of colon count and define an index of phrase rhythm flexibility, which helps to study the types of period construction in Gorgias. (II.3.2) The chapters on the choice of syntax type define sentences types (verbal, nominal, circular, undivided), which might have different functions in prose rhythm (II.3.3), whereas the following chapters define the criteria for the analysis of several rhetorical figures (anaphora, litotes etc.), prosodic and other features (e.g.

hiatus, auto-reference, pivots), which have special functions in the period, either marking an introduction, closure or transition. (II.3.4) Rhetorical figures are defined as based on structural parallelism or not, whereas figures which are not primarily based on parallelism (polyptoton, un-periodic word repetition), still have common features with parallelism figures (analogy of phrase construction and sound repetitions). (II.4) The chapter on the method of the study of sound repetition discusses the analysis of alliteration and stresses the need to study sound echo as a structural device in rhythm. (II.5) The last chapter in this part defines the principles of the study of syllable-counting rhythm (from isosyllabic to quantitative and accentual rhythm); it defines the most critical problems in this field (ignoring the study of intonation contours and concentrating on single syllables and difficulties in defining clausulae), and introduces indexes of rhythmic engagement, which can be used for evaluation of the level of one or another rhythm type in prose or in poetry. (II.6)

Part III presents the description of prose rhythm in Gorgias, *Helen*, period after period, discussing the most prominent rhythm features and problematic places, whereas Part IV presents some of the conclusions which can be drawn from the statistical analysis of the features, described in Part III. Part IV begins by presenting grounds for the omission of some described rhythm features and for selecting others for a thorough discussion. Chapter 1 of Part IV presents conclusions regarding the dynamics of prose rhythm features and the discourse rhythm, as revealed in the critical synopsis of this speech (IV.1.2). According to expectations, keyword repetition proved to be an important factor in producing coherence of the discourse, where distribution of the keywords in this speech confirmed, in most places, the boundaries occurring in the hierarchical division of this speech into sub-parts; whereas in cases where these rules were broken (e.g. P.23ab, P.30) it could be explained by a mismatch on two levels: macro-textual, i.e. division of the speech into great sub-parts, in which the boundaries are hierarchically significant, and micro-textual, i.e. level of period, where occasionally cohesion between adjacent periods is great on the syntactic and rhythmic level, thus diminishing significance of the boundaries of macrotextual units (IV.1.3). Analysis of the dynamics of word type distribution confirmed the results of the analysis of keyword distribution in both aspects: high percentages of content words (high WTDI) occurred most often in hierarchically important sub-part boundaries (beginnings, ends etc.), whereas the exceptions confirmed the clash between micro- and macro-textual levels (as WTDI was low in places where this clash occurred). Another conclusion could be made: the percentage of lexical words is high in periods which present important statements (e.g. the definition of *poiesis* in P.16c). The function of auto-reference is close to WTD. However, the distribution of word types could not be correlated to the dynamics of syntax types. (IV.1.4) Contrary to expectations, the analysis of the dynamics of the choice of sentence type (nominal or verbal) did not reveal much correlation with thematic development. However, the usage of nominal syntax for personal statements and conclusions could be confirmed, as well as the

preference of Gorgias to replace logical argumentation with syntactic devices: opposition of diathesis, rhetorical questions and nominal sentences. It was concluded that the function of simple (un-divided) periods in Gorgias' speech is transitory and that circular structures are used for closures (IV.1.5). The dynamics of the occurrences of parallelism figures (parallelism, antithesis, parison, isocolon) did not reveal any correlation with the choice of syntactic structures, which might prove that these two levels are not much correlated; however, as the basis of rhetorical analysis is primarily syntax and syntax-correlated lexical markers (cf. Part II), this result seems illogical; therefore the method for analysis of parallelism figures needs to be refined before stating any definite conclusions. However, analysis of the types of parallelism revealed a preference for binary structures, the definite absence of ternary structures at important boundaries (e.g. paragraph-ends) and the possibility of reducing all ternary structures to binary ones (as preferred in the rhetorical theory of Aristotle); the occurrence of parison in paragraph closures confirmed the above-stated conclusion that there is a correlation between division of the speech into greater structural units and phrase rhythm features; the chapter ends by concluding that parison (as a word-counting rhythm), which is usually based on sentence parallelism, can be based on the analogy of word type choice and order (IV.1.6). The analysis of commata and cola revealed the flexibility of phrase rhythm, the shortness of Gorgias' period and the great number of cola in almost every period, without a distinctive pattern (as in the case of rhetorical figures). However, a correlation between the number of cola and the number of parallelism figures was observed, which can be explained with the definition of these figures as based on parallel structures. (IV.1.7)

Therefore it can be concluded that the rhythm, revealed in the choice of syntactic and rhetorical structures, word types and rhetorical figures, often (and mostly) supports development of the argument. This means that even in Gorgias, the figures are usually not used only for the sake or ornament (revealing independent patterns), but in order to organise the discourse. The compensatory nature of the rhythmic functions of different rhetorical figures (cf. P.7b, P.8a, P.19d), which indicate the boundaries of rhythm units, might cause the absences of systematic patterns in statistics concerning the occurrences of one or another figure. However, this does not mean that they should not be considered more seriously during analysis of the text, as they can often have a meaning crucial for interpretation (as e.g. in the case of emendation in P.9).

The analysis of prose metre (Ch.2), i.e. different rhythm types, where the elementary unit is a syllable, by using indexes of participation, brought the following conclusions: 1) syllable-counting rhythm is not of primary importance in Gorgias (it is phrase rhythm and word count); 2) from three studied rhythm types: syllable-counting, accentual and quantitative rhythm, the first is the only one which can be considered as used systematically by Gorgias. However, isosyllabism, the strict repetition of the same syllable number in

adjacent units (commata, cola, periods) is not as frequent as might be expected because of Gorgias' fame as its founder (rising to 51,6% of all syllables in a period). It was revealed that the participation of syllables in proximity rhythms (i.e. gradation and repetition of syllable configurations of approximately the same length) is near 100%, which confirms the definition of prose rhythm (by Aristotle) as not being an exact repetition; 3) next to isosyllabic patterns, quantitative and accentual patterns can be detected, but not systematically; their emergence can occasionally (not always) be explained as the influence of parison, syntactic (and rhetorical) parallelism; 4) clausular rhythm (in the case of accentual and quantitative rhythm) is in general not important, when it occurs it coincides with other features (e.g. sound figures) and might be a result of this coincidence. However, no definite conclusions concerning clausulae can be made before further, more thorough studies. (IV.2.1)

In Ch.2.2 another conclusion concerning syllable-counting rhythm was made: occasionally syllabic rhythm becomes most important in a period (even before word-rhythm and phrase-rhythm), by forming isosyllabic patterns which include the whole period (or even adjacent periods) or sub-periods, corresponding to rhythm patterns in lyric poetry. Occasionally these patterns become so strong that they can overrule division of the rhetorical period into cola and commata (which is normally the basis of syllable-counting rhythm) (IV.2). The last two subchapters revealed that word-counting rhythm is most important: 72.5% for all words and 84.9% for content words. It is characteristic of parison and parallel structures in general, therefore as parallelism is the most frequent device of period construction, parison can be considered as the basis of prose rhythm in Gorgias. (IV.3–4)

The last chapter of the dissertation concludes that prose rhythm is characterised by several types of rhythm variation and change, which can be found in Greek (lyric) poetry, including discontinuous syntax patterns (analogical to *enjambement* in runover words), which help to focus on the important keywords of a period or to achieve swift movement from one sub-period to another; further it concludes that the functions of pivots (rhythmically detached phrases) are to ensure coherence within a period (closure) or between periods (transition). The final sub-chapters demonstrate that ambiguity is characteristic of prose rhythm as the three levels (syntax, rhetorical phrasing, prose metre), which are normally interdependent and coincide, can occur in clashes. Another typical case of ambiguity in prose rhythm is redefinition (*epiplotke*), where the linearity of rhythm is reanalysed into rhythm patterns according to a changing rhythmic context.

Finally, it has to be asked, whether the questions asked in the introduction have been answered? Hopefully the preceding parts have demonstrated that prose rhythm, distinguished from metre by its variability and constant change can still be described and analysed by the method presented in Parts II and III. The interdependence and correlation of three levels (syntax, rhetorical period and prose metre) was much discussed, but without definite results, as all three

are considered as a basis of the division of rhetorical period into sub-parts. Whereas rhetorical division is principal, it does not go as a rule into clash with syntax on the level of elementary units, but occasionally it can occur. However, a foundation for further studies has been laid. It was demonstrated that the basis of rhythm in Gorgias is phrase-rhythm, mostly relying on word-count (and parison); as regards the syllable-counting rhythm, isosyllabic and nearly isosyllabic patterns prevail. A quantitative method of study of these rhythms by indexes of participation in repetition structures proved to be effective (as it brought definite results which can be compared with other works and authors). The correlation between the number of cola in a period and the number of style figures in it (revealing that when the number of cola increases, the number of style figures increases as well or vice versa) and the absence of a systematic pattern in the distribution of these rhetorical figures (antithesis, homoeoteleuton, chiasmus etc.) lead to a hypothesis that this result might be caused by the compensatory nature of their function (one of these figures has to occur as a marker for colon boundaries, but it is not important which). This could be a starting-point for further studies in this field. Further analysis of the discussion of style figures in the rhetorical treatises of antiquity (not focused on in this dissertation) could help to improve the method of study. And, although the distribution of most rhetorical figures did not reveal a systematic pattern, some of them (e.g. parison), as well as keyword repetition, the dynamics of word type distribution, occurred in strict correlation with the thematic organisation of the speech; therefore it proved that style in Gorgias is in the service of sense, however difficult or impossible it might be to distinguish these two.

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## KOKKUVÕTE (SUMMARY)

Doktoritöö *Form, style and syntax: Towards a method of description and analysis of Greek prose rhythm: The example of "Helen's encomium" by Gorgias*. (Vorm, stiil ja süntaks. Vanakreeka proosarütmi kirjelduse ja analüüsi meetodi visand Gorgiase "Helena enkooniumi" näitel, edaspidi doktoritöö) eesmärk on luua vanakreeka proosarütmi analüüsi meetod, mis võimaldaks: 1) kirjeldada ja uurida võimalikult suurt arvu erinevaid proosarütmi aspekte; 2) teostada statistilisi uurimusi, mis lubaks võrrelda ühtsetel alustel erinevate proosaaautorite rütmi ning 3) võimaldaks analüüsida lauserütmi nii proosas kui luules. Selle meetodi väljakujundamiseks ja testimiseks analüüsitakse doktoritöös üht tervikteost, vanakreeka sofistliku retoorika ühe suurima esin-daja, Gorgiase (5.–4. saj. e.m.a.) ainsat terviklikult säilinud ja autentseks peetavat kõnet *Helena enkoonium* (*Helena ülistus*). Analüüsi aluseks on H.Dielsi – W.Kranzi väljaanne *Fragmente der Vorsokratiker* ja aelle TLG elektroonilises versioonis esitatud tekst.<sup>1</sup> Lisaks kinnitatakse *Helena enkooniumis* (ülistuskõnes) esinevate rütmielementide statistilise ja kõne teksti süvaanalüüsi põhjal, et Gorgiase ja üldistatult kreeka proosarütmi põhilisteks iseärasusteks on muutuvus ja range sümmeetria puudumine, kusjuures proosa-rütmi kolm tasandit: süntaks, fraasirütm ja silbirütm langevad reeglina kokku, sest fraasi- ja silbirütmis moodustuvate üksuste aluseks on süntaks; samas võivad nii fraasirütm kui silbirütm saavutada ajuti ülekaalu, tõustes esiplaanile ning minnes isegi süntaktiliste kriteeriumite vastu. Kõiki kolme tasandit (ja nende kooslusi) iseloomustab võimalus rütmikonteksti muutudes rütmi-struktuure ümber tõlgendada (analoogselt *epiplotke* mõistele kreeka lüürilistes värssides).

Doktoritöö esimene osa (Part I) käsitleb vanakreeka proosarütmi uurimise teoreetilisi aluseid ja annab ülevaate senisest uurimistööst. Kuigi esimeseks vanakreeka proosarütmi käsitlevaks teoseks võib pidada Aristotelese *Retoori-kaat*, on Aristotelese käsitluse puhul tegemist eeskätt retoorilise proosa teooriaga, mis esitab tekstinäiteid oma teooria illustreerimiseks ning annab seega vaid üksikuid, tänapäeva lugeja jaoks mitte alati selgeid juhtnööre proosarütmi empiiriliseks uurimiseks. Vanakreeka proosarütmi tänapäeva vaimus empiirilise uurimise alusepanijaiks võib pidada Fr. Blassi ja E. Nordeni töid lauserütmi kohta 19.–20. sajandi vahetusest. Samuti 20. sajandi algusest (1919) pärineb ka A. de Grooti käsitlus vanakreeka proosarütmi ühe aspekti, proosameetrika kohta, mis uurib silbirütmi erinevaid aspekte (I.3.1–2, I.3.4). Kuigi proosarütmi alaseid üksikuurimusi on tehtud 20. sajandi jooksul mitmeid, puuduvad süstemaatilised üldkäsitlused, mis viiksid uurimist edasi. Teed selleks näitavad Serge Mouravievi uurimused Herakleitosest, mille puhul võetakse arvesse eraldi

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<sup>1</sup> 3. osas käsitletakse teksti analüüsidest vajadusel ka teose uusimaid väljaandeid.

nii süllaabikat, helikordusi kui (eelkõige) fraasirütmi, kuigi võib kritiseerida Mouravievi püüdu leida Herakleitosest sümmeetriale põhinevat aktsendilist süllaabikat, ignoreerides (siinses dissertatsioonis olulisimaks peetud) proosarütmi põhiprintsiipi: muutuvust ja range skeemi puudumist (I.3.3).

