The Noun Phrase in Ancient Greek

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The Noun Phrase in Ancient Greek

A Functional Analysis of the Order and
Articulation of NP Constituents in Herodotus

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BRILL

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ABBREVIATIONS

a	article
A	adjective
Adv	adverb
D	dependent
dem	demonstrative
GEN	genitive
N	noun
num	numeral
NP	noun phrase
pos	possessive
prt	particle
PP	prepositional phrase
PTC	participle
rel	relative clause
SoA	state of affairs
X	any modifier

Abbreviations to refer to Greek authors follow LSJ.

INTRODUCTION

This book is about the noun phrase (NP) in Ancient Greek. It aims to provide a functional analysis of the factors that determine the structure of the NP, viz. the ordering and articulation of its constituents. In contrast to most modern European languages, in which the ordering of NP elements is rather fixed, the structure of the NP in Ancient Greek is extremely flexible in that the various constituents may occur in almost every possible order and that each constituent may or may not be preceded by an article. As a result of this flexibility, the number of possible NP patterns is enormous. Although one would expect that the existence of so many possibilities would raise questions about the use and function of the various options, the structure of the Ancient Greek NP has received very little attention. Apart from the descriptions in the standard grammars, which generally consist of an overview of the various possibilities without much attention for the differences in use, the discussion of the structure of the Greek NP is limited to a few studies on the difference between pre- and postnominal adjectives or demonstratives and to some remarks on the articulation of its constituents in general literature on what is often called 'double definiteness'. There is no systematic analysis of the structure of the Ancient Greek NP.

This study attempts to fill this gap. On the basis of a careful analysis of the structure of the NPs in a particular corpus (see section 1.2), I will try to answer the question as to which arguments lead a native speaker of Ancient Greek in his choice to select one of the various possible NP patterns. The answer to this question will not only increase our knowledge of the (Ancient Greek) NP, but will—I hope—also result in a better interpretation of Ancient Greek texts.

Since the interest of this book is the structure of the NP, other issues—such as the meaning or function of NP modifiers, the difference between various constructions with a similar meaning (e.g. the difference between a possessive construction with a possessive pronoun 'ὁ ἐμὸς πατήρ' and a construction with a genitive of a personal pronoun 'ὁ πατήρ μου'), or the relation between the complexity of the NP and the availability of the referent—although each contributing to our knowledge of the

form and function of the NP, will only be dealt with if and insofar these issues are relevant for the understanding of the structure of the NP.

1.1. *The outline of the study*

This study of the structure of the Ancient Greek NP consists of two parts. The central theme of the first part is word order variation in the NP. This part generalises over definite and indefinite NPs, or rather, articular and non-articular NP constituents, as the factors that determine the order of the NP constituents are (as I will argue) insensitive to their articulation. After an introductory chapter on word order in the NP, which gives an overview of the various aspects used to explain word order variation in the Ancient Greek NP and which presents the theoretical framework of my research, the Chapters 3 and 4 discuss word order in NPs with only one and with multiple modifiers respectively.

Insight in the factors that determine the order of the NP constituents is, however, not sufficient for a complete understanding of the structure of the Ancient Greek NP. Since two NPs with exactly the same ordering may differ in the presence or absence of the article, the position of this article and the number of articles expressed (e.g. XN vs. aXN, aXN vs. XaN and aXXN vs. aXaXN),[1] the second part of this study analyses the articulation of the NP constituents. As there is no coherent and systematic description of the use and function of the Greek article that answers modern linguistic insights, Chapter 5 starts with a very basic discussion of the circumstances in which an Ancient Greek NP is marked with a definite article. Chapter 6, finally, analyses the factors that determine which constituents of a definite NP are articular. The book ends with an overview of the various possible NP patterns and a short description of the circumstances under which they are used.

1.2. *Method and data*

Research into the Ancient Greek language automatically implies a corpus-linguistic approach. Corpus-linguistics has the disadvantage that

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[1] For an explanation of the abbreviations, see the list of abbreviations at page XI.

you cannot limit the parameters that influence the data to the one in which you are interested; the advantage, on the other hand, is that all data are embedded in an explicit and well-defined context. Even within corpus-linguistics, one can try to keep constant as many variables as possible. For this reason, I decided to analyse data from one author only to exclude possible stylistic and diachronic differences.[2] My choice for Herodotus was made because this prose[3] text with various text types contains a lot of description, which is a necessary condition for finding NPs with multiple modifiers.[4] These advantages counterbalance the fact that Herodotus wrote in the Ionic dialect,[5] so that there might be differences with authors who wrote in the Attic dialect.[6]

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[2] For the influence of style on word order variation, see Chapter 2, section 2.2.1. Several grammars suggest a diachronic difference in the use of the aNaA and NaA pattern (cf. also Brunel 1964 and Biraud 1991).

[3] The choice for a prose text was inspired by fear that rhythm might influence the order of the constituents in the NP. By now, however, H. Dik's (2007: 89–102) study of the position of the attributive adjective in Sophocles proves that there is also no correlation in poetry between word shape and position of the constituents of the NP. The influence of rhythm on the position of adjectives in prose was already reluctantly denied by Bergson, who on the basis of his data had to admit that 'die Sprachkünstler der klassischen Prosa ihre Sätze so zu bauen und die Worte so zu wählen wussten, dass die gedanklich beste Wortfolge fast ausnahmslos auch die bevorzugte äussere Form ergab' (Bergson 1960: 157).

[4] Because speakers do not give more information than is strictly necessary (cf. Grice 1975: 45), extensive noun phrases tend to be used only if the speaker wants to inform the addressee about an entity he was not yet familiar with and/or if there is a contrast between several very similar entities. Descriptive contexts thus seem the most likely candidates for finding multiple-modifier NPs. For the relation between the complexity of an NP and the accessibility (and topicality) of the referent, see among many others Ariel (1990), Fox (1987a+b), Gundel et al. (1993) and Lichtenberk (1996).

[5] Although I do not want to exclude possible dialectal differences beforehand, I do not agree with the conclusion Devine and Stephens (2000: 22) draw on the basis of the statistical differences between Thucydides and Herodotus that the more frequent postposition of adjectives in Herodotus is a syntactic feature of the Ionic dialect. I fail to see why 'the pragmatic parameter cannot vary for the same adjective in the same genre' (Devine and Stephens 2000: 22). Like H. Dik (2007: 86 note 4), I would argue that the more frequent postposition of qualifying adjectives in Herodotus is due to a different usage of NPs with qualifying adjectives. As Dik argues, Herodotus contains a lot of description for the sake of description, while Thucydides is much more argumentative. In an argumentative text, an adjective like πολύς is obviously more likely to become pragmatically marked than in a description.

[6] Although dialectal differences cannot be excluded, I would be surprised if the very closely related dialects (C.D. Buck (1955) considers Attic and Ionic to be one dialect group; R. Woodard (2004: 650) describes them as 'sisters') differ in more respects than the well-known phonological features. My expectation that dialectal differences play no major role was confirmed by the (unpublished) papers written by the participants of a

I included all definite and indefinite NPs with one or more modifiers from the corpus of Herodotus in the analysis, irrespective of their semantic and syntactic properties. Yet, since it is impossible to decide whether a modifier is pre- or postnominal in NPs without an overt head, only NPs with an overtly expressed noun were taken into consideration. NPs with substantivised infinitives, participles, adjectives etc. as well as NPs with proper names, names of countries, seas etc. as their heads were also excluded; the former because these substantivised heads permit other kinds of modifiers than common nouns, the latter because the combination of a proper name with its modifier (like 'Red Bull' and 'the Black Sea') may have become a fixed expression no longer obeying normal noun phrase formation rules.

Finally, because this book studies word order variation *within* the NP, it only discusses the position of modifiers that form an integral part of the NP. Therefore, constituents with a predicating function as well as appositional modifiers have been left out of consideration. Since predicative elements also agree in case, number and gender with the noun, it is sometimes difficult to decide whether we are dealing with an attributive modifier or with a predicating constituent, especially in the case of participles. In example (1), for instance, it is unclear whether the participle modifies the noun ('men who flee') or has predicative value ('men when they flee') and should therefore be analysed at the level of the clause:

(1)   ἡμεῖς δέ (εὕρημα γὰρ εὑρήκαμεν ἡμέας τε αὐτοὺς καὶ τὴν Ἑλλάδα, νέφος τοσοῦτο ἀνθρώπων ἀνωσάμενοι) μὴ διώκωμεν **ἄνδρας φεύγον-τας**.

        Therefore I say to you (as it is to a fortunate chance that we owe ourselves and Hellas, and have driven away so mighty a band of enemies), let us not pursue **men who flee/men when fleeing**.   (Hdt. 8.109.2)[7]

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seminar I gave in 2004 and 2005, which show that the use of word order patterns in the NP in Herodotus is comparable to that in the Attic prose texts of Xenophon and Plato, despite major statistical differences.

    [7] The Greek examples in this book are taken from the Oxford Classical Text editions, the translations from the Greek-English Loeb editions. In a number of cases, however, the translations have been adapted. For those readers who have no or only very little knowledge of Ancient Greek, I have added a literal translation of the NP in question, if necessary. Without doubt, transcriptions and glosses would have been much more helpful for these readers, but in my opinion the addition of a transcription and gloss for every example, or even every NP, was unfeasible because of the large number and complexity of the examples.

Although the opposite can also be maintained, it was decided only to exclude unambiguously predicative elements. The same stance was taken with respect to appositional modifiers, which also are not easily recognisable, because my source is a written text that has come down to us without punctuation marks. The reason for my unwillingness to assume a loose connection between the noun and modifier *a priori* is that in the past postnominal elements have been considered an apposition or afterthought too easily (see Chapter 6, section 6.1.1.1). Therefore, I only excluded clear appositional examples like example (2) and (3):

(2)   (...) παρενθήκην ποιεέσκετο τήνδε, ὡς ἡ Εὐρώπη περικαλλὴς χώρη καὶ **δένδρεα παντοῖα** φέρει **τὰ ἥμερα** (...).

(...) he kept adding that Europe was an extremely beautiful land and bore **all kinds of orchard trees** (lit. trees all kind the cultivated) (...).

(Hdt. 7.5.3)

(3)   (...) ἀπέπεμπε ἐς Δελφοὺς καὶ τάδε ἄλλα ἅμα τοῖσι· **κρητῆρας δύο μεγάθεϊ μεγάλους, χρύσεον καὶ ἀργύρεον**, τῶν ὁ μὲν χρύσεος ἔκειτο ἐπὶ δεξιὰ ἐσιόντι ἐς τὸν νηόν, ὁ δὲ ἀργύρεος ἐπ' ἀριστερά·

(...) he (= Kroisos) sent them to Delphi, with other gifts besides: namely, **two very large bowls, one of gold and one of silver** (lit. bowls two large, gold and silver). The golden bowl stood to the right, the silver to the left of the temple entrance.

(Hdt. 1.51.1)

In example (2), τὰ ἥμερα must be an apposition, since the adjective παντοῖα cannot occur in definite NPs. In example (3), the number of the adjectives χρύσεον καὶ ἀργύρεον (singular) makes clear that they must be an apposition to the plural κρητῆρας δύο μεγάθεϊ μεγάλους.

The fact that this book studies word order *within* the NP also implies that hyperbaton is left out of consideration.[8] The order of the various constituents of the NP is studied irrespective of whether and, if so, how many constituents of the level of the sentence intervene. This limitation is based on the idea that one should first try to understand what determines the order of the NP constituents itself, before addressing much more complex matters like (dis)continuity.

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[8] Hyperbaton in Ancient Greek is the subject of numerous studies, of which Devine and Stephens (2000) is the most recent one. They provide an extensive bibliography on both hyperbaton in Greek and discontinuous NPs in general.

PART I

WORD ORDER

INTRODUCTION TO WORD ORDER

2.1. *Word order in the noun phrase*

Although almost every page of an Ancient Greek text contains several NPs with one or more modifiers, the order of the constituents of these NPs has received very little attention. Probably, this is due to the fact that—irrespective of the order of the constituents in Greek—the order of the constituents in a translation is rather set. Since a modern reader of the examples (1) and (2) is not forced to think about the word order within the highlighted NPs, he will easily fail to notice that they differ in their ordering, let alone that he will wonder why the red cloak in example (1), introduced by πορφύρεον εἶμα (AN), is referred to later by τὸ εἶμα τὸ πορφύρεον (NA), or why the lying colossus in example (2) is said to be πόδες πέντε καὶ ἑβδομήκοντα (NA) high, while the two huge statues of Egyptian stone are said to be εἴκοσι ποδῶν (AN) high:

(1)   ἐπείτε δὲ τῷ Καμβύσῃ ἐκ τῆς Ἐλεφαντίνης ἀπίκοντο οἱ Ἰχθυοφάγοι, ἔπεμπε αὐτοὺς ἐς τοὺς Αἰθίοπας ἐντειλάμενός τε τὰ λέγειν χρῆν καὶ δῶρα φέροντας **πορφύρεόν** τε **εἶμα** καὶ χρύσεον στρεπτὸν περιαυχέ-νιον καὶ ψέλια καὶ μύρου ἀλάβαστρον καὶ Φοινικηίου οἴνου κάδον. (…) λαβὼν δὲ **τὸ εἶμα τὸ πορφύρεον** εἰρώτα ὅ τι εἴη καὶ ὅκως πε-ποιημένον·

When the Fish-eaters arrived from Elephantine to Kambyses, he sent them to the Ethiopians, with orders what to say, and bearing as gifts **a red cloak** and a twisted gold necklace and bracelets and an alabaster box of incense and an earthenware jar of palm wine. (…) Then, having taken **the red cloak** (lit. the cloak the red), he (= the king of Ethiopia) asked what it was and how it had been made.   (Hdt. 3.20.1–22.1)

(2)   ἀνέθηκε δὲ καὶ ἐν τοῖσι ἄλλοισι ἱροῖσι ὁ Ἄμασις πᾶσι τοῖσι ἐλλογίμοισι ἔργα τὸ μέγαθος ἀξιοθέητα, ἐν δὲ καὶ ἐν Μέμφι τὸν ὕπτιον κείμενον κολοσσὸν τοῦ Ἡφαιστείου ἔμπροσθε, τοῦ **πόδες πέντε καὶ ἑβδομή-κοντά** εἰσι τὸ μῆκος. ἐπὶ δὲ τῷ αὐτῷ βάθρῳ ἑστᾶσι Αἰθιοπικοῦ ἐόντες λίθου δύο κολοσσοί, **εἴκοσι ποδῶν** τὸ μέγαθος ἐὼν ἑκάτερος, (…).

Furthermore, Amasis dedicated, besides monuments of marvellous size in all the other temples of note, the huge image that lies supine before

> Hephaistos' temple at Memphis; the length of this image is **seventy-five feet** (lit. feet five and seventy); on the same base there stand two huge statues of Aithiopian stone, each of them **twenty feet** high, (...).
>
> (Hdt. 2.176.1)

Yet, since H. Dik (1995, 1997 and 2007) proved that word order in Greek, although traditionally assumed to be 'free', is determined by pragmatic factors, we can no longer ignore word order variations in the NP, even if these variations cannot be expressed in a translation. The following two chapters try to answer the question as to which factors determine word order variation in the Greek NP by analysing the order of the NP constituents in the corpus mentioned in the Introduction. First of all, however, this chapter will present an overview of the various aspects of word order, all of which have been used to explain word order variation in the Greek NP in the more or less recent past, and will provide the theoretical framework of my research.

2.2. *Possible explanations for word order variation in the NP*

2.2.1. *Style*

The oldest remark on word order variation in the NP that is still available to us is Aristotle's remark at *Rhetorica* 1407b, in which Aristotle instructs his reader how to develop a lofty style. In between his advice to use a description (e.g. 'a plane figure, all the points of which are equidistant from the centre') instead of the name of a thing (i.e. 'circle') and to employ connecting particles instead of omitting them for the purpose of conciseness, Aristotle teaches his reader:

(3)   καὶ μὴ ἐπιζευγνύναι, ἀλλ' ἑκατέρῳ ἑκάτερον, τῆς γυναικὸς τῆς ἡμετέ-
ρας· ἐὰν δὲ συντόμως, τοὐναντίον, τῆς ἡμετέρας γυναικός.

You should avoid linking up, but each element should have its own article: τῆς γυναικὸς τῆς ἡμετέρας (lit. the woman the our). But for conciseness, the reverse: τῆς ἡμετέρας γυναικός (lit. the our woman).

(Arist. *Rh.* 1407b35–37)

By considering definite NPs with a prenominal modifier to be more concise than the more pompous alternative with a postnominal modifier preceded by an article of its own, Aristotle explicitly relates word order variation to variation in style.[1]

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[1] We should bear in mind, however, that Aristotle does not discuss word order

In a much more implicit way, Dionysius of Halikarnassus also seems to suggest that word order variation is a matter of style, for in his rewriting of a passage from Herodotus in the style of Thucydides, Dionysius mainly changes the order of the constituents. The original NP τύραννος ἐθνέων τῶν ἐντὸς Ἅλυος ποταμοῦ becomes τύραννος τῶν ἐντὸς Ἅλυος ποταμοῦ ἐθνῶν in the more direct and systematic style of Thucydides:[2]

(4) λήψομαι δ᾽ ἐκ τῆς Ἡροδότου λέξεως τὴν ἀρχὴν τῆς ἱστορίας, ἐπειδὴ καὶ γνώριμός ἐστι τοῖς πολλοῖς, μεταθεὶς τὸν χαρακτῆρα τῆς διαλέκτου μόνον. Κροῖσος ἦν Λυδὸς μὲν γένος, παῖς δ᾽ Ἀλυάττου, τύραννος δ᾽ **ἐθνῶν τῶν ἐντὸς Ἅλυος ποταμοῦ·** ὃς ῥέων ἀπὸ μεσημβρίας μεταξὺ Σύρων τε καὶ Παφλαγόνων ἐξίησι πρὸς βορέαν ἄνεμον εἰς τὸν Εὔξεινον καλούμενον πόντον. μετατίθημι τῆς λέξεως ταύτης τὴν ἁρμονίαν, καὶ γενήσεταί μοι οὐκέτι ὑπαγωγικὸν τὸ πλάσμα οὐδ᾽ ἱστορικόν, ἀλλ᾽ ὀρθὸν μᾶλλον καὶ ἐναγώνιον· Κροῖσος ἦν υἱὸς μὲν Ἀλυάττου, γένος δὲ Λυδός, τύραννος δὲ **τῶν ἐντὸς Ἅλυος ποταμοῦ ἐθνῶν·** ὃς ἀπὸ μεσημβρίας ῥέων μεταξὺ Σύρων καὶ Παφλαγόνων εἰς τὸν Εὔξεινον καλούμενον πόντον ἐκδίδωσι πρὸς βορέαν ἄνεμον. οὗτος ὁ χαρακτὴρ οὐ πολὺ ἀπέχειν ἂν δόξειεν τῶν Θουκυδίδου τούτων.

I will take from the writings of Herodotus the opening of his History, since it is familiar to most people, only changing the nature of the dialect: 'Kroisos was a Lydian by birth and the son of Alyattes. He was lord over **the nations on this side of the river Halys** (lit. of nations the on this side of the river Halys), which flows from the south between Syria and Paphlagonia, and falls, towards the north, into the sea which is called the Euxine.' I change the order of this line, and the cast of the passage will become no longer that of a spacious narrative, but tense rather and forensic: 'Kroisos was the son of Ayattes, and by birth a Lydian. He was lord over **the nations on this side of the river** Halys (lit. of the on this side of the river Halys nations), which from the south flowing between Syria and Paphlagonia runs into the sea which is called the Euxine and debauches towards the north.' This style would seem not to differ widely from these words of Thucydides: (. . .)   (D.H. *Comp.* 4.55–70)[3]

The ancient view of word order variation as a stylistic phenomenon found its way to modern times. Gildersleeve's description of the three

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variation in the NP in this passage, but only wants to teach his reader to develop a lofty style. By doing so, he hints at the difference between NPs with pre- and postnominal modifiers, but that is not to say that this passage reflects his ideas on word order variation. The reason that I nevertheless discuss this passage is that it has clearly influenced present-day grammarians (see next page).

[2] For a discussion of this passage in a general analysis of Dionysius' method of metathesis, see De Jonge (2005).

[3] The translation is an adaptation of the translation of W. Roberts (1910).

attributive positions of the adjective in a definite NP is clearly influenced by Aristotle: 'the first, ὁ ἀγαθὸς ἀνήρ, is the most simple, natural, and straightforward, and is briefer (σύντομος) than the second, ὁ ἀνὴρ ὁ ἀγαθός, which is more deliberate, and somewhat more rhetorical, pompous (ὀγκώδης), passionate. The third position, ἀνὴρ ὁ ἀγαθός, is the epanorthotic, self-corrective, or slipshod position' (Gildersleeve 1900: 280). Goodwin (1879: 209) describes the difference between the three patterns in similar terms.

My objection to the use of style as an explanation for word order variation in the NP is that it cannot account for examples like (5) and (6):[4]

(5)   (…) **οἱ ἄγριοι οἶες** καὶ **οἱ ὄνοι οἱ ἄγριοι** ἀσινεῖς εἰσιν.

       (…) **the wild sheep** and **the wild asses** (lit. the asses the wild) are
       harmless   (X. *Cyr.* 1.4.7)

(6)   οἰκήσετε δὲ **τὰς αὐτὰς οἰκίας** καὶ **χώραν τὴν αὐτὴν** ἐργάσεσθε καὶ
       γυναιξὶ ταῖς αὐταῖς συνοικήσετε (…).

       You will inhabit **the same houses** and till **the same land** (lit. land the
       same) and live with **the same wives** (lit. wives the same) (…).
                                                                  (X. *Cyr.* 4.4.10)

If the difference between the various ordering patterns resides in the style of the author—as Dionysius seems to believe—or in the 'rhetoricalness' of the NP—as Aristotle, Gildersleeve and Goodwin assume—, how to explain that the same author so easily alternates the various possible patterns in one sentence?[5] It seems difficult to believe that Xenophon wanted to refer to the wild sheep in a simple and straightforward way, while the wild asses needed a more rhetorical, pompous and passionate reference.[6]

Although it might seem rather rude to put aside Aristotle's observation on his native language, there are two arguments in my defence. First of all, even for native speakers it is often difficult to formulate the abstract rules

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[4] Examples were taken from Gildersleeve (1900: 280).

[5] According to the overview of Gildersleeve (1900: 280–281), almost all classical authors made use of all three attributive patterns (aAN, aNaA and NaA), although there are considerable statistical differences.

[6] Although it might be expected on the basis of examples like these, nobody—as far as I know, at least—defended the view that the alternation of the various possible NP patterns are just variations of formulation. In my view, it is very unlikely that a language is so uneconomical as to have several constructions at its disposal with exactly the same function, although diachronic developments may cause a temporal co-occurrence of two formally different, but otherwise identical constructions.

that shape their language. In spite of their capability to understand and produce language and their capacity to pronounce upon the grammatical accuracy of a particular utterance, they have no direct access to the abstract and unconscious rules behind these utterances (their 'mental grammar'). Secondly, I do not want to deny that the first pattern may sound more concise than the second one. I do deny, however, that this is the reason for the choice for the one or the other pattern. In English, too, *the ship's funnel* may sound more concise than *the funnel of the ship*. In many cases, however, the choice for one of the two patterns has nothing to do with the style of NP as such.[7] So, even though Aristotle prescribes his readers to make use of the second pattern to create a lofty style, word order variation is not necessarily determined by style. We should thus be reluctant to ascribe the use of a particular pattern to the personal preference of the author or his desire to create some stylistic effect (whether 'rhetoricalness' or variation of formulation), unless we can prove a correlation between the use of a word order pattern and (the style of) the author and can exclude the influence of other factors.

2.2.2. *Syntax*

It will not come as a surprise that no one has tried to formulate syntactic rules[8] to explain word order variation in the NP of a language in which almost every order of NP constituents is possible.[9] Everyone who attempts to formulate them will share Dionysius' feelings:

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[7] According to Quirk et al. (1985: 1275 ff.), the choice between the genitive construction (*the ship's funnel*) and the *of*-construction (*the funnel of the ship*) depends on the lexical properties of both nouns, the relation between the nouns, the complexity of the subordinate noun and the information structure of the utterance. Taylor (1996: 18) focuses on the latter aspect: he claims that the difference between the prenominal possessive and the *of*-construction resides in the mental path the addressee needs to follow to identify the intended referent. In the case of a prenominal possessive the addressee is guided from the easily identifiable (already activated) *ship* to the *funnel* that is to be inferred from it, whereas the *of*-construction leads the addressee directly to the *funnel* itself. Keizer (2007a), on the other hand, assumes that the difference between a pre- and a postnominal construction does not reside in the activatedness of the possessor, but (among some other factors) in the activatedness of the *relation between* the possessor and possessee.

[8] Of course, this was done for languages with a rather rigid ordering of the NP. Cf. Haeseryn et al. (1997) who set up the following order of prepositional modifiers in the Dutch NP: articles, pronouns and genitives have to be placed before numerals, which have to be placed before adjectives and participles. Rijkhoff (1992 and 2002) shows that this kind of syntactic ordering can be explained by semantic factors (see section 2.3.1).

[9] Kühner-Gerth (1904: I 621–622) present the following ordering possibilities for a definite NP with two juxtaposed modifiers: aX_1X_2N, aX_2X_1N, aX_1aX_2N, aX_2aX_1N,

(7)   ἔτι πρὸς τούτοις ἠξίουν τὰ μὲν ὀνοματικὰ προτάττειν τῶν ἐπιθέτων,
          τὰ δὲ προσηγορικὰ τῶν ὀνοματικῶν, τὰς δ᾽ ἀντονομασίας τῶν προσ-
          ηγορικῶν, ἔν τε τοῖς ῥήμασι φυλάττειν, ἵνα τὰ ὀρθὰ τῶν ἐγκλινομέ-
          νων ἡγῆται καὶ τὰ παρεμφατικὰ τῶν ἀπαρεμφάτων, καὶ ἄλλα τοι-
          αῦτα πολλά. πάντα δὲ ταῦτα διεσάλευεν ἡ πεῖρα καὶ τοῦ μηδενὸς
          ἄξια ἀπέφαινε. τοτὲ μὲν γὰρ ἐκ τούτων ἐγίνετο καὶ τῶν ὁμοίων αὐ-
          τοῖς ἡδεῖα ἡ σύνθεσις καὶ καλή, τοτὲ δ᾽ ἐκ τῶν μὴ τοιούτων ἀλλ᾽
          ἐναντίων. διὰ ταύτας μὲν δὴ τὰς αἰτίας τῆς τοιαύτης θεωρίας ἀπ-
          έστην.

          And still further, I thought it right to put my nouns before my adjectives,
          common before proper nouns, and pronouns before common nouns;
          and with verbs, to take care that the indicative should precede the other
          moods, and finite verbs infinitives, and so on. But experience upset
          all those assumptions and showed them to be completely worthless.
          Sometimes the composition was rendered pleasing by these and similar
          arrangements, but at other times not by these but by the opposite sort.
          So for these reasons I abandoned such theories. (D.H. *Comp.* 5.61–71)[10]

Though not formulating syntactic rules, Brunel (1964) gives his analysis
of the position of the adjective in the Greek NP a syntactic flavour by
arguing that the difference between the NA and AN order resides in
the degree of unity of the NPs. Whereas the NA order has a low degree
of unity because the noun on its own is sufficient for a grammatically
acceptable expression, the AN order forms a strong unity because the
adjective, which cannot make up an NP on its own, supposes a noun
(Brunel 1964: 16).

   Because of the 'analytic' nature of the NA order, the postnominal adjec-
tive is well suited to elaborate a notion pre-existing in the noun, or to
add a secondary thought to the concept expressed by the noun. Thus,
postnominal adjectives may be classifying, i.e. specifying the concept
expressed by the noun (e.g. Hdt. 1.167.2 ἀγῶνα γυμνικὸν καὶ ἱππικόν),
descriptive, i.e. characterising the referent sufficiently described by the
noun (e.g. Hdt. 2.156.2 ἐν λίμνῃ βαθέῃ καὶ πλατέῃ), or augmentative, i.e.
augmenting an inherent value of the noun (e.g. Hdt. 1.10.3 ἐς αἰσχύνην
μεγάλην).[11] The adjectives in the 'synthetic' AN construction, by con-
trast, express an inseparable part of the notion expressed by the NP as a

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aX$_1$NX$_2$, aNaX$_1$aX$_2$ and aNaX$_2$aX$_1$. However, my data show that there are even more
possible orderings: aX$_2$NX$_1$, X$_2$aX$_1$N, aNaX$_1$X$_2$ and aNX$_2$aX$_1$ also occur, although not very
regularly.
   [10] The translation is an adaptation of the translation of W. Rhys Roberts (1910).
   [11] Brunel (1964: 16–26).

whole (are '*complexive*', e.g. Hdt. 1.2 μακρῇ νηί) or express a subjective evaluation of the referent of the noun (are '*impressive*', e.g. Hdt. 1.165 ἰσχυρὰς κατάρας).[12]

The main problem of Brunel's conclusion that the difference between pre- and postnominal adjectives resides in the synthetic or analytic nature of the NP is that it does not logically follow from his observations on the concrete examples. Throughout his whole book, the discussion of the examples gives the impression that word order is determined by pragmatic factors. For example, while discussing prenominal adjectives in indefinite NPs, Brunel writes:

(8) L'intérêt du groupe se trouve encore concentré pour l'essentiel dans l'adjectif, lorsque le substantif est précisément celui qu'implique le contexte, en particulier le contexte *antérieur*. Si Hérodote écrit, I, 2, κατα-πλώσαντες μακρῇ νηί, et, 163, ἐναυτίλλοντο δὲ οὐ στρογγύλῃσι νηυσὶ ἀλλὰ πεντηκοντέροισι, les verbes impliquent déjà la notion de 'navire'. Ce n'est sans doute pas un hasard que nous lisions inversement, 70, νηυσὶ μακρῇσι ἐπιπλώσαντες, avec adjectif postposé en tant que classificatif: le verbe susceptible de rendre banale la notion de 'navire' n'est exprimé qu'après le groupe nominal. (Brunel 1964: 27)

These and the many similar examples where a prenominal adjective provides the essential information of the NP seem at odds with the conclusion that the adjective forms an inseparable part of a synthetic NP. Likewise, the description of the examples of postnominal adjectives in definite NPs does not justify the conclusion that the analytic nature of the aNaA ordering endows the adjective with a descriptive, classifying or augmenting value:

(9) La dominance de l'élément substantif apparaît bien dans le cas où le contexte engage la notion substantive, et elle seul, dans une opposition d'ordre logique, la notion adjective étant déjà impliquée dans le contexte. Nous lisons ainsi dans Platon, *Gorg.*, 474 d, οἷον πρῶτον τὰ σώματα τὰ καλὰ οὐχὶ ἤτοι κατὰ τὴν χρείαν λέγεις καλὰ εἶναι …; Socrate vient d'indiquer que la question posée sur la nature de la beauté concerne toutes les choses belles, corps, couleurs, figures, etc.… C'est par la notion de 'corps' que le premier exemple s'oppose à ceux qui seront globalement envisagés par la suite. (Brunel 1964: 88)

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[12] Brunel (1964: 26–32). Although the overview of the different roles of pre- and post-nominal adjectives may give the impression that Brunel provides a semantic explanation for word order variation in the NP, I consider Brunel's theory to be syntactic since he assumes the different semantic roles of the adjectives to stem from the syntactic difference between an analytic (NA) or synthetic ordering (AN).

Brunel's clear and extensive discussions of his numerous examples would probably have led to another conclusion if he had not excluded a 'pragmatic'[13] explanation beforehand. Fearing that he would be influenced by Marouzeau's (1922) analysis of the Latin NP, Brunel firmly resolves to study the facts without prejudice:

(10)   Nous nous efforcerons, pour définir les valeurs respectives des deux tours, d'aborder les faits observables sans idée préconçue. .... Nous n'excluons pas *a priori* l'hypothèse qui verrait entre les deux ordres du grec une différence d'expressivité. Mais sa vérification implique qu'on a d'abord réussi à établir le caractère normal de l'un d'eux. A supposer que la valeur du groupe dépende essentiellement du relief de l'adjectif—mais en fait la réalité doit être plus complexe—, comment apprécier celui-ci sans interpréter déjà la construction?   (Brunel 1964: 13)

Brunel attempts so hard not to come up with a pragmatic explanation, that he does exactly what he wants to avoid: being prejudiced and interpreting the constructions. From the very beginning, he follows the track of a synthetic vs. analytic analysis of the NPs, in spite of his data that seem to point in another direction.

2.2.3. *Semantics*

Four years before Brunel published his syntactic account of the Greek NP, Bergson (1960) defended the view that the position of the adjective in relation to the noun depends on its semantic value. Bergson bases his analysis of word order variation in the Greek NP on Marouzeau's classification of Latin adjectives into determining adjectives on the one hand and qualifying and quantifying adjectives on the other. While determining adjectives express a quality by which the referent can be distinguished or classified (e.g. Ἀθηναῖος, ἀνθρώπειος), qualifying and quantifying adjectives express a judgement or appreciation that does not distinguish the referent from other possible referents (e.g. ἀγαθός, ὀλίγος).[14] According to Bergson, these two classes of adjectives obey different placement rules (Bergson 1960: 60–61 and 73–75):

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[13] Of course, pragmatics as a subdiscipline of linguistics was scarcely developed in Brunel's time. By now, however, we would call explanations as given by Brunel in (8) and (9) pragmatic.
[14] Marouzeau (1922: 15).

(11)   Determining adjectives usually follow the noun. They precede the noun:

   a. in the case of a logical or affective emphasis,[15] or
   b. if they are used as a qualifying adjective.

(12)   Qualifying and quantifying adjectives usually precede the noun (even in the case of contrast). They follow the noun:

   a. in the case of a non-contrastive emphasis, or
   b. if they are used as a non-emphatic afterthought, or
   c. if they are used as a determining adjective.

Both Brunel (1964: 6–7) and H. Dik (1997: 57)[16] correctly observe that it is not very convincing that the position of the adjective is determined by its inherent semantic value if determining adjectives may occasionally be classified as qualifying and *vice versa*. The possibility of a reanalysis of the semantics of an adjective raises the question of whether we should make a distinction—if useful at all—between various *usage* types of adjectives rather than a categorisation on the basis of their context-independent semantics.

Another major objection to Bergon's analysis is, as H. Dik's (1997: 58) schematic account of Bergson's '*Übersicht der Stellungen*' (Bergson 1960: 167) clearly shows (see figure 1), that because of the possible reanalysis of the adjective almost every interpretation of a pre- or postnominal adjective becomes possible. Therefore, Bergson's analysis is practically useless for the reader of an Ancient Greek text who wants to be helped with respect to the interpretation of an arbitrary NP.
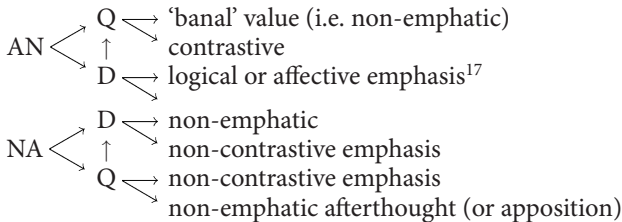
Figure 1. Dik's schematic account of Bergson's
'*Übersicht der Stellungen*' (slightly adapted)

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[15] Although Bergson (1960) acknowledges some influence of pragmatics on adjective position, I discuss his theory under the heading of semantic approaches, since the starting point of his theory is semantic (viz. that the position of the adjective depends on the class to which it belongs).

[16] For an overview of H. Dik's own theory of adjective position, see section 2.2.4.

[17] In H. Dik's original scheme (1997: 58) prenominal adjectives that are determining are said to be contrastive. Bergson (1960: 167), however, states that 'das determinative

Bergson's analysis is also criticised by Biraud (1991: 38), who argues that the position of the adjective is not influenced by its semantic value, but by the role of the adjective in the NP.[18] Postnominal adjectives have a discriminating role, i.e. oppose the referent of the NP to other entities to which the noun may refer, whereas prenominal adjectives have a qualifying role, i.e. oppose the qualification of the adjective to other possible qualifications. Unfortunately, Biraud only gives examples of prenominal modifiers, so that the difference between the two roles does not become very clear.[19]

The reason why Biraud mentions the different roles of the adjectives only briefly is that the aim of her book is not to describe the difference between pre- and postnominal adjectives, but to show that there are three types of modifiers ('*déterminants*') with their own syntactic and semantic properties. The main distinction between these types of modifiers—named D1, D2 and D3—is the position they take in the NP. D1s are usually expressed between the article (= D2) and the noun (e.g. qualifying adjectives, numerals and possessive adjectives); D3s, by contrast, are typically expressed outside the cluster formed by the article and noun (e.g. demonstratives and modifiers like ἕκαστος and μόνος):
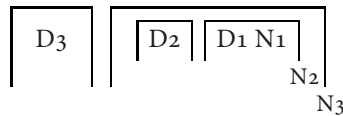
Figure 2. Biraud's schematic representation of the NP

Another distinction between the three types of modifiers is the ground for their pre- or postposition. While the pre- or postposition of adjectives (D1s) depends on their semantic role (discriminating vs. qualifying), the position of demonstratives (D3s) is determined by their pragmatic value: demonstratives are prenominal if they make up the most important part

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Adjektiv voraus geht wenn es aus irgendeinem Grund (logischer order affektiver Art) hervorgehoben werden soll'. In my view, Dik's 'contrastive' does not cover the affective emphasis distinguished by Bergson.

[18] Biraud passes the same criticism on Brunel, although Brunel does not classify adjectives on the basis of their semantics, but gives an overview of the various roles (!) adjectives may assume by being used in a synthetic or analytic construction.

[19] I fail to see a substantial difference between the two roles as formulated by Biraud. If a postnominal adjective opposes the referent described by the NP to other possible referents to which the noun may refer, the adjective in ἀνὴρ ἀγαθός opposes a good man to other men (e.g. a bad man, happy man, honest man etc.). However, if the prenominal adjective in ἀγαθὸς ἀνήρ opposes its qualification to other possible qualifications, it also contrasts a good man to a bad man, happy man, honest man, etc.

of the message of the NP and postnominal if they do not. According to Biraud, this different behaviour with respect to their position confirms her idea that D1s and D3s are two distinct types of modifiers. At the same time, however, she warns against overestimating this difference between D1s and D3s, because in both cases the prenominal modifier 'porte une charge de signification autonome et subjectivement plus importante que celle du nom' (Biraud 1991: 46).

Yet, if prenominal D1s and D3s share the property of being more important than the noun, why not conclude that this is the basic distinction between pre- and postposition for both types of modifiers? In my view, it is Biraud's focus on the difference between D1s and D3s more than her Greek data that blocks this conclusion.

2.2.4. *Pragmatics*

Around the same time that Brunel and Bergson presented their syntactic and semantic analysis of the position of the adjective in the NP, Palm (1960) claimed that the position of the demonstrative is determined by pragmatic factors. In his view, the first element of the NP is the most important:

(13)   Und das Wort, das den Begriff repräsentiert, der in diesem Augenblick den grössten Raum im Bewusstsein des Redenden einnimmt, tritt an die Spitze der Wortgruppe, zu der es gehört. (Diese Hypothese, die wohl zuerst von H. Weil vorgebracht worden ist, scheint mir sehr wertvoll zu sein, ja das Wesentliche betr. die Worstellung im allgemeinen zu sagen).
(Palm 1960: 11)

Palm adds that this rule implies that a demonstrative precedes the noun if the identification of the referent is of primary importance to the speaker, while it follows the noun if the identification is self-evident or if the noun ('*das Hauptbegriff*') is more interesting. In the latter case, the importance of the noun may, for instance, be due to its contrastiveness or to its use in a taunt, where the characterisation is more important than the identification (Palm 1960: 13–14).[20]

Apart from the section in which Palm (1960: 27) ascribes a '*reflektierende, analytische und nicht emotionelle*' value to postnominal demon-

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[20] Rijksbaron (1994) further elaborates Palm's pragmatic analysis with respect to noun plus demonstrative combinations at the beginning of a clause. He concludes that the order of the demonstrative and noun relates to the prominence of the topic to which this combination refers. For more details of Rijksbaron's analysis, see Chapter 3, section 3.5.3.

stratives and a '*emotionelle*' value to prenominal ones, his analysis of and
conclusion about the position of the demonstrative seem very attractive
to me. The major improvement on the studies discussed above is that
Palm does not analyse the modifier in isolation, but as part of larger
whole by which the speaker wants to convey a message to his audience.
As a consequence, he is the first who recognises the significance of the
other part of the NP: the noun itself.[21]

Despite the emergence of pragmatics as an independent and important
subfield of general linguistics, it took more than 30 years for the next
pragmatic study on word order in the Greek NP to appear. In 1997,
three years after the refinements of Palm's conclusions by Rijksbaron (see
footnote 20), H. Dik presented a pragmatic analysis of the position of
the adjective in relation to the noun. By comparing various examples of
determining and qualifying/quantifying adjectives[22] she argues that the
semantics of the adjectives does not play any role in the ordering of the
NP, but that the pre- or postposition of the adjective is solely dependent
on its pragmatic marking. While the noun-adjective order is the default
ordering for all types of adjectives, the adjective may be prenominal if it
is pragmatically marked. Or, as H. Dik formulates her 'rule of grammar'
herself:

(14)   a. when the adjective is not pragmatically marked, it will be postposed;
       b. when the adjective is contrastive or otherwise the most salient element
          of a noun phrase, it will be preposed.   (H. Dik 1997: 76)

But despite H. Dik's many clear examples of both determining and qual-
ifying/ quantifying adjectives in which pragmatics determines the word
order, Devine and Stephens (2000: 21) are not convinced that semantics
does not affect the ordering of the NP. On the basis of H. Dik's statistics,
they calculate that although both determining and qualifying adjectives
may be pre- and postnominal, there is a highly significant correlation
between determining adjectives and prenominal position. However, the
fact that there is a correlation between the semantic class of the adjec-
tives and their position does, in my view, not prove that semantics *causes*

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[21] Cf. Dover's criticism (1960: 837) of Bergson: 'in order to answer the question "why
does this word come at this point in this group?" we should ask not "what part of speech
is it?", but (1) "what element of the sense of the whole group does it communicate, and
what is the order of communication in the group?"…'.

[22] For a definition of determining and qualifying/quantifying adjectives, see section
2.2.3.

the position of the adjectives.[23] The highly significant correlation could also be a consequence of the fact that determining adjectives are simply more suitable for pragmatic highlighting than qualifying and quantifying adjectives.[24] This same reservation also applies to the many other factors Devine and Stephens (2000: 21) distinguish in their multifactorial, statistical approach. The influence of dialect, genre, time and definiteness[25] on the position of the modifier, regardless of their statistic relevance, is probably indirect also.[26]

2.2.5. *Conclusion*

As the preceding overview of the various studies on word order variation in the Ancient Greek NP indicates, it is not likely that style, syntax or semantics play a prominent role in the explanation for the position of the adjective or demonstrative in the NP. Style proved to be incapable of explaining the use of different ordering patterns in the same sentence or passage, Brunel's syntactic explanation turned out to be inspired by a predisposed rejection of pragmatic factors and the semantic explanations proved to depend on the context more than a semantic explanation should. Palm's and H. Dik's pragmatic explanations for the position of the adjective and demonstrative, however, seemed very promising.

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[23] Just as a correlation between the number of ice-creams sold on a particular day and the number of women who visit the ice-cream cart with their legs shaved does not justify the conclusion that the shaving of their legs *causes* the women to buy ice-cream, a correlation between the semantics of a modifier and its position does not necessarily justify the conclusion that the former causes the latter.

[24] For the same line of reasoning, see H. Dik (2007). She must be confusing determining adjectives with qualifying ones when she says that: 'I take it that *determining* adjectives are simply less likely to constitute the most salient part of a noun phrase than qualifying or quantifying ones (my italics)' (H. Dik 2007: 85).

[25] For the relation between genre and the position of modifiers, see footnote 5 of Chapter 1. For the relation between definiteness and word order, see Chapter 6, section 6.1.2.

[26] Another pragmatic analysis of word order variation in the Ancient Greek NP is Viti's (2008) study of the position of the genitive in relation to the noun. In this article, which unfortunately came to my attention too late to be fully incorporated into this section, Viti argues that genitives are prenominal either if they provide new or discontinuous information that is persistent or if they provide old information that is contrastive or emphasised. Postnominal genitives, by contrast, provide new information that rapidly decays or old, non-ambiguous and non-contrastive information. Although I think Viti focusses too much on the information *status* (old vs. new) of the modifier and furthermore pays too little attention to the information provided by the noun, the general outcome of her analysis is in line with the findings of H. Dik (1997) and Palm (1960).

However, before we may conclude that it is pragmatics that influences the position of modifiers in relation to the noun, the conclusions of Dik and Palm with respect to adjectives and demonstratives must be tested on a larger database, so that the reservations of Devine and Stephens on the basis of their statistical analysis can be countered by many more concrete examples. Furthermore, knowledge of the factors that determine the position of the adjective and demonstrative in relation to the noun will not be sufficient for judging the ordering of the NP in general. First of all, it is by no means clear whether other modifiers behave in a way similar to the adjective and demonstrative. Especially the position of embedded modifiers, i.e. modifiers that contain a noun themselves, such as genitives and prepositional phrases, may be influenced by other factors than the position of simple modifiers like adjectives and demonstratives (cf. Rijkhoff 2002, see section 2.3.1). Secondly, because the various studies discussed in the previous sections analysed the position of only one modifier in relation to the noun, it remains unclear which patterns are allowed for in NPs with multiple modifiers and which factors determine the ordering of these modifiers.

2.3. *Theoretical framework*

The overview of possible explanations for word order in the NP (section 2.2) suggests that word order variation in the Greek NP might be functional, i.e. might reflect a difference in meaning or function of the elements within the NP, and furthermore, that this difference might be pragmatic. Hence, my research had to be embedded in a theoretical framework that a) would do justice to the fact that almost every combination of NP elements is possible, b) left room for the possibility that these syntactic differences reflect differences in meaning or function and c) recognises pragmatic factors as a possible explanation for word order variation. The following three reasons persuaded me to choose the theory of Functional Grammar (now Functional Discourse Grammar).

First of all, the basic assumption of Functional Grammar that language is in the first place an instrument of social interaction and should therefore be studied in the light of its communicative function does not only answer my own firm conviction, but also the third criterion (c). Secondly, my second criterion is another basic assumption of FG, known as the axiom to take languages seriously:

(15)   Whenever there is some overt difference between two constructions X
         and Y, start out on the assumption that this difference has some kind
         of functionality in the linguistic system. Rather than pressing X into the
         preconceived mould of Y, try to find out why X and Y are different, on the
         working assumption that such a difference would not be in the language
         unless it had some task to perform.   (S. Dik 1997: 18)

Thirdly, the most recent functional study on noun phrase structure (Rijkhoff 2002) has been written in the framework of Functional Grammar.[27] In this study, which will be described in more detail in the next section, Rijkhoff sets up a typologically adequate model of the NP and formulates three semantic ordering principles to account for the internal syntax of NPs.

Despite the conflict between Rijkhoff's conclusion that the ordering within the NP is determined by semantics and the conclusions of H. Dik and Palm that seem to hint in the direction of a pragmatic ordering, Rijkhoff's NP model, because of its theoretical framework, is by far the best starting point to contrast the Greek facts to. Moreover, his recognition of a discourse layer provides a theoretical background for describing a fundamental distinction in the use of Greek modifiers (see Chapter 6).

For those readers who are not familiar with the theory of Functional Grammar in general and Rijkhoff's NP model in particular, the next section contains a brief summary of Rijkhoff's theory. In the following chapters I will use as little theoretical terminology as possible in the description of my data. However, in the sections that compare my Greek data with Rijkhoff's model some theoretical comments will be inevitable.

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[27] Other general studies on NP structure, both empirical and theoretical, have been written by Alexiadou et al. (2007), Bach (1968), Benveniste (1966), Coene and D'hulst (2003), Ewert and Hansen (1993), Foley (1980), Gil (1987), Hawkins (1994), Lappin (1988), McCawley (1971), Meillet (1906), Payne (1994), Seiler (1978, 1985), Van Valin and Lapolla (1997: 52–69), Velasco and Rijkhoff (2008) and Zimmermann (1991). Moreover, numerous studies have been written about the structure of the NP in a specific language. For other European languages, see for instance Börjars (1994) (Swedish), Börjars and Delsing (2008) (Scandinavian languages), Broekhuis et al. (2003) (Dutch), Keizer (2007b) (English), Schroeder (1999) (Turkish), Szabolcsi (1994), Laczko (1995), Moravcsik (1995) (Hungarian), Willim (1995) (Polish) and the contributions in Siewierska (1997) and Plank (2003). Literature on NP structure in non-European languages can be found in Rijkhoff's (2002) extensive bibliography.

2.3.1. *Rijkhoff's NP model*

On the basis of his data from 52 carefully selected languages, Rijkhoff distinguishes five kinds of modifiers: classifying, qualifying, quantifying, localising and discourse modifiers. The first four modifiers are descriptive modifiers specifying a property of the referent.[28] While classifying modifiers specify to which kind of entity the head noun refers (i.e. the subclass to which the entity belongs), qualifying modifiers specify inherent features of the referent, such as colour, size and age.[29] Both classifying and qualifying modifiers are typically expressed by an adjective in Indo-European languages (e.g. a corporate lawyer, a steam train (classifying), a red ball, an enormous statue (qualifying)). Quantifying modifiers, such as number markers and numerals, subsequently, specify the quantitative properties of the referent. Localising modifiers, finally, give information on the location of the referent. In the case of demonstrative pronouns (e.g. *this book, that book*) and locative modifiers like *on the table* and *in the garden*, the localising function of the modifier is obvious. But besides spatial location, a localising modifier may also indicate location in time (e.g. *the book I bought yesterday*) or possession. According to Rijkhoff, possessor phrases (e.g. *John's book*) may be seen as localising modifiers in that, cognitively, John's book is located 'at' John (Rijkhoff 2002: 174–175).

In contrast to these descriptive modifiers, discourse modifiers do not describe a property of the referent, but are concerned with the status of the referent as a discourse entity. They give information on the existence and position of the referent in the discourse. Modifiers like *the former* and *the latter*, for instance, provide information on the relative distance of the referent in the discourse instead of describing a more or less inherent property of the referent. Moreover, articles—although not specifying the position of the discourse referent—indicate whether the referent already exists in the world of discourse.

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[28] Originally, Rijkhoff distinguished only three descriptive modifiers, viz. qualifying, quantifying and localising modifiers. This division was inspired by Aristotle's statement that there are three types of variation (τρεῖς κινήσεις), viz. variation of quality (τὴν τὸ ποῖον), variation of quantity (τὴν τὸ ποσόν) and variation of locality (τὴν τὸ ποῦ). The classifying layer is a later addition defended in Rijkhoff (2008a+b).

[29] Quality modifiers may also give information on the way the nominal is represented in space (with respect to shape and homogeneity). However, because 'nominal aspect', as Rijkhoff (2002: 100 ff.) names this kind of modification, plays no role in Greek, it will not be dealt with in this book.

$$(\Omega \; [\omega_{2b} \; [\omega_{2a} \; [\omega_1 \; [\omega_0 \; [\; N \; (x_i)] \; \tau_0] \; \tau_1 \; (x_i)] \; \tau_{2a} \; (x_i)] \; \tau_{2b} \; (x_i)] \; T_i \; (X_i))^{30}$$

nucleus

class layer

quality layer

quantity layer

location layer

discourse layer

Ω   discourse operator (grammatical categories such as definiteness and specificity)
ω   NP operator (symbolise descriptive grammatical modifier categories)
N   (head) noun
x   NP variable (symbolises the descriptive content of the NP)
τ   NP satellite (symbolises descriptive lexical modifier categories)
T   discourse satellite (symbolises lexical modifiers specifying discourse properties of the referent)
X   referent variable (symbolises the referent of the NP)

Figure 3. Rijkhoff's hierarchical structure of the NP

In Rijkhoff's semantic NP structure, the five different types of modifiers are hierarchically ordered around the noun. Figure 3 is the formal representation of Rijkhoff's NP structure, which is not meant as an underlying ('deep') structure, but rather as a reflection of the semantic relations between the elements of the NP (Rijkhoff 2002: 227 and Rijkhoff 2008). Closest to the noun (in layer zero), we find the classifying modifiers because they only modify the description of the referent as expressed by the noun. Qualifying modifiers, on the other hand, modify—or, as Rijkhoff would say—have scope over the description of the noun plus the class or kind expressed by possible classifying modifiers (in *a fast steam train*, for instance, *fast* modifies the combination *steam train*). Quantifying modifiers, subsequently, have scope over the description of the referent by the noun plus the properties expressed by possible qualifying and/or classifying modifiers. For example, the cats referred to by 'the two red cats' both must be catlike *and* red (or at least, the speaker must assume both to be catlike and red). For this reason, quantitative modifiers are placed in the third layer. Because localising modifiers specify the locality

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[30] The position of operators and satellites before and after the noun, respectively, is a matter of convention. Not every slot for an operator or satellite will be used by every language. Greek, for instance, does not dispose of qualifying operators ('nominal aspect markers', see the previous footnote).

of the entity as described by the noun and the quantitative, qualitative and class modifiers, their appropriate position is in the final descriptive layer of the NP. Discourse modifiers, finally, are placed in the outermost layer because they give information on the discourse status of the referent as described in the descriptive layers.

By distinguishing a discourse layer, Rijkhoff's NP model is—as far as I know—the only one that does justice to the dual functions of the NP. On the one hand, the NP gives a description of a referent specifying its qualifying, quantifying and localising properties. On the other hand, this description is used to refer to a discourse entity. The distinction between the descriptive function of the NP (symbolised by the x variable) and its referential function (symbolised by the X variable) explains why we can use two different descriptions to refer to the same referent (example 16) and why anaphoric reference can be made to the description of a referent (example 17) (Rijkhoff 2002: 229):

(16)   The Morning Star (X_i, x_i) is the Evening Star (X_i, x_j)

(17) A. My neighbour (X_i, x_i) just saw a black cat and now the superstitious old fool (X_i, x_j)[31] believes he $(A\ X_i)$ is in for some bad luck today.
      B. Why do you call him $(A\ X_i)$ that $(A\ x_j)$.

For my own research, the distinction of a discourse layer turned out to be extremely useful, because, as I will argue in Chapter 6, in Ancient Greek discourse modifiers are marked differently from descriptive modifiers.

Although Rijkhoff's NP structure is meant to be a semantic model of the NP, it has some predictive value for the internal syntax of NPs, because—as was already stated by Behaghel—'das geistig eng Zusammengehörige auch eng zusammengestellt wird' (Behaghel 1932: 4). To account for the order of the constituents in the NPs of the languages in his sample, Rijkhoff elaborates Behaghel's law into three ordering principles: the principle of domain integrity, the principle of head proximity and the principle of scope.
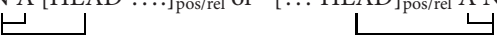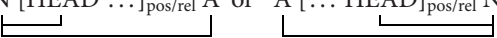
The first principle predicts that, because of the preference of constituents to remain in their proper domain,[32] the NP tends not to be interrupted by constituents of the sentence level (e.g. John buys a new book vs. *John new buys a book). Discontinuity is therefore a marked phe-

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[31] 'A X_1' stands for anaphoric reference to X_1.
[32] A domain is a phrase consisting of a head and its dependents. FG (S. Dik 1997: 396) distinguishes three different domains of constituent ordering: the clause, the noun phrase and the adjectival phrase.

nomenon (Rijkhoff 2002: 253). With respect to the internal syntax of the NP, the principle of domain integrity predicts that embedded modifiers[33] are preferably expressed in the periphery of the matrix domain.

The principle of head proximity also affects both the internal syntax of the NP and the position of the NP in the sentence. The principle of head proximity says that in a subordinate domain, the preferred position of the head constituent is as close as possible to the head of the superordinate domain (Rijkhoff 2002: 264). This principle leads to the following two predictions. First, it predicts that the preferred position of any lexical modifier is immediately before or after the noun, but that, if several modifiers occur on the same side of the noun, short modifiers (like adjectives) are preferred closer to the noun than long, embedded modifiers (like possessor NPs and relative clauses), since this would result in a higher degree of head proximity:

(18)   a. N A [HEAD ....]$_{pos/rel}$ or [... HEAD]$_{pos/rel}$ A N   preferred

       b. N [HEAD ...]$_{pos/rel}$ A or A [... HEAD]$_{pos/rel}$ N   not preferred

Secondly, the principle of head proximity predicts that—and explains why—languages with a prefield[34] ordering at sentence level also tend to have a prefield ordering at NP level, whereas postfield ordering at sentence level correlates with postfield ordering at the level of the NP.[35] Since the head of the NP prefers to be adjacent to the head of its superordinate level (the verb), the modifiers of a preposed noun tend to precede the noun (–NV vs. *N–V), while those of a postposed noun tend to follow (VN– vs. *V–N).[36]

The principle of scope, finally, shows the importance of the underlying structure as presented in figure 3, for this principle says that 'the semantic

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[33] Embedded modifiers are modifiers containing a noun; e.g. *the hat **of the dean***, *the book **on the table***.

[34] In FG, the area in front of the head is called the prefield, the area after the head the postfield (S. Dik 1997: 397):—prefield—[head]—postfield—.

[35] For the principle of 'harmony' across different domains, see Greenberg (1963) and Hawkins (1983).

[36] In this case, the tendency is also stronger for embedded than non-embedded modifiers, probably because embedded modifiers tend to be longer and therefore do more damage to the principle of head proximity than shorter, non-embedded modifiers. Another possible reason may be that embedded modifiers are referring expressions constituting a greater obstacle than non-referential modifiers if they disobey the head proximity principle (Rijkhoff 2002: 291).

distance of grammatical and lexical modifiers (operators and satellites in FG terminology) relative to the head in the underlying structure is iconically reflected in the actual linguistic expression' (Rijkhoff 2002: 313). So, it is predicted that modifiers are centripetally ordered around the noun reflecting the scope differences as represented in Rijkhoff's semantic NP model:

(19)   [discourse [locality [quantity [quality [class [N] class] quality] quantity] locality] discourse]

Together, the three principles predict that in NPs without embedded modifiers the constituents of the NP occur as an uninterrupted string in the sentence (principle of domain integrity), that no element occurs between the adjective and the noun (principle of head proximity) and that modifiers of the same field are ordered according to scope differences (principle of scope). These predictions make up the following 8 ordering patterns for the constituents demonstrative (dem), numeral (num), adjective (A) and noun (N):

(20)   dem num A N *dem A N num*[37]   num A N dem   *A N num dem*
       dem num N A   dem N A num   num N A dem   N A num dem

The position of embedded modifiers in complex NPs, however, is more difficult to predict, because in this case the three principles may be competing. While the principle of domain integrity predicts that the embedded modifier is expressed in the periphery of the matrix NP, the principle of head proximity and the principle of scope may prefer a position in between the constituents of the matrix NP if this leads to a higher degree of head proximity or a better reflection of the scope differences respectively.

   In this short summary of Rijkhoff's semantic NP model and the principles he formulates to account for the order of the constituents of the NP in the actual linguistic expression, many interesting and illustrative details have, naturally, been omitted. At the same time, some controversial issues have not been discussed. Some of the latter will be dealt with when the Greek facts are discussed.

2.3.2. *Terminology used*

The following chapters will argue that the order of the constituents in the Greek NP is determined by their information value, the most salient

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[37] The italicised patterns are not attested in Rijkhoff's sample.

element of the NP being expressed first. Although the combination of 'information value' and 'saliency' will evoke the term focus, several considerations restrained me from using this term instead of the more informal 'most salient element of the NP'. Before discussing these considerations, it should be described, very shortly, what focus is.

In general—there are some differences in its exact definition within the various theories on information structure—, the term focus is used to refer to that part of the utterance that is not known or presupposed in the given communicative setting.[38] For instance (focus in small caps):

(21)   (Who wrote that very readable book on information structure?)

        LAMBRECHT wrote that book.

(22)   (Do you want yoghurt or fruits for desert?)

        I would like some YOGHURT.

As example (22) illustrates, focus is not the marking of the newness of the information provided by the constituent in small caps as such (the yoghurt is completely given information), but rather of the newness of the fact that this constituent stands in a certain relationship with the remainder of the sentence. Or, as Lambrecht formulates it (with reference to his example (5.1), which runs: 'Q: Where did you go last night? A: I went to the MOVIES'): 'the expression *(the) movies* in (5.1) can have information value only as an element of the proposition expressed by the entire sentence. What is "new" is not the constituent, nor its designatum, but its role as the second argument of the predicate "go-to" in the pragmatically presupposed open proposition "speaker went to x"' (Lambrecht 1994: 209–210). Although this very short description of focus does not justice to the complexity of the concept focus and the extensive literature written about this concept, it will suffice to show that focus is not suitable to describe word order variation in the Ancient Greek NP.

The first reason why I think focus is not a term suitable for describing word order in the Ancient Greek NP is that the term focus is only relevant

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[38] While most theories on information structure contrast focus, interpreted as the new information advancing the discourse, with background or presupposition, viz. the known information (see for instance Chomsky 1971, Dahl 1969, Vallduvi 1991, Steedman 1991 and Lambrecht 1994), there are some theories that contrast focus with topic, defined as the element where the sentence is about (see for instance Sgall 1967 and S. Dik 1997). Despite this difference, the interpretation of focus is almost the same. For a schematic overview of the historical development of the various information structure approaches, see Kruijff-Korbayova and Steedman (2003).

at the level of the sentence, not at the level of the NP. If the essential characteristic of a focal element is not that it provides new information, but that it establishes a 'new relation' between this information and the *remainder of the proposition*, the information structure *within* the NP cannot be described in terms of focus. That focus is not useful to describe the information structure within the NP is not only apparent from this theoretical objection, but is also supported by examples like (23) and (24). The fact that the complete NP belongs to the focus of the sentence seems to confirm that the information structure *within* the NP cannot possibly be described in terms in focus:

(23)   Q: What did you buy? A: I bought SOME BLUE SOCKS.

(24)   Q: What did she do yesterday afternoon?
        A: She WENT TO THE NEW CITY CENTRE TO BUY A WONDERFUL PRESENT FOR MY LITTLE
        BROTHER.

The second reason why I prefer the more informal term saliency to focus is that the term focus as defined above is not a gradual concept. A particular constituent of an utterance cannot be more (or less) focal than another constituent, if one assumes focal elements to establish a new relation with the remainder of the sentence.[39] That focus is not a gradual concept makes it by definition unsuitable for the description of the order of the constituents in the multiple-modifier NPs of my sample, because these are ordered, as I will argue, from more salient elements on the left to less salient elements on the right side of the NP. It makes perfectly good sense, by contrast, to describe the order of multiple-modifier NPs by a diminishing degree of saliency.

My final objection to the term focus is that the most salient element of the NP is not necessarily more informative (or 'newer') than

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[39] This view seems in contrast to Firbas (1964), who claims that information structure is not a dichotomy (background-new), but a hierarchical structure. In Firbas' view, there is not only a difference in information value between backgrounded and new constituents, but the various new constituents also differ in their 'communicative dynamism', i.e. 'the extent to which they contribute to the development of the communication' (Firbas 1964: 270). Although I agree with Firbas that not every element of the focus domain contributes equally to the development of the discourse, I maintain that these elements do not differ in their degree of focality. For in my view (see above), focal elements do not simply provide new information, but establish a new relation with the remainder of the proposition. All focal elements contribute to the same degree to the establishment of this relation.

the other NP constituents. As will be discussed in more detail in Chapter 3, section 3.2.2, the most salient element can also be most salient because the speaker considers it to be the most important or relevant part of the message expressed by the NP. In an example like (25), for instance, the constituents of the NP do not differ in their information *status* (they all express information that is new to the addressee). They do, however, differ in the information *value* ascribed to them by the speaker:

(25)   To attract as much attention as possible in the enormous crowd, she put on her FIRE-ENGINE RED rain coat.

On the basis of the three considerations presented above, the term focus will be reserved to refer to that part of the utterance that is not known or presupposed in the given communicative setting; the informativeness of the elements of the NP, by contrast, will be defined in terms of saliency.[40] My strict distinction between focal elements at the level of the clause and salient elements at the level of the NP does not imply that they cannot coincide. Since focus may be assigned to every part of the sentence irrespective of its size and function, ranging from almost all elements of the clause to only part of the predicate (example 26a and b), focus assignment to part of the NP is very well possible (example 27):

(26)   a. Peter did NOT solve the problem
          (focus on denial)
       b. I didn't PAINT the house, I REpainted it.
          (focus on the predicate; on part of the predicate)

(27)   a. S: John bought fresh pineapple. A: No, he bought fresh PAPAYAS.
          (focus on noun)
       b. I prefer the GREEN car.
          (focus on NP modifier)[41]

In (27a) and (27b), the NP element printed in small capitals has been assigned contrastive focus and is therefore the most salient element of the NP. Despite the possible overlap in cases like these, the focus of the sentence and the most salient element of the NP should carefully be distinguished, not only in order to avoid terminological confusion, but also to account for apparent exceptions to the word order rules described in the next chapters. In Chapter 3, section 3.4, these exceptions, which

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[40] In Chapter 3, section 3.2.2, I will describe in more detail and on the basis of some concrete Greek NPs what exactly I understand saliency to mean.

[41] Examples are (slight modifications of) those of S. Dik (1997: 330–333).

can be explained by the interaction between the pragmatic functions at the level of the sentence and the information structure of the NP, are discussed in more detail.