Proosarütmi teoreetiliste aluste käsitlemisel on peamine selle rütmi iseloom: sõna *rhythmos* etümoloogia ja ka rütmi laiem definitsioon viitavad üldiselt liikumisele, proosarütm aga vastandub eelkõige ühele luules esinevale rütmiprintsiiobile, regulaarsele meetrumile oma muutuvuse, korduse ja variatsiooniprintsiiibi vaheldumise, mitmetitõlgendavate rütmimustrite esinemisega ja võimalusega ajas konteksti muutumist arvestades rütmiskeeme ümber tõlgendada. Needsamad proosarütmi printsiiibid esinevad vabamates värsitüüpides (nt kreeka lüüriline luule, vabavärs) ning on leidnud luule puhul ka teoorias käsitlemist, samas ei takista miski rakendamast samu teoreetilisi käsitlusi ka vanakreeka proosa uurimisele. (I.1.1–2.4).

Proosarütmi uurimise teoreetilised alused määravad selle, mida uurida proosarütmi elementidena: lähtudes luule uurimise meetodeist käsitleb nn. proosameetrika proosarütmi elementaarse rütmiüksusena silpi, ometi selgub, et proosarütm ei moodusta luulega sarnaselt mõõdetavaid ja äratuntavaid mustreid. Tulemused statistikas osutuvad ebarahuldavaiks ka seetõttu, et alati pole selge, kas vanakreeka proosa puhul tuleks uurida silpide pikkusi või rõhke ning kas kindlat rütmiskeemi tuleks otsida kogu lause ulatuses või ainult fraasi- ja lauselõppudest, nn. klausleist (I.3.2). Kui käsitleda rütmi algelemendina sõna ja sõnadest moodustuvaid fraase, ilmneb, et proosarütmi uurimine eeldab mitme eri tasandi koos käsitlemist; nendeks on prosodia, süntaks ja fraasirütm (retoorika). Igal tasandil on võimalik eristada rida hierarhiliselt kasvavaid üksusi silbist kuni terviktekstini, ent kuigi nt. retooriline koolon ja periood võivad vastata prosoodilisele ja/või süntaktilisele fraasile ja lausele, ei ole see alati nii (I.2.5). Proosarütmi kui fraasirütmi uurimine eeldabki nende retooriliste figuuride käsitlemist, millel on rütmiline funktsioon eelkõige teksti liigendajatena; selleks annab aluse antiikaja retoorikateooria, mis käsitleb retoorilisi figuure fraasikujunduse osana seoses proosarütmiga (I.2.3). Samas tuleks lisada ka teised stilistilised ja süntaktilised iseärasused, mis mõjutavad lauserütmi.

Proosarütmi uurimise puhul ei saa unustada kreeka retoorilise proosa esitusolukorda, mis seab ühe olulise piirangu: lineaarsuse ehk kõne esituse ja vastuvõtu kulgemise ajas. Siit tulenevalt käsitletakse ka rütmiüksuste mitmemõttelisuse ja redefinitsiooni probleematikat: nagu luules, nii ka proosas võib rütmiüksus (koolon) saada muutuvast rütmikontekstis uue tõlgenduse. Näiteks kaht järjestikust 6-silbilist fraasi, millele lisandub 1-silbiline siirdefraas (pivot) tõlgendatakse järgnevate 13-silbiliste fraaside taustal kui 13-silbilist liitfraasi (I.2.4.2–3).

Doktoritöö teine osa (Part II) esitab proosarütmi kirjeldamise ja analüüsi meetodi, selgitused sellele ja analüüsiga seostuvatele probleemidele ning juhendeid praktiliseks analüüsiks. Kuigi doktoritöö eesmärk ei ole jõuda erinevate proosarütmi karakteristikute statistilise analüüsini kontrollitud tulemuste tasan-

dil, arendatakse meetodit, mis oleks sobiv nii teksti lähianalüüsiks ja kirjel-  
duseks kui tervikteostes esinevate rütmielementide statistiliseks analüüsiks.

Proosarütmi analüüsi (ja tajumise) aluseks on rütmüksuste õige liigenda-  
mine. II osa ptk.1.1–4 esitavad teksti fraasideks liigendamise põhialused:  
sidusus rütmüksuste siseselt (nii prosoodias kui süntaksi aspektist), rütmi-  
üksuste piiride markeerimine (leksikaalsete markerite, süntaksi, rütmi ja  
retooriliste väljendusvahendite abil) ja ökonoomsuse printsiip, st. liigpikkade ja  
ebaselgete rütmüksuste vältimine. Neid kolme printsiipi saab rakendada nii  
üksikult (alustades reeglina rütmüksuste piiride markerite otsingust) kui ka  
mitmeakaupa.

II osa ptk.2 käsitleb põhjalikult leksikaalseid markereid, mis näitavad rütmi-  
üksuste (enamasti kokkulangevalt prosoodia ja süntaksiüksustega) piire. Selleks  
toetutakse uurimustele, mis vaatlevad vanakreeka keele leksikat kui abisõnade  
(partiklite) ja nn. leksikaalsete ehk tähenduslike sõnade kogumit. Mõlemas  
sõnarühmas eristatakse sõnaliigid ka nende võimaliku asukoha järgi fraasis  
(II.2.1):

1) мобиilsed sõnad (ehk vaba positsiooniga sõnad: ‘M’), mis ei aita kaasa  
fraasipiiride äratundmisele, kuid võivad omada suurt tähtsust nn. sõnu loendava  
rütmi puhul; enamasti kuuluvad sellesse mitmesugused nimi- ja omadussõnad,  
aga ka adverbid;

2) eelisasendiga sõnad (‘M<sup>a</sup>’), mis esinevad pigem fraasi ja lause algul, kuid  
võivad asuda ka mujal; eelisasendiga sõnade hulka on loetud küsisõnad, eitus-  
partiklid, demonstratiiv-pronoomeeid, mitmesugusid siduvad sõnad, asesõnade  
ning koha- ja ajaadverbide rõhulised vormid, kvantorsõnad ja mitmesugused  
numeraalid (II.2.2); Prepositiivide hulka on loetud mitmesugused sidendid,  
määrav artikkel, relatiivpronoomen, prepositsioonid ja eituspartikkel μή  
(II.2.1.1); postpositiivide hulka on arvatud mitmesugused sidendid, rõhu-  
partiklid, rõhuta asesõnad ja adverbid ning verbide εἶναι (‘olema’) ja φάναί  
(‘ütleva’) kliitilised vormid (II.2.1.2).

3) apositiiivid ehk seotud positsiooniga sõnad, mille hulka kuuluvad pre-  
positiivid (eessõnad, ‘p’), mis aitavad ära tunda rütmüksuse algust, ja post-  
positiivid (tagasõnad, ‘q’), mis viitavad kohati minimaalse rütmüksuse lõpule,  
kuid põhiliselt osutavad sellele, et neile eelnev sõna võib olla rütmüksuse  
alguses (tulenevalt Wackernageli seadusest, mille järgi postpositiivsed partiklid  
asuvad fraasis 2. kohal). Apositiivid esinevad lauses rõhututena või koguni  
sõnarõhu kaotanutena (kliitikutena) ning moodustavad koos tuumsõnadega  
(tavalsed ‘M’ või ‘M<sup>a</sup>’) prosoodilisi ja lauserütmi üksusi.

II osa ptk. 3 käsitleb fraasirütmi üksusi, alustades elementaartüksusest,  
sõnast. Sõnade roll lauserütmis sõltub sõnaliigist, seetõttu on analüüsis eristatud  
nn leksikaalid ja mitteleksikaalid ehk abisõnad, kusjuures viimaste puhul  
eristatakse mõnel puhul rõhuliste abisõnade rühma. Nende sõnade vahekorda  
perioodis näitab nn sõnaliigi valiku indeks, mis illustreerib lause tempot (II.3.1–  
5). Lauserütmi põhielemendid (konstitutiivsed üksused) on retooriline koolon ja  
komma. Nende puhul on mõnikord tegemist hierarhiliselt sama tasandi

üksustega, mida eristab vaid pikkus ja leksikaalide esinemine rühmas, mõnikord aga võib komma olla kooloni allüksus. Kõrgeim lauserütmi üksus on periood, mis jaguneb väga paindlikult all-perioodideks ja/või liitkooloneiks. Perioodi suur paindlikkus (mitmel tasandil erinevate allüksuste loomise võimalus) põhjustab ülisuuri raskusi lauserütmi kvantitatiivse analüüsi jaoks. Keerukaim on asjaolu, et lühikesi rütmiüksusi on väga suur hulk ja nad võivad moodustada erinevaid, väga mitmejärgulises hierarhias esinevaid suuremaid üksusi, mistõttu statistilises analüüsis tuleb piirduda rütmilise paindlikkuse indeksi väljaselgitamisega, mis näitab, kui mitmeks elementaarüksuseks üks või teine periood võib jaguneda (II.3.2).

Süntaksi roll lauserütmis sõltub mitmetest olulistest teguritest: nn. hüperbaton, ehk katkestatus sõnajärjes, mis näitab, et lauserütmi (retoorilise rütmi) uurimist ei saa samastada lause süntaktilise analüüsiga.<sup>1</sup> Hüperbaton muudab lauserütmi paindlikuks, killustades perioodi väikesteks rütmiüksusteks (II.3.3.1). Ringstruktuurid (nii fraaside paigutuses kui sõnajärjes) aitavad kaasa lause terviku tajumisele ja selle lõpetatuse mulje loomisele (II.3.3.2). Rütmi mõjutavad ka mitmesugused süntaksi iseärasused, nt lausetüübi (koopulaga või koopulata nominaallause, rind- või põimlause, impersonaalsete verbidega lause) valik (II.3.3.3).

Lauserütmi üksusi moodustatakse ja eristatakse mitmesuguste retooriliste figuuride abil, mille hulka kuuluvad lõpetusena toimivad figuurid (parallelism, gradatsioon, mitmesugused seostavad lühifraasid, litootes, epanafoor, mõnikord harva ka lause süntaktiline terviklikkus, cf. II.3.4.1); esineb ka rida algusfiguure (sh. asyndeton), kuid mitmete retooriliste figuuride puhul sõltub algust või lõppu märkiv roll kontekstist. Tekstiüksusi ja lauserütmi üksusi tähistavad veel muutus rütmi- või lause struktuuris (II.3.4.3.1–2) ja haik (hiaatus) prosoodilise üksuse katkestusena (II.3.4.3), tähtsad on ka autoreferatiivsed märkused (II.3.4.4). Lauserütmi moodustamisel kaasa mängivad retoorilised figuurid on reeglina kordusfiguurid. Nende statistiline analüüs on keeruline, kuna enamusest põhineb struktuuriparallelismil (seega tekib topeltarvestuse oht), samuti võivad mitmed neist figuuridest esineda eri tasandi rütmiüksuste vahel, nt. antitees võib esineda nii üksikute koolonite kui nt. üksikkooloni ja liitkooloni vahel (II.4.1.1). Seetõttu ei saa statistilises analüüsis siduda ühtki koolonit vaid ühe figuuri esinemisega, vaid tuleb uurida nende rütmilist hõivatust, st. koolonite erinevates figuurides osalemise kordi (II.4.1.2).

Struktuuriparallelismi puhul on tähtsaimad vormid lauseparallelism (mis lähtub analoogiaprintsipist mõttes ja struktuurikordusest) ja selle erivorm, antitees (II.4.1.3–4). Ülejäänud parallelismifiguuridest on lauserütmi puhul olulisemaid kiasm ja lausestruktuuri kordus ehk parison (II.4.2.2). Parallelismi

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<sup>1</sup> Hüperbaton tähendab seda, et sõltuvus- ja ühildumisreeglite tõttu kokkukuuluvad sõnad, nt. nimisõna ja selle genitiivtäiend, verb ja otsesihitis ei asu fraasis kõrvuti ühes madalama tasandi prosoodilises üksuses, vaid neid eristavad mingid muud sõnad või nad kuuluvad erinevatesse madalama tasandi prosoodilistesse üksustesse.

puhul on kreeka retoorikas traditsiooniliselt uuritud selle seost sülbirütmiga, iseäranis seetõttu, et just Gorgiassele omistatakse nn. isokooloni (sama silbiarvuga fraaside reastamise) leiutamist. Siin eristatakse kaht peamiselt süllaabilise rütmiga seostuvat figuuri: isokoolon (täpne kordus) ja gradatsioon, kusjuures viimane esineb ka fraasi- ja sõnakorduse tasandil (II.4.3). Hulk kordusfiguure põhineb sõnakordusel, fraasirütm liigendamisel on siin tähtsaimad anafoor (II.4.4.1), epifoor, sümploke, epanadiploos ja *concatenatio* (II.4.4.2); tagasihoidlikumat rolli fraasirütmis mängib lihtne sõnakordus, mis on olulisem kogu teksti sidususe saavutamiseks, ja polüptoton ehk tüvekordus, mis võib aidata luua väiksemaid rütmüksusi või raamistada perioodi, luules mulje selle lõpetatusest (II.4.4.3).

Häälikukorduste uurimine vanakreeka kirjanduses on keerukas selleteemaliste käsitluste vähesuse tõttu. Häälikukorduste hulka kuulub eraldi üks retooriline figuur, mis seostub otseselt fraasistruktuuriga, nn. fraasilõpuriim ehk homoioteleuton (II.5.2), seoseid mitmesuguste sõnakorduse liikidega on vähem uuritud. Häälikukorduste enim uuritud alaliigi, alliteratsiooni uurimisest vanakreeka kirjanduses on võibolla otstarbekam loobuda, kuna see seostub liialt sõnaalguse häälikute uurimisega ja jätab muu tagaplaanile. Siiski, senise uurimipraktika tõttu on vajalik määratleda, kas seda nähtust tuleks uurida kõigi järjestikuste sõnade puhul, või arvestada ka sõnaliiki ning jätta välja artiklid ja prepositsioonid; ning kas tuleks eristada kõiki foneeme või ainult üldist laadi uurides nt. koos kõiki erinevaid guturaale (II.5.3). Häälikukorduste teine alaliik on kõlamäng ehk *parehhees*, millel on ka fraasikujundav roll parallelismis (II.5.4). Häälikukorduste puhul käsitletakse küll uurimise problemaatikat, kuid statistilise analüüsi meetodit ei esitata.

Proosameetrika uurimisel tuleb arvestada selle ohustatust ebakindla teksti-traditsiooni tõttu. Nt. käsikirjade ümberkirjutamispraktika muutumistest sõltuv elisiooni, kraasiste või atika deklinatsiooni kasutamine võib mõjutada silpide arvu perioodis ja seega ka muuta statistiliste andmete täpsust (II.6.1.2, 6.2). Uuritakse kolme tüüpi silbirütmi:

1) Süllaabiline rütm, mis uurib silpide arvu koolonis. Selle osakaalu määramiseks kasutatakse nn. silpide rütmilise hõivatuse indeksit, st. iga perioodi puhul näidatakse ära, kui suur osa selles esinevaist silpidest esineb üht või teist liiki süllaabilises rütmis, kusjuures tuuakse eraldi isokoolia (sama silpide arvuga naaberfraasid), gradatsioon (ligilähedase silpide arvuga naaberfraasid) ja kontraste arvestavad rütmid (II.6.1, 6.1.1, 6.2).

2) Aktsendilise (st. rõhuliste ja rõhutute silpide vaheldumisel põhineva) rütmi uurimisel kasutatakse samuti silpide rütmilise hõivatuse indeksit, mis näitab kui suur osa perioodis esinevaist silpidest esineb korduvates rütmiskeemides (nõutud on ühe või teise silbikombinatsiooni kordumine vahetus naabruses kas perioodisiseselt või naaberfraaside lõppudes). Eraldi uuritakse nii tervet perioodi kui fraasilõppe ehk klausleid; luulest tuttavate värsijala tüüpide esinemist eraldi välja ei tooda. Meetod on traditsiooniline, sest statistiline analüüs toetub rõhuliste silpide uurimisele, mitte ei arvesta rõhulisi sõnu; kuigi

selle meetodi sobivust võib kahtluse alla seada (meloodiline rõhk intonatsiooni kontuuri tõusu ja langusena ei pruugi sõnast üksikuid silpe esile tõsta), on selle juurde jäänud selleks, et võimaldada võrrelda erinevaid silbirütmi alaliike (II.6.3).

3) Kvantiteeriva (st. pikkade ja lühikeste silpide vaheldumisel põhineva) rütmi uurimisel kasutatakse samuti silpide rütmilise hõivatuse indeksit, kusjuures otsitakse taas vahetult kõrvuti esinevate rütmikombinatsioonide kordumisi. Ka siin uuritakse eraldi nii terve perioodi sisest rütmi kui fraasilõppe ehk klauslirütmi (II.6.4). Klauslite eraldi uurimise põhjuseks on senine kreeka proosarütmi uurimise traditsioon (mis lähtub Cicero avaldusist ladina proosarütmi kohta), käesolevas uurimuses piirduakse klauslite nelja lõpusilbi uurimisega (II.6.5).

III osa (Part III) sissejuhatav 1. peatükk esitab põhjendused, miks on just Gorgiase *Helena enkoomium* valitud uuritavaks teoseks (Gorgiast peetakse antiigi proosarütmi üheks leiutajaks ja andunuimaks kasutajaks) ning käsitletakse ka analüüsi aluseks olevat Diels – Kranzi editsiooni ja sellega seostuvaid probleeme. III osa tuum, 2. peatükk esitab Gorgiase *Helena ülistuskõne* teksti liigendatuna proosarütmi üksusiks (perioodid, koolonid ja kommad), kusjuures iga perioodi liigendatud tekstile järgneb selle rütmikarakteristikute kirjeldus ja analüüs, milles selgitatakse nii antud perioodis esinevaid analüüsiprobleeme kui seda, millist rolli mängivad rütmikarakteristikud antud perioodi mõtte edasiandmisel ja kogu teose rütmi kujundamisel. Analüüs ja kirjeldus on esitatud sellisel kujul, et vajadusel oleks võimalik seda kasutada ka iseseisvalt, Gorgiase *Helena Enkoomiumi* rütmi- ja retoorikaprobleeme käsitleva kommentaarina; teose kui terviku mõistmiseks eelnevad selle suuremate alaosade kirjeldusele ja analüüsile sissejuhatused, mis näitavad selle alaosa rolli temaatilise arengu dünaamikas ja antiikaja retoorikõpetuses üldiselt.

IV osa (Part IV) esitab eelnevalt kirjeldatud rütmikarakteristikute esinemise kokkuvõtliku analüüsi tulemused, kusjuures eraldi käsitletakse neist vaid osa, milleks on: 1) Gorgiase proosarütmi enim iseloomustavad karakteristikud (st. rütmitüübid, mis näitavad selle proosa muutlikkust, ja lauserütmi esinemise põhiprintsiipe); 2) traditsiooniliselt proosarütmi all uuritavad karakteristikud (st. silbirütm) ja 3) tervikteose rütmistruktuuri illustreerivad näitajad. IV osa 1. peatükk käsitleb rütmi dünaamika probleeme terviktekstis. Kogu kõne liigenduse ja teemaarenduse esitab kriitiline sünopsis (IV.1.2), millega järgnevates alapeatükkides võrreldakse erinevaid proosarütmi komponente.

1) Märksõnade (siin: perioodist perioodi korduvad sõnad) sagedusanalüüs näitab, et korduvate märksõnade esinemise dünaamika järgib kõne üldist struktuuri (teemaarenduse liigendumist), kusjuures märksõnad võivad esineda nii perioodi sisemist ühtsust (sidusust) kinnitavalt (kordudes vaid perioodi sisest) kui perioode või suuremaid alajaotusi omavahel siduvas funktsioonis (kordudes vahetult kõrvuti asuvais perioodides, paragrahvides või siis hoopis erinevais osades). Nn. omavahel seotud (st. koos ühtedes ja samades perioodides korratud) märksõnade esinemise dünaamika toetas kõne alaosade

vahelist hierarhiat: enim esines omavahel seotud märksõnade kordumist hierarhiliselt madalamate alaosade siseselt ja vähim suurte alaosade piiridel. Kaks seda reeglit rikkuvat erandit kinnitasid lähemal vaatlusel reeglit, et makrotasandil (kus esinevad hierarhiliselt tugevad piirid alaosade temaatilises arenduses) ja mikrotasandil (kus perioodid on omavahel süntaktiliselt, rütmiliselt ja ka märksõnade kordumise abil tihedalt seotud) võib teose liigendamine alaosadeks olla vastuolus (IV.1.3);

2) Sõnaliikide jagunemise dünaamika analüüs näitab leksikaalsete ja mitteleksikaalsete sõnade vahekorra muutumist samuti vastavalt kõne üldstruktuurile ja temaatilisele arendusele. Oluliseks leksikaalide esinemissageduseks on arvatud suhtarv, mis ületab 1,5. Ilmneb, et kõne piirosades (algul, lõpul, kohati ka alaosade piiridel) on see indeks kõrgem kui 1,5. Samas on kõrgem indeks võimalik ka nn. oluliste argumentide puhul, eriti gnoomilise (nominaalse) süntaksi kaasnemise korral (mida kinnitab analüüs III osas). Madalat indeksit (st. abisõnade suurt ülekaalu) esineb enim siirdefraasides, mis juhatavad ühelt teemalt või alaosalte teisele (IV.1.4);

3) Lausetüübi (verbaalne või nominaalne ehk gnoomiline süntaks) valiku dünaamika analüüs näitab, et ka see karakteristik sõltub teose temaatilisest ülesehitusest, kuid kokkulangevused on vähemad. Gnoomiline süntaks esineb pigem alaosade piiridel ja oluliselt väiteis, verbaalne süntaks teemaarenduse puhul, kuid liitlausetes ja keerukamais lausepõimikuis esinevad mõlemad sageli koos. Leiab kinnitust E. Benveniste'i tees, et gnoomilist süntaksi kasutatakse enim üldiste tõdede või isiklike seisukohtade väljendamiseks: Gorgiase *Helena enkoomiumis* esineb gnoomilist süntaksi enim just mingite argumentide aluseks olevate eelduste või siis argumenti kokkuvõtivate järelduste esitamisel (kui neid näidatakse vaieldamatute tõikadena). Benveniste'i teesi täiendatakse, samastades otsese kõne ja nn. autoreferentsi (iseennast puudutavate märkuste) ehk isiklike seisukohtade väljendamise, mis läbi kaovad senised vaieldavad erandid tema näidetes. Lausetüüpide lähem vaatlus näitab teiste, vähem ülevaatlikult analüüsitud lauseliikide eriroole: lisaks nominaallausele esitatakse järeldusi sageli ka retoorilise küsimuse kujul, samuti kasutatakse väite ja järelduse konstrueerimisel diateeside (peamiselt aktiivi ja passiivi) vastandamist. Nii hüpotaktiline kui ringstruktuur on kasutusel argumendi paremaks esiletoomiseks, seevastu lihtne, nn. jagamata periood täidab siirdefraasi funktsiooni. Ka autoreferatiivsuse analüüs näitab, et seda kasutatakse enim siirdefraasides, üleminekuina ühelt osalt teisele, aga ka autori seisukohtade väljendamiseks mujal (IV.1.5);

4) Parallelsismi tüüpide esinemise dünaamika ei näidanud mingit erilist seost parallelsismi ja kõne temaatilise arenduse vahel; see pole üllatav, sest kogu kõne põhinebki parallelsimil. Parallelsim esineb Gorgiase *Helenas* nii lauseparallelsismi kui positsioonianaloogia ja ka rütmis (isokoolia ja gradatsioonina). Sellel võib näha lõpetuse funktsiooni, kui see esineb perioodi lõpul, mis on ühtlasi ka mingi alaosa lõpp. Parallelsim lõpetavas funktsioonis esineb peaaegu eranditult kaheste paaride puhul (tasakaalustatud), kolmene rütm on

erandkorras võimalik gradatsiooni puhul, mis aga on siiski taandatav kahesele rütmile. Tavaliselt esineb siis parison (lausestruktuuri parallelism). Ometi esineb parallelismi palju ka perioodi keskel, mil tal on rütmi edasiviiv (jätku-) funktsioon. Sellistel juhtudel on võimalikud ka kolmesed, neljased jne. paralleelstruktuurid (IV.1.6);

5) Retoorilise ehk lauserütmi paindlikkuse dünaamika analüüs ei lange vastupidiselt ootustele kokku teose üldise struktuuri ja teemaarendusega. Ilmneb Gorgiase lauserütmile üldine iseloomulik joon: fragmentarisatsioon, ehk kõigi lausete killustamine lühikesteks alaosadeks (koolonid ja kommad), mis ka varem märkimist leidnud. Seevastu ilmnes selgesti suure rütmilise paindlikkuse (st. perioodi jaotumise võimalikult rohkemaiks kooloniteks) ja teatud retooriliste figuuride seos (nt. parisoni sõltumine koolonite arvust): mida rohkem kooloneid (reeglina paralleelstruktuurides), seda rohkem ka lauseparallelismi. Selle põhjuseks võib olla asjaolu, et vastavalt definitsioonile põhinevad need figuurid lauseparallelismil. Samas võib retooriliste figuuride esinemisel täheldada teatud komplementaarsuse põhimõtet, mille esialgu saab sõnastada vaid hüpoteesina: igas perioodis esineb mõni retooriline figuur (tähistades perioodi või selle alaosade piire), kuid alati pole oluline, milline neist, peaasi, et nende liigendav funktsioon on täidetud (IV.1.7).

IV osa 2. peatükk uurib erinevate proosameetrika komponentide osakaalu Gorgiasel silpide rütmilise hõivatuse indekseid kasutades (vt. ka tabelid 9–11, lisad I ja II). Erinevate rütmitüüpide (süllaabiline, aktsendiline ja kvantiteeriv) seas on kerges ülekaalus süllaabiline rütm (51,6% kõigist silpidest esineb isosüllaabilistes koolonites, st. on hõivatud ranges süllaabilises rütmis). See protsent on väike, võrreldes poeesiaga, kus reeglina on kõik silbid rütmiliselt rangelt paika pandud ja näitab, et range süllaabika ei olegi proosarütmile omane. Seevastu nn. lähirütmide puhul (gradatsiooni kaasa arvates), ulatub süllaabilise rütmi osakaal 95,5 %-le, mis lubaks Gorgiase silbirütmi põhiprintsipi käsitleda vaba süllaabikat. Samas ei saa enne põhjalikumaid uurimusi kindlat järeldust teha, sest kõrge protsendi põhjuseks võib olla ka Gorgiase perioodide suur killustatus lühikesteks alaosadeks (4–6 silbilised kommad). Kvantitatiivse ja aktsendilise rütmi puhul jääb silpide rütmilise hõivatuse indeks 40 protsendi ligidale, mistõttu edasist uurimist ei ole läbi viidud. Erinevalt lauserütmi mitmetest karakteristikutest puudub süllaabilisel rütmil aga seos teose teemaarenduse dünaamikaga. Siit saab järeldada, et süllaabiline rütm kuulub väliste faktorite alla, mil puudub seos teose sisuga, kusjuures lauserütm on argumentiga lahutatamatult seotud (IV.2.1.1).

Kuna vanakreeka ja bütsantsi proosarütmi uurimisel on sageli keskendutud klauslite (fraasilõpurütmi) uurimisele, on ka siin vaadeldud neid eraldi, uurides klauslirütmi silpide rütmilise hõivatuse indeksite abil naaberfraasides esinevate rütmimustrite kordumise sagedust. Mingit süsteemset rütmikasutust, mis seoks omavahel aksendilisi ja kvantiteerivaid klausleid, ei täheldatud. Samas võis aktsendiliste klauslite puhul näha teatud korrelatsiooni parisoni (lauseparallelismi) ja klauslirütmi esinemise vahel (mida rohkem parisoni, seda

kõrgem ka klauslirütmi indeks), mis näitab, et ka klauslirütmi aluseks on lauseparallelism (IV.2.1.2).