This chapter ends with a little reservation. In contrast to H. Dik's (1997: 57) confident words that the recent interest in pragmatics 'equipped us with a better theoretical apparatus to handle many finer distinctions formerly subsumed under the term "emphasis"', which Dover (1960: 32–34) had shown to be susceptible to misuse, I would like to point out that despite our broader knowledge of pragmatics, part of Dover's criticism remains valid, even if we, as H. Dik proposes, replace 'emphasis' by 'focus'. Whether we use the non-theoretical term emphasis or the more well-founded term focus, in both cases the assignment of a pragmatic function in a written text of a dead language is a perilous undertaking, or as Dover (1960: 33) formulates it: 'individuals may disagree on the location of "emphasis" in a given passage of Greek, and an individual may disagree with himself on different occasions.' Furthermore, the replacement of the term emphasis by focus does not remove the danger of circularity, which may arise if we interpret our data according to the principle we want to establish and subsequently use these interpretations as evidence for the principle. In the following chapters, the reader has to decide whether I got round these two pitfalls of a pragmatic analysis adequately.

WORD ORDER IN SINGLE-MODIFIER NPS

3.1. *Introduction*

In this chapter, I will describe the least complicated word order patterns, viz. the ordering patterns of single-modifier NPs. The fact that these NPs can only be ordered in two ways, i.e. NX or XN, makes them suitable to start an analysis of word order in the NP with. Because the order of the constituents in the NP is insensitive to the presence or absence of an article, this chapter generalises over definite and indefinite NPs unless it is explicitly indicated that a certain phenomenon is only characteristic for definite or indefinite NPs. The tables 1–3 (see below) give a statistical overview of the occurrence of the various modifiers (adjectives, adverbs,[1] participles, prepositional phrases, genitives, possessives, numerals, demonstratives and relative clauses)[2] that occur regularly in the single-modifier NPs within my corpus.

The tables 1–3 show three remarkable results, of which the total absence of adverbs and prepositional phrases in indefinite NPs is probably the most striking. However, the non-existence of indefinite NPs with adverbs and prepositional phrases will not be characteristic for my corpus, since adverbs and prepositional phrases display a general tendency to occur only in definite NPs.[3] The reason of this tendency is that adverbs and prepositional phrases are usually used as localising modifiers, i.e.

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[1] Although both their number and their usage is rather limited, there are a number of examples of adverbial modifiers in my corpus. With the exception of Hdt. 1.137.2 τὸν ἀληθέως τοκέα 'the/his true parent', these modifiers give information on the location (in time or place) of the referent, e.g. τὴν ἄνω γνάθον 'the lower jaw' (Hdt. 2.68.3), ἐν τοῖσι ὄπισθε λόγοισι 'in the later stories' (Hdt. 5.22.1), and τὸν σῖτον τὸν ἐνθεῦτεν 'the corn there' (Hdt. 6.28.2). The question of which adverbs can be used as modifier under which circumstances will not be dealt with here, because that would lead too far afield.

[2] Although there are 147 examples of a noun modified by τις in my corpus, I have left these NPs out of consideration because the meaning/function of (unaccented) τις was not clear enough to examine whether its position is determined by the same factor(s) as the position of other modifiers.

[3] Cf. Rijkhoff (2002: 177) on this tendency.

modifier	prenominal		postnominal		total
adjective (A)[4]	997	(42%)	1380	(58%)	2377
adverb (Adv)	—		—		—
demonstrative (dem)	5	(14%)	32	(86%)	37
genitive (GEN)	366	(55%)	305	(45%)	671
numeral (num)	403	(64%)	226	(36%)	629
participle (PTC)	9	(10%)	77	(90%)	86
possessive (pos)[5]	36	(44%)	46	(56%)	82
prepositional phrase (PP)	—		—		—
relative clause (rel)	—		51	(100%)	51
total	1816	(46%)	2117	(54%)	3933

Table 1. Types of modifiers in indefinite single-modifier NPs

give information on the location (in time or place) of the referent, e.g. *the temple here, the time after, the book on the table, the canteen in the Academy building*. By relating the referent of the matrix NP to a location, a localising modifier generally makes the referent of the matrix NP identifiable (for the process of identification, see Chapter 5, section 5.2.2), which explains the lesser compatibility of a localising prepositional modifier and indefinite NPs.[6] Prepositional phrases providing qualifying information, on the other hand, like *a boy with golden hair* or *a man without compassion*, are not inherently impossible in indefinite NPs. Their absence from my corpus will be due to the Greek preference for expressing qualifying phrases like these with a participle (ὄν or ἔχων) or relative clause instead of a prepositional phrase.

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[4] Although it is traditionally assumed that the position of adjectives is influenced by their semantics, the analysis of my data showed that it is no use to make a subdivision within the category of adjectives (see section 3.5.1).

[5] In addition to possessive pronouns (e.g. ἐμός, σός), personal pronouns (e.g. ἡμῶν, αὐτοῦ, μου) and reflexives (e.g. ἐμαυτοῦ, ἑαυτοῦ), genitives of demonstratives (e.g. τούτου, τούτων) are also classified into this category (and not in the category of genitives).

[6] Cf. Rijkhoff (2002: 175). Other modifiers that may give information on the location of the referent, such as possessives, genitives and relative clauses, however, do occur in indefinite NPs. In these cases, the modifier does not unequivocally anchor the referent, so that the referent is not identifiable, despite the presence of a localising modifier, e.g. Hdt. 7.39.1 σέο παιδός 'a child of yours' (for unequivocality, see Chapter 5, section 5.2.2); or the matrix NP is non-referential and therefore lacks an article, e.g. Hdt. 1.127.2 στρατηγὸν αὐτῶν Ἅρπαγον ἀπέδεξε 'he appointed Harpagos as their commander' (for the indefiniteness of non-referential NPs, see Chapter 5, section 5.4) or the modifier is not used as a localising modifier, e.g. Hdt. 1.107.1 θυγάτηρ τῇ οὔνομα ἔθετο Μανδάνην 'a daughter, whom he called Mandane' and Hdt. 1.179.4 ὀκτὼ ἡμερέων ὁδόν 'an eight days' journey'.

modifier	prenominal		postnominal		total
adjective (A)[7]	540	(79 %)	147	(21 %)	687
adverb (Adv)	41	(89 %)	5	(11 %)	46
demonstrative (dem)	500	(61 %)	324	(39 %)	824
genitive (GEN)[8]	610	(58 %)	440	(42 %)	1050
numeral (num)	68	(87 %)	10	(13 %)	78
participle (PTC)	198	(59 %)	138	(41 %)	336
possessive (pos)	248	(47 %)	280	(53 %)	528
prepositional phrase (PP)[9]	121	(67 %)	60	(33 %)	181
relative clause (rel)	46	(24 %)	147	(76 %)	193
total	2372	(60 %)	1551	(40 %)	3923

Table 2. Types of modifiers in definite single-modifier NPs

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[7] For want of a better category, I have included αὐτός ('same') under the adjectives. This seems to be in line with the view of most grammars, which describe αὐτός in its function as a modifier as an adjectival pronoun (cf. Kühner-Gerth 1904: I 651 ff., Goodwin 1879: 213–214, Smyth 1956: 302). Αὐτός in the meaning 'self' is obviously not included because of its predicative nature.

[8] In the case of both genitives and possessives, it is sometimes difficult to decide whether the genitive or genitival possessor modifies the preceding/following noun or is an argument of the verb. This is especially problematic in sentences with a compound verb with the prepositions περί and ἀπό:

(i) μετὰ δὲ αὐτός τε ὁ Ἀρίστων ἔδωκε τοῦτο, ὅ τι δὴ ἦν, τὸ εἵλετο τῶν κειμηλίων τῶν Ἀρίστωνος ὁ Ἄγητος, καὶ αὐτὸς τὴν ὁμοίην ζητέων φέρεσθαι παρ' ἐκείνου, ἐνθαῦτα δὴ **τοῦ ἑταίρου τὴν γυναῖκα** ἐπειρᾶτο ἀπάγεσθαι.

Ariston gave Agetos whatever it was that he chose out of all his treasures, and then, seeking equal recompense from him, tried to take **the wife of his comrade** (lit. of his comrade the wife). (Hdt. 6.62.2)

In example (i), we may read that Agetos tried to take the wife of his friend, in which case τοῦ ἑταίρου modifies the noun τὴν γυναῖκα, or that Agetos tried to take 'from his friend his wife', in which case τοῦ ἑταίρου depends on ἀπάγεσθαι. Even though the entity or location from which the object of ἀπάγω is separated is normally preceded by the preposition ἀπό or ἐκ, I decided not to include ambiguous examples like (i) in my sample. This choice is supported by the fact that a participle of εἰμί 'to be' may be added to make the modifier unambiguously modify the preceding or following noun (e.g. τοῦ ἑταίρου ἐοῦσαν τὴν γυναῖκα 'the wife being of his friend'). For a more detailed discussion of this construction, see Chapter 6, section 6.1.3.2.

[9] Although from a formal point of view it is sometimes difficult to decide whether a prepositional phrase is a modifier that belongs to an NP or an argument of the verb, the status of the prepositional phrase in a specific clause can always be determined on the basis of the context. In Hdt. 2.120.5 (τοῦ δαιμονίου παρασκευάζοντος ὅκως παν-ωλεθρίῃ ἀπολόμενοι καταφανὲς τοῦτο τοῖσι ἀνθρώποισι ποιήσωσι, ὡς τῶν μεγάλων ἀδικημάτων μεγάλαι εἰσὶ καὶ **αἱ τιμωρίαι παρὰ τῶν θεῶν**. 'the divine powers provided that the Trojans, perishing in utter destruction, should make this clear to all mankind: that **retribution from the gods** (lit. the retributions from the gods) for terrible wrong-doing is also terrible'), for instance, there can be no doubt that the prepositional phrase modifies the preceding noun.

modifier	prenominal		postnominal		total
adjective (A)	1537	(50 %)	1527	(50 %)	3064
adverb (Adv)	41	(89 %)	5	(11 %)	46
demonstrative (dem)	505	(60 %)	356	(40 %)	861
genitive (GEN)	976	(57 %)	745	(43 %)	1721
numeral (num)	471	(67 %)	236	(33 %)	707
participle (PTC)	207	(49 %)	215	(51 %)	422
prepositional phrase (PP)	121	(67 %)	60	(33 %)	181
possessive (pos)	284	(47 %)	326	(53 %)	610
relative clause (rel)	46	(19 %)	198	(81 %)	244
total	4188	(53 %)	3668	(47 %)	7856

Table 3. Types of modifiers in definite and
indefinite single-modifier NPs together

Secondly, the tables show that none of the various modifiers is exclusively placed in pre- or postposition. Apparently, the ordering of the constituents of an NP cannot, or at least not sufficiently, be explained by the semantics or type of the modifier. However, the fact that the various modifiers vary considerably in their preference for a pre- or postposition gives the impression that the semantics of the modifier does somehow affect its position. Although, on average, preposing is (almost) as frequent as postposing, relative clauses are postnominal in 81 percent of the cases, while adverbs, prepositional phrases and numerals tend to be prenominal (in 67–89 %). Still, we should not conclude too hastily that this variation implies that the type of modifier or its semantics plays a role in the ordering of the NP, as Devine and Stephens (2000: 21) have done on the basis of H. Dik's numbers of the position of determining and qualifying adjectives. The preference for preposing numerals, for instance, is not necessarily a consequence of their being a numeral or their quantifying nature as such, but might also be explained by their aptitude for contrastive contexts. Similarly, the preference for postposing relative clauses might be a consequence of the fact that many of these clauses happen to be very heavy modifiers which do not provide very salient information.[10] Statistical differences among various modifiers thus do not necessarily imply an influence of the semantics of the modifier, but may also be a side effect of some other ordering factor.[11]

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[10] For the heaviness principle that predicts that heavy (i.e. complex) modifiers tend to be expressed at the end of the NP, see section 3.3.1.

[11] As I argued in Chapter 2, section 2.2.4, even a highly significant correlation between

The view that it is—at least—not only the semantics of the modifier
that determines its position is supported by the fact that the preference
of a certain modifier for pre- or postposition may differ according to the
definiteness of the NP. Whereas participles and demonstratives prefer
to be postnominal in indefinite NPs, they tend to be prenominal in
definite ones. Adjectives, by contrast, have a rather strong preference for
being prenominal in definite NPs, but have no explicit preference for a
particular position in indefinite NPs.

The third and final remarkable result with respect to statistics is the
considerable difference between my numbers and those of H. Dik, who
calculates a ratio of 23 % prenominal adjectives against 78 % postnominal
ones in Herodotus.[12] This difference demonstrates that the statistical
outcome of research on word order in the NP is so strongly determined
by the selection of the data that one should be very cautious to compare
the numbers of pre- and postnominal modifiers from different studies
without question. Therefore, the conclusion Devine and Stephens (2000:
22) draw by comparing statistical data from Bergson (1960), Brunel
(1964), H. Dik (1997) and Palm (1960), viz. that word order in the NP
is affected by the parameters dialect, genre, definiteness and adjective
type, should be severely queried until the statistical data are confirmed
by concrete examples.

The concrete examples in my corpus seem to indicate that NPs are
ordered according to the information value of their constituents, in such
a way that the most salient information is expressed first (cf. the hypoth-
esis set up by Palm and H. Dik about the position of demonstratives and
adjectives respectively, see Chapter 2, section 2.2.4). In the following sec-
tions, I will argue that although statistics seem to hint in another direc-
tion, it is mainly pragmatics that determines the position of a modifier in
the NP, irrespective of its semantics or the presence of an article.

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the semantics of the modifier and its pre- or postposition does not prove that semantics
causes its position.

[12] H. Dik studied the position of a limited number of selected adjectives, viz. Ἑλληνι-
κός 'Greek', Μηδικός 'Median', ἐπιχώριος 'native', λίθινος 'stone', ξύλινος 'wooden', χρύ-
σεος 'golden', ἀργύρεος 'silver', λευκός 'white' (determining) and μέγας 'big', (σ)μικρός
'small', μακρός 'long', δίκαιος/ἄδικος '(un)just', ἀγαθός 'good', δόκιμος 'esteemed', κάλ-
λιστος 'most beautiful', θωμάσιος/θωμαστός 'wonderful' (qualifying/ quantifying), in
order to compare the behaviour of determining adjectives on the one hand and quali-
fying and quantifying ones on the other (see Chapter 2, sections 2.2.3 and 2.2.4).

3.2. *Prenominal modifiers*

In this section, I will argue that the preposed part of a single-modifier NP is somehow pragmatically marked, or at least more strongly marked than the postposed part. The nature of this pragmatic marking may be twofold: the prenominal modifier may be contrastive (section 3.2.1) or may for some other reason be the most salient element of the NP (section 3.2.2).[13]

3.2.1. *Contrast*

The clearest examples that support my hypothesis that prenominal modifiers are pragmatically marked are those where the modifier is explicitly contrasted with a similar modifier in another NP:

(1)   καίτοι **τυράννου ὕβριν** φεύγοντας ἄνδρας ἐς **δήμου ἀκολάστου ὕβριν** πεσεῖν ἐστι οὐδαμῶς ἀνασχετόν·

For men fleeing **the insolence of a tyrant** (lit. of tyrant insolence) to fall victim to **the insolence of the unguided populace** (lit. unguided populace's insolence) is by no means to be tolerated.   (Hdt. 3.81.2)

(2)   ὁ δὲ **βασιλήιος πῆχυς τοῦ μετρίου** ἐστὶ **πήχεος** μέζων τρισὶ δακτύλοισι.

The royal measure is greater by three fingers' breadth than **the common measure**.   (Hdt. 1.178.3)

(3)   οὕτω μὲν δὴ **τὴν τρίτην** ἐσηγάγετο **γυναῖκα** ὁ Ἀρίστων, **τὴν δευτέρην** ἀποπεμψάμενος.

In this way Ariston married **his third wife** (lit. the third wife), after divorcing **the second one** (lit. the second).   (Hdt. 6.63.1)

In example (1), taken from the famous constitutional debate, there is an explicit contrast between two modifiers modifying the same noun: the insolence of a tyrant is contrasted with the insolence of the populace. Similarly, in example (2), the βασιλήιος πῆχυς 'royal measure' is con-

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[13] That the prenominal modifier is pragmatically marked seems in contradiction with the statistics provided in Table 2 and 3, for this would imply that the pragmatically marked ordering occurs slightly more than the unmarked one, at least for definite NPs. As I will explain in Chapter 6, section 6.1.2, however, the fact that the pragmatically marked situation is more common than the neutral one can be explained on the basis of the function of the modifier in combination with Grice's maxim of quantity. In the same section, I will argue that the fact that the pragmatically marked option is the most frequent one means that one should be careful when using frequency as a criterion for determining (pragmatic) markedness, as Croft (2003: 111 ff.) proposes.

trasted with the τοῦ μετρίου πήχεος 'common measure'. In example (3), Ariston's third wife is contrasted with his second one. In this latter example, the hypothesis that it is the prenominal modifier that gives the most crucial information of the NP is strengthened by the fact that the second NP lacks a noun.

To set up an explicit contrast it is, obviously, not necessary to oppose two NPs with the same kind of modifier:

(4) Ἀργεῖοι μὲν γὰρ περιστάντες ἐμακάριζον **τῶν νεηνιέων τὴν ῥώμην**, αἱ δὲ Ἀργεῖαι τὴν μητέρα αὐτῶν, οἵων τέκνων ἐκύρησε.

The Argive men stood around and praised **the strength of the youths** (lit. of the youths the strength); the Argive women congratulated their mother for having borne such children.   (Hdt. 1.31.3)

(5) Παυσανίην ὦν ὁρῶντα τὴν Μαρδονίου κατασκευὴν χρυσῷ τε καὶ ἀργύρῳ καὶ παραπετάσμασι ποικίλοισι κατεσκευασμένην κελεῦσαι τούς τε ἀρτοκόπους καὶ τοὺς ὀψοποιοὺς κατὰ ταὐτὰ Μαρδονίῳ δεῖπνον παρασκευάζειν. (…) ἐκπλαγέντα τὰ προκείμενα ἀγαθὰ κελεῦσαι ἐπὶ γέλωτι τοὺς ἑωυτοῦ διηκόνους παρασκευάσαι **Λακωνικὸν δεῖπνον**.

Pausanias, seeing Mardonios' establishment with its display of gold and silver and gaily coloured tapestry, ordered the bakers and the cooks to prepare a dinner such as they were accustomed to do for Mardonios. (…) amazed at the splendour before him, for a joke he commanded his own servants to prepare **a Lakonian dinner**.   (Hdt. 9.82.1–2)

(6) ἐν δὲ αὐτῇ νῆσος ἔνι τῇ οὔνομα Φλά· ταύτην δὲ τὴν νῆσον Λακεδαιμονίοισί φασι λόγιον εἶναι κτίσαι. ἔστι δὲ καὶ **ὅδε λόγος**[14] λεγόμενος· (…).

In this (lake) is an island called Phla. It is said that the Lakedaimonians were told by an oracle to plant a settlement on this island. **The following story** is also told (lit. also this story is being told): (…).

          (Hdt. 4.178–179.1)

In example (4), the prenominal genitive does not contrast with another modifier, but with another noun: the youths are contrasted with their mother mentioned in the next line. In example (5) and (6), the elements the prenominal modifier is contrasted with do not even belong to an NP. In example (5), the prenominal adjective contrasts with the prepositional adjunct κατὰ ταὐτὰ Μαρδονίῳ three lines earlier. In example (6), where

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[14] For the absence of the article in the highlighted NP, see Chapter 5, section 5.3.3.

the contrastive force of the modifier is confirmed by the scope particle καί 'also',[15] the demonstrative stands out against the verb φασι from the previous line.

I have argued that the modifier in the previous examples is prenominal in the case of an explicit contrast between this modifier and some other element in the text. However, preposing of the modifier may also be due to an implicit contrast between the property or location expressed by the modifier and some property or location that is to be filled in with the help of the context. In example (7), for instance,

(7)   λέγει μετὰ τοῦτον Ἀχαιμένης, ἀδελφεός τε ἐὼν Ξέρξεω καὶ **τοῦ ναυτι-
        κοῦ στρατοῦ στρατηγός**, (…).

        Next spoke Achaimenes, Xerxes' brother and **admiral of the fleet** (lit. of
        the fleet general) (…).   (Hdt. 7.236.1)

the fact that the reader has repeatedly been informed that Xerxes' army consists of a land force and a navy allows the writer to present Achaimenes as the *navy's* general without any further elaboration of the contrast.[16] But even if the contrast was not introduced previously, the addressee may easily fill in the element to which a prenominal modifier is opposed. The addressee of example (8), for instance, will immediately understand that his father blames him for choosing the life of a vagrant instead of living the life worthy for a royal child:

(8)   ὃς ἐὼν ἐμός τε παῖς καὶ Κορίνθου τῆς εὐδαίμονος βασιλεὺς **ἀλήτην
        βίον** εἵλεο, ἀντιστατέων τε καὶ ὀργῇ χρεώμενος ἐς τὸν σὲ ἥκιστα ἐχρῆν.

        Though my son and a prince of prosperous Korinth, you choose **the life
        of a vagrant** (lit. vagrant life), by opposing and being angry with me with
        whom you least ought to be.   (Hdt. 3.52.4)

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[15] On the analogy of cases like Hdt. 7.167.1 (ἔστι δὲ ὑπ' αὐτῶν Καρχηδονίων ὅδε λόγος λεγόμενος 'this story is told by the Karchedonians themselves') and 2.81.2 (ἔστι δὲ περὶ αὐτῶν ἱρὸς λόγος λεγόμενος 'there is a sacred legend told about this'), I assume the participle λεγόμενος to be part of the predicate instead of the NP. For other periphrastic perfects with εἰμί + present/perfect participle, see for instance Hdt. 3.107.1 ἐν δὲ ταύτῃ λιβανωτός τέ ἐστι μούνῃ χωρέων πασέων φυόμενος ('frankincense is growing only in this country'), Hdt. 1.153.1 τοῖσί ἐστι χῶρος ἐν μέσῃ τῇ πόλι ἀποδεδεγμένος ἐς τὸν συλλεγόμενοι ἀλλήλους ὀμνύντες ἐξαπατῶσι ('… who set apart a place in the middle of their city where they perjure themselves and deceive each other') and 7.111.2 οὗτοι οἱ τοῦ Διονύσου τὸ μαντήιόν εἰσι ἐκτημένοι ('it is they who possess the place of divination sacred to Dionysus').

[16] Note that the modifier within the embedded genitive (the adjective ναυτικοῦ) is also prenominal.

Likewise, the addressee of example (9) will, on the basis of his knowledge of the world, understand that the female horses of the Skythians are implicitly contrasted with the male ones:

(9)   ἐπεὰν φυσητῆρας λάβωσι ὀστείνους, αὐλοῖσι προσεμφερεστάτους, τούτους ἐσθέντες **ἐς τῶν θηλέων ἵππων τὰ ἄρθρα** φυσῶσι τοῖσι στόμασι, ἄλλοι δὲ ἄλλων φυσώντων ἀμέλγουσι·

Taking tubes of bone very much like flutes, they insert these **into the genitalia of the mares** (lit. into of the female horses the genitalia) and blow into them, some blowing while others milk.   (Hdt. 4.2.1)

Besides being contrasted to an element in the addressee's knowledge, a prenominal modifier may also be implicitly opposed to the (supposed) expectations of the addressee, as in example (10):

(10)   ὡς δὲ ἀπὸ δείπνου ἦσαν, διαπινόντων τὸν Πέρσην τὸν ὁμόκλινον **Ἑλλάδα γλῶσσαν** ἱέντα εἰρέσθαι αὐτὸν ὁκοδαπός ἐστι, (…).

Now as they were drinking together after dinner, the Persian who sat with him asked **in the Greek tongue** (lit. Greek tongue) from what country he was, (…).   (Hdt. 9.16.2)

In this example, the modifier is prenominal because the addressee does not expect that the Persian can address his couch-mate in the *Greek* language. To clarify that and how the two couch-mates can communicate, the author has to stress that the Persian knows Greek.

In the examples discussed above, the pragmatic marking of the prenominal modifier due to its contrastiveness could rather easily be demonstrated, as the context provides the essential clues. In the next section, however, a marked reading of the prenominal modifier is much more dependent on our interpretation, which is always more open to subjectivity.

3.2.2. *Saliency*

Modifiers are not only prenominal if they form the most salient part of the NP because of a contrast, whether explicit or implicit, but also if their saliency is caused by some other factor. It is difficult to give an exhaustive overview of these factors because what makes the modifier the most salient part of the NP depends strongly on the context. Yet, we can roughly distinguish two subgroups of most salient modifiers.

First, the modifier may be the most salient element because it is the most informative part of the message conveyed by the NP. In these

cases, the modifier provides completely new information, whereas the information supplied by the noun is given in or inferrable from the context:

(11)   οὐ γὰρ ἔτυχον ἐοῦσαι νέες σφι ἀξιόμαχοι τῇσι Αἰγινητέων συμβαλεῖν· ἐν ᾧ ὦν Κορινθίων ἐδέοντο χρῆσαι σφίσι νέας, ἐν τούτῳ διεφθάρη τὰ πρήγματα. οἱ δὲ Κορίνθιοι, ἦσαν γὰρ σφι τοῦτον τὸν χρόνον φίλοι ἐς τὰ μάλιστα Ἀθηναίοισι, διδοῦσι δεομένοισι **εἴκοσι νέας**, (...).

They (= the Athenians) did not have ships worthy to fight the Aiginetans. While they were asking the Corinthians to lend them ships, the affair was ruined. The Korinthians at that time were close friends to the Athenians, so when the Athenians asked for help they gave them **twenty ships**, (...).
(Hdt. 6.89)

(12)   ὁ μὲν ταῦτα ἐπειρώτα, ὁ δ' αὖτις **τὸν αὐτόν** σφι **χρησμὸν** ἔφαινε κελεύων ἐκδιδόναι Πακτύην Πέρσῃσι.

This Aristodikos asked; and the god again gave them exactly **the same answer**, that Pactyes should be surrendered to the Persians. (Hdt. 1.159.2)

(13)   τοῖσι δὲ αὐτομόλοισι τούτοισι οὔνομά ἐστι Ἀσμάχ, δύναται δὲ τοῦτο τὸ ἔπος **κατὰ τὴν Ἑλλήνων γλῶσσαν** ‘οἱ ἐξ ἀριστερῆς χειρὸς παριστά-μενοι βασιλέϊ’·

These Deserters are called Asmakh, which translates, **in the Greek language** (lit. in the of Greeks language), as ‘those who stand on the left hand of the king’.   (Hdt. 2.30.1)

In example (11), Herodotus explains why the Athenians break their promise to Nikodromos to help him take Aigina: because the Athenians, not yet owning enough warships themselves, have to borrow some ships from the Korinthians first, they arrive one day late. At the moment the addressee is informed that the Korinthians lend the Athenians twenty ships, the number of the ships is still unknown, while it is perfectly clear that the Korinthians will lend them the ships. The difference in information status between the noun and the numeral causes the latter to be preposed. Although the difference in information status between the noun and modifier in examples (12) and (13) is smaller (as the noun does not provide given, but inferrable information), the modifier is still much more informative than the noun. In example (12), we are told that an Aristodikos, who did not trust an earlier consultation of the oracle, consults the oracle again, and receives τὸν αὐτὸν χρησμόν, the exact same answer. In the context of a consultation of an oracle, the information provided by the modifier (i.e. what the answer looked like) is of course far more informative than the information of the noun (i.e. the

fact they got an answer). Likewise, the genitival modifier Ἑλλήνων ('of the Greeks') in example (13) is more informative than the noun γλῶσσαν ('language'), which is already evoked by the verb δύναται ('mean').

In the case of numerals, the prenominal modifier does not need to provide new information on a given or inferrable noun to be the most informative part of the NP. If it is evident from the preceding context that the NP will give expression to a measure, the numeral tends to be prenominal, even if the quantity/variable is not given or inferrable.[17] In example (14), for instance, the participle phrase σταθμὸν ἔχοντες reveals that something countable will follow, so the numeral automatically becomes the most informative part of the NP:

(14)   Γύγης δὲ τυραννεύσας ἀπέπεμψε ἀναθήματα ἐς Δελφοὺς οὐκ ὀλίγα (…) κρητῆρές οἱ ἀριθμὸν ἓξ χρύσεοι ἀνακέαται. ἑστᾶσι δὲ οὗτοι ἐν τῷ Κορινθίων θησαυρῷ σταθμὸν ἔχοντες **τριήκοντα τάλαντα·**

Having assumed the sovereignty, Gyges sent many offerings to Delphi: among which six golden bowls. These stand in the treasury of the Korinthians and weigh **thirty talents**.   (Hdt. 1.14.1–2)

In example (14) it may have been expected that talents would be used to give expression to the weight of the bowls, because Herodotus always expresses weight in talents. As can be seen in example (15), however, the numeral may also be prenominal if it is not yet clear which variable will be used,[18] as long as the preceding context—in this case the combination of the verb plus ὅσον τε—indicates that the NP will give expression to a measure:

(15)   τοῖσι δὲ Πέρσῃσι οὐδενὸς μαχομένου φόβος ἐνέπεσε, ἀποδραμόντες δὲ ὅσον τε **ἑξήκοντα στάδια** ἵζοντο.

Then, although no one attacked them, panic seized the Persians, and they fled to a place around **sixty stade** distant and camped there.

(Hdt. 4.203.3)

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[17] In NPs giving expression to a (length of) time, the numeral may be prenominal even if it is not contrastive or salient, nor evident that the NP will give expression to a measure, e.g. Hdt. 1.165.1 ἐν τῇ Κύρνῳ **εἴκοσι ἔτεσι** πρότερον τούτων ἐκ θεοπροπίου ἐνεκτήσαντο πόλιν … ('in Kyrnos they had built a city … **twenty years** before at the command of an oracle') and Hdt. 7.80 τούτων δὲ τῶν νησιωτέων ἦρχε Μαρδόντης ὁ Βαγαίου, ὃς ἐν Μυκάλῃ στρατηγέων **δευτέρῳ ἔτεϊ** τούτων ἐτελεύτησε ἐν τῇ μάχῃ ('the commander of these islanders was Mardontes son of Bagaios, who in the next year (lit. **in second year**) was general at Mykale and died in the battle'). I do not see what causes the preposition of the numeral in these cases.

[18] Distance can be expressed in all kinds of variables, ranging from πλέθρα (31 m) to στάδιοι (185 m), παρασάγγαι (5,550 m) and σχοῖνοι (11,100 m).

This tendency[19] to be prenominal because the addressee expects an NP with a modifier is, obviously, confined to numerals. While the context may reveal that something countable will follow, the future occurrence of a qualifying or localising modifier is difficult to predict.

In the examples of salient modifiers discussed above, the saliency of the modifier is related to the (supposed) knowledge of the addressee, for whom the unknown information expressed by the modifier is more informative than the given or inferrable information of the noun. In most cases, however, the prenominal modifier and the noun do not differ in information status (i.e. in the newness or givenness of the information), but rather in the information value the author ascribes to the modifier. In these cases, the modifier is prenominal because the author considers it to be the most important or relevant part of the message expressed by the NP. Although it might seem a bit tricky to attempt to recover which constituent of the NP was considered to express the most important or relevant information by an author now dead by more than 2000 years, I will argue that the context often provides enough clues to reconstruct the communicative aim of the author. In example (16), for instance, the speaker explicitly stresses that he assumes the information given by the adjective more important than that of the noun by choosing the construction ὅσῳ ἐσωτέρω … τοσούτῳ πλέω:

(16)   ὅσῳ γὰρ δὴ προέβαινε ἐσωτέρω τῆς Ἑλλάδος ὁ Πέρσης, **τοσούτῳ πλέω ἔθνεά** οἱ εἵπετο.

The farther into Hellas the Persian advanced, **the more nations** followed him   (Hdt. 8.66.2).

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[19] Although numerals tend to precede the noun in the situations described above, they can also follow the noun. Cf. Hdt. 4.62.1 φρυγάνων φάκελοι συννενέαται ὅσον τε ἐπὶ **σταδίους τρεῖς** μῆκος καὶ εὖρος, ὕψος δὲ ἔλασσον· ('piles of bundles of sticks approximately **three stades** (lit. stades three) wide and long, but of a lesser height') and 4.85.4 ἡ δὲ Προποντίς, ἐοῦσα εὖρος μὲν **σταδίων πεντακοσίων**, μῆκος δὲ τετρακοσίων καὶ χιλίων, καταδιδοῖ ἐς τὸν Ἑλλήσποντον … ('the Propontis, which is **five hundred stades** (lit. stades five hundred) wide and one thousand four hundred long, opens into the Hellespont …'). The fact that the preposing of 'expected' numerals is a tendency instead of a strict rule may be explained if we assume that the difference in information status between the noun and numerals is not as clear-cut as in those examples where the modifier provides new information on a given or inferrable noun. Moreover, the postposing of 'expected' numerals may be due to their heaviness (see section 3.3.1); cf. Hdt. 2.9.2 (…) ὅσον δέ τι ἀπὸ θαλάσσης ἐς μεσόγαιαν μέχρι Θηβέων ἐστί, σημανέω· **στάδιοι** γάρ εἰσι **εἴκοσι καὶ ἑκατὸν καὶ ἑξακισχίλιοι**, 'and I will now declare the distance inland from the sea to Thebes: it is **six thousand one hundred and twenty stades** (lit. stades twenty and hundred and six thousand)'.

In example (17),

(17)   σύ νυν, ἢν βούλῃ ἐμοὶ πείθεσθαι, **τῆς περ Ἀστυάγης ἄρχει χώρης**, ταύτης ἁπάσης ἄρξεις.

If, then, you will listen to me, you shall rule **all the country which is now ruled by Astyages** (lit. the *scope-prt* Astyages rules country, that in its entirety you will rule).   (Hdt. 1.124.2)

it is the scope-particle περ together with the demonstrative ταύτης, which picks up the content of the relative clause, that makes clear that Harpagos considers the prenominal relative clause to be much more important than the noun.[20] He does not want to promise Kyros kingship of just any country, but of exactly that country that is reigned by Astyages.

    In examples (18) and (19), which do not have any explicit indications, it is the larger context that reveals the intention of the author:

(18)   ὁ δὲ **πορφύρεόν** τε **εἶμα** περιβαλόμενος, ὡς ἂν πυνθανόμενοι πλεῖστοι συνέλθοιεν Σπαρτιητέων, καὶ καταστὰς ἔλεγε πολλὰ τιμωρέειν ἑωυτοῖσι χρηίζων.

He then put on **a purple cloak**, so that as many Spartans as possible might assemble to hear him, and stood up and made a long speech asking aid for his people.   (Hdt. 1.152.1)

(19)   τουτέων δὲ ἡ μὲν Ἄνθυλλα ἐοῦσα λογίμη πόλις ἐς ὑποδήματα ἐξαίρετος δίδοται **τοῦ αἰεὶ βασιλεύοντος Αἰγύπτου τῇ γυναικί·**

Of these cities, Anthylla is a town of some reputation and especially assigned to provide the **consort of the reigning king of Egypt** (lit. of the reigning king of Egypt the consort) her shoes.   (Hdt. 2.98.1)

In example (18), the saliency of the modifier appears from the ὡς-clause. Herodotus informs his readers that Pythermos did not put on an ordinary cloak, but a purple one, so as to attract the attention of as many Spartans as possible. In example (19), the saliency of the prenominal genitive is apparent exactly from the fact that Herodotus provides these details

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[20] As will be clear from the fact that I did not highlight the demonstrative ταύτης and the following ἁπάσης, I do not consider these two elements a part of the NP. In my view (and that of the text editor who inserted a comma after the noun), the NP only consists of a prenominal relative clause (τῆς περ Ἀστυάγης ἄρχει) and a noun (χώρης). The demonstrative and the following adjective are a resumptive element and predicative adjective respectively. The reason for taking the demonstrative as a resumptive element is that it cannot have a deictic or anaphoric function (*that country of Astyages). For the position of the relative clause before the noun, see section 3.5.4.

about Anthylla: if the city had provided the shoes for just an ordinary lady instead of the consort of the king of Egypt himself, Herodotus would not have mentioned it at all.

So, modifiers may be prenominal if the author wants to stress the importance or relevance of the information expressed by the modifier. In the case of a genitive or possessive, the preposition of the modifier may indicate that the exact nature of the relation between the referent of genitive/possessive and the referent of the head noun is less relevant than the fact that a relation exists. A comparison of some examples of modifier-noun and noun-modifier orderings giving expression to interpersonal relationships will illustrate the difference between the two options:

(20) ἔπειτα μέλλοντος αὐτοῦ διὰ ταύτην τὴν αἰτίην ἀνασκολοπιεῖσθαι ὑπὸ Ξέρξεω βασιλέος, ἡ μήτηρ τοῦ Σατάσπεος ἐοῦσα **Δαρείου ἀδελφεὴ** παραιτήσατο, φᾶσά οἱ αὐτὴ μέζω ζημίην ἐπιθήσειν ἤ περ ἐκεῖνον·

And when on this charge he was to be impaled by King Xerxes, Sataspes' mother, who was **Dareios' sister**, interceded for his life, saying that she would impose a heavier punishment on him than Xerxes.

(Hdt. 4.43.2)

(21) (…) ἔπεμψε Σιτάλκης παρὰ τὸν Ὀκταμασάδην λέγων τοιάδε· τί δεῖ ἡμέας ἀλλήλων πειρηθῆναι; εἶς μέν **μεο τῆς ἀδελφεῆς παῖς**, ἔχεις δέ **μεο ἀδελφεόν**. σὺ δή μοι ἀπόδος τοῦτον καὶ ἐγώ σοι τὸν σὸν Σκύλην παραδίδωμι. στρατιῇ δὲ μήτε σὺ κινδυνεύσῃς μήτ᾽ ἐγώ.

(…) Sitalkes sent this message to Oktamasades: 'Why should we try each other's strength? You are **my sister's son** (lit. of me the sister's son), and you have **my brother** (lit. of me brother) with you; give him back to me, and I will give up your Skyles to you; and let us not endanger our armies.'

(Hdt. 4.80.2–3)

In example (20), we are told that Sataspes' mother, who happens to be Dareius' sister, changed Xerxes' decision to punish Sataspes to death. To understand how Sataspes' mother could influence Xerxes, the exact nature of the relation between Sataspes' mother and the royal house is less relevant than the fact that she was related. For that reason, the genitive is prenominal. Similarly, in Oktamasades' plea to avoid a contest in example (21), the exact nature of the relation between himself and Sitalkes is of secondary importance to the fact that they are related. Again, it is the modifier that is expressed first.

In (22) and (23), by contrast, it is the nature of the relation instead of the partakers in the relation that is stressed by the preposition of the noun:

(22)   ἐμοὶ μήτε χρυσόν, ὦ βασιλεῦ, μήτε ἄργυρον δίδου, ἀλλ᾽ ἀνασωσάμε-
       νός μοι [δὸς] τὴν πατρίδα Σάμον, τὴν νῦν ἀδελφεοῦ τοῦ ἐμοῦ Πολυ-
       κράτεος ἀποθανόντος ὑπὸ Ὀροίτεω ἔχει **δοῦλος ἡμέτερος**, (...).

       Do not give me gold, O king, or silver, but Samos, my country, which **our
       slave** (lit. slave our) has now that my brother Polykrates has been killed
       by Oroites, (...).   (Hdt. 3.140.5)

(23)   Κροῖσος ἦν Λυδὸς μὲν γένος, **παῖς** δὲ **Ἀλυάττεω, τύραννος** δὲ **ἐθνέων
       τῶν ἐντὸς Ἅλυος ποταμοῦ**, ὃς ῥέων ἀπὸ μεσαμβρίης μεταξὺ Συρίων
       τε καὶ Παφλαγόνων ἐξιεῖ πρὸς βορέην ἄνεμον ἐς τὸν Εὔξεινον κα-
       λεόμενον πόντον.

       Kroisos was a Lydian by birth, **son of Alyattes**, and **tyrant of the nations
       west of the river Halys** (lit. tyrant of nations the west of Halys river),
       which flows from the south between Syria and Paphlagonia and empties
       to the north into the sea called Euxeinos.   (Hdt. 1.6.1)

In example (22), Syloson is not grieved because *their* slave took posses-
sion of Samos after his brother's dead, but because it is their *slave* who
is in power. In example (23), the enumeration of Kroisos' qualities in
his introduction into the discourse causes the nouns to be preposed.[21]
The second NP in this example illustrates that the difference between the
GENN and NGEN pattern with nouns giving expression to interpersonal
relationships (e.g. mother, brother, slave) also applies to NPs with nouns
that give information on someone's function (e.g. tyrant, king, general).
Two more examples of this latter category are (24) and (25):[22]

(24)   (...) ἦλθόν σφι ἄγγελοι ἀπὸ Σάμου (...) πεμφθέντες ὑπὸ Σαμίων λά-
       θρῃ τῶν τε Περσέων καὶ τοῦ τυράννου Θεομήστορος τοῦ Ἀνδροδά-
       μαντος, τὸν κατέστησαν **Σάμου τύραννον** οἱ Πέρσαι.

       (...) messengers came to them there from Samos (...) The Samians had
       sent these, keeping their despatch secret from the Persians and the tyrant
       Theomestor son of Androdamas, whom the Persians had made **tyrant of
       Samos** (lit. of Samos tyrant).   (Hdt. 9.90.1)

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[21] Cf. the examples of NPs with preposed, contrastive nouns in section 3.3.
[22] Other clear examples are provided by NPs with nouns like *temple* or *oracle*. The
GENN pattern is used if the god(ess) to whom the sanctuary is dedicated is of primary
importance (e.g. Hdt. 7.76 Ἄρεος χρηστήριον ('an oracle sacred to Ares'), as R. Macan
(1973: 101) notes 'the right oracle for brave men'), whereas the NGEN pattern is used if
it is the existence of the sanctuary that is most relevant (e.g. Hdt. 6.91.2 πρὸς πρόθυρα
Δήμητρος θεσμοφόρου ('to the temple gate of Demeter the Lawgiver'), where the fact
that one of the prisoners grasps the doorhandle of a temple is more important than that
the temple was dedicated to Demeter).

(25)   τῆς δὲ Μιλήτου ἐτύγχανε ἐπίτροπος ἐὼν Ἀρισταγόρης ὁ Μολπαγό-
        ρεω, γαμβρός τε ἐὼν καὶ ἀνεψιὸς Ἱστιαίου τοῦ Λυσαγόρεω, τὸν ὁ
        Δαρεῖος ἐν Σούσοισι κατεῖχε· ὁ γὰρ Ἱστιαῖος **τύραννος** ἦν **Μιλήτου**
        καὶ ἐτύγχανε τοῦτον τὸν χρόνον ἐὼν ἐν Σούσοισι, (...).

        Now it chanced that the deputy ruling Miletos was Aristagoras son of
        Molpagoras, son-in-law and cousin of Histiaios son of Lysagoras whom
        Dareios kept with him at Sousa. For Histiaios was **tyrant of Miletos**, but
        was at Sousa at that time, (...).   (Hdt. 5.30.2)

While the GENN pattern in example (24) puts the accent on the city
Theomestor rules (as the fact that he was a tyrant is known already),
the NGEN pattern in example (25) stresses Histiaios' function (tyrant
as opposed to Aristagoras who was the deputy ruling Miletos).

    Another special use of salient genitives and possessives that are pre-
sented as more important or relevant than the noun is formed by geni-
tives and possessives occurring in an NP that in its entirety refers metony-
mically to the 'referent'[23] of the modifier:

(26)   εἶπε πρὸς ταῦτα ὁ ὁπέων αὐτοῦ· ὦ βασιλεῦ, ἕτοιμος μὲν ἐγώ εἰμι ποιέ-
        ειν καὶ ἀμφότερα καὶ τὸ ἕτερον αὐτῶν καὶ πάντως τὸ ἂν σὺ ἐπιτάσσῃς·
        ὡς μέντοι ἔμοιγε δοκέει εἶναι **τοῖσι σοῖσι πρήγμασι** προσφερέστερον,
        φράσω.

        To this his henchman answered, 'My King, ready am I to do either or
        both, whatever you desire. Nevertheless, I will tell you what I think is in
        your best interest (lit. is most useful for **the your affairs**)'. (Hdt. 5.111.3)

(27)   Ἱστιαίου δὲ τοῦ Μιλησίου ἐναντίη ταύτῃ, λέγοντος ὡς νῦν μὲν διὰ
        Δαρεῖον ἕκαστος αὐτῶν τυραννεύει πόλιος, **τῆς Δαρείου** δὲ **δυνά-**
        μιος καταιρεθείσης οὔτε αὐτὸς Μιλησίων οἷός τε ἔσεσθαι ἄρχειν οὔτε
        ἄλλον οὐδένα οὐδαμῶν·

        But Histiaios of Miletos advised the opposite, saying that 'It is owing to
        Dareios that each of us is sovereign of his city; if **Dareios' power** (lit. the
        of Dareios power) is overthrown, we shall no longer be able to rule, I in
        Miletos or any of you elsewhere.'   (Hdt. 4.137.2)

(28)   Δαρεῖος ὁ Ὑστάσπεος σύν τε **τοῦ ἵππου τῇ ἀρετῇ** (τὸ οὔνομα λέγων)
        καὶ Οἰβάρεος τοῦ ἱπποκόμου ἐκτήσατο τὴν Περσέων βασιληίην.

        Dareios son of Hystaspes, aided by **the excellence of his horse** (here
        followed the horse's name) **and of Oebares his groom** (lit. of the horse the
        excellence and O. his groom), got possession of the kingdom of Persia.
                                                                    (Hdt. 3.88.3)

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[23] Referent is placed between quotation marks because it is rather awkward to speak
of the referent of the modifier in the case of possessives (being non-referential modifiers).

Τοῖσι σοῖσι πρήγμασι in example (26) is a long-winded expression to refer to 'you'. Likewise, τῆς Δαρείου δυνάμιος in example (27) may be said to refer metonymically to Dareios. Because the modifiers express the information that it is actually all about, they precede the rather empty noun.[24] Although the noun in example (28) might seem less empty than the ones in (26) and (27), the NP as a whole (i.e. 'the excellence of the horse') can still be replaced by a simple 'the horse' without affecting the understanding and general meaning of the sentence. Hence, it is the modifier that expresses the most important or relevant part of the message expressed by the NP.

A final special group of prenominal modifiers expressing the most important or relevant information of the message consists of modifiers whose saliency resides in their relevance for the identification of the referent.[25] The modifiers belonging to this subgroup express a very characteristic property of the referent that is necessary for retrieving the referent. In most of these cases, the NP picks up a referent that is no longer very accessible because of an intervening digression. In example (29), for instance, the highlighted NP picks up the referent that is introduced at the beginning of the preceding section with the words that Kroisos sent heralds to the rest of the allies, and to Sparta. After a digression about the current situation at Sparta, the camera zooms in on the arrival of the Sardian herald:

(29)   τοῖσι μὲν δὴ κατεστήκεε πολιορκίη, Κροῖσος δὲ δοκέων οἱ χρόνον ἐπὶ
         μακρὸν ἔσεσθαι τὴν πολιορκίην ἔπεμπε ἐκ τοῦ τείχεος ἄλλους ἀγγέ-
         λους ἐς τὰς συμμαχίας. (…) ἔς τε δὴ ὦν τὰς ἄλλας ἔπεμπε συμμαχίας
         καὶ δὴ καὶ ἐς Λακεδαίμονα. [description of the situation in Sparta] τοι-
         ούτων δὲ τοῖσι Σπαρτιήτησι ἐνεστεώτων πρηγμάτων ἧκε **ὁ Σαρδιηνὸς
         κῆρυξ** δεόμενος Κροίσῳ βοηθέειν πολιορκεομένῳ.

What I mean to say is that in the NPs under consideration 'mine or the queen's *x*' although literally referring to the *x* of me or the queen, in fact refers to me myself or the queen herself.

[24] The question of why Herodotus uses these metonymical expressions instead of a simple σοί or Δαρείου falls outside the scope of the present study and will therefore be disposed of with the suggestion that the nouns of the NPs give expression to that aspect of the modifier that is especially relevant in the given context.

[25] Obviously, this type of saliency is only attested in definite NPs, as modifiers in indefinite NPs (generally) do not contribute to the identifiability of the referent (for a discussion of the relation between (in)definiteness and (un)identifiability, see Chapter 5). As a matter of fact, this type of salient modifiers only occurs in the aXN pattern (and not in the XaN pattern). This is due to a different function of the modifiers in the aXN and XaN pattern (for a discussion of this different function, see Chapter 6).

So then they were besieged. But Kroisos, supposing that the siege would last a long time, sent messengers from the city to his allies. (...) So he sent to the Lakedaimonians as well as to the rest of the allies. (...) After this had happened to the Spartans **the Sardian herald** came to ask for their help for Kroisos, now besieged. (Hdt. 1.81–83)

In the NP that refers to this herald the modifier is prenominal not because it is contrastive, nor because it is salient in that it provides more informative or important information than the noun, but because it provides the essential information for the identification of the referent who has become less accessible after the digression about the situation at Sparta.

Likewise, the τὰ τοῦ Βαβυλωνίου ῥήματα in (30) picks up the warning of one of the Babylonians cited in Hdt. 3.151. The repetition of the exact content of the warning shows that the author does no longer consider the referent very accessible:

(30)   ὡς δέ οἱ ἐξηγγέλθη καὶ ὑπὸ ἀπιστίης αὐτὸς ὁ Ζώπυρος εἶδε τὸ βρέφος, ἀπείπας τοῖσι ἰδοῦσι μηδενὶ φράζειν τὸ γεγονὸς ἐβουλεύετο. καὶ οἱ πρὸς **τὰ τοῦ Βαβυλωνίου ῥήματα**, ὃς κατ’ ἀρχὰς ἔφησε, ἐπεάν περ ἡμίονοι τέκωσι, τότε τὸ τεῖχος ἁλώσεσθαι. πρὸς ταύτην τὴν φήμην Ζωπύρῳ ἐδόκεε εἶναι ἁλώσιμος ἤδη ἡ Βαβυλών·

Zopyros would not believe the news. But when he saw the foal for himself, he told those who had seen it to tell no one; then reflecting he recalled **the Babylonian's words** (lit. the of the Babylonian words) at the beginning of the siege—that the city would be taken when mules gave birth—and having this utterance in mind he conceived that Babylon might be taken. (Hdt. 3.153.1–2)

Besides picking up a referent whose accessibility has diminished because of an intervening digression, a modifier that is essential for the identification of the referent may also express the only available or the most prominent information on a referent, which was either mentioned a long time ago (example 31), or belongs to the general knowledge of the author and addressee (example 32):

(31)   Beyond these (he said) live one-eyed Arimaspians (ἄνδρας μουνοφθάλμους), beyond whom are the griffins that guard gold (τοὺς χρυσοφύλακας γρῦπας) (Hdt. 4.13)

(...) τὸ δὲ ἀπὸ τούτων τὸ κατύπερθε Ἰσσηδόνες εἰσὶ οἱ λέγοντες **τοὺς μουνοφθάλμους ἀνθρώπους** καὶ τοὺς χρυσοφύλακας γρῦπας εἶναι, (...).

(...) but as for what is north of them, it is from the Issedones that the tale comes of **the one-eyed men** and the griffins that guard gold, (...).

(Hdt. 4.27)

(32)   Ἡρακλέα ἐλαύνοντα **τὰς Γηρυόνεω βοῦς** ἀπικέσθαι ἐς γῆν ταύτην
        ἐοῦσαν ἐρήμην, ἥντινα νῦν Σκύθαι νέμονται.

        Herakles, driving **the cattle of Geryones** (lit. the of Geryones cattle),
        came to this land, which was then desolate, but is now inhabited by the
        Skythians.   (Hdt. 4.8.1)

The fact that the modifier expresses the most prominent information
for the identification of the referent may also explain the preposing
of numerals modifying a noun that gives expression to a previously
mentioned distance, period, size etc. (e.g. *the 60 years*). The information
of the noun in these NPs is so empty that even if it was mentioned earlier,
the referent cannot be identified without the information of the modifier:

(33)   καὶ ἔπειτα ἀποβὰς παρὰ τὸν ποταμὸν ὁδοιπορίην ποιήσεαι ἡμερέων
        τεσσεράκοντα· σκόπελοί τε γὰρ ἐν τῷ Νείλῳ ὀξέες ἀνέχουσι καὶ χοιρά-
        δες πολλαί εἰσι, δι᾽ ὧν οὐκ οἷά τέ ἐστι πλέειν. διεξελθὼν δὲ ἐν **τῇσι
        τεσσεράκοντα ἡμέρῃσι** τοῦτο τὸ χωρίον, (. . .).

        Then you disembark and journey along the riverbank for forty days; for
        there are sharp projecting rocks in the Nile and many reefs, through
        which no boat can pass. Having traversed this part **in forty days** (lit. in
        the forty days), (. . .).   (Hdt. 2.29.5)

(34)   ἡ δὲ τρίτη ταρίχευσίς ἐστι ἥδε, ἣ τοὺς χρήμασι ἀσθενεστέρους σκευά-
        ζει· συρμαίῃ διηθήσαντες τὴν κοιλίην ταριχεύουσι **τὰς ἑβδομήκοντα
        ἡμέρας** καὶ ἔπειτα ἀπ᾽ ὧν ἔδωκαν ἀποφέρεσθαι.

        The third manner of embalming, the preparation of the poorer dead, is
        this: they cleanse the belly with a purge, embalm the body **for seventy
        days** (lit. the seventy days) and then give it back to be taken away.
                                                                      (Hdt. 2.88)

In example (33), although taken from a description of a journey contain-
ing several distances and periods, a contrastive reading of the highlighted
modifier does not seem the most obvious solution, primarily because
the modifier is postnominal when the referent is introduced into the
discourse (ἡμερέων τεσσεράκοντα). In my view, the preposition of the
modifier must be due to its relevance for the identification of the referent,
as the noun will not be very helpful. Also in example (34), where a con-
trastive reading is impossible because all three types of ταρίχευσις have
the same time of embalming, the modifier will have been preposed to
realise the identification of the referent that was introduced in Hdt. 2.86.5
(ταριχεύουσι λίτρῳ, κρύψαντες ἡμέρας ἑβδομήκοντα, 'they conceal the
body for seventy days, embalmed in saltpetre').

    We have seen that besides being salient because of being the most
informative part of the NP, a prenominal modifier can also owe its

saliency to providing the most relevant information of the message con-
veyed by the NP. In the case of a genitive or possessive, being the most rel-
evant part of the NP may imply that the partaker in the relation expressed
by the genitive or possessive is more relevant than the exact nature of the
relation expressed by the noun, or that the NP in its totality metonymi-
cally refers to the 'referent' of the genitive or possessive. In definite NPs,
finally, being the most relevant information of the NP may also imply that
the modifier expresses the most prominent information for the identifi-
cation of the referent.

3.3. *Postnominal modifiers*

In the previous section, it was argued that modifiers precede the noun
if they are contrastive or otherwise the most salient element of the
NP. Therefore, we expect postnominal modifiers to be less salient than
the noun. There are many examples in my corpus that confirm this
expectation, among which (35)–(37):

(35)   ἀποιχομένου ὦν ἐς Πέρσας τοῦ Σμέρδιος ὄψιν εἶδε ὁ Καμβύσης ἐν τῷ
        ὕπνῳ τοιήνδε· ἐδόκεέ οἱ ἄγγελον ἐλθόντα ἐκ Περσέων ἀγγέλλειν ὡς
        ἐν τῷ θρόνῳ τῷ βασιληίῳ ἱζόμενος Σμέρδις τῇ κεφαλῇ τοῦ οὐρανοῦ
        ψαύσειε.

        Smerdis having gone to Persia, Kambyses saw in a dream a vision, in
        which it seemed to him that a messenger came from Persia and told him
        that Smerdis sitting **on the royal throne** (lit. on the throne the royal)
        touched heaven with his head.   (Hdt. 3.30.2)[26]

(36)   ὁ δὲ Ὀροίτης μαθὼν τὸν κατάσκοπον ἐόντα προσδόκιμον ἐποίεε
        τοιάδε· **λάρνακας ὀκτὼ** πληρώσας λίθων πλὴν κάρτα βραχέος τοῦ
        περὶ αὐτὰ τὰ χείλεα, ἐπιπολῆς τῶν λίθων χρυσὸν ἐπέβαλε, καταδήσας
        δὲ τὰς λάρνακας εἶχε ἑτοίμας.

        When Oroites heard that the inspector was to be expected, he did this:
        he filled **eight chests** (lit. chests eight) with stones, leaving only a very
        shallow space at the top; then he laid gold on top of the stones, locked
        the chests, and kept them ready.   (Hdt. 3.123.2)

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[26] In 3.64.1 and 3.65.2, when Kambyses' dream is mentioned again, the order of the
noun and the modifier is reversed (ἐς τὸν βασιλήιον θρόνον). The reason that in these
cases the modifier precedes the noun is most probably that these NPs are preceded by the
participle ἱζόμενος 'sitting'. After this verb, the fact that Smerdis is sitting on a seat is less
informative than the exact characteristics of this seat expressed by the adjective.

(37)   ἢν δὲ ἀπορραγῇ, τὸ πλοῖον οἴχεται φερόμενον **ὑπὸ ἰσχύος τοῦ ῥόου**.

And if the rope breaks, the boat is carried away **by the strength of the current** (lit. by strength of the current).   (Hdt. 2.29.2)

The property of the throne in example (35), the number of the chests in example (36) and the 'possessor' of the strength in (37) are not contrastive, nor the most informative part of the NP, nor do they present the most relevant information of the message expressed by the NP. Hence, the conclusion that these postnominal modifiers are pragmatically unmarked seems justified.

To understand all instances of the noun-modifier pattern, however, the other part of the NP, the noun, also must be taken into consideration; for the postposition of the modifier may not only be due to the unmarkedness of the modifier, but also to the markedness of the noun. Next to examples (35)–(37), where the nouns are as unmarked as the following modifiers,[27] there are many examples where the noun of an NX pattern precedes the modifier because it is the noun that forms the most salient element of the NP. The clearest examples of nouns providing the most salient information of the NP are those where the noun contrasts with a noun with the same or a similar modifier:

(38)   προηγέοντο μὲν δὴ **ἱππόται χίλιοι** ἐκ Περσέων πάντων ἀπολελεγ-
        μένοι· μετὰ δὲ **αἰχμοφόροι χίλιοι**, καὶ οὗτοι ἐκ πάντων ἀπολελεγμένοι,
        τὰς λόγχας κάτω ἐς τὴν γῆν τρέψαντες.

First came **a thousand horsemen** (lit. horsemen thousand), chosen out of all Persians; next, **a thousand spearmen** (lit. spearmen thousand), picked men like the others, carrying their spears reversed.   (Hdt. 7.40.2)

(39)   ἀπικομένων δὲ τούτων ἐς τὴν προειρημένην ἡμέρην, ὁ Κλεισθένης
        πρῶτα μὲν **τὰς πάτρας** τε **αὐτῶν** ἀνεπύθετο καὶ **γένος ἑκάστου**.

When they arrived on the appointed day, Kleisthenes first inquired **the country** (lit. the countries of them) and **lineage of each** (lit. lineage of each).   (Hdt. 6.128.1)

In example (38), 'thousand spearmen' contrasts with the previously mentioned 'thousand horsemen'. As the modifiers are exactly the same, it is clearly the nouns that provide the most salient information. In example

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[27] That the modifier follows the noun if both the noun and the modifier are pragmatically unmarked implies that the order noun-modifier is the default one. As the examples (38)–(46) show, however, this does not imply that a preposed noun is by definition unmarked.

(39), the contrast between the country and the lineage[28] will also be evident, even though the modifiers, despite the fact that they refer to the same referent, look a bit different. As the nouns are not placed against, but rather next to each other, contrast is probably not the best term to account for the saliency of the nouns in these examples. For want of a better term, however, I will speak of contrast even in those cases where we find an enumeration of several noun-modifier patterns:

(40)   Ἰνδοὶ δὲ **εἵματα** μὲν ἐνδεδυκότες **ἀπὸ ξύλων πεποιημένα, τόξα** δὲ **καλάμινα** εἶχον καὶ **ὀϊστοὺς καλαμίνους·**

The Indians wore **garments of tree-wool** (lit. garments of tree-wool made), and carried **reed bows** (lit. bows reed) and **reed arrows** (lit. arrows reed).   (Hdt. 7.65)

(41)   ἐνδὺς **κιθῶνα μέγαν** καὶ **κόλπον βαθὺν** καταλιπόμενος **τοῦ κιθῶνος, κοθόρνους τοὺς εὕρισκε εὐρυτάτους ἐόντας** ὑποδησάμενος, ἤιε ἐς τὸν θησαυρὸν ἐς τόν οἱ κατηγέοντο.

He donned a **wide tunic** (lit. tunic wide), leaving a **deep fold** in it (lit. fold deep of the tunic), and put on **the most spacious boots that he could find** (lit. boots the he found most spacious being), then went into the treasury to which they led him.   (Hdt. 6.125.3)

Although the term contrast is not very felicitous in cases like (38)–(41), it is not difficult to prove that the nouns are preposed because they are the most salient part of the NP. This is more difficult if the noun is the most informative or most relevant element of the NP, as this asks for more interpretation of (the context of) the NP. The following examples illustrate that the grounds for nouns to be salient are comparable to those for modifiers (see section 3.2.2):

(42)   πρόφαντα δέ σφι ἔν τε Δωδώνῃ καὶ ἐν Δελφοῖσι ἐγένετο, ἐπείτε ἐπειρώτων τοὺς προφήτας **τὸ αἴτιον τοῦ παρεόντος κακοῦ**, οἱ δὲ αὐτοῖσι ἔφραζον ὅτι ἀδίκως τὸν φύλακον τῶν ἱρῶν προβάτων Εὐήνιον τῆς ὄψιος ἐστέρησαν·

Furthermore, a declaration was given to them at Dodona and Delphi, when they inquired of the prophets what might be **the cause of their present ill** (lit. the cause of the present ill): the gods told them by their prophets that they had done unjustly in blinding Euenios, the guardian of the sacred flock.   (Hdt. 9.93.4)

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[28] In the Greek example, the second NP lacks an article because it is the second NP in an enumeration (for the use of the article in enumerations, see Chapter 5, section 5.3.2).

(43)   οἱ γὰρ δὴ τῶν Λιβύων νομάδες, εἰ μὲν πάντες οὐκ ἔχω ἀτρεκέως τοῦτο
εἰπεῖν, ποιεῦσι δὲ αὐτῶν συχνοὶ τοιάδε· **τῶν παιδίων τῶν σφετέρων**,
ἐπεὰν τετραέτεα γένηται, οἰσύπῃ προβάτων καίουσι τὰς ἐν τῇσι κορυ-
φῇσι φλέβας, μετεξέτεροι δὲ αὐτῶν τὰς ἐν τοῖσι κροτάφοισι, (…).

The Lybian nomads, I cannot say absolutely whether they all have, but
many of them have these practices: when **their children** (lit. the children
the their) are four years old, they burn the veins of their scalps or some-
times of their temples with grease of sheep's wool, (…).   (Hdt. 4.187.2)

In example (42), the larger context of the NP indicates that the noun τὸ
αἴτιον provides the most informative part of the message of the NP, as the
noun introduces a new aspect of the already familiar topic referred to by
the genitive: the present illness of the Apollonians was already familiar to
the addressee, whereas the fact that they ask the oracles for *the reason* for
their illness is new. Similarly, in the highlighted NP in example (43) the
information status of the noun is higher than that of the possessive, as the
referent of the noun is inferrable, whereas the 'referent' of the possessive
is given.

Besides being most informative to the addressee, a preposed noun may
also be most important or relevant in the view of the author/speaker
(for the difference between those two options, see section 3.2.2 above).
In example (44), for example, Artemisia advises Xerxes to march home
himself and to leave Mardonios behind to conquer Greece:

(44)   τοῦτο μὲν γὰρ, ἢν καταστρέψηται τά φησι θέλειν καί οἱ προχωρήσῃ
τὰ νοέων λέγει, σὸν τὸ ἔργον, ὦ δέσποτα, γίνεται· οἱ γὰρ σοὶ δοῦλοι
κατεργάσαντο· τοῦτο δέ, ἢν τὰ ἐναντία τῆς Μαρδονίου γνώμης γέ-
νηται, οὐδεμία συμφορὴ μεγάλη ἔσται, σέο τε περιεόντος καὶ ἐκείνων
τῶν πρηγμάτων περὶ οἶκον τὸν σόν· (…) Μαρδονίου δέ, ἤν τι πάθῃ,
λόγος οὐδεὶς γίνεται· οὐδέ τι νικῶντες οἱ Ἕλληνες νικῶσι, **δοῦλον σὸν**
ἀπολέσαντες·

For if he subdues all that he offers to subdue and prospers in his design,
the achievement, Sire, is yours since it will be your servants who have
accomplished it. If, on the other hand, the issue is contrary to Mardonios'
expectation, it will be no great misfortune so long as you and all that
household of yours are safe; (…) As for Mardonios, if any disaster befalls
him, it is does not much matter, nor will any victory of the Greeks be a
real victory when they have but slain **your servant** (lit. servant your).
(Hdt. 8.102.2–3)

Artemisia argues that if Mardonios' plans succeed, it will be Xerxes'
achievement, since his slaves did the job. If, on the other hand, Mardonios
is conquered by the Greeks, nothing will be lost, since the Greeks will
only defeat a slave of his. While Herodotus lets Artemisia prepose the

possessive in her description of a successful outcome of Mardonios' plans (οἱ σοὶ δοῦλοι κατεργάσαντο 'your servants have accomplished it'), he lets her preposes the noun in the unsuccessful option to stress that the Greeks will harm nothing more than a *slave* if they defeat Mardonios.