Süllaabilise rütmi puhul näidatakse Gorgiase rütmiskeemide sarnasust Pindarose komplekssete triaadiliste struktuuridega. Kuigi suurte, kuni 45-silbiliste korduvate üksuste tajutavus võib näida küsitavana, tuleb arvestada, et lause meloodiline joonis pole teada ning et koorilüürikas on stroofid veel palju pikemad. (IV.2.2.1–3). Sõnarütm on valdav (72,5%, leksikaalsete sõnade puhul 84,9%), selle põhjusena nähakse parisoni. Parisoni ja lauseparallelismi puhul näidatakse selle kohatist kokkulangevust isokooloniga (selle põhjustajana, IV.2.3.1) ning parisoni põhinemist sõnu loendavale rütmile (nii gradatsioonis kui ilma) ja seost struktuurianaloogiaga (IV.2.3.2–4).

IV osa 3. peatükk (*epiploke*) käsitleb proosarütmi muutuvust ja redefiniitsiooni rolli selles. Näidatakse, et proosarütmi muutuvuses ja paindlikkuses on oma roll hüperbatonil ehk (näiliselt) segipaisatud sõnajärjel. Nagu poeesias *enjambement*'i puhul on ka hüperbatonil pragmaatiline tähtsus olulise (või uue) informatsiooni esiletõstjana ning suuremate rütmiskeemide moodustamisel. Tavaliselt aitavad üksikud, ülejäänud lausest isoleeritud sõnad ja fraasid (pivot) teostada üleminekut ühelt süllaabilise rütmi üksuselt teisele või moodustada suuremaid ja esmapilgul raskestitajutavaid üksusi (IV.3.2). Tähtis roll on neil ka *epiploke*, rütmiskeemi järk-järgulise muutmise ja ümbertõlgendamise puhul, mis on kreeka proosarütmile väga omane, kuid seni tähelepanuta. Rütmi-struktuuride pideva ümbertõlgendamisega seostub ka teatav kahemõttelisus süntaksis ning selle vastuolu retoorilise ehk lauserütmiga (IV.3.3).

Töö lisadena esitatakse tabelleid ja skeeme, mis täiendavad IV osas toodud statistilist analüüsi (Appendix II) ja Gorgiase *Helena* kvantitatiivse, aktsendilise ja süllaabilise rütmi skeemid perioodide kaupa (Appendix I).

Kokkuvõtteks tuleb rõhutada järgmisi asjaolusid: Gorgiase ja vanakreeka proosarütmi uurimisel ei saa piirduda ainult poeesia puhul käsitletava tasandiga, st. silbirütmi uurimisega, sest silbist palju olulisemateks rütmiüksusteks on siin sõna ja fraas (komma, koolon). Samuti ei ole proosarütmi uurimisel mõtet keskenduda rangelt süsteemsete ja korduvate rütmimustrite otsimisele, kuna proosarütmi olemus on hoopis teine: sellele on iseloomulik pidev muutumine, teatud mitmemõttelisus ja paindlikkus. Nagu koorilüürikas, on ka proosas süllaabilise rütmi puhul võimalik struktuuride ümbermõtestamine (*epiploke*).

Gorgiase *Helena* ülistuskõne põhiliseks rütmielemendiks on fraasirütm, mis saavutatakse erinevaid lauseparallelismi (sageli parisoni) võtteid kasutades, vahel ka spetsiaalsete periooditüüpide (lihtne ehk jagunemata periood ja ringstruktuurid) kasutamiseega. Silpide rütmilise hõivatuse indeks näitab, et Gorgiasel on oluline ka silbirütm, kuid peamiselt ebatäpsete kordustena.

Proosarütmi kirjeldamise aluseks on teksti liigendamine rütmi põhiüksusteks: kooloniteks (kommadeks) ja perioodideks, kuna just need on proosale iseloomulikud. Teksti liigendamisel tuleb arvestada kolme printsiipi: tekstiosade piiride markeerimist, tekstiosade sisest koherentsust ja ökonoomikat, mis ei laseks tekkida kahemõttelistel või liigpikkadel ühikutel. Kuigi

teksti on võimalik analüüsida eri tasandil (prosoodia, süntaks, retooriline rütm), lähtutakse lauserütmist, mis on samastatud teksti liigendamisega perioodideks ja kooloneiks, nagu seda nägi antiigi retoorika. Kõigi tekstiosade puhul peab meeles pidama range ja üksühele vastava hierarhia puudumist.

## APPENDIXES

### Appendix I: The description of syllable-counting rhythms in “Helen”

Signs in the analysis of quantitative rhythm: — long syllable; ∪ short syllable; x (final indifferent syllable); u long syllable in a hiatus; () short syllable, which is not elided; repeated clausulae are underlined and/or marked with \* (in the case of adjacent positions).

Signs in the analysis of accentual rhythm: ˘ circumflex or acute accent, / gravis accent; . unaccentuated syllable. Possible repetitions are underlined; in case of ambiguous readings they are given without an asterisk. All possible repetitions of at least two consequent feet are presented in bold; the syllables of ambiguous description are marked with (A).

#### P.1

Κόσμος πόλει μὲν εὐανδρία,		2 + 7 = 9
— — ∪ — ∪ — — ∪ x		
7 . 7 . / . . . 7 .		
σώματι δὲ κάλλος,	ψυχῆι δὲ σοφία,	6 + 6 = 12
— ∪ ∪ ∪ — x	— — ∪ ∪ ∪ x	
7 . . / 7 .	. 7 / . . 7 .	
πράγματι δὲ ἀρετή,	λόγοι δὲ ἀλήθεια·	7 + 7 = 14
— ∪ ∪ (∪) ∪ ∪ x	∪ — (∪) ∪ — — x	
7 . . / . . 7	7 . / . 7 . .	
	τὰ δὲ ἐναντία τούτων ἄκοσμία.	8 + 4 = 12
	∪ (∪) ∪ — ∪ ∪ — — ∪ — ∪ x.	
	/ / . . 7 . 7 . . . 7 .	

#### P.2

ἄνδρα δὲ	καὶ γυναῖκα	3 + 4	=7
— ∪ ∪	— ∪ — x		
7 . /	/ . 7 .		
καὶ λόγον	καὶ ἔργον	3 + 3 = 6	
— ∪ —	u — x		
† 7 . . . / 7 .*	/ 7 .*		
καὶ πόλιν	καὶ πρᾶγμα	3 + 3 = 6	(=12)
— ∪ —	— — ∪ / x		
† 7 . . . / 7 .*	/ 7 .*		
χρῆ		1	= 13
—			
/			
τὸ μὲν ἄξιον ἐπαίνου	ἐπαίνωι τιμᾶν,	8 + 5	= 13
∪ ∪ — ∪ ∪ ∪ — u	∪ — — — x		
/ / 7 . . . 7 .	. 7 . . 7		
τῶι δὲ ἀναξίωι	μῶμον ἐπιτιθέναι·	6 + 7	= 13
— (∪) ∪ — ∪ —	— ∪ ∪ ∪ ∪ ∪ x*		
7 / . . . 7 .*	7 . . . . 7 .*		

ἴση γὰρ

υ — υ  
7 . /

ἀμαρτία

υ — υ —  
/ . 7 . \*

μέμφεσθαί τε

— — — υ  
7 . 7 .

καὶ ἐπαινεῖν

υ υ — —  
/ . . . 7\*

καὶ ἀμαθία

υ υ υ υ x\*  
/ . . . 7\*

τὰ ἐπαινετὰ

(υ) υ — υ x  
/ . . . 7

τὰ μομητὰ.

υ — — x.  
/ . . . 7\*

3 +

4 + 5 = 9

4 + 5 = 9

4 + 4 = 8

**P.3**

τοῦ δ' αὐτοῦ ἀνδρὸς

— — υ — x  
7 . 7 . /

λέξαι τε τὸ δέον ὀρθῶς

— — υ υ υ υ — x  
7 . . / 7 . . 7

καὶ ἐλέγξαι \*\*\* τοὺς μεμφομένους Ἑλένην,

υ υ — — — — υ υ — υ υ —  
/ . 7 . / . . 7 . . 7 .

γυναῖκα

υ — υ/x  
. 7 .

περὶ ἧς

υ υ —  
. ≠ 7

5+

3 + 5 = 13

4 + 8 = 12+

\*3 = 15

\*3+

ὁμόφωνος

καὶ ὁμόψυχος

γένεον

\*4 + 5 = 12+ (\*15)

\*3 (=12)=15

υ υ — — υ υ — — — — —  
/ . 7 . . \* / . 7 . . \* υ υ x\*

ἢ τε τῶν ποιητῶν ἀκουσάντων πίστις

— υ — — — — υ — — — — — x  
7 . 7 . . 7 . . 7 . 7 .

ἢ τε τοῦ ὀνόματος φήμη,

— υ υ υ υ — — — — \*  
7 . 7 . 7 . 7 . 7 .

ὁ τῶν συμφορῶν μνήμη

γένεον.

\*6 + 6 = 12 (\*15)

9

7+

3 = 10

υ — — υ — — — \* υ υ υ x\*  
/ 7 . . 7 7 . . 7 . \*\*

**P.4**

ἐγὼ δὲ βούλομαι

υ — υ — υ —  
. / ≠ 7 . .

λογισμὸν τινα

υ — — υ υ — υ — x  
. . 7 . . 7 7 . /

τὴν μὲν κακῶς ἀκούουσαν παύσαι τῆς αἰτίας,

— — υ — υ — — — — — — — υ x  
≠ / . 7 . 7 . . 7 . 7 . 7 .

τοὺς δὲ μεμφομένους ψευδομένους ἐπιδείξας

— υ — υ — — — — — — — υ υ — x  
/ / . . 7 . . . 7 . . 7 . \*

καὶ δείξας τὰ ληθῆς [ἦ] παύσαι τῆς ἀμαθίας.

5+

5 + 4 = 14

8 + 6 = 14

6 + 8 = 14

6 + 8 = 14

$\frac{\text{---}}{7 \dots /}$        $\frac{\text{---}}{7 \cdot 7 \cdot \underline{7} \cdot *}$

**P.5**

ὅτι μὲν οὖν φύσει καὶ γένει 4 + 2+3 = 9  
 $\frac{\text{---}}{7 \cdot 7}$        $\frac{\text{---}}{7 \cdot 7}$   
 τὰ πρῶτα τῶν πρῶτων ἀνδρῶν καὶ γυναικῶν 3 + 3 + 2+4 = 12  
 $\frac{\text{---}}{7 \cdot 7}$        $\frac{\text{---}}{7 \cdot 7}$        $\frac{\text{---}}{7 \cdot 7}$   
 ἢ γυνὴ περὶ ἧς ὅδε ὁ λόγος, 3 + 3 + 5 = 11  
 $\frac{\text{---}}{7 \cdot 7}$        $\frac{\text{---}}{7 \cdot 7}$        $\frac{\text{---}}{7 \cdot 7}$   
 οὐκ ἄδηλον οὐδὲ ὀλίγοις. 4 + 5 = 9  
 $\frac{\text{---}}{7 \cdot 7}$        $\frac{\text{---}}{7 \cdot 7}$

**P.6**

δῆλον γὰρ ὡς 3+1= 4  
 μητρὸς μὲν Λήδας, 5+  
 πατρὸς δὲ 3 = 8  
 $\frac{\text{---}}{7 \cdot / \dots / 7 \cdot}$        $\frac{\text{---}}{7 \cdot / \dots / 7 \cdot}$   
 τοῦ μὲν γενομένου θεοῦ, 2+4+2 = 8  
 $\frac{\text{---}}{7 \cdot / \dots / 7 \cdot}$        $\frac{\text{---}}{7 \cdot / \dots / 7 \cdot}$   
 λεγομένου δὲ θνητοῦ, 4+3 = 7\*  
 $\frac{\text{---}}{7 \cdot / \dots / 7 \cdot}$        $\frac{\text{---}}{7 \cdot / \dots / 7 \cdot}$   
 Τυνδάρεω καὶ Διός, 4+3 = 7(+)  
 $\frac{\text{---}}{7 \cdot / \dots / 7 \cdot}$        $\frac{\text{---}}{7 \cdot / \dots / 7 \cdot}$

ὧν 1 [=8]  
 ὁ μὲν διὰ τὸ εἶναι ἔδοξεν, 10  
 $\frac{\text{---}}{7 \cdot / \dots / 7 \cdot}$        $\frac{\text{---}}{7 \cdot / \dots / 7 \cdot}$   
 ὁ δὲ διὰ τὸ φάναι ἠλέγχθη, 10  
 $\frac{\text{---}}{7 \cdot / \dots / 7 \cdot}$        $\frac{\text{---}}{7 \cdot / \dots / 7 \cdot}$   
 καὶ ἦν 2  
 ὁ μὲν ἀνδρῶν κράτιστος 7  
 $\frac{\text{---}}{7 \cdot / \dots / 7 \cdot}$        $\frac{\text{---}}{7 \cdot / \dots / 7 \cdot}$   
 ὁ δὲ πάντων τύραννος. 7  
 $\frac{\text{---}}{7 \cdot / \dots / 7 \cdot}$        $\frac{\text{---}}{7 \cdot / \dots / 7 \cdot}$

**P.7a**

ἐκ τοιούτων δὲ γενομένη 9 (+)  
 ἔσχε 2 + =11 [11] [9]  
 $\frac{\text{---}}{7 \cdot / \dots / 7 \cdot}$        $\frac{\text{---}}{7 \cdot / \dots / 7 \cdot}$   
 τὸ ἰσόθεον κάλλος, 7 = 9  
 $\frac{\text{---}}{7 \cdot / \dots / 7 \cdot}$        $\frac{\text{---}}{7 \cdot / \dots / 7 \cdot}$   
 ὁ λαβοῦσα καὶ οὐ λαβοῦσα 4 + 5(+)  
 ἔσχε 2 = 9 =11 [20][18]  
 $\frac{\text{---}}{7 \cdot / \dots / 7 \cdot}$        $\frac{\text{---}}{7 \cdot / \dots / 7 \cdot}$



	$\frac{\text{---}\underline{\text{U}}\text{---}\underline{\text{U}}\text{X}^*}{/ \underline{\text{.7.}}^*}$				
τάς αιτίας,		4 +			
	$\frac{\text{---}\underline{\text{U}}\text{---}}{/ \text{.7.}}$	2+	(11)		
εἰκὸς ἦν	γενέσθαι			+3/3+ (6)	[=14/]
	τὸν τῆς Ἑλένης	εἰς τὴν Τροίαν	στόλον.	5 + 6 (11)	[=14]
$\frac{\text{---}\underline{\text{U}}\text{---}\underline{\text{U}}\text{---}}{/ \text{.7.} \text{.7.}}$	$\frac{\text{---}\underline{\text{U}}\text{---}}{/ \text{.7.}}$	$\frac{\text{---}\underline{\text{U}}\text{---}\underline{\text{U}}\text{---}}{/ \text{.7.} \text{.7.}}$	$\frac{\text{---}\underline{\text{U}}\text{---}\underline{\text{U}}\text{---}}{/ \text{.7.} \text{.7.}}$		

**P.9**

ἢ γὰρ	Τύχης βουλήμασι				
$\frac{\text{---}}{\text{.7.}}$	$\frac{\text{U} \text{---}\underline{\text{U}}\text{X}^*}{/ \text{.7.} \underline{\text{.7.}}^*}$			2 + 6 = 8	
$\frac{\text{.7.}}{\text{.7.}}$	καὶ θεῶν βουλευμάσι			7	[=15]
	$\frac{\text{---}\underline{\text{U}}\text{---}\underline{\text{U}}\text{X}^*}{/ \text{.7.} \underline{\text{.7.}}^*}$			8	(23)
	καὶ Ἀνάγκης ψηφίσμασιν			3 + 1 + 3 =	7
	$\frac{\text{u} \text{U} \text{---}\underline{\text{U}}\text{X}^*}{/ \text{.7.} \underline{\text{.7.}}^*}$			7	[=15]
	ἔπραξεν ἃ ἔπραξεν,				
	$\frac{\text{---}\text{U}(\text{U})\text{---}\text{X}}{\text{.7.} \text{.7.}}$			7	
	ἢ βίαι ἀρπασθεῖσα,			6	(20) [43]
	$\frac{\text{---}\text{u} \text{---}\underline{\text{X}}^*}{\text{.7.} \underline{\text{.7.}}^*}$				
	ἢ λόγοις πεισθεῖσα,			(7)	
	$\frac{\text{---}\underline{\text{U}}\text{---}\underline{\text{X}}^*}{\text{.7.} \underline{\text{.7.}}^*}$				
	<ἢ ἔρωτι ἀλοῦσα>.				
	$\frac{\text{u} \text{U} \text{---}(\text{U})\text{U} \text{---}\text{X}}{\text{.7.} \underline{\text{.7.}}^*}$				

**P.10a**

εἰ μὲν οὖν	διὰ τὸ πρῶτον,				
$\frac{\text{---}\underline{\text{U}}\text{---}}{/ \text{.7.}}$	$\frac{\text{U} \text{U} \text{---}\text{X}}{/ \text{.7.}}$			3+5= 8	
	ἀξιος αἰτιάσθαι	ὁ αἰτιώμενος·		7+6=13 (21)	
	$\frac{\text{---}\text{U} \text{U} \text{---}\text{u/x}}{\text{.7.} \text{.7.}}$	$\frac{(\text{U}) \text{---}\underline{\text{U}}\text{---}\underline{\text{U}}\text{X}}{\text{.7.} \text{.7.}}$			
	θεοῦ γὰρ προθυμίαν	ἀνθρωπίνῃ προμηθίαι		7+8+	
$\frac{\text{U} \text{---}\underline{\text{U}}\text{---}\underline{\text{U}}\text{---}}{\text{.7.} \text{.7.} \underline{\text{.7.}}^*}$	$\frac{\text{---}\text{U} \text{---}\underline{\text{U}}\text{---}\underline{\text{U}}\text{X}/\text{U}}{\text{.7.} \text{.7.} \underline{\text{.7.}}^*}$			7	= 22 [43]
		ἀδύνατον κωλύειν.			
		$\frac{\text{U} \text{U} \text{U} \text{---}\underline{\text{U}}\text{X}}{\text{.7.} \underline{\text{.7.}}^*}$			

**P.10b**

πέφυκε γὰρ	οὐ τὸ κρείσσον	ὑπὸ τοῦ ἥσσονος	καλύεσθαι,		
$\frac{\text{U} \text{---}\text{U} \text{U}}{\text{.7.} \text{.7.}}$	$\frac{\text{---}\text{U}}{\text{.7.}}$	$\frac{\text{U} \text{U} \text{u} \text{---}\text{U} \text{---}\text{X}}{\text{.7.} \text{.7.} \underline{\text{.7.}}^*}$		4	4 + 10 = 14
	ἀλλὰ τὸ ἥσσον	ὑπὸ τοῦ κρείσσονος	ἄρχεσθαι	5 + 9 = 14	[=18]
				καὶ ἄγεσθαι,	4
	$\frac{\text{---}\text{U}(\text{U})\text{---}\text{U}}{\text{.7.} \text{.7.}}$	$\frac{\text{U} \text{U} \text{---}\underline{\text{U}}\text{---}\underline{\text{X}}^*}{\text{.7.} \text{.7.} \underline{\text{.7.}}^*}$		$\frac{\text{u} \text{U} \text{---}\underline{\text{X}}^*}{\text{.7.} \underline{\text{.7.}}^*}$	[=18]
	καὶ τὸ μὲν κρείσσον	ἠγγεῖσθαι,		1 + 7	
	$\frac{\text{---}\underline{\text{U}}\text{---}\underline{\text{X}}^*}{\text{.7.}}$				



καὶ τῆς πατρίδος στερηθεῖσα  
 -----U-----x\*  
 † 7 . 7 . . . 7 . \*  
 καὶ τῶν φίλων ὀρφανισθεῖσα  
 -----U-----x\*  
 / 7 7 . . . 7 . \*

πῶς οὐκ ἂν εἰκότως  
 -----U-----  
 7 . 7 . 7 . \*

ἐλεηθεῖη μάλλον  
 UU-----x  
 . . . 7 . 7 . \*  
 ἢ κακολογηθεῖη;  
 -----UU-----x  
 / . . . . 7 .

5+4=9 (=15)  
 4+5=9  
 6 (=15) (30)  
 7  
 7 (=14)

**P.13b**

ὁ μὲν γὰρ  
 U-U  
 . / /  
 δίκαιον οὖν  
 U-U-U  
 7 . . 7

ἔδρασε δεινά,  
 -----U----- (U)  
 7 . . . 7

τὴν μὲν οἰκτίραι,  
 -----  
 / 7 . 7 .

ἢ δὲ ἔπαθε·  
 -----(U)UUU  
 . / 7 . .

τὸν δὲ μισήσαι.  
 -----U-----x  
 / 7 . 7 .

3+  
 5+5 = 13  
 4+  
 5+5 = 14

**P.14**

εἰ δὲ λόγος ὁ πείσας  
 -----UUUU-----x  
 . / 7 . 7 . \*

καὶ τὴν ψυχὴν ἀπατήσας,  
 -----UU-----x  
 † / . / 7 . \*

οὐδὲ πρὸς τοῦτο χαλεπὸν ἀπολογήσασθαι  
 -----U----- UU UU-----x\*  
 . / † 7 . . . / . . . 7 . \*

καὶ τὴν αἰτίαν ἀπολύσασθαι  
 -----UUUU-----x/-\*  
 † / . 7 . . . 7 . \* . . . 7 . \*\*

ὠδε.  
 -----x  
 7 \*\*

7  
 8 [=15]  
 5+3+6 = 14  
 10 [=24]  
 2

**P.15**

λόγος δυνάστης μέγας ἐστίν,  
 U-U-U-----UU-----x  
 7 . . 7 . 7 . . 7

ὅς σμικροτάτοι σώματα καὶ ἀφανεστάτοι  
 -----UU-----Ux/U UU-----Ux  
 / . . 7 . 7 . . / . . . 7 .

θειότατα ἔργα ἀποτελεῖ·  
 -----UU(U)----- (U)UUUUx  
 . 7 . . 7 . . . 7 . \*

9  
 8+6 = 14  
 10? [=33]

δύναται γὰρ

καὶ φόβον παύσαι  
 U-U-----  
 7 . . /

καὶ φόβον παύσαι  
 -----U-----x  
 † 7 . 7 .

καὶ λύπην ἀφελεῖν  
 -----U-----UUx  
 † 7 . 7 . \*

καὶ χαρὰν ἐνεργάσασθαι  
 -----UUUU-----x  
 † 7 . 7 . \*

καὶ ἔλεον ἐπαυξῆσαι.

4+  
 5+  
 6 (=15)  
 8  
 8 [= 16] [=31]

—○—○—○—x      u○○○○—x  
 / . / . . 7 . .      ≠ 7 . . 7 \*\*

**P.16a-P.16b**

ταῦτα δὲ ὡς οὕτως ἔχει δεῖξω· 3+5+2 = 10

—○(○)      ————○—x  
 7 . /      . 7 . 7 . 7 .

δεῖ δὲ καὶ δόξῃ δεῖξαι τοῖς ἀκούουσι· 2+5+5 = 12

—○      ————○—x  
 7 ≠ ≠ 7 . 7 .      7 . 7 . .

**P.16c**

τὴν ποίησιν ἅπασαν 7

————○○—x  
 ≠ 7 . . 7 . .

καὶ νομίζω καὶ ὀνομάζω λόγον ἔχοντα μέτρον· 4+5 = 9  
7      [=23]

—○—x      u ○○—x      ○○○—○—x  
 / . 7 .      / . 7 . \*      7 . 7 . 7 . \*

ἦς τοὺς ἀκούοντας εἰσήλθε 1 + 5 + 3 = 9

———————x  
 7 ≠ . 7 . . 7 . \*

καὶ φρίκη περίφοβος 7

————○○○○x  
 ≠ 7 . . 7 . . \*

καὶ ἔλεος πολὺδακρυς 8

u○○—○○—x\*  
 ≠ 7 . . . 7 . \*

καὶ πόθος φιλοπενθής, 7      [=31]

—○—○○—x\*  
 ≠ 7 . . . . 7

ἐπ' ἄλλοτριῶν τε πραγμάτων καὶ σωμάτων 6 + 3 + 4 = 13

εὐτυχίας καὶ δυσπραγίας 4 + 5 = 9      [=22]

○()——○——      —○———○x      —○○——○○x  
 . . . 7 . .      . 7 . / . 7 .      . . 7 . / . . 7 .

ἰδιόν τι πάθημα 4 + 3 = 7

διὰ τῶν λόγων ἔπαθεν ἡ ψυχὴ. 5 + 6 = 11      [=18]

○○—○—○—      ○○—○—      ○○○—x  
 7 . 7 . 7 . .      . / 7 7 .      7 . . . . 7

**P.17**

φέρε δὴ πρὸς ἄλλον ἀπ' ἄλλου μεταστῶ λόγον. 3+3+3+3+2 = 14

○○—      ○—○      ○()——      ○——○x  
 7 . /      ≠ 7 .      . 7 .      . . 7 7 .

**P.18a**

αἱ γὰρ ἔνθεοι διὰ λόγων ἐπαιδαῖ 5+7      [=12]

—○—○—      ○○○—○—x  
 . ≠ 7 . .      . / 7 . . . 7

ἐπαγωγοὶ ἡδονῆς, ἀπαγωγοὶ λύπης 4+3+ 4+2      [=13]

γίνονται·

○○—u—○—      ○○————      ——x  
 . . . / . . 7 . . . . / 7 .      7 . .