Another example of a preposed noun that is presented as more relevant than the following modifier is example (45):

(45)   Leonidas had gained the kingship at Sparta unexpectedly.

   διξῶν γάρ οἱ ἐόντων πρεσβυτέρων ἀδελφεῶν, Κλεομένεός τε καὶ Δω-
   ριέος, ἀπελήλατο **τῆς φροντίδος περὶ τῆς βασιληίης**.

   For since he had two older brothers, Kleomenes and Dorieos, he had
   renounced **all thought of the kingship** (lit. the thought of the kingship).
   (Hdt. 7.205.1)

The noun is preposed because Herodotus wants to stress that, because of the existence of two elder brothers, Leonidas did not even *think* of becoming the king of Sparta.

Whereas the saliency of the noun in (44) and (45) strongly depends on my interpretation of the example, the γάρ-phrase in example (46), where Herodotus himself explains why the Indians use camels instead of horses, explicitly indicates that the information expressed by the noun is contextually more relevant than the postnominal modifier:

(46)   ἐπὶ δὴ ταύτην τὴν ψάμμον στέλλονται ἐς τὴν ἔρημον οἱ Ἰνδοί, ζευξά-
   μενος ἕκαστος **καμήλους τρεῖς**, (…) αἱ γάρ σφι κάμηλοι ἵππων οὐκ
   ἥσσονες ἐς ταχυτῆτά εἰσι, χωρὶς δὲ ἄχθεα δυνατώτεραι πολλὸν φέ-
   ρειν·

   It is for this sand that the Indians set forth into the desert. They harness
   three camels (lit. camels three) apiece, (…) for their camels are as swift
   as horses, and much better able to bear burdens besides.   (Hdt. 3.102.3)

The previous examples illustrated that the modifier may be postnominal either if both the noun and the modifier are not pragmatically marked (the so-called default mode, see footnote 27), or if the noun is contrastive or otherwise the most salient element of the NP by being the most informative or most relevant part of the NP. The noun-modifier pattern may also be used if both the noun and the modifier are pragmatically marked, provided that the marked information expressed by the noun is still (presented as) more salient than the marked information of the modifier. This can be most clearly illustrated by those examples where both the noun and the modifiers provide contrastive information:

(47)   ἐς γὰρ ἑβδομήκοντα ἔτεα οὖρον τῆς ζόης ἀνθρώπῳ προτίθημι. οὗτοι
        ἐόντες **ἐνιαυτοὶ ἑβδομήκοντα** παρέχονται **ἡμέρας διηκοσίας καὶ πεν-
        τακισχιλίας καὶ δισμυρίας**, ἐμβολίμου μηνὸς μὴ γινομένου·

        I set the limit of a man's life at seventy years; these **seventy years** (lit.
        years seventy) have **twenty-five thousand, two hundred days** (lit. days
        two hundred and five thousand and twenty thousand), leaving out the
        intercalary month.   (Hdt. 1.32.2–3)

(48)   καὶ ἢν μέν γε κατασκήψῃ ἐς τὴν Πελοπόννησον, κίνδυνος αὐτῷ τε
        βασιλέϊ καὶ **τῇ στρατιῇ τῇ ἐν τῇ ἠπείρῳ** ἔσται· ἢν δὲ ἐπὶ τὰς νέας τρά-
        πηται τὰς ἐν Σαλαμῖνι, τὸν ναυτικὸν στρατὸν κινδυνεύσει βασιλεὺς
        ἀποβαλεῖν.

        If it descends upon the Peloponnese, the king himself and **his army on
        the mainland** (lit. the army the on the mainland) will be endangered. If,
        however, it turns towards the ships at Salamis, the king will be in danger
        of losing his fleet (lit. the naval forces).   (Hdt. 8.65.3)

(49)   (…) τέταρτον δὴ τοῦτο ἐπὶ τὴν Ἀττικὴν ἀπικόμενοι Δωριέες, δίς τε ἐπὶ
        πολέμῳ ἐσβαλόντες καὶ δὶς ἐπ' ἀγαθῷ **τοῦ πλήθεος τοῦ Ἀθηναίων**,
        (…) δεύτερον δὲ καὶ τρίτον ὅτε ἐπὶ Πεισιστρατιδέων ἐξέλασιν ὁρμη-
        θέντες ἐκ Σπάρτης ἀπίκοντο, (…).

        (…) this was the fourth time that Dorians had come into Attika. They
        had come twice as invaders in war and twice as helpers of **the Athenian
        people** (lit. the people the of Athenians). (…) the second and third when
        they set out from Sparta to drive out the sons of Peisistratos, (…).
                                                                       (Hdt. 5.76)

In example (47), Solon converts the number of years of an average human
life to the number of days of a human life. Despite the fact that both
the nouns and the numerals contrast, the nouns are preposed because
they express the main contrast: years are converted into days. A similar
example of a double contrast can be found in example (48), where
the noun στρατιῇ ('army') stands out against the preceding βασιλέϊ
('king'),[29] while the modifier ἐν τῇ ἠπείρῳ ('on the mainland') contrasts
with ναυτικόν ('naval') in the next line. Because in the first line of

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[29] The position of αὐτῷ falls outside the scope of this study because it is a predicative
element that does not belong to the NP proper. However, since it is argued elsewhere
in this book (Chapter 4, section 4.2.2.2) that predicative elements also obey the saliency
principle, it seems justified to pay some attention to the position of αὐτῷ in this exam-
ple. A possible explanation for the fact that αὐτῷ precedes the noun despite the con-
trast between this noun and the following στρατιῇ is that it is of eminent importance
that the king HIMSELF would be in danger if the cloud of dust descended upon the Pelo-
ponnese. Formulated more technically, the saliency of the predicative element apparently
outweighs the contrastiveness of the noun.

the example the basic opposition is between the king himself and his army, the contrastive noun precedes the also contrastive, but less salient modifier. In example (49), the opposition between the Dorian aggressor (Δωριέες) and the Athenians (Ἀθηναίων) is surpassed by the contrast between the masses of the Athenians (τοῦ πλήθεος) and their tyrants (Πεισιστρατιδέων).

In the double contrastive NPs in examples (47) to (49), the nouns were preposed because they expressed the main contrast. If, by contrast, the modifier is the most salient element of a double contrastive NP, this constituent is preposed:

(50)   Ἀρτάβανε, ἐγὼ τὸ παραυτίκα μὲν οὐκ ἐσωφρόνεον εἴπας ἐς σὲ **μάταια ἔπεα χρηστῆς εἴνεκα συμβουλίης·**

Artabanos, for a moment I was of unsound mind, answering your **good advice with foolish words**.   (Hdt. 7.15.1)

(51)   Description of an attack by the Persian army:

δῆλον ἐποίευν παντί τεῳ καὶ οὐκ ἥκιστα αὐτῷ βασιλέι ὅτι **πολλοὶ ἄνθρωποι** εἶεν, **ὀλίγοι** δὲ **ἄνδρες**.

And they (= the Persian soldiers) made it clear to everyone, especially the king himself, that among so **many people** there were **few real men** (lit. that there were many people, but few men).   (Hdt. 7.210.2)

In example (50), Xerxes makes excuses to his uncle Artabanos for insulting him when he advised against invading Greece. In this apology, the main contrast is obviously not between Xerxes' reaction and Artabanos' advice, but between the foolishness of reaction and the accuracy of the advice. Similarly, the main contrast in example (51) is between the quantity expressed by the adjectives.

In the previous examples where both the noun and the modifier provided contrastive information, both NPs were ordered either according to the noun-modifier or the modifier-noun pattern. Combinations of a noun-modifier and a modifier-noun pattern can also be used to give expression to two double contrastive NPs. Traditionally, these chiastic orderings were assumed to be a stylistic device. In my view, however, the ordering of these NPs can and must be explained in exactly the same way as all other examples, viz. by pragmatics.[30] In example (52), we find such a combination of a modifier-noun and a noun-modifier pattern:

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[30] As Slings (1997a: 184 ff.) has shown, the chiastic ordering of clausal constituents can also very often be accounted for by their information status. In ὅσσοι ἐνὶ μεγάροισι γερούσιον αἴθοπα οἶνον | αἰεὶ πίνετ' ἐμοῖσιν (object-verb), ἀκουάζεσθε δ' ἀοιδοῦ (verb-

(52) ἐς δὲ Θεμισκύρην τὴν ἐπὶ Θερμώδοντι ποταμῷ ἐκ τῆς Σινδικῆς (…) τριῶν τε ἡμερέων καὶ δύο νυκτῶν πλόος· αὗται δὲ **τρεῖς μυριάδες καὶ τριήκοντα ὀργυιέων** γίνονται, **στάδιοι** δὴ **τριηκόσιοι καὶ τρισχίλιοι**.

From the Sindic region to Themiskura on the Thermodon river it is a voyage of three days and two nights; that is, of **three hundred thirty thousand orguiai** (lit. three ten-thousands and thirty orguiai), or **three thousand three hundred stades** (lit. stades three hundred and three thousand).   (Hdt. 4.86.3)

Chiastic though these NP orderings may be, the word order within each NP is perfectly explicable by the pragmatic principles described in the previous sections. While in the first NP the numerals are preposed because the addressee can deduce from the preceding context that the NP will give expression to a measure (see section 3.2.2), in the second NP the numeral follows the noun, because the noun is more salient than the numeral as the distance expressed in *orguiai* by the first NP is converted to *stadia* by the second NP.

In examples (53) and (54) we find the combination of a noun-modifier and a modifier-noun pattern. These chiastic arrangements can also be explained by the saliency of the NP constituents, although these will probably be less straightforward than example (52):

(53) τοὺς δὲ σταυροὺς τοὺς ὑπεστεῶτας τοῖσι ἰκρίοισι (…) ἱστᾶσι τρόπῳ τοιῷδε· κομίζοντες ἐξ ὄρεος τῷ οὔνομά ἐστι Ὄρβηλος **κατὰ γυναῖκα ἑκάστην** ὁ γαμέων **τρεῖς σταυροὺς** ὑπίστησι·

The piles that support the platform there (…) they set in the following way. The men bring the piles from a mountain called Orbelos, and every man plants **three piles** for **every woman** (lit. for woman every) that he weds.   (Hdt. 5.16.2)

(54) ὑπὸ τοῦτον μὲν δὴ τὸν στρατὸν ἐβουλεύσαντο καταφυγόντες οἱ τοῦ ναυτικοῦ στρατηγοὶ ἀνειρύσαι τὰς νέας καὶ περιβαλέσθαι ἕρκος **ἔρυμα τῶν νεῶν** καὶ **σφέων αὐτῶν κρησφύγετον**.

It was the design of the Persian admirals to flee to the shelter of that army, and to beach their ships and build a fence round them, which should be **a protection for the ships** and **a refuge for themselves** (lit. for themselves refuge).   (Hdt. 9.96.3)

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object). ('all of you who always drink the sparkling chieftain-wine in my palace, and who listen to the singer', *Od.* 13, 8–9), for example, the chiasmus can be explained if we assume that in the first line the noun οἶνον is the focal element, while in the second line the verb has focus function. Chiasmus as a figure of speech is, in Slings' view, with whom I wholly agree, restricted to those cases where the actual ordering of the constituents runs counter

In example (53), the variation in word order can be explained by a difference in information value of the constituents of the two NPs. While in the first NP the noun is the most informative part of the NP because of the unexpected combination of setting up piles and marrying a wife, in the second one the numeral is more informative, because it provides new information (τρεῖς 'three') about a given noun (σταυρούς 'piles'). In example (54), the modifier of the first NP (τῶν νεῶν 'for the ships') provides rather obvious information in a context in which we are told that the navy beaches their ships and builds a fence round them, whereas the modifier of the second NP (σφέων αὐτῶν 'for themselves') is more salient than the noun, as the contrast between the ships and the soldiers is more prominent than the contrast between a protection and a refuge.

The last examples of this section illustrated that the ordering of two NPs with both a contrastive noun and a contrastive modifier does not depend on the author's decision to use a parallel or chiastic ordering, but either on the message the author wants to convey by the NPs, or on the knowledge of the addressee(s), who prefers the most informative element of the NP to be expressed first.

3.3.1. *Exceptional cases*

In my corpus, there are two groups of exceptional cases in which the modifier is postnominal although it is more salient than the noun. As I will argue, these cases do not alter the fact that word order in the NP is generally determined by the saliency of its constituents. They do show, however, that besides the saliency principle other principles may also influence word order in the NP, so that the actual word order in a concrete example may be the result of various principles preferring opposite constituent orderings. The tension between these competing principles explains why it is often difficult to formulate strict ordering rules for NPs susceptible to various principles: now this principle, now that principle is most influential.

The first group of exceptions consists of 31 NPs with the combination of the noun ἀνήρ ('man') and the adjective ἀγαθός ('good'), or its comparative ἀμείνων or superlative ἄριστος. The phrase ἀνὴρ ἀγαθός turns out to be such a fixed expression that even if the adjective is the

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to the word order expected on the basis of the information structure of the clause. In my corpus, however, I did not find such examples.

most salient element of the NP it most often still follows the noun.[31] In example (55), for instance, the opening line of Xerxes' speech in which he attempts to persuade Masistes to offer him his wife, it is most probable that Xerxes does not only want to stress the family relations between Masistes and himself,[32] but also wants to flatter Masistes by calling him a *good* man. However, despite the plausible saliency of the adjective, it is the noun that is preposed:

(55)   Μασίστα, σὺ εἶς Δαρείου τε παῖς καὶ ἐμὸς ἀδελφεός, πρὸς δ᾽ ἔτι τού-
         τοισι καὶ εἶς **ἀνὴρ ἀγαθός**.

         Masistes, you are Dareios' son and my brother, and in addition you are **a
         good man** (lit. man good).   (Hdt 9.111.2)

Even more probable is the saliency of the adjective in example (56), where the Spartan Dienekes is said to be an even better soldier than the other, very brave Spartans and Thespians. Despite the evident saliency of the adjective, it is postnominal:

(56)   Λακεδαιμονίων δὲ καὶ Θεσπιέων τοιούτων γενομένων ὅμως λέγεται
         ἀνὴρ ἄριστος γενέσθαι Σπαρτιήτης Διηνέκης·

         This then is how the Lakedaimonians and Thespians conducted them-
         selves, but the Spartan Dienekes is said to have exhibited the greatest
         courage of all (lit. to have been **man best**).   (Hdt. 7.226.1)

Although the fixed character of the phrase usually beats the saliency of the adjective, there is one example in my corpus in which the saliency principle dominates,[33] with the consequence that the adjective ἀγαθός does precede the noun ἀνήρ:[34]

(57)   ἐν γὰρ δὴ τούτοισι καὶ αὐτοὶ ἐνεσόμεθα, **ἀρίστων** δὲ **ἀνδρῶν** οἰκὸς
         ἄριστα βουλεύματα γίνεσθαι.

         For we ourselves shall be among them, and among **the best men** (lit. best
         men) it is likely that there will be the best counsels.   (Hdt. 3.81.3)

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[31] Cf. H. Dik (1997: 73). As she points out, the combination of ἀνήρ and ἀγαθός is fossilised in the noun ἀνδραγαθία.

[32] For the interpretation of the preposition of the genitive and possessive of the first two NPs, see section 3.2.2.

[33] At least, one example in a single-modifier NP. There is another example in Hdt. 8.79.1: (…) τὸν ἐγὼ νενόμικα, πυνθανόμενος αὐτοῦ τὸν τρόπον, **ἄριστον ἄνδρα** γενέσθαι ἐν Ἀθήνῃσι **καὶ δικαιότατον** '(…) whom I, learning by inquiry of his character, consider to be **the best and most just man** (lit. best man and most just) in Athens'.

[34] The neat parallel with ἄριστα βουλεύματα later on in the sentence is in my view no sufficient explanation for the fac t that ἀγαθός in this example precedes ἀνήρ. For the

The postposition of a pragmatically marked modifier may also be due to the overriding of the saliency principle by the heaviness principle. The heaviness principle predicts that heavy constituents tend to be expressed at the end of the NP and may be even displaced to a later position in the sentence. This heaviness principle is based on S. Dik's Principle of Increasing Complexity (1997: 404) that says that there is a language independent preference for ordering constituents in an order of increasing complexity:[35]

(58)   preferred: [—] [——] [———] [————] [————]
        not preferred: [————] [———] [——] [—]

Although this schematic representation of the heaviness principle may give the impression that the heaviness of a constituent is determined by its length, it is—at least in the case of salient, but postnominal modifiers[36]—not the length of a modifier that is decisive for its heaviness, but its complexity.[37] With respect to the heaviness principle, the complexity of a modifier is determined by the number of constituents that are dependent on it, i.e. the number of subordinate constituents that it governs. Modifiers that are complex for some other reason, for instance because they contain a noun themselves, or because they consist of multiple elements, are not sensitive to the heaviness principle. The position of genitival phrases consisting of multiple elements, for instance, is insensitive to the heaviness principle (cf. 3.128.5 Πολυκράτεος τοῦ Σαμίου τίσιες, 4.79.2 οἰκίης μεγάλης καὶ πολυτελέος περιβολή and 5.91.2 τῶν ἄλλων συμμάχων ἀγγέλους).

The tension between the saliency principle preferring the most salient element to be expressed first and the heaviness principle preferring com-

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fact that there is a parallel does not explain *why* the author chose for a parallel instead of chiastic ordering (for a discussion of parallel and chiastic orderings, see the previous section).

[35] This principle was first formulated by Behaghel (1932) as the *Gesetz der wachsenden Glieder*. For the term heaviness, see Hawkins (1983).

[36] As will be shown in Chapter 4, section 4.3, the heaviness of coordinated modifiers *is* dependent on their length.

[37] This means that there is no resistance against long modifiers, i.e. modifiers consisting of many letters and/or syllables, in the prefield (cf. Hdt. 8.112.1 ἀπειλητηρίους λόγους, 2.127.2 δι᾽ οἰκοδομημένου αὐλῶνος and 5.77.2 τετρακισχιλίους κληρούχους). It should be noted, however, that long, salient numerals are sometimes split up in a pre- and postnominal part, probably to avoid too much information before the head of the NP, cf. Hdt. 2.9.2 (ἑξακοσίων σταδίων καὶ τρισχιλίων lit. six hundred stades and three thousand) and Hdt. 7.187.2 (τριηκοσίους τε ἄλλους μεδίμνους καὶ τεσσεράκοντα lit. three hundred other bushels and forty).

plex modifiers to be expressed after the noun is most often settled to the advantage of the latter. Examples (59) and (60) are two of the examples in my corpus in which a salient modifier follows the noun because of its heaviness:

(59)   ἅπασαν γὰρ τὴν Βοιωτίην κατεῖχε ἠχὼ ὡς **ἀνδρὸς** ἀπολομένου **μετά γε Μαρδόνιον λογιμωτάτου παρά τε Πέρσῃσι καὶ βασιλέϊ**.

The sound of this was heard over all Boiotia, for **a man** was dead **who, next to Mardonios, was most esteemed by all Persia and the king** (lit. man after Mardonios most esteemed by Persians and king).   (Hdt. 9.24)

(60)   οἱ δὲ βάρβαροι ἐπειδὴ ἐγίνοντο ἐπειγόμενοι κατὰ τὸ ἱρὸν τῆς Προ-νηίης Ἀθηναίης, ἐπιγίνεταί σφι **τέρεα ἔτι μέζονα τοῦ πρὶν γενομένου τέρεος**.

When the barbarians came with all speed near to the temple of Athena Pronaia, they were visited by **a miracle yet greater than the previous miracle**.   (Hdt. 8.37.2)

In example (59), the postnominal modifier is clearly more salient than the noun: the people in Boiotia do not mourn because a *man* died, but because this man was the most esteemed Persian soldier after Mardonios. Similarly, in example (60), the information provided by the modifier is more relevant than the preceding noun: it is not the fact that the barbarians were visited by another miracle, but that this one was even greater than the one before that is the main point of the message.

In indefinite NPs, the maximum number of dependents that can ac-company a prenominal modifier seems to be just one: a degree adverbial or an argument in the case of an adjective (example 61) or an adverb or prepositional phrase in the case of a participle (example 62):

(61)   ὅσοι δὲ ἂν αὐτῶν καὶ **κάρτα πολλοὺς ἄνδρας** ἀραιρηκότες ἔωσι, οὗτοι δὲ σύνδυο κύλικας ἔχοντες πίνουσι ὁμοῦ.

And as many as have slain not one but **very many enemies** have two cups apiece and drink out of both.   (Hdt. 4.66)

(62)   εἶχον δὲ αὐτῶν τόξα μετεξέτεροι Λύκια, περὶ δὲ τῇσι κεφαλῇσι **ἐκ διφθερέων πεποιημένας κυνέας**.

Some of them carried Lykian bows and wore **caps made of skin** (lit. of skin made caps) on their heads.   (Hdt. 7.77)

If the modifier is more complex, the heaviness principle usually wins over the saliency principle, so that the modifier is expressed after the noun, even if it is more salient (cf. examples 59 and 60). This movement of complex constituents to the postfield of the NP can be accounted for

psychologically: the reader/hearer of the text cannot cope with too much information before reading/hearing the head of the NP.

To avoid too much information before the head of the NP the speaker may also opt for the solution of splitting the complex modifier phrase in two and expressing the salient part of the phrase before and the remainder of the phase after the noun. By expressing the salient modifier before and the dependent after the noun, the speaker meets the wishes of both the principle of heaviness and the saliency principle as best he can:[38]

(63)   ἐγὼ γὰρ ἐν τῇδε θέλων τῇ αὐλῇ φρέαρ ποιήσασθαι, ὀρύσσων ἐπέτυχον σορῷ ἑπταπήχεϊ· ὑπὸ δὲ ἀπιστίης μὴ μὲν γενέσθαι μηδαμὰ **μέζονας ἀνθρώπους τῶν νῦν** ἄνοιξα αὐτὴν καὶ εἶδον τὸν νεκρὸν μήκεϊ ἴσον ἐόντα τῇ σορῷ.

I wanted to dig a well in the courtyard here, and in my digging I hit upon a coffin twelve feet long. I could not believe that there had ever been **men taller than now** (lit. taller men than the now), so I opened it and saw that the corpse was just as long as the coffin.   (Hdt. 1.68.3)

(64)   Κροῖσος ὁ Λυδῶν τε καὶ ἄλλων ἐθνέων βασιλεύς, νομίσας τάδε μαντήια εἶναι μοῦνα ἐν ἀνθρώποισι, ὑμῖν τε **ἄξια δῶρα** ἔδωκε **τῶν ἐξευρημάτων**, (…).

Kroisos, king of Lydia and other nations, believing that these are the only true places of divination among men, endows you with **such gifts as your wisdom deserves** (lit. worthy gifts the inventions), (…).   (Hdt. 1.53.2)

Although the maximum of one dependent per prenominal modifier is also valid for the multiple-modifier NPs in my corpus (see Chapter 4, section 4.2.2.2), definite NPs with a participial modifier or relative clause are, for reasons unclear to me, less sensitive to the heaviness principle, as they may contain a prenominal modifier with two and (very exceptionally) even three dependents or constituents:[39]

(65)   The queen of Babylon contrived a trick. She made a tomb for herself and set it high over one of the gates of the city, with the inscription:

τῶν τις **ἐμέο ὕστερον γινομένων Βαβυλῶνος βασιλέων** ἢν σπανίσῃ χρημάτων, ἀνοίξας τὸν τάφον λαβέτω ὁκόσα βούλεται χρήματα· μὴ μέντοι γε μὴ σπανίσας γε ἄλλως ἀνοίξῃ· οὐ γὰρ ἄμεινον.

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[38] For the details about the position of dependents in the NP, see section 3.6.

[39] Although an example like Hdt. 7.8α1 (τὰ μέν νυν Κῦρός τε καὶ Καμβύσης πατήρ τε ὁ ἐμὸς Δαρεῖος κατεργάσαντο καὶ προσεκτήσαντο ἔθνεα, … 'which nations Kyros and Kambyses and my father Dareios subdued and added to our realm, …') might seem to ignore any influence of the heaviness principle whatsoever, it has to be observed that although the relative clause is exceptionally long it is not particularly complex. Besides a (coordinated) predicate it only contains an (also coordinated) subject.

'If **any king of Babylon in the future** (lit. one of the after me being of Babylon kings) is in need of money, let him open this tomb and take as much as he likes: but let him not open it unless he is in need; for it will be the worse for him.'   (Hdt. 1.187.2)

(66) ὑπερβάντες δὲ οἱ Ἀθηναῖοι **τοὺς οἱ Κορίνθιοι ἔθηκαν Πλαταιεῦσι εἶναι οὔρους**, τούτους ὑπερβάντες τὸν Ἀσωπὸν αὐτὸν ἐποιήσαντο οὖρον Θηβαίοισι πρὸς Πλαταιέας εἶναι καὶ Ὑσιάς.

The Athenians went beyond **the boundaries the Corinthians had made for the Plataeans** (lit. the the Korinthians made for the Plataeans to be boundaries), crossing these they fixed the Asopos river as the boundary for the Thebans in the direction of Plataea and Hysiae.   (Hdt. 6.108.6)

This acceptability of prenominal modifiers with two (or even more) dependents is not only surprising in comparison to indefinite NPs and multiple-modifier NPs (which only allow one), but is all the more remarkable because even among definite NPs we find quite a number of examples where part of the modifier phrase precedes and part of the modifier phrase follows the noun:

(67) (…) τοὺς μὲν ἐξελαύνων τῶν τυράννων, **τοὺς** δ᾽ **ἔλαβε τυράννους ἀπὸ τῶν νεῶν τῶν συμπλωσασέων ἐπὶ Νάξον**, τούτους δὲ φίλα βουλόμενος ποιέεσθαι τῇσι πόλισι ἐξεδίδου, (…).

(…) some of the tyrants he banished, and as for **those tyrants whom he had taken out of the ships that sailed with him against Naxos** (lit. the he took tyrants out of the ships the sailed with him against Naxos), he handed them each over to their cities, which he wished to please, (…).
(Hdt. 5.37.2)

(68) τούτων δή μιν εἵνεκεν καλέσαντες φίλον προσεκτῶντο πίστι τε λαβόν-τες καὶ ὁρκίοισι ἦ μὲν ἕξειν παρ᾽ ἑωυτῷ μηδ᾽ ἐξοίσειν μηδενὶ ἀνθρώ-πων **τὴν ἀπὸ σφέων ἀπάτην ἐς Πέρσας γεγονυῖαν**, (…).

For these reasons they summoned him and tried to make him a friend, having bound him by tokens of good faith and oaths to keep to himself and betray to no one **their deception of the Persians** (lit. the from them deception to the Persians being), (…).   (Hdt. 3.74.2)

Examples like these give the impression that participle phrases and relative clauses in definite NPs *are* sensitive to the heaviness principle, as the splitting of a modifier phrase into a pre- and a postposed part was considered a concession to the heaviness principle (cf. examples 63 and 64 above). How we should reconcile this concession to the heaviness principle displayed in examples like (67) and (68), on the one hand, with very heavy prenominal modifiers, on the other (cf. example 65 and 66), is not clear to me, nor why the ambivalent attitude

towards the heaviness principle is only demonstrated by definite NPs with a participle phrase or relative clause.

Despite these unanswered questions, it is clear that a salient modifier may follow the noun either if the modifier happens to be the adjective ἀγαθός modifying the noun ἀνήρ or if the modifier is heavy (i.e. complex). In these cases, the saliency principle preferring the modifier to be prenominal may be overruled by other word order principles that prefer the modifier to follow the noun. However, as these various principles are competing motivations, the tendencies described above are no strict rules: in some cases the saliency principle turns out to be more influential than in others.

3.4. *Clause vs. NP*

Besides the two exceptional cases discussed in the previous section, there is a third ground for postposing salient modifiers. The order of the constituents of the NP that is preferred by the pragmatic ordering principle that the most salient information should be expressed first may also be thwarted by word order rules at the level of the clause. Like NPs, clauses are ordered according to the pragmatics of their constituents, but whereas NPs prefer to express their most salient information first, clauses prefer to start with the element the clause is about (the topic) and next present the most salient information on this topic (the focus).[40] Schematically, clauses are ordered as follows:

(69)   topic—focus—predicate—X (= remaining elements)[41]

NPs expressed at the beginning of the sentences are subject to two different types of ordering rules: those for NPs preferring the most salient element to be expressed first, and those for clauses preferring the topic to be expressed first. In my corpus, it is the preference of the clause that is decisive. Therefore, clauses may open with an NP whose modifier is postnominal despite the fact that it is the most salient element of the NP because the noun gives expression to the topic of the sentence and for that reason requires the very first position of the clause. The overruling

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[40] For a more detailed description of focus, see Chapter 2.3.2.
[41] This figure was taken from H. Dik (1995), who provides a detailed study of word order at the level of the clause.

of the saliency principle by the word order rules at the level of the clause can be illustrated nicely by examples (70) and (71):[42]

(70)   τοὺς δὲ ἀττελέβους ἐπεὰν θηρεύσωσι, αὐήναντες πρὸς τὸν ἥλιον
        καταλέουσι καὶ ἔπειτα ἐπὶ γάλα ἐπιπάσσοντες πίνουσι. **γυναῖκας** δὲ
        νομίζοντες **πολλὰς** ἔχειν ἕκαστος ἐπίκοινον αὐτέων τὴν μίξιν ποιεῦν-
        ται τρόπῳ παραπλησίῳ τῷ καὶ Μασσαγέται·

        They hunt locusts, which they dry in the sun, and after grinding sprinkle
        them into milk and drink it. It is their custom for every man to have **many
        wives** (lit. wives many); their intercourse with women is promiscuous, as
        among the Massagetai.   (Hdt. 4.172.1–2)

(71)   τότε δὲ οὗτος ὁ Ἀρυάνδης κατοικτίρας Φερετίμην διδοῖ αὐτῇ στρατὸν
        τὸν ἐξ Αἰγύπτου ἅπαντα, καὶ τὸν πεζὸν καὶ τὸν ναυτικόν· **στρατηγὸν**
        δὲ **τοῦ** μὲν **πεζοῦ** Ἄμασιν ἀπέδεξε ἄνδρα Μαράφιον, **τοῦ** δὲ **ναυτικοῦ**
        Βάδρην ἐόντα Πασαργάδην γένος.

        At this time, Aryandes took pity on Pheretime and gave her all the
        Egyptian army, both the land and sea forces. And he appointed Amasis,
        a Maraphian, **general of the infantry**, and Badres of the tribe of the
        Pasargadai, **admiral of the fleet** (lit. as general, of the land-force Amasis
        appointed …., of the sea fleet …).   (Hdt. 4.167.1)

In (70), the modifier is the most salient element of the NP (every man has MANY women), but nevertheless postnominal because the noun expresses a new subtopic in the description of the habits of the Nasamo-ones. Also in (71), the fact that the noun is placed before the contrastive modifier is due to its being the topic of the sentence, as the use of the particles clarifies: 'as *strategos* (δέ) he appointed, of the army (μέν) X, of the fleet (δέ) Y'. On the basis of the same particles it is debatable, however, whether the noun and genitive still constitute one NP, for the position of μέν after the article of the modifier seems to indicate that there is a domain boundary between the noun and the following modifier.[43]

In examples (70) and (71), the word order principles at the level of the clause cause the salient modifier to be expressed after the noun, but these same principles may also lead to a preposition of a pragmatically

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[42] Besides changing the order of the modifier and the noun, word order rules at the level of the clause may also influence the position of the modifier in relation to the article (e.g. aGENN may become GENaN if the genitive expresses the topic of the sentence), see footnote 68 of Chapter 6.

[43] For the relation between particles (and other postpositive elements) and domain boundaries, see H. Dik (1995: 35–37).

unmarked modifier. If an unmarked modifier gives expression to the topic of the clause, it is expressed at the very beginning of the sentence, even before the more salient noun. In my corpus, the preposition of an unmarked modifier due to its topicality is confined to genitival phrases at a strong topic shift. The confinement to genitival phrases is not characteristic for my corpus, but will be due to the fact that the other modifiers (apart from possessives, possibly) are simply not suited for expressing the topic of a sentence. The exclusive occurrence of these topical modifiers at topic shifts (especially transitions between the various layers of the story) can be explained by the importance of marking the topic at the moment it alters.

In most cases, the unmarked, but nevertheless prenominal genitive occurs after a (short) digression at the transition to the main story (cf. examples 72 and 73). By preposing the genitive, which refers to the topic of the main story, the author clearly indicates that the digression has finished:

(72)   Δηιόκης μέν νυν τὸ Μηδικὸν ἔθνος συνέστρεψε μοῦνον καὶ τούτου ἦρξε. ἔστι δὲ Μήδων τοσάδε γένεα· Βοῦσαι, Παρητακηνοί, Στρούχατες, Ἀριζαντοί, Βούδιοι, Μάγοι. γένεα μὲν δὴ Μήδων ἐστὶ τοσάδε. **Δηιόκεω** δὲ **παῖς** γίνεται Φραόρτης, ὃς τελευτήσαντος Δηιόκεω, βασιλεύσαντος τρία καὶ πεντήκοντα ἔτεα, παρεδέξατο τὴν ἀρχήν.

    Deiokes, then, subdued the Median nation only and ruled it. The Median tribes are these: the Busai, the Paretakeni, the Struchates, the Arizanti, the Budii, the Magi. Their tribes are this many. **A son of Deiokes** (lit. of Deiokes son) was Phraortes, who inherited the throne when Deiokes died after a reign of fifty-three years.   (Hdt. 1.101–102.1)

(73)   πυθόμενοι γὰρ ὡς στρατεύεσθαι ὁρμέαται οἱ Πέρσαι ἐπὶ τὰς πόλις σφέων, ἐλόχησαν τὴν ἐν Πηδάσοισι ὁδόν, ἐς τὴν ἐμπεσόντες οἱ Πέρσαι νυκτὸς διεφθάρησαν καὶ αὐτοὶ καὶ οἱ στρατηγοὶ αὐτῶν, Δαυρίσης καὶ Ἀμόργης καὶ Σισιμάκης· σὺν δέ σφι ἀπέθανε καὶ Μύρσος ὁ Γύγεω. **τοῦ** δὲ **λόχου τούτου ἡγεμὼν** ἦν Ἡρακλείδης Ἰβανώλλιος ἀνὴρ Μυλασεύς.

    For learning that the Persians had set forth to march against their cities, they beset the road with an ambush at Pedasoi. The Persians fell into this by night and perished, they and their generals, Daurises and Amorges and Sismakes. With these fell also Myrsos, son of Gyges. **The leader of this ambush** (lit. of this ambush leader) was Herakleides of Mylasas, son of Ibanollis.   (Hdt. 5.121)

The topical genitive can also be used to *introduce* a digression (even a small one), consequently establishing a strong link between the digression and the main story:

(74)   συγχωρήσαντος δὲ Ξέρξεω ἐπὶ τούτοισι ὁ Σατάσπης ἀπικόμενος ἐς
        Αἴγυπτον καὶ λαβὼν νέα τε καὶ ναύτας παρὰ τούτων (. . .) **τούτου** δὲ
        τοῦ Σατάσπεος εὐνοῦχος ἀπέδρη ἐς Σάμον, ἐπείτε ἐπύθετο τάχιστα
        τὸν δεσπότην τετελευτηκότα, ἔχων χρήματα μεγάλα, τὰ Σάμιος ἀνὴρ
        κατέσχε, (. . .).

        Xerxes agreed to this, and Sataspes went to Egypt where he received a
        ship and a crew from the Egyptians (. . .) **A eunuch of this Sataspes** (lit.
        of this the Sataspes eunuch) as soon as he heard of his master's death
        escaped to Samos, with a great hoard of wealth, of which a man of Samos
        got possession, (. . .).   (Hdt. 4.43.3–7)

(75)   ἐς δὲ τὴν Σικελίην ἄλλοι τε ἀπίκατο ἄγγελοι ἀπὸ τῶν συμμάχων συμ-
        μείξοντες Γέλωνι, καὶ δὴ καὶ ἀπὸ Λακεδαιμονίων Σύαγρος. **τοῦ** δὲ
        Γέλωνος τούτου πρόγονος, οἰκήτωρ ὁ ἐν Γέλῃ, ἦν ἐκ νήσου Τήλου τῆς
        ἐπὶ Τριοπίῳ κειμένης. (. . .)

        As for Sicily, envoys were sent there by the allies to hold converse with
        Gelon, Syagros from Lacedaemon among them. **An ancestor of this
        Gelon** (lit. of the Gelon this ancestor), who settled at Gela, was from the
        island of Telos which lies off Triopium. (. . .)   (Hdt. 7.153.1)

Examples (70)–(75) illustrated the phenomenon that word order in NPs
expressed at the very beginning of a clause may run counter to the
saliency principle if one of the constituents of the NP is the topic of the
clause or even the topic of the following discourse unit. In these cases,
the topical element is preposed irrespective of its saliency within the NP.
Yet, the influence of the word order rules at the level of the clause on
the ordering of the NP is rather limited: of all the single-modifier NPs
there are but some twenty examples. This limited influence on the order
of the constituents of the NP will partly be due to the fact that it is simply
not very likely that the topic of the clause is expressed by one of the
constituents of a modified noun phrase, i.e. by either the noun or the
modifier. Furthermore, the word order principles for NPs and clauses
need not contradict, but may both prefer the same ordering of the NP
constituents, as in the following examples:

(76)   τὸ δὲ δὴ ἐκ τῆς Εὐρώπης ἀγόμενον στράτευμα ἔτι προσλογιστέα
        τούτῳ παντὶ τῷ ἐξηριθμημένῳ· δόκησιν δὲ δεῖ λέγειν. **νέας** μέν νυν οἱ
        ἀπὸ Θρηίκης Ἕλληνες καὶ ἐκ τῶν νήσων τῶν ἐπικειμένων τῇ Θρηίκῃ
        παρείχοντο **εἴκοσι καὶ ἑκατόν·** (. . .) πεζοῦ δέ (. . .).

        I must, however, also take into account the force brought from Europe,
        and I will rely on my best judgement in doing so. The Greeks of Thrace
        and the islands off Thrace furnished **one hundred and twenty ships** (lit.
        ships furnished the Greeks … twenty and hundred). (. . .) As regards the
        land-force (. . .).   (Hdt. 7.185.1)

(77)   Fearing that they alone could not repel Dareios' army, the Skythians
        sent messengers to their neighbours. Their kings have already gathered
        and are deliberating on how to meet the Persian army. The assembled
        kings were those of the Tauri, Agathyrsi, Neuri, Maneaters, Black-cloaks,
        Geloni, Boudini and Sauromatae. (description of the habits of these
        nations).

        ἐπὶ τούτων ὦν **τῶν καταλεχθέντων ἐθνέων τοὺς βασιλέας** ἁλισμένους
        ἀπικόμενοι τῶν Σκυθέων οἱ ἄγγελοι ἔλεγον ἐκδιδάσκοντες ὡς ὁ Πέρ-
        σης, (…).

        The kings of the aforesaid nations (lit. of these the aforesaid nations the
        kings) having gathered, then, the Skythian messengers came and laid
        everything before them, explaining how the Persian, (…).
                                                                    (Hdt. 4.118.1)

(78)   οἰκέουσι δὲ κατὰ τάδε Λίβυες. ἀπ᾽ Αἰγύπτου ἀρξάμενοι πρῶτοι Ἀδυρ-
        μαχίδαι Λιβύων κατοίκηνται, οἳ νόμοισι μὲν τὰ πλέω Αἰγυπτίοισι
        χρέωνται, ἐσθῆτα δὲ φορέουσι οἵην περ οἱ ἄλλοι Λίβυες. **αἱ** δὲ **γυναῖ-
        κες αὐτῶν** ψέλιον περὶ ἑκατέρῃ τῶν κνημέων φορέουσι χάλκεον·

        The Lybian tribes live in the following order: starting from Egypt, the first
        Lybian tribe is the Adyrmachidae, which follow Egyptian customs for the
        most part, but dress like other Libyans. **Their women** (lit. the women of
        them) wear twisted bronze ornaments on both legs.   (Hdt. 4.168.1)

In example (76), the noun is both preposed because of the contrast with
the following πεζοῦ, and because it expresses the topic of the sentence,
being a subtopic of the previously mentioned στράτευμα. Similarly, the
prenominal genitive in example (77) is both implicitly contrastive and
resumes the topic of the main line of the narrative after the lengthy
digressions on the habits of the various nations. In example (78), finally,
it is the noun again that is preposed both because it expresses the topic of
the sentence, which is a subtopic of the discourse topic (the Lybians),
and because it is the most salient element of the NP by expressing a
new element of an already familiar entity. These three examples clearly
illustrate that word order rules at the level of the clause and those at the
level of the NP do not necessarily hinder each other, but may also co-
operate.

3.5. *A few particular modifiers*

Although the word order principles discussed in the previous three sections are not sensitive to the semantics of the modifier and hence hold for all modifiers alike, four types of modifiers need consideration. In section 3.5.1, I will defend why I have not made a subdivision within the category of adjectives, although the position of adjectives is traditionally assumed to be influenced by their semantics. Section 3.5.2 argues that the position of 'postpositive possessives' (μου, οἱ, σφεων, αὐτοῦ, etc.), against the expectations on the basis of Wackernagel's Law, is largely determined by pragmatic factors. Next, section 3.5.3 pays attention to the position of demonstratives after first mentions and digressions. Section 3.5.4, finally, argues that so-called relative clauses with incorporated antecedent can better be analysed as NPs with a prenominal relative clause.

3.5.1. *Adjectives*

As I have described in Chapter 2, section 2.2.3 and 2.2.4, there is an ongoing debate on whether the semantics of adjectives is decisive for their position. On the basis of my data, I cannot but conclude that Brunel (1964) and H. Dik (1997) were right in their reservations regarding a semantic account of adjective position, despite the highly significant correlation between determining adjectives and preposition found by Devine and Stephens (2000). The most problematic aspect of a semantic explanation for the position of the adjectives in my corpus is the fact that a classification into qualifying and quantifying adjectives, on the one hand, and determining ones, on the other, turns out to be too strict. Especially in the case of definite NPs, there are numerous examples of qualifying and quantifying adjectives that are used with a determining function:

(79)   τῶν βουλομένων τὰ πιστὰ ποιέεσθαι ἄλλος ἀνὴρ ἀμφοτέρων αὐτῶν ἐν μέσῳ ἑστεὼς λίθῳ ὀξέϊ τὸ ἔσω τῶν χειρῶν **παρὰ τοὺς δακτύλους τοὺς μεγάλους** ἐπιτάμνει τῶν ποιευμένων τὰς πίστις, (…).

A man stands between the two pledging parties, and with a sharp stone cuts the palms of their hands, near **the thumbs** (lit. the fingers the great), (…).   (Hdt. 3.8.1)

(80)   ἐπίστασθαι μὲν γὰρ ὡς βουκόλου τοῦ Ἀστυάγεος εἴη παῖς, ἀπὸ δὲ τῆς κεῖθεν ὁδοῦ **τὸν πάντα λόγον** τῶν πομπῶν πυθέσθαι.

For he had thought, he said, that Astyages' cowherd was his father, but in his journey from the city his escort had told him **the whole story**.
                                                                                        (Hdt. 2.122.2)

The adjectives in (79) and (80) are qualifying and quantifying by nature, but are used as determining adjectives, as they express a quality or quantity by which the referent can be distinguished from other possible entities satisfying the description of the noun.[44] Although Bergson's model leaves room for such a reanalysis of the adjective (see Chapter 2, section 2.2.3), the fact that it occurs very regularly raises questions about the principles underlying the position of the adjective. If the classification of an adjective depends on the way it is used rather than its inherent semantic value, it is highly implausible that it is its semantics that determines its position.[45]

In addition to being problematic, my data show that the classification into qualifying/quantifying and determining adjectives is unnecessary: the position of adjectives is determined by the very same principles as apply to all other modifiers. Only 1,5 % of the more than two thousand adjectives in my corpus does not obey the word order principles described in the sections above. This very small number of exceptions would have been impossible if the position of adjectives had been determined by their semantics. It should be added, however, that the fact that over 98 % of the adjectives obeys the principles described above does not imply that there are no statistical differences between the two types of adjectives. In line with the findings of Devine and Stephens (2000), the qualifying and quantifying adjectives in my corpus are more frequently postnominal than determining ones are.[46] Yet, in my view, this does not legitimize the conclusion that semantics influences adjective position. As defended in Chapter 2, section 2.2.4, determining adjectives may simply be more suitable for pragmatic highlighting than qualifying and quantifying adjectives.

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[44] In Chapter 6, section 6.1.2 I will argue that expressing a feature of the referent by which it can be distinguished from other possible entities satisfying the description of the noun is typical for articular modifiers.

[45] Compare the criticisms of Brunel (1964) and H. Dik (1997) discussed in Chapter 2, section 2.2.3.

[46] Because of the classificational problems, it is impossible to provide exact numbers of qualifying/quantifying and determining adjectives in my corpus, but even without exact numbers the tendency is evident.

3.5.2. *Postpositive possessives*[47]

The pragmatic rule that—apart from the exceptional cases discussed in 3.3.2 and 3.4—the modifier precedes the noun if it is the most salient element of the NP, and otherwise follows the noun also holds true for the 'postpositive possessives' (μου, οἱ, σφεων, αὐτοῦ, etc.) in my corpus. This is rather surprising, as, on the basis of Wackernagel's Law, we would expect the position of postpositives to depend on syntactic factors. Wackernagels's Law (1892) reads that postpositives tend to be the second word in their sentence. If we interpret 'their sentence' as either the clause or their own domain (viz. the NP),[48] we expect postpositive possessives to be expressed either in the peninitial position of the sentence or in the peninitial position of the NP.[49] In my corpus, however, a number of postpositive possessives counters this expectation:[50]

(81) τὸν γὰρ ποταμὸν πρῆγμα ἂν ἦν μοῦνον ἐπεῖναί **σφεων ἐπὶ τὴν χώρην**, (. . .).

It would only have been necessary to let the river out over **their land** (lit. of them the land), (. . .).   (Hdt. 7.130.2)

(82) ἤδη ὦν ἔφη λέγων ὁμοίως αὐτὸς τῷ ποδανιπτῆρι πεπρηγέναι· εἰ γὰρ πρότερον εἶναι δημότης, ἀλλ᾽ ἐν τῷ παρεόντι εἶναι **αὐτῶν βασιλεύς**·

He said that he fared like the washbowl. Since before he was a common man, but now he was **their king** (lit. of them king).   (Hdt. 2.172.5)

(83) (. . .) μετὰ δὲ ταῦτα ἡ ναυμαχίη ὑπολαβοῦσα ἐς γόνυ τὴν πόλιν ἔβαλε, ἐπὶ δὲ τῇ ναυμαχίῃ ἐπεγένετο Ἱστιαῖος Λεσβίους ἄγων, κεκακωμένων δὲ τῶν Χίων **καταστροφὴν** εὐπετέως **αὐτῶν** ἐποιήσατο.

(. . .) then the sea-fight broke upon them and beat the city to its knees; on top of the sea-fight came Histaios and the Lesbians. Since the Chians were in such a bad state, he easily subdued them (lit. he easily made **subjugation of them**).   (Hdt. 6.27.3)

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[47] Postpositive words are words that form a prosodic unit with the preceding word, among which particles (e.g. γάρ, γε, δή, μέν), the non-contrastive personal pronouns (μου, σε, οἱ,) and αὐτ- as anaphoric pronomen. I use the term 'postpositive possessives' to refer to postpositive words used as a possessive modifier (e.g. **σευ** τὸν πόδα 'of you the foot', ἡ μήτηρ **οἱ** 'the mother to him', περίμετρον **αὐτῆς** 'the circumference of her').

[48] See H. Dik (1995: 32–34) for this very plausible 'modern linguistic' interpretation of Wackernagel's Law.

[49] Or rather: after the first mobile word in the clause or in the NP, see Dik (1995: 33).

[50] In the indefinite single-modifier NPs of my corpus, one of the 6 prenominal postpositive possessives and three of the 22 postnominal postpositive possessives do not obey Wackernagel's Law. In the definite single-modifier NPs 16 of the 45 prenominal and two of

(84)   (…) τὸν ἐγὼ ἀκούω καὶ δέκα ἔτεσι ὕστερον μετὰ ταῦτα δεηθέντων
         τῶν Αἰγινητέων χῶσαι Κλεάδην τὸν Αὐτοδίκου ἄνδρα Πλαταιέα,
         πρόξεινον ἐόντα **αὐτῶν**.

         (…) which, as I learn by inquiry, was built as late as ten years after, at the
         Aeginetans' desire, by Kleades son of Autodikos, a Plataean, **their patron**
         (lit. being patron of them).   (Hdt. 9.85.3)

In examples (81) and (82), the postpositive possessives do not occupy
the peninitial position in the clause, nor the peninitial position of the
NP. Although the possessives in (83) and (84) do occupy the second
position of the NP, it is still debatable whether these examples confirm
Wackernagel's Law since the NPs are discontinuous.

Although the number of exceptions to Wackernagel's Law is not ex-
tremely high (17 % of the indefinite NPs and 11 % of the definite NPs
with a postpositive possessive), these exceptions do raise the question of
whether the position of the postpositive possessives is indeed determined
by a syntactic rule, and not—like all other modifiers—by pragmatics,
even in those cases where the postpositive possessive does occupy the
peninitial position of the sentence or NP. In any case, Wackernagel's
syntactic Law in itself is not capable of explaining why a postpositive
possessive is sometimes expressed at the second position in the sentence
(example 85 and 87) and at other times at the second position of the NP
(example 86 and 88):

(85)   (= 21) (…) ἔπεμψε Σιτάλκης παρὰ τὸν Ὀκταμασάδην λέγων τοιάδε 'τί
         δεῖ ἡμέας ἀλλήλων πειρηθῆναι; εἶς μέν **μεο τῆς ἀδελφεῆς** παῖς, ἔχεις δέ
         μεο ἀδελφεόν. σὺ δή μοι ἀπόδος τοῦτον καὶ ἐγώ σοι τὸν σὸν Σκύλην
         παραδίδωμι.'

         (…) Sitalkes sent this message to Oktamasades: 'Why should we try each
         other's strength? You are my sister's (lit. of me the sister's) son, and you
         have **my brother** (lit. of me brother) with you; give him back to me, and
         I will give up your Skyles to you.'   (Hdt. 4.80.3)[51]

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the 131 postnominal postpositive possessives are not expressed at the peninitial position
of the sentence or NP. Also in NPs with multiple modifiers, the postpositive possessive is
not always expressed at the peninitial position of the sentence or NP, cf. Hdt. 2.95.2 (πᾶς
ἀνὴρ αὐτῶν, 'every man of them') and 9.17.2 (ἡμέρῃσι δὲ οὐ πολλῇσι μετὰ τὴν ἄπιξιν
τὴν ἐς Θήβας ὕστερον ἦλθον **αὐτῶν ὁπλῖται χίλιοι**, 'a few days after the Persians' com-
ing to Thebes, **thousand hoplites of them** (lit. of them hoplites thousand) arrived').

[51] Although μεο in both clauses actually occupies the third position, it is said to occupy
the second position because it follows after the first *mobile* word. The words actually
occupying the peninitial position (μέν and δέ respectively) are postpositives themselves.
For more details on the position of postpositives after postpositives, see Wackernagel
(1892) himself and Ruijgh (1990: 223–224).

(86)   ἔπειτα δουλεύουσα αὐτόθι ἱδρύσασθαι ὑπὸ φηγῷ πεφυκυίῃ ἱρὸν Διός,
       ὥσπερ ἦν οἰκὸς ἀμφιπολεύουσαν ἐν Θήβῃσι ἱρὸν Διός, ἔνθα ἀπίκετο,
       ἐνθαῦτα **μνήμην αὐτοῦ** ἔχειν.

       And then, being a slave there, she established a shrine of Zeus under an
       oak that was growing there; for it was reasonable that, as she had been
       a handmaid of the temple of Zeus at Thebes, she would remember that
       temple (lit. would have **remembrance of it**) in the land to which she had
       come.   (Hdt. 2.56.2)

(87)   τρίτον δὲ εἰρώτα τὸ μύρον· εἰπόντων δὲ τῆς ποιήσιος πέρι καὶ ἀλείψιος,
       τὸν αὐτὸν λόγον τὸν καὶ περὶ τοῦ εἵματος εἶπε. ὡς δὲ ἐς τὸν οἶνον ἀπ-
       ίκετο καὶ ἐπύθετο **αὐτοῦ τὴν ποίησιν**, (…).

       Thirdly he inquired about the incense; and when they described making
       and applying it, he made the same reply as about the cloak. But when
       he came to the wine and asked about **its making** (lit. of it the making),
       (…).   (Hdt. 3.22.3)

(88)   σαφέως δὲ αὐτοῖσι πάντα ἐξηγησάμενον τὰ περὶ τὴν ἐξαίρεσιν τοῦ
       λίθου δοῦναι **τὰ μέτρα αὐτοῦ**, λέγοντα ὡς ταῦτα διαφυλάσσοντες
       ταμίαι τῶν τοῦ βασιλέος χρημάτων ἔσονται.

       Explaining clearly to them how to remove the stone (lit. the things with
       respect to the removal of the stone), he gave **the co-ordinates of it**, and
       told them that if they kept these in mind, they would be the custodians
       of the king's riches.   (Hdt. 2.121α2)[52]

Although examples (85)–(88) all follow Wackernagel's Law, the syn-
tactic rule does not explain why the possessive in examples (85) and
(87) occupies the peninitial position of the clause, whereas in exam-
ples (86) and (88) it occupies the peninitial position of the NP. The
pragmatic principle that the most salient element of the NP must be
expressed first, however, can account for the difference between the
examples. In example (85), the possessive precedes the noun because it
is the most salient element of the NP in that the fact that Oktamasades
has something that belongs to Sitalkes is more relevant than what or
who exactly this thing is. In example (86), by contrast, the possessive
is less salient than the noun (the priestess did not remember the tem-
ple of *Zeus* instead of anything else, but had *remembrance* of it) and
therefore follows the noun. The difference between examples (87) and
(88) can be explained similarly: whereas the possessive in example (87)
is prenominal because of the contrast between the various gifts (the

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[52] As in example (85), the postpositive possessive actually occupies the third instead
of second position. As in (85), however, it does follow the first *mobile* word of its domain,
as the article is a prepositive.

cloak, the incense and the wine) about which the king of the Aithiopians asks information, the possessive in example (88) follows the noun because of the contrast between the removal of the stone and its coordinates.

The examples above illustrate that even in those cases where the position of a postpositive possessive is in accordance with Wackernagel's Law, this law in itself is not sufficient to account for the position of postpositive possessives. The position of a postpositive possessive in relation to the noun it modifies is probably as much a matter of pragmatics as the position of all other modifiers.

3.5.3. *Demonstratives*

Despite irregularities with respect to the position of the demonstrative in relation to the article (on which see Chapter 6, section 6.1.4.1), its position in relation to the noun is in accordance to the general rules formulated in the first part of this chapter. This implies that a demonstrative is postnominal if the noun is contrastive (cf. example 89 where γυναῖκα 'woman' contrasts with χρήματα 'money') or otherwise the most salient element of the NP (cf. example 90 where 'aegides' is derived from 'aegea'), or if the modifier lacks a special pragmatic marking (example 91):

(89) νῦν ὦν, ἐπειδὴ περὶ πολλοῦ ἥγημαι μὴ ξεινοκτονέειν, **γυναῖκα** μὲν **ταύτην** καὶ τὰ χρήματα οὔ τοι προήσω ἀπάγεσθαι, ἀλλ᾽ αὐτὰ ἐγὼ τῷ Ἕλληνι ξείνῳ φυλάξω, (...).

Now, then, since I make it a point not to kill strangers, I shall not let you take away **this woman** (lit. woman this)[53] and the wealth, but I shall watch them for the Greek stranger, (...). (Hdt. 2.115.6)

(90) αἰγέας γὰρ περιβάλλονται ψιλὰς περὶ τὴν ἐσθῆτα θυσανωτὰς αἱ Λίβυσσαι, κεχριμένας ἐρευθεδάνῳ, **ἐκ** δὲ **τῶν αἰγέων τουτέων** αἰγίδας οἱ Ἕλληνες μετωνόμασαν.

For Libyan women wear the hairless tasselled 'aegea' over their dress, coloured with madder, and the Greeks have changed the name of **these aegeae** (lit. of the aegeae these) into their 'aegides'. (Hdt. 4.189.2)

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[53] For the absence of the article in this NP, due to the fact that the woman cannot be unequivocally related to the situation (in which apparently more women are present), see Chapter 5, section 5.3.3. The same section also discusses the absence of the article in 'forward-referring NPs' with a demonstrative, as in example (91).

(91)   ἥκει γὰρ ὁ Πέρσης οὐδέν τι μᾶλλον ἐπ᾽ ἡμέας ἢ οὐ καὶ ἐπ᾽ ὑμέας, οὐδέ
        οἱ καταχρήσει ἡμέας καταστρεψαμένῳ ὑμέων ἀπέχεσθαι. μέγα δὲ ὑμῖν
        λόγων τῶνδε μαρτύριον ἐρέομεν·

        For the Persian has come to attack you no less than us, and when he has
        subjugated us he will not be content to leave you alone. We will give you
        a convincing proof of what we say (lit. **of words these**).   (Hdt. 4.118.3–4)

If, on the other hand, it is the demonstrative that is contrastive or other-
wise the most salient element of the NP, it precedes the noun:

(92)   οἱ δὲ Ἕλληνες ἐπισχόντες **ταύτην τὴν ἡμέρην** τῇ ὑστεραίῃ ἐκαλλιε-
        ρέοντο, (…).

        The Greeks waited through **that day** (lit. that the day), and on the next
        they sought and received favourable augury, (…).   (Hdt. 9.92.2)

(93)   **τοῦτο** δὴ **τὸ ἔπος** καὶ αὕτη ἡ αἰτίη ἐγγενομένη ἤγαγε Καμβύσην τὸν
        Κύρου μεγάλως θυμωθέντα ἐπ᾽ Αἴγυπτον.

        This speech (lit. this the speech) and this crime that occurred turned
        Kyros' son Kambyses, furiously angry, against Egypt.   (Hdt. 3.1.5)

(94)   (…) τὰ Σοῦσα ταῦτα, ἔνθα βασιλεύς τε μέγας δίαιταν ποιέεται, καὶ
        τῶν χρημάτων οἱ θησαυροὶ ἐνθαῦτά εἰσι· ἑλόντες δὲ **ταύτην τὴν πόλιν**
        θαρσέοντες τῷ Διὶ πλούτου πέρι ἐρίζετε.

        (…) that Sousa where the great king lives and where the storehouses of
        his wealth are located. Take **that city** (lit. that the city), and you need not
        fear to challenge Zeus for riches.   (Hdt. 5.49.7)

In example (92), ταύτην τὴν ἡμέρην 'this day' is explicitly contrasted with
τῇ ὑστεραίῃ 'the following'. In examples (93) and (94), on the other hand,
the preposition of the demonstrative can be explained if we assume that
it expresses that it is exactly *this* entity and none else that plays a role in
the SoA in question.[54]

     The examples above give little cause for a separate section devoted
to demonstratives. Yet, the frequent use of an NP with a demonstrative

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[54] This formulation will evoke Rijksbaron's description of the οὗτος (δὲ) ὁ noun
pattern (Rijksbaron 1994). In Rijksbaron's formulation prenominal demonstratives have
a strongly referring function by which the identity of the entity in question is emphasised
(Rijksbaron 1994: 233 + 237). In contrast to Rijksbaron, I prefer to explain the position
of the demonstrative by its saliency instead of its strongly or weakly referring function.
The reason for my preference for an explanation on the basis of saliency is twofold.
First, it allows me to treat demonstratives on a par with other modifiers. Secondly the
saliency principle is more accurate in those cases where the demonstrative does not
have an anaphoric function at all (cf. example 92, where the demonstrative has no
anaphoric function at all, so that one cannot speak of a weakly or strongly referring
function).

immediately after the first mention of a referent and after (small) digressions does justify some attention. Given the subject of this book, I will not pay attention to the mere fact *that* a demonstrative is used,[55] but only give my interpretation of the position of the demonstrative. As the examples (95)–(98) show, the demonstrative may both precede and follow the noun in these cases:

(95)   (. . .) τοῦτο δὲ ποιησάμενοι κρητῆρα χάλκεον ζῳδίων τε ἔξωθεν πλή-
       σαντες περὶ τὸ χεῖλος καὶ μεγάθεϊ τριηκοσίους ἀμφορέας χωρέοντα
       ἦγον, δῶρον βουλόμενοι ἀντιδοῦναι Κροίσῳ. **οὗτος ὁ κρητὴρ** οὐκ ἀπ-
       ίκετο ἐς Σάρδις δι᾽ αἰτίας διφασίας λεγομένας τάσδε·

       (. . .) they made a bowl of bronze, engraved around the rim outside with
       figures, and large enough to hold three hundred jars, and brought it with
       the intention of making a gift in return to Kroisos. **This bowl** (lit. this the
       bowl) never reached Sardis, for which two reasons are given.
                                                                    (Hdt. 1.70.1–2)

(96)   ἀπὸ δὲ ταύτης τῆς πόλιος πλέων ἐν ἴσῳ χρόνῳ ἄλλῳ ἥξεις ἐς τοὺς
       αὐτομόλους ἐν ὅσῳ περ ἐξ Ἐλεφαντίνης ἦλθες ἐς τὴν μητρόπολιν τὴν
       Αἰθιόπων. **τοῖσι** δὲ **αὐτομόλοισι τούτοισι** οὔνομά ἐστι Ἀσμάχ, (. . .).

       From this city you make a journey by water equal in distance to that by
       which you came from Elephantine to the capital city of Aithiopia, and
       you come to the land of the deserters. **These deserters** (lit. the deserters
       these) are called Asmakh, (. . .).   (Hdt. 2.30.1)

(97)   ἀπικομένου δὲ τοῦ στρατοῦ ἐπὶ ποταμὸν Σκάμανδρον, ὃς πρῶτος
       ποταμῶν ἐπείτε ἐκ Σαρδίων ὁρμηθέντες ἐπεχείρησαν τῇ ὁδῷ ἐπέλιπε
       τὸ ῥέεθρον οὐδ᾽ ἀπέχρησε τῇ στρατιῇ τε καὶ τοῖσι κτήνεσι πινόμενος,
       ἐπὶ τοῦτον δὴ **τὸν ποταμὸν** ὡς ἀπίκετο Ξέρξης, (. . .).

       When the army had come to the river Skamander, which was the first
       river after the beginning of their march from Sardis that fell short of their
       needs and was not sufficient for the army and the cattle to drink—when
       Xerxes arrived **at this river** (lit. at this the river), (. . .).   (Hdt. 7.43.1)

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[55] The use of a full NP with a demonstrative in these cases runs counter to the
traditional view that the way the author refers to an entity (e.g. with a pronoun or full
NP) depends on the accessibility of the referent (Givón 1983, Ariel 1990, Gundel et al.
1993), for although the referents are highly accessible, the author uses a full NP. The use of
a full NP is in line, however, with the more recent view that since discourse is not a linear
sequences of clauses, but a hierarchically ordered entity (cf. Hopper and Thompson 1980
and Fox 1987b) it is the internal structure of the text more than the anaphoric distance to
the previous mention of the referent that determines the anaphoric strategy used by the
speaker. Even over short distances, full NPs may be used if there is a major discontinuity
in the text (e.g. an episodic change or a change in location) (cf. Fox 1987b and Tomlin
1987) or if the referent will be thematically prominent in the following discourse unit
(cf. Lichtenberk 1996). In the examples below, the presence of a demonstrative may be

(98)   τοιοῦτο ἕτερον ἤκουσα καὶ κατὰ τὸ τῆς ἐν Αἰγύπτῳ λίμνης ὄρυγμα
        γενέσθαι, πλὴν οὐ νυκτὸς ἀλλὰ μετ᾽ ἡμέρην ποιεύμενον· ὀρύσσοντας
        γὰρ τὸν χοῦν τοὺς Αἰγυπτίους ἐς τὸν Νεῖλον φορέειν, ὁ δὲ ὑπολαμβά-
        νων ἔμελλε διαχέειν. **ἡ** μέν νυν **λίμνη αὕτη** οὕτω λέγεται ὀρυχθῆναι.

        Something similar, I was told, had happened when the Egyptian lake was
        dug, except that the work went on not by night but by day. The Egyptians
        bore the earth dug out by them to the Nile, to be caught and scattered (as
        was to be expected) by the river. Thus is **this lake** (lit. the lake this) said
        to have been dug.   (Hdt. 2.150.4)

These examples seem to show that the difference between a pre- and a
postnominal modifier in these cases resides in the prominence of the
information on this referent.[56] The demonstrative precedes the noun if
the information on the referent, which either follows on a first mention
(95) or a digression (97), is part of the main line of the story, while
a postnominal demonstrative either starts a digression (96) or rounds
it off (98). That it is the value of the information on the referent that
determines the position of the demonstrative is not to say that these NPs
do not differ in the pragmatic marking of their demonstrative. In NPs
with a prenominal demonstrative it is still the demonstrative that is the
most salient element of the NP ('exactly *this* x'), whereas in NPs with a
postnominal demonstrative the demonstrative has no special pragmatic
marking ('this x'). Apparently, a pragmatic marking of the demonstrative
is more appropriate if the information on the referent of the NP is part
of the main line of the story than if it is part of a digression.

3.5.4. *Relative clauses*

Relative clauses are the last modifiers that deserve consideration, not
because they are any different from other modifiers with respect to their
position in relation to the noun, but because it is rather difficult to see *that*

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explained by the fact that there is a shift of focus of attention (97 and 98) or/and by the
fact that the referent is thematically prominent (95–98).

    [56] For a similar view, see Rijksbaron (1994). Rijksbaron, however, assumes that the
difference between an NP with a pre- and with a postnominal demonstrative in these
cases is that whereas the former introduces the referent as a prominent topic, the latter
introduces additional information on a non-prominent topic. However, the bowl in (95)
and the river in (97) are in my view not more prominent topics than the deserters in
(96) and the lake in (98). I therefore assume that it is not the prominence of the topics,
but the value of the information on the referent that determines the position of the
demonstrative. Both the referent of an NP with a prenominal demonstrative and that with

they are no different.[57] Like other modifiers, relative clauses precede the noun if they are contrastive (example 99) or otherwise the most salient element of the NP (example 100), whereas they follow the noun if they lack a special pragmatic marking (example 101) or if it is the noun that is marked (example 102):[58]

(99) σύ νυν **τὴν** μὲν **ἔχεις γυναῖκα**, ἐπείτε τοι οὐ τίκτει, ἔξεο, ἄλλην δὲ γῆμον·

Therefore send away **the wife that you have** (lit. the you have wife), seeing that she bears you no children, and wed another. (Hdt. 5.39.2)

(100) τὰς [δὲ] παρθένους οὐ φυλάσσουσι, ἀλλ᾽ ἐῶσι **τοῖσι αὐταὶ βούλονται ἀνδράσι** μίσγεσθαι. τὰς δὲ γυναῖκας ἰσχυρῶς φυλάσσουσι·

Of their maidens they take no care, allowing them to have intercourse **with any man they wish** (lit. the they want men). Their wives, however, they strictly guard. (Hdt. 5.6.1)

(101) (…) ἐπακοῦσαι ἐκέλευε τὸν Κλεομένεα, ἀποπέμψαντα τὸ παιδίον· προσεστήκεε γὰρ δὴ τῷ Κλεομένεϊ **ἡ θυγάτηρ, τῇ οὔνομα ἦν Γοργώ·**

(…) he asked Kleomenes send away his child and to listen to him. For **his daughter, whose name was Gorgo** (lit. the daughter, to whom was Gorgo as a name) was standing by Kleomenes. (Hdt. 5.51.1)

(102) ὑστέρῳ μέντοι χρόνῳ καὶ συγκατοίκισε αὐτὴν ὁ στρατηγὸς Ὀτάνης ἔκ τε ὄψιος ὀνείρου καὶ **νούσου ἥ μιν κατέλαβε νοσῆσαι τὰ αἰδοῖα.**

But afterwards Otanes, the Persian general, helped to settle the land, prompted by a dream and **a disease that he contracted in his genitals**. (Hdt. 3.149)

So despite some differences with respect to its articulation (on which see Chapter 6, section 6.1.4.3), the position of the relative clause in the NP and the grounds for its position are wholly comparable to those

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a postnominal demonstrative are thematically highly prominent, as is indicated by the very presence of the demonstrative, marking in both cases a shift in the focus of attention.

[57] I will not deal with other aspects of relative clauses than their position in relation to the noun. For a more extended discussion of relative clauses in Greek, see Rijksbaron (1981). For a more general discussion of syntactic and pragmatic aspects of relative clauses, see among many others Seiler (1960), Schwartz (1971), Downing (1978), Lehmann (1984, 1986), Fox (1987c) and Cristofaro and Giacalone Ramat (2008).

[58] A third possibility is that the postnominal relative clause is salient, but heavy, since heavy modifiers tend to be expressed after the noun. As has been shown in section 3.3.1, however, relative clauses—in definite NPs at least—are relatively insensitive to the heaviness principle. Whereas other modifiers are considered heavy if they contain more than one dependent, relative clauses (in definite NPs) may still precede the noun if they contain two (and sometimes even three) constituents.

of other modifiers. The traditional grammars, however, seem to have misunderstood the construction used in examples like (99) and (100), for they consider the relative clause—instead of being prenominal—to have incorporated the head noun.[59] In their view, the antecedent of the relative clause, adjusted to the case of the relative clause and deprived of its article, is attracted into the relative clause.[60] As Rijksbaron (1981) (and Kühner-Gerth, see footnote 59) already observed, however, it is much more logical to consider examples like (99) and (100) as NPs with a prenominal relative clause, on the analogy of NPs containing a prenominal adjective (aAN) or participle (aPTCN). Whereas Rijksbaron observed that, but did not grasp why, the relative clauses precedes the noun in examples like (99) and (100),[61] on the basis of the preceding sections it seems legitimate to conclude that it is the saliency of the relative clause that determines its position before the noun.

Apart from the fact that prenominal relative clauses combine the article of the noun with the relative (see Chapter 6, section 6.1.4.3), they have the same characteristics as postnominal ones.[62] Which all the more

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[59] Cf. Goodwin (1879: 221), Schwyzer-Debrunner (1950: 641) and Smyth (1956: 570). Kühner-Gerth (1904: II 416 ff.) are the notable exception as they seem to have understood the nature of the construction: 'da aber der Adjektivsatz (= relative clause), wie das auf ein Substantiv bezogene Adjektiv, den Hauptton hat, so kehrt die griechische Sprache gern, um das relative Satzgefüge gewissermassen mehr vor das Auge zu bringen und mit Nachdruck hervorzuheben, das Verhältnis um' (Kühner-Gerth 1904: II 416). Although I do not understand the addition that the relative clause in this construction gets a noun-like nature and the noun an attributive one, I wholly agree with Kühner-Gerth that the construction has to be analysed as an NP with a relative clause preceding the noun because of its saliency.

[60] Although the grammars describe the construction as in example (99) and (100) as if the head noun is incorporated *into* the relative clause, it in fact stands after the relative clause. Ancient Greek is therefore not comparable to languages with so-called internal relatives (like for instance Tibetan, Wappo and Bambara, see Keenan 1985: 161–163) in which the head noun occurs within the relative clause, e.g.

(i)   ?I   čhuya-ø   tumt-i   šoýikhi?
       me house-obj bought-subj burned down
       'the house I bought burned down'

(The example was taken from C.N. Li and S.A. Thompson 1978).

[61] In his attempt to determine any pragmatic differences between pre- and postnominal relative clauses Rijksbaron concludes: 'it is, however, very difficult, even more so than with the noun-adjective constructions, to detect clear, explicit instances of such differences. As with their adjectival counterparts, such differences as may exist will mainly be a matter of stylistics …' (Rijksbaron 1981: 252).

[62] Prenominal relative clauses are for instance not necessarily restrictive, as Rijksbaron (1981: 241) argued, see for instance Hdt 3.105.2 (the Indians harness three camels apiece, males on either side sharing the drawing, and a female in the middle: the man himself

confirms that there is nothing special about prenominal relative clauses, apart from the fact that the grammarians—unaccustomed to prenominal relative clauses in their mother languages–[63] did not recognise them as such.

3.6. *The position of dependent constituents*

The previous sections discussed the position of modifiers in relation to the noun. Some of these modifiers, viz. adjectives, participles and (very rarely) adverbs, may—in their function as the head of an adjectival or participial phrase—be modified by their own dependents, like arguments (full of *sunlight*) and degree adverbials (*very* rich).[64] This section will argue that the position of these dependent constituents is, like the position of the modifiers itself, determined by pragmatic factors. On the basis of its saliency, the dependent constituent (D) may be expressed before the combination of noun and modifier (DXN or DNX), in between (XDN or NDX) or after this combination (XND or NXD). Because the various possibilities for dependents on postnominal and prenominal modifiers are not completely comparable, they will be discussed separately.

The three different possibilities for the position of dependents on prenominal modifiers (DXN, XDN and XND)[65] occur 62, 26 and 12

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rides on the female, that when harnessed has been taken away from as young an offspring as may be) τὰς δὲ θηλέας ἀναμιμνησκομένας τῶν ἔλιπον τέκνων ἐνδιδόναι μαλακὸν οὐδέν 'the mares never tire, for they remember the young that they have left'. The reason that prenominal non-restrictive relative clauses are relatively rare will be that non-restrictive relative clauses often provide additional information on the referent and are consequently not that salient.

[63] Although relative clauses are usually postnominal in the Germanic languages, prenominal relatives are (even in the rest of Europe) no extraordinary phenomenon. For a discussion of the position of relative clauses in European languages, see Rijkhoff (1998: 349–350). In the languages of the world, prenominal relative clauses are almost as common as postnominal ones (cf. Rijkhoff 2002: 195–196).

[64] Although relative clauses often contain more than one constituent, the order within the relative clause will not be discussed here, since they are clause constituents obeying word order rules at the level of the clause rather than dependents on modifiers which are ordered according to word order rules at the level of the NP.

[65] Moreover, there are two cases where the dependent precedes and the adjective itself follows the noun (DNX), viz. Hdt. 2.152.3–4 (ἦλθε χρησμὸς ὡς τίσις ἥξει ἀπὸ θαλάσσης χαλκέων ἀνδρῶν ἐπιφανέντων. (...) ἀγγέλλει τῶν τις Αἰγυπτίων ἐς τὰ ἔλεα ἀπικόμενος τῷ Ψαμμητίχῳ, ὡς οὐκ ἰδὼν πρότερον **χαλκῷ ἄνδρας ὁπλισθέντας**, ὡς χάλκεοι ἄνδρες ἀπιγμένοι ἀπὸ θαλάσσης ληιλατέουσι τὸ πεδίον. 'the oracle answered that he would have vengeance when he saw men of bronze coming from the sea. (...)

times respectively. The first possibility, DXN, is used if the dependent constituent provides even more salient information than the prenominal adjective, or is the most salient information of the prenominal participle phrase:

(103) (…) ὡς ἄρα ἀνθρώποισι **αἱ λίην ἰσχυραὶ τιμωρίαι** πρὸς θεῶν ἐπίφθο-νοι γίνονται.

(…) thus does over-brutal revenge (lit. the too brutal revenges) draw down upon men the anger of the gods.   (Hdt. 4.205)

(104) They said that two black doves had come flying from Thebes in Egypt, one to Libya and one to Dodona;

τὴν δὲ **ἐς τοὺς Λίβυας οἰχομένην πελειάδα** λέγουσι Ἄμμωνος χρηστή-ριον κελεῦσαι τοὺς Λίβυας ποιέειν·

The dove which came to Libya (lit. the to the Libyans coming dove) told the Libyans (they say) to make an oracle of Ammon.   (Hdt. 2.55.3)

In example (103) the intensifier precedes the adjective to indicate that it is not brutal revenge, but over-brutal revenge that invites retribution of the gods. In example (104), the directional satellite precedes the participle because it is the direction the dove took and not the fact that it went away that is the feature that distinguishes it from the other dove.

If the dependent constituent is somewhat less salient than the adjective or participle on which it depends, it is expressed in between the modifier and the noun (XDN). The difference between the DXN and the XDN pattern can be illustrated by examples (105) and (106):

(105) Παφλαγόνες δὲ ἐστρατεύοντο ἐπὶ μὲν τῆσι κεφαλῆσι κράνεα πεπλεγ-μένα ἔχοντες, ἀσπίδας δὲ σμικρὰς αἰχμάς τε οὐ μεγάλας, πρὸς δὲ ἀκόντια καὶ ἐγχειρίδια, περὶ δὲ τοὺς πόδας πέδιλα ἐπιχώρια ἐς μέσην κνήμην ἀνατείνοντα. Λίγυες δὲ καὶ Ματιηνοὶ καὶ Μαριανδυνοί τε καὶ Σύριοι τὴν αὐτὴν ἔχοντες Παφλαγόσι ἐστρατεύοντο· … Φρύγες δὲ **ἀγχοτάτω τῆς Παφλαγονικῆς σκευὴν** εἶχον, ὀλίγον παραλλάσσοντες.

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an Egyptian came into the marsh country and brought news to Psammetichos—for he had never before seen **men armoured in bronze** (lit. in bronze men armoured)—that men of bronze had come from the sea and were foraging in the plain') and Hdt. 6.137.4 (ἑωυτοὺς δὲ γενέσθαι **τοσούτῳ ἐκείνων ἄνδρας ἀμείνονας**, ὅσῳ … 'they were insofar better men than they (lit. insofar than they men better), that …'). In the first example, the postposition of the participle is probably inspired by the parallel with the χαλκέων ἀνδρῶν 'bronze men' from the oracular utterance. In the second example, the postposition of the adjective must be a consequence of the fact that the adjective ἀγαθός prefers to be postnominal when modifying the noun ἀνήρ, even if it expresses the most salient information of the NP (see section 3.3.1).

The Paphlagonians in the army had woven helmets on their heads, and small shields and short spears, and also javelins and daggers; they wore their native shoes that reach midway to the knee. The Ligyes and Matieni and Mariandyni and Syrians were equipped like the Paphlagonians. (...) The Phrygians had **equipment that was very similar to the Paphlagonian** (lit. very similar to the Paphlagonian equipment), with only a small difference.   (Hdt. 7.72.1–3)

(106)   ἄλλοι δὲ τῶν Ἰνδῶν Κασπατύρῳ τε πόλι καὶ τῇ Πακτυϊκῇ χώρῃ εἰσὶ πρόσοικοι, πρὸς ἄρκτου τε καὶ βορέω ἀνέμου κατοικημένοι τῶν ἄλλων Ἰνδῶν, οἳ **Βακτρίοισι παραπλησίην** ἔχουσι **δίαιταν**.

Other Indians dwell near the town of Kaspatyros and the Pactyic country, north of the rest of the other Indians; these have **a way of living that is very similar to the Baktrians** (lit. to the Baktrians very similar way of living).   (Hdt. 3.102.1)

In example (105) the XDN pattern is used because the adverb is the most salient element of the adverbial phrase: while the Ligyes, Matienoi, Mariandynoi and Syrians wear the same outfit as the Paphlagonians, the outfit of the Phrygians is only similar to that of the Paphlagonians. In example (106), by contrast, the dependent argument precedes the adjective, because it is the likeness to the Baktrians, more than the fact that there is a likeness Herodotus wants to inform us about.

   Besides arguments, intensifiers can also follow the adjective. A comparison between example (107) and example (103) will suffice to illustrate the difference between intensifiers that precede and intensifiers that follow the adjective. Whereas in example (103) the intensifier was preposed to stress that only *over*-brutal revenge invites retribution of the gods, in example (107) the intensifier has no such pragmatic marking. As a consequence, it is placed in the default, i.e. postposed, position:

(107)   οὗτος μέν νυν οὕτω δὴ ἔπρηξε διὰ ξεινικά τε νόμαια καὶ Ἑλληνικὰς ὁμιλίας· **πολλοῖσι** δὲ **κάρτα ἔτεσι** ὕστερον Σκύλης ὁ Ἀριαπείθεος ἔπαθε παραπλήσια τούτῳ.

This, then, was how he (= Anacharsis) fared, owing to his foreign ways and consorting with Greeks; and **a great many years** (lit. many very years) afterward, Skyles, son of Ariapithes, suffered a like fate.
                                                                          (Hdt. 4.77.2–78.1)

If the information value of the dependent constituent is so low that it can even be omitted without affecting the meaning of the sentence, it can be placed out of its proper domain after the noun:

(108) (= 63) ὑπὸ δὲ ἀπιστίης μὴ μὲν γενέσθαι μηδαμὰ **μέζονας ἀνθρώπους τῶν νῦν** ἄνοιξα αὐτὴν καὶ εἶδον τὸν νεκρὸν μήκεϊ ἴσον ἐόντα τῇ σορῷ.

Not believing that there had ever been **men taller than those now** (lit. taller men that the now), I opened it and saw that the corpse was just as long as the coffin.   (Hdt. 1.68.3)

(109) ὡς μέντοι Αἰγύπτιοι λέγουσι, οὐκ Ἄμασις ἦν ὁ ταῦτα παθών, ἀλλὰ ἄλλος τις τῶν Αἰγυπτίων ἔχων **τὴν αὐτὴν ἡλικίην Ἀμάσι**, τῷ λυμαινόμενοι Πέρσαι ἐδόκεον Ἀμάσι λυμαίνεσθαι.

The Egyptians say, however, that it was not Amasis to whom this was done, but another Egyptian of **the same age as Amasis**, whom the Persians abused thinking that they were abusing Amasis.   (Hdt. 3.16.5)

Both the standard of comparison in example (108) and the argument in (109) are so predictable on the basis of the context that the addressee would have come to the same interpretation of the sentence if they had not been expressed at all. Because of their very low information value, they are expressed after the far more salient adjective and noun.[66] The fact that intensifiers and degree adverbials do not occur in the XND pattern may be explained by the fact that their information value can never be so low as to be completely omittable.

As indicated above, the dependents on postnominal modifiers may occur in between (111 times) and after the combination of noun and adjective/participle (69 times). In the NDX pattern, the dependent is more salient than the following adjective or participle, whose meaning is often rather empty. One of the participles used frequently in this pattern, for instance, is the participle of γίγνομαι in its function as a copular verb (see example 110). Although the adjective in (111) is somewhat more meaningful, it still gives less salient information that the preceding genitive:

(110) πολλά τε γάρ μιν καὶ μεγάλα τὰ ἐπαείροντα καὶ ἐποτρύνοντα ἦν, πρῶτον μὲν ἡ γένεσις, τὸ δοκέειν πλέον τι εἶναι ἀνθρώπου, δεύτερα δὲ **ἡ εὐτυχίη ἡ κατὰ τοὺς πολέμους γενομένη·**

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[66] In section 3.3.1, I argued on the basis of this and a very comparable example that the fact that part of the adjectival phrase precedes and part of phrase follows the noun can be explained if we assume that the speaker wants the best of two worlds: the preposition of the salient part of the adjectival phrase satisfies the saliency principle, whereas the postposition of the other part of the phrase pleases the heaviness principle. As the overview of the various possible positions of dependents in this section clarifies, postposition of part of the modifier phrase (favoured by the heaviness principle) is only possible if that part of the modifier phrase has a very low information value.

For there were many weighty reasons that impelled and encouraged him to do so: first, his birth, because of which he seemed to be something more than mortal; and next, **his victories in his wars** (lit. the victories the in the wars being).   (Hdt. 1.204.2)[67]

(111) ταύτης μὲν πέρι τοσαῦτα ἔλεγον, πλὴν ὅτι αὐτήν μιν, ὡς τοῦτο ἐξέρ- γαστο, ῥῖψαι ἐς **οἴκημα σποδοῦ πλέον**, ὅκως ἀτιμώρητος γένηται.

This was all that the priests told of her, except that when she had done this she cast herself into **a chamber full of hot ashes** (lit. chamber of hot ashes full), to escape vengeance.   (Hdt. 2.100.4)

The NXD pattern, finally, occurs if the adjective or participle is more salient than the constituent that depends on it:[68]

(112) ἐπ᾽ αὐτοφώρῳ δὲ ἁλοὺς αὐτοῦ ἐν τῷ στρατοπέδῳ ἐπικατήμενος **χει- ρίδι πλέῃ ἀργυρίου**, ἔφυγε ἐκ Σπάρτης ὑπὸ δικαστήριον ὑπαχθείς, (. . .).

After being caught in the act of hoarding **a sleeve full of silver** there in the camp, he was brought before a court and banished from Sparta, (. . .).   (Hdt. 6.72.2)

(113) καὶ διαίτῃ ἀπὸ τούτου χρέωνται τῇ παλαιῇ τῶν Σαυροματέων αἱ γυ- ναῖκες, καὶ ἐπὶ θήρην ἐπ᾽ ἵππων ἐκφοιτῶσαι καὶ ἅμα τοῖσι ἀνδράσι καὶ χωρὶς τῶν ἀνδρῶν, καὶ ἐς πόλεμον φοιτῶσαι καὶ **στολὴν τὴν αὐτὴν τοῖσι ἀνδράσι** φορέουσαι.

Ever since then the women of the Sauromatae have followed their ancient ways; they ride out hunting, with their men or without them; they go to war, and dress the same as the men (lit. wear **equipment the same as the men**).   (Hdt. 4.116.2)

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[67] In fact, the participle in this example could have been left out altogether. The presence of the participle in cases like this can be explained by the fact that in contrast to a simple prepositional phrase or adverb a construction with a participle of γίγνομαι or εἰμί can express time and/or aspect. Nevertheless, in individual cases the difference between a simple prepositional phrase or adverb and a construction with a copular participle is difficult to account for, cf. Hdt. 1.186.1 (. . . **ἐπὶ τῶν πρότερον βασιλέων**, ὅκως τις ἐθέλοι ἐκ τοῦ ἑτέρου φάρσεος ἐς τοὔτερον διαβῆναι, χρῆν πλοίῳ διαβαίνειν, '. . . **in the days of the former rulers**, when one wanted to go from one part to the other, one had to cross in a boat') and Hdt. 2.23 (Ὅμηρον δὲ ἤ τινα **τῶν πρότερον γενομένων ποιητέων** δοκέω τοὔνομα εὑρόντα ἐς ποίησιν ἐσενείκασθαι, 'and I suppose that Homer or **some older poet** (lit. one of the earlier being poets) invented this name and brought it into his poetry').

[68] In this pattern, the participle of γίγνομαι also occurs, although less frequently. In these cases, the aspectual/temporal dimensions of the participle are more salient than the content of the dependent. Cf. Hdt 4.155.2 (Βάττος δὲ μετωνομάσθη, ἐπείτε ἐς Λιβύην ἀπίκετο, **ἀπό τε τοῦ χρηστηρίου τοῦ γενομένου ἐν Δελφοῖσι αὐτῷ** καὶ ἀπὸ τῆς τιμῆς τὴν ἔσχε τὴν ἐπωνυμίην ποιεύμενος. 'he changed his name to Battos on his coming

In example (112), the content of the glove Leutychides sits on is perfectly clear because of the preceding statement that he was bribed with a lot of silver. In example (113), the postposition of the dependent is not due to a higher information status of the adjective, but to the fact that the information expressed by the adjective is more relevant than the following dependent. Herodotus does not want to stress that the women of the Sauromatae wear the same clothes *as their husbands*, but that they wear the *same* clothes as their husbands.

If more than one constituent depends on the adjective or participle, the various possibilities can be combined, as examples (114) and (115) illustrate:

(114)   Ἀράβιοι δὲ σκευὴν μὲν εἶχον τὴν αὐτὴν καὶ ἐν τῷ πεζῷ, ἤλαυνον δὲ πάντες **καμήλους ταχυτῆτι οὐ λειπομένας ἵππων**.

The Arabians had the same equipment as the men of their infantry, and all of them rode on **camels no less swift than horses** (lit. camels in speed not lagging behind horses).   (Hdt. 7.86.2)

(115)   ἐν δὲ τῷ Ἰσθμῷ ἦσαν ἁλισμένοι πρόβουλοι τῆς Ἑλλάδος ἀραιρημένοι **ἀπὸ τῶν πολίων τῶν τὰ ἀμείνω φρονεουσέων περὶ τὴν Ἑλλάδα**.

On the Isthmus men chosen **from the cities that were best disposed towards Hellas** (lit. from the cities the best disposed towards Hellas) were assembled in council for the Greek cause.   (Hdt. 7.172.1)

In (114), the dative precedes the participle to indicate that it is on this very point of comparison that the camels were not lagging behind the other riding animals. The genitive, by contrast, expressing the rather obvious riding animals to which the camels are compared, is postposed. The same pattern is found in (115): τὰ ἀμείνω precedes and περὶ τὴν Ἑλλάδα follows the participle. While the former dependent expresses the point of contrast with the pro-Persians cities, the latter provides rather obvious information.

Although the various possibilities for the position of the dependent constituents on pre- and postnominal modifiers have been discussed separately, it will be clear that in both cases the position of the dependent constituent is determined by the pragmatic principle that the more salient the information, the further to the left it is expressed. Apart from this similarity, there is one striking difference. Postnominal modifiers, both adjectives and participles, are much more frequently

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to Libya, taking this new name **because of the oracle given to him at Delphi** and the honourable office that he received').

accompanied by a dependent constituent than prenominal ones.[69] Partly, this higher number of postnominal adjectival and participle phrases may be explained by the fact that heavy constituents tend to be postnominal.[70] In example (115), for instance, the presence of two dependent constituents will have caused the adjectival phrase to be expressed after the less salient noun. However, for the greater part of the postnominal modifiers with dependent constituents the reason they follow the noun is not the fact that they are heavy, but (as usual) that the information they express is less salient than that of the preceding noun (cf. examples 110–112). Apparently, complex adjectival and participle phrases are less likely to be salient modifiers than simple ones.

3.7. Conclusion

In this chapter, I argued that word order in single-modifier NPs is mainly determined by pragmatics. Modifiers (even postpositive possessives and relative clauses) precede the noun if they are pragmatically marked, but follow the noun if they lack pragmatic marking *or* if it is the noun that is marked. Pragmatic marking is understood to mean that the marked constituent is implicitly or explicitly contrastive, or otherwise the most salient element of the NP. Although it is highly dependent on the context what makes a constituent the most salient element of the NP, two subgroups were distinguished: the constituent may be the most salient element of the NP because it provides the addressee with the most informative part of the NP, or it may be most salient because the author assumes the information it expresses to be the most relevant in view of the message he wants to convey. The saliency of the constituents was argued to be also responsible for the word order in 'double contrastive' NPs. The choice for a parallel (N_1-X_1, N_2-X_2) or chiastic ordering (N_1-X_1, X_2-N_2)

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[69] In my corpus, there are 17 indefinite NPs with a prenominal adjective accompanied by a dependent constituent and 4 indefinite NPs with a participle clause with one or more dependents. That is 2 % and 44 % of the total number of indefinite NPs with a prenominal adjective and participle respectively. For indefinite NPs with a postnominal adjective or participle, these numbers are 5 % (66 NPs) and 60 % (46 NPs). For definite NPs the proportion is even more unbalanced: there are 86 definite NPs with a prenominal modifier accompanied by one or more dependent constituents versus 90 postnominal ones. This implies that 12 % of the prenominal adjectival and participial modifiers is modified by a dependent constituent versus 30 % of the postnominal ones.

[70] For the influence of the heaviness principle on the ordering of the NP, see section 3.3.1.

was argued not to depend on the author's preference for the one or the other construction, but on the information structure of the NPs.

The sections 3.3.1 and 3.4 discussed exceptions to the general rule that the most salient element is expressed first. If the adjective ἀγαθός modifies the noun ἀνήρ or if the modifier is heavy (i.e. complex) the saliency principle may be overridden in that the modifier is postnominal although it is the most salient element of the NP. The postposition of these modifiers is a tendency and not a strict rule, which may be explained if we assume that the saliency principle, on the one hand, and the principles preferring heavy modifiers and ἀγαθός to be postnominal, on the other, are competing motivations with varying success. The third exception results from a conflict between word order principles at the level of the NP and those at the level of the clause. In my corpus, a constituent of the NP that has topic function at the level of the clause is always expressed at the very beginning of the clause, irrespective of the saliency of the constituent at the level of the NP.

Section 3.5 paid attention to a few particular modifiers, not because these modifiers do not observe the previously mentioned word order rules, but because it is more difficult to see *that* these modifiers conform to the rules. First of all, it was argued that there is no reason to suppose that in the case of adjectives semantics influences the position of the modifier. Subsequently, it was argued that, against our expectations on the basis of Wackernagel's Law, even the position of 'postpositive possessives' is mainly determined by pragmatics. Next, the difference between pre- and postnominal demonstratives in NPs after so-called first mentions and digressions was analysed and finally, it was argued that so-called relative clauses with incorporated antecedent should be analysed as NPs with a prenominal relative clause.

The last section discussed the position of constituents that depend on adjectival and participial modifiers, like degree adverbials (*very* rich) and arguments (full of *sunlight*). These constituents may occur before, in between or after the combination of the modifier and the noun. The actual position they take turned out to be dependent on the same principles that determine the position of the modifiers on which they depend.

Besides the exceptional cases discussed in the sections 3.3.1 and 3.4 that could be accounted for on the basis of other ordering principles (e.g. the heaviness principle, word order rules at the level of the clause), 3 % of the NPs in my sample is problematic, spread almost equally among pre- and postnominal modifiers (see Table 4):

modifier	prenominal		postnominal	
	indefinite	definite	indefinite	definite
adjective (A)	7 (1%)	3 (1%)	20 (1%)	4 (3%)
adverb	—	0	—	0
participle (PTC)	0	12 (6%)	3 (4%)	4 (3%)
prepositional phrase (PP)	—	3 (2%)	—	3 (5%)
genitive (GEN)	11 (4%)	30 (5%)	15 (4%)	12 (3%)
possessive (pos)	3 (8%)	25 (10%)	2 (4%)	6 (2%)
numeral (num)	27 (7%)	0	10 (4%)	0
demonstrative (dem)	2 (40%)	14 (3%)	1 (3%)	9 (3%)
relative clause (rel)	—	3 (7%)	1 (2%)	7 (5%)
total	50 (3%)	90 (4%)	52 (3%)	45 (3%)

Table 4. The number of problematic cases

In general, these low numbers do not give cause for concern.[71] In the
case of possessives, however, the relatively high number of problematic
cases does seem to be alarming: in both definite and indefinite NPs with
a prenominal possessive, about 10% of the modifiers does not seem
to be contrastive or otherwise the most salient element of the NP, so
that a postnominal modifier would have been more in line with the
expectations. Two of the problematic cases are (116) and (117):[72]

(116)   ὡς δὲ οὕτω νενομίκασι τὰ περὶ τοὺς νόμους οἱ πάντες ἄνθρωποι, πολ-
        λοῖσί τε καὶ ἄλλοισι τεκμηρίοισι πάρεστι σταθμώσασθαι, ἐν δὲ δὴ καὶ
        τῷδε· Δαρεῖος **ἐπὶ τῆς ἑωυτοῦ ἀρχῆς** καλέσας Ἑλλήνων τοὺς παρ-
        εόντας εἴρετο ἐπὶ κόσῳ ἂν χρήματι βουλοίατο τοὺς πατέρας ἀποθνῄ-
        σκοντας κατασιτέεσθαι·

        I will give this one proof among many from which it may be inferred that
        all men hold this belief about their customs. **During his own reign** (lit.
        during the of himself reign) Dareios summoned the Greeks who were
        with him and asked them for what price they would eat their fathers'
        dead bodies.   (Hdt. 3.38.2–3)

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[71] The number of problematic demonstratives seems unacceptable high (40%), but is
statistically irrelevant because of the very low number (viz. 10) of prenominal demon-
stratives in indefinite NPs. The same holds true, although to a lesser degree, for prenom-
inal relatives in definite NPs (3 of the 46 examples does not conform to the ordering
principles).

[72] Other problematic cases can be found at: Hdt. 1.68.5 τὴν ἑωυτοῦ συμφορήν, 1.109.1
τῇ ἑωυτοῦ γυναικί, 1.110.1 ἑωυτοῦ συνδούλῃ, 1.123.3 τὴν ἑωυτοῦ γνώμην, 2.8.1 αὐτοῦ
τὰ τέρματα, 4.3.4 ἡμέτεροι δοῦλοι, 4.162.1 τοῦ τούτου παιδός, 4.172.2 αὐτέων τὴν
μεῖξιν, 5.47.2 διὰ τὸ ἑωυτοῦ κάλλος, 6.95.1 τοῖσι ἑωυτοῦ δασμοφόροισι, 7.120.1 ἐς τὰ
σφέτερα ἱρά and 7.147.3 ἐς τοὺς σοὺς πολεμίους.

(117) εἰ γὰρ πρότερον εἶναι δημότης, ἀλλ᾽ ἐν τῷ παρεόντι εἶναι **αὐτῶν βασι-
λεύς·**

For before he was a common man, but now he was their king (lit. of them king).   (Hdt. 2.172.5)

I cannot explain what triggers the preposition of the possessives in example (116) and (117), or what causes the relatively large number of non-salient prenominal possessives in general. More data are needed to answer the question of whether possessives do indeed behave differently from other modifiers and, if so, in which respect.

In comparison to possessives, prenominal numerals and participles are less problematic in that they only display a relatively high number of problematic cases in definite *or* indefinite NPs. In the case of numerals, the high number of problematic cases is mainly caused by numerals in indefinite NPs giving expression to (a length of) time. As discussed in footnote 17 of this chapter, a numeral in this kind of NP is frequently prenominal even if it is not contrastive or salient, nor evident that the NP will give expression to a measure. Neither the reason for the preposition of the numeral in these cases (cf. example 118), nor the difference with similar NPs with postnominal numerals (cf. example 119) has become clear to me:

(118) μετὰ δὲ **ἑκκαίδεκα ἔτεα** τὰ πάντα ἄρξας τελευτᾷ, τῷ παιδὶ ψάμμι παραδοὺς τὴν ἀρχήν.

Then he died after a reign of **sixteen years**, and his son Psammis reigned in his place.   (Hdt. 2.159.3)

(119) τὸν μὲν δὴ τυφλὸν τοῦτον οἴχεσθαι φεύγοντα ἐς τὰ ἕλεα, τὸν δὲ Αἰθίοπα βασιλεύειν Αἰγύπτου **ἐπ᾽ ἔτεα πεντήκοντα**, ἐν τοῖσι αὐτὸν τάδε ἀποδέξασθαι.

The blind man fled to the marshes, and the Ethiopian ruled Egypt **for fifty years** (lit. for years fifty), during which he distinguished himself for the following.   (Hdt. 2.137.2)

Similarly, I have no explanation for the relatively frequent preposition of non-salient participles, neither for the general phenomenon, nor for the individual examples. I do not know, for instance, how to explain the preposition of the participle in example (120), for there is no contrast with other gifts, nor any reason why the promised state of the gifts would deserve special attention.

(120) Xerxes promised that the Persian who would come with the best-equipped army would receive most precious gifts.

(…) αὐτίκα πᾶς ἀνὴρ ἐς τὴν ἀρχὴν τὴν ἑωυτοῦ ἀπελάσας εἶχε προθυ-μίην πᾶσαν ἐπὶ τοῖσι εἰρημένοισι, θέλων αὐτὸς ἕκαστος **τὰ προκείμενα δῶρα** λαβεῖν, (…).

(…) and immediately every man (of the Persians) rode away to his own province and used all zeal to fulfil the king's command, each desiring to get **the promised gifts**, (…).   (Hdt. 7.19.2)

By way of conclusion, it should be stressed that despite these problematic cases the overwhelming majority of my data fits perfectly well into the picture described in the previous sections. In 97 % of the NPs in my corpus, the most salient element of the NP is expressed first, irrespective of the type or semantics of the modifier, unless word order rules at the level of the sentence or the heaviness of the constituent urge otherwise. This very high percentage seem to be a very strong indication that it is pragmatics, in combination with the heaviness principle, that determines the position of the modifier in the Ancient Greek NP, not semantics, nor style. This is not to say, however, that in the remaining 3 % of the NPs in my corpus, style and (given the fact that some modifiers tend to be more problematic that others) perhaps even semantics may not influence their position. However, due to the low number of and variation in the problematic cases I have not been able to find out what exactly determines the position of the modifier in these examples.

WORD ORDER IN MULTIPLE-MODIFIER NPS

4.1. *Introduction: an overview of the*
literature on the order of modifiers

Regarding the ordering of the constituents in multiple-modifier NPs, the grammars only observe that everything is possible. Smyth (1956: 294), for instance, describes the various possibilities in the following way:

(1)   Two or more attributives of a substantive are variously placed: (1) εἰς τὰς ἄλλας Ἀρκαδικὰς πόλεις *to the other Arcadian cities* X. H. 7.4.38. (2) τὸ ἐν Ἀρκαδίᾳ τὸ τοῦ Διὸς τοῦ Λυκαίου ἱερόν *the sanctuary of Lycean Zeus in Arcadia* P.R.565d. (3) ἐς τὸν ἐπὶ τῷ στόματι τοῦ λιμένος στενοῦ ὄντος τὸν ἕτερον πύργον *to the other tower at the mouth of the harbour which was narrow* T. 8.90. (4) ἐν τῇ οἰκίᾳ τῇ Χαρμίδου τῇ παρὰ τὸ Ὀλυμπιεῖον *in the house of Charmides by the Olympieion* And. 1.16. (5) ἀπὸ τῶν ἐν τῇ Ἀσίᾳ πόλεων Ἑλληνίδων *from the Greek cities in Asia* X. H. 4.3.15. (6) πρὸς τὴν ἐκ τῆς Σικελίας τῶν Ἀθηναίων μεγάλην κακοπραγίαν *with regard to the great failure of the Athenians in Sicily* T. 8.2. (7) τὸ τεῖχος τὸ μακρὸν τὸ νότιον *the long southern wall* And. 3.7.

The other grammars describe, in similar terms, how the modifiers can all precede or follow the noun, or partially precede and partially follow the noun, and that each of them can or cannot be preceded by an article (cf. Gildersleeve 1900: 328 ff., Goodwin 1879: 210, Kühner-Gerth 1904: I 621–622). Regardless of how true these observations may be, they immediately raise the question of what determines the various possible arrangements. This question, however, has never been dealt with.

The order of multiple modifiers has received very little attention, not only regarding Ancient Greek, but also regarding other (Indo-European) languages. And if grammars discuss this topic, they discuss how the various modifiers are ordered, not why (cf. Quirk et al. 1985, Haeseryn et al. 1997 and Biber et al. 1999). This lack of attention may be a consequence of the fact that in most Indo-European languages the order of multiple modifiers is rather fixed. Fixed orderings evoke perhaps less need for understanding of the principles behind the ordering than flexible ones. This idea is supported by the fact that there *is* discussion on that aspect of

word order in which most Indo-European languages do allow variation, viz. the order of multiple adjectives.

In most publications that discuss adjective order, the semantics of the adjectives is presented as the main factor determining their ordering, although phonological and pragmatic factors (like euphony, idiomacy and emphasis) are generally thought to have some influence as well.[1] The publications do not agree, however, on the nature of the semantic factor that is responsible for the order of the adjectives.[2] Biber et al. (1999) argue that (English) adjectives expressing inherent features have to stand closer to the noun than those expressing non-inherent features (e.g. a new red ball). Martin (1969), Posner (1986) and Sproat and Shih (1988), on the other hand, assume that the crucial factor for adjective ordering is their (in)dependence on comparison (i.e. the degree in which recognition of the feature asks for comparison with other objects).[3] They argue that the less dependent on comparison, the nearer the adjective is placed to the noun. Hetzron (1978) and Risselada (1984), in their turn, suppose that the subjectivity/objectivity of the adjectives controls their position: the more objective the quality expressed by the adjective (i.e. the more a matter of recognition instead of opinion), the closer to the noun it has to be expressed (e.g. a nice green shirt, *a green nice shirt). Wulff (2003), finally, concludes on the basis of a statistical corpus analysis that various factors affect adjective ordering, of which (in)dependence on comparison, affective load[4] and the subjectivity/objectivity of the adjective are most influential.

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[1] For the influence of these other factors on the order of adjectives, see De Jong (1983), Hetzron (1978: 175–178), Risselada (1984: 224) and Wulff (2003: 251–256 and 266–270).

[2] In some publications, the semantic factor on which the classification is based is left implicit. Dixon (1977), for instance, sets up a detailed classification of adjectives, but does not discuss the principle behind this classification. Fries (1986) is also not very explicit on the semantic factor that determines the order of adjectives in his corpus. In his conclusion, he states that the closer the adjective stands to the noun, the closer in meaning it is to the noun, but what is meant by being closer in meaning remains undiscussed.

[3] The difference between adjectives that are and those that are not dependent on comparison can be illustrated by the following examples. The identification of a *red bag* in a set of bags need not be preceded by a comparison of the colours of the various bags. Perceiving the *red bag* alone suffices. A *heavy bag*, by contrast, can only be selected out of a set of bags by comparing the weight of the various bags. Therefore, Martin and Posner name *red* independent from comparison, and *heavy* dependent. Sproat and Shih (1988), by contrast, describe the same difference in terms of 'apparentness': an adjective like *red* is more and an adjective like *heavy* is less apparent.

[4] The affective load of the adjective is understood to be the (possible) positive or negative connotation of the adjective (possible in that the adjective can also be neutral

Whether these various semantic factors are or are not responsible for the ordering of adjectives in one or more languages, it is evident that most of them cannot determine the order of NP modifiers in general, simply because they are not applicable to all types of modifier. It is, for instance, difficult to speak of the subjectivity/objectivity, (in)dependence on comparison or affective load of genitives, prepositional phrases and numerals. The only semantic criterion mentioned above that may influence the position of all types of modifiers is the inherence of the feature they express. Although Rijkhoff (2002) himself does not present it as such, one might say that the various categories he distinguishes in his NP model differ exactly in this respect.

As described in detail in Chapter 2, section 2.3.1, Rijkhoff distinguishes five types of modifiers,[5] which are centripetally ordered around the noun (cf. example 2 below).[6] Classifying modifiers, which specify which kind of entity the head noun refers to (e.g. *a corporate lawyer*), stand as close as possible to the noun. Qualifying modifiers, which specify inherent features of the referent (e.g. colour, size, age), are placed at greater distance from the noun. The next layer is the appropriate position for modifiers indicating quantity, like numerals. Localising modifiers, subsequently, which give information on the location of the referent (spatial location, location in time or possession) are placed in the final descriptive layer. Discourse modifiers, finally, which give information on the referential status of the referent, are placed at the utmost left or right position:[7]

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as to the affective load). *Fantastic*, for instance, has a positive load, whereas *painful* has a negative connotation. On the basis of the statistic analysis of her data, Wulff (2003: 266) concludes that positively loaded adjectives marginally significantly more often precede negatively loaded adjectives than *vice versa*.

  [5] By setting up an ordering of five types of modifiers rather than an ordering of adjectives, numerals, genitives, demonstratives, etc. themselves, Rijkhoff obviates the problem that the same modifier can fulfil several functions and that the same function can be fulfilled by various modifiers. Adjectives, for instance, are typically qualifying modifiers expressing an inherent feature of the referent. Nevertheless, they may be used to indicate frequency (e.g. his *frequent/weekly/annual* visits) or time (e.g. the *future* king, my *previous* job), in which cases they should be analysed as quantifying and localising modifiers respectively (examples were taken from Keizer 2004). On the other hand, quality—typically expressed by an adjective—may also be expressed by a relative clause, which typically expresses locality (e.g. he gave her a ring *that was actually rather cheap*).

  [6] A detailed overview of the five types of modifiers distinguished by Rijkhoff can be found in Chapter 2, section 2.3.1.

  [7] Rijkhoff repeatedly emphasises, however, that this universally preferred order of modifiers only applies to 'simple' modifiers. The position of embedded modifiers, i.e.

(2)   [discourse [locality [quantity [quality [kind [N] kind] quality] quantity] locality] discourse][8]

Despite major differences in the scope of the research, the methodology used and the exact conclusion arrived at, Rijkhoff and the above-mentioned studies on adjective ordering both assume that the position of NP modifiers depends on their semantics. Seiler (1978 and 1985), on the other hand, attempts a different approach. In his view, it is not the meaning, but rather the function of the modifier that is decisive for its position.[9] On the basis of his study of the position of prenominal modifiers in German, he concludes that NPs are ordered from more *referenz-festlegende* modifiers on the left to more *inhaltfestlegende* modifiers on the right. Whereas adjectives are expressed close to the noun because they characterise the referent, demonstratives are placed at the other end of the continuum, as their main function is to specify the reference. Seiler illustrates the influence of the function of the modifier on its position by the following two examples:

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modifiers which contain a noun themselves, is harder to predict because of competing motivations (see Chapter 2, section 2.3.1). However, even though the complexity of the modifier may have some influence on its position, it is still the semantic type of the modifier that is—on the whole—most influential in Rijkhoff's NP model.

   [8] It should be remembered that Rijkhoff's NP model is a semantic and not a syntactic model of the NP. Nevertheless, it has some predictive value for the internal syntax of the NP because of the *principle of scope* that says the semantic distance of the modifier in relation to the head noun is iconically reflected in the actual linguistic expression. Rijkhoff's two other principles that may influence the position of the modifiers in the actual linguistic expression (i.e. the *principle of head proximity* and the *principle of domain integrity*) are discussed in Chapter 2, section 2.3.1.

   [9] For a very similar approach, see Fugier and Corbin (1977) and Fugier (1983). According to Fugier and Corbin, Latin modifiers have to be divided in identifying ('déterminatives') and qualifying modifiers ('qualificatives'). While the former help to identify the referent by specifying the reference (e.g. *populus Romanus* [as opposed to *populus Albanus*]), the latter attribute a quality to the head of the NP (e.g. *hortus pulcher*). This difference in function is reflected in some syntactic differences, for instance the fact that identifying modifiers are expressed in the periphery of the noun, while qualifying modifiers may be expressed at greater distance from the noun (cf. *gentes Africae vagae* and *populus Romanus imperiosus*). Although Devine and Stephens (2006: 476) provide a semantic motivation for the ordering of Latin adjectives (viz. that extensional, subjective and narrowly applicable adjectives are farther from the noun than intensional, objective and more broadly applicable adjectives), their view is eventually very similar to that of Fugier and Corbin; for Devine and Stephens explain their semantic motivation by arguing that it is simply more natural for a speaker to identify the set of entities he is talking about first and then to evaluate these entities. Risselada (1984: 206–207) offers some counterexamples to the view that qualifying or evaluating modifiers are placed farther from the noun than identifying modifiers.

(3a)   die drei heiligen Könige 'the three holy kings'

(3b)   die heiligen drei Könige 'the (three) Magi' (i.e. the three wise men from
        the East)

Regarding these examples, Seiler (1978: 313 en 1985: 440) observes that
(3a) is the usual order of the modifiers article, numeral and adjective. The
NP refers to some arbitrary kings, whose number happens to be three. In
(3b), by contrast, the number is characteristic for the kings in question.
As a consequence, the numeral is expressed at closer distance to the noun.

     However, in Seiler's schematic overview of prenominal modifiers in
German, the idea that the function of the modifier is decisive for its
position seems to have been discarded, as the modifiers are ordered on
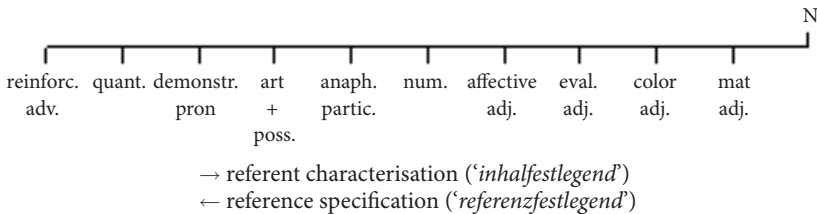the basis of their semantics:

→ referent characterisation ('*inhalfestlegend*')
← reference specification ('*referenzfestlegend*')

Figure 1. Seiler's schematic overview of prenominal modifiers

Although his examples on the three kings showed that there is no one-
to-one relation between the form of the modifier and its function (in the
(a)-example the adjective and in the (b)-example the numeral was more
'*inhaltsfestlegend*'), Seiler places the various modifiers at a fixed position
in the NP on the basis of their meaning instead of their function in a
particular context. Even though the position can be defended that some
modifiers are by nature more suitable for characterising the referent or
specifying the reference, this scheme undoes the whole argument on the
importance of the function of the modifier.

     Although the basic assumptions of Rijkhoff's semantic NP model seem
more promising than those of Seiler's continuum of more *inhalts-* to
more *referenzfestlegende* modifiers,[10] there are also several shortcomings
attached to Rijkhoff's approach. These will be discussed in the next
section on the basis of my Greek data.

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[10] I will argue in Chapter 6, however, that the difference between *Inhaltfestlegende* and
referenzfestlegende modifiers, although it does not influence the position of the modifiers
in the Ancient Greek NP, does affect their articulation.

4.2. *Word order in multiple-modifier NPs*

This section discusses word order in the Greek NP with multiple modifiers, irrespective of their form (adjectival, participial, genitival, etc.), number and the presence or absence of the article before the noun and before the various modifiers.[11] But before switching to word order in multiple-modifier NPs in Greek, I will first (in section 4.2.1) discuss two general problematic aspects of Rijkhoff's model, which I encountered while analysing my data. Having discussed these two shortcomings of Rijkhoff's model, I will turn to the order of the modifiers in Greek. For the sake of presentation, the description of the data has been divided into three subsections: word order in NPs with multiple prenominal modifiers (4.2.2.1), NPs with multiple postnominal modifiers (4.2.2.2) and NPs with pre- and postnominal modifiers (4.2.2.3). In all these subsections, I will argue that in Ancient Greek word order in multiple-modifier NPs is not determined by the semantics or function of the modifiers, as Rijkhoff (2002) claims, but—like in single-modifier NPs—by the saliency of the various constituents.

4.2.1. *Two criticisms of Rijkhoff's NP model*

If one uses Rijkhoff's NP model to analyse the NPs in some corpus, it soon turns out to be a bit oversimplified. Although models by definition simplify the actual practice, they should not bend it. In two respects, however, Rijkhoff's NP model is such a simplification, that it is, in my view, questionable whether it is still an adequate model of the noun phrase.

The first problem concerns the division of modifiers into the five categories classifying, qualifying, quantifying, localising and discourse modifiers. However clear and well-defined this division might seem, it is in practice often hard, if not impossible, to class each modifier under its proper category.[12] Genitives and relative clauses turn out to be especially problematic. Examples (4)–(7) present four of the many problematic genitives:

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[11] This section, however, does not discuss word order in NPs with an overt coordinator. These will be discussed separately in section 4.3.

[12] The classificational problems are not confined to the Greek language, as appears from Keizer's (2004: 12–13) English examples of modifiers that cannot be classified under one of Rijkhoff's categories. She seems a bit too critical, however, when she

(4)   πρὶν δὲ **τῆς ὁδοῦ τὸ πέμπτον μέρος** διεληλυθέναι τὴν στρατιήν, (…).

But before his army had accomplished **the fifth part of their journey** (lit. of the journey the fifth part), (…).   (Hdt. 3.25.4)

(5)   μαχομένων δέ σφεων ἐπὶ χρόνον **τέλος τοιόνδε** ἐγένετο **τῆς μάχης**.

They fought for a long time and the end of the battle was as I will now tell (lit. there was **end such of the battle**).   (Hdt. 9.22.1)

(6)   **κατὰ** μὲν δὴ **τὴν Κροίσου** τε **ἀρχὴν** καὶ Ἰωνίης **τὴν πρώτην κατα-στροφὴν** ἔσχε οὕτω.

Such are the facts **about Kroisos' rule** (lit. the of Kroisos rule), and **the first overthrow of Ionia** (lit. of Ionia the first overthrow). (Hdt. 1.92.1)

(7)   (…), **οὐδεμίαν ὑμέων** ἔχω **ἐλπίδα** μὴ οὐ δώσειν ὑμέας δίκην βασιλέϊ τῆς ἀποστάσιος.

(…), I have **no hope for you** (lit. no for you hope) that you won't pay the penalty to the king for your rebellion.   (Hdt. 6.11.2)

None of the highlighted genitives in examples (4)–(7) can successfully be classified under one of Rijkhoff's categories, as they do not give information on the kind, quality, quantity or location of the referent, nor on its discourse status. The general characteristic of these five genitives is that they express an obligatory addition to the noun. In examples (4) and (5), the nouns need a complement that indicates *of what* the soldiers accomplished a part and *of what* the end was as Herodotus will tell.[13] The genitives τῆς ὁδοῦ and τῆς μάχης provide this complement. The genitives in examples (6) and (7), on the other hand, are obligatory in that they give expression to an argument of the derivational noun.[14] The genitives in (6) express the subject and object of (the SoA which is expressed by) their nouns, whereas the genitive in example (7) expresses the beneficiary of the ἐλπίδα. To do justice to the existence of complements and arguments,

criticises Rijkhoff that adjectives need not be qualifying, but can also be quantifying (e.g. *his frequent/regular/weekly/annual visits*) and localising (e.g. *my previous job, a recent proposal, the future king*) (Keizer 2004: 12). Although Rijkhoff assumes adjectives are basically qualifying modifiers, he repeatedly stresses that there is no one-to-one relation between form and function, so that one type of modifier can have various functions and one function can be expressed by various modifiers (see, for instance, Rijkhoff 2002: 173).

[13] Nouns like μέρος and τέλος are generally called relational nouns, because their referent always stands in a certain relationship to another object.

[14] A derivational noun is a noun that is derived from a verb (e.g. *the observation* from the verb *to observe*). In the traditional Greek and Latin grammars, the genitives that give expression to the subject or object of a derivational noun are called subjective and objective genitives.

Rijkhoff's NP model should be extended with an additional layer, placed in between the noun and the classifying modifiers, as the semantic bond between nouns and their complements or arguments is even closer than that between nouns and classifying modifiers.[15]

Although the addition of an additional layer for arguments may solve most of the problems with genitives,[16] this solution is not helpful for the classification of relative clauses. According to Rijkhoff, relative clauses are typically localising modifiers, as their basic function is locating the referent in time. Whether this is indeed the basic function of relative clauses can be doubted by the fact that the majority of the relative clauses in my corpus contains a generic present, which—by its very nature—does not locate the referent at a specific point in time:

(8)   ἐνδεδύκασι δὲ **κιθῶνας λινέους περὶ τὰ σκέλεα θυσανωτούς, τοὺς**
        καλέουσι καλασίρις·

        They wear **linen tunics with fringes hanging about the legs, which they**
        call 'kalasiris' (lit. tunics linen about the legs with fringes, which they
        name kalasiris).   (Hdt. 2.81.1)

(9)   Δαρεῖος δὲ ἐνθεῦτεν ὁρμηθεὶς ἀπίκετο **ἐπ' ἄλλον ποταμὸν τῷ οὔνομα**
        Ἀρτησκός ἐστι, ὃς διὰ Ὀδρυσέων ῥέει.

        From there, Dareios set out and came **to another river called Arteskos,**
        which flows through the country of the Odrysae (lit. to other river to
        which as a name Arteskos is, which through of Odrysae flows).
                                                              (Hdt. 4.92)[17]

But even if the relative clause contains a verb that does locate the SoA at a specific point in time, it is difficult to maintain that the relative clause serves to locate the referent at this point. It is highly unlikely, for instance, that the function of the relative clauses in (10) and (11) is to place the child and woman in question in the past:

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[15] For arguments in the term structure in FG, see Mackenzie (1983 en 1987) and Keizer (2004). Keizer criticises Rijkhoff (among other things) for not acknowledging arguments at the term level, but does not put forward suggestions for the position of these arguments in Rijkhoff's NP model. Incidentally, it should be noted that Rijkhoff (2002: 19) explicitly indicates that his model is only concerned with NPs referring to entities and that NPs referring to SoA's (i.e. the observation) and propositions (i.e. the idea) are left out of consideration. This does not alter the fact that a proper model of the NP should also accommodate arguments and complements.

[16] It is important to note that whereas Greek tends to express arguments of the noun in the genitive case, other languages may choose other solutions. In English, for example, the argument in example (7) is expressed by a prepositional phrase ('for you').

[17] For the analysis of 'name' as an adjunct rather than the subject of the relative clause, see Chapter 5, section 5.4.2.

(10)   χρόνου δὲ περιόντος ἐξεγένετό οἱ **παῖς ἰσχόφωνος καὶ τραυλός, τῷ οὔνομα ἐτέθη Βάττος, ὡς Θηραῖοί τε καὶ Κυρηναῖοι λέγουσι, ὡς μέντοι ἐγὼ δοκέω, ἄλλο τι**

In time, **a son of weak and stammering speech** was born to him, **to whom he gave the name Battos, as the Theraeans and Cyrenaeans say; but in my opinion the boy was given some other name** (lit. son weak-voiced and stammering, to whom was as a name given Battos, as Theraeans and Cyrenaeans say, but as I believe, other some).

(Hdt. 4.155.1)

(11)   τὰς μητέρας ἐξελόντες **γυναῖκα** ἕκαστος **μίαν** προσεξαιρέετο **τὴν ἐβούλετο** ἐκ τῶν ἑωυτοῦ οἰκίων, τὰς δὲ λοιπὰς ἀπάσας συναγαγόντες ἀπέπνιξαν·

Sending away all the mothers, each chose **one woman, whomever he liked** (lit. woman one whom he wanted) of his domestics; as for the rest, they gathered them together and strangled them.   (Hdt. 3.150.2)

Keizer's (2004: 13) view that a relative clause serves to relate the referent of the head noun to some state of affairs seems much more attractive to me, but presents the problem that relative clauses no longer fit into Rijkhoff's NP model, as 'relating the referent to some state of affairs' cannot be subsumed under a semantic category like 'qualifying' or 'localising'.

Besides revealing classificational problems with the genitives and relative clauses, the analysis of my data shows that Rijkhoff's NP model draws too sharp a distinction between descriptive and discourse modifiers. According to Rijkhoff, descriptive modifiers describe the properties of the entity referred to and discourse modifiers are concerned with the referent as a discourse entity. In my corpus, however, there are countless examples of modifiers that give both descriptive information and information on the discourse status of the referent. These modifiers combine a descriptive and discourse function by clarifying which referent is referred to by describing a property of the referent. Examples (12)–(14) provide some examples of these 'combining modifiers' in multiple-modifier NPs:

(12)   ἐκ τούτων δὲ τῶν λίθων ἔφασαν τὴν πυραμίδα οἰκοδομηθῆναι τὴν ἐν μέσῳ τῶν τριῶν ἑστηκυῖαν, **ἔμπροσθε τῆς μεγάλης πυραμίδος, τῆς ἐστι τὸ κῶλον ἕκαστον ὅλου καὶ ἡμίσεος πλέθρου**.

And of these stones they said the pyramid was built that stands midmost of the three, **over against the great pyramid, of which each side measures one and a half plethron** (lit. before the great pyramid, of which is the side every one and half plethron).   (Hdt. 2.126.2)

(13)   (...) παρ᾽ Αἰγυπτίοισι δὲ Πὰν μὲν ἀρχαιότατος καὶ **τῶν ὀκτὼ τῶν πρώτων λεγομένων θεῶν**, Ἡρακλέης δὲ τῶν δευτέρων τῶν δυώδεκα λεγομένων εἶναι, (...).

    (...) but in Egypt, Pan is the most ancient of these and is one **of the eight gods who are said to be the earliest of all** (lit. of the eight the first said gods); Herakles belongs to the second dynasty (that of the so-called twelve gods), (...).   (Hdt. 2.145.1)

(14)   ὁ δὲ ναυτικὸς στρατὸς ὁ Περσέων (...) τῷ δευτέρῳ ἔτεϊ ὡς ἀνέπλωσε, αἱρέει εὐπετέως τὰς νήσους τὰς πρὸς τῇ ἠπείρῳ κειμένας, Χίον καὶ Λέσβον καὶ Τένεδον. (...) αἵρεον δὲ καὶ **τὰς ἐν τῇ ἠπείρῳ πόλις τὰς Ἰάδας** κατὰ ταὐτά, (...).

    The Persian fleet (...) putting out to sea in the next year easily subdued the islands that lie off the mainland, Chios and Lesbos and Tenedos. (...) They also captured **the Ionian cities of the mainland** (lit. the on the mainland cities the Ionian) in the same way (...).   (Hdt. 6.31.1–2)

In example (12), the adjective μεγάλης 'big' is not only descriptive in that it gives qualifying information on the referent of the noun (the pyramid), but also has a discourse function. By attributing a quality to the noun, the adjective indicates to which of the pyramids the NP refers. Likewise, the numeral ὀκτώ 'eight' in example (13) is both a quantifying and discourse modifier: it attributes a quantifying property to the noun and thereby indicates which of the gods is meant. The prepositional phrase in example (14), finally, is both a localising and discourse modifier: by describing their spatial location it contrasts the cities on the mainland with those on the islands.

    Of course, Rijkhoff does not deny that descriptive modifiers may distinguish two entities. But instead of attributing to them both a descriptive and a discourse function, he chooses to classify them under the localising modifiers. At least, that may be inferred from a footnote in which he states that contrastive adjectives that serve to identify the referent are localising modifiers. In Rijkhoff's view, *red* in the example 'no, I want the *red* apple' should be analysed as a localising modifier (Rijkhoff 2002: 173).[18] In my view, however, this analysis of contrastive modifiers that serve to identify the referent is incorrect, as these modifiers do not give information on the location of the referent in the world of discourse. *Red* in Rijkhoff's example 'no, I want the *red* apple' does not say anything about the location of this referent (e.g. whether it is on the fruit bowl

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[18] Although this footnote opens with 'recall that …', I have not found any previous discussion of this topic.

on the table, or in a bag in the kitchen), but gives expression to a quality (the colour) of the referent, by which it can be distinguished from other similar entities. Instead of classifying modifiers like *red* under the localising modifiers, it is much more likely that these modifiers have both a descriptive and a discourse function.

In addition to 'purely' descriptive modifiers, which attribute a feature to the referent of the (head) N (as the modifiers printed in italics in example 15 and 16) and 'pure' discourse modifiers, which are concerned with the referential aspect of the NP without giving descriptive information (as the modifiers printed in italics in examples 17 and 18), an adequate NP model should thus also accommodate modifiers that have both a descriptive and a discourse function (as in examples 12–14 above).[19]

(15) (…) ἐπεὶ καὶ Ἄμηστριν τὴν Ξέρξεω γυναῖκα πυνθάνομαι γηράσασαν δὶς **ἑπτὰ Περσέων παῖδας, ἐόντων ἐπιφανέων ἀνδρῶν**, ὑπὲρ ἑωυτῆς τῷ ὑπὸ γῆν λεγομένῳ εἶναι θεῷ ἀντιχαρίζεσθαι κατορύσσουσαν.

(…) I have learned by inquiry that when Xerxes' wife Amestris reached old age, she buried twice *seven* **sons of notable Persians** (lit. seven of Persians sons, being notable men) as an offering on her own behalf to the fabled god beneath the earth.   (Hdt. 7.114.2)

(16) ἐν δὲ τούτῳ τά τε αἰπόλια καὶ τὰς ποίμνας καὶ **τὰ βουκόλια** ὁ Κῦρος **πάντα τοῦ πατρὸς** συναλίσας ἐς τὠυτὸ ἔθυε καὶ παρεσκεύαζε ὡς δεξόμενος τὸν Περσέων στρατόν, (…).

Meanwhile, collecting **all his *father's* goats and sheep** (lit. the goats and sheeps all of the father) and oxen in one place, he slaughtered and prepared them as a feast for the Persian host, (…).   (Hdt. 1.126.2)

(17) ταῦτα δὲ ποιήσαντες **τὸ ἄλλο σῶμα τοῦ βοὸς** πιμπλᾶσι ἄρτων καθαρῶν καὶ μέλιτος καὶ ἀσταφίδος καὶ σύκων καὶ λιβανωτοῦ καὶ σμύρνης καὶ τῶν ἄλλων θυωμάτων, (…).

Having done this, they fill *what remains* **of the carcass** (lit. the other body of the cow) with pure bread, honey, raisins, figs, frankincense, myrrh, and other kinds of incense, (…).   (Hdt. 2.40.3)

(18) τρίτον δὲ εἰρώτα τὸ μύρον· εἰπόντων δὲ τῆς ποιήσιος πέρι καὶ ἀλείψιος, **τὸν αὐτὸν λόγον τὸν καὶ περὶ τοῦ εἵματος εἶπε**.

Thirdly he inquired about the incense; and when they described making and applying it, he made **the *same* reply as about the cloak** (lit. the same story which he also about the cloack said).   (Hdt. 3.22.3)

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[19] In Chapter 6, it will be argued that purely descriptive modifiers are non-articular in Ancient Greek, whereas modifiers that (also) have a discourse function are always preceded by an article.

Although the former two categories (i.e. purely descriptive or pure discourse modifiers) fit perfectly well into Rijkhoff's NP model, the accommodation of the combined descriptive-discourse modifiers is less straightforward.[20] It becomes clear how serious this omission is when one realises how common the use of the descriptive-discourse modifiers is. About 40 % of the modifiers in multiple-modifier NPs in my corpus combines a descriptive and a discourse function.

In conclusion, my data reveal two general shortcomings of Rijkhoff's NP model. In the first place, it is too restrictive in that not all modifiers can be classified as classifying, qualifying, quantifying, localising or discourse modifiers. This problem can be solved partially by extending the NP model with an additional layer for arguments, in between the noun and qualifying modifiers. This extension, however, offers no solution for relative clauses, whose basic function is not to locate the referent in time, but to relate the noun to another SoA. The second shortcoming of Rijkhoff's model is that it does not regard the fact that modifiers, apart from being either a descriptive modifier or a discourse one, may combine a descriptive and a discourse function.[21]

4.2.2. *Word order in Greek multiple-modifier NPs*

Although I encountered the two problematic aspects of Rijkhoff's NP model discussed in the previous section on the basis of my Greek data, Rijkhoff's model will cause similar problems for the classification of modifiers in other languages. More specific for Greek is the problem that the semantic structure of the NP is very frequently not reflected in the actual linguistic expression. Formulated differently, the semantics of the modifiers is not the factor that is decisive for the order of the constituents

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[20] The easiest solution would be to represent the modifier at both the discourse and the proper descriptive level (in such a way that it is not expressed twice in the actual expression). Another possible solution could be to represent the descriptive information at the proper descriptive level and to add a new kind of discourse operator to indicate that the intended referent is contrasted with other available referents. Whichever solution is taken to represent these modifiers, the problem that the position of the modifiers within the actual linguistic expression cannot be accounted for on the basis of the *principle of scope*—because of its double function—remains unsolved.