**P.18b**

συγγινομένη γὰρ τῇ δόξῃ τῆς ψυχῆς 6 + 3+3 = 12

—○—○○—○  
 . . . 7 . /      ————x  
 7 7 . 7 . 7

ἡ δύναμις τῆς ἐπαιδῆς 4 + 4 = 8      [=20]

$$\begin{array}{r} \text{---}\cup\cup\text{---}=\cup\text{---}x \\ \cdot \quad 7 \quad \cdot \quad 7 \quad \cdot \quad 7 \end{array}$$

ἔθελξε καὶ ἔπεισε καὶ μετέστησεν αὐτήν 3+1+3+7=14

$$\begin{array}{r} \cup\text{---}\cup\cup\text{---}\cup \\ 7 \quad \cdot \quad / \quad 7 \quad \cdot \quad \cdot \end{array} \quad \begin{array}{r} \text{---}\cup\text{---}=\cup\text{---}x/ \\ / \quad \cdot \quad 7 \quad \cdot \quad \cdot \quad / \end{array} \quad \begin{array}{r} \cup\text{---}x \\ \cdot \quad \cdot \quad 7 \quad \cdot \end{array}$$

γοητεία. 4 [=18]

**P.18c**

γοητείας δὲ καὶ μαγείας 5+4+4+3 = 16

$$\begin{array}{r} \cup\text{---}\cup\text{---}\cup\text{---}x \\ \cdot \quad \cdot \quad 7 \quad \cdot \quad / \quad / \quad \cdot \quad 7 \quad \cdot \end{array}$$

αἱ εἰσι 3 +

ψυχῆς ἀμαρτήματα καὶ δόξης ἀπατήματα. 7+1+7 = 18

$$\begin{array}{r} \cup\text{---}\cup\text{---}\cup\text{---}\cup\text{---}x \\ / \quad \cdot \quad \cdot \quad 7 \quad \cdot \end{array} \quad \begin{array}{r} \text{---}\cup\cup\text{---}\cup\text{---}x \\ / \quad 7 \quad \cdot \end{array}$$

**P.19a**

ὅσοι δὲ ὅσους περὶ ὅσων 3+2+4 = 9

$$\begin{array}{r} \cup\text{---}(\cup)\cup\text{---}\cup\text{---}(\cup)\cup\text{---}x \\ 7 \quad \cdot \quad / \quad 7 \quad \cdot \quad \cdot \quad / \quad 7 \quad \cdot \end{array}$$

καὶ ἔπεισαν καὶ πείθουσι δὲ 4 + 5 = 9 [=18]

ψευδῆ λόγον πλάσαντες. 4 + 3 = 7 {=25}

$$\begin{array}{r} \cup\cup\text{---} \quad \text{---}\cup\text{---}\cup\text{---} \quad \text{---}\cup\text{---}\cup\text{---}x \\ / \quad 7 \quad \cdot \quad \quad / \quad 7 \quad \cdot \end{array}$$

**P.19b**

εἰ μὲν γὰρ πάντες περὶ πάντων εἶχον 3+2+4+2 = 11 [=18]

$$\begin{array}{r} \text{---}\text{---}\text{---} \quad \text{---}x \quad \cup\cup\text{---}\text{---}\text{---}x \\ \cdot \quad / \quad / \quad 7 \quad \cdot \quad \cdot \quad / \quad \cdot \quad \cdot \quad \cdot \quad \cdot \quad \cdot \end{array}$$

τῶν <τε> παροιχομένων μνήμην 8\*

$$\begin{array}{r} \text{---}\langle\cup\rangle\cup\text{---}\cup\cup\text{---}\text{---}x \\ 7 \quad \langle \rangle \quad \cdot \end{array}$$

τῶν τε παρόντων <ἔννοιαν> 5\*

$$\begin{array}{r} \text{---}\cup\cup\text{---}\text{---} \quad \langle\text{---}x\rangle \\ 7 \quad \cdot \quad \cdot \quad 7 \quad \cdot \end{array}$$

τῶν τε μελλόντων πρόνοιαν, 5 + 3 = 8

$$\begin{array}{r} \text{---}\cup\text{---}\text{---}\cup\text{---}x \\ 7 \quad \cdot \quad \cdot \quad 7 \quad \cdot \end{array}$$

οὐκ ἂν ὁμοίως ὁμοίως ἦν ὁ λόγος, 5 + 4 + 3 = 12 {=44}

$$\begin{array}{r} \text{---}\cup\cup\text{---}\text{---} \quad \cup\text{---}\cup\text{---} \quad \cup\cup\text{---}x \\ \cdot \quad / \quad \cdot \quad 7 \quad \cdot \quad \quad 7 \quad \cdot \quad 7 \quad \cdot \quad \cdot \quad \cdot \end{array}$$

**P.19c**

<οἶς> τὰ νῦν γε 4

$$\begin{array}{r} \text{---} \quad \cup\text{---}\cup \\ 7 \quad / \quad 7 \quad \cdot \end{array}$$

οὔτε μνησθῆναι τὸ παροιχόμενον 5+6 = 11

$$\begin{array}{r} \text{---}\text{---}\text{---}\text{---}\cup\cup\text{---}\cup\cup\text{---}x^* \\ 7 \quad \cdot \quad \cdot \quad 7 \quad \cdot \quad / \quad \cdot \quad \cdot \quad \cdot \quad \cdot \quad \cdot \quad \cdot \end{array}$$

οὔτε σκέψασθαι τὸ παρὸν 5+3 = 8

$$\begin{array}{r} \text{---}\text{---}\text{---}\text{---}\cup\cup\text{---}x^* \\ 7 \quad \cdot \quad 7 \quad \cdot \quad \cdot \quad / \quad \cdot \quad \cdot \quad \cdot \quad \cdot \quad \cdot \end{array}$$

οὔτε μαντεύσασθαι τὸ μέλλον 6+3 = 9

εὐπόρως ἔχει 5 [=37]

$$\begin{array}{r} \text{---}\cup\text{---}\text{---}\text{---}\cup\text{---}x \quad \text{---}\cup\text{---}\cup\text{---}x \\ 7 \quad \cdot \quad \cdot \quad 7 \quad \cdot \quad \cdot \quad / \quad 7 \quad \cdot \quad \cdot \quad \cdot \quad \cdot \quad \cdot \end{array}$$

ὥστε περὶ τῶν πλείστων οἱ πλείστοι 2 + 5 + 3 = 10

$$\begin{array}{r} \text{---}\cup\cup\cup\text{---}\text{---}\text{---}\text{---}x \\ 7 \quad \cdot \quad \cdot \quad / \quad 7 \quad 7 \quad \cdot \quad \cdot \quad \cdot \quad \cdot \quad \cdot \end{array}$$



7 . . . / . . . 7 . 7 7 .  
 και τὴν ψυχὴν ἐτυπώσατο ὅπως ἐβούλετο, 9 + 6 = 15  
 ———— ∪ ∪ — ∪ x\* ∪ — ∪ — ∪ x\* χρῆ μαθεῖν 3 [=30]  
 / ≠ / . . / . . 7 . . 7 . . — ∪ x  
 / . 7

**P.21b**  
 πρῶτον μὲν τοὺς τῶν μετεωρολόγων λόγους, 3+1+7+2 = 3+10 [=13]  
 ———— ∪ ∪ — ∪ ∪ — ∪ x  
 7 . / ≠ 7 . . . 7 . 7 .  
 οἵτινες δόξαν ἀντι δόξης 5 + 4 = 9  
 — ∪ — — ∪ — ∪ — x  
 7 . . 7 . . / 7 .  
 τὴν μὲν ἀφελόμενοι 7  
 — ∪ ∪ ∪ ∪ ∪ x\*  
 ≠ / . 7 . . \*  
 τὴν δ' ἐνεργασάμενοι 7 [=23]  
 — ∪ ( ) ∪ — ∪ ∪ ∪ x\*  
 / . . 7 . . \*  
 τὰ ἄπιστα καὶ ἀδηλα φαίνεσθαι 4+4+3 = 11  
 ∪ ∪ — ∪ ∪ — ∪ — x  
 ≠ 7 . . / 7 . 7 . . \*  
 τοῖς τῆς δόξης ὁμμασιν ἐποίησαν· 4+3+4 = 11 [=22]  
 ———— ∪ ( ) ∪ — ∪ — x  
 7 7 7 . 7 . . 7 . . \*

**P.21c**  
 δεῦτερον δὲ τοὺς ἀναγκαίους διὰ λόγων ἀγῶνας, 4 + 5 + 7 [= 16]  
 — ∪ — ∪ — ∪ — — ∪ — — ∪ ∪ ∪ — ∪ — x\*  
 7 . . / / 7 . . / 7 . . 7 . .  
 ἐν οἷς εἷς λόγος πολὺν ὄχλον 2+ 3+ 4 = 2+7  
 ———— — ∪ — ∪ ∪ — ∪ — ∪ — ∪ — ∪ — x ἔτερψε καὶ ἔπεισε 3+ 4 = 7 (11) [= 16]  
 . 7 7 7 . . / 7 . 7 . . 7 . . ≠ 7 . . ≠ 7 . .  
 τέχνη γραφεῖς, 4+  
 οὐκ ἀληθεῖαι λεχθεῖς· 7 = 11  
 — — ∪ x — ∪ — — — — x  
 7 . . 7\* . . . 7 . . 7\*

**P.21d**  
 τρίτον <δὲ> φιλοσόφων λόγων ἀμίλλας, 2 + 4 + 2 + 3 = 11  
 ∪ — ∪ ∪ ∪ ∪ — ∪ — ∪ — x\*  
 7 . </> . . 7 . 7 . 7 .  
 ἐν αἷς δαίκνυται καὶ γνώμης τάχος 2+ 3 + 5 = 10  
 ∪ — — — ∪ x  
 . 7 7 . . / 7 . ≠ 7 . 7 . \*  
 ὡς εὐμετάβολον ποιοῦν τὴν τῆς δόξης πίστιν. 8 + 6 = 14 [=35]  
 — — ∪ ∪ ∪ — — — — — — x  
 . . . 7 . . . 7 / 7 7 . 7 . \*

**P.22a**  
 τὸν αὐτὸν δὲ λόγον ἔχει 4 + 4 = 8  
 ∪ — — ∪ ∪ ∪ ∪ x  
 / . / ≠ 7 . 7 . \*  
 ἢ τε τοῦ λόγου δύναμις πρὸς τὴν τῆς ψυχῆς τάξιν 8 + 7 = 15  
 — ∪ — ∪ — ∪ ∪ x — — — — — — x  
 7 . 7 7 . 7 . . / ≠ 7 . 7 7 .  
 ἢ τε τῶν φαρμάκων τάξις πρὸς τὴν τῶν σωμάτων φύσιν. 8 + 8 = 16  
 — ∪ — — ∪ — — x — — — — ∪ — ∪ x





οὕτως ἀπέσβεσε      καὶ ἐξήλασεν      ὁ φόβος τὸ νόημα.

$\begin{array}{c} \_ \_ \_ \_ \_ \\ 7 \cdot \underline{\underline{.7.}} \end{array}$ 
 $\begin{array}{c} u \_ \_ \_ \_ \_ \\ / \underline{\underline{.7.}} \end{array}$ 
 $\begin{array}{c} \_ \_ \_ \_ \_ \_ \_ \_ \\ \cdot 7 \cdot \underline{\underline{.7.}} \end{array}$

$2 + 4 + 5 = 11$   
 $7 \quad \quad \quad [=18]$

**P.29**  
πολλοὶ δὲ      ματαίοις πόνοις      καὶ δειναῖς νόσοις

$\begin{array}{c} \_ \_ \_ \_ \_ \\ \cdot \neq / \end{array}$ 
 $\begin{array}{c} \_ \_ \_ \_ \_ \_ \_ \_ \\ \cdot 7 \cdot \underline{\underline{.7.}} \end{array}$ 
 $\begin{array}{c} \_ \_ \_ \_ \_ \_ \_ \_ \\ / \underline{\underline{.7.7.}} \end{array}$

$3 + 5 + 5 = 13$

καὶ δυσίατοις μανίαις      περιέπεσον·

$\begin{array}{c} \_ \_ \_ \_ \_ \_ \_ \_ \\ / \cdot \cdot 7 \cdot \cdot 7 \cdot \end{array}$ 
 $\begin{array}{c} \_ \_ \_ \_ \_ \_ \_ \_ \\ \cdot \underline{\underline{.7.}} \cdot \end{array}$

$8 + 5 = 13$

οὕτως εἰκόνας      τῶν ὀφρμένων πραγμάτων

$\begin{array}{c} \_ \_ \_ \_ \_ \_ \_ \_ \\ 7 \underline{\underline{.7.}} \end{array}$ 
 $\begin{array}{c} \_ \_ \_ \_ \_ \_ \_ \_ \\ 7 \cdot \cdot 7 \cdot \underline{\underline{.7.}} \end{array}$

ἢ ὄψις ἐνέγραψεν      ἐν τῷ φρονήματι.

$\begin{array}{c} \_ \_ \_ \_ \_ \_ \_ \_ \\ \cdot 7 \cdot \underline{\underline{.7.}} \end{array}$ 
 $\begin{array}{c} \_ \_ \_ \_ \_ \_ \_ \_ \\ \cdot 7 \underline{\underline{.7.}} \cdot \end{array}$

$5 + 8 = 13$   
 $3+4+6 = 13$

**P.30**  
καὶ τὰ μὲν δειματοῦντα      πολλὰ μὲν παραλείπεται,

$\begin{array}{c} \_ \_ \_ \_ \_ \_ \_ \_ \\ / \neq / \cdot \cdot 7 \cdot \end{array}$ 
 $\begin{array}{c} \_ \_ \_ \_ \_ \_ \_ \_ \\ \cdot / / \underline{\underline{.7.}} \cdot \end{array}$

ὅμοια δ' ἐστὶ      τὰ παραλειπόμενα

οἷάπερ <τὰ> λεγόμενα.

$\begin{array}{c} \_ \_ \_ \_ \_ \_ \_ \_ \\ 7 \cdot \cdot \cdot / \end{array}$ 
 $\begin{array}{c} \_ \_ \_ \_ \_ \_ \_ \_ \\ / \cdot \cdot \underline{\underline{.7.}} \end{array}$ 
 $\begin{array}{c} \_ \_ \_ \_ \_ \_ \_ \_ \\ 7 7 \cdot \langle \rangle \underline{\underline{.7.}} \cdot \end{array}$

$1 + 6 + 8 = 15$   
 $5 + 7 = 12$   
 $3 + 4 = 7$

**P.31a**  
ἀλλὰ μὴν οἱ γραφεῖς

$\begin{array}{c} \_ \_ \_ \_ \_ \_ \_ \_ \\ \cdot / / \underline{\underline{.7.}} \end{array}$

$3 + 3 = 6$

ὅταν ἐκ πολλῶν χρωμάτων      καὶ σωμάτων

$\begin{array}{c} \_ \_ \_ \_ \_ \_ \_ \_ \\ 7 \cdot \cdot \cdot 7 \cdot 7 \cdot \end{array}$ 
 $\begin{array}{c} \_ \_ \_ \_ \_ \_ \_ \_ \\ / \cdot 7 \cdot \end{array}$

ἐν σώμα      καὶ σχήμα

τελείως ἀπεργάσσονται,

τέρπουσι τὴν ὄψιν·

$\begin{array}{c} \_ \_ \_ \_ \_ \_ \_ \_ \\ 7 7 \cdot \neq 7 \cdot \cdot 7 \cdot \cdot \cdot 7 \cdot \cdot \cdot 7 \cdot \cdot / 7 \cdot \end{array}$

$2+6+4 = 12$   
 $3+3+3+5=14$   
 $6 \quad \quad \quad [=38]$

ἢ δὲ τῶν ἀνδριάντων ποίησις

$\begin{array}{c} \_ \_ \_ \_ \_ \_ \_ \_ \\ \cdot \neq 7 \cdot \cdot 7 \cdot 7 \cdot \cdot \end{array}$

καὶ ἡ τῶν ἀγαλμάτων ἐργασία

$\begin{array}{c} \_ \_ \_ \_ \_ \_ \_ \_ \\ / \cdot 7 \cdot \cdot 7 \cdot \cdot \cdot 7 \cdot \end{array}$

θέαν ἠδεῖαν      παρέσχετο τοῖς ὄμμασιν.