[21] A third problem that is not related to the NP model *an sich*, but to Rijkhoff's ordering principles is that they have no predictive value with respect to the order of two or more modifiers that belong to the same semantic level. The order of two qualifying adjectives in an example like 'a beautiful red car', for instance, cannot be accounted for by Rijkhoff's principles.

in the noun phrase in Greek, as would have been expected on the basis of Rijkhoff's *principle of scope* (see Chapter 2, section 2.3.1). Examples (19)–(22) provide four of the many counterexamples:[22]

(19)   τὸ δὲ Βαβυλώνιον τάλαντον δύναται **Εὐβοΐδας ἑβδομήκοντα μνέας**.

The Babylonian talent is equal to **seventy Euboic minae** (lit. Euboic seventy minae).   (Hdt. 3.89.2)

(20)   ἀπὸ δὲ τῆς διαβάσιος τοῦ Ἑλλησπόντου, ἔνθεν πορεύεσθαι ἤρξαντο οἱ βάρβαροι, ἕνα αὐτοῦ διατρίψαντες μῆνα ἐν τῷ διέβαινον ἐς τὴν Εὐρώπην, **ἐν τρισὶ ἑτέροισι μησὶ** ἐγένοντο ἐν τῇ Ἀττικῇ, (...).

Since the crossing of the Hellespont, where the barbarians began their journey, they had spent one month there crossing into Europe and **in three more months** were in Attika, (...).   (Hdt. 8.51.1)

(21)   Γύγης (...) ἀπέπεμψε ἀναθήματα ἐς Δελφοὺς οὐκ ὀλίγα, ἀλλ᾽ ὅσα μὲν ἀργύρου ἀναθήματα, ἔστι οἱ πλεῖστα ἐν Δελφοῖσι, πάρεξ δὲ τοῦ ἀργύρου χρυσὸν ἄπλετον ἀνέθηκε ἄλλον τε καὶ τοῦ μάλιστα μνήμην ἄξιον ἔχειν ἐστί, **κρητῆρές** οἱ **ἀριθμὸν ἓξ χρύσεοι** ἀνακέαται.

Gyges (...) sent many offerings to Delphi: most of the silver offerings in Delphi came from him; and besides the silver, he dedicated a hoard of gold, among which **six golden bowls** (lit. bowls in number six golden) are the offerings especially worthy of mention.   (Hdt. 1.14.1)

(22)   οὗτοι οἱ Χεμμῖται λέγουσι τὸν Περσέα πολλάκις μὲν ἀνὰ τὴν γῆν φαίνεσθαι σφίσι, πολλάκις δὲ ἔσω τοῦ ἱροῦ, **σανδάλιόν** τε **αὐτοῦ πεφορημένον** εὑρίσκεσθαι, **ἐὸν τὸ μέγαθος δίπηχυ**, τὸ ἐπεὰν φανῇ, εὐθενέειν ἅπασαν Αἴγυπτον.

The people of this Khemmis say that Perseus is seen often up and down this land, and often within the temple, and that **a worn out sandal of his, which is two cubits long** (lit. a sandal of him worn out, being with respect to length two cubits), keeps turning up, and that when it does turn up, all Egypt prospers.   (Hdt. 2.91.3)

In example (19), the qualifying modifier Εὐβοΐδας 'Euboic' is expressed before, instead of after, the quantifying modifier ἑβδομήκοντα 'seventy'. Example (20), on the other hand, disobeys Rijkhoff's rules in that the discourse modifier ἑτέροισι 'other' is placed in between a quantifying modi-

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[22] Because of the classificational problems with modifiers in definite NPs (which—as discussed in the previous section—often combine a descriptive and discourse function), I only provide examples of indefinite NPs with modifiers that can be classified unequivocally. Furthermore, I have checked carefully whether the 'improper' position of the modifier can be explained by the influence of one of Rijkhoff's other ordering principles. For a description of these principles and their interaction with the *principle of scope*, see Chapter 2, section 2.3.1.

fier and the noun rather than at the utmost left or right position. Example
(21) is the mirror image of example (19): the quantifying modifier (ἕξ)
stands closer to the noun than the qualifying one (χρύσεοι). Example
(22), finally, is 'incorrect' in that the localising modifier αὐτοῦ 'of him'
is placed between the noun and the qualifying modifiers πεφορημένον
'worn out' and δίπηχυ 'two cubits long'.[23]

In the first two examples, the violations of Rijkhoff's rules might be
explained by assuming that the basic semantic ordering may be broken if
one of the modifiers is somehow pragmatically marked. In example (19),
for instance, the Babylonian currency unit is converted into the Euboic
one. The contrastive value of the qualifying modifier Εὐβοΐδας 'Euboic'
probably allows this modifier to be expressed before the quantifying
modifier ἑβδομήκοντα 'seventy'. In the same way, the utmost left position
of the quantifying modifier in example (20) might be explained by its
contrastive value. These examples give the impression that Ancient Greek
is one of the languages that allow emphasised modifiers to occur in
a special, in this case NP-initial, position.[24] However, the 'improper'
position of the quantifying modifier in (21) and the localising modifier
in (22) cannot be explained by a special pragmatic marking of these
modifiers.

But although pragmatics cannot explain the 'improper' position of the
modifiers in examples (21) and (22), it may explain the order of the con-
stituents in the NP as a whole. As in single-modifier NPs, the position of
a constituent in a multiple-modifier NP depends on its saliency: the more
salient the information, the further to the left it has to be expressed. In the
enumeration of Gyges' gifts in example (21), for instance, the noun κρη-
τῆρες ('bowls') is obviously the most salient element of the NP and for
this reason it is the first element of the NP. After the noun, there are two
elements left: a numeral ἕξ and an adjective χρύσεοι. While Rijkhoff's
semantic analysis cannot account for the position of the adjective after
the numeral, this ordering can be accounted for if we assume that more
salient information has to be expressed first: because the adjective pro-
vides redundant information (Herodotus already informed us that Gyges
dedicated χρυσὸν ἄπλετον 'a hoard of gold') it is posed after the more
informative numeral. Likewise, the position of the localising modifier in

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[23] For my view on participle phrases with a participle of εἰμί, see Chapter 6, section
6.1.3.2.

[24] For the so-called *principle of pragmatic highlighting*, see Rijkhoff (2002: 334–335)
and S. Dik (1997: 403).

(22) just after the noun can be explained if we assume it is more informative for the addressee that the Chemmitae found a sandal that belonged to Perseus than that this sandal was worn out and two cubits long.

The pragmatic principle that the more salient the information, the earlier it has to be expressed does not only account for the ordering of the constituents in the NPs that contradict Rijkhoff's NP model, but may also explain the ordering of those NPs that do agree with Rijkhoff's ordering principles, as can been seen in examples (23) and (24):

(23)   (…), ἐπειδὴ οἵ τε Ἀθηναῖοι ἀπίκοντο εἴκοσι νηυσί, ἅμα ἀγόμενοι **Ἐρετριέων πέντε τριήρεας**, (…).

(…), when the Athenians arrived with twenty ships, taking with them **five triremes of the Eretrians** (lit. of Eretrians five triremes) as well, (…).
(Hdt. 5.99.1)

(24)   Διονύσιος δὲ ὁ Φωκαιεὺς ἐπείτε ἔμαθε τῶν Ἰώνων τὰ πρήγματα διεφθαρμένα, **νέας** ἑλὼν **τρεῖς τῶν πολεμίων** ἀπέπλεε (…).

As for Dionysios the Phocaean, when he saw that the Ionian cause was lost, he sailed away having captured **three enemy ships** (lit. ships three of the enemies) (…).
(Hdt. 6.17)

In example (23), Herodotus narrates that Aristagoras plans an expedition against Sardis as soon as the Athenians arrive with twenty ships 'taking with them five ships of the Eretrians'. Rijkhoff would explain the position of the genitive Ἐρετριέων before the numeral πέντε by arguing that localising modifiers have to be placed at a greater distance from the noun than quantifying ones.[25] However, the utmost left position of the genitive can also be explained by its saliency, as it is rather unexpected that the Athenians bring five ships of the Eretrians in addition to their own ships. In example (24), on the other hand, in which we are told that Dionysios captured νέας τρεῖς τῶν πολεμίων, the localising modifier is expressed at the final position of the NP. This position is not only the right place for localising modifiers, but also in line with its very low information value: it is not surprising that Dionysios captures three ships of his enemies, rather than his own.

Examples (19)–(24) were meant to illustrate that (a) the order of the constituents in multiple-modifier NPs in Greek is frequently not

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[25] It should be noted that the position of the genitival modifier at the beginning of the NP is also preferred by the *principle of domain integrity* and the *principle of head proximity*. However, an even higher degree of 'head proximity' could have been obtained, if the genitive had been expressed at the other side of the noun.

in accordance to Rijkhoff's rules and (b) that even if Rijkhoff's ordering principles are obeyed, they are not indispensable for an explanation of the Greek facts. In Greek, it is not the semantics of the modifiers, but their saliency that determines their position in the NP. The following subsections discuss this saliency principle in more detail on the basis of NPs with multiple prenominal (4.2.2.1) or postnominal modifiers (4.2.2.2) and NPs with both pre- and postnominal modifiers (4.2.2.3).

But before giving a more detailed description of the various word order patterns attested in my corpus, it should be stressed—perhaps unnecessarily—that the fact that modifiers are not ordered by their semantics, but by their saliency, means that their position does not give any information on their scope:

(25)   τῶν δὲ κροκοδείλων φύσις ἐστὶ τοιήδε. **τοὺς χειμεριωτάτους μῆνας τέσσερας** ἐσθίει οὐδέν, (...).

The nature of crocodiles is as follows. For **the four winter months** (lit. the winter months four), it eats nothing, (...).   (Hdt. 2.68.1)

(26)   κατὰ μὲν δὴ τὸν πρότερον πόλεμον συνεχέως ἀεὶ κακῶς ἀέθλεον πρὸς τοὺς Τεγεήτας, κατὰ δὲ τὸν κατὰ Κροῖσον χρόνον καὶ **τὴν Ἀναξανδρίδεώ τε καὶ Ἀρίστωνος βασιληίην ἐν Λακεδαίμονι** ἤδη οἱ Σπαρτιῆται κατυπέρτεροι τῷ πολέμῳ ἐγεγόνεσαν, (...).

In the previous war the Lakedaimonians continually fought unsuccessfully against the Tegeans, but in the time of Kroisos and **Anaxandrides' and Ariston's kingship in Sparta** (lit. the of Anaxandrides and Ariston kingship in Sparta) the Spartans had the upper hand, (...). (Hdt. 1.67.1)

Whereas in example (25) the final modifier has scope over the preceding NP elements (four [winter months]), in example (26) it is the first modifier that has scope over the other NP elements (A+A's [kingship in Lakedaimon]). The suggestion of Devine and Stephens (2000: 23), therefore, that the difference in word order between ἄλλα μεγάλα ἔργα in example (27) and ἄλλος βωμὸς μέγας in (28) resides in the scope of ἄλλος is incorrect:

(27)   ἐν ταύτῃ τῇ ναυμαχίῃ Αἰγύπτιοι μὲν τῶν Ξέρξεω στρατιωτέων ἠρίστευσαν, οἳ **ἄλλα** τε **μεγάλα ἔργα** ἀπεδέξαντο καὶ νέας αὐτοῖσι ἀνδράσι εἷλον Ἑλληνίδας πέντε.

In that sea-fight of all Xerxes' fighters the Egyptians conducted themselves with the greatest valour, who achieved **other great feats of arms** (lit. other great feats) and took five Greek ships together with their crews.   (Hdt. 8.17)

(28)   ἔξω δὲ τοῦ νηοῦ βωμός ἐστι χρύσεος. ἔστι δὲ καὶ **ἄλλος βωμὸς μέγας**,
        ἐπ' οὗ θύεται τὰ τέλεα τῶν προβάτων·

Outside the temple is a golden altar. There is also **another altar, which is
great** (lit. other altar great), on which are sacrificed the full-grown of the
flocks.   (Hdt. 1.183.2)

The differences between the order of the modifiers in the two examples
should not, as Devine and Stephens (2000: 23) suggest, be explained by
the fact that ἄλλα in (27) has scope over the whole modified phrase
('other great deeds'), whereas ἄλλος in (28) only has scope over the noun
('another altar, which was large'), but that μεγάλα in (27) is more salient
than μέγας in (28). Whereas the greatness of the deeds of the Egyptians in
(27) is very salient in that it explains why they are considered to be Xerxes'
best fighters in the sea-battle, the size of the altar in (28) is apparently not
especially relevant.[26]

4.2.2.1. Multiple prenominal modifiers

If the position of the constituents of multiple-modifier NPs is indeed an
indication of their saliency, the modifiers of NPs with multiple prenom-
inal modifiers should be more informative than the following noun. In
most of the examples in my corpus this is indeed the case:

(29)   ἡ δὲ βασιλέος αἵρεσις **ἐς τὴν ὑστέρην τὴν Μαρδονίου ἐπιστρατηίην**
        δεκάμηνος ἐγένετο.

There were ten months between the king's taking of the place and **the
later invasion of Mardonios** (lit. the later the of Marodonios invasion).
                                                                (Hdt. 9.3.2)

(30)   συχνὰς μὲν δὴ τῶν νήσων ἀραιρήκεε, **πολλὰ** δὲ καὶ **τῆς ἠπείρου ἄστεα·**

He had taken many of the islands, and **many of the mainland cities**.
                                                                (Hdt. 3.39.4)

(31)   δωρέεται δή μιν μετὰ ταῦτα ὁ Δαρεῖος **πεδέων χρυσέων δύο ζεύγεσι·**
        ὁ δέ μιν ἐπείρετο εἰ οἱ διπλήσιον τὸ κακὸν ἐπίτηδες νέμει, ὅτι μιν ὑγιέα
        ἐποίησε.

After this, Dareios rewarded him with a gift of **two pairs of golden
fetters** (lit. of fetters golden two pairs). He (= Demokedes) asked him
(= Dareios) whether it was his purpose to double his pains for making
him well.   (Hdt. 3.130.4)

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[26] Devine and Stephens' idea that the order of the modifiers reflects their scope
relations is proven wrong by various examples in my corpus in which prenominal ἄλλος

In example (29), the modifiers precede the noun because both provide contrastive information: the taking of Athens by the king ten months before is contrasted with the present invasion of Mardonios. In example (30), the preposition of the genitival modifier τῆς ἠπείρου 'on the mainland' is—as καί makes clear—also due to its contrastiveness. The first modifier, by contrast, precedes the noun because of its saliency: Polykrates' enormous military force enables him to conquer *many* islands and *many* cities on the mainland in no time.[27] In example (31), finally, both prenominal modifiers are more salient than the noun. The genitive πεδέων χρυσέων 'of golden fetters' is more salient than the noun ζεύγεσι 'pairs' in that it makes clear what exactly is offered to Demokedes. That the numeral is also more salient than the noun appears from the fact that Demokedes asks Dareios whether he doubled his pains out of gratitude for his recovery.[28]

If my hypothesis that the position of the NP constituents is an indication of their saliency is correct, NPs with multiple prenominal modifiers should not only have more salient modifiers than nouns (as has been illustrated by examples 29–31), but should also meet the condition that the first modifier is more salient than the second one (and the second one more than the third one etc.). This second condition is also met in most examples in my corpus:

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does have scope over a postnominal modifier. Cf. for instance Hdt. 1.64.2 ἐς ἄλλον χῶρον τῆς Δήλου ('to another part of Delos'), Hdt. 2.44.2 ἄλλο ἱρὸν Ἡρακλέος ('another temple of Herakles') and 9.26.5 ἄλλα γέρεα μεγάλα, τὰ διατελέομεν ἔχοντες ('other great privileges which we have never ceased to possess').

[27] On the next page, I will argue that for the saliency principle to be correct, the first modifier in an NP with multiple prenominal modifiers should be more salient than the second one. Because of the context (Amasis is worried about the enormous success of Polykrates, who succeeded in all his military affairs and grew to such power that he was famous in the whole Greek world), the *number* of the cities taken might be argued to be more important than the contrast between the islands and the mainland.

[28] Besides being prenominal because of its contrastiveness or saliency, a modifier in an NP with multiple prenominal modifiers may also be prenominal because it provides essential information for the identification of the referent. In these cases, the information of the modifier is the only available or most prominent information on a referent. In Hdt. 3.118.1 (τῶν τῷ μάγῳ ἐπαναστάντων ἑπτὰ ἀνδρῶν lit. 'of the to the Magus revolting seven men'), for example, the modifier provides very prominent information of a referent that is not very accessible because it has not been mentioned anymore after the description of the murder of the Magians in 3.70–80. Similar instances of prenominal modifiers providing the essential information for the identification of referent can be found in Chapter 3, section 3.2.2 (about prenominal modifiers in single-modifier NPs).

(32) (= 23) (…), ἐπειδὴ οἵ τε Ἀθηναῖοι ἀπίκοντο εἴκοσι νηυσί, ἅμα ἀγόμενοι **Ἐρετριέων πέντε τριήρεας**, οἳ οὐ τὴν Ἀθηναίων χάριν ἐστρατεύοντο ἀλλὰ τὴν αὐτῶν Μιλησίων, ὀφειλόμενά σφι ἀποδιδόντες, (…).

(…), when the Athenians arrived with twenty ships, taking with them **five triremes of the Eretrians** (lit. of Eretrians five triremes) as well, who came to the war to please not the Athenians but the Milesians themselves, thereby repaying their debt, (…).   (Hdt. 5.99.1)

(33) **τὸ** δ᾽ **αὐτῶν μέγιστόν** ἐστι **τεῖχος** κατὰ τὸν Ἀθηνέων κύκλον μάλιστά κῃ τὸ μέγαθος.

And **their longest wall** (lit. the of them longest wall) is about the length of the wall that surrounds the city of Athens.   (Hdt. 1.98.5)

(34) (…) φασὶ δὲ οἱ αὐτοὶ οὗτοι καὶ τὴν Ἄργην τε καὶ τὴν Ὦπιν, ἐούσας παρθένους ἐξ Ὑπερβορέων, **κατὰ τοὺς αὐτοὺς τούτους ἀνθρώπους** πορευομένας ἀπικέσθαι ἐς Δῆλον ἔτι πρότερον Ὑπερόχης τε καὶ Λαοδίκης·

(…), these same relate that Arge and Opis, two girls from the Hyperboreans, also came **by way of these same peoples** (lit. by way of the same these peoples) to Delos, earlier than Hyperoche and Laodike.
                        (Hdt. 4.35.1)

In example (32), both modifiers are more salient than the noun, as the five ships of the Eretrians are contrasted with the 20 ships of the Athenians. Although both modifiers are contrastive, the first one is more salient than the second because the fact that the Athenians bring ships of the Eretrians is, judging from the extensive explanation in the following sentences, rather unexpected. Similarly, the first contrastive modifier of the highlighted NP in example (33) is more salient than the second (also contrastive) one, as the contrast between the wall of Babylonians and the one of the Athenians is—at this very moment—more relevant than the contrast between the various walls of the Babylonians.[29] In example (34), finally, where both modifiers are more salient than the noun, the first modifier precedes the second one to stress that it were exactly the same people that were also visited by Arge and Opis.[30]

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[29] For the idea that αὐτ- (as well as other 'postpositive possessives') obeys the saliency principle and should not (only) be explained by Wackernagel's Law, see Chapter 3, section 3.5.2.

[30] My analysis of the constituent order in this example runs counter to the analysis of Biraud (1991: 52 ff.) who argues that the structure article-adjective-demonstrative-noun (or: D_2-D_1-D_3-N in her terminology, see Chapter 2, section 2.2.3) is the consequence of a movement of the demonstrative (D_3) from the ultimate left position to the position in between the adjective (D_1) and the noun (D_3—D_2—D_1—N 〉 D_2—D_1—D_3—N).

Examples (32)–(34) were meant to illustrate that pragmatics does not only determine the position of the modifiers in relation to the noun, but also the order of the modifiers among themselves. This latter principle can also be illustrated by the following near-minimal pair:

(35)   ἔστι δὲ καὶ **ἄλλος ὅδε λόγος** λεγόμενος, ὡς (…).

They tell, however, also **this other tale** (lit. other this tale), that: (…).
(Hdt. 8.118.1)

(36)   (…), νόμοι δὲ αὐτοῖσι οἵδε κατεστᾶσι. ὁ μὲν σοφώτατος ὅδε κατὰ γνώ-
μην τὴν ἡμετέρην, τῷ καὶ Ἰλλυριῶν Ἐνετοὺς πυνθάνομαι χρᾶσθαι.
(…) δεύτερος δὲ σοφίη **ὅδε ἄλλος** σφι **νόμος** κατέστηκε·

(…), they established the following laws. The wisest of these, in our judgement, is one which I have learned by inquiry is also a custom of the Eneti in Illyria. (…) I come now to the next wisest of their customs (lit. second in wisdom is **this other law** established for them).
(Hdt. 1.196.1–197)

In example (35) ἄλλος precedes the demonstrative to indicate that there is also (καί) *another* version of the story of Xerxes' return from Athens. In example (36), by contrast, δεύτερος at the beginning of the sentence already indicates that Herodotus is moving on to the description of the second best Babylonian law. Consequently, ἄλλος is more predictable than in the first example and therefore follows the demonstrative instead of preceding it.

I have argued that the NPs with multiple prenominal modifiers in my corpus obey the saliency principle. In a very small number of examples, however, the saliency principle is overruled by word order principles at the level of the clause:[31]

According to Biraud, the result of this movement is a disjunct structure, since the article + adjective are separated from the noun. The creation of this disjunct structure is alternately described as a stylistic device (1991: 57) and a means to give prominence to the disjunct article plus adjective (1991: 52). In my view, however, it is not the demonstrative that moves to the right, but the combination of article and adjective that is 'moved' to the left. Furthermore, this 'movement', that, in my view, does not create a disjunct structure, is never inspired by stylistic factors, but always by pragmatic ones: the combination of article and adjective (D1) precedes the demonstrative because it is more salient than the demonstrative.

[31] For word order at the level of the clause and a more detailed description of the overruling of word order rules at the level of the NP by those at the level of the clause, see Chapter 3, section 3.4.

(37)   τὸ μὲν πλεῖστον καὶ δυνατώτατον τοῦ στρατοῦ ἅμα αὐτῷ Ξέρξῃ πο-
         ρευόμενον ἐπ᾽ Ἀθήνας ἐσέβαλε ἐς Βοιωτούς, ἐς γῆν τὴν Ὀρχομενίων.
         Βοιωτῶν δὲ **πᾶν τὸ πλῆθος** ἐμήδιζε, (…).

         The greater and stronger part of the host marched with Xerxes himself
         towards Athens and broke into the territory of Orchomenos in Boiotia.
         The whole population of Boiotia (lit. of Boiotians whole the population)
         took the Persian side, (…).   (Hdt. 8.34)

(38)   (…), τὰ δὲ πρὸς ἠῶ τε καὶ ἥλιον ἀνατέλλοντα πεδίον ἐκδέκεται πλῆ-
         θος ἄπειρον ἐς ἄποψιν. **τοῦ** ὦν δὴ **πεδίου τούτου τοῦ μεγάλου οὐκ**
         ἐλαχίστην μοῖραν μετέχουσι οἱ Μασσαγέται, (…).

         (…), towards the east and the sunrise there stretches from its shores a
         boundless plain as far as the eye can see. **The greater part of this wide**
         plain (lit. of the plain this the wide not small part) is the country of the
         Massagetae, (…).   (Hdt. 1.204.1)

The genitive in example (37) is the first element of the NP although the
information it provides is neither contrastive, nor otherwise the most
salient element of the NP and would therefore be expected to follow
the noun. The reason that the genitive is nonetheless prenominal is that
it expresses the topic of the sentence (which in Greek prefers to be
expressed at the very first position of the clause, see Chapter 3, section
3.4). Similarly, the topicality of the genitive in example (38) explains why
it precedes the noun, although it is less salient than the noun.

4.2.2.2. Multiple postnominal modifiers

If my hypothesis that multiple-modifier NPs are not ordered according to
Rijkhoff's semantic principles, but according to the pragmatic principle
that the most salient information is expressed first is correct, the noun
of NPs with multiple postnominal modifiers should be more salient than
the following modifiers. In most of the examples in my corpus this is
indeed the case:

(39)   ἐνθαῦτα δὴ ἐπολιόρκεον τὴν Βάρκην ἐπὶ μῆνας ἐννέα, ὀρύσσοντές
         τε **ὀρύγματα ὑπόγαια φέροντα ἐς τὸ τεῖχος** καὶ προσβολὰς καρτερὰς
         ποιεύμενοι.

         The Persians besieged Barke for nine months, digging **underground**
         passages leading to the walls (lit. passages underground leading to the
         wall), and making violent assaults.   (Hdt. 4.200.2)

(40)   ἐν δὲ Πλαταιῇσι οἱ Πέρσαι, ὡς ἐτράποντο ὑπὸ τῶν Λακεδαιμονίων,
         ἔφευγον οὐδένα κόσμον ἐς τὸ στρατόπεδον τὸ ἑωυτῶν καὶ **ἐς τὸ τεῖχος**
         τὸ ξύλινον τὸ ἐποιήσαντο ἐν μοίρῃ τῇ Θηβαΐδι.

At Plataea, however, the Persians, routed by the Lakedaimonians, fled in disorder to their own camp and **inside the wooden wall which they had made in the territory of Thebes** (lit. to the wall the wooden which they had made in territory the of Thebes). (Hdt. 9.65.1)

(41)   μεῖξις δὲ τούτων τῶν Ἰνδῶν τῶν κατέλεξα πάντων ἐμφανής ἐστι κατά περ τῶν προβάτων, καὶ τὸ χρῶμα φορέουσι ὅμοιον πάντες καὶ παρα-πλήσιον Αἰθίοψι. **ἡ γονὴ** δὲ **αὐτῶν, τὴν ἀπίενται ἐς τὰς γυναῖκας**, οὐ κατά περ τῶν ἄλλων ἀνθρώπων ἐστὶ λευκή, ἀλλὰ μέλαινα κατά περ τὸ χρῶμα.

These Indians whom I have described have intercourse openly like cattle; they are all black-skinned, like the Ethiopians. **Their semen** too, **which they ejaculate into the women** (lit. the semen of them, which …), is not white like other men's, but black like their skin. (Hdt. 3.101)

In examples (39) and (40), the nouns are contrastive: ὀρύγματα 'passages' in (39) contrasts with the following προσβολάς 'assaults' and τεῖχος 'wall' in (40) contrasts with the preceding στρατόπεδον 'camp'. In example (41), by contrast, the preposition of the noun is not due to its contrastiveness, but to the fact that the noun is more informative than the possessive: the noun expresses a new element in the description of the habits and particularities of the already familiar Indians. After a description of the attitude of the Indians towards sick people, their nomadic existence and their sexual behaviour, Herodotus gives a description of their skin and, finally, their sperm.

Besides being contrastive or otherwise the most salient element of the NP, the noun may also precede the following modifiers because neither the noun, nor the modifiers have a special pragmatic marking:

(42)   ἐχρᾶτο δὲ **καταστάσι πρηγμάτων τοιῇδε·** τὸ μὲν ὄρθριον μέχρι ὅτεο πληθώρης ἀγορῆς προθύμως ἔπρησσε τὰ προσφερόμενα πρήγματα, (…).

The following was how he scheduled his affairs (lit. he used **system of affairs following**): in the morning, until the hour when the marketplace filled, he readily conducted whatever business was brought to him, ….
(Hdt. 2.173.1)

(43)   ἀποθανὼν δὲ καὶ ταριχευθεὶς ἐτάφη **ἐν τῇσι ταφῇσι τῇσι ἐν τῷ ἱρῷ, τὰς αὐτὸς οἰκοδομήσατο**.

And being dead he was embalmed and laid **in the burial-place built for him in the temple** (lit. in the burial-places the in the temple, which he had built himself). (Hdt. 3.10.2)

In both example (42) and (43), neither the nouns, nor the following modifiers are contrastive or otherwise salient. Therefore, the modifiers

follow the noun (for this so-called default mode, see Chapter 3, section 3.3).

Examples (39)–(43) were meant to illustrate that the order of the constituents in multiple-modifier NPs is an indication of their saliency in that the postnominal modifiers are less salient than the preceding noun. The following examples illustrate that not only the position of the noun, but also the order of the modifiers themselves is in accordance to the saliency principle. In example (44), for instance, the first modifier precedes the second one because not only the noun, but also the first modifier is pragmatically marked:

(44) ὁ δὲ Ἅρπαγος ὡς ἐπήλασε τὴν στρατιήν, ἐπολιόρκεε αὐτούς, προϊσχό-μενος ἔπεα ὥς οἱ καταχρᾷ εἰ βούλονται Φωκαιέες **προμαχεῶνα ἕνα μοῦνον τοῦ τείχεος** ἐρεῖψαι καὶ οἴκημα ἓν κατιρῶσαι.

    Harpagos marched against the city and besieged it, but he made over-tures, and said that it would suffice him if the Phokaians would demolish **only one rampart of the wall** (lit. rampart one only of the wall) and ded-icate one house.   (Hdt. 1.164)

While Harpagos besieges Phokaia, he declares that it suffices him if the Phokians symbolically demolish one rampart of the wall and one of their houses. As the addition of μοῦνον 'only' points out, the numeral ἕνα is much more salient that the rather predictable genitive τοῦ τείχεος 'of the wall'. Despite the saliency of the first modifier, however, it is still the noun that is the most salient element of the NP because of the contrast between the one rampart and the one house. Consequently, προμαχεῶνα precedes ἕνα, which precedes τοῦ τείχεος.

In most cases, the fact that the first modifier of an NP with multiple postnominal modifiers precedes the following one(s) is not, as in example (44), due to the high information value of the first modifier, but rather to the very low information value of the following one(s). This low infor-mation value may be due to the fact that the information provided is already known, natural or not relevant for the purpose of communica-tion:

(45) (= 21) Γύγης (. . .) ἀπέπεμψε ἀναθήματα ἐς Δελφοὺς οὐκ ὀλίγα, ἀλλ᾽ ὅσα μὲν ἀργύρου ἀναθήματα, ἔστι οἱ πλεῖστα ἐν Δελφοῖσι, πάρεξ δὲ τοῦ ἀργύρου χρυσὸν ἄπλετον ἀνέθηκε ἄλλον τε καὶ τοῦ μάλιστα μνήμην ἄξιον ἔχειν ἐστί, **κρητῆρές** οἱ **ἀριθμὸν ἓξ χρύσεοι** ἀνακέαται.

    Gyges (. . .) sent many offerings to Delphi: there are very many silver offerings of his there; and besides the silver, he dedicated a hoard of gold, among which **six golden bowls** (lit. bowls in number six golden) are the offerings especially worthy of mention.   (Hdt. 1.14.1)

(46)   τοῖσι δὲ βαρβάροισι αὐτίκα μετὰ ταῦτα πλοίῳ ἦλθε ἀνὴρ Ἱστιαιεὺς
         ἀγγέλλων **τὸν δρησμὸν τὸν ἀπ' Ἀρτεμισίου τῶν Ἑλλήνων**.

         Immediately after this there came to the barbarians a man of Histiaea in
         a boat, telling them of **the flight of the Greeks from Artemisium** (lit. the
         flight the from A of the Greeks).   (Hdt. 8.23)[32]

(47)   ἐν ταύτῃ τῇ πόλι ἔστι Περσέος τοῦ Δανάης ἱρὸν τετράγωνον, (…)
         τὰ δὲ πρόπυλα τοῦ ἱροῦ λίθινά ἐστι κάρτα μεγάλα· ἐπὶ δὲ αὐτοῖσι
         ἀνδριάντες δύο ἑστᾶσι **λίθινοι μεγάλοι·**

         In this city is a square temple of Perseus son of Danae, (…). Before
         this temple stand great stone columns; and upon them, **two great stone
         statues** (lit. statues two stone great).   (Hdt. 2.91.2)

(48)   ταῦτα Δαρεῖος εἴπας καὶ καταστήσας Ἀρταφρένεα **ἀδελφεὸν ἑωυτοῦ
         ὁμοπάτριον** ὕπαρχον εἶναι Σαρδίων, ἀπήλαυνε ἐς Σοῦσα ἅμα ἀγόμε-
         νος Ἱστιαῖον, (…).

         This, then, is what Dareios said, and after appointing Artaphrenes, **his
         father's son** (lit. brother of him of the same father), to be viceroy of Sardis,
         he rode away to Sousa, taking Histaios with him, (…).   (Hdt. 5.25.1)

We have already seen that the final position of the adjective in example
(45) is due to the fact that it provides redundant information, as the
remark that Kroisos offered χρυσὸν ἄπλετον has already revealed that
the bowls are golden. In example (46), by contrast, the low information
value is not due to its familiarity, but its predictability, as it is only natural
that it is the flight of the Greeks that is announced to the barbarians.
In example (47), the low information value of the adjectives cannot be
described in terms of 'familiarity' or 'predictability'. Nevertheless, it is
obvious that in the context of a great stone entrance of a temple, the fact
that the statues are also great and made of stone is not very informative.
In example (48), finally, the utmost right position of the adjective must
be a consequence of its irrelevance for the purpose of communication.

The NP's with multiple postnominal modifiers in the previous exam-
ples were ordered according to their saliency. As in NP's with multiple
prenominal modifiers, however, the saliency principle can be overruled.
For NPs with postnominal modifiers, these overrulings are not triggered
by word order rules at the level of the sentence, but are a consequence

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[32] Examples like this seem to suggest that NPs with verbal nouns do not behave
differently from other NPs. Formulated differently, the fact that the modifiers in (46) are
arguments of a verbal noun does not influence the fact that their ordering around the
noun is determined by pragmatics. For more examples of NPs with a verbal noun, see
(6), (7) and (29).

of the fact that one of the modifiers, although providing salient informa-
tion, is heavy.[33] As has been described thoroughly in Chapter 3, section
3.3.1, heavy (i.e. complex) constituents tend to be expressed at the end
of the NP, irrespective of their saliency. It was argued that, although it is
difficult to determine when exactly a modifier is heavy, modifiers with
more than one dependent are always postnominal in multiple-modifiers
NPs:[34]

(49)   ἦν δὲ περὶ Δαρεῖον **ἀνὴρ Αἰγύπτιος φωνέων μέγιστον ἀνθρώπων·**
        τοῦτον τὸν ἄνδρα καταστάντα ἐπὶ τοῦ χείλεος τοῦ Ἴστρου ἐκέλευε
        Δαρεῖος καλέειν Ἱστιαῖον Μιλήσιον·

        There was **an Egyptian** with Dareios **whose voice was the loudest in the
        world** (lit. man Egyptian voiced loudest of men); Dareios had this man
        stand on the bank of the Ister and call to Histaios the Milesian.

                                                                    (Hdt. 4.141)

(50)   πρῶτοι δὲ ἐσῆλθον Τεγεῆται ἐς τὸ τεῖχος, καὶ τὴν σκηνὴν τὴν Μαρδο-
        νίου οὗτοι ἦσαν οἱ διαρπάσαντες, τά τε ἄλλα ἐξ αὐτῆς καὶ **τὴν φάτνην
        τῶν ἵππων, ἐοῦσαν χαλκέην πᾶσαν καὶ θέης ἀξίην**.

        The first to enter the camp were the Tegeans, and it was they who
        plundered the tent of Mardonios, taking from it besides everything else
        **the feeding trough of the horses which was all of bronze and a thing
        well worth looking at** (lit. the feeding through of the horses being bronze
        all and looking worth).   (Hdt. 9.70.3)

As the following sentence makes clear, the participle phrase in example
(49) provides crucial information on the man that is introduced as a

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[33] Although there are no examples where word order rules at the level of the clause
overrule those at the level of the NP, the conclusion that the constituents of NPs with
multiple postnominal modifiers never fulfil one of the special pragmatic functions of the
clause is not justified. In those cases where one of the NP constituents has topic or focus
function, it happens to be the case that the word order principles for the clause and for
the NP do not contradict each other, but prefer the same ordering; cf. example (41) where
the preposed noun is both the most salient element of the NP and expresses the topic of
the sentence (which is a subtopic of the discourse topic).

[34] The reason that it is difficult to determine when a modifier is heavy is that the
saliency and heaviness principle are not strict laws, but competing motivations with
varying success (see Chapter 3, section 3.3.1). Incidentally, there are two exceptions to
the rule that prenominal modifiers of NPs with multiple modifiers may not have more
than one dependent, viz. Hdt. 4.8.2 (τὴν **Ἕλληνες λέγουσι Ἐρύθειαν** νῆσον, τὴν πρὸς
Γηδείροισι τοῖσι ἔξω Ἡρακλέων στηλέων ἐπὶ τῷ Ὠκεανῷ· 'the island called by the
Greeks Erythea (lit. the Greeks call Erythea island), on the shore of Ocean near Gadira,
outside the pillars of Herakles.') and Hdt. 4.12.3 (οὗτος ἄλλος **ξυνὸς Ἑλλήνων τε καὶ
Βαρβάρων λεγόμενος** λόγος 'this other story current among Greeks and foreigners alike
(lit. common of Greeks and foreigners told story)'. As has been shown in Chapter 3,
section 3.3.1, exceptions like these also occur in definite single-modifier NPs.

loud-voiced Egyptian man. Nevertheless, it follows the far less salient noun and adjective. This unexpected order must be a consequence of the heaviness of the participle phrase (which has more than one dependent, viz. μέγιστον and ἀνθρώπων).[35] Similarly, the final modifier 'being bronze completely and well worth looking at' in example (50) is highly salient, for the luxury of the feeding trough is the reason it is taken. Nevertheless its heaviness causes it to be expressed after the far less salient genitival modifier 'of the horses'.

The principle that the position of the constituents—unless they are heavy—is an indication of their saliency also turns out to be valid for adjectives with predicative value. Although the position of these predicative elements falls outside the scope of my research, as they are no part of the NP proper, the observation that they obey the saliency principle and may therefore be expressed in between proper NP elements seems too important to me to remain undiscussed. Examples (51) and (52) are two of the numerous instances where an adjective with predicative value occurs in between the noun and an attributive modifier because the saliency of the constituents says so:[36]

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[35] In my view, the reason that the most salient information is expressed last has nothing to do with the fact that the sentence is a so-called presentative (or: thetic) sentence, i.e. a sentence which introduces a new topic into the discourse (see Lambrecht 1987, Sasse 1987 and Cornish 2004). In contrast to what is claimed by Rijksbaron et al. (2000: 149), the presentative sentences in my corpus do not necessarily display a crescendo pattern (each constituent being more informative than the previous one). In Hdt. 3.113.1 (δύο δὲ γένεα ὀΐων σφι ἔστι θώματος ἄξια, τὰ οὐδαμόθι ἑτέρωθι ἔστι 'they have besides two marvellous kinds of sheep, found nowhere else') and Hdt. 3.85.1 (Δαρείῳ δὲ ἦν ἱπποκόμος ἀνὴρ σοφός, τῷ οὔνομα ἦν Οἴβαρης 'now Dareios had a clever groom, whose name was Oebaros'), for example, the NPs are not ordered in a crescendo pattern from less salient information on the left to more salient information on the right. And even when the final constituent of the NP in a presentative sentence is more salient than the previous ones, this is usually not due to the fact that the NP introduces a new referent, but to the fact that the modifier is heavy (as in examples 49 and 50). The only example in my corpus of an NP in a presentative sentence where the order of the constituents cannot be explained by a combination of the saliency and heaviness principle is Hdt. 8.82.1 ἀπιστεόντων δὲ τούτων ἧκε τριήρης ἀνδρῶν Τηνίων αὐτομολέουσα, τῆς ἦρχε ἀνὴρ Παναίτιος ὁ Σωσιμένεος, ἥ περ δὴ ἔφερε τὴν ἀληθείην πᾶσαν. ('while they were still held by disbelief, a trireme of Tenian deserters arrived, captained by Panaetios son of Sosimenes, which brought them the whole truth'). Although the second relative clause is the most salient modifier, it is placed in the outermost right position, even after the equally heavy first relative clause.

[36] Some more examples can be found at Hdt. 1.113.2 τῷ κόσμῳ παντὶ τοῦ ἑτέρου παιδός, 2.90.2 οἱ ἱρέες αὐτοὶ οἱ τοῦ Νείλου, 3.150.1 ἐν τούτῳ παντὶ τῷ χρόνῳ, 7.224.2 τὸν οἶκον πάντα τὸν ἑωυτοῦ and 8.104 τοῖσι ἀμφικτυόσι πᾶσι τοῖσι ἀμφὶ ταύτης οἰκέουσι τῆς πόλιος.

(51) Ἑκαταῖος δ᾽ ὁ λογοποιὸς πρῶτα μὲν οὐκ ἔα πόλεμον βασιλέϊ τῷ Περ-
σέων ἀναιρέεσθαι, καταλέγων **τά** τε **ἔθνεα πάντα τῶν ἦρχε Δαρεῖος**
καὶ τὴν δύναμιν αὐτοῦ·

Hekataios the historian first advised that they should not make war
on the king of Persia listing **all the nations subject to Dareios** (lit. the
nations all of which Dareios ruled) and all his power.   (Hdt. 5.36.2)

(52) (...) μετὰ δὲ ταῦτα **τὸν χρυσὸν ἅπαντα τὸν ἐκ τοῦ ἄστεος** καὶ τὸν
ἄργυρον ἔσπειρε ἀπὸ τοῦ τείχεος ἐς τὸν Στρυμόνα (...).

(...) after that, he took **all the gold** and silver **from the city** (lit. the gold
all the from the city and the silver) and scattered it from the walls into
the Strymon (...).   (Hdt. 7.107.2)

In both example (51) and (52), the predicative πάντα is less salient than
the contrastive noun, but much more salient than the highly predictable
relative clause or prepositional phrase. Apparently, the saliency of πάντα
allows this modifier to be expressed between the noun and the rela-
tive/prepositional phrase, even though it is no part of the NP proper.[37]
The expression of predicative modifiers in between proper NP elements
in my corpus is limited to the modifiers πᾶς and αὐτός. The ready accep-
tance of these predicative modifiers in between proper NP elements may
be facilitated by the fact that the very same modifiers—with a different
meaning—may also be used as attributive modifiers (see Chapter 6, sec-
tion 6.1.3.2).

Besides being expressed in between proper NP elements, these pred-
icative adjectives may of course also be expressed at the beginning or the
end of the NP, depending on their information value:

(53) (...), ὃς μεμφόμενος Ἀμάσι ἔπρηξε ταῦτα ὅτι μιν **ἐξ ἀπάντων τῶν ἐν
Αἰγύπτῳ ἰητρῶν** ἀποσπάσας ἀπὸ γυναικός τε καὶ τέκνων ἔκδοτον
ἐποίησε ἐς Πέρσας, (...).

(...), who advised it out of resentment against Amasis, that out of **all
the Egyptian physicians** (lit. of all the in Egypt physicians) Amasis had
dragged him away from his wife and children and sent him up to Persia,
(...).   (Hdt. 3.1.1)

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[37] Apparently, Rijkhoff's domain principle, which prescribes that constituents are to
be expressed in their proper domain (see Chapter 2, section 2.3.1), can easily be violated
in Greek. This can also be inferred from the fact that NP constituents can be separated by
constituents of the level of the clause (cf. example 5, 7, 11, 24, 65 and 67). As I explained
in Chapter 1, section 1.2, I did not analyse the grounds for discontinuous expression of
the NP.

(54)   εὑρίσκω δὲ ὧδε ἂν γινόμενα ταῦτα, εἰ λάβοις **τὴν ἐμὴν σκευὴν πᾶσαν**
        καὶ ἐνδὺς μετὰ τοῦτο ἵζοιο ἐς τὸν ἐμὸν θρόνον καὶ ἔπειτα ἐν κοίτῃ τῇ
        ἐμῇ κατυπνώσειας.

        I believe that this is most likely to happen, if you take **all my apparel** (lit.
        the my apparel all) and sit wearing it upon my throne, and then lie down
        to sleep in my bed.   (Hdt. 7.15.3)

In example (53) the predicative modifier ἁπάντων is more salient than,
and therefore expressed before, the NP constituents ἐν Αἰγύπτῳ and
ἰητρῶν (the Egyptian is angry that out of *all* the doctors in Egypt, he
is the chosen one). In example (54), by contrast, πᾶν is expressed at the
end of the NP because it is not particularly salient: it is the combination
of Xerxes' apparel, his throne and his bed that will trick the god, not the
fact that Artabanos wears Xerxes' *whole* apparel.[38]

    Examples (51)–(54) were meant to demonstrate that predicative mod-
ifiers are also sensitive to the saliency principle and can therefore be
expressed between proper NP elements. In Chapter 6, this obedience to
the saliency principle will be used as an argument against the traditional
strict division between attributive and predicative modifiers.

4.2.2.3. Pre- and postnominal modifiers

Next to NPs with multiple prenominal modifiers and NPs with multiple
postnominal modifiers, my corpus also supplies examples of NPs with
both pre- and postnominal modifiers. Examples (55) and (56) are two of
the numerous instances:

(55)   (…), ξυροῦντες τῶν παιδίων ἢ πᾶσαν τὴν κεφαλὴν ἢ τὸ ἥμισυ ἢ **τὸ
        τρίτον μέρος τῆς κεφαλῆς**, ἱστᾶσι σταθμῷ πρὸς ἀργύριον τὰς τρίχας.

        (…), shaving all or one half or **one third of their children's heads** (lit.
        the third part of the head), they weigh the hair in a balance against a sum
        of silver.   (Hdt. 2.65.4)

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[38] Although πᾶς is, because of its semantics, likely to be salient, there are many more
examples where it is less salient than the noun and/or other modifiers, cf. Hdt. 1.72.3
τῆς χώρης ταύτης ἁπάσης, 1.126.2 τὰ βουκόλια πάντα τοῦ πατρός, 1.161 Μαιάνδρου
πεδίον πᾶν, 1.186.2 τοῦ ποταμοῦ τὸ ῥέεθρον πᾶν, 5.36.2 τὰ ἔθνεα πάντα τῶν ἦρχε
Δαρεῖος, 6.43.3 τυράννους τῶν Ἰώνων πάντας, 6.44.1 τὰ ἐντὸς Μακεδόνων ἔθνεα
πάντα and 7.27 τὴν βασιλέος στρατιὴν πᾶσαν.

(56)   ἔστι δέ σφι τὰ πλοῖα ταῦτα πλήθεϊ πολλὰ καὶ ἄγει ἔνια **πολλὰς χιλιά-
       δας ταλάντων**.

       They have many of these boats; some are of **many thousand talents'**
       burden.   (Hdt. 2.96.5)[39]

Because Rijkhoff's NP model concentrates on the relative distance of the
modifiers to the noun (see example 2), examples like these cannot be
accounted for by this semantic model. The ordering of the constituents
in NPs with both pre- and postnominal modifiers can be accounted for,
however, by the saliency principle: the prenominal modifier is more, the
postnominal modifier less salient than the noun in between.

  That the prenominal modifier in NPs with both pre- and postnominal
modifiers is more salient than the following noun can be illustrated by
examples (55) and (57)–(59):

(57)   ὁ δ᾽ ἀμείβετο φὰς τούτων οὐδέτερα ποιήσειν, ἐκείνους τε οὐ καλῶς
       συμβουλεύειν παραινέοντας **τὴν ἔχει γυναῖκα, ἐοῦσαν ἀναμάρτητον
       ἑωυτῷ**, ταύτην ἀπέντα ἄλλην ἐσαγαγέσθαι·

       He (= Anaxandrides), however, said in response that he would do neither
       of these things and that they were not giving him good advice in bidding
       him to get rid of **his present wife, who was blameless** (lit. the he had wife,
       being blameless to him), and to marry another.   (Hdt. 5.39.2)

(58)   ἀλείφατι δὲ χρέωνται Αἰγυπτίων οἱ περὶ τὰ ἕλεα οἰκέοντες **ἀπὸ τῶν
       σιλλικυπρίων τοῦ καρποῦ, τὸ καλέουσι μὲν Αἰγύπτιοι κίκι**, (…).

       The Egyptians who live around the marshes use an oil drawn **from the
       castor-berry, which they call kiki** (lit. of the castors the fruit, which the
       Egyptians call kiki), (…).   (Hdt. 2.94.1)

(59)   (…) συνέπαινος καὶ αὐτὸς Δαρεῖος ἐγένετο, παρεσκευάσατο μὲν διη-
       κοσίας τριήρεας, **πολλὸν δὲ κάρτα ὅμιλον Περσέων τε καὶ τῶν ἄλλων
       συμμάχων**, (…).

       (…) and when Dareios himself too had consented to the plan, he (=
       Artaphrenes) equipped two hundred triremes and **a very great company
       of Persians and their allies in addition** (lit. great very company of
       Persians and the other allies), (…).   (Hdt. 5.32)

In examples (55) and (57), the first modifier precedes the noun because
it provides contrastive information: the numeral in (55) contrasts half of
the head with a third part of it and the relative clause in (57) contrasts
the wife to whom Anaxandrides is happily married to the woman the

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[39] The order of the constituents in the highlighted NPs in examples (55) and (56) will
be explained below.

Ephors advise him to marry, in their attempt to ensure the family of the Eurysthenes of offspring. In examples (58) and (59), on the other hand, the first modifiers precede the noun because of their saliency. In example (58), the first modifier is more salient because it indicates of which plant the Egyptians produce oil. In example (59), the addition of κάρτα confirms that despite the contrast between the ships and the crowd, the modifier πολλόν is more salient than the noun. Artaphrenes did not only equip two hundred ships, but a *gigantic* mass of Persians and other allies as well.[40]

Whereas the first modifier in the modifier-noun-modifier pattern is more salient, the second modifier is less salient than the noun in between. Sometimes, the relatively low degree of saliency of the final modifier is due to the fact that the noun is pragmatically marked. In example (60), for instance, the noun is contrastive, and in example (61) the noun provides very salient information (some boats carry many *thousands* talent's burden):

(60)   (. . .), ἤλαυνε τὸν στρατὸν ὁ Μεγάβαζος διὰ τῆς Θρηίκης, πᾶσαν πόλιν **καὶ πᾶν ἔθνος τῶν ταύτῃ οἰκημένων** ἡμερούμενος βασιλέϊ·

         (. . .), Megabazos marched his army through Thrace, subduing to the king's will every city and **every people of that region**.   (Hdt. 5.2.2)

(61)   (= 56) ἔστι δέ σφι τὰ πλοῖα ταῦτα πλήθεϊ πολλὰ καὶ ἄγει ἔνια **πολλὰς χιλιάδας ταλάντων**.

         They have many of these boats; some are of **many thousand talents'** burden.   (Hdt. 2.96.5)

Most often, however, the fact that the noun is more salient than the postnominal modifier is not due to a pragmatic marking of the noun, but to the very low information value of the postnominal modifier. This low information value may be a consequence of the fact that the information provided is already known, natural or not that relevant for the storyline:

(62)   (= 17) ταῦτα δὲ ποιήσαντες **τὸ ἄλλο σῶμα τοῦ βοὸς** πιμπλᾶσι ἄρτων καθαρῶν καὶ μέλιτος καὶ ἀσταφίδος καὶ σύκων καὶ λιβανωτοῦ καὶ σμύρνης καὶ τῶν ἄλλων θυωμάτων, (. . .).

         Having done this, they fill **what remains of the carcass** (lit. the other body of the cow) with pure bread, honey, raisins, figs, frankincense, myrrh, and other kinds of incense, (. . .).   (Hdt. 2.40.3)

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[40] Besides being contrastive or otherwise more salient information than the noun, the prenominal modifier may also precede the noun because it provides the essential

(63)   (...) τὴν θεραπηίην τὴν ἑπομένην τούτοισι καὶ τοὺς ἐν τοῖσι σιταγω-
γοῖσι ἀκάτοισι ἐόντας καὶ μάλα **ἐν τοῖσι ἄλλοισι πλοίοισι τοῖσι ἅμα
πλέουσι τῇ στρατιῇ**, τούτους τῶν μαχίμων ἀνδρῶν οὐ δοκέω εἶναι
ἐλάσσονας ἀλλὰ πλέονας.

(...) as for the service-train which followed them and the crews of the
light corn-bearing vessels and especially of **all the other vessels which
came by sea with the force** (lit. the other vessels the together sailing
with the force), these I believe to have been not fewer but more than
the fighting men.   (Hdt. 7.186.1)

(64)   (= 58) ἀλείφατι δὲ χρέωνται Αἰγυπτίων οἱ περὶ τὰ ἕλεα οἰκέοντες **ἀπὸ
τῶν σιλλικυπρίων τοῦ καρποῦ, τὸ καλέουσι μὲν Αἰγύπτιοι κίκι**, (...).

The Egyptians who live around the marshes use an oil drawn **from the
castor-berry, which they call kiki** (lit. from the castors the fruit, wich the
Egyptians call kiki), (...).   (Hdt. 2.94.1)

(65)   ἔχει δὲ καὶ ἡ Κυρηναίη χώρη, ἐοῦσα ὑψηλοτάτη ταύτης τῆς Λιβύης
τὴν οἱ νομάδες νέμονται, **τρεῖς ὥρας** ἐν ἑωυτῇ **ἀξίας θώματος**.

The country of Kyrene, which is the highest part of the Libya that the
nomads inhabit, has **three marvellous harvest seasons** (lit. three harvest
seasons worth wonder).   (Hdt. 4.199.1)

In example (62), the genitive could have been left out without affecting
the interpretation of the sentence, as we have already been informed
that it is a cow that is being slaughtered. Similarly, in example (63),
it is so natural on the basis of the context that 'the other ships' refers
to the other ships in the wake of the king's fleet that the postnominal
modifier could have been left unmentioned. In examples (64) and (65),
by contrast, the low information value of the postnominal modifier
is not due to its familiarity or predictability, but to the fact that the
information it provides is not essential for the proper understanding of
the utterance in question. In example (64), the relative clause provides
additional information, which is not indispensable for the addressee's
understanding of the production of oil in Egypt. Similarly, the author's
judgement expressed by the adjective in example (65) is not essential for
the description of the three harvest seasons in Kyrene.

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information for the identification of the referent (see Chapter 3, section 3.2.2). In these
cases, the modifier provides the only available or most prominent information on a
referent. In Hdt. 7.196.1 (τῶν πεντεκαίδεκα νεῶν τῶν εἶπον Σανδώκεα στρατηγέειν
'the fifteen ships of which I told that Sandokes was captain'), for example, the numeral
provides the most prominent information of the ships that have been said to be captured
by the enemy in 7.194.

In the examples shown hitherto, the NPs consisted of one pragmati-
cally marked prenominal modifier, a noun and one unmarked postnom-
inal modifier. Yet, the noun may also be modified by more than two
modifiers, in which case the noun is modified by one or more prenomi-
nal modifiers and one or more postnominal modifiers. The order of the
constituents in these NPs is also in accordance with the saliency princi-
ple:

(66)   τὸ μέν νυν μέγαθος τοσοῦτόν ἐστι τοῦ ἄστεος τοῦ Βαβυλωνίου, ἐκε-
         κόσμητο δὲ ὡς **οὐδὲν ἄλλο πόλισμα τῶν ἡμεῖς ἴδμεν**.

         Such is the size of the city of Babylon; and it was planned like **no other
         city of which we know.**   (Hdt. 1.178.2)

(67)   τοῦτο μὲν δὴ τὸ τεῖχος θώρηξ ἐστί, **ἕτερον δὲ ἔσωθεν τεῖχος** περιθέει,
         οὐ πολλῷ τεῳ ἀσθενέστερον τοῦ ἑτέρου τείχεος, στεινότερον δέ.

         This wall is the city's outer armour; within them there is **another encir-
         cling wall, not much weaker than the other wall, but narrower**.
                                                               (Hdt. 1.181.1)

In example (66), Herodotus describes the splendour of the city of Baby-
lon. To be maximally effective rhetorically, Herodotus expresses οὐδέν
before the contrastive ἄλλο when he states that there is no other city we
know that matches the splendour of Babylon ('*no* other city'). Because
the genitive provides highly predictable information, it follows the noun.
In example (67), both ἕτερον and ἔσωθεν are contrastive and therefore
precede the already familiar noun. As the main point of the clause is that
there is *another* wall next to the one elaborately described in the pre-
ceding section, ἕτερον precedes ἔσωθεν. The adjectives ἀσθενέστερον
and στεινότερον are postnominal, even though they are also contrastive,
because they provide additional information on the nature on the second
wall.[41]
     In the examples of the modifier-noun-modifier pattern discussed
above, the order of the constituents was determined by pragmatics, as the
prenominal modifiers turned out to be more and the postnominal mod-
ifiers less pragmatically marked than the noun. However, as with NPs
with multiple postnominal modifiers, the order of the modifiers of NPs
with both pre- and postnominal modifiers may also be influenced by the
heaviness principle:

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[41] For the order of coordinated adjectives and the use of δέ to coordinate two modi-
fiers, see section 4.3.

(68) **τὴν** μὲν δὴ **μετὰ Σαυρομ**α**τέων μοῖραν ταχϑεῖσαν, τῆς ἦρχε Σκώπα-σις**, πέμπουσι Ἴωσι κελεύοντες ἐς λόγους ἀπικέσϑαι, τούτοισι οἳ τὸν Ἴστρον ἐζευγμένον ἐφρούρεον·

They then sent **the division of the Skythians to which the Sauromatae were attached, and which was led by Skopasis** (lit. the with the Sauro-matae division drawn up, which Skopasis led), to speak with those Ioni-ans guarding the bridge over the Ister. (Hdt. 4.128.2)

(69) ξεῖνε Λυδέ, ἐγὼ ἐπείτε ἐξῆλϑον τὴν Περσίδα χώρην, **οὐδενὶ ἀνδρὶ** συνέμειξα ἐς τόδε **ὅστις ἠϑέλησε ξείνια προϑεῖναι στρατῷ τῷ ἐμῷ**, οὐδὲ ὅστις ἐς ὄψιν τὴν ἐμὴν καταστὰς αὐτεπάγγελτος ἐς τὸν πόλεμον ἐμοὶ ἠϑέλησε συμβαλέσϑαι χρήματα, ἔξω σεῦ.

My Lydian friend, since I came out of Persia I have so far met with **no man who was willing to give hospitality to my army**, nor who came into my presence unsummoned and offered to furnish money for the war, besides you. (Hdt. 7.29.1)

Example (68) is a nice illustration of the tension between the saliency and the heaviness principle. Whereas the saliency principle prefers the con-trastive participle phrase to be expressed before the noun, the heaviness principle prefers the rather heavy participle phrase to be postnominal. As a result, the participle is expressed after the noun, while the depen-dent of this participle precedes the noun. In example (69), the heaviness principle has beaten the saliency principle, so that the rather heavy rela-tive clause follows the noun, although it provides highly salient informa-tion. The relative clause is the most salient element of the NP because it expresses the crucial point of Xerxes' happiness. Xerxes is not delighted that he finally meets someone, but rather that he finally meets someone who offers him and his army hospitality.

4.2.3. *Concluding remarks*

The preceding sections argued that Ancient Greek differs from many other languages in that the order of the modifiers within the NP is not determined by the semantics of the modifiers, but by their saliency. The various constituents of the NP are ordered in a diminishing degree of saliency from more salient information on the left to less salient information on the right. Hence, the modifiers in multiple-modifier NPs may either all precede *or* follow the noun, or precede *and* follow the noun, dependent on their saliency. The number of examples of the various possibilities in my corpus can be found in Table 1:

NP pattern	number of examples		number of problematic cases	
definite NPs				
multiple prenominal modifiers	162	(52)[42]	8	(= 5 %)
multiple postnominal modifiers	139	(22)	3	(= 2 %)
pre- and postnominal modifiers	249	(36)	7	(= 3 %)
indefinite NPs				
multiple prenominal modifiers	130		7	(= 5 %)
multiple postnominal modifiers	378		32	(= 8 %)
pre- and postnominal modifiers	268		21	(= 8 %)
total	1336		78	(= 6 %)

Table 1. The number of multiple-modifier NPs

Although Table 1 is meant to give a general impression of the number of multiple-modifier NPs, rather than to provide a basis for genuine statistical analyses, the relatively low number of multiple prenominal modifiers in indefinite NPs asks for some explanation. In my view, the difference between the rather equal distribution of multiple pre- and multiple postnominal modifiers in the case of definite NP and the much less equal distribution in the case of indefinite NPs can be explained by their different function. Since indefinite NPs are mainly used to introduce a new referent into the discourse, it is not surprising that instances of indefinite NPs with two or more prenominal (and thus salient) modifiers are relatively rare. Given the function of the NP, it is more likely that one or more modifiers provide additional information, which is not that salient, about the referent. In definite NPs, by contrast, which are most often used to refer to some textually evoked or inferrable referent, modifiers are often added to facilitate the identification of the referent. For this reason, modifiers in definite NPs are more likely to provide salient (especially contrastive) information.

The crucial question is of course why the Greek language takes an exceptional position by ordering modifiers on the basis of their saliency instead of their semantics. A plausible answer seems that the Greek

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[42] The numbers between brackets are the number of NPs in that specific category in which one of the modifiers has predicative value. So, 162 (52) in the first line of the second column means that there are 162 NPs with multiple prenominal modifiers, of which 52 contain one predicative element (i.e. πᾶς or αὐτός). Although these elements do not belong to the NP proper, I did include them in my analysis, as they also turned out to be sensitive to the saliency principle and could therefore be placed between proper NP elements. For a discussion of the position and status of these predicative elements, see section 4.2.2.2.

musical accent made acoustic emphasis and other prosodic tools for expressing pragmatic prominence impractical, so that the language users had to employ other solutions to give prominence to certain parts of the NP.[43] This answer, however, is invalidated by Devine and Stephens, who conclude on the basis of typological evidence that 'even though Greek has a pitch accent and makes extensive use of particles and word order, there is no typological reason for excluding a priori the possibility that focus, and particularly contrastive focus, could have been marked prosodically in Greek by pitch obtrusion and by phrasing effects' (Devine and Stephens 1994: 469).[44]

Rijkhoff himself explains the deviant behaviour of the modifiers in (modern) Greek by the fact that Greek modifiers are not integral parts of the NP, but have an appositional relation with the noun. He repeatedly emphasises that his semantic ordering principles only apply to languages with integral NPs[45] and are not meant to explain the position of modifiers that are not integral parts of the NP, like the appositional modifiers in the example from Nama Hottentot in example (70).[46]

(70)   kini-di   ne   !nona-di   !Gombates di-di
        book-3PL.F these three-3PL.F !Gombates of-3PL.F

        'these three books of !Gombate's (lit. books, these three ones, the ones of !Gombate)'

But although many more scholars[47] seem to believe that Greek modifiers are not integral parts of the NP, I doubt whether this is correct. As

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[43] Cf. Sicking (1986: 139), who explains the abundant use of particles in Greek by the fact that the musical accent hinders acoustic emphasis and other prosodic tools. Hellwig (1974: 164 ff.) also assumes that musical accent and prosodic marking are mutually exclusive.

[44] Hirt (1929: 36) comes to the same conclusion, but in a less accurate way. He simply claims that 'trotz dieser ausgesprochenen musikalischen Betonung eine gewisser Lautheit (Nachdrucksakzent) nicht gefehlt haben kann, wie sie eben keiner Sprache fehlt'.

[45] An integral NP is understood to mean a hierarchically organised structure with the noun as its semantic and syntactic head, on which the modifiers are dependent (Rijkhoff 2002: 23).

[46] The example, discussed by Rijkhoff (2002: 21), was taken from Payne (1994). Payne (1994: 2850) observes that the fact that each element in this example is marked for person and gender by the postposition -di together with fact that each element may occur in isolation seems to indicate that the example consists of three miniature NPs in apposition rather than one integrated and hierarchically structured NP.

[47] For an appositional interpretation of the Ancient Greek NP, see Gildersleeve (1900: 280) and Smyth (1956: 293). Joseph and Philippaki-Warburton (1987), Stavrou and Horrocks (1987) and Rijkhoff (1992: 234 ff.) argue for an appositional interpretation of the Modern Greek NP.

I will argue in Chapter 6, section 6.1.1.2, the possible articulation of the modifiers in definite NPs, generally considered a major indication of appositional structure of the Greek NP, does not indicate that the modifier is not an integral part of the NP, but has a totally different function. Furthermore, as will be demonstrated in section 4.3, the various modifiers of one NP may have scope over each other, which would be impossible if the various modifiers were independent appositions on the noun instead of integral parts of a hierarchically organised NP.

But although I severely doubt that the NPs in my corpus have an appositional structure, I cannot exclude the possibility that in an older stage Ancient Greek NPs were non-hierarchical, appositional structures and that the pragmatic ordering of NP constituents is a residue of this non-hierarchical past. That Ancient Greek is originally a non-configurational language[48] has been suggested by Devine and Stephens (2000: 143 ff.), who use this non-configurational past as explanation for the frequent use of hyperbaton in classical Greek.[49] They validate their conclusion about the origin of Greek by many examples that show that Homeric Greek displays characteristics of a non-configurational language, such as free word order, null anaphora (e.g. Θησεὺς ἤγαγεν 'Theseus brought [it]'), adjunct lexical arguments (e.g. ἥ μιν ἔγειρε Ναυσικάαν εὔπεπλον 'she woke her, the beautifully dressed Nausikaa'), lack of a definite article, failure of agreement and parataxis. Although I doubt whether each of these characteristics does indeed validate the conclusion that Homeric Greek was a non-configurational language,[50] without further research I cannot

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[48] Non-configurational languages are languages with a flat instead of a hierarchical phrase structure. Because such languages try to avoid hierarchical structures, they prefer appositional structures to NPs with dependent modifiers. References to literature on non-configurational languages in general and descriptions of noun phrase structure in non-configurational languages in particular can be found in Devine and Stephens (2000: 142–143 and 149) and Rijkhoff (2002: 19–22).

[49] That the frequent use of hyperbaton in classical Greek can be explained by a non-configurational past is doubted by Beckwith (2002: 321). He argues that if Ancient Greek developed from a non-configurational language to a configurational one we would expect it to be more configurational than Indo-European. Yet, since classical Greek displays a higher rate of hyperbaton than Indo-European, Beckwith argues that Devine and Stephens' conclusion does not seem legitimate.

[50] Lack of a definite article and null anaphora, for instance, are no indisputable signs of non-configurationality. Similarly, the use of adjunct lexical arguments need not be a sign of the avoidance of hierarchical structures, but can also be explained as a 'topic promotion strategy' (Lambrecht 1994: 176 ff.). As Lambrecht argues, an extra-clausal lexical NP (e.g. now the wizard, he lived in Africa) may be used to establish a new topic in the discourse.

exclude the possibility that the Greek NP was originally more apposi-
tional or non-hierarchical than in the times of Herodotus.[51]

4.3. *Coordination and juxtaposition*[52]

Section 4.2 argued that multiple-modifier NPs are ordered from more
salient information on the left to less salient information on the right.
This principle does not only account for word order in NPs with juxta-
posed modifiers, but also plays a role in NPs with coordinated modifiers,
albeit a much smaller one. However, before discussing the order of coor-
dinated modifiers, it should be examined what coordination is and what
it is used for.

In my corpus, I have found two different types of coordination.[53] In
the first place, there are some (very rare) examples where two elements
are combined to constitute one compound modifier. Two clear examples
of this kind of coordination are given in (71) and (72):

(71)   κατὰ μὲν δὴ Ἀθηναίους ἐτετάχατο Φοίνικες (οὗτοι γὰρ εἶχον **τὸ πρὸς
        Ἐλευσῖνός τε καὶ ἑσπέρης κέρας**), (…).

        The Phoenicians were marshalled against the Athenians—for they had
        the wing toward Eleusis and the West (lit. the toward Eleusis and west
        wing)—(…).   (Hdt. 8.85.1)

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[51] It should be noted, however, that even if it is proven that the Ancient Greek NP was
non-hierarchical in an older stage, this does not actually solve the problem that Ancient
Greek differs from many other (Indo-European) language with respect to the ordering of
the modifiers around the noun. For how to explain that Ancient Greek did, whereas other
Indo-European languages did not, preserve some reminiscence of its non-configurational
past?

[52] This section is a further elaboration of S. Bakker (2007). While that article focussed
on the ordering of coordinated and juxtaposed adjectives, the present section takes the
difference between coordination and juxtaposition of all kinds of modifiers into account.

[53] Since the aim of this book is to study word order *within* the NP, examples of
coordination like Hdt. 7.112 χρύσεά τε καὶ ἀργύρεα μέταλλα ('gold and silver mines')
and Hdt. 1.180.3 οἰκιέων τριορόφων καὶ τετραφόρων ('houses with three and four
floors') are left out of consideration, because these examples do not consist of one NP
with two coordinated elements, but of two coordinated NPs, of which the first or the last
is elliptical. For the same reason, examples like Hdt. 2.43.2 (πολλά μοι καὶ ἄλλα τεκμήριά
ἐστι τοῦτο οὕτω ἔχειν, ἐν δὲ καὶ τόδε, ὅτι …, 'I have a lot of other evidence that this
is true, besides this (lit. among which also this …)') are also left out of consideration.
Although καί stands in between two modifiers, in my view it does not coordinate the two
modifiers, but coordinates the NP in question with some following NP (in this case 'the
many other proofs' and 'this' rather than πολλά and ἄλλα).

(72)   ἐς μέν νυν Σάμον ἀνέθηκε **κατὰ ξεινίην τὴν ἑωυτοῦ τε καὶ Πολυκρά-**
        τεος τοῦ Αἰάκεος, (…).

        The offerings in Samos were dedicated **because of the friendship be-**
        tween himself (= Amasis) and Polykrates, son of Aeakes (lit. because
        of friendship the between himself and Polykrates the of Aeakes), (…).
                                                                (Hdt. 2.182.2)

In example (71), the two genitives Ἐλευσῖνος and ἑσπέρης, which both
depend on πρός, together make up one modifier that provides informa-
tion on the position of the κέρας. Similarly, the two genitives in (72) are
to be analysed as one compound modifier.

   Besides these cases of coordination of two elements within one mod-
ifier, there are many more examples of coordination of two or more sep-
arate modifiers:

(73)   συνελέχθησάν τε δὴ πολλῷ πλέονες νέες ἢ ἐπ᾽ Ἀρτεμισίῳ ἐναυμάχεον
        καὶ ἀπὸ πολίων πλεόνων. (…) **νέας** δὲ **πολλῷ πλείστας τε καὶ ἄριστα**
        πλεούσας παρείχοντο Ἀθηναῖοι.

        Many more ships assembled now than had fought at Artemisium, and
        from more cities. (…) The Athenians provided **by far the most numer-**
        ous and the most seaworthy ships (lit. ships most numerous and most
        seaworthy).   (Hdt. 8.42.1–2)

(74)   (…) **πρῶτον** μὲν **καὶ μέγιστον μαρτύριον** οἱ ἄνεμοι παρέχονται
        πνέοντες ἀπὸ τῶν χωρέων τουτέων θερμοί. δεύτερον δέ, ὅτι (…).

        (…) **the principal and strongest evidence** (lit. principal and strongest
        evidence) is that the winds blowing from these regions are hot. In the
        second place, that (…).   (Hdt. 2.22.2)

Unlike the coordinators in examples (71) and (72), the coordinators in
(73) and (74) do not coordinate various elements within one modifier,
but coordinate various modifiers of one noun. The coordinated mod-
ifiers, which each have their own semantic relationship with the head
noun, are combined into one larger modifying unit.[54]

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[54] In the case of these larger modifying units, the combined modifiers do not necessar-
ily have the same semantic relationship with the head noun. Whereas the first modifier in
example (73) is a quantifying modifier giving information on the quantity of the referent,
the second one provides information that qualifies the referent. For this kind of coor-
dination, therefore, Haspelmath's definition of coordination, viz. 'the term coordination
refers to syntactic constructions in which two or more units of the same type are com-
bined into a larger unit and *still have the same semantic relations* with other surrounding
elements' (Haspelmath 2007; my italics) seems more adequate than S. Dik's definition: 'a
co-ordination is a construction consisting of two or more members which *are equivalent*

The question arises now what the difference is between 'normal', juxtaposed modifiers and these larger modifying units. It may seem that this question can be answered easily by comparing coordinated modifiers with juxtaposed ones. Such a comparison turns out to be somewhat complicated, however, because of the fact that in a written text coordinated modifiers may not be easily recognisable, as they need not to be coordinated with an overt coordinator. In addition to being coordinated by a conjunctive, disjunctive or adversative connection particle (e.g. καί, οὔτε, ἤ, δέ),[55] modifiers may also be coordinated by means of a pause, which—because of the lack of punctuation marks—left no trace in the written text. In her study of the difference between coordinated and juxtaposed Latin adjectives, Risselada (1984: 202) suggests that in these cases of so-called zero-coordination, an overt coordinator can be inserted without changing the meaning of the NP. Applying this criterion, however, sounds easier than it is, for in practice it is often difficult to decide whether an overt coordinator can be inserted without any effect on the meaning of the NP.[56] Furthermore, one runs the risk of judging the Latin or Greek examples on the basis of the acceptability of the English translation.[57] Despite these criticisms of Risselada's criterion, I cannot offer a better alternative.

On the basis of her Latin sample, Risselada's answer to the question as to what the difference is between coordinated and juxtaposed adjectives is that adjectives are coordinated if they 'are equivalent as to the semantic relationship with the head' (Risselada 1984: 210) and are juxtaposed if they are not.[58] Although Fugier and Corbin (1977) assume that

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as to grammatical function, and bound together at the same level of structural hierarchy by means of a linking device' (S. Dik 1968: 25; my italics).

[55] In my corpus, I found the following coordinators: (τε) καί (very frequently), δέ, οὔτε, οὐδέ and (very rarely) ἀλλά or ἤ. The difference between the various coordinators has not been analysed. For the use and function of (some of) these particles at the level of the clause, see E.J. Bakker (1993), Sicking and Van Ophuijsen (1993) and S.R. Slings (1997b).

[56] In Hdt. 4.25.1 (τὸ δὲ τῶν φαλακρῶν κατύπερθε οὐδεὶς ἀτρεκέως οἶδε φράσαι· ὄρεα γὰρ ὑψηλὰ ἀποτάμνει ἄβατα …, 'but what lies north of the bald men no one can say with exact knowledge; for high impassable mountains bar the way …'), for instance, I find it difficult to decide whether an overt coordinator can or cannot be inserted.

[57] That the use of overt coordinators in Greek is not completely comparable to that in English is evident from examples like (79) and (81) where the modifier πολύς 'much' is overtly coordinated with an adjective, whereas the use of 'and' in English seems highly unnatural.

[58] Being equivalent as to semantic relationship with the head means that the adjectives give information on the same feature of the referent (e.g. provenance, colour, size, and

the function of the modifier, and not its semantics, is the crucial factor, their analysis of the difference between juxtaposed and coordinated Latin modifiers is very similar. They assume that Latin modifiers are coordinated if both have a qualifying function and otherwise are juxtaposed.[59] Both views, however, cannot explain the use of coordinators in my Greek examples.[60] Example (75), for instance, contradicts the view of Fugier and Corbin, as the participles are coordinated, although they both have an identifying function:

(75)   **ἡ** δὲ **Κλεομένεα τεκοῦσα καὶ [τὸ] δεύτερον ἐπελθοῦσα γυνή, ἐοῦσα θυγάτηρ Πρινητάδεω τοῦ Δημαρμένου**, οὐκέτι ἔτικτε τὸ δεύτερον.

As for the wife who was the mother of Kleomenes and arrived second, the daughter of Prinetadas son of Demarmenos (lit. the Kleomenes having borne and secondly arriving wife, being a daughter of Demarmenos), she bore no more children.   (Hdt. 5.41.3)

Risselada's view is contradicted by examples like the following, where the modifiers are coordinated although they do obviously not belong to the same semantic class:

(76)   (= 73) (. . .) **νέας** δὲ **πολλῷ πλείστας τε καὶ ἄριστα πλεούσας** παρείχοντο Ἀθηναῖοι.

(. . .) the Athenians provided **by far the most numerous and the most seaworthy ships** (lit. ships most numerous and most seaworthy).   (Hdt. 8.42.2)

(77)   ἐξυφήνασα Ἄμηστρις ἡ Ξέρξεω γυνὴ **φᾶρος μέγα τε καὶ ποικίλον καὶ θέης ἄξιον** διδοῖ Ξέρξῃ.

Xerxes' wife, Amestris, wove and gave to him **a great gaily-coloured mantle, marvellous to see** (lit. mantle great and gaily-coloured and marvellous to see).   (Hdt. 9.109.1)

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evaluation). Risselada concretises the somewhat vague 'same feature of the referent' by setting up a classification of adjectives after the example of Hetzron.

[59] For the difference between qualifying and identifying modifiers, see footnote 9 of this chapter.

[60] Although I did not check the concrete examples, I doubt whether the views of Risselada (1984) and Fugier and Corbin (1977) actually hold for Latin. Risselada's own remark that a writer may coordinate two adjectives of different semantic classes if he chooses to put them on the same level raises doubts about her semantic approach. If the writer may influence the juxtaposition/coordination in these cases, why not make him equally responsible for the choice juxtaposition/coordination in all other instances? Fugier and Corbin's analysis is problematic in that a division of modifiers into qualifying and identifying is too strict in that modifiers may (and often do) combine the two functions. In their example *populus Romanus* 'Roman people', for instance, the adjective does not only identify the referent, but provides qualifying information as well.

In example (76), the first modifier is a quantifying modifier, while the second one is a qualifying one. In example (77), the adjectives are all qualifying modifiers, but still differ in the semantic relationship with the head (for the classification of adjectives, see Risselada 1984: 214 ff.), as the first adjective provides information on the physical properties of the referent, the second one on its colour, and the last one gives an evaluation of the referent.[61]

In my view, the difference between juxtaposed and coordinated modifiers has nothing to do with their function or semantic class, but with their scope.[62] In the case of juxtaposed modifiers, one of the modifiers has scope over the combination of the noun plus the other modifier(s). Coordinated modifiers, by contrast, do not have scope over each other, but only modify the noun itself. Schematically, the difference may be depicted as follows:

(78a)   juxtaposition: X_i (X_j N) or (N X_j) X_i[63]

      e.g. *beautiful old cars* (= old cars which are beautiful)

(78b)   coordination: X_i + X_j (N) or (N) X_i + X_j

      e.g. *beautiful, old cars* (= cars which are beautiful and old)

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[61] Strikingly, Del Mar Puebla Manzanos (2001) concludes on the basis of her data from book one of Herodotus that Risselada's conclusion about the difference between juxtaposition and coordination of Latin adjectives is also valid for Greek. The difference between the outcome of her and my research, although our data partly overlap, must be due to the fact that Del Mar Puebla Manzanos also included many coordinated *NPs* in her sample (for instance, Αἰγύπτια τε καὶ Ασσύρια φορτία from Hdt. 1.1.1, which should in my view be analysed as the coordination of two NPs, viz. Egyptian (wares) and Assurian wares, rather than the coordination of two adjectives within one NP). Moreover, she considers adjectives separated by a comma/pause as juxtaposed instead of coordinated, which must have polluted her data severely as well.

[62] The same view can be found in S. Dik (1997: 136) and in Sproat and Shih (1988: 478), who speak of parallel modification (if the modifiers are coordinated) and modification in sequence (if the modifiers are juxtaposed).

[63] It is important to note that this scheme is a semantic representation of an NP with two juxtaposed modifiers, not a syntactic one. As was discussed extensively in section 4.2, the order of the modifiers in Ancient Greek does not give information on their scope relations, but on their saliency. Although X_i in (78a) has scope over the combination of N plus X_j, it is not necessarily the outermost NP element in the actual linguistic expression (in Ancient Greek, at least). The fact that the scope relations are not reflected in the actual linguistic expression has often led to the mistaken idea that (Ancient) Greek has a flat, non-hierarchical structure (cf. footnote 47). The existence of a mechanism to thwart the scope relations (viz. coordination) confirms, however, that in a normal, juxtaposed, situation modifiers do have scope over each other, even though the scope relations are not obvious from the linguistic expression.

Though the difference may seem small for NPs in isolation, within their context the difference in meaning and—especially—in implications turns out to be considerable.[64] In example (79), for instance, juxtaposition of the same modifiers would lead to the interpretation that the Dorians had many cities of the kind 'famous' instead of many cities, which were all famous. Whereas juxtaposition of the adjectives would leave the possibility open that the Dorians also had many non-famous cities, coordination of the adjectives explicitly excludes this interpretation:

(79)   Δωριέων μὲν **πολλαί τε καὶ δόκιμοι πόλιες**, Αἰτωλῶν δὲ Ἦλις μούνη, Δρυόπων δὲ Ἑρμιών τε καὶ Ἀσίνη ἡ πρὸς Καρδαμύλῃ τῇ Λακωνικῇ, Λημνίων δὲ Παρωρεῆται πάντες.

The Dorians have **many famous cities** (lit. many and famous cities), the Aetolians only Elis, the Dryopians Hermione and Asine near Lakonian Kardamyle, the Lemnians all the Paroreatae.   (Hdt. 8.73.2)

Similarly, if the modifiers in example (80) were juxtaposed, this would lead to the interpretation that the bushes, apart from bearing much stinking fruit, also bore sweet-smelling fruit. This interpretation, however, is surely blocked now the adjectives are coordinated:

(80)   παρὰ τὰ χείλεα τῶν τε ποταμῶν καὶ τῶν λιμνέων σπείρουσι τὰ σιλλικύπρια ταῦτα, τὰ ἐν Ἕλλησι αὐτόματα ἄγρια φύεται· ταῦτα ἐν τῇ Αἰγύπτῳ σπειρόμενα **καρπὸν** φέρει **πολλὸν μέν, δυσώδεα δέ·**

They sow this plant, which grows wild in Hellas, on the banks of the rivers and lakes. Sown in Egypt, it produces **abundant fruit, though malodorous** (lit. fruit much, but malodorous).   (Hdt. 2.94.1–2)

Now the difference between coordinated and juxtaposed modifiers has been discussed, we should pass on to the ordering of the constituents in NPs with coordinated modifiers. The examples below will show that coordinated and juxtaposed modifiers do not only differ with respect to their scope, but also with respect to their ordering. Whereas the ordering of NPs with juxtaposed modifiers is determined by the pragmatic principle that the more salient the information, the further to the left it is expressed, in the case of NPs with coordinated modifiers this only holds true for the position of the modifiers in relation to the noun. The order of the modifiers themselves depends on a number of factors, of which

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[64] I do not agree, therefore, with Biraud's conclusion that 'les trois constructions du groupe nominal (coordination, coordination avec crase, juxtaposition) sont des variantes correspondant à un même sens global. (…) elles sont des variantes libres: rien dans leurs contextes ne paraît provoquer l'apparition de l'une plutôt que de l'autre' (Biraud 1991: 29).

their saliency is only a minor one. A much more important factor is the heaviness of the modifiers:[65]

(81)   σκευὴν μὲν τοιαύτην εἶχον ἤ περ εἴρηται, χωρὶς δὲ **χρυσόν τε πολλὸν καὶ ἄφθονον** ἔχοντες ἐνέπρεπον.

Their equipment was such as I have said; beyond this they stood out by **the abundance of gold** (lit. gold much and plentiful) that they had.

<div align="right">(Hdt. 7.83.2)</div>

(82)   ὁ δὲ λέγεται πρὸς τῆς Σικελίης τῶν οἰκητόρων τὰ ὑπεναντία τούτων πεφυκέναι **θηλυδρίης τε καὶ μαλακώτερος ἀνήρ**.

He (= Telines), on the contrary, is reported by the dwellers in Sicily to be **a soft and effeminate man**.

<div align="right">(Hdt. 7.153.4)</div>

In examples like (81) and (82), the saliency of the modifiers, although responsible for their position in relation to the noun,[66] cannot be decisive for the ordering of the modifiers themselves, as their meaning differs so little that it is simply impossible to decide which of them is more salient. For the same reason, a semantic explanation for the ordering of the modifiers is also impossible. The ordering of the modifiers can be explained, however, by their heaviness, as in both examples the second adjective is one syllable longer than the first one. The following two examples show that the influence of the heaviness principle is not confined to those cases where the meaning of the modifiers is so similar that pragmatic and semantic factors can be excluded beforehand:

(83)   (= 79) Δωριέων μὲν **πολλαί τε καὶ δόκιμοι πόλιες**, Αἰτωλῶν δὲ Ἦλις μούνη, Δρυόπων δὲ Ἑρμιών τε καὶ Ἀσίνη ἡ πρὸς Καρδαμύλῃ τῇ Λακωνικῇ, Λημνίων δὲ Παρωρεῆται πάντες.

The Dorians have **many famous cities** (lit. many and famous cities), the Aetolians only Elis, the Dryopians Hermione and Asine near Lakonian Kardamyle, the Lemnians all the Paroreatae.

<div align="right">(Hdt. 8.73.2)</div>

(84)   (= 73) συνελέχθησάν τε δὴ πολλῷ πλέονες νέες ἢ ἐπ' Ἀρτεμισίῳ ἐναυμάχεον καὶ ἀπὸ πολίων πλεόνων. (. . .) **νέας** δὲ **πολλῷ πλείστας τε καὶ ἄριστα πλεούσας** παρείχοντο Ἀθηναῖοι.

Many more ships assembled now than had fought at Artemisium, and from more cities. (. . .) The Athenians provided **by far the most numerous and the most seaworthy ships** (lit. ships most numerous and most seaworthy).

<div align="right">(Hdt. 8.42.1–2)</div>

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[65] In the case of coordinated modifiers it is—in contrast to the cases of heaviness discussed in Chapter 3, section 3.3.1—not only the complexity of the modifier, but also its length that is decisive for its heaviness.

[66] In example (81), the adjectives follow the noun because the noun is more infor-

On the basis of examples like (81)–(84), it seems legitimate to draw the conclusion that the order of coordinated modifiers is determined by their heaviness. For a number of reasons, however, this conclusion is a bit too simple. First of all, it would do no justice to the fact that in many cases the ordering of the modifiers is not only favoured by the heaviness principle, but also in accordance to the saliency principle. In example (83), for instance, the adjective πολλαί, apart from being the least heavy adjective, may also be said to precede δόκιμοι because of the contrast between the many cities of the Dorians and the single Aetolian city (cf. μούνη). Similarly, the preposition of the first adjective (πλείστας) in example (84) may not only be due to its being less heavy, but also to its being more salient than the following ἄριστα πλεούσας. As the issue of the section is that many more ships assembled at Salamis than had fought at Artemisium, the great number of the Athenian ships is more salient than their excellent quality.

Secondly, there is a small number of examples where the order of the coordinated modifiers does not conform to the heaviness principle, but can be explained by their saliency:

(85) ἀνὴρ ἁλιεὺς λαβὼν **ἰχθὺν μέγαν τε καὶ καλὸν** ἠξίου μιν Πολυκράτεϊ δῶρον δοθῆναι.

A fisherman, who had taken **a fine and great fish** (lit. fish great and fine), desired to make a gift of it to Polykrates.   (Hdt. 3.42.1)

(86) λέγεται δὲ καὶ ὅδε λόγος, ἐμοὶ μὲν οὐ πιθανός, ὡς τῶν Περσίδων γυναι-κῶν ἐσελθοῦσά τις παρὰ τὰς Κύρου γυναῖκας, ὡς εἶδε τῇ Κασσανδάνῃ παρεστεῶτα **τέκνα εὐειδέα τε καὶ μεγάλα**, πολλῷ ἐχρᾶτο τῷ ἐπαίνῳ ὑπερθωμάζουσα, (. . .).

The following story, incredible to me, is also told: that one of the Per-sian women who came to visit Kyros' wives, and saw the **tall and attrac-tive children** (lit. children attractive and tall) who stood by Kasandane, expressed her admiration in extravagant terms, (. . .).   (Hdt. 3.3.1)

As the adjectives in example (85) do not differ in heaviness, the heaviness principle cannot be decisive for their order. In example (86), the order of the adjectives even runs counter to the heaviness principle, as the first adjective is heavier than the second. Although the influence of pragmatics is not as clear as in examples (83) and (84) above, it can be

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mative than the adjectives. It is the fact that the Immortals are all covered with *gold* that amazes Herodotus. The adjectives in example (82), by contrast, precede the noun because the qualifications expressed by the adjectives are more informative than the noun itself (it is not very surprising that Telines is a man).

maintained that the order of the adjectives in (85) and (86) is determined by their saliency. In example (85), the size of the fish can be argued to be more salient than its beauty on the basis of the argument that a small fish, no matter how beautiful, would never have been brought to the King. In example (86), the relatively higher degree of saliency of the first adjective becomes clearer if we compare this example to another example with the same adjectives in a different order:

(87)   ἐν τῇ προτέρῃ νυκτὶ τῶν Παναθηναίων ἐδόκεε ὁ Ἵππαρχος **ἄνδρα** οἱ ἐπιστάντα **μέγαν καὶ εὐειδέα** αἰνίσσεσθαι τάδε τὰ ἔπεα·

     In the night before the Panathenaea Hipparchos thought that **a tall and handsome man** (lit. man tall and handsome) stood over him uttering these riddling verses.   (Hdt. 5.56.1)

Whereas in example (87) the size of the man is of primary importance, because it is exactly this characteristic that reveals the divine nature of the night-time visitor, the women in example (86) are, apparently, mainly impressed by the beauty of the children of Kassandane.

A third objection to the conclusion that the order of coordinated modifiers is determined by their heaviness is that it would pass over the fact that the order of coordinated modifiers is sometimes determined by their semantics:

(88)   ἐπιπεσὼν δέ σφι περιπλέουσι **βορῆς ἄνεμος μέγας τε καὶ ἄπορος** κάρτα τρηχέως περιέσπε πλήθεϊ πολλὰς τῶν νεῶν ἐκβάλλων πρὸς τὸν Ἄθων.

     But **a great and irresistible north wind** (lit. north wind great and irresistible) fell upon them as they sailed past and dealt very roughly with them, driving many of their ships upon Athos.   (Hdt. 6.44.2)

(89)   περὶ δὲ τὸν χῶρον **ὄρεα ὑψηλὰ καὶ ἄβατα** περικληίει πᾶσαν τὴν Μηλίδα γῆν, Τρηχίνιαι πέτραι καλεόμεναι.

     And around the ground **high and inaccessible mountains** (lit. mountains high and inaccessible) enclose the whole of Malis and are called the Rocks of Trachis.   (Hdt. 7.198.1)

Although the order of the adjectives in example (88) is in accordance to the heaviness principle, I would like to argue that it is not (only) the heaviness, but (also) the semantics of the adjectives that determines their order. Like in example (89), the second adjective follows the first not (only) because it is heavier, but because it expresses a consequence of the first adjective. In example (89), ἄβατα follows ὑψηλά to express that the inaccessibility of the mountains is a consequence of their height: the mountains are high and *therefore* inaccessible. Similarly, ἄπορος in

example (88) expresses a consequence of μέγας. Its position after μέγας is thus not only determined by its heaviness, but also the most natural ordering.[67]

On the basis of the examples above, we have to conclude that even though almost all examples of coordinated modifiers are ordered from less heavy modifiers on the left to more heavy adjectives on the right, the ordering of coordinated modifiers is not determined exclusively by the heaviness principle. Both the saliency and the semantics of the modifiers also play a role, even though the role of the former is generally much smaller than in the case of juxtaposed modifiers.[68] But even a combination of the factors heaviness, saliency and semantics cannot account for the order of all coordinated modifiers in my corpus. In examples (90) and (91), for instance, the order of the modifiers cannot be explained by any of the three factors:

(90)   τῶν δὲ λοιπῶν Βορυσθένης ἐστὶ πολυαρκέστατος, ὃς νομάς τε καλλίστας καὶ εὐδοκιδεστάτας κτήνεσι παρέχεται **ἰχθῦς τε ἀρίστους διακριδὸν καὶ πλείστους**, (…).

But in comparison to the rest, the Borysthenes (= the Dnjepr) is most productive; it provides the finest and best-nurturing pasture lands for beast and **by far the most excellent and greatest amount of fish** (lit. fish best by far and most), (…).   (Hdt. 4.53.2)

(91)   καὶ ἐν κορυφῇσι ἑκάστου τοῦ κολωνοῦ ἀνακοντίζει ἐκ μέσου τοῦ ἁλὸς **ὕδωρ ψυχρὸν καὶ γλυκύ**, (…).

And on the top of every hill, a fountain of **cold sweet water** (lit. water cold and sweet) shoots up from the midst of the salt, (…).
                                    (Hdt. 4.181.2)

In example (90), the order of the adjectives runs counter to the heaviness principle, even though there are no compelling semantic or pragmatic reasons for this ordering. In example (91), it is the saliency principle that

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[67] Traditionally, it was assumed that the consecutive interpretation of the second adjective in cases like these was due to the explicative value of the coordinator. It was argued that καί, besides expressing plain coordination, could also be used in a so-called explicative mode (cf. Kühner-Gerth 1904: II 247). It seems more sound, however, to assume that the consecutive interpretation of the second adjective is a consequence of the semantics of the adjectives (in combination with the addressee's knowledge of the world), not of the value of the coordinator.

[68] That the ordering of coordinated modifiers is more flexible than the ordering of juxtaposed modifiers is not specific for Ancient Greek, but also holds true for other languages. Cf. Sproat and Shih (1988: 479), who conclude on the basis of data from English, Mandarin Chinese and Polish that adjectival ordering restrictions are, cross-linguistically, limited to juxtaposed modifiers.

is overruled (regardless of how much worth mentioning cold water may be in the middle of the desert, for water shooting up from blocks of salt, its sweetness seems to be more informative than its low temperature), although this ordering of the adjectives is not preferred by the heaviness principle or semantics of the adjectives either.

Especially problematic are modifiers coordinated with the help of the particles (μέν …) δέ.[69] Besides the fact that the order of modifiers coordinated by (μέν …) δέ often runs counter to the three orderings principles discussed above (cf. example 92), many of these NPs are problematic in that it is impossible to decide whether the ordering conforms to the saliency principle, because it is uncertain which of the two modifiers is more salient (example 93 and 94):

(92)   ἦν οἱ **παῖς, τοῦ καὶ πρότερον ἐπεμνήσθην, τὰ μὲν ἄλλα ἐπιεικής, ἄφωνος δέ**. ἐν τῇ ὦν παρελθούσῃ εὐεστοῖ ὁ Κροῖσος τὸ πᾶν ἐς αὐτὸν ἐπεποιήκεε ἄλλα τε ἐπιφραζόμενος καὶ δὴ καὶ ἐς Δελφοὺς περὶ αὐτοῦ ἐπεπόμφεε χρησομένους·

He had **a son, whom I have already mentioned, in other respects fine, but mute**. Now in his days of prosperity past Kroisos had done all that he could for his son; and besides resorting to other devices he had sent to Delphi to inquire of the oracle concerning him.   (Hdt. 1.85.1)

(93)   (= 67) τοῦτο μὲν δὴ τὸ τεῖχος θώρηξ ἐστί, **ἕτερον δὲ ἔσωθεν τεῖχος περιθέει, οὐ πολλῷ τεῳ ἀσθενέστερον τοῦ ἑτέρου τείχεος, στεινότερον δέ**.

This wall is the city's outer armour; within them there is **another encircling wall, not much weaker than the other wall, but narrower**.
          (Hdt. 1.181.1)

(94)   (= 80) ἀλείφατι δὲ χρέωνται Αἰγυπτίων οἱ περὶ τὰ ἕλεα οἰκέοντες ἀπὸ τῶν σιλλικυπρίων τοῦ καρποῦ, τὸ καλέουσι μὲν Αἰγύπτιοι κίκι, ποιεῦσι δὲ ὧδε. παρὰ τὰ χείλεα τῶν τε ποταμῶν καὶ τῶν λιμνέων σπείρουσι τὰ σιλλικύπρια ταῦτα, τὰ ἐν Ἕλλησι αὐτόματα ἄγρια φύεται· ταῦτα ἐν τῇ Αἰγύπτῳ σπειρόμενα **καρπὸν** φέρει **πολλὸν μέν, δυσώδεα δέ**·

The Egyptians who live around the marshes use oil drawn from the castor-berry, which they call kiki. They sow this plant, which grows wild in Hellas, on the banks of the rivers and lakes. Sown in Egypt, it produces **abundant fruit, though malodorous** (lit. fruit much, but malodorous).
          (Hdt. 2.94.1–2)

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[69] The function of the particle δέ at the level of the NP has never been analysed, but it is to be expected that it is comparable to its function at the level of the clause. Although traditionally δέ was said to occupy a position in between the copulative (e.g. καί) and adversative (e.g. ἀλλά) particles (cf. Denniston 1954: 162 and Kühner-Gerth

In example (92), the order of the adjectives cannot be explained by the three ordering principles discussed above, as ἄφωνος follows τὰ μὲν ἄλλα ἐπιεικής although it does not express a consequence of ἐπιεικής and is less heavy and more salient than ἐπιεικής (it is the muteness of his son—and not the fact that he was fine in other respects—that caused Kroisos to consult the oracle in Delphi).[70] Example (93) is even more problematic, in that it is unclear whether the order, which cannot be explained by the heaviness or semantics of the modifiers, is or is not in accordance to the saliency principle, as it is impossible to decide whether the most salient point of difference between the two walls resides in their strength or in their width. A similar problem with respect to the interpretation is provided by example (94) (although, in this case, the order of the modifiers can be explained by the heaviness principle). While the modifier that is accompanied by δέ may be interpreted as more salient than the preceding modifier (the fruit is abundant, yet—and that is the main point—malodorous), the other stance might also be defended. On the basis of the preceding information that the Egyptians use the fruit of the kiki to produce oil, it can be argued that the first adjective is more salient, as the abundance of fruit is more relevant for the production of oil than its unpleasant odour.

Apart from the fact that the context of examples (93) and (94) is not very helpful, the decision for the one or other interpretation is complicated by the fact that we do not know the exact function of δέ.[71] Does it just add new information in a discontinuous way, or is this new information presented as more important, more salient or more relevant than the preceding information? Further research is required to answer this question, which may—eventually—give a better insight in the complex picture of the factors that determine the order of coordinated modifiers.

1904: II 262), Egbert Bakker (1993) has argued that δέ can be better analysed as a marker of discontinuity introducing a new information unit in the text.

[70] In my view, the reason that the most salient adjective is expressed last has nothing to do with the fact that the sentence is a so-called presentative (or: thetic) sentence, i.e. a sentence which introduces a new topic into the discourse. As was argued in footnote 35, the presentative sentences in my corpus do not necessarily display a crescendo pattern. It might be argued, however, that the order of the adjectives is influenced by the so-called affective load principle, which says that positively loaded adjectives prefer to precede negatively loaded ones (see footnote 4).

[71] For the ideas on the function of δέ at the level of the clause, see footnote 69.

4.4. *Conclusion*

This chapter discussed word order in multiple-modifier NPs. Section 4.2 argued that the order of the modifiers, both in relation to the noun and to themselves, (mainly) depends on the very same pragmatic principle that determines the position of the modifier in single-modifier NPs, viz. the more salient the information, the further to the left it has to be expressed. Section 4.3 demonstrated that this pragmatic principle also plays a role in the ordering of NPs with coordinated modifiers, but a much smaller one. Although the position of the modifiers in relation to the noun is still determined by their saliency, the ordering of coordinated modifiers themselves depends on a complex of factors, among which their heaviness, saliency and semantics are most prominent.

In section 4.3 it was also argued that the difference between juxtaposed and coordinated modifiers resides in the scope of the modifiers. In the case of juxtaposed modifiers, one of the modifiers has scope over the combination of noun plus the other modifier(s). Coordinated modifiers, by contrast, do not have scope over each other, but only modify the noun itself. That juxtaposed modifiers have scope over each other is an important argument against an appositional or non-hierarchical structure of the Greek NP. Such an appositional structure can therefore not explain that the constituents of the Ancient Greek NP are largely ordered on the basis of their saliency instead of their semantics.

All in all, the grammars are correct in claiming that in multiple-modifier NPs everything is possible. But not so in every context.

PART II

ARTICULATION

THE USE OF THE ARTICLE

5.1. *Introduction*

The previous chapters discussed the order of the constituents of the NP, irrespective of the possible articulation of these constituents. For a complete understanding of the structure of the Ancient Greek NP, however, the articulation of the constituents should also be taken into consideration, for word order patterns may differ in the presence or absence of an article, the position of this article or in the number of articles expressed (cf. aXN vs. XN, XaN vs. aNX, aNaX vs. aNX). As already indicated in the introduction, however, before the (difference in) articulation of the various NP constituents can be analysed, we should first address the much more basic question of in which circumstances an Ancient Greek NP is marked with a definite article and what this article indicates exactly. The reason why we have to start with this basic question is that there are no adequate and up-to-date descriptions of the use and function of the Greek article.

This chapter will thus not pay attention to the articulation of modifiers (i.e. the difference between aNaX and NaX or aXXN and aXaXN), but will only try to answer the question of when Greek NPs are marked with a definite article.[1] To answer this question, I have analysed the use of the article in all NPs with a common noun in books 2 and 7 of Herodotus (both with and without modifiers). The reason to limit the analysis to the use of the article with common nouns and to leave proper names, geographical names and substantivised adjectives, participles etc. out of consideration is, first of all, that these NPs were deemed not suitable for the analysis of the structure of the NP (see Chapter 1, section 1.2). An analysis of their definiteness would therefore lead too far afield, as the aim of this chapter is not to provide a description of the use and function

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[1] The articulation of the NP constituents and the question of whether the grounds for their articulation corresponds to the 'common' use of the article will be dealt with exhaustively in the next chapter.

of the Ancient Greek article in general, but only to do so as far as is relevant for the ultimate aim of this book, i.e. the structure of the Ancient Greek NP. Furthermore, the existing descriptions of the use of the article gave reason to suppose that the use of the article in these NPs differs considerably from that in common NPs.

The reason I only analysed the NPs from two books is a practical one: all the NPs from Herodotus would offer too big a sample. Books 2 and 7 were chosen because they are representative for the whole work of Herodotus in that they present all text types used by Herodotus: descriptions (mainly in book 2), passages of direct and indirect speech (mainly in book 7) and narrative passages (mainly in book 7). A third limitation does not concern the selection of data, but the scope of the research. As this chapter does not aim to provide an exhaustive description of the use of definite descriptions, but is meant as preface to the analysis of the articulation of NP constituents in the next chapter, the use of definite NPs will not be compared to other referring expressions, such as personal pronouns, pronominals and zero anaphora. However interesting such a comparison would be, it would focus too much on the structure of the discourse instead of the structure of the NP.

Before discussing the use of the article in the NPs in my corpus, I will first present an overview of the literature on the Greek article (in section 5.2.1) and definiteness in general (in section 5.2.2). The subsequent discussion of my own data consists of three parts: the use of the article in referential NPs (section 5.3), in non-referential NPs (section 5.4) and in generic NPs (section 5.5).

5.2. The state of research

5.2.1. The Greek article

For a description of the use and function of the Greek article we have to rely on the standard grammars. The overall structure of the descriptions of the article in these grammars, which date back to the beginning of the last century, is highly similar. After the general observation that the article marks a particular or general noun as definite and known, they continue to describe the use of the article by using various categories, such as the article with proper names, the article with predicate nouns, the article with abstract nouns, the article in prepositional phrases, etc. In my view, it is not very useful to summarise their

comprehensive descriptions of the rules and exceptions in this section.[2] Instead, I will try to show why the existing descriptions, although very useful because of their enormous supply of examples and useful observations, do not satisfactorily describe the use and function of the Greek article.

In the first place, the existing descriptions of the use of the article seem needlessly complicated. Instead of trying to define a basic meaning for the article on the basis of which its use in the various categories can (at least largely) be explained, most of the grammars state only briefly that the article marks an object or person as a particular individual (Humbert 1960: 48, Kühner-Gerth 1904: I 589), as distinct (Schwyzer-Debrunner 1950: 24), or as known/present to the mind (Gildersleeve 1900: 226, Smyth 1956: 286–287). Subsequently, they give a lengthy presentation of circumstances for each category in which an NP does or does not receive an article, even if this can be explained on the basis of the definitions of the use of the article they formulated earlier. Gildersleeve (1900: 249), for instance, in his description of the use of the article with names of rivers presents the following rule: 'when the name of a river is mentioned for the first time, the type ὁ Νεῖλος ('the Nile') is used of well-known rivers, the type ὁ Στρυμὼν ποταμός ('the Strymon river') of fairly well-known rivers, and the type Βρόγγος ποταμός ('Broggos river') or ποταμὸς Βρόγγος ('river Broggos') of obscure rivers'. However, the presence or absence of the article in these cases can be understood easily on the basis of Gildersleeve's assumption that 'the Attic article is used of objects present to the mind or senses, well-known, notorious, expected, recurring or customary' (Gildersleeve 1900: 226).

Besides the fact that the existing descriptions of the article in various categories are unnecessary complicated, there is another reason why an overview of the use of the article in various categories of expressions is not an adequate description of the use of the article. As Sansone (1993: 191–192) already noted, the grammars present manifold rules for the use of the article, but do not supply a hierarchy for the application of these rules. In this way, there will be numerous instances where various rules are in conflict with each other; for example in the case of an abstract noun like στάσις 'revolt' (which should—according to the various grammars— be preceded by the article when concretised) is used in a prepositional phrase (which is generally said to lack an article).

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[2] The observations and ideas of the various grammars are referred to and discussed throughout the presentation of my data in the following sections.

The absence of such a hierarchy would be less problematic if the descriptions of the various categories were adequate. For many categories, however, this is not the case. Take for instance the descriptions of the use of the article with substantives followed by an attributive genitive (e.g. Kühner-Gerth 1904: I 607, Smyth 1956: 291). The grammars state that the head noun usually lacks an article, viz. when the head noun and genitive form a compound idea. The article is present, however, when 'beide Begriffe selbständig und bestimmt aufgefasst werden' (Kühner-Gerth 1904: I 607). How does this rule help us to understand that in Xenophon we find τελευτὴ τοῦ βίου (2 times) and ἡ τελευτὴ τοῦ βίου (5 times) alternately?[3] The assumption that the grammars have overlooked some major factors determining the use of the article is strengthened by statements such as 'ebenso *kann* der Artikel fehlen bei denjenigen Gattungsnamen, welche zugleich als Eigennamen oder an der Stelle derselben gebraucht werden' (Kühner-Gerth 1904: I 602) and 'the generic article is frequently omitted, especially with abstracts, without appreciable difference in meaning' (Smyth 1956: 288). The fact that no differences in meaning could be found does not mean that there are no differences at all.

So, although the descriptions of the use of the article in the various grammars contain many valuable observations, it turns out that none of the descriptions adequately describes the use of the Greek article and, more specifically, that the studies present a lengthy enumeration of the use of the article in all kind of circumstances, instead of formulating a definition of the function of the article, by means of which its use in the various circumstances can be explained.[4] For my analysis of the structure of the NP, however, this general definition is exactly what I need. Therefore, the aim of the remainder of this chapter is not to give an overview of the use of the Greek article in all kind of circumstances, but just to find an adequate formulation of the basic function of the article.

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[3] Indefinite are X. *Mem.* 1.5.2.2 ἐπὶ τελευτῇ τοῦ βίου and X. *An.* 1.1.1.3 τελευτὴν τοῦ βίου. Definite, by contrast, are X. *Ap.* 1.3 τῆς τελευτῆς τοῦ βίου, X. *An.* 1.9.30.2 ἐν τῇ τελευτῇ τοῦ βίου, X. *Cyr.* 8.7.3.1 τοῦ βίου ἡ τελευτή, X. *Cyr.* 8.7.6.2 τοῦ βίου τὸ τέλος and X. *Lac.* 10.1.2 τῷ τέρματι τοῦ βίου. In my view, the presence or absence of the article in these cases depends on the question of whether the genitive is classifying. For classifying genitives and the absence of the article, see section 5.3.2.

[4] In this respect, I disagree with Sansone (Sansone 1993: 205), who states that 'there is need, not for a bigger and better theory to account comprehensively for all the various cases, but for a more sensitive instrument to detect and measure the fine distinctions that the phenomena present'. In my view, it is only sensible to fill in the details after the majority of the examples can be explained satisfactorily by an adequate theoretic account.

That does not mean that the many observations in the grammars of the use of the article in the various categories are not extremely useful, or that a complete overview of the use of the article is not desirable, but that for my analysis of the structure of the NP, in which many of those categories are left out of consideration, such an overview would simply lead too far afield.

The recent studies of the use of the article by Sansone (1993) and Rijksbaron (2001) suggest that the general function of the article should be described in pragmatic terms. Both studies assume a relation between the presence of the article and a pragmatic marking of the referent, even though they show fundamental differences. Sansone (1993), in an analysis of the use of the article with abstract nouns in Plato, argues that part of the examples in his corpus in which the reason for the presence of the article is not obvious,[5] can be explained by the fact that the article in question is used as topicalisation device.[6] A strong indication for the interpretation of the article as a topicality marker is, according to Sansone, that in cases of prolepsis[7] the dislocated noun tends to be definite:[8]

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[5] In his analysis of the use of the article with abstract nouns, Sansone leaves out of consideration those instances where an abstract noun 'behaves pretty much in the same way other nouns behave' with respect to its articulation (i.e. 80 % of the examples). His examples show that he considers the presence of an article to be obvious if it is anaphoric, possessive, or can be accounted for by so-called contextual constraints (viz. when the noun is accompanied by a form of οὗτος, ἄλλος (the rest) or αὐτός (the same), by the genitive of a demonstrative, reflexive, or reciprocal pronoun or when it is needed to distinguish the subject from the predicate). Natural though Sansone's decision to focus on those instances where the behaviour of abstract nouns differs from that of other nouns may be, it is problematic in that we do not know how exactly these other nouns behave.

[6] For a definition of topic, see Chapter 3 section 3.4. A topicalisation device is a strategy to mark the topic of the sentence as such, for instance by placing the topic at the beginning of the sentence, e.g. *as for my cat, my neighbours poisoned him.*

[7] Prolepsis is the traditional term for the left-dislocation of the topic of the subordinate sentence into the main sentence. The left-dislocated noun may, but need not be syntactically adjusted to the main clause. Cf. the examples below where the dislocated topic is adjusted to the main sentence to E. *Ba.* 173–174 (εἰσάγγελλε Τειρεσίας ὅτι ζητεῖ νιν 'announce that Teiresias is looking for him (lit. announce Tereisias that he is looking for him)') where the dislocated element is not adjusted to fit into the syntax of the main clause (the example was taken from Rijksbaron et al. 2000: 150).

[8] Another indication is, according to Sansone, the absence of the article with abstract nouns in negative statements and with negative concepts, e.g. οὐ ταὐτὸν εἶναι θάρσος τε καὶ ἀνδρείαν (*Prt.* 350d) vs. τὴν ἀνδρείαν καὶ τὴν σοφίαν ταὐτὸν εἶναι (*Prt.* 351a) and ὑπὸ ψεύδους (*Grg.* 525a) vs. ὑπὸ τῆς ἀληθείας (*Ap.* 39b). Sansone explains that 'the significance of this dissociation of article and negative lies in the fact that, in general, negatives are much more closely associated with focus than with topic' (Sansone 1993:

(1)   (…), καὶ βουλοίμην ἂν ταῦτα διεξελθόντας ἡμᾶς ἐξελθεῖν καὶ **ἐπὶ τὴν
        ἀρετὴν** ὅτι ἔστιν, καὶ πάλιν ἐπισκέψασθαι περὶ αὐτοῦ εἴτε διδακτὸν
        εἴτε μὴ διδακτόν, (…).

        (…) and I should like to work our way through these things until at last
        we arrive at what **virtue** is (lit. at the virtue, what it is), and then go back
        and consider whether it is teachable or not, (…).   (Pl. *Prt.* 361c4–6)

(2)   σκοποῦντες γὰρ καὶ τοιαύτην τάχ᾽ ἂν κατίδοιμεν **τήν τε δικαιοσύνην
        καὶ ἀδικίαν** ὅπῃ ποτὲ ταῖς πόλεσιν ἐμφύονται.

        For by observation of such a city we might discern the origin of **justice
        and injustice** in states (lit. the justice and injustice from where they grow
        in cities).   (Pl. *R.* 372e4–6)

As an illustrative example of the 'topicalising capacity' of the definite arti-
cle, Sansone quotes the opening sentence of the *Meno*, where the article
marks the topic 'not only of this sentence, but of the entire conversation
that follows' (Sansone 1993: 201):[9]

(3)   ἔχεις μοι εἰπεῖν, ὦ Σώκρατες, ἆρα διδακτὸν **ἡ ἀρετή;**

        Can you tell me, Sokrates, whether **virtue** (lit. the virtue) can be taught?
                                                                  (Pl. *Men.* 70a1–2)

Sansone's interpretation of the use of the article in example (3) bears
much resemblance to Rijksbaron's (2001) view on the use of the article
with proper nouns in Xenophon and Plato. According to Rijksbaron, one
of the possible explanations for the presence of an article before a proper
name is that it underlines the special position of the character in question
in a passage that is of special importance for the development of the
story.[10] In the first chapter of the first book of the *Anabasis*, for instance,

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203), which can be explained if we assume that people prefer to communicate (and take
as the topic of their communication) things that exist. Although I agree that there is a
negative relation between topicality and negation, I do not understand why the absence
of articles with abstract nouns in negative statements is an indication for the function
of the article as a topicality marker. That the negation is part of the focus rather than
the topic, does not imply that negative sentences have no topic at all (cf. Sansone's own
reformulation of the example *God doesn't exist* in *God- he doesn't exist*, which clearly
indicates that God is the topic of the sentence).

[9] Although Sansone is right that the articular nouns in examples (1)–(2) give expres-
sion to a topic (either of the sentence, as in (1) and (2), or of the following discussion,
as in (3)), I doubt whether it is the function of the article to mark the noun as such. As
Chafe (1976) already noted, there is an evident correlation between definiteness and top-
icality: because utterances prefer to be about entities familiar to the addressee, topics tend
to be familiar and therefore definite. For the relation between topicality and definiteness
in Greek, see Slings (1992: 99).

[10] The other, much more frequent, use of the article before a proper noun is, according

the name Kyros is preceded by an article when Kyros undertakes crucial actions in the preparation of the war against his brother (Rijksbaron 2001: 17).

Despite the similarities between Sansone's interpretation of example (3), and Rijksbaron's explanation of the articulation of Kyros' name in the *Anabasis*, there are substantial differences in their analyses of the use of the article. Whereas Sansone, with the exception of the *Meno* example, focuses on the sentence level for the interpretation of the use of the article, Rijksbaron's analysis takes larger discourse units into account. Furthermore, Rijksbaron aims to find a common ground for all uses of the article with proper nouns, whereas Sansone only attempts to offer an explanation for the use of the article when it is 'not obvious'.[11] It will cause no surprise, therefore, that Rijksbaron's final conclusion differs from Sansone's suggestion that the article can mark the topic of the sentence. Rijksbaron suggests interpreting the article with proper nouns as a form of textual *deixis*: the article focuses the attention of the addressee to the person in question, either to contrast this person to another person (in the case of turntakings, see footnote 10), or to highlight this person.[12]

Though the analyses of Sansone and Rijksbaron are different, their conclusions both seem to suggest that the function of the article in

to Rijksbaron (2001) found in turntaking scenes. Every time the turn switches to another conversation partner, this is marked by the presence of the article (sometimes in combination with the particle δέ) before his name. Rijksbaron suggests (2001: 14) that the proper name is in fact an apposition to the combination of the article + δέ, e.g. 'he asked this, Kyros …', 'he admitted this, Orontas …' (for this use of the article + δέ in topic shifts, see for instance Kühner-Gerth 1904: I 584–585). This may indeed be a good explanation for the origin of the combination of article and proper name in these turntaking-scenes, but does not seem to be supported by synchronic evidence, as the particle δέ, although compulsory after the article in topic shifts, is not always present with articular proper names in these turntaking-scenes (for examples, see Rijksbaron 2001: 13–14).

[11] Even of the examples that cannot be explained by 'contextual constraints' (see footnote 5), more than 50 % should, in Sansone's view, be explained by the syntactic principle that genitives that modify a definite noun prefer to be definite themselves. Thus, topic marking, only accounting for a small 10 % of the examples, is a very unlikely candidate for the general function of the article that we are looking for.

[12] So, Rijksbaron assumes that whereas common (spatio-temporal) deictic expressions direct the addressee's attention towards a referent present in the speech situation, the article with proper nouns attracts the attention to a participant in the discourse. For a discussion of *deixis* in relation to definiteness, see Lyons (1999: 160 ff.). Incidentally, in a more recent version of his theory on the articulation of proper names, Rijksbaron (2006: 257) claims that the article with proper names has an anaphoric function and that combinations of an article and proper name have to be considered a strong anaphora. I fail to see the advantage of this analysis over the previous one.

Ancient Greek (at least with abstract and proper nouns) differs widely from the function of the article in other Indo-European languages.[13] However, before jumping to the conclusion that the article in Ancient Greek does indeed have a different function, it should first be analysed what the function of the article in other Indo-European languages is.

5.2.2. *Definiteness in general*

The nature of definiteness has been studied for many years by many scholars from many different backgrounds. As a result, there is a vast amount of literature on definiteness.[14] This state of research is not meant as an exhaustive overview of this literature, but will focus on three central notions within the more pragmatically oriented theories on definiteness, viz. familiarity, identifiability and uniqueness or unambiguity.[15] The reason why this state of research is limited to these three notions is that an overview of their history, shortcomings and strength is in my view sufficient for a proper understanding of the use of the definite article in Ancient Greek.[16]

The first notion, familiarity, was introduced by Christophersen (1939), who claimed that a speaker can use a definite article if he and the hearer are mutually familiar with the referent:

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[13] Rijkhoff (1992: 154) also implies that the definite article in Ancient Greek has a different function. On the basis of the fact that the definite article may co-occur with demonstratives, he suggests that the Greek article is actually a so-called stage II article (Greenberg 1978: 65; 1981), marking specificity instead of definiteness.

[14] As usual, the literature is mainly based on English examples. However, because the literature does not provide an overview of the circumstances in which an English NP receives an article, but attempts to find out what definiteness *is* (i.e. what it 'means' for an NP to get a definite article), the results may be relevant for other languages as well. That is not to say, of course, that in all languages the use of the definite article is completely comparable. Each language will have specific rules for the use of the article in specific circumstances. In French, for example, plural generic NPs are articular (e.g. *les chiens sont fidèles*), whereas in English they are not (e.g. *dogs are faithful*).

[15] The pragmatic tradition dates back to the ancient grammarians. Apollonius Dyscolus, for instance, who described the use of the Greek article in the second century AD, already defined definiteness in terms of identifiability (A.D. *de Syntaxi*, 43). In the last century, this pragmatic view of definiteness has been adopted and elaborated by many linguists. The other, more recently developed approach to definiteness started with Russell (1903) at the beginning of the last century. His logical, formal-semantic analysis of definite NPs has been carried on by Strawson (1950), Searle (1969), Kempson (1975), Wilson (1978) and Heim (1982 and 1983), among others.

[16] A much more detailed overview of the existing literature on definiteness can be found in Keizer (1992) and Lyons (1999).

(4)   Now the speaker must always be supposed to know which individual he
        is thinking of; the interesting thing is that the *the*-form supposes that the
        hearer knows it too. For the proper use of the *the*-form it is necessary that
        it should call up in the hearer's mind the image of the exact individual
        the speaker is thinking of. If it does not do that, the form will not be
        understood.   (Christophersen 1939: 28)

Hawkins (1978) agrees with Christophersen that the notion of familiarity
is crucial to the understanding of the use of the definite article. Accord-
ing to Hawkins, being mutually familiar means belonging to a shared
speaker-hearer set, a mental or physical set defined by shared knowledge
and/or the shared situation of utterance (Hawkins 1978: 130). Hawkins
states that an entity may belong to a shared set (a) because it has been
located in the shared set by previous discourse (the so-called anaphoric
use of the definite article, see examples 5 and 6), (b) because it exists in
the immediate (example 7) or non-immediate/larger (example 8) situa-
tion of the speaker and hearer, or (c) because of a combination of a pre-
vious mention and general knowledge, in that the previous mention of
some noun may, on the basis of the hearer's general knowledge, evoke a
whole set of associated objects (the so-called associative anaphoric use,
see examples 9 and 10).[17]

(5)   Fred was discussing an interesting book in his class. I went to discuss **the
        book** with him afterwards.

(6)   Fred was wearing trousers. **The pants** had a big patch on them.

(7)   Harry, mind **the table**!

(8)   **The Prime Minister** has just resigned.

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[17] Apart from the anaphoric, immediate and larger situation and associative use of
the definite article, Hawkins (1978) also distinguishes a category of 'unfamiliar uses' and
'unexplanatory modifiers'. The unfamiliar uses have in common that the referent of the
definite NP is not yet familiar to the hearer at the moment of utterance. Nevertheless, the
use of the definite article is felicitous thanks to the presence of a modifier which enables
the hearer to identify the referent. These modifiers can take the shape of an 'establishing
relative clause', i.e. a relative that establishes a definite referent for the hearer by linking the
unknown referent to already familiar knowledge (What's wrong with Bill? Oh, *the woman
he went out with last night* was nasty to him), an associative clause, which incorporates
both the trigger and the associate of an associative anaphoric sequence (I remember *the
beginning of the war*), an NP-complement (Bill was amazed by *the fact that there's so
much life on earth*) or a nominal modifier (I don't like *the colour red*). In contrast to these
unfamiliar uses, unexplanatory modifiers do not relate the unknown, definite referent to
some knowledge the hearer already possesses. The relative clause in an example like '*the
first person to sail to America* was an Icelander', for instance, does not link the unknown
referent to an already familiar object. Nevertheless, a definite article may be used, due to
the fact that the hearer can identify a set of objects in which he is to locate the referent.

(9)   Fred was discussing an interesting book in his class. He is friendly with
        the author.

(10)   The man drove past our house in a car. **The exhaust fumes** were terrible.

Although referents of definite NPs are always familiar, Hawkins (1978)
stresses that the notion of familiarity on its own fails to account for the use
of the definite article. In examples like (11) and (12), no definite article is
used, although the referents belong to a shared set:

(11)   Pass me **a bucket**, please.

(12)   Fred bought a book from Heffer's. He was dismayed that **a page** was torn.

Hawkins argues that the absence of a definite article in these examples
can be explained by the semantics of the article: a definite NP does not
refer to just a referent in a shared set, but to the totality of objects or mass
in the shared set.[18] In sum, Hawkins assumes that a speaker performs the
following acts when using a definite article: he (a) introduces a referent to
the hearer; (b) instructs the hearer to locate the referent in some shared
set of objects; and (c) refers to the totality of the objects or mass within
this set.[19]

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[18] In fact, Hawkins reformulates Russell's axiom of uniqueness (Russell (1903: 62)
claimed that a sentence like *the King of France is bald* logically entails that (1) there is
a King of France (axiom of existence), (2) there is only one King of France (axiom of
uniqueness) and that (3) this individual is bald), but whereas Russell claimed uniqueness
in an absolute sense (i.e. in respect to all possible referents in the world), Hawkins argues
that uniqueness must be interpreted relatively to the shared set involved. The reason why
Hawkins talks about inclusiveness instead of uniqueness, is that uniqueness only holds
for singular count nouns. Plural count nouns and mass nouns do not refer uniquely:
    (i) Bring *the wickets* in after the game of cricket.
    (ii) I must ask you to move *the sand* from my gateway.
What does hold for both singular and plural count and mass nouns is that they refer
inclusively to the totality of the objects or mass in the relevant set (i.e. to all the sand and
to all the wickets in the above examples), which in case of a singular count noun happens
to be just one object.

[19] Hawkins argues that it is in this latter respect that indefinite articles differ from
definite ones. Whereas the definite article refers inclusively, the indefinite article refers
exclusively, i.e. to a proper subset of the potential referents of the referring expression.
As examples like (11) and (12) make clear, the indefinite article does not necessarily
differ from the definite one with respect to the locatability of the referent in a shared
set. According to Hawkins, an indefinite article is neutral in this respect: the context
determines whether indefinites are or are not locatable in a shared set. In an example
like 'Fred sold *a car* last week, and then he sold *some tyres* to his friend' it depends on
the context whether *tyres* does or does not belong to the previous mentioned car, and
consequently may or may not be locatable in the shared set (i.e. the previous mentioned
car).

Both aspects of Hawkins' theory on definiteness met severe criticism. The familiarity constraint was criticised first of all by Lyons (1980), who claims that the referent of a definite description need not be familiar, as a definite NP can be used to inform the hearer about the existence of the referent in a certain shared set.[20] In an example like

(13)   Don't go in there; **the dog** will bite you.

the definite NP does not refer to an already familiar entity, but is used to add an entity to the shared knowledge of the speaker and the hearer. Although Hawkins pays attention to this use of the definite article in immediate situation sets (e.g. (on a notice on the garden gate) beware of **the dog**), he fails to recognise that this use of the article is much more extensive. Lyons (1980) gives examples of non-familiar definites in other usage types as well (e.g. meet me at **the horse-trough** tonight (larger situation use) and Florence is selling her house; she finds **the cellar** too cramped (associative use)).

Hawkins' inclusiveness constraint is most severely criticised in the same article of Lyons (1980) and by S. Dik (1997). On the basis of examples like (14) and (15), Lyons (1980) argues that definite NPs need not refer inclusively:

(14)   Close **the door** for me, please. [in a room with three doors, one opened and two closed]

(15)   Open **the door** for me, please. [in a hallway with four doors, all closed, the speaker stands dressed for a journey, a suitcase in each hand]

Lyons argues that despite the fact that the definite NPs in examples (14) and (15) do not refer inclusively, the reference will almost certainly be successful: with the help of the context, the addressee will be perfectly capable of finding out which door he has to close or open. Therefore, the basic meaning of the definite article is, according to Lyons (1980), not familiarity and inclusiveness, but identifiability: a definite article indicates that the referent is unambiguously identifiable within the shared set.

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[20] Despite Lyons' clear and convincing examples of the use of the definite article to refer to non-familiar entities and the many corpus analyses (among which Birner and Ward 1994, Fraurud 1990, Poesio and Vieira 1998) that confirm that familiarity is not suited to account for the use of the definite article, the familiarity hypothesis remained very influential. More than 20 years after Lyons, Gundel et al. (2001: 2) state in their introduction that their proposal 'contrasts with what is still a prevalent view concerning the meaning of the definite article, namely that the referent of definite article phrase must be in some sense already familiar to the addressee'.

Inclusiveness must be considered a conversational implicature instead of an inherent part of the meaning of the article.[21] S. Dik (1997: 186), who agrees with Lyons that the definite article marks identifiability, clearly explains why inclusiveness should be interpreted as an implicature of identifiability by the following example: if there are ten books lying on the table and someone is asked to remove *the books* from the table, he will infer that he is to clear all the books from the table, because the only set of books that is available to him is the complete set of all the books on the table, no proper subset being defined. Likewise, if the speaker asks someone to remove *some books* from the table, the addressee will infer that, since the set is apparently not available to him, it cannot be the case that the whole set of books is intended.

To answer the criticisms on his familiarity and inclusiveness constraint, Hawkins (1991) reformulated his original account of the use of the articles against the background of the theory of implicature.[22] With his new approach, Hawkins solves the problem voiced by his critics that the referent of a definite NP is not always locatable in a shared set by replacing the term 'shared knowledge' by the weaker notion of 'mutual cognitive environment' or 'mutually manifestness'. To make a successful definite reference, the intended referent does not need to be mutually known in advance, but must be mutually manifest in actual language use.

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[21] In the course of time, Lyons seems to have changed his mind, for in (1999) he argues that 'there are also cases of definiteness for which an account in terms of identifiability is either not fully convincing or simply inadequate' (Lyons 1999: 7). He claims that the use of the article in examples like '*I've just been to a wedding*. The bride *wore blue*' cannot be accounted for on the basis of identifiability, because the addressee 'still does not know who she is or anything about her. If asked later who got married that morning he would be in no position to say on the basis of this example, and if he passes the newly-wed in the street the next day he will not be able to recognise her as the person referred to.' He argues that the felicity of the definite article is due to the fact that the addressee—knowing that weddings involve brides—will be able to infer that the speaker refers the *unique* bride of the previous mentioned wedding. In my view, Lyons confuses recognising the referent in the real world with understanding which discourse referent is referred to (this same distinction also confuses Epstein (2002: 363), who remarks after quoting the opening sentence of Hemingway's *A Farewell to Arms* ('in the late summer of that year we lived in a house in a village that looked across the river and the plain to the mountains') that the referent of the NPs the river, the plain and the mountains are identifiable only to the narrator). If you interpret identifiability as understanding which discourse referent is referred to (instead of recognising the referent in the real world), Lyons' examples of inclusiveness can be explained perfectly well on the basis of identifiability. Cf. Gundel, Hedberg and Zakarski (2001: 7).

[22] See Levinson (1987) and (Grice 1975).

The addressee does not need to have prior knowledge of the referent, on the condition that he can accept the entity in the mutual cognitive environment.[23]

Although the replacement of familiarity by mutual manifestness solves one of the problems, it does not answer the suggestion that inclusiveness is an implicature of identifiability instead of an inherent part of the meaning of the article. Without a substantial discussion Hawkins maintains that it is inclusiveness—instead of identifiability—that plays a role in the use of the definite article. Lyons' counterexamples are simply rejected by the argument that *close the door* is short for *close the door which is open*.

Whether one believes Hawkins (and Langacker (1991), see footnote 23) that definite NPs inclusively refer to all mutually manifest entities satisfying the descriptive content, or Lyons (1980) and S. Dik (1997) that the definite article indicates that the referent is unambiguously identifiable, both approaches are faced with the problem that it is by no means clear when a referent is 'mutually manifest' or identifiable. It is exactly this question that interested Löbner (1985), Rijkhoff (1989) and Keizer (1992). To answer this question, the three of them did not take the anaphoric and deictic use of the article as the starting point of their research, but focused on the much more complicated instances that were named associative by Hawkins.

Despite major differences in their approach, terminology and focus, Löbner (1985) and Rijkhoff (1989) agree on the central point of their analyses of definiteness: a referent is identifiable if it is (Löbner) or can be (Rijkhoff) related to an available entity. Rijkhoff, who wants to set up a procedural model of the process of identification, pays a lot of attention to the various ways in which a relation may be established between the referent of the definite NP and its 'identifying referent' (as Rijkhoff names the entity to which the identifiable referent can be related). Löbner, on the other hand, in his much more theoretical account, mainly stresses the importance of non-ambiguity: a definite article is only felicitous if the link between the referent itself and its 'argument' (as Löbner names the entity to which the referent is related) is one-to-one.

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[23] The term 'manifestness' is adopted from Sperber and Wilson, who define it as follows: 'a fact is manifest to an individual at a given time if and only if he is capable at that time of representing it mentally and accepting its representation as true or probably true' (Sperber & Wilson 1986: 39). Hawkins' definition of definiteness as mutual manifestness bears resemblance to the definition of Langacker (1991: 98) who assumes that the definite article indicates that the speaker and hearer have *mental contact* with the same instance of the description.