$\begin{array}{c} \_ \_ \_ \_ \_ \_ \_ \_ \\ 7 \cdot \cdot 7 \cdot \cdot 7 \cdot \cdot 7 7 \cdot \cdot \end{array}$

$10$   
 $1+10 = 11$   
 $5+4+4 = 13 [=34]$

**P.31b**  
οὕτω      τὰ μὲν λυπεῖν      τὰ δὲ ποθεῖν      πέφυκε τὴν ὄψιν.

$\begin{array}{c} \_ \_ \_ \_ \_ \_ \_ \_ \\ 7 \cdot \underline{\underline{.7.}} \end{array}$ 
 $\begin{array}{c} \_ \_ \_ \_ \_ \_ \_ \_ \\ / \underline{\underline{.7.}} \end{array}$ 
 $\begin{array}{c} \_ \_ \_ \_ \_ \_ \_ \_ \\ 7 \cdot \cdot \neq 7 \cdot \end{array}$

πολλὰ δὲ πολλοῖς πολλῶν

$2 + 4 + 8 = 16$   
 $6 \quad \quad \quad [=16]$   
 $3+2+2 = 7$



<p>7 . 7 . . 7 . *</p> <p>εἶτε βίαι ἀρπασθεῖσα</p> <p>— ∪ ∪ — — — — x *</p> <p>7 . 7 . . 7 . *</p> <p>εἶτε ὑπὸ θείας ἀνάγκης ἀναγκασθεῖσα</p> <p>— ∪ ∪ ∪ — — ∪ — — ∪ — — — — x *</p> <p>7 . . 7 . . 7 . . . . 7 . *</p> <p>ἔπραξεν ἃ ἔπραξε,</p> <p>∪ — (∪) ∪ ∪ — x</p> <p>7 . . / 7 . .</p>	<p>8</p> <p>9+5 = 14</p> <p>3+4 = 7</p> <p>10</p>	
<p>πάντως διαφεύγει τὴν αἰτίαν;</p> <p>— — ∪ ∪ — — — — ∪ x</p> <p>7 . . . 7 . / . 7 .</p>	<p>10</p>	
<p><b>P.36</b></p> <p>ἀφείλον τῶι λόγῳ</p> <p>∪ — — — ∪ x</p> <p>. 7 . 7 7 .</p> <p>ἐνέμεινα τῶι νόμῳι</p> <p>∪ ∪ — ∪ — ∪ —</p> <p>. 7 . . 7 7 .</p> <p>ἐπειράθην καταλῦσαι</p> <p>∪ ∪ ∪ — ∪ ∪ — x</p> <p>. . 7 . . 7 .</p> <p>ἔβουλήθην γράψαι</p> <p>∪ — — — — — ∪ —</p> <p>. . 7 . 7 .</p>	<p>δύσκειαν γυναικός,</p> <p>— — — ∪ — x</p> <p>7 . . . . 7</p> <p>ὄν ἐθέμην ἐν ἀρχῇ τοῦ λόγου·</p> <p>∪ ∪ ∪ ∪ ∪ — — — ∪ x</p> <p>/ . 7 . . . 7 7 7 .</p> <p>μώμου ἀδικίαν</p> <p>— ∪ ∪ — ∪ x</p> <p>7 . . 7 . *</p> <p>καὶ δόξης ἀμαθίαν,</p> <p>— — — ∪ ∪ ∪ x</p> <p>/ 7 . . 7 . *</p> <p>τὸν λόγον</p> <p>Ἐλένης μὲν ἐγκώμιον,</p> <p>ἔμὸν δὲ παίγιον.</p> <p>∪ ∪ — — — — — ∪ x</p> <p>. 7 . / . 7 . .</p> <p>∪ — ∪ — ∪ x</p> <p>. / 7 . .</p>	<p>6 + 6 = 12</p> <p>7+4+6 = 17</p> <p>8 + 6</p> <p>7 [=21]</p> <p>6+3</p> <p>8</p> <p>6 [=25]</p>

## Appendix II. Supplementary Tables and Charts

### A. Tables

All calculations in this part have been made using Microsoft Excel 7.0 for Windows 95.

**Table 6.** Ratio of elementary cola (elem.cl.) per complex colon (cmpl cl)

period	cmpl.cl	elem.cl	EL/CO
p1	4	8	2.0
p2	8	16	2.0
p3	6	13	2.2
p4	4	9	2.3
p5	4	11	2.8
p6	8	13	1.6
p7a	3	6	2.0
p7b	10	19	1.9
p8a	5	11	2.2
p8b	4	11	2.8
p9	6	8	1.3
p10a	4	7	1.8
p10b	6	13	2.2
p11	2	6	3.0
p12	5	11	2.2
p13a	9	17	1.9
p13b	2	6	3.0
p14	4	7	1.8
p15	7	9	1.3
p16ab	2	6	3.0
p16c	10	16	1.6
p17	1	4	4.0
p18a	2	5	2.5
p18b	3	7	2.3
p18c	2	6	3.0
p19a	3	6	2.0
p19b	4	8	2.0
p19c	5	10	2.0
p19d	3	6	2.0
p20a	6	12	2.0
p20b	7	12	1.7
p21a	2	5	2.5
p21b	6	9	1.5
p21c	3	9	3.0
p21d	3	7	2.3
p22a	5	5	1.0
p22b	5	15	3.0
p23a	1	5	5.0

p23b	1	3	3.0
p24	3	5	1.7
p25	5	12	2.4
p26	8	16	2.0
p27	5	10	2.0
p28	3	8	2.7
p29	4	9	2.3
p30	3	5	1.7
p31a	5	13	2.6
p31b	2	10	5.0
p32	2	7	3.5
p33	6	14	2.3
p34	5	6	1.2
p35	6	11	1.8
p36	4	11	2.8
	236	494	2.1

**Table 7.** The length of elementary cola in comparison to the number of words in period

	words	elem.cl	Ind.Wo/Cl
p1	21	8	2.6
p2	37	16	2.3
p3	37	13	2.8
p4	28	9	3.1
p5	24	11	2.2
p6	41	13	3.2
p7a	14	6	2.3
p7b	48	19	2.5
p8a	30	11	2.7
p8b	32	11	2.9
p9	19	8	2.4
p10a	17	7	2.4
p10b	38	13	2.9
p11	16	6	2.7
p12	23	11	2.1
p13a	43	17	2.5
p13b	16	6	2.7
p14	19	7	2.7
p15	26	9	2.9
p16ab	13	6	2.2
p16c	41	16	2.6
p17	8	4	2.0
p18a	11	5	2.2

p18b	17	7	2.4
p18c	14	6	2.3
p19a	13	6	2.2
p19b	24	8	3.0
p19c	30	10	3.0
p19d	15	6	2.5
p20a	40	12	3.3
p20b	33	12	2.8
p21a	15	5	3.0
p21b	26	9	2.9
p21c	21	9	2.3
p21d	17	7	2.4
p22a	25	5	5.0
p22b	49	15	3.3
p23a	11	5	2.2
p23b	8	3	2.7
p24	17	5	3.4
p25	24	12	2.0
p26	37	16	2.3
p27	34	10	3.4
p28	22	8	2.8
p29	22	9	2.4
p30	14	5	2.8
p31a	34	13	2.6
p31b	21	10	2.1
p32	20	7	2.9
p33	33	14	2.4
p34	15	6	2.5
p35	30	11	2.7
p36	31	11	2.8
	1314	494	2.7

**Table 8.** The correspondence between parallelism figures and the indices of the flexibility of phrase rhythm (Ind.Wo/Cl)

	elem.cl	parison	homoeot	Ind.Wo/Cl
p1	8	5	2	2.6
p2	16	12	6	2.3
p3	13	2	6	2.8
p4	9	0	2	3.1
p5	11	6	5	2.2
p6	13	6	6	3.2
p7a	6	0	2	2.3
p7b	19	6	6	2.5
p8a	11	2	2	2.7
p8b	11	0	4	2.9
p9	8	5	5	2.4
p10a	7	2	0	2.4
p10b	13	7	7	2.9
p11	6	2	2	2.7
p12	11	5	9	2.1
p13a	17	8	9	2.5
p13b	6	2	2	2.7
p14	7	2	4	2.7
p15	9	4	2	2.9
p16ab	6	0	0	2.2
p16c	16	7	6	2.6
p17	4	0	0	2.0
p18a	5	2	2	2.2
p18b	7	2	2	2.4
p18c	6	2	4	2.3
p19a	6	0	0	2.2
p19b	8	0	0	3.0
p19c	10	3	3	3.0
p19d	6	2	0	2.5
p20a	12	0	0	3.3
p20b	12	4	4	2.8
p21a	5	0	2	3.0
p21b	9	2	2	2.9
p21c	9	2	4	2.3
p21d	7	0	0	2.4
p22a	5	4	4	5.0
p22b	15	7	10	3.3
p23a	5	0	2	2.2
p23b	3	2	0	2.7
p24	5	0	0	3.4
p25	12	2	0	2.0
p26	16	2	4	2.3
p27	10	4	4	3.4

p28	8	0	2	2.8
p29	9	3	2	2.4
p30	5	0	2	2.8
p31a	13	4	4	2.6
p31b	10	2	4	2.1
p32	7	0	0	2.9
p33	14	4	6	2.4
p34	6	4	4	2.5
p35	11	2	6	2.7
p36	11	8	8	2.8
	494	150	172	2.7

**Table 9.** Isosyllabic rhythm

	Syl	isos	%isos	grad	%grad
p1	47	26	55.32	41	87.23
p2	75	60	80.00	75	100.00
p3	69	42	60.87	66	95.65
p4	56	56	100.00	56	100.00
p5	41	18	43.90	41	100.00
p6	71	64	90.14	68	95.77
p7a	29	27	93.10	29	100.00
p7b	116	6	5.17	116	100.00
p8a	51	20	39.22	34	66.67
p8b	57	34	59.65	57	100.00
p9	43	37	86.05	43	100.00
p10a	43	0	0.00	43	100.00
p10b	69	64	92.75	69	100.00
p11	32	27	84.38	32	100.00
p12	54	32	59.26	54	100.00
p13a	96	69	71.88	86	89.58
p13b	27	20	74.07	27	100.00
p14	41	16	39.02	39	95.12
p15	64	16	25.00	64	100.00
p16ab	22	14	63.64	22	100.00
p16c	94	54	57.45	94	100.00
p17	14	12	85.71	14	100.00
p18a	28	14	50.00	25	89.29
p18b	38	34	89.47	34	89.47
p18c	34	0	0.00	34	100.00
p19a	25	18	72.00	25	100.00
p19b	44	26	59.09	44	100.00
p19c	60	0	0.00	47	78.33
p19d	36	0	0.00	36	100.00
p20a	72	72	100.00	72	100.00
p20b	69	41	59.42	62	89.86

p21a	30	0	0.00	27	90.00
p21b	58	36	62.07	55	94.83
p21c	43	43	100.00	43	100.00
p21d	35	16	45.71	35	100.00
p22a	39	32	82.05	39	100.00
p22b	93	62	66.67	93	100.00
p23a	23	20	86.96	20	86.96
p23b	18	0	0.00	18	100.00
p24	38	0	0.00	29	76.32
p25	41	0	0.00	41	100.00
p26	90	46	51.11	78	86.67
p27	70	20	28.57	70	100.00
p28	49	8	16.33	49	100.00
p29	52	52	100.00	52	100.00
p30	34	14	41.18	33	97.06
p31a	72	12	16.67	72	100.00
p31b	41	14	34.15	39	95.12
p32	42	14	33.33	38	90.48
p33	69	14	20.29	69	100.00
p34	33	33	100.00	33	100.00
p35	70	42	60.00	65	92.86
p36	75	12	16.00	63	84.00
	2732	1409	51.57	2610	95.53

**Table 10.** Quantitative and accentual rhythm (general)

	QU	QU%all	AC	AC%all
p1	21	44.68	17	36.17
p2	33	44.00	51	68.00
p3	44	63.77	47	68.12
p4	22	39.29	14	25.00
p5	12	29.27	23	56.10
p6	8	11.27	34	47.89
p7a	14	48.28	25	86.21
p7b	12	10.34	62	53.45
p8a	25	49.02	10	19.61
p8b	30	52.63	20	35.09
p9	20	46.51	20	46.51
p10a	19	44.19	28	65.12
p10b	32	46.38	37	53.62
p11	8	25.00	22	68.75
p12	38	70.37	47	87.04
p13a	38	39.58	51	53.13
p13b	18	66.67	10	37.04
p14	16	39.02	24	58.54
p15	18	28.13	10	15.63

p16ab	8	36.36	16	72.73
p16c	34	36.17	50	53.19
p17	0	0.00	0	0.00
p18a	8	28.57	0	0.00
p18b	16	42.11	10	26.32
p18c	16	47.06	17	50.00
p19a	0	0.00	0	0.00
p19b	0	0.00	26	59.09
p19c	50	83.33	16	26.67
p19d	25	69.44	24	66.67
p20a	22	30.56	34	47.22
p20b	24	34.78	35	50.72
p21a	27	90.00	12	40.00
p21b	35	60.34	28	48.28
p21c	16	37.21	14	32.56
p21d	0	0.00	16	45.71
p22a	24	61.54	18	46.15
p22b	29	31.18	44	47.31
p23a	16	69.57	6	26.09
p23b	9	50.00	12	66.67
p24	26	68.42	24	63.16
p25	16	39.02	12	29.27
p26	33	36.67	37	41.11
p27	35	50.00	29	41.43
p28	16	32.65	22	44.90
p29	23	44.23	22	42.31
p30	14	41.18	22	64.71
p31a	24	33.33	35	48.61
p31b	18	43.90	26	63.41
p32	20	47.62	22	52.38
p33	26	37.68	42	60.87
p34	8	24.24	12	36.36
p35	35	50.00	44	62.86
p36	32	42.67	28	37.33
	1113	40.74	1307	47.84