Although Löbner's and Rijkhoff's definitions of definiteness works perfectly well to explain the use of the definite article in examples like (16) and (17) (father can be unambiguously related to wife and bar can be related to cinema), Keizer (1992: 242 ff.) shows that their definition of definiteness is too narrow in that the referent of a definite NP is not always related to an available *entity*. In examples like (18) and (19), for instance, the felicity of the definite article cannot be attributed to the fact that the referent is (unambiguously) related to an available entity.

(16)   I do not want my mother to marry **the father of my wife**.

(17)   John went to see a film, but when he saw **the bar** opposite the cinema he changed his mind.[24]

(18)   We were going to sell the house yesterday, but **the estate agent** didn't show up.

(19)   (= 15) Open **the door** for me, please. [in a hallway with four doors, all closed, the speaker stands dressed for a journey, a suitcase in each hand]

In example (18), it seems to be the combination of the verb (*sell*) and the noun (*the house*) together, rather than the noun on its own, that 'triggers the associate' (*the estate agent*), to speak with Hawkins. Similarly, in example (19) it is through a combination of considerations, such as the use of the verbs *close* and *open*, situational information and assumptions about the intentions of the speaker, that the referent can be identified.

To account for examples like (18) and (19), Keizer (1992) suggests a more cognitive approach to the use of definites, making use of notions of 'frames' or 'schemata'.[25] She claims that a definite NP is used to refer to an entity that forms an unequivocal part of a schema activated in the hearer's mind. On the basis of this definition, she cannot only explain the use of the definite article in examples like (18) and (19), where the estate agent and the front door are unequivocal parts of a 'selling-a-house' and a 'leaving-the-house-for-a-journey'-schema, but can also account for the difference in acceptability of the following two examples:

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[24] Example (16) was taken from Löbner (1985: 305), example (17) from Rijkhoff (1989: 241).

[25] 'Frames', 'schemata' and 'scripts' are terms used in artificial intelligence and discourse analysis respectively for data structures representing generic concepts stored in memory. These data structures are hierarchical networks of the various elements that are generally related to some object or (sequence) of event(s) (see Minsky 1975, Fillmore 1985 and Rumelhart 1980). For a similar approach to definiteness, see Lambrecht (1994: 77 ff.).

(20a)   I had trouble with the car yesterday. **The carburetor** was dirty.

(20b)   I had trouble with the car yesterday. ?**The ashtray** was dirty.

Whereas Löbner's and Rijkhoff's approach cannot explain the difference in acceptability between examples (20a) and (20b) as both the carburetor and the ashtray can be related unambiguously to the car mentioned previously, Keizer's definition does offer an explanation for the incoherence of example (20b). Whereas a carburetor is an unequivocal part of the having-trouble-with-a-car-schema, an ashtray is not. As the activated schema has no slot for ashtrays, (20b) is not a coherent sentence.[26]

Attractive though Keizer's cognitive account of definiteness is in many respects, her formulation that a definite NP is used to refer to an entity that is anchored in an available knowledge structure,[27] or as I would prefer, cognitive structure, wrongly suggests that a definite article can only be used if the addressee was previously aware of the relation between the referent and the cognitive structure. As can be illustrated by many examples, the definite article may also be used if the addressee is not conscious of the fact that the entity is part of an available knowledge structure. I'm not alluding to examples like 'beware of the dog' or 'don't go in there, the dog will bite you', in which case the addressee was not previously aware of the existence of the dog in the situation, but will accept this existence, because his knowledge structure of approaching large houses contains a slot for big and dangerous watchdogs you had better beware of. What I do allude to are cases where the addressee is not familiar at all with the referent, as in the following example (Lyons 1980: 87):

(21)   If you arrive in Mexico City, make your way to **the zócalo**.

As Lyons correctly remarks, the average monoglot Englishman has not the slightest idea of what a zócalo is, so that the referent cannot be

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[26] Of course, the sentence may be coherent in the very unlikely situation that the speaker and the addressee share specific knowledge about a situation in which the dirtiness of the ashtray could cause problems.

[27] Knowledge structure is Keizer's all-encompassing term for General Knowledge Structures and Specific Knowledge Structures. She uses the theory unspecific term General Knowledge Structures—borrowed from Graesser and Clark (1985)—to refer to frames, schemata, scripts etc. Specific Knowledge Structures, on the other hand, are knowledge structures containing information on specific objects, situations, etc. This information may be part of the addressee's short-term memory, in which case the information is provided by the preceding discourse or situation, or part of the long-term memory. In the latter case the information is shared by a small number of people only, so that the information cannot be assumed to be generally shared.

assumed to be anchored in the cognitive structure. Nevertheless, the utterance will be successful, as the addressee will—thanks to the definite description—accept that a zócalo is an unequivocal feature of Mexico City. On the basis of examples like (21), I would like to suggest that we adapt Keizer's hypothesis slightly by assuming that the referent of a definite description is not necessarily anchored in, but can always be related to (anchored *into*) an available cognitive structure.

Keizer's hypothesis should also be adjusted to account for the fact that one and the same referent may be presented as an unequivocally relatable entity or as a new, unrelatable entity, dependent on the purpose of the speaker. As Hawkins' (1978: 131) reformulation of his own example

(22a)   What's wrong with Bill? Oh, **the woman he went out with last night** was nasty to him.

into

(22b)   What's wrong with Bill? Oh he went out with **a woman** last night and she was nasty to him.

makes clear, the speaker has freedom in the presentation of the referent as either relatable or not. Apparently, the definiteness of an NP does not depend on the question of whether the referent *is* relatable to available knowledge, but whether the speaker *presents* the referent as such.[28] Of course, the speaker can only present the referent as relatable if the referent can indeed be somehow related to a cognitive structure that is available to the addressee. The speaker thus has always to take the information available to the addressee into account. This means that a speaker may choose to present an entity that could theoretically be presented as an unequivocally relatable entity as a new, unrelatable entity (cf. example 22a and 22b), but not the other way round.

An element of Keizer's theory that should in my view not be adjusted is that the condition that the cognitive structure to which the referent is to be related has to be available for the addressee, despite the fol-

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[28] The question of what exactly determines the speaker's choice for presenting a referent as relatable or not, will not be dealt with here, as it would lead to far off the subject of this chapter. In example (22), the choice for one of the alternatives might be dependent on the addressee's familiarity with Bill's social life (the more familiar, the more likely option (22a); although unfamiliarity with Bill's social life would not automatically lead to option 22b). Epstein (2002) would probably argue that the difference between the two options depends on the discourse prominence of the woman (see below). This could indeed play a role as well.

lowing examples of Epstein (2002: 339 and 349) which seem to refute this condition:

(23)   As he circled around **the Indians**, Richard Alexander thought about buying one. 'I could see one of the smaller ones along a wall in our family room', said his wife, Sharon, who watched him study the line of colorful, hand-carved wooden figures outside a souvenir shop near the middle of town. (*New York Times*, 25 July 1995, p. A6)

(24)   Hall has been thinking about God, psychiatry, analysis, fairy tales, dreams and **the monkey trap**. As a boy he saw a picture of a monkey trap in a book, and he has used it as a basis for a theory on human behavior. (*New York Times Magazine*, 18 August 1996, p. 22–4)

Epstein uses examples like these to illustrate his conviction that the traditional views that the article marks familiarity or unique identifiability are not valid. According to Epstein, the function of the article in the examples (23) and (24) is rather to indicate that the discourse entities to which the NPs refer are highly prominent, 'i.e. that the entity plays an important part in the broader discourse context' (Epstein 2002: 349). Although I will not deny that the highlighted NPs in examples (23) and (24) refer to highly prominent entities, I do deny that it is the function of the article to mark the referents as such. In my view, the function of the article in these examples does not differ from the function in the examples discussed above, viz. indicating that the referent is unequivocally to be related to some cognitive structure.

What *is* different in example (23) and (24), however, (and that could be the reason why the referent is interpreted as highly prominent) is that the addressee does not yet dispose of the knowledge to which the discourse referent is to be related. On reading the highlighted definite NPs the addressee will feel puzzled ('the Indians? what Indians?') and will immediately start looking for a cognitive structure to which the referent can be related (and find one in the following lines). The mere fact, however, that the addressee feels puzzled on reading *the Indians* and *the monkey trap* is a clear indication that the use of a definite article to introduce a referent that cannot yet be related to available knowledge is not standard. Therefore, I maintain that for a definite expression to be felicitous, the cognitive structure to which the referent is related has to be available.[29]

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[29] For the phenomenon that a speaker uses a construction that presupposes that the referent has been introduced before, although it has not, see Clark and Haviland (1977: 7–8). In their view, the addressee will recognise the intentional violation and co-operate.

In sum, Keizer's (1992: 274) anchoring-unequivocality hypothesis must be adapted to account for the facts that, first, the referent of a definite description is not necessarily anchored in, but can always be related to (anchored *into*) an available cognitive structure and, second, that the definiteness of an NP does not depend on the question of whether the referent *is* relatable to available knowledge, but whether the speaker *presents* the referent as such. I therefore conclude that a definite article is appropriate if the speaker presents the referent in question as unequivocally relatable to an available cognitive structure that is relevant in the given discourse. However small the adaptation in the formulation may seem, it implies a totally different view on the nature of definiteness. Whereas Keizer assumes familiarity to be the basic value of definiteness (as is evident from the fact that she takes Prince's scale of assumed familiarity as the starting point of her theory on definiteness), my reformulation implies that the general characteristic of definite NPs is identifiability.

5.3. *The use of the article in referential NPs*

It is time to explore whether the Greek article, like its English counterpart, marks the referent of the NP as identifiable (i.e. unequivocally relatable to an available cognitive structure), or has—as the studies of Sansone (1993) and Rijksbaron (2001) suggest—a different function. This section discusses the use of the article in referential NPs, i.e. NPs that are used to refer to some specific or non-specific discourse referent. After the presentation of the general rule for the use of the article in referential NPs in section 5.3.1, two exceptional cases will be discussed in section 5.3.2. Section 5.3.3, finally, discusses the use of the article in combination with a demonstrative.

5.3.1. *The general rule*

Although the conclusions of Sansone (1993) and Rijksbaron (2001) hinted at another direction, my data seem to indicate that the general function of the article in Greek is to mark the discourse referent as identifiable.[30] As in English, the presence of an article indicates that the discourse

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[30] Of course, that is not to say that Sansone and Rijksbaron may not be correct in their conclusion that in the case of abstract and proper names the use of the article is a

referent can be unequivocally related to an available cognitive structure. The following examples clearly illustrate this function of the article:

(25) ἐν τοσαύτῃσι δὲ γενεῇσι ἀνθρώπων ὀκτωκαίδεκα μὲν Αἰθίοπες ἦσαν, μία δὲ γυνὴ ἐπιχωρίη, οἱ δὲ ἄλλοι ἄνδρες Αἰγύπτιοι. **τῇ δὲ γυναικὶ** οὔνομα ἦν, ἥτις ἐβασίλευσε, τό περ τῇ Βαβυλωνίῃ, Νίτωκρις.

In all these many generations there were eighteen Aithiopians; one woman, native to the country; the rest were all Egyptian men. The name of **the woman** who reigned was the same as that of the Babylonian princess, Nitokris. (Hdt. 2.100.1–2)

(26) ἐν ὁτέοισι δ᾿ ἂν οἰκίοισι αἰέλουρος ἀποθάνῃ ἀπὸ τοῦ αὐτομάτου, οἱ ἐνοικέοντες πάντες ξυροῦνται **τὰς ὀφρῦς** μούνας· παρ᾿ ὁτέοισι δ᾿ ἂν κύων, **πᾶν τὸ σῶμα** καὶ **τὴν κεφαλήν**.

The occupants of a house where a cat has died a natural death only shave **their eyebrows** (lit. the eyebrows); where a dog has died, **the whole body** (lit. whole the body) and **the head** are shaven. (Hdt. 2.66.4)

(27) οἱ δὲ Ἕλληνες ἐπείτε ἀπίκατο ἐς τὸν Ἰσθμόν, ἐβουλεύοντο πρὸς τὰ λεχθέντα ἐξ Ἀλεξάνδρου τῇ τε στήσονται τὸν πόλεμον καὶ ἐν οἵοισι χώροισι. **ἡ νικῶσα** δὲ **γνώμη** ἐγίνετο τὴν ἐν Θερμοπύλῃσι ἐσβολὴν φυλάξαι·

When the Greek reached the Isthmos, they held, in consideration of the warning of Alexander, a conference to decide how and where they would stand to the fight. **The winning proposal** was to guard the pass of Thermopylae. (Hdt. 7.175.1)

(28) ἐς μὲν τοσόνδε **τοῦ λόγου** Αἰγύπτιοί τε καὶ οἱ ἱρέες ἔλεγον, (…).

Up to this point of **the story** it was the Egyptians and the priests who gave me the information, (…). (Hdt. 2.142.1)

In example (25), where the use of the article would traditionally be named anaphoric, 'the woman' is an unequivocal part of the cognitive structure 'kings of Babylon' in which she has been explicitly introduced the line before. Although the eyebrows, body and head in example (26) have not been explicitly introduced earlier, they can on the basis of the general knowledge that people have eyebrows, a body and a head effortlessly (and unequivocally) be related to the previously mentioned occupants. The use of the article in example (27) is comparable to that in (26): on the

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topicalisation strategy or used for textual deixis. As I argued in section 5.2.1, however, I try to find a definition of the *general* function of the article by means of which its use in the greater part of the circumstances can be explained, since I think it is only sensible to fill in details (like the use of the article with proper names) after the majority of the examples can be explained satisfactorily.

basis of our general knowledge that only one proposal can be winning, ἡ νικῶσα γνώμη 'the winning proposal' can unequivocally be related to the textual information that the Greeks held a conference to decide which position they should occupy to meet their adversaries.[31] The use of the definite NP in example (28), which would traditionally be called deictic, on the other hand, differs from the previous ones in that the referent is part of the immediate situation instead of a general cognitive structure. Nevertheless, the felicity of the definite article is due to the fact that the referent can be unequivocally related to this situation.

The mere fact that examples (26)–(28) contain several definite NPs per sentence excludes the possibility that the general function of the article in Ancient Greek is topicalisation or textual deixis. And although the highlighted NPs in examples (25) and (27) do have topic function (the NP in example (25) could even be said to be the 'focus of attention' as the woman becomes the discourse topic of the following sections), they do not seem to be marked as such by the presence of the article, but by the fact that they occupy the first position in the sentence.[32] The presence of the definite article might simply be explained, like in the examples (26) and (28), by the fact that the referent is identifiable for the addressee.

Above, I argued that for a referent to be identifiable, it is not necessary that the referent is anchored in some available cognitive structure at the moment of utterance, as long as the addressee is able to relate the referent to some available cognitive structure afterwards. In my corpus I have found many examples that support this hypothesis. Before the mentioning of οἱ χυτοί in (29), for instance,

(29)   ὡς δὲ τά τε τῶν γεφυρέων κατεσκεύαστο καὶ τὰ περὶ τὸν Ἄθων, **οἵ** τε **χυτοὶ** περὶ τὰ στόματα τῆς διώρυχος, οἳ τῆς ῥηχίης εἵνεκεν ἐποιήθησαν ἵνα μὴ πίμπληται τὰ στόματα τοῦ ὀρύγματος, καὶ αὐτὴ ἡ διῶρυξ παντελέως πεποιημένη ἀγγέλλετο, (…).

         When the bridges and the work in Athos had been done, including **the breakwaters** at the ends of the canal, which were built because of the surf, to prevent the entrances of the canal to be silting up, and the canal itself was reported to be completely finished, (…).   (Hdt. 7.37.1)

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[31] Examples like (27), where the referent has to be related to a cognitive structure that is evoked by a complex of information, are relatively infrequent in my corpus. Much more often, the referent of the definite NP is an unequivocal part of an *entity* that has been or will be introduced in the narrative (cf. example 26).

[32] H. Dik (1995) has argued convincingly that Greek sentences are ordered according to the pragmatic function of its constituents. Constituents that are marked as topic tend to occupy the first position of the sentence, immediately followed by the constituent that

the addressee was definitely not aware of the existence of breakwaters at the ends of the canal in Athos (the construction of the canal itself is described in 7.22–24).[33] As soon as they are mentioned, however, the article forces the addressee to understand that he has to relate them to his knowledge about the construction of the canal. Likewise, the seer Megistias will not have been part of an available knowledge structure of the average addressee of (30):

(30)   τοῖσι δὲ ἐν Θερμοπύλῃσι ἐοῦσι Ἑλλήνων πρῶτον μὲν **ὁ μάντις Μεγισ-**
         τίης ἐσιδὼν ἐς τὰ ἱρὰ ἔφρασε τὸν μέλλοντα ἔσεσθαι ἅμα ἠοῖ σφι
         θάνατον, (…).

         The seer Megistias was the first who after having examined the offerings
         predicted the Greeks in Thermophylae the death that awaited them in
         the morning, (…).   (Hdt. 7.219.1)

The definite expression, however, makes the addressee understand that he has to relate the seer to his available knowledge of the situation described. Obviously, for an ancient addressee, this relation is easier to make than for a modern addressee, as an ancient addressee was accustomed to the presence of seers and offerings at an expedition.[34]

If the Greek definite article marks identifiability, the absence of an article should indicate that the referent of the NP cannot unequivocally be related to an available cognitive structure, either because the relation between the referent and the cognitive structure is not unequivocal, or because the referent is not related to an available cognitive structure at all. (31) and (32) provide two examples of an NP that is indefinite because the referent is not an unequivocal part of the relevant cognitive structure:[35]

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has focus function. Schematically, the order of the constituents at the level of the sentence is: topic-focus-predicate-other constituents (see Chapter 3, section 3.4).

[33] Unless the addressee was a hydraulic engineer and could on the basis of his very specialist knowledge assume that breakwaters had to be part of the construction of the canal.

[34] In some cases, it is difficult to decide whether the entity was (already) anchored in the knowledge of the addressees, or had to be anchored into his knowledge on the basis of the utterance. The colossus in Hdt. 2.176.1 for instance (ἀνέθηκε δὲ … ὁ Ἄμασις …, ἐν δὲ καὶ ἐν Μέμφι τὸν ὕπτιον κείμενον κολοσσὸν τοῦ Ἡφαιστείου ἔμπροσθε, τοῦ πόδες πέντε καὶ ἑβδομήκοντά εἰσι τὸ μῆκος, 'in Memphis Amasis dedicated the colossus that lies on its back in front of the temple of Hephaistos, which is 75 feet in length') might have been well known (and therefore be anchored in the general knowledge of the addressee), but as the rest of the passage is quite descriptive (Herodotus continues to tell that there stand two other statues on the same base), the latter interpretation seems more likely. Of course, these classification problems are due to the fact that our general knowledge is not the same as the general knowledge of the average Greek in the fifth century BC.

[35] The standard English example of a non-unequivocal relation between the referent

(31)   τούτων συναμφοτέρων ἦρχε Ἀρτόχμης, **Δαρείου** ἔχων **θυγατέρα**.

        Both these together had as their commander Artochmes, who had married **a daughter of Dareios** (lit. of Dareios a daughter).   (Hdt. 7.73)

(32)   τρεῖς μοίρας ὁ Ξέρξης δασάμενος πάντα τὸν πεζὸν στρατόν, μίαν αὐτέων ἔταξε παρὰ θάλασσαν[36] ἰέναι ὁμοῦ τῷ ναυτικῷ· (…) **ἑτέρη** δὲ τεταγμένη ἤιε **τοῦ στρατοῦ τριτημορὶς** τὴν μεσόγαιαν, (…).

        Xerxes divided the whole land army into three parts. One of these he gave the order to march along the seacoast beside the fleet. (…) **Another third part of the army** (lit. another of the army third part) went by his command further inland, (…).   (Hdt. 7.121.2–3)

In both example (31) and (32) the referent of the highlighted NP is not identifiable because the relation between the referent and the cognitive structure is not one-to-one: Dareios in example (31) has more than one daughter and in example (32) there are two third parts to which τριτημορίς might refer (the third τριτημορίς has already been ordered to march along the seacoast).

    In examples (33) and (34), the absence of the definite article is not due to the fact that the referent cannot be related unequivocally, but to the fact that the referent cannot be related at all, or rather, is presented as such:

(33)   ἐς τοῦ Ἡλίου τὸ ἱρὸν ἀξιοθέητα ἀνέθηκε ἔργα, **ὀβελοὺς δύο λιθίνους**, ἐξ ἑνὸς ἐόντας ἑκάτερον λίθου, μῆκος μὲν ἑκάτερον πήχεων ἑκατόν, εὖρος δὲ ὀκτὼ πήχεων.

        The most remarkable offerings he dedicated to the temple of Helios: **two stone obelisks** (lit. obelisks two stone), both made from a single block of stone, one hundred cubits high, eight cubits broad.   (Hdt. 2.111.4)

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and the cognitive structure it has to be related to is that of 'window' and 'house'. Although one can say that 'the roof of the house was replaced four years ago', because a house (most often) has only one roof, one cannot say that 'the window of the house was replaced four years ago', because the relation between house and window is not unequivocal, as most houses have more than one window.

    [36] The use of the article with θάλασσα in prepositional phrases does not always conform to the general principle that identifiable referents are definite. In my corpus, NPs with a form of θάλασσα are definite if θάλασσα occurs in some prepositional phrase that expresses (swimming) in the sea (cf. Hdt. 2.93.2) or (jumping/falling) into the sea (e.g. Hdt. 7.223.3). The NP, on the other hand, does not have an article if it occurs in a prepositional phrases that expresses from the sea (cf. Hdt. 2.9.2), (push) into the sea (cf. Hdt. 3.60.3), (flow or run out) into the sea (e.g. Hdt. 7.22.2), at/near the sea(side) (e.g. Hdt. 2.32.4) or by sea (e.g. Hdt. 7.173.1). In prepositional phrases that express (to go) to the sea (e.g. Hdt. 2.32.4 and Hdt. 1.154.1) and (to be the best) by sea (e.g. Hdt. 7.10b1 and Hdt. 7.139.2), the use of the article varies. Without any discernable difference, the article

(34)   καὶ δὴ ἐζευγμένου τοῦ πόρου ἐπιγενόμενος **χειμὼν μέγας** συνέκοψέ
         τε ἐκεῖνα πάντα καὶ διέλυσε.

         When the strait was bridged, **a violent storm** (lit. storm violent) blew up,
         chopped up all the work and destroyed it.   (Hdt. 7.34)

The highlighted NPs in example (33) and (34) are indefinite because
Herodotus does not want to present the two stone obelisks and the violent
storm as unequivocally relatable to an available cognitive structure, but as
new entities that are added to the knowledge of the addressee. Herodotus
might also have decided to present these entities as identifiable (for
instance: 'the storm that blew up after the strait was bridged …'), but
chose not to.[37]

   Although I do not want to discuss why Herodotus chose to present the
referents of the highlighted NPs in the examples (33) and (34) as non-
relatable, I do want to pay some more attention to the fact that it is the
speaker and not the nature of the entity itself that determines whether
the NP is definite (as I argued above on the basis of the English examples
22a and 22b). In my corpus, there are many examples that subscribe to
my adaptation of Keizer's theory (see section 5.2.2) that the speaker may
choose to present the referent as unequivocally relatable, or not. The
difference between the following examples, for instance, is due to this
freedom of choice of the speaker:

(35)   (…) ἀντίους δὲ τῶν προπυλαίων ἔστησε ἀνδριάντας δύο, ἐόντας **τὸ
         μέγαθος** πέντε καὶ εἴκοσι πήχεων, (…).

         (…) opposite the forecourt he (= Rhampsinitos) set two statues twenty-
         five ells high (lit. being twenty-five ells with respect to **the height**), (…).
                                                                        (Hdt. 2.121.1)

(36)   ἑκατέρωθι δὲ ἀνὴρ ἐγγέγλυπται **μέγαθος** πέμπτης σπιθαμῆς, (…).

         In each case there is a man of **a height** (lit. with respect to height) of five
         span engraved in the rock.   (Hdt. 2.106.3)

The difference in definiteness between these two examples can be ex-
plained as follows:[38] although μέγαθος in example (35) is presented as

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can both be present and absent in these cases. It should be noted that in the latter cases,
the presence or absence of the article cannot be accounted for by the difference between
reference to a particular (and identifiable) sea and reference to (unidentifiable) seawater.

   [37] The fact that a speaker (writer) may choose to present the referent as an unequiv-
ocally relatable entity or as a new, unidentifiable entity has been substantiated on page
160.

   [38] In Hdt. 2.32.7, the two possibilities alternate in one sentence: … ἀπικέσθαι ἐς πόλιν

unequivocally relatable to the two statues ('the/their height'), μέγαθος in (36) is not presented as referring to the—unequivocally relatable—size of the man that is carved in each side of the rock, but rather as referring to an unrelatable 'size in general'.[39] The choice of the speaker to present the referent as relatable or not, is not confined to examples like (35) and (36) with an accusative, dative or 'genitive' of respect.[40] In the following example, for instance, the objects πλήθει and ἵππῳ are presented as non-relatable and therefore unidentifiable entities referring to numerical superiority and horse soldiers in general, rather than unequivocally relatable entities referring to the number and the cavalry of the barbarians:

(37)   οἱ μέν νυν χῶροι οὗτοι τοῖσι Ἕλλησι εἶναι ἐφαίνοντο ἐπιτήδεοι· ἅπαντα γὰρ προσκεψάμενοι καὶ ἐπιλογισθέντες ὅτι οὔτε **πλήθεϊ** ἕξουσι χρᾶσθαι οἱ βάρβαροι οὔτε **ἵππῳ**, ταύτῃ σφι ἔδοξε δέκεσθαι τὸν ἐπιόντα ἐπὶ τὴν Ἑλλάδα.

These places seemed to be fit to the Greeks. After careful consideration and reasoning that the barbarians could not make use of **superior numbers** (lit. number) or **horsemen** (lit. cavalry), they decided to await the invader of Greece there.   (Hdt. 7.177)

The preceding examples supported my modification of Keizer's definition of definiteness with respect to the role of the speaker in the relatability of the referent. My reformulation 'a referent is definite if it is *presented* as unequivocally relatable to some available cognitive structure' seems also to be favoured by examples like the following:

ἐν τῇ πάντας εἶναι τοῖσι ἄγουσι **τὸ μέγαθος** ἴσους, **χρῶμα** δὲ μέλανας. 'they said that they came to a city in which all people were like the men who had brought them in respect to **their size** (let. the size), and black in **colour**'.

[39] Herodotus usually presents NPs in the accusative, dative or even genitive case that indicate to what the verb or adjective applies (accusative/dative/genitive of respect) as unrelatable ('in size') instead of relatable ('in respect to the/his size'). (For a clear example of a genitive of respect, which is in contrast to the accusative and dative of respect not a widely accepted syntactic-semantic category, see Hdt. 7.20.1 χειρὶ μεγάλη πλήθεος 'a force large in number'). In Dutch, the same variation is also possible. *Wat grootte betreft* ('in size') and *wat betreft de/zijn grootte* (lit. 'in the/his size') may be alternated without any appreciable difference in meaning.

[40] For the term 'genitive' of respect, see the previous footnote. Cf. also the following two examples with a prepositional phrase that has more or less the function of a respect: Hdt. 2.10.2 οὐδεὶς αὐτῶν **πλήθεος πέρι** ἄξιος συμβληθῆναί ἐστι ('none of them is comparable in size') and Hdt. 7.187.2 … **κάλλεός τε εἵνεκα καὶ μεγάθεος** οὐδεὶς αὐτῶν ἀξιονικότερος ἦν αὐτοῦ Ξέρξεω ἔχειν τοῦτο τὸ κράτος ('… for splendour and greatness no one was more worthy than Xerxes to control this power').

(38)   Ἀρτάβανε, ἐγὼ τὸ παραυτίκα μὲν οὐκ ἐσωφρόνεον εἴπας ἐς σὲ **μάταια ἔπεα χρηστῆς εἵνεκα συμβουλῆς·**

Artabanos, I was out of my mind when I said **foolish words** in reply to **useful advice**.   (Hdt. 7.15.1)

The referents of the μάταια ἔπεα 'foolish words' and the χρηστῆς συμβουλῆς 'useful advice' are identifiable both for the internal addressee of these words and the reader of the text, as Artabanos' advice and Xerxes' reaction have been cited word for word in the text (7.10α1–11 and 7.11.1–4). However, despite the identifiability of their referents, the NPs are indefinite. The reason for the absence of the article is that Xerxes does not assume Artabanos to be able to identify the referents on the basis of the descriptive content of the NP. In fact, he does not even want Artabanos to identify the referents. The NPs are not meant to identify the referents, but to attribute them a new qualification: Xerxes wants to inform Artabanos that, on second thoughts, he considers his uncle's advice useful and his own words foolish.

   Something similar is the case in example (39),

(39)   (= 36) εἰσὶ δὲ καὶ περὶ Ἰωνίην δύο τύποι ἐν πέτρῃσι ἐγκεκολαμμένοι τούτου τοῦ ἀνδρός, (…). ἑκατέρωθι δὲ **ἀνὴρ** ἐγγέγλυπται **μέγαθος πέμπτης σπιθαμῆς, τῇ μὲν δεξιῇ χειρὶ ἔχων αἰχμήν, τῇ δὲ ἀριστερῇ τόξα,** καὶ τὴν ἄλλην σκευὴν ὡσαύτως·

Also, there are in Ionia two figures of this man carved in rock. (…) In both places, there is **a man of a height of five span engraved in the rock, with a spear in his right hand and a bow in his left,** and the rest of his equipment the like.   (Hdt. 2.106.2–3)

where Herodotus describes the τύποι 'figures' of this man as a twenty feet high figure with a spear and a bow in his hands. The entity the highlighted NP refers to has been introduced one line before and would therefore be perfectly identifiable. Nevertheless, Herodotus uses an indefinite NP to signal that the NP is not meant to help the addressee to identify this referent, but is to inform him about the details of this referent.[41]

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[41] As the function of these indefinite NPs is to inform the addressee on the qualifications of the referent, rather than to identify this referent, many of them contain one or more modifiers that give expression to these new qualifications. The fact that these modifiers provide new information on given referents explains why they usually precede the noun, cf. example (38). In example (39), the postposition of the modifiers is due to their heaviness: both the genitival phrase that specifies the dimensions of the referent and the participal phrase specifying its attributes has more than one dependent (for a more detailed discussion of the heaviness principle and the maximum number of dependents that can accompany a prenominal modifier, see Chapter 3, section 3.3.1). Incidentally,

The indefinite NPs in examples (36)–(39) illustrate that for a definite article to be felicitous, the identifiability (= unequivocal relatability) of the referent is no sufficient condition. The use of a definite article is only felicitous if the speaker really wants the addressee to identify the referent and presents the referent as unequivocally relatable to some available cognitive structure.

Before turning to the conclusion of this section, it should be stated explicitly that the definiteness of an NP is not sensitive to the (non-)specificity of the NP.[42] The definite article marks the referent as identifiable, irrespective of the fact whether the speaker has or has not a particular referent in mind.[43] Examples (40)–(43) provide some illustrative examples of definite and indefinite non-specific NPs:

(40)   ἀγαγόντες τὸ σεσημασμένον κτῆνος **πρὸς τὸν βωμὸν ὅκου ἂν θύωσι**, πῦρ ἀνακαίουσι, ἔπειτα δέ (...).

        After having brought the marked animal **to the altar where they will sacrifice it**, they light a fire, and (...).   (Hdt. 2.39.1)

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the qualification or evaluation of the referent may also be expressed by the noun itself, as in Hdt. 7.160.1 ὦ ξεῖνε Σπαρτιῆτα, ὀνείδεα κατιόντα ἀνθρώπῳ φιλέει ἐπανάγειν τὸν θυμόν· σὺ μέντοι ἀποδεξάμενος **ὑβρίσματα** ἐν τῷ λόγῳ οὔ με ἔπεισας ἀσχήμονα ἐν τῇ ἀμοιβῇ γενέσθαι 'my Spartan friend, the hard words that a man hears are likely to arouse his anger; but for all the arrogant tenor of your speech (lit. though showing **insolent acts** in your speech) you will not move me to make an unseemly answer'.

[42] Rijkhoff's assumption (1992: 154) that the article in Ancient Greek is a specificity marker, suggested by the fact that the article may co-occur with demonstratives, is therefore certainly not substantiated by the Greek facts. For a discussion of the typologically exceptional combination of the article and demonstrative, see section 5.3.3.

[43] Note that I take specificity to be a pragmatic matter. In my view, the choice for a specific or non-specific NP depends on whether the speaker does or does not have a particular referent in mind. The more commonly held view is that specificity is (partly) a semantic matter. In this view, NPs are ambiguous between a specific and a non-specific reading if they occur in a so-called opaque context, i.e. a sentence containing a certain logical operator, such as a propositional attitude verb (cf. Joan wants to present the prize to the winner), a negation (cf. I didn't see a car parked at the door), a modal verb (cf. you should go to a movie tonight), etc. If the NP has wide scope over the operator, it is specific, if it has narrow scope, it is non-specific. As an example like 'I haven't started the class yet; I'm missing a student' shows, however, the ambiguity between a specific and non-specific reading may also arise in sentences without such a logical operator. Because Ancient Greek does not mark the difference between non-specific NPs under the scope of operator differently from non-specific NPs in sentences without any operator (as for instance Russian and Jacaltec, see Lyons 1999: 174–175), I prefer the position that the ambiguity between a specific and non-specific reading is an always-present pragmatic matter to the view that there are two types of specificity (see Ioup 1977 among others): one semantically based (in opaque contexts, i.e. in sentences containing a logical operator) and the other pragmatically based (in non-opaque, transparent contexts, i.e. in sentences without such a logical operator).

(41)   εἰσὶ δὲ κατὰ ταῦτα τὰ χωρία καὶ λέοντες πολλοὶ καὶ βόες ἄγριοι,
       τῶν τὰ κέρεα ὑπερμεγάθεά ἐστι τὰ ἐς Ἕλληνας φοιτῶντα. οὖρος δὲ
       τοῖσι λέουσί ἐστι ὅ τε δι᾽ Ἀβδήρων ῥέων ποταμὸς Νέστος καὶ ὁ δι᾽
       Ἀκαρνανίης ῥέων Ἀχελῷος·

       In these parts there are many lions and wild oxen, which have the
       enormous horns that are transported to Greece. The boundary to **the
       lions** is the river Nestos that flows through Abdera and the river Achelous
       flowing trough Akarnania.   (Hdt. 7.126)

(42)   ἡ δὲ ἰητρικὴ κατὰ τάδε σφι δέδασται· **μιῆς νούσου** ἕκαστος ἰητρός ἐστι
       καὶ οὐ πλεόνων.

       The practice of medicine is so specialised among them that each physi-
       cian is a healer of **one disease** (lit. disease one) and no more. (Hdt. 2.84)

(43)   ἐσθῆτα δὲ φορέουσι οἱ ἱρέες λινέην μούνην καὶ **ὑποδήματα βύβλινα**,
       ἄλλην δέ σφι ἐσθῆτα οὐκ ἔξεστι λαβεῖν οὐδὲ ὑποδήματα ἄλλα.

       The priests wear a single linen garment and **sandals of papyrus**: they may
       have no other kind of clothing or footwear.   (Hdt. 2.37.3)

In the examples (40) and (41), the highlighted NP is definite because the
referent, although non-specific because the speaker has no particular ref-
erent in mind, is identifiable: in example (40), the referent is identifiable
on the basis of the addressee's general knowledge that offerings imply
an altar, in example (41) because the referent has explicitly been intro-
duced one line before. The non-specific referents of the indefinite NPs in
the examples (42) and (43), by contrast, are not identifiable. In example
(42), this is due to the non-unequivocal relation between the referent and
the relevant cognitive structure, in example (43) to the writer's choice
to present the referents as new entities, unrelated to available knowl-
edge.

    Non-specific NPs are thus comparable to specific ones in that their def-
initeness depends on the identifiability of the referent. At least, that is the
conclusion that seems to be legitimate on the basis of my corpus, in which
the use of the article in 94 % of the referential NPs can be accounted for
by assuming that the definite article presents the referent as unequivo-
cally relatable to an available cognitive structure. This percentage seems
high enough to conclude that—in my corpus, at least—identifiability is
the general function of the article we were looking for. Of the remaining
6 %, a large part can be explained by one of the five exceptional cases that
will be discussed in the next section.

5.3.2. *Five refinements of the general rule*

Around six percent of the referential NPs in my corpus does not conform to the general rule for the use of the definite article set up in the previous section in that the article is absent although the referent can be related unequivocally to an available cognitive structure, or is present although the referent cannot be related to an available cognitive structure. Fortunately, more than a third of these exceptions can be explained by one of the five further refinements of the general rule that will be discussed in this section.

The most important refinement (in the sense that it is responsible for the largest number of exceptions to the general rule) is that a classifying genitive[44] cannot function as the anchor of a relatable entity. As a consequence, referents that are to be related to a classifying genitive are always indefinite, even if they can be unequivocally related. Compare examples (44) and (45) containing a classifying genitive with examples (46) and (47) containing a possessive genitive:

(44) ἔχει δὲ **ὀφθαλμοὺς** μὲν **ὑός**, ὀδόντας δὲ μεγάλους καὶ χαυλιόδοντας κατὰ λόγον τοῦ σώματος.

It has **pigs' eyes** (lit. eyes of pig), and long, protruding teeth in proportion to its body. (Hdt. 2.68.3)

(45) πρῶτοι δὲ καὶ τόνδε τὸν λόγον Αἰγύπτιοί εἰσι οἱ εἰπόντες, ὡς **ἀνθρώπου ψυχὴ** ἀθάνατός ἐστι, (…).

The Egyptians were the first who maintained the following doctrine, too, that **the human soul** (lit. of a man soul) is immortal. (Hdt. 2.123.2)

(46) πολλοὶ δὲ **ἀνδρῶν ἐχθρῶν τὰς δεξιὰς χεῖρας νεκρῶν ἐόντων** ἀποδείραντες αὐτοῖσι ὄνυξι καλύπτρας τῶν φαρετρέων ποιεῦνται.

Many too take off the skin, nails and all, from **their dead enemies' right hands** (lit. of enemies the right hands, dead being) and make coverings for their quivers. (Hdt. 4.64.3)

(47) τοξεύων γὰρ ὁ Ἀρτάβαζος ἐς τὸ συγκείμενον, ἁμαρτὼν τοῦ χωρίου τούτου βάλλει **ἀνδρὸς Ποτειδαιήτεω τὸν ὦμον**, (…).

For Artabazos in shooting an arrow to the place agreed upon, missed it and hit **the shoulder of a man of Potidaia** (lit. of a man from Potidaia the shoulder), (…). (Hdt. 8.128.2)

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[44] As was described in Chapter 2, section 2.3.1, classifying modifiers are understood to mean modifiers that answer the question of to *what kind of* entity is referred. Dog in a dog's tail, for instance, is a classifying genitive because it specifies which kind of tail

The definiteness of the head nouns in the highlighted NPs in examples (46) and (47) conforms to the general rule in that the entities they refer to can unequivocally be related to the entity expressed by the 'possessive' genitive. The indefiniteness of the head nouns in examples (44) and (45), by contrast, contradicts the general rule. This is due to the fact that the genitives to which they are to be related are classifying instead of possessive. The genitive in example (44) does not give information on the possessor of the eyes, but rather on the kind of eyes: the crocodile does not have eyes that belong to some pig, but has eyes that are characteristic of a pig. In the same way, the genitive in example (45) does not refer to the possessor of the soul, but indicates which kind of soul is meant.

The indefiniteness of the head noun in an NP with a classifying genitive is not characteristic for Ancient Greek. Many modern European languages also lack an article in such NPs, as can be seen in examples (48b) and (49b):[45]

(48a) Hij wilde **de dochter van een koning** trouwen.

  He wanted to marry **the daughter of a king**.

(48b) Hij wilde **een koningsdochter** trouwen.

  He wanted to marry **a king's daughter**.

(49a) Several hours later **the bird's** relieved **owner** arrived at the station, explaining the parrot had flown off as she took it to her grandchildren for a treat.

(49b) His hair felt like **a bird's nest**.[46]

It is not clear why classifying genitives cannot function as an anchor. The Dutch and English examples give the impression that the indefiniteness of the head noun may have to do with the non-specific nature of the genitive, as the genitives in the definite NPs in the (a)-examples are

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is meant. For an extensive description of classifying genitives as opposed to other types of genitives, see Koptjevskaja-Tamm (2003).

[45] In Dutch and English there are also syntactical and/or prosodical differences between NPs with a classifying and NPs with a possessive genitive. As can be seen in example (48b), Dutch NPs with a classifying genitive tend to become compounds, e.g. varkensstaart ('a pig's tail'), koningsdochter ('a king's daughter') and vogelnestje ('a bird's nest'). Although in English the classifying genitive is syntactically not integrated into the head noun, the fact that NPs with a classifying genitive tend to be single-stressed (rather than being pronounced like a phrase) seems to indicate that English NPs with a classifying genitive are more like compounds than common phrases of head noun plus dependent genitive (cf. Biber et al. 1999: 294–295).

[46] The examples (49a) and (49b) were taken from Biber et al. (1999: 294).

specific, whereas their counterparts in the (b)-examples are non-specific. Yet, although classifying genitives are indeed always non-specific, their non-specific nature cannot be an explanation for the indefiniteness of the head noun, as entities that are to be related to non-specific anchors need not be indefinite (see example (46) where the head noun is definite, despite the fact that the genitive is non-specific). Another possibility, suggested by the fact that the genitive in the Dutch and English examples forms a syntactic or prosodic unity with the head noun (for more details, see footnote 45), is that a classifying genitive is no longer interpreted as referring, so that the indefiniteness of the head noun might be explained by the fact that the entity to which it refers is to be related to a non-referential entity. However, apart from the absence of an article, the Greek examples do not provide any indication that the classifying genitives would be non-referential. My data, therefore, do not allow a more substantial conclusion than that entities relatable to a classifying genitive are always indefinite and that this may have to do with a possible non-referential nature of the classifying genitive.

The second refinement of the general rule is that NPs consisting of a preposition and a noun that form a fixed adverbial expression (e.g. κατὰ ῥόον 'downstream' or κατὰ δύναμιν 'according to ability')[47] generally omit the article, even if the noun refers to an unequivocally relatable entity:[48]

(50)   (…) αἱ μὲν δὴ πρῶται τῶν νεῶν ὅρμεον πρὸς γῇ, ἄλλαι δ᾽ ἐπ᾽ ἐκείνῃσι **ἐπ᾽ ἀγκυρέων·**

The first of the ships made fast to the land (lit. to land), the others lay outside them **at anchor.**   (Hdt. 7.188.1)

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[47] Of course, it is difficult to draw a line between fixed adverbial expressions and common prepositional phrases, especially on the basis of this (relatively) small amount of data. My data do make clear, however, that the absence of an article is only possible with non-modified nouns (e.g. κατὰ δύναμιν 'according to ability', but not *κατὰ δύναμιν τοῦ βασιλέος 'according to ability of the king') in prepositional phrases that occur regularly.

[48] That the article can be omitted in NPs containing a preposition is noted by all grammars (cf. Gildersleeve 1900: 243, Goodwin 1879: 208, Kühner-Gerth 1904: I 605, Smyth 1956: 289 and Schwyzer-Debrunner 1950: 24). Kühner-Gerth, however, are the only ones who ascribe the absence of the article to the 'adverbialen Charakter' of the expression in question. Goodwin's explanation (1879: 208) that the article may be omitted in familiar expressions of time and place, because these expressions are probably older than the Attic use of the article might seem attractive, but is problematic in that the absence of the article in fixed adverbial expressions is also usual in other languages, which do not have a preceding stage without an article, cf. English 'at anchor', French 'en route' (lit. on way) and Dutch 'van begin af aan' (lit. from very beginning).

(51)   (. . .) ὅτι μοῦνοι πάντων ἀνθρώπων Κόλχοι καὶ Αἰγύπτιοι καὶ Αἰθίο-
         πες περιτάμνονται **ἀπ᾽ ἀρχῆς** τὰ αἰδοῖα.

         (. . .) that the Kolchians and Egyptians and Aithiopians are the only
         nations that have **from the first** (lit. from beginning) practised circum-
         cision.   (Hdt. 2.104.2)

(52)   εἰ δὲ ταῦτα μὲν ὑποδύνειν οὐκ ἐθελήσεις, σὺ δὲ πάντως στράτευμα
         ἀνάξεις ἐπὶ τὴν Ἑλλάδα, ἀκούσεσθαί τινά φημι τῶν αὐτοῦ τῇδε ὑπο-
         λειπομένων Μαρδόνιον, μέγατι κακὸν ἐξεργασάμενον Πέρσας, ὑπὸ
         κυνῶν τε καὶ ὀρνίθων διαφορεόμενον ἤ κου ἐν γῇ τῇ Ἀθηναίων ἤ σέ
         γε ἐν τῇ Λακεδαιμονίων, εἰ μὴ ἄρα καὶ πρότερον **κατ᾽ ὁδόν**, (. . .).

         But if you are unwilling to submit to this and will at all hazards lead
         your army overseas to Hellas, then I think that those left behind in this
         place will hear that Mardonios has done great harm to the Persians, and
         has been torn apart by dogs and birds in the land of Athenians or of
         Lakedaimonians, if not even before that **on the way there** (lit. on way),
         (. . .).   (Hdt. 7.10ϑ3)

The article is present, however, if the NP is a common prepositional
phrase instead of a fixed adverbial expression (at least, if the referent is
identifiable).[49] Compare example (52) to (53):

(53)   To fool the guards of the body of his brother, a young man devises the
         following plan: he puts skins full of wine on his asses and sets out driving
         to the guards. When he approaches them, he pulls at the feet of two or
         three of the skins and looses the fastenings of the skins, so that the wine
         runs out.

         τοὺς δὲ φυλάκους ὡς ἰδεῖν πολλὸν ῥέοντα τὸν οἶνον, συντρέχειν **ἐς τὴν
         ὁδὸν** ἀγγεῖα ἔχοντας καὶ τὸν ἐκκεχυμένον οἶνον συγκομίζειν ἐν κέρδεϊ
         ποιευμένους.

         The guards, when they saw the wine flowing freely, ran out **into the road**
         with cups and caught what was pouring out, thinking themselves in luck.
                                                                       (Hdt. 2.121δ2)

For the third refinement of the general rule that a (Greek) NP is defi-
nite if the referent is identifiable, a distinction should be made between
NPs referring to an entity that has been introduced into the discourse,

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[49] The difference between the lack of the article in the fixed adverbial expressions and
the presence of the article in common prepositional phrases seems comparable to the
difference between the accusative of respect with and without article in examples (35)
and (36) above. Whereas the road in the common prepositional phrase in example (53)
is presented as unequivocally relatable to the knowledge of the addressee, the road in
example (52) is not presented as referring to the—unequivocally relatable—road between
Persia and Athens or Sparta, but as referring to an unrelatable 'road in general'.

either by textual information or by the situation (so-called evoked enti-
ties), and NPs referring to an entity that has not yet been introduced into
the discourse, but derives its identifiability from to the fact that it may be
related unequivocally to general or specific knowledge of the addressee.
Whereas Hawkins (1978) names the NPs in this latter category 'associa-
tives' and Keizer (1992) names them 'inferrables' (after Prince 1981b), I
prefer a term like 'relatables', to give expression to the fact that the refer-
ents of these NPs need not be anchored in the knowledge of the addressee
as long as they can unequivocally be related to his knowledge. For some
reason unclear to me, the following refinement of the general rule only
concerns NPs that refer to relatable entities.

This refinement is that the subject of a copular verb may be indefinite,
even though the referent can be related unequivocally to an available
cognitive structure:[50]

(54)   ταῦτα τὰ ἔθνεα μοῦνα ἵππευε· **ἀριθμὸς** δὲ **τῆς ἵππου** ἐγένετο ὀκτὼ
μυριάδες, πάρεξ τῶν καμήλων καὶ τῶν ἁρμάτων.

These were the only nations that provided cavalry. **The number of the
cavalry** (lit. number of the cavalry) was eight muriades, besides the
camels and the chariots.   (Hdt. 7.87)

(55)   ἐπεὰν δὲ σαπῇ καὶ προσίῃ ὁ τεταγμένος χρόνος, ἀπικνέεται ἐς ἑκάστην
πόλιν βᾶρις ἐκ τῆς Προσωπίτιδος καλεομένης νήσου. ἣ δ' ἔστι μὲν ἐν
τῷ Δέλτα, **περίμετρον** δὲ **αὐτῆς** εἰσὶ σχοῖνοι ἐννέα.

When the carcass has rotted and the time appointed is at hand, a boat
from the island that is called Prosopotis comes to each city. This island
lies in the Delta, **the circumference of this island** (lit. circumference of
her) is nine schoeni.   (Hdt. 2.41.4–5)

Both the number in (54) and the circumference in (55) are unequivocally
relatable to an identifiable entity (the cavalry and the island respectively)
and should therefore be definite according to the general rule. Appar-
ently, however, the general rule can be overruled in these examples. What
exactly causes the omission of the article is not clear to me, as in about
half of the examples the relatable subject of a copular verb is ordinar-
ily definite. Compare example (55) with the very similar (56) where the
relatable subject does get an article:

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[50] For a justification of why I take the highlighted NPs to be the subject of the copular
verb rather than the ὀκτὼ μυριάδες or σχοῖνοι ἐννέα, see the introduction on classifying
sentences in section 5.4.1.

(56)   τὸ δ᾽ ὦν πάλαι αἱ Θῆβαι Αἴγυπτος ἐκαλέετο, **τῆς τὸ περίμετρον** στά-
       διοί εἰσι εἴκοσι καὶ ἑκατὸν καὶ ἑξακισχίλιοι.

   Thebe was called Aigyptos in ancient times, **its circumference** (lit. of it
   the circumference) was six thousand one hundred and twenty furlongs.
                                                              (Hdt. 2.15.3)

In the following example, a definite subject (τὸ μῆκος) alternates with
two indefinite subjects (εὖρος, ὕψος) within the same sentence:

(57)   τῆς δὲ στέγης ταύτης **τὸ** μὲν **μῆκος** ἔξωθέν ἐστι εἷς τε καὶ εἴκοσι πήχεες,
       εὖρος δὲ τεσσερεσκαίδεκα, **ὕψος** δὲ ὀκτώ.

   The length of this chamber on the outside is twenty-one ell, **its width** (lit.
   width) fourteen ell, **its height** (lit. height) eight ell.   (Hdt. 2.175.3)

Unfortunately, it is impossible on the basis of my data to arrive at a more
satisfactory conclusion than that a relatable (viz. non-evoked) subject of
a copular verb may be indefinite, even if its referent is identifiable.

   The fourth refinement is that an identifiable referent may lack an
article if it is coordinated with another noun. Generally, the use of the
article with coordinated nouns is comparable to the use of the article
with a single noun: in coordinations of unidentifiable entities all nouns
are bare, in coordinations of identifiable entities the article is usually
expressed with every noun that is included in the coordination:

(58)   ἐκείνους ὦν τοὺς νεηνίας ἀποπεμπομένους ὑπὸ τῶν ἡλίκων, **ὕδατί τε
       καὶ σιτίοισι** εὖ ἐξηρτυμένους, ἰέναι τὰ πρῶτα μὲν διὰ τῆς οἰκεομένης,
       (…).

   These young men sent away by their companions, being well supplied
   with water and food, first went through the inhabited country, (…).
                                                              (Hdt. 2.32.5)

(59)   (…), Αἰγύπτιοι δὲ ὑπὸ τοὺς θανάτους ἀνιεῖσι τὰς τρίχας αὔξεσθαι τάς
       τε ἐν τῇ κεφαλῇ καὶ τῷ γενείῳ, τέως ἐξυρωμένοι.

   (…), in times of death, Egyptians grow their hair both **on their head and
   on their cheeks**, although they normally shave their hair.   (Hdt. 2.36.1)

In a (very small) number of cases of coordinations of identifiable entities,
however, one article serves to express the identifiability of all the entities.
The effect of the omission of the article with the second, third, etc. noun in
the coordination is that the different entities are depicted as one whole.[51]

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[51] Cf. Kühner-Gerth (1904: I 611) and Smyth (1956: 291), who state that a single article
with various nouns creates the effect of a single notion (for example οἱ στρατηγοὶ καὶ
λοχαγοί: the generals and captains, i.e. the commanding officers), whereas a repeated

Compare example (60), where the other women and men are presented as one group, with example (61), where the infantry and the cavalry are presented as two distinct entities.

(60)   πλέουσί τε γὰρ δὴ ἅμα ἄνδρες γυναιξὶ καὶ πολλόν τι πλῆθος ἑκατέρων ἐν ἑκάστῃ βάρι· αἱ μέν τινες τῶν γυναικῶν κρόταλα ἔχουσαι κρο-ταλίζουσι, οἱ δὲ αὐλέουσι κατὰ πάντα τὸν πλόον, **αἱ δὲ λοιπαὶ γυναῖ-κες καὶ ἄνδρες** ἀείδουσι καὶ τὰς χεῖρας κροτέουσι.

They go by boat, men and women together, a great number of both in each boat. Some of the women rattle with castanets, and some of the men play flutes during the whole trip, **the other women and men** sing and clap their hands.   (Hdt. 2.60.1)[52]

(61)   ἐκέλευσέ σφεας τοὺς δορυφόρους περιάγοντας ἐπιδείκνυσθαι **πάντα τε τὸν πεζὸν στρατὸν** καὶ **τὴν ἵππον**, (. . .).

He (= Xerxes) ordered his guards to lead them around and show them **his whole infantry and the cavalry** (lit. whole the foot army and the cavalry), (. . .).   (Hdt. 7.146.3)

A third, equally rare, possibility in the coordination of identifiable entities is leaving out all the articles. The few examples in my corpus seem to indicate that this possibility is only used if the different nouns together express one notion like 'home and hearth' and 'wife and children'.[53] Compare the indefinite coordination of children, women and belongings in example (62), which is used to give expression to the notion of 'all they care about,' to the coordination of definite NPs in (63), expressing that Boges slaughtered both his wife, and his children, and his concubines, and his servants:[54]

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article lays stress on each word. Syntactically, the two nouns may be said to constitute one NP, so that one article suffices to express the identifiability of both nouns.

[52] Note that it is not necessary that the nouns that 'share' the article are all of the same gender, as Smyth (1956: 291) suggests.

[53] For a similar view, see Kühner-Gerth (1904: I 604–605). Although this phenomenon occurs in other languages as well (cf. 'huis en haard', 'home and hearth', 'Haus und Herd'), it has—as far as I know—never been described or explained. What is described in the literature, however, is that the conjunctive construction or coordinator between conjuncts which form a conceptual unit may differ from the construction or coordinator between the conjuncts that are less closely associated (for literature on the difference between so-called natural vs. accidental coordination, see Haspelmath 2004: 13).

[54] Smyth's observation that 'concrete co-ordinated words forming a copulative expressions may omit the article' (1956: 291) is not correct in that the nouns included in an anarthrous co-ordination may be rather abstract, cf. Hdt. 2.99.1 μέχρι μὲν τούτου **ὄψις τε ἐμὴ καὶ γνώμη καὶ ἱστορίη** ταῦτα λέγουσά ἐστι, τὸ δὲ ἀπὸ τοῦδε Αἰγυπτίους ἔρχο-μαι λόγους ἐρέων κατὰ τὰ ἤκουον· ('thus far, **my own sight, opinion and investigation** were the source of my story, from now on I will record Egyptian stories, in the way I

(62)   πάρεξ δὲ τούτου, ἐν τῇ ἡμετέρῃ καταλιπόντας **τέκνα καὶ γυναῖκας καὶ χρήματα** οὐδ' ἐπιλέγεσθαι χρὴ νεώτερόν τι ποιήσειν.

Moreover, it is not necessary to fear that they, who have left **children, wives and belongings** in our country, will rise in revolt.   (Hdt. 7.52.2)

(63)   ὡς δ' οὐδὲν ἔτι φορβῆς ἐνῆν ἐν τῷ τείχεϊ, συννήσας πυρὴν μεγάλην ἔσφαξε **τὰ τέκνα καὶ τὴν γυναῖκα καὶ τὰς παλλακὰς καὶ τοὺς οἰκέτας** καὶ ἔπειτα ἐσέβαλε ἐς τὸ πῦρ, (. . .).

When there was no food left in the city, he piled up a great pyre, slaughtered **his children, and his wife, and his concubines, and his servants** (lit. the children and the wife and the concubines and the servants), and threw them in the fire, (. . .).   (Hdt. 7.107.2)

So, a noun referring to an identifiable entity may share an article with another identifiable entity, with which it forms one NP. If the two nouns together give expression to one notion, they may lack an article altogether.

The fifth and final refinement of the general rule that NPs referring to identifiable entities are definite differs from the previous four in that it accounts for the presence of the article in certain NPs referring to non-identifiable entities instead of the absence of the article in NPs referring to identifiable entities. This last refinement is that NPs are definite if they have distributive force, irrespective of the identifiability of the referent in question:

(64)   πανηγυρίζουσι δὲ Αἰγύπτιοι οὐκ ἅπαξ **τοῦ ἐνιαυτοῦ**,[55] πανηγύρις δὲ συχνάς, (. . .).

The Egyptians do not hold solemn assemblies once **a year** (lit. the year), but often, (. . .).   (Hdt. 2.59.1)

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heard them'). Both ὄψις ('sight'), γνώμη ('opinion') and ἱστορίη ('investigation') are not very concrete and together express a rather abstract notion.

[55] In cases like this, a form of ἕκαστος can be added to emphasise the distributive function of the article, cf. Hdt. 4.66: ἅπαξ δὲ **τοῦ ἐνιαυτοῦ ἕκάστου ὁ νομάρχης ἕκαστος** ἐν τῷ ἑωυτοῦ νομῷ κιρνᾷ κρητῆρα οἴνου (once **a year** (lit. the year every) **every governor** (lit. the governor every) in his own district mixes a bowl of wine). The idea that in examples like these ἕκαστος is a kind of afterthought underlining the distributive function of the article is strengthened by the fact that NPs with a form of ἕκαστος are usually bare (because the referent cannot be related unequivocally to an available structure, cf. Hdt. 2.134.1 πυραμίδα δὲ καὶ οὗτος κατελίπετο πολλὸν ἐλάσσω τοῦ πατρός, εἴκοσι ποδῶν καταδέουσαν **κῶλον ἕκαστον** τριῶν πλέθρων . . . 'he too left a pyramid much smaller than his father's, **every side** being of two hundred and eighty feet . . .').

(65)   The Persians build a pontoon bridge tying up the ships with cables of
          papyrus and flax.

          παχύτης μὲν ἦν ἡ αὐτὴ καὶ καλλονή, κατὰ λόγον δὲ ἐμβριθέστερα ἦν
          τὰ λίνεα, τοῦ τάλαντον **ὁ πῆχυς** εἷλκε.

          All these were of the same thickness and fair appearance, but the flaxen
          were proportionally heavier, of which **a cubit** (lit. the cubit, i.e. every
          cubit) weighs a talent.   (Hdt. 7.36.3)

Although the examples in my corpus are very limited, both in number
(9 examples) and in use (mainly time adjuncts), the refinement seems
legitimate on the basis of the descriptions in the grammars (cf. Kühner-
Gerth 1904: I 593, Schwyzer-Debrunner 1950: 25 and Smyth 1956: 287),
which suggest that this use of the article is quite common in Ancient
Greek. On the basis of my own data, however, it is impossible to arrive at
a more extensive conclusion than that distributive NPs are definite, even
if the referent is not identifiable.[56]

Before turning to the conclusion of this section, some attention should
be paid to the so-called possessive use of the article, because this use of
the article—although perfectly in line with the general rule for the use of
the article—differs from the actual practice in modern Indo-European
languages. In Ancient Greek, possessive phrases that refer to inalienable
possessions lack an overt possessive marker, but do give expression to the
identifiability of the referent by means of an article. Traditionally, the use
of the article in these possessive phrases was named possessive, in the
conviction that the article replaces a possessive pronoun.[57] In my corpus,
this use of the article (or as I would say: this absence of a possessive)
is common with kinship terms, nouns denoting parts of the body and
nouns denoting weapons:

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[56] That distributive NPs are definite does not hold for those cases where the distribu-
tive nature of the NP is expressed by means of the preposition κατά. These NPs always
lack an article, even if the referent is identifiable, e.g. Hdt. 7.212.2 οἱ δὲ Ἕλληνες **κατὰ
τάξις τε καὶ κατὰ ἔθνεα** κεκοσμημένοι ἦσαν καὶ ἐν μέρεϊ ἕκαστοι ἐμάχοντο, πλὴν
Φωκέων· ('the Greeks were set in array **by divisions and nations**, and each of these fought
in its turn, with exception of the Phokians'). Although some combinations of κατά plus
noun may be considered fixed adverbial expressions (so that the absence of an article is
only natural, see the second refinement), this explanation seems unlikely in examples like
Hdt. 7.212.2.
[57] Cf. Smyth (1956: 287): 'the article often takes the place of an unemphatic possessive
pronoun when there is no doubt as to the possessor'. For the possessive use of the article,
see also Gildersleeve (1900: 227), Goodwin (1879: 207), Kühner-Gerth (1904: I 593) and
Schwyzer-Debrunner (1950: 25).

(66) τούτους ὦν τοὺς ἄνδρας συμβουλεύω τοι μηδεμιῇ μηχανῇ ἄγειν ἐπὶ **τοὺς πατέρας**·

I advise you by no means to lead these men against **their fathers** (lit. the fathers).   (Hdt. 7.51.2)

(67) αἱ μέν τινες τῶν γυναικῶν κρόταλα ἔχουσαι κροταλίζουσι, οἱ δὲ αὐλέ-ουσι κατὰ πάντα τὸν πλόον, αἱ δὲ λοιπαὶ γυναῖκες καὶ ἄνδρες ἀείδουσι καὶ **τὰς χεῖρας** κροτέουσι.

Some of the women make a noise with rattles, others play flutes all the way, while the rest of the women, and the men, sing and clap **their hands** (lit. the hands).   (Hdt. 2.60.1)

(68) μετὰ δὲ αἰχμοφόροι χίλιοι, καὶ οὗτοι ἐκ πάντων ἀπολελεγμένοι, **τὰς λόγχας** κάτω ἐς τὴν γῆν τρέψαντες.

After them thousand spearmen, also chosen from all Persians, carrying **their spear** (lit. the spears) downward to the ground.   (Hdt. 7.40.2)

These examples illustrate that Ancient Greek takes a completely different position than most European languages (like English, French, Dutch, Spanish) that consider the expression of identifiability (with the definite article) a matter of lesser importance than the expression of possession (with a possessive pronoun), cf. my father/*the my father, mi padre/*el mi padre and mijn vader/*de mijn vader.[58] According to Haspelmath (1999), the fact that many European languages do not give expression to the identifiability of the referent in possessed NPs can be economically motivated, since an overwhelming majority of possessed NPs turns out to be identifiable (94 % of the possessed NPs in his corpus).[59] A similar economic motivation might explain the absence of the possessive in the Greek examples (66), (67) and (68): if there is no doubt as to the possessor of the entity, it might have felt superfluous to give expression to this possessor. This explanation is favoured by the fact that possessive pronouns are present in NPs referring to inalienable possessives. In contrast to other languages, in Ancient Greek the expression of the identifiability was apparently not felt as redundant.

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[58] Although the use of a 'possessive article' instead of a possessive is more restrictive than in Greek, in Dutch (dialects) this use of the article is also possible, cf. *ik heb pijn in de buik* ('I have pain in the belly') or *de kinderen gaan dit jaar niet met ons mee op vakantie* ('the children won't be joining us on holiday this year').

[59] Some languages, however, pass over the economical motivations and prefer to be explicit by overtly expressing the definiteness of the referent along with the possessive pronoun. Haspelmath (1999: 228) provides examples of Italian (la mia casa 'the my house'), Modern Greek (to spíti mu 'the house of me'), Basque (zuen liburu-ak 'your books-the') and Samoan ('o l-o-na fale 'the-his house').

Because the so-called possessive use of the article, although remarkable for modern language users, does not deviate from the general rule that an NP is definite if the referent can be related unequivocally to an available cognitive structure, we do not have to formulate a refinement of the general rule to account for examples like (66)–(68). For a proper description of the use of the article in my corpus, the general rule supplemented with the following five refinements therefore suffices:

(i)   a classifying genitive cannot function as the anchor of a relatable entity;

(ii)   a fixed adverbial expression is always bare;

(iii)   a relatable subject of a copular verb can be bare, even if it is identifiable;

(iv)   in coordinations one or more elements can lack an article if the coordinated entities are depicted as one whole or concept;

(v)   an NP with distributive force is always definite, irrespective of the identifiability of the referent.

In combination with the general rule, these refinements can account for the use of the article in 96 % of the referential NPs in my corpus. In the remaining 4 %, the deviant behaviour of the article seems either due to the nature of the noun,[60] or cannot be explained at all. However, the very small number of problematic cases does not cast doubt on the general conclusion that the definite article marks identifiability.

5.3.3. *The combination of article and demonstrative*

In conformity to the principles formulated in the introduction of this chapter, this section will not deal with the question of when and why an NP contains a demonstrative,[61] but will only pay attention to the use of the article in NPs with a demonstrative. As I will argue, the (in)definiteness of NPs with a demonstrative can regularly be explained by the general rule for the use of the article (plus the refinements discussed in the previous section). Nevertheless, there are several reasons why the use of the article in these NPs deserves separate consideration.

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[60] NPs with a form of βασιλεύς, for instance, are always bare, probably because βασιλεύς is considered a proper noun. NPs with a form of γῆ, θάλασσα and ἥλιος more frequently lack an article than would be expected on their identifiability, especially in combination with a preposition. The exact reason for their deviant behaviour could not be established.