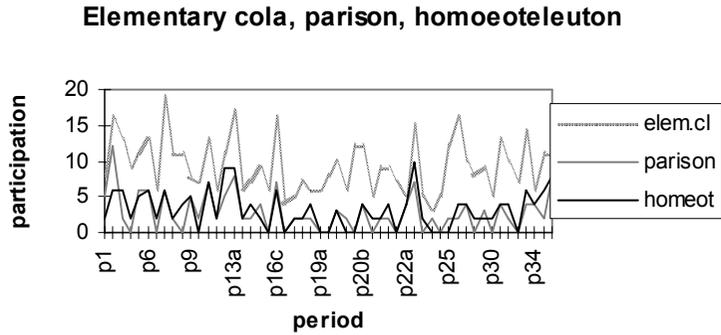
**Table 11.** Rhythm in clausulae (quantitative and accentual)

	CLA	CLAQU	%CLAQU	CLAAC	%CLAAC
p1	24	16	66.67	0	0.00
p2	32	16	50.00	24	75.00
p3	24	16	66.67	0	0.00
p4	16	0	0.00	8	50.00
p5	16	8	50.00	0	0.00
p6	32	8	25.00	8	25.00
p7a	12	0	0.00	8	66.67
p7b	40	8	20.00	40	100.00

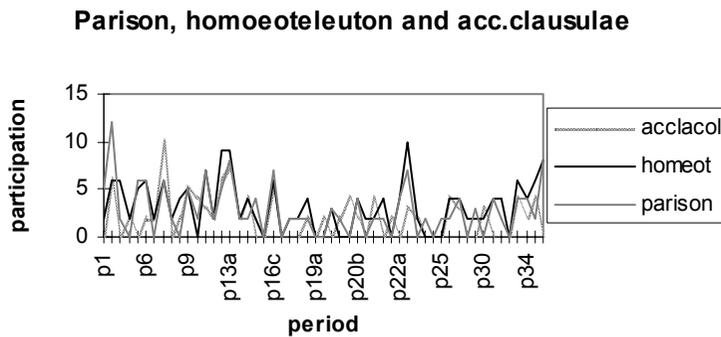
p8a	20	8	40.00	0	0.00
p8b	20	12	60.00	8	40.00
p9	24	20	83.33	20	83.33
p10a	24	12	50.00	16	66.67
p10b	24	16	66.67	12	50.00
p11	8	0	0.00	8	100.00
p12	24	16	66.67	24	100.00
p13a	40	28	70.00	28	70.00
p13b	16	8	50.00	8	50.00
p14	16	16	100.00	16	100.00
p15	28	0	0.00	0	0.00
p16ab	8	8	100.00	0	0.00
p16c	40	16	40.00	20	50.00
p17	0	0	0.00	0	0.00
p18a	8	0	0.00	0	0.00
p18b	8	0	0.00	0	0.00
p18c	8	0	0.00	8	100.00
p19a	12	0	0.00	0	0.00
p19b	16	0	0.00	8	50.00
p19c	20	8	40.00	0	0.00
p19d	12	8	66.67	8	66.67
p20a	24	8	33.33	16	66.67
p20b	24	0	0.00	8	33.33
p21a	8	8	100.00	0	0.00
p21b	24	16	66.67	16	66.67
p21c	12	8	66.67	0	0.00
p21d	12	0	0.00	8	66.67
p22a	12	0	0.00	0	0.00
p22b	20	8	40.00	12	60.00
p23a	12	12	100.00	8	66.67
p23b	0	0	0.00	0	0.00
p24	12	0	0.00	0	0.00
p25	20	0	0.00	0	0.00
p26	32	8	25.00	16	50.00
p27	20	8	40.00	12	60.00
p28	12	0	0.00	0	0.00
p29	16	0	0.00	0	0.00
p30	12	0	0.00	12	100.00
p31a	20	0	0.00	0	0.00
p31b	8	0	0.00	0	0.00
p32	16	0	0.00	0	0.00
p33	24	24	100.00	16	66.67
p34	20	8	40.00	8	40.00
p35	24	16	66.67	16	66.67
p36	16	0	0.00	0	0.00
	972	372	38.27	420	43.21

## B. Charts

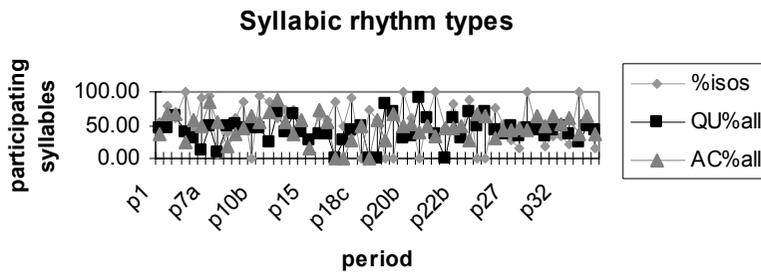
**Chart 6.** The correspondence between elementary cola and parallelism figures (parison and homoeoteleuton)



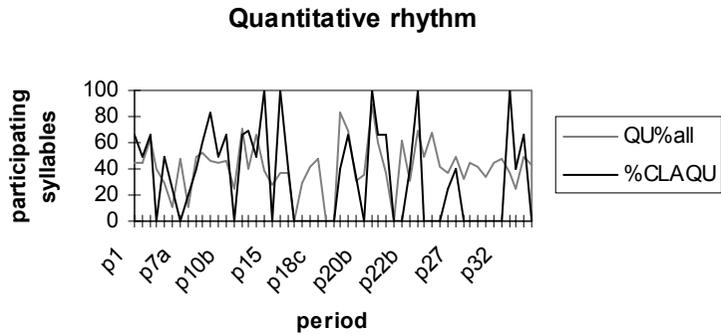
**Chart 7.** The correspondence between accentual clausulae and parallelism figures



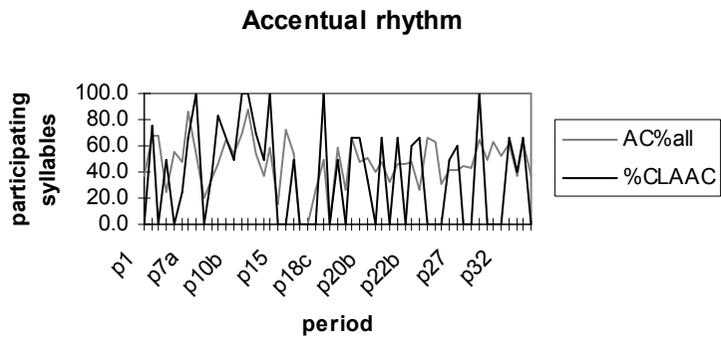
**Chart 8.** Prevalence of rhythm type: isosyllabic, quantitative and accentual pattern



**Chart 9.** Quantitative rhythm in clausulae and within the period



**Chart 10.** Accentual rhythm in clausulae and in the middle of the period



### **C. Clausula types**

Tables A and B present the occurrences of different clausula-types in period-ends. Repetitions in adjacent period-ends are underlined

#### **A. Quantitative clausulae**

1) $\cup \text{---} x$	14	(P.2, 7b, 13a, 13b, <u>15,16ab, 16c</u> , 18b, 21b, <u>22b, 23a,23b</u> , 32, 34)
2) $\text{---} \cup x$	10	(P.8b, 10a, 17, <u>19d, 20a, 20b</u> , 24, <u>31a, 31b</u> , 35)
3) $\cup \text{---} \cup x$	8	(P.1, 8a, 18c, 21a, 22a, 29, 33, 36)
3a) $\text{---} \cup \cup \text{---} \cup \cup$	3	(P.18c, 21a, 33)
4) $\text{---} \text{---} \text{---} x$	6	(P.9, 10b, 14, 18a, <u>21c, 21d</u> )
5) $\text{---} \cup \text{---} x$	6	(P.6, 7, 12, 19a, <u>25, 26</u> )
6) $\cup \cup \cup x$	4	(P. <u>4, 5</u> , 11, 30)
7) $\text{---} \cup \cup x$	3	(P.3, 19b, 27)
8) $\cup \cup \text{---} x$	2	(P.19c, 28)
8a) $\text{---} \cup \cup \text{---} x$	2	(P.19c, 28)
Sum	53 periods	(incl. 17 in adjacent period-ends)

#### **B. Accentual clausulae**

1) $. . 7 .$	15	(P.1, 4, 7b, <u>9, 10a</u> , 11, 13a, <u>14, 15</u> , 18b, <u>24, 25, 26, 27</u> , 33)
1a) $7 . . 7 .$	6	(P.4, 9, 14, 18b, <u>24, 25</u> )
2) $. 7 . .$	14	(P.3, 6, 12, 16b, 18a, 18c, 19a, 19c, 21b, <u>22b, 23a, 23b</u> , <u>29, 30</u> )
2a) $7 . . 7 . . 3$	3	(P. <u>23a, 23b</u> , 30)
3) $7 . 7 .$	11	(P.5, 7a, <u>8a, 8b</u> , 13b, 19b, 19d, 21d, 22a, 31b, 35)
4) $7 . . 7$	4	(P.2, 20b, 21c, 32)
5) $/ 7 . 7$	2	(P.10b, 28)
6) $/ 7 . .$	2	(P.31a, 36)
7) $. 7 7 .$	2	(P.17, 20a)
8) $. . . 7$	2	(P.16c, 34)
9) $. 7 . 7$	1	(P.21a)
Sum	53 periods	(incl 19 in adjacent period-ends)

# CURRICULUM VITAE

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3. 1997.a. mai–juuni, 1999.a. mai–juuni, 2002.a. juuni–juuli. Urbino Ülikool (Itaalia Vabariigi Välisministeeriumi stipendium)
4. 2001 sügis–2003 kevad. Lausanne'i Ülikool (doktorantuur, juh. Prof. C.Calame)
5. 2003 sügissemester. Baseli Ülikool (Basel-linna stipendium külalisüliõpilastele)
6. 2003 okt. Fribourgi ülikool: Prof. J. Louis Holtzi (Pariis, Lyon) ladina paleograafia seminar.
7. 2006 okt. Fribourgi ülikool. Doktorantuuriprogramm: “Nouvelles perspectives sur les éditions scientifiques et de l’interprétations des textes du Moyen Age” (Gebert-Rüef-Stiftungi stipendium).

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# CURRICULUM VITAE

## I. General

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2. Born on September 18th 1965 in Tartu
3. Estonian
4. Home address: Eesti, Tartu 51006, Ilmatari 40; tel. 00372 7422243; Janika.Pall@ut.ee
5. Current employment: University of Tartu, Institute for German, Romance and Slavonic languages; lecturer in classical philology
6. Education: 1991 Tallinn Conservatory (piano); 1995 (Tartu University, *baccalaureus artium* in classical philology *cum laude*); 2000 MA *cum laude* in classical philology
7. Languages: Estonian, English, German, French, Russian (oral and written); Ancient Greek, Latin (written); Italian, Modern Greek (communication level)
8. Employment: 1991–1996 Ülenurme Music School (piano teaching and accompaniment); 1995–2003 Tartu University, assistant (0.5) in classical philology; 2004– lecturer in classical philology

## II. Studies abroad and scholarships

1. 1995 Oct–Dec. Göttingen University (Scholarship from Göttingen University)
2. 1996 June–August. *Thyessa* programm in Modern Greek language and culture (Scholarship of the Greek republic for participation in the program)
3. 1997 May–June, 1999 May–June 2002 June–July. Urbino University (The scholarship of Italian Ministry of Foreign Affairs)
4. Winter 2001 – Summer 2003. Lausanne University (doctoral studies with Prof. C. Calame)
5. Winter 2003. Basel University (The scholarship of Basel-City canton for foreign students)
6. 2003 Oct. Fribourg University. A course of Latin Paleography by Prof. J. Louis Holtz (Paris, Lyon)
7. 2006 Oct. Fribourg University. Doctoral program: “Nouvelles perspectives sur les éditions scientifiques et de l’interprétations des textes du Moyen Age” (Scholarship of Gebert-Rüef-Stiftung)

### III. Publications in foreign languages

- Päll, J. 2007. “Sur les Estes de Tacite et l'impartialité en Histoire.” — Talviste, K.; Ollivry, J.P.; Lepsoo, T. eds. *Relecture et découverte : colloque à l'occasion du 80e anniversaire de l'Institut scientifique français Tartu, 21–22 septembre 2002*. Tartu: Tartu Ülikooli Kirjastus, 81–91.
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## DISSERTATIONES STUDIORUM GRAECORUM ET LATINORUM UNIVERSITATIS TARTUENSIS

1. **Kristi Viiding.** Die dichtung neulateinischer Propemptika an der *Academia Gustaviana (Dorpatensis)* in den Jahren 1632–1656. Tartu, 2002.
2. **Maria-Kristiina Lotman.** Jambiline trimeeter: värsisüsteemid, meetrum, rütm, semantika. Tartu, 2003.