[61] Himmelmann (1996) provides a very clear and well-illustrated overview of the various possible uses of demonstratives (both adjectival and pronominal) in narrative discourse. Some other literature on this topic was mentioned in Chapter 3, footnote 55.

First of all, by allowing a combination of demonstratives and articles Greek NPs take a rather exceptional position as in most other European language such a combination is simply impossible.[62] Furthermore, the fact that Greek allows a combination of demonstrative and article has led Rijkhoff (1992: 154) to the mistaken belief that the Greek article does not mark identifiability, but specificity. In my view, however, the examples where an article and demonstrative are combined do not justify this conclusion.

In contrast to most modern European languages, in which the presence of a demonstrative is not compatible with the use of an article,[63] Ancient Greek may express both a demonstrative and an article within one and the same NP. The grammars[64] assume that an NP containing a demonstrative is definite, unless one of the following exceptions occurs: the noun is non-referential, the head of the NP is a proper name, the NP contains a numeral or relative clause, the demonstrative is cataphoric, the expression is affective, or the language is poetic.[65] As the following examples illustrate, however, the formulation of such a catalogue of

[62] For an overview of the various possibilities for the form and position of demonstratives in languages that have definiteness marking, see Lyons (1999: 118–121). He distinguishes the following possibilities for the (few) languages in which demonstratives co-occur with the definite article: (a) languages like Swedish and Armenian, in which the article takes the form of an affix, so that the determiner position is still available for the demonstrative; (b) languages like Irish in which the demonstrative is outside the actual NP and (c) languages like Spanish and Catalan in which the demonstrative is adjectival. Ancient Greek does not fit properly in one of these categories, because the demonstrative, although adjectival in that it agrees with the noun in case, gender and number, cannot, like normal adjectives, be used in both the reference and the referent patterns (for the difference between reference and referent patterns, see Chapter 6, section 6.1.1.2).

[63] I would prefer a functional explanation for this incompatibility above the more formal solution (of for instance Lyons 1999: 118) that the specifier position of the NP can only be filled once. In my view, the fact that demonstrative and article do not co-occur may—like the absence of a definiteness marker in NPs with a possessive pronoun (see section 5.3.2)—be explained by economic motivations: because NPs with a demonstrative most often are definite, many languages apparently deem it unnecessary to mark the NPs as such.

[64] See Goodwin (1879: 206), Kühner-Gerth (1904: I 627 ff.) and (Smyth 1956: 296–297). Harry (1898) devotes a whole article to the omission of the article in NPs with a demonstrative.

[65] Moreover, both Harry (1898: 58), Kühner-Gerth (1904: I 630) and Smyth (1956: 296–297) point to the fact that in Herodotus the omission of the article is especially frequent with postnominal demonstratives. According to Harry (1898: 57), this frequent omission of the article is due to the fact that Herodotus 'was under the spell of epic poetry'. On the basis of my data, I cannot exclude the possibility that the omission of the article is more frequent in Herodotus than in later authors. I do, however, severely doubt that this possible difference has anything to do with the 'spell of epic poetry', for in my corpus the

exceptions is unnecessary if one accepts that the use of the article in NPs with a demonstrative is completely comparable to that in NPs without demonstratives:[66]

(69)   τοῦ δὲ Νείλου τὰς πηγὰς οὔτε Αἰγυπτίων οὔτε Λιβύων οὔτε Ἑλλήνων τῶν ἐμοὶ ἀπικομένων ἐς λόγους οὐδεὶς ὑπέσχετο εἰδέναι, εἰ μὴ ἐν Αἰγύπτῳ ἐν Σάϊ πόλι ὁ γραμματιστὴς τῶν ἱρῶν χρημάτων τῆς Ἀθηναίης. (…) **οὗτος** μὲν δὴ **ὁ γραμματιστής**, εἰ ἄρα ταῦτα γενόμενα ἔλεγε, ἀπέφαινε, ὡς ἐμὲ κατανοέειν, δίνας τινὰς ταύτῃ οὔσας ἰσχυρὰς καὶ παλιρροίην, (…).

But as to the sources of the Nile, no one that conversed with me, Egyptian, Libyan, or Greek, professed to know them, except the recorder of the sacred treasures of Athena in the Egyptian city of Saïs. (…) **This recorder** (lit. this the recorder), then, if he spoke the truth, showed, I think, that there are some strong eddies and an upward flow of water, (…)

                                                                              (Hdt. 2.28.1–5)

(70)   ἐγὼ δὲ ἐπείτε παρέλαβον **τὸν θρόνον τοῦτον**, ἐφρόντιζον ὅκως μὴ λείψομαι τῶν πρότερον γενομένων ἐν τιμῇ τῇδε μηδὲ ἐλάσσω προσκτήσομαι δύναμιν Πέρσῃσι.

Ever since I came to **this throne** (lit. the throne this), I have considered how I might not fall short of my predecessors in this honour, and not add less power to the Persians.   (Hdt. 7.8α2)

(71)   εἰ γάρ τοι ταύτῃ φαίνεται ἐνδεέστερα εἶναι τὰ ἡμέτερα πρήγματα, στρατοῦ ἂν ἄλλου τις τὴν ταχίστην ἄγερσιν ποιοῖτο. ὁ δ’ ἀμείβετο λέγων· ὦ βασιλεῦ, οὔτε **στρατὸν τοῦτον**, ὅστις γε σύνεσιν ἔχει, μέμφοιτ’ ἂν οὔτε τῶν νεῶν τὸ πλῆθος·

'If our power seems to you to lack anything in this regard, it would be best to muster another army as quickly as possible.' Artabanos answered and said, 'O king, there is no fault that any man of sound judgement could find either with **this army** (lit. army this) or with the number of your ships.   (Hdt. 7.48–49.1)

(72)   ἔθαψαν δὲ Σαῖται πάντας τοὺς **ἐκ νομοῦ τούτου** γενομένους βασιλέας ἔσω ἐν τῷ ἱρῷ.

The people of Saïs buried all kings who were natives of **this district** (lit. from district this, i.e. the district of which the city of Saïs was the capital) within the temple precinct.   (Hdt. 2.169.4)

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omission of the article with demonstratives is (nearly) always perfectly explicable by the general rule that NPs are definite if the referent is identifiable (see below).
    [66] As can been seen in the tables in Chapter 3, section 3.1, in all books of Herodotus I found 824 definite single-modifier NPs with a demonstrative, as opposed to 37 indefinite

In both example (69) and (70) the NP is definite to indicate that its referent is unequivocally relatable to an available cognitive structure: the recorder in (69) is an unequivocal part of the asking-information-about-the-sources-of-the-Nile-schema thanks to its introduction in this schema in Hdt. 2.28.1; the throne in (70) forms an unequivocal part of the situation of the conversation partners in the direct speech (viz. the Persian court). In examples (71) and (72), by contrast, the NP lacks an article to indicate that the referents cannot be unequivocally related. Στρατόν in example (71) is ambiguous between the existing army of the king and the hypothetical army summoned to be raised in the previous sentence. It is not before the information of the verb becomes available that the addressee can infer which of the two armies is referred to. Νομοῦ in example (72) might even refer to several potential referents, as Egypt is divided into about twenty districts.[67]

In some examples, it is exactly the presence of a demonstrative that makes the referent identifiable (i.e. unequivocally relatable) as the demonstrative contrasts the intended referent with other potential referents that satisfy the description of the noun:[68]

(73)   τῶν δὲ οὔ φασι θεῶν γινώσκειν τὰ οὐνόματα, οὗτοι δέ μοι δοκέουσι ὑπὸ Πελασγῶν ὀνομασθῆναι, πλὴν Ποσειδέωνος. **τοῦτον** δὲ **τὸν θεὸν** παρὰ Λιβύων ἐπύθοντο·

        The gods whose names they say they do not know were, as I think, named by the Pelasgians, except Poseidon. **This god** (lit. this the god) they learned from the Libyans.   (Hdt. 2.50.2)

(74)   **ταύτην** μὲν **τὴν ἡμέρην** παρεσκευάζοντο ἐς τὴν διάβασιν, (…).

        That day (lit. that the day) they made preparations for the crossing, (…).
                                                                      (Hdt. 7.54.1)[69]

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ones. In NPs with multiple modifiers, the numbers are 188 and 48 respectively. Together that makes 1012 definite NPs with a demonstrative against 85 indefinite ones.

[67] Examples like these falsify Lyons' (1999: 107) idea that demonstratives are inherently [+def]. The other possibility he considers, viz. that demonstratives only appear in definite NPs because they are semantically incompatible with indefiniteness (Lyons 1999: 121), is equally disputed by my data. Hawkins (1978: 149–157) and Prince (1981a: 233 ff.), on the other hand, do recognise that the presence of a demonstrative does not imply that the referent is inherently definite (or as they formulate it: unique within the shared set or uniquely identifiable).

[68] As these disambiguating demonstratives are contrastive, they always precede the noun. For the position of demonstratives in relation to the noun, see Chapter 3, section 3.5.3.

[69] This example contradicts Hawkins' idea (1978: 152 ff.) that the referent of an NP with a demonstrative must be either visible or known on the basis of previous mention

In example (73), the prenominal demonstrative makes the NP refer unequivocally to the last-mentioned god (viz. Poseidon). The unequivocality of the reference legitimises the presence of the article. Similarly, the contrastive demonstrative in example (74) makes the NP unequivocally referring and therefore definite.

The preceding examples of the use of the article in NPs with a demonstrative could be explained on the basis of the general rule that an NP is definite if it refers to an entity that can be related unequivocally to an available cognitive structure. In my view, the very same general rule is also responsible for the (in)definiteness of NPs with so-called cataphoric demonstratives, i.e. demonstratives that refer forward, for instance to a direct or indirect citation or description. At first sight, however, it may be confusing that very comparable examples are sometimes definite and sometimes indefinite:

(75)   ἔστι δὲ ὑπ᾽ αὐτῶν Καρχηδονίων **ὅδε λόγος** λεγόμενος (…) ὡς οἱ μὲν βάρβαροι τοῖσι Ἕλλησι ἐν τῇ Σικελίῃ ἐμάχοντο (…).

        This story is told by the Karchedonians themselves (…) that the barbarians fought with the Greeks in Sicily (…).   (Hdt. 7.167.1)

(76)   ἐπιλέγων δὲ **τὸν λόγον τόνδε** ταῦτα ἐνετέλλετο, ὡς εἰ μὲν ἀπώλοντο (…).

        He gave this command adding **this story** (lit. the story this) that if the spies been put to death (…).   (Hdt. 7.147.1)

In my view, the difference in the use of the article in examples (75) and (76) is explicable on the basis of the assumption that the definiteness of an NP depends on the decision of the speaker to *present* the referent as relatable, or not. In examples like (75) and (76), where the NP refers forward to an indirect quotation, the speaker may choose to present the

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in the text (the so-called matching constraint). Although the highlighted NP in this example contains a demonstrative, its referent is not evoked by either the text or the situation. Himmelmann (1996), who also assumes that the 'associative-anaphoric' use (i.e. my relatable use) is not possible for demonstratives (cf. a book … the/*that author), classifies examples like this under the discourse deictic use of demonstratives. In his view, reference to a point in time within a sequence of narrated events (e.g. *at that moment*) is a subtype of reference to propositions or events in the story (e.g. *this fact, these words*). In my view, this classification hides the fact that narrated propositions and events are evoked, whereas points in time are usually not. I would therefore prefer to classify points in time in a separate category for reference to non-evoked, relatable entities, which is needed anyway for examples like (76). I do admit, however, that this use of the demonstrative is severely limited both in number and application. The number of examples in my corpus is so small, that I have no idea what legitimatises this use of the demonstrative.

entity to which the 'forward-referring' NP refers as a new, unrelated entity (e.g. a story is told, viz. that ...; see example 77), or, he may choose to present this as unequivocally relatable on the basis of the information provided in the subordinate clause (e.g. the story is told that ...; see example 78):[70]

(77) **λόγος** δέ ἐστι ἅμα τῷ ἔαρι πτερωτοὺς ὄφις ἐκ τῆς Ἀραβίης πέτεσθαι (...).

There is **a story** that at the beginning of spring winged serpents fly from Arabia (...).   (Hdt. 2.75.3)

(78) τῇ δὲ Θέτι ἔθυον πυθόμενοι παρὰ τῶν Ἰώνων **τὸν λόγον** ὡς ἐκ τοῦ χώρου τούτου ἁρπασθείη ὑπὸ Πηλέος, (...).

They sacrificed to Thetis after hearing from the Ionians **the story** that it was from this place that Peleus had carried her off, (...). (Hdt. 7.191.2)

The difference in the definiteness of the highlighted NPs in examples (75) and (76) can thus be explained if we assume that whereas the referent of the highlighted NP in example (75) is presented as a new, unrelatable entity, the referent of the NP in example (76) is presented as unequivocally relatable on the basis of the information in the subordinate clause. As examples (77) and (78) show, the presence of a cataphoric demonstrative has no influence on the (in)definiteness of the NPs.

But although the choice of the speaker to present the referent as (non)identifiable can explain the difference in definiteness in the examples presented above, it is debatable whether it can also explain the difference in the use of the article in NPs with a cataphoric demonstrative that refer forward to a direct quotation, description or enumeration:[71]

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[70] In these examples, the subordinate clause functions as a so-called referent-establishing relative (cf. Hawkins 1978: 130), i.e. a clause that establishes a link between the new, unknown referent of the noun and available knowledge. As the difference between examples (77) and (78) makes clear, a relative clause can only have a referent-establishing function if it forms one speech act with the preceding noun. This has of course to do with the fact that the information to which the referent of the noun has to be related has to be available for the addressee.

[71] Because book 2 and book 7 did not provide (near) minimal pairs, examples (79)–(82) were taken from all books of Herodotus.

(79)   ὁρέων δέ σφεας τά τε βυβλία σεβομένους μεγάλως καὶ τὰ λεγόμενα ἐκ
        τῶν βυβλίων ἔτι μεζόνως, διδοῖ ἄλλο ἐν τῷ ἐνῆν **ἔπεα τάδε·** ὦ Πέρσαι,
        βασιλεὺς Δαρεῖος ἀπαγορεύει ὑμῖν μὴ δορυφορέειν Ὀροίτην.

        Seeing that they were greatly affected by the rolls and yet more by what
        was written in them, he gave another, in which were **these words** (lit.
        words these): 'Persians! King Dareios forbids you to be Oroetes' guard.'
                                                              (Hdt. 3.128.4)[72]

(80)   ταῦτα δέ μιν ποιεῦντα ἐδικαίωσε Κροῖσος ὁ Λυδὸς νουθετῆσαι **τοῖσδε**
        τοῖσι ἔπεσι· ὦ βασιλεῦ, μὴ πάντα ἡλικίῃ καὶ θυμῷ ἐπίτρεπε, (…).

        For these acts Kroisos the Lydian thought fit to take him to task, and
        addressed him **thus** (lit. with these the words): 'Sire, do not sacrifice
        everything to youth and temper, (…)'.   (Hdt. 3.36.1)

(81)   θάπτουσι δὲ τοὺς ἀποθνήσκοντας βοῦς **τρόπον τόνδε·**

        They bury dead cows in **the following way** (lit. way this).   (Hdt. 2.41.4)

(82)   ἀθανατίζουσι δὲ **τόνδε τὸν τρόπον·**

        Their belief in their immortality is **as follows** (lit. in this the way).
                                                              (Hdt. 4.94.1)

It might be suggested that the difference between the indefinite NPs in
examples (79) and (81) and the definite ones in (80) and (82) is cre-
ated by analogy with examples like (77) and (78). Even though the ref-
erents of the NPs in examples (80) and (82) are actually not identifi-
able, they are presented as such, after the example of (really definite) NPs
in examples like (76) and (78). However, as the demonstrative in defi-
nite NPs referring forward to direct citations, descriptions and enumer-
ations always precedes the noun,[73] the definiteness of the NP in these
examples can also be explained by this preposition of the demonstra-
tive. As illustrated above, by contrasting the intended referent to other
possible referents, a contrastive demonstrative may make the reference
unequivocal, if this is not warranted on the basis of the descriptive infor-
mation of the NP. Although this unequivocal-making-potential of the

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[72] Examples like this warn us about being overenthusiastic in explaining the absence
of an article by a non-referential nature of the noun. Although it seems often attractive to
analyse the demonstrative and noun as two separate constituents, one referential and the
other non-referential, instead of one NP ('they tell this as a story' instead of 'they tell this
story'), the noun plus demonstrative in example (79) should, in my view, be analysed as
one referential NP.

[73] The only exception (in all books of Herodotus) is Hdt. 8.100.1 λογισάμενος ὦν
ταῦτα προσέφερέ οἱ **τὸν λόγον τόνδε·** ('taking all this into account, he made this
proposal (lit. the proposal this)').

prenominal demonstrative seems an accurate explanation for the definiteness of the NPs in examples like (80) and (82), my corpus does not offer enough data to take a definitive stance on the definiteness of these NPs.

By way of conclusion to this section on the combination of demonstratives and articles, I would like to repeat that there is no need to describe the use of the article in NPs with a demonstrative by means of lengthy enumerations of examples and exceptions, as the grammars do. In Greek, the use of the article is not affected by the presence of a demonstrative, so that its use in NPs containing a demonstrative can just be described by the general rule formulated in section 5.3.1. Moreover, the fact that Ancient Greek may express a demonstrative and article in one and the same NP should not give rise to speculations about the function of the article, but can simply be explained by the fact that Ancient Greek is (in this respect) less economical than many other European languages. From the viewpoint of the marking of identifiability, the situation in Ancient Greek is in fact much more natural than that in languages blocking the simultaneous expression of a demonstrative and article.

5.4. *The use of the article in non-referential NPs*

The previous section described the use of the article in 'common' referring NPs, i.e. NPs used to refer to some (non-)specific discourse referent. This section, on the other hand, discusses the use of the article in non-referential NPs, i.e. NPs that are not used to refer to some referent, but ascribe a property to a referent (e.g. he described his decision to marry her as *his best decision ever*). Non-referential NPs can be used as predicate NPs, as the third argument of verbs with a double accusative or as adjuncts. Although the use of the article does not depend on the function of the non-referential NP, predicate NPs are discussed separately from the other uses (in section 5.4.2). The reason to dedicate a separate subsection to predicate NPs is that they are not necessarily non-referential. Because the differences in use of the article can be understood best by contrasting the two types of predicate NPs, the section on predicate NPs (5.4.1) will discuss both referring and non-referential predicate NPs.

5.4.1. *Predicate NPs*

A widespread misunderstanding, both in Ancient Greek grammars and in general linguistic studies, is that predicate NPs are bare in principle. Though the observation that predicate NPs most often lack an article may be true, I will argue below that this is not due to the predicative function of the NP. For Ancient Greek, an additional problem is that the grammars do not give a clear-cut description of the 'exceptional' cases in which a predicate NP does receive an article. Neither Goodwin's (1879: 208) formulation that a predicate NP is definite 'if it refers to distinct persons or things', nor Schwyzer-Debrunner's (1950: 24) explanation that the article is present if 'eine scharfe Determination des Prädikat erwünscht ist', nor Kühner-Gerth's (1904: I 592) and Smyth's (1956: 292) description that a predicate NP is definite if the object is well-known, previously mentioned or identical with the subject will be helpful for the explanation of the difference between examples like (83) and (84):[74]

(83)   τοὺς ὦν δὴ **τὰς νέας** λέγοντας εἶναι **τὸ ξύλινον τεῖχος** ἔσφαλλε τὰ δύο τὰ τελευταῖα ῥηθέντα ὑπὸ τῆς Πυθίης.

   Those who said that **the ships** were **the wooden wall** were disturbed by the last two verses of the oracle of the Pythia.   (Hdt. 7.142.2)

(84)   μετὰ δὲ Μυκερῖνον γενέσθαι **Αἰγύπτου βασιλέα** ἔλεγον οἱ ἱρέες Ἄσυ-χιν, (...).

   The priests said that after Mykerinos Asychis was **king of Egypt** (lit. of Egypt king), (...).   (Hdt. 2.136.1)

I will argue that for a proper description of the use of the article in predicate NPs one should distinguish two types of copular sentences:[75] classifying and identifying ones (cf. Halliday 1967 and Lyons 1977).[76] These

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[74] Unfortunately, in his discussion of copular sentences in Ancient Greek, Kahn (1973) does not pay attention to the use of the article.

[75] Within this section, I use the term copular sentences to refer to copular sentences with a predicate NP. Of course, a copular verb may also be combined with other kinds of constituents, such as adjectives (e.g. John is *wise*) and adpositional, possessive, locative and existential constructions (e.g. this present is *for John*, this house is *John's*, John is *in the garden*, there is a dog *in the garden*). Copular sentences with these kinds of constituents, however, are not relevant for this discussion, as the use of the article (if any) is perfectly explicable on the basis of the general rule presented in section 5.3.1.

[76] Another tradition classifies copular sentences on the basis of the discourse function of the copular sentence as a whole. In this tradition, a distinction is made between (at least) specificational and predicational sentences. For a clear overview of the various theories within this tradition (including Higgins 1979 and Declerck 1988), see Keizer

two sentence types can be distinguished on the basis of the referentiality of the predicate NP.[77] If the predicate NP is non-referential, the sentence is classifying.[78] In examples (85) and (86), for instance,

(85)   John is **a teacher**[79]

(86)   John is **the cleverest student**

the predicate NP does not refer to some teacher or cleverest student, but ascribes the property of being a teacher and being the cleverest student to the referent of the subject NP (John). By attributing a property to the subject, these sentences classify the subject in a particular class of entities (hence the term *classifying* sentences).[80]

The predicate NP in identifying sentences,[81] by contrast, is always referring. Consequently, the function of identifying sentences like (87) and (88) is not to ascribe a property to the subject, but to equate (identify) the referent of the subject NP with the referent of the predicate NP.

(87)   John is **the tall one over there**

(88)   The bank robber is **a man called Bill Smith**

That the NPs in (87) and (88) are equated with each other appears from the fact that the order of the constituents within the sentence can be reversed. Put differently, in identifying sentences it is not possible to

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(1992: 44 ff.). She proposes—after showing that the classifying/identifying and specificational/predicational approach cannot be collapsed—to combine the two approaches in a two-layered typology. On the first layer, classifying sentences are distinguished from identifying ones. On the second level, these basic distinctions are categorised further on the basis of the discourse function of the sentence. Although this typology of copular sentences seems very attractive to me, I would digress too much if I were to present it in detail.

[77] It is nowhere explicitly stated that the referentiality of the predicate NP is the factor on the basis of which the sentence is classified. It is my own inference from their descriptions of the characteristics of the two types of sentences that the referentiality of the predicate NP is the decisive factor.

[78] Halliday (1967) calls classifying sentences intensive, Lyons (1977) calls them ascriptive.

[79] All English examples in the first part of this section were taken from Keizer (1992: 27, 35, 37, 47, 56, 71, 290, 291), except where otherwise specified.

[80] Note that example (86) can also be interpreted as an identifying sentence, if stress is laid on John instead of on the cleverest student (Who is the cleverest student? *John is the cleverest student*).

[81] Halliday (1967) calls identifying sentences extensive, Lyons (1977) calls them equative.

decide which of the two NPs predicates over the other. In classifying sentences, by contrast, one of the NPs does have a predicating function, so that reversion is not possible.[82] Another proof that the predicate and subject NP in identifying sentences are being equated is that the finite verb can agree in number both with the subject NP and the predicate NP; again this does not hold for classifying sentences. Compare examples (89) and (90):[83]

(89)   What you must avoid is/are feeling sorry for yourself and sleeping too much.

(90)   My brother is/*are a musician and a painter.

It must be noticed that copular sentences with a definite predicate NP are sometimes ambiguous between a classifying and an identifying interpretation. In examples like (91)

(91)   John is **the author of this book**.

the context has to determine whether the sentence is a statement about John's identity (i.e. answers the question: 'who is John?') or ascribes a property to John (i.e. answers the question: 'what is John?').[84]

   The reason why I introduced the distinction between classifying and identifying sentences is that the use of the article in the non-referential predicate NP of a classifying sentence differs from the use of the article in the referring 'predicate NP'[85] of an identifying sentence. In identifying sentences, the 'predicate NP' is as referring as the subject NP, and consequently, we would expect the use of the article to be the same in both NPs.

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[82] In some cases reversion seems possible; example (86), for instance, can be reversed into *the cleverest student is John*. This is due to the fact that example (86) may also be interpreted as an identifying sentence (see footnote 80).

[83] There are (at least) two other distinctions between classifying and identifying sentences. In the first place, classifying and identifying sentences behave differently with respect to pronominalisation and relativisation (e.g. *John is a nice guy. Peter is one, too* vs. **John is the winner. Peter is one, too* and *Charlie thinks he is a genius, which/*who he is not* vs. *Charlie thinks he is the winner, *which/who he is not*). Moreover, only predicate NPs in classifying sentences can receive a modifier of degree (e.g. *he is to a certain point our leader* vs. **he is to a certain point the leader we elected last year*). The examples are adapted from Keizer (1992: 28 and 36).

[84] It should be noted that although example (86) could also be interpreted as both a classifying and an identifying sentence, the former interpretation was only possible if stress were laid on 'John' instead of on 'the cleverest student'. In example (91), on the other hand, both interpretations are possible with stress on the final NP.

[85] As both NPs refer, it seems a bit awkward to speak of a predicate NP in these cases. For the sake of convenience, I will use the term 'predicate NP' to refer to the second NP.

Even though I found no more than 12 examples[86] of identifying sentences in my corpus, these examples seem to confirm this expectation:[87]

(92)   (= 83) τοὺς ὦν δὴ **τὰς νέας** λέγοντας εἶναι **τὸ ξύλινον τεῖχος** ἔσφαλλε τὰ δύο τὰ τελευταῖα ῥηθέντα ὑπὸ τῆς Πυθίης.

Those who say that **the ships** are **the wooden wall** were disturbed by the last two verses of the oracle of the Pythia.   (Hdt. 7.142.2)

(93)   κατὰ ταῦτα τὰ ἔπεα συνεχέοντο αἱ γνῶμαι τῶν φαμένων **τὰς νέας τὸ ξύλινον τεῖχος** εἶναι.

On the basis of these verses the opinion of those who said that **the ships** were **the wooden wall** became doubtful.   (Hdt. 7.142.3)

(94)   Ever since I turned back and repented, a vision keeps coming to haunt my sight, and it will not allow me to do as you advise; just now it has threatened me and gone

εἰ ὦν **θεός** ἐστι ὁ ἐπιπέμπων καί οἱ πάντως ἐν ἡδονῇ ἐστι γενέσθαι στρατηλασίην ἐπὶ τὴν Ἑλλάδα, ἐπιπτήσεται καὶ σοὶ τὠυτὸ τοῦτο ὄνει-ρον, ὁμοίως [ὡς] καὶ ἐμοὶ ἐντελλόμενον.

If **a god** is the sender (of these dreams) and if it is his full pleasure that we invade Greece, that same dream will visit you too, and it will give you the same order as it gave me.   (Hdt. 7.15.3)[88]

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[86] The small number could be due to the text type of my corpus, for the purpose of an identifying sentence (see Higgins 1979, Declerck 1988 and Keizer 1992) is to give (further) information on the identity of a referent (e.g. *The bank robber is Bill Sikes* or A: *Bill? Who's Bill?* B: *He's the fellow who was sitting next to you at dinner yesterday*), or to equate two referents the addressee assumes to be two different persons/objects (e.g. *the morning star* is *the evening star*). In a narrative text about historical events, this kind of identifying information is, naturally, very limited. Herodotus does present information on people's function and origin, but, generally, the purpose of this information is not to identify the referent, but to give further information on the referent's identity. In an example like: (…) ἀπικνέονται παρὰ Ὑδάρνεα· ὁ δὲ Ὑδάρνης ἦν μὲν γένος Πέρσης, **στρατηγὸς** δὲ τῶν παραθαλασσίων ἀνθρώπων τῶν ἐν τῇ Ἀσίῃ. ('… they came to Hydarnes. Hydarnes was a Persian of birth, **commander** of the people living at the sea-coast in Asia,' Hdt. 7.135.1), 'commander' does not provide information by means of which the addressee can identify Hydarnes, but gives additional information on his identity.

[87] The expectation also seems to be confirmed by the observation of Gildersleeve (1900: 324) that 'the article is not much used with the predicate except in convertible propositions, that is, those statements where the predicate may be the subject or subject predicate'.

[88] This sentence might also be interpreted as a classifying sentence (if the sender belongs to the category of gods). For two reasons, however, an identifying interpretation seems more likely to me. First of all, the context makes it more likely that Xerxes is looking for the identity of the sender (who is the sender?) than its class (what is the sender?). Second, if the first NP (θεός) was meant to provide an indication of the class of the sender

Examples (92) and (93) are taken from an episode where Herodotus relates the confusion of the Athenians after having received an oracle that says that a wooden wall (τεῖχος ξύλινον) will save them. Some of the Athenians claim that the wooden wall of the oracle has to be the Acropolis, but others think it means their ships. The latter interpretation, however, seems to contradict the last two sentences of the oracle that say that Salamis (an island near Athens) will bring death to the sons of women. As this short recapitulation of the episode makes clear, both τὰς νέας ('the ships') and τὸ ξύλινον τεῖχος ('the wooden wall') that are equated in (92) and (93) refer to textually evoked, and therefore identifiable, entities. Thus, in both NPs, the presence of the article seems in line with the general rule. Example (94) is taken from a direct speech, in which Xerxes tells Artabanos about a dream he had. He states that if the sender of the dream was a god (thus, if the sender can be equated with one of the gods) and wants them to invade Greece, this god will also visit Artabanos. As ὁ ἐπιπέμπων ('the sender') is a substantivised particle, I will leave its articulation out of consideration;[89] θεός, on the other hand, is a common noun that does deserve some attention. The absence of an article is in conformity to the general rule, as the NP refers to a new, unrelatable entity (i.e. some non-specific god).

Thus, despite the small number of identifying sentences, it seems justified to draw the conclusion that in Greek the article in the 'predicate NP' of identifying sentences functions in the same way as the article in 'normal' referring NPs, i.e. indicating whether the intended referent can be identified by the addressee.

In contrast to identifying sentences, classifying sentences occur frequently in my corpus (apparently, a narrative text is suitable for ascribing properties to objects and persons).[90] All these sentences show that the use

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instead of its identity, an adjective (θεῖος) would have been more natural, e.g. Hdt. 7.137.2 (...) δῆλον ὦν μοι ὅτι θεῖον ἐγένετο τὸ πρῆγμα ἐκ τῆς μήνιος· '(...) makes it plain to me that this was the divine result of his anger'.

[89] For the exclusion of substantivised participles from my data, see Chapter 1, section 1.2. If the definiteness of participles is comparable to that of common nouns, the presence of the article can be explained by the fact that the sender is unequivocally relatable to the dream, as in the view of the speaker of these words every dream has a sender.

[90] The higher frequency of classifying sentences in comparison to identifying ones could be a general tendency, for the traditional grammars of Classical Greek—which do not distinguish identifying and classifying sentences themselves—give many examples of the latter and only very few of the former (that are exceptional cases in their view). Incidentally, only Kühner-Gerth (1904: I 591) realise that the predicate NP of—what I name—classifying sentences lacks the article because it does not refer to a specific

of the article in non-referential predicate NPs differs from the use of the article in 'common' referring NPs.[91] In a non-referential NP, the use of the article is not determined by the identifiability of the property the NP expresses, but by its non-referentiality: a non-referential predicate NP is simply always bare.[92] As the following examples of non-referential predicate NPs illustrate, in all classifying sentences the predicate NP is bare, irrespective of the question of whether the information the NP expresses is textually evoked (examples 95 and 96), relatable to available knowledge (examples 97 and 98, where king can be related to Egypt and mother city to the other Ethiopians) or new, unrelatable information (examples 99 and 100):

(95)   ὅσοι μὲν αὐτὸν τῶν θεῶν ἀπέλυσαν μὴ φῶρα εἶναι, τούτων μὲν τῶν
        ἱρῶν οὔτε ἐπεμέλετο (…) ὅσοι δέ μιν κατέδησαν **φῶρα** εἶναι, τούτων
        δὲ ὡς ἀληθέως θεῶν ἐόντων καὶ ἀψευδέα μαντήια παρεχομένων τὰ
        μάλιστα ἐπεμέλετο.

        The shrines of the gods who acquitted him of a theft, he neglected (…)
        but those of the gods who had convicted him of being **a thief** (lit. thief),
        he worshipped, since he considered them to be gods indeed and their
        oracles reliable.   (Hdt. 2.174.2)

(96)   ἀνὰ χρόνον δὲ αὐτοῦ οἱ ἀπόγονοι γενόμενοι ἱροφάνται τῶν Χθονίων
        Θεῶν διετέλεον ἐόντες, Τηλίνεω ἑνός τεο τῶν προγόνων κτησαμένου
        τρόπῳ τοιῷδε. (…) ἐπ᾽ ᾧ τε οἱ ἀπόγονοι αὐτοῦ **ἱροφάνται τῶν Θεῶν**
        ἔσονται.

        In course of time his descendants became the priest of the Earth Goddess
        and continued to be so. This office was obtained by Telines, one of
        the descendants, in the following way (…) on the condition that his
        descendants would be **the priests of the Gods** (lit. priests of the Gods).
                                                                      (Hdt. 7.153.2–3)

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individual, but express 'den abstrakten Begriff einer Eigenschaft, die von dem Subjekte ausgesagt wird.'

[91] This does not only hold for Greek, but also for English, for instance. For this language, Keizer (1992: 277 ff.) shows that whereas referential NPs are definite if they refer to unequivocally inferrable and evoked entities, non-referential NPs are only definite if they denote unequivocally inferrable properties. Thus, 'with referential NPs the basic difference is that between identifiability (on the basis of either givenness or inferrability) and unidentifiability (newness). With predicate nominals, on the other hand, the basic distinction appears to be that of inferrability vs. non-inferrability (i.e. both givenness and newness)' (Keizer 1992: 292).

[92] According to Lyons (1999: 104) in a great many languages the predicate NP of classifying sentences is bare if the NP expresses a profession, social status or sex of human beings. Cf. Jean est médecin, Juan es médico, Johann ist Arzt (Lyons 1999: 185). In Greek, however, the article is absent irrespective of the property the NP expresses.

(97)   μετὰ δὲ Μυκερῖνον γενέσθαι **Αἰγύπτου βασιλέα** ἔλεγον οἱ ἱρέες Ἄσυ-
        χιν, (…).

        The priests said that after Mykerinos Asychis had become **the king of
        Egypt** (lit. of Egypt king), (…).   (Hdt. 2.136.1)

(98)   λέγεται δὲ αὕτη ἡ πόλις εἶναι **μητρόπολις τῶν ἄλλων Αἰθιόπων**.

        This city is said to be **the mother city of the other Ethiopians** (lit. mother
        city of the other Ethiopians).   (Hdt. 2.29.6)

(99)   (…) οἳ φασι **τρία μόρια** εἶναι γῆν πᾶσαν,[93] Εὐρώπην τε καὶ Ἀσίην καὶ
        Λιβύην.

        (…) they say that the whole world consists of (lit. is) **three parts**: Europe,
        Asia and Libya.   (Hdt. 2.16.1)

(100)   οὗτος μέν οἱ ὁ λόγος ἦν τιμωρός, τούτου δὲ τοῦ λόγου παρενθήκην
        ποιεέσκετο τήνδε, ὡς ἡ Εὐρώπη **περικαλλὴς** εἴη **χώρη** (…).

        This argument was a call for revenge, and he made this addition to this
        argument, that Europe was **a nice country** (lit. nice country) (…).
                                                                        (Hdt. 7.5.3)

As examples (97) and (99) show, in Greek it is not necessary for the
subject to be the first NP.[94] Classifying sentences may thus as easily
be reversed as identifying sentences. The second criterion by means of
which we could distinguish between English classifying and identifying
sentences was the agreement in number of the finite verb (as only the
finite verb of an identifying sentence can both agree in number with the
subject NP and the predicate NP). In Greek, however, this criterion is not
very useful either, because the finite verb of classifying sentence can also
agree with the predicate NP (cf. Smyth 1956: 263):

(101)   (= 56) τὸ δ' ὦν πάλαι αἱ Θῆβαι Αἴγυπτος ἐκαλέετο, τῆς τὸ περίμετρον
        στάδιοί **εἰσι** εἴκοσι καὶ ἑκατὸν καὶ ἑξακισχίλιοι.

        Thebe was called Aigyptos in ancient times, its circumference **was** (lit.
        are) six thousand one hundred and twenty furlongs.   (Hdt. 2.15.3)

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[93] For some reason unclear to me NPs with a form of γῆ (in the meaning 'earth'/'world')
in combination with a form of πᾶσα ('whole') are always bare, even though NPs with a
form of πᾶς in the meaning 'whole' are normally definite. That the absence of the article is
due to the nature of the noun rather than presence of the modifier is supported by the fact
that the use of the article with γῆ more often conflicts with the general rule described in
section 5.3.1. NPs with a form of γῆ meaning 'land' (as opposed to water) or 'earth'/'world'
often lack an article although the referent is identifiable. With γῆ meaning 'soil', 'arable
land' or 'territory', by contrast, the use of the article does conform to the general rule.
[94] In Greek it is the pragmatic function of the constituent that determines its position
in the clause (see H. Dik 1995).

Hence, the distinction between subject and predicate NP in classifying sentences can only be made on the basis of the function of the NP: the NP to which a property is attributed is the subject, the NP that attributes this property is the predicate NP. This difference in function is reflected in the use of the article: whereas the referring subject NP is definite if identifiable, the non-referential predicate NP is always bare.

5.4.2. *Other non-referential NPs*

In the previous subsection (5.4.1), I discussed the use of the article in the predicate NPs of copular sentences. I argued that the non-referential predicate NPs of classifying sentences always lack an article, irrespective of the identifiability of the property they express. This section shows that other non-referential NPs are also always bare. Most of these other non-referential NPs serve as the third argument of a verb with a double accusative, such as ποιέω ('make someone so and so'), καλέω ('call someone so and so') or καθίστημι ('appoint someone'). Just like the non-referential NPs that serve as the predicate of a copular sentence, these NPs do not refer to some entity, but ascribe a property to a referent. As a consequence of their non-referential nature these NPs always lack an article:[95]

(102) ὃς ἂν ᾖ τοῦ γένεος τούτου πρεσβύτατος, τούτῳ ἐπιτάξαντες ἔρχεσθαι τοῦ ληίτου αὐτοὶ φυλακὰς ἔχουσι (**λήιτον** δὲ καλέουσι τὸ πρυτανήιον οἱ Ἀχαιοί).

They order the eldest of that family not to enter their townhall and themselves keep watch there. The Achaeans call the townhall **leitos**.

(Hdt. 7.197.2)

(103) ἐπείτε γὰρ ἐστήσαντό μιν **βασιλέα** τῶν Αἰγυπτίων οἱ ἀπεστεῶτες, παρεσκευάζετο ὡς ἐλῶν ἐπὶ τὸν Ἀπρίην.

For after the rebels made him **king** of the Egyptians, he prepared to march against Apries   (Hdt. 2.162.2)

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[95] Some of Kühner-Gerth's examples (1904: I 591) show that the third argument of verbs like καλέω does not have to be predicating, but also can be referring. Cf. Hdt. 5.77.2 (…) ἐπὶ τῶν ἱπποβοτέων τῇ χώρῃ λείπουσι· **οἱ** δὲ **ἱπποβόται** ἐκαλέοντο οἱ παχέες τῶν Χαλκιδέων ('… they left them on the estates of the 'horse owners'. The rich men of the Chalkidians are called **the horse owners**') and X. *An.* 6.6.7 ἐπιχειροῦσι βάλλειν τὸν Δέξιππον, ἀνακαλοῦντες **τὸν προδότην** ('they set to work to hit Dexippos calling him **the traitor**'). As the second example clearly shows, καλέω in these cases means: identifying someone as X by calling him X.

Moreover, non-referential NPs can be used as non-obligatory complements of the verb (i.e. as so-called adjuncts). In these cases, the non-referential NP expresses in which capacity or role one of the participants or objects is involved in the SoA. In example (104), for instance, Herodotus tells us that three men were sent to Asia 'as spies'; in (105) he suggests the possibility that king Sesotris left a part of his army 'as inhabitants of the country'. Like the non-referential NPs discussed above, non-referential adjuncts are always bare, irrespective of the identifiability of the entity/property they express:

(104) ὡς δὲ ταῦτά σφι ἔδοξε, καταλυσάμενοι τὰς ἔχθρας πρῶτα μὲν **κατα-σκόπους** πέμπουσι ἐς τὴν Ἀσίην ἄνδρας τρεῖς.

As soon as they had decided these things, they settled their disputes and sent three men **as spies** to Asia first.   (Hdt. 7.146.1)

(105) οὐκ ἔχω τὸ ἐνθεῦτεν ἀτρεκέως εἰπεῖν εἴτε αὐτὸς ὁ βασιλεὺς Σέσωστρις ἀποδασάμενος τῆς ἑωυτοῦ στρατιῆς μόριον ὅσον δὴ αὐτοῦ κατέλιπε **τῆς χώρης οἰκήτορας**, εἴτε (...).

I cannot say with certainty what happened next, whether king Sesostris himself parted off some part of his army and left it there **as inhabitants of the country** (lit. of the country inhabitants), or (...).   (Hdt. 2.103.2)

The absence of an article before οὔνομα in constructions like τῷ Α κεῖται/ἐστι/ἦν οὔνομα Β seems to indicate that in these cases οὔνομα has to be analysed as a non-referential NP:[96]

(106) μετὰ δὲ τοῦτον βασιλεῦσαι ἄνδρα τυφλὸν ἐξ Ἀνύσιος πόλιος, τῷ **οὔνομα** Ἄνυσιν εἶναι.

After him reigned a blind man from Anysispolis called Anysis (lit. to whom was A. **as a name**).   (Hdt. 2.137.1)

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[96] Another noun that is frequently used non-referentially is γνώμη (e.g. Hdt. 7.18.3 ἐπιστάμενος ταῦτα **γνώμην** εἶχον ἀτρεμίζοντά σε μακαριστὸν εἶναι πρὸς πάντων ἀνθρώπων. 'knowing this, I had **the opinion** ('as an opinion') that if you kept quiet, you would be the happiest person in the opinion of all people'). The absence of the article with the non-referential NP in phrases like this is probably extended to all constructions where γνώμη is combined with a verb, even those where γνώμη cannot be interpreted non-referentially as the verbal complex is not followed by an AcI or ὡς-sentence (cf. Hdt. 7.8δ2 ἵνα δὲ μὴ ἰδιοβουλέειν ὑμῖν δοκέω, τίθημι τὸ πρῆγμα ἐς μέσον, **γνώμην** κελεύων ὑμέων τὸν βουλόμενον ἀποφαίνεσθαι. 'but so that I not seem to you to have my own way, I lay the matter before you all, and bid whoever wishes to declare **his opinion** (lit. opinion)'). The problem with this hypothesis is, however, that the constructions where γνώμη cannot be interpreted non-referentially are more frequent than those where the absence of the article can be explained by the non-referentiality of γνώμη.

(107) τοῦτο γὰρ δὴ **οὔνομά** ἐστι τοῖσι πλοίοισι τούτοισι.

This was **as a name** to these boats. (Hdt. 2.96.5)

As can been seen in the literal translations of the examples (106) and (107), I analyse constructions like these as possessive/locative constructions (e.g. 'for/to him is Ἄνυσις') with an additional adjunct giving information on the role of the subject ('as a name'). Kühner-Gerth (1904: I 591), on the other hand, assume that ὄνομα is the predicate NP of a copular sentence ('Ἄνυσις is the name'), while the dative is some kind of adjunct ('for/to him'). The problem of this analysis is that one cannot explain the absence of the article before ὄνομα: the copular sentence 'Ἄνυσις is the name' being an identifying one (it equates Ἄνυσις and ὄνομα, as can been seen from the fact that the sentence can be reversed), one would expect ὄνομα to be definite.

5.5. The use of the article in generic NPs

As the grammars observe correctly (cf. Gildersleeve 1900: 255 ff., Goodwin 1930: 207, Kühner-Gerth 1904: I 589, Smyth 1956: 287–288 and Schwyzer-Debrunner 1950: 24–25), a Greek NP can owe its article to its genericity. In this section, I will analyse the function of this 'generic article' (as Smyth (1956: 278) calls it) and examine whether its function is comparable to the function of the article in non-generic NPs. Should we distinguish two kinds of articles, each with its own function, or do the 'generic' and 'non-generic' article share some basic characteristic? Before we can give an answer to this question, however, it should be analysed what generic reference and generic NPs are. As singular and plural generic NPs have slightly different functions, they will be discussed in two separate sections.

5.5.1. Singular generic NPs

As in most—if not all—other European languages, in Ancient Greek a definite singular NP may be used generically:[97]

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[97] Although (non-specific) indefinite NPs may occur in generic sentences, they are not generic NPs themselves. In an example like 'a beaver builds dams' (= a beaver, no matter which one, builds dams), the expression as a whole is generic, but the NP 'a beaver' is not. However substantial the difference between a generic (definite) NP and a non-specific (indefinite) NP is theoretically, in some contexts it turns out to be very small. In

(108)   I travelled to a district in Arabia not far from Bouto where I learned about the winged serpents.

τοῦ δὲ **ὄφιος** ἡ μορφὴ οἵη περ τῶν ὕδρων· πτίλα δὲ οὐ πτερωτὰ φορέει, ἀλλὰ τοῖσι τῆς νυκτερίδος πτεροῖσι μάλιστά κῃ ἐμφερέστατα.

The snake looks like water snakes (lit. the form of the snake is like of water snakes). Their wings are not feathered but very like the wings of a bat.   (Hdt. 2.76.2–3)

(109)   **ὁ** δὲ **Αἰγύπτιος πῆχυς** τυγχάνει ἴσος ἐὼν τῷ Σαμίῳ.

The Egyptian cubit is equal to the Samian.   (Hdt. 2.168.1)

(110)   φυρῶσι **τὸ** μὲν **σταῖς** τοῖσι ποσί, **τὸν** δὲ **πηλὸν** τῇσι χερσί.

Dough (lit. the dough) they knead with their feet, but **clay** (lit. the clay) with their hands.   (Hdt. 2.36.3)[98]

As argued above, the question is why these generic NPs take a definite article and what the relation is between this use of the definite article and the use of the article in NPs referring to (non-)specific entities. To answer this question, we should first examine what singular generic NPs do.

In the (recent) literature on genericity,[99] it is agreed that in the case of singular generic NPs reference is made to a kind.[100] The main argument

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comparisons, for instance, both definite (generic) NPs and indefinite (non-specific) NPs occur. Although there seems to be a slight preference for an indefinite NP if comparison is made with a referent the addressee is thoroughly familiar with (cf. Hdt. 2.73.2 ἐς τὰ μάλιστα **αἰετῷ** περιήγησιν ὁμοιότατος καὶ τὸ μέγαθος 'he (= the phoenix) is most like an **eagle** in shape and size') and for a definite NP if comparison is made with more remote referents (cf. Hdt. 2.96.1 τὰ δὲ δὴ πλοῖά σφι τοῖσι φορτηγέουσι ἐστὶ ἐκ τῆς ἀκάνθης ποιεύμενα, τῆς ἡ μορφὴ μέν ἐστι ὁμοιοτάτη **τῷ Κυρηναίῳ λωτῷ**, … . 'the ships which they use for carrying cargo are made of acacia wood, which is most like **the Cyrenian lotus** in form, …'), the two possibilities often alter in free variation.

[98]   This example makes clear that Greek resembles French in that generic mass nouns are definite (cf. *Le lait est salutaire*). In English (and German and Dutch), by contrast, generic mass nouns are indefinite (cf. *Milk is healthy*).

[99]   Among many others: Nunberg and Pan (1975), Burton-Roberts (1976), Carlson (1979 and 1982), Declerck (1991), Krifka et al. (1995), Lyons (1999) and Oosterhof (2008).

[100]   For a long period, it was claimed that definite singular NPs (and other generic NPs as well) are non-referential expressions that express universal quantification. According to this theory (108) could be paraphrased as 'for every x, if x is a snake, then it has the shape of a hydra'. This theory, however, was proven to be inadequate for several reasons. In the first place, universal quantification is too weak: for whereas generic NPs only occur in sentences that express principled (non-accidental) generalisations, universal quantifiers may also occur in sentences that express accidental generalisations (Dahl 1975, Lyons 1977, Carlson 1982). Apart from being too weak, universal quantification is also too strong in that generic NPs allow exceptions, whereas universal quantifiers do

for this analysis is that definite singular NPs are the subject *par excellence* for kind-predicates, like *be extinct* (cf. the dodo is extinct) and *abound* (cf. the beaver abounds on these rivers).[101] But as a kind consists of members, a kind-referring analysis can also explain the use of the definite singular in those cases where more or less concrete entities are required,[102] as in example (111):

(111) ἐπεὰν γὰρ ἐς τὴν γῆν ἐκβῇ ἐκ τοῦ ὕδατος **ὁ κροκόδειλος** καὶ ἔπειτα χάνῃ (...).

For when **the crocodile** comes ashore out of the water and then lies with his mouth wide open (...).   (Hdt. 2.68.5)

Kind-reference on its own, however, fails to explain the difference in acceptability of the following examples:

(112a) The lion is ferocious.

(112b) ?The lion with three feet is ferocious.

(113a) The Coke bottle has a narrow neck.

(113b) ?The green bottle has a narrow neck.

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not (Lyons 1977). The (third) objection to the view of generics as universal quantifiers is that universal quantification does definitely not hold for those generics that occur in non-generic sentences, e.g. Shockley invented the transistor/*every transistor/*all transistors. (cf. Kleiber 1990: 38 and 42, Krifka et al. 1995: 43–44, Papafragou 1996: 167 ff.). Definite singular generic NPs have also been analysed as denoting the meaning or intension of the noun (among others Martin 1986). It has been often brought forward, however, that an intensional analysis is blocked in non-generic sentences like *the rat reached Australia in 1770* and *l'homme a mis le pied sur la lune en 1969*. It will be clear that these sentences do not communicate that the intension of the rat came to Australia or the intension of mankind set foot on the moon, but rather some concrete, extensional entities of these kinds. Kleiber (1990: 47) adds that even in some generic sentences an intensional analysis of the definite singular NP raises questions. In an example like 'le chat est un animal intelligent', it is difficult to maintain that it predicates the property of being an intelligent animal to the intension of the cat ('cathood').

[101] In some languages a plural NP is also possible in combination with a kind-predicate (e.g. *dodos are extinct* and *les dodos sont en voie de disparition)*. The definite singular NP, however, is conceived to be considerably better. I could not test the acceptability of plural generics with kind-predicates for Ancient Greek, as kind-predicates do not occur in my corpus. There is only one example of a predicate that requires a kind-referring object: (...) ἔλεγον (...) πρώτους Αἰγυπτίους ἀνθρώπων ἁπάντων ἐξευρεῖν τὸν ἐνιαυτόν ('(...) they said (...) that first of all people the Egyptians invented the year', Hdt. 2.4.1).

[102] It is important to note that are not two different kinds of kind-referring NPs. *The beaver/panda/X* is not ambiguous between a 'class-qua-class' reading and a 'class-as-a-collection-of-its-members' interpretation. The fact that coordination of both types of predicates is possible (e.g. the dodo had two legs and is now extinct (example taken from

On the basis of examples like these, Nunberg and Pan (1975) and Krifka et al. (1995) argue that a definite singular NP can only be interpreted generically if reference is made to a well-established kind. According to Krifka et al. (1995), the contrast between (112a) and (113a) on the one hand, and (112b) and (113b) on the other must be due to the fact that whereas *the lion* and *the Coke bottle* denote well-established kinds, *the lion with three feet* and *the green bottle* do not.

On the basis of my data, however, I doubt whether the conclusion of Krifka et al. that the definite singular refers to a well-established kind is correct. Their view is problematic because the definite singular may refer to a kind the addressee is not familiar with:

(114)   τὰ μὲν δὴ ἄλλα ὄρνεα καὶ θηρία φεύγει μιν, **ὁ** δὲ **τροχίλος** εἰρηναῖόν οἵ
         ἐστι, ἅτε ὠφελεομένῳ πρὸς αὐτοῦ.

         All birds and beasts flee from it, except **the sandpiper**, with which it is at
         peace because this bird does the crocodile a service.   (Hdt. 2.68.4)

(115)   νομίζουσι δὲ καὶ τῶν ἰχθύων **τὸν καλεύμενον λεπιδωτὸν** ἱρὸν εἶναι καὶ
         τὴν ἔγχελυν.

         And of the fish they consider **the so-called lepidotos** to be sacred and
         the eel.   (Hdt. 2.72)

I can hardly imagine that the Egyptian spur-winged lapwing in example (114) was a well-established kind for the average (Greek) addressee, or that Herodotus wanted to present this bird as such. In example (115), there can be no doubt as to the nature of the kind Lepidotos: from the participle καλεύμενον 'so-called' it is evident that Herodotus did not even assume the addressee to be familiar with this fish.

Kleiber (1990) is also very critical about Krifka's view that definite singular generic NPs refer to well-established kinds, as it fails to explain the difference between examples like (116)–(119):

(116)   ?Le mammifère est un animal.

(117)   ?Je vais vous parler de l'animal.

(118)   L'animal qui a peur se couche.

(119)   L'étudiant de notre Université est toujours un modèle de travail.

It is difficult to maintain that whereas *le mammifère* in (116) and *l'animal* in (117) do not refer to well-established kinds, *l'animal qui a peur* or

Lyons 1999: 183)), proves that *the X* has a constant semantic representation. Apparently, the kind Dodo has inherited the properties and characteristics of the individual dodos.

l'étudiant de notre Université do. Therefore, Kleiber abandons the idea of kind-referring completely and develops a new theory claiming that a definite singular generic NP has to be considered a mass NP:[103]

(120) 'La combinaison *Le* + N comptable générique aboutit à un SN (= NP) massif. L'idée fondamentale est que l'utilisation de *Le* générique avec un N comptable a pour conséquence de présenter un référent homogène, qui n'est plus constitué d'occurences discernables, différentes'

<div align="right">(Kleiber 1990: 84).</div>

On the basis of this theory, Kleiber can account for the difference in acceptability between (116)–(117) and (118)–(119): a definite singular NP cannot refer to superclasses like *the mammal* and *the animal* as the members of those superclasses constitute too heterogeneous a whole to allow 'homogeneous reference' with a mass NP. Homogeneous reference, however, is possible as soon as the referents become homogenised, either by adding a further modification (e.g. l'animal *qui a peur*), or by choosing a predicate that takes the referent as something homogeneous (e.g. *l'animal est dépourvu de raison*).[104]

Although the idea of homogeneity sounds very attractive to me, I do not agree with Kleiber that a definite singular generic NP must be considered a mass NP. Mass nouns (e.g. sand, gold) typically consist of parts instead of members. The definite singular generic, however, although a homogeneous whole, in my view still has members instead of parts. This can be most convincingly argued in those cases where the predicate requires concrete entities (cf. example 111).[105] My second objection to Kleiber's theory is that homogeneity on its own is not sufficient for the felicity of generic reference by a definite singular NP. For why should the *animal qui a peur* of (118) make up a more homogeneous class than the *lion with three feet* of (112b)? I think that (part of) the answer is that the kind/type/class[106] the definite singular refers to has to

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[103] Observe that Kleiber does not argue that the count noun that is part of the generic NP turns into a mass noun, but that the NP as a whole adopts the characteristics of a mass noun. This view is based on the assumption that the basic meaning of the definite article is to express unity (see below).

[104] In the same way, the unwillingness of the definite singular to allow exceptions (cf. ?*l'oiseau, sauf l'autruche, vole* and *les oiseaux, sauf les autiches, volent*) can be explained by the fact that homogeneous reference is not compatible with deviant members.

[105] Kleiber (1990: 96–97) states that in this kind of sentences the principle of 'métonymie intégrée' is at work. The characteristics of some parts of the whole are attributed to the whole. I do agree with him that the NP is used metonymically. However, in my view *the crocodile* in example (111) refers to individuals instead of parts of the whole.

[106] I prefer the somewhat clumsy enumeration 'kind/type/class' to plain 'kind', as the

share the properties and characteristics that are *relevant* for the utterance
in question in a homogeneous way. As the property of being afraid in
(118) is relevant with respect to the fact that animals hide themselves,
the utterance is successful. The property of having three feet of the lions
in (112b), by contrast, is not relevant for their ferocity. Likewise, the
property of being green of the bottles in (113b) has nothing to do with,
i.e. is not relevant for, their having a narrow neck.

In conclusion, my tentative hypothesis will be that the definite singu-
lar generic NP refers to a kind/type/class whose members are sufficiently
homogeneous[107] with respect to the characteristics relevant for the utter-
ance. In this way, the problems of the traditional kind-referring analysis
(what's a kind?) have been solved, together with my objection to Kleiber's
theory that the definite singular has no parts, but members.

The question is, of course, why a generic singular NP—referring to
a kind/type/class whose members are sufficiently homogeneous with
respect to the characteristics relevant for the utterance—is marked by
a definite article and whether the function of this 'generic' article is
comparable to the function of the 'common' article in non-generic NPs.
In the literature on genericity, the use of the definite article with singular
generic NPs has not received much attention. Generally, it is only stated
that singular generics are definite, without any attention to the reason
why. Kleiber (1990: 71), who—as was discussed above—assumes singular
generics to be mass NPs referring to sufficiently homogeneous referents,
does pay some attention to the function of the article in generic NPs.
He defends the view that in both generic and non-generic NPs the
definite article expresses unity. For generic NPs, this function of the
article will be a consequence of their 'mass' nature. Kleiber does not
explain, however, how to understand the article to express unity in non-
generic NPs.

Although I do not agree with Kleiber that singular generics are mass
NPs, nor that the function of the article is to express unity, one aspect of

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singular generic NPs in my corpus do not only refer to various kinds of animals and
plants, but also to measures (e.g. example 109). For want of a better alternative, I also use
the enumeration kind/type/class to account for this kind of generics.

[107] I will not try to give a definition of being sufficiently homogeneous. For the aim of
the present study it is sufficient to stress that the members of the kind have to resemble
each other so much that one member can represent the whole kind. Further research has
to make clear to which extent the members have to resemble each other to be sufficiently
homogeneous.

his analysis seems very attractive, viz. the fact that he discerns one general function of the article for both generic and non-generic NPs. In my view, it is also possible to discern such a general function of the definite article if singular generics are considered to refer to a kind/type/class with sufficiently homogeneous members for the relevant characteristic(s) and if definite articles in non-generic NPs are considered to mark identifiability instead of unity. In both cases, the definite article marks the identifiability of the referent, irrespective of the fact whether it marks a generic or non-generic noun.

For a generic referent, I assume that the identification will run as follows: on hearing *the beaver* the addressee will first check whether there is a (non-)specific (i.e. non-generic) beaver anchored in his current pragmatic information.[108] If there is such a non-generic beaver available, for instance because it was mentioned before, or because of the activation of a cognitive structure to which this beaver can be unequivocally anchored (e.g. a zoo, a trip along a river in Canada), he will assume the definite NP to refer to this non-generic entity. If there is no such entity anchored in his current pragmatic information (i.e. an available cognitive structure), he will consider *the beaver* to refer to a kind anchored in his larger (i.e. non-current, non-available) information.[109] If this analysis of the function of the article in singular generics is correct, the general function of the article is to indicate that the referent can unequivocally be related to some knowledge. In the case of a non-generic NP, this knowledge has to be available; the referent of a generic NP, by contrast, is to be related to general knowledge.

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[108] Cf. Declerck (1991: 190), who names this primacy of current information the immediateness principle. The immediateness principle can be explained on the basis of Grice's maxim of relation (i.e. the addressee expects to get information that is maximally relevant): a referent in the addressee's current pragmatic information is more present/near/available and hence more relevant than the remote and hence less relevant information in his larger information.

[109] My analysis that the article in singular generic NPs indicates that the referent is unequivocally relatable to general knowledge is favoured by the fact that some languages possess a specific marker for both unique entities and kind-referring NPs. Like kind-referring NPs, unique entities are part of the general (instead of current) knowledge of the addressee. Frisian and some German dialects, for example, use a short form of the article (*da* instead of *dea*) in combination with proper names and in references to unique entities and kind-referring NPs. In Indonesian the situation is highly similar: unique entities and kind-referring NPs are bare in contrast to other definite NPs that are overtly marked with a special determiner or suffix (Krifka et al. 1995: 69).

5.5.2. *Plural generic NPs*

In contrast to English, in which plural generic NPs are indefinite (e.g. *Mary likes dogs*), Ancient Greek marks plural generics as definite:[110]

(121)   (= 115) νομίζουσι δὲ καὶ τῶν ἰχθύων τὸν καλεύμενον λεπιδωτὸν ἱρὸν εἶναι καὶ τὴν ἔγχελυν. ἱροὺς δὲ τούτους τοῦ Νείλου φασὶ εἶναι καὶ τῶν ὀρνίθων **τοὺς χηναλώπεκας**.

   And of the fish they consider the so-called lepidotos to be sacred and the eel. They say that they are sacred to the Nile and of the birds, **the fox-geese**.   (Hdt. 2.72)

(122)   Αἰγύπτιοι (...) τὰ πολλὰ πάντα ἔμπαλιν τοῖσι ἄλλοισι ἀνθρώποισι ἐστήσαντο ἤθεά τε καὶ νόμους. (...) **τὰ ἄχθεα οἱ** μὲν **ἄνδρες** ἐπὶ τῶν κεφαλέων φορέουσι, **αἱ** δὲ **γυναῖκες** ἐπὶ τῶν ὤμων.

   The Egyptians (...) have instituted customs and laws contrary for the most part to those of the rest of mankind. (...) **Men** (lit. the men) carry **loads** (lit. the loads) on their heads, **women** (lit the women) on their shoulders.   (Hdt. 2.35.2–3)

Although there is a lively discussion about the indefinite plural generics,[111] the definite plurals in languages like Ancient Greek and French did not get much attention. Krifka et al. (1995: 68), who discuss the French system briefly in one section, simply state that the definite plural is a kind-referring NP comparable with the definite singular. This, however, cannot be true, as singular and plural definites do not fit into the subject and object position of kind-referring predicates equally well:

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[110] Kühner-Gerth (1904: I 602 ff.) and Smyth (1956: 289) claim that the article may be left out in (plural) generic NPs. In the examples cited, however, the indefinite NPs are never used generically, but most often non-specific, e.g. Pl. *Phdr.* 227a πορεύομαι δὲ πρὸς περίπατον ἔξω τείχους 'and I am going for a walk outside the walls' and X. *Mem.* 4.3.14.8 καὶ ἄνεμοι αὐτοὶ μὲν οὐχ ὁρῶνται 'and the winds are themselves invisible'.

[111] See (among many others) Carlson (1977, 1979 and 1982), Krifka et al. (1995) and Laca (1990). In my view, Krifka's and Laca's observation that a generic interpretation of an indefinite plural is only possible in suitable syntactic and pragmatic contexts is a consequence of the more general rule that if the context (and not just the syntactic or pragmatic function of the NP) does not restrict the total number of specimens to which the NP refers, the addressee will assume that reference is made to all specimens of the kind (cf. Declerck (1991: 185) about *beavers build dams*: 'since there are no semantic or pragmatic elements in the context that restrict the reference in any way, the maximal-set principle leads the hearer to conclude that the reference is to the largest possible set of entities satisfying the description *beavers*, that is, the generic set. Since this set is not restricted in any way, it includes all beavers in any possible world, that is not only the beavers existing now, but also those living in the past and in the future').

(123a) Le dodo est éteint.

(123b) ?Les dodos sont éteints.

(124a) Shockley a inventé le transistor.

(124b) ?Shockley a inventé les transistors.

Kleiber is the only one who discusses the plural definite NPs in more detail. In his view, *les X* refers to the ensemble of individuals that are X (Kleiber 1990: 72–73). So, whereas the definite singular refers to a homogeneous referent that seem no longer to consist of separate occurrences, the definite plural refers to the set of the (still countable) members of a class. According to Kleiber, this difference explains why the definite plural, in contrast to the definite singular, does allow exceptions (cf. ?*l'oiseau, sauf l'autruche, vole* and *les oiseaux, sauf les autruches, volent*) and is not restricted to 'homogeneous' classes (cf. ?*le lion à trois pattes est féroce* et *les lions à trois pattes sont féroces*).

Although my analysis of the definite singular does not wholly correspond with Kleiber's (see section 5.5.1), his idea that the definite plural *the beavers* refers to the ensemble of members of the kind Beaver sounds very attractive to me. Yet, Kleiber's formulation 'the ensemble of individuals that are X' is not very explicit about what exactly the plural generic refers to. Although Kleiber (1990: 73) explicitly indicates that plural generics are not universal quantifiers, he does not clarify what they are: almost all individuals of the kind, the most typical ones?

It has been suggested by other scholars (among whom Nunberg and Pan 1975), that generic reference by plural generic NPs should be seen as universal quantification over the prototypical elements of a concept. A sentence like *ducks lay whitish eggs* should be paraphrased as *prototypical ducks lay whitish eggs*. This analysis, however, also encounters many problems. Apart from the fact that some concepts do not have prototypical elements, while others have multiple ones (Krifka et al. 1995: 47),[112] some generic NPs express ideals rather than prototypes, e.g. *postgraduate students work hard* (Papafragou 1996: 174).[113]

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[112] Mathematical concepts as in *two and two equals four*, for instance, have no prototypical element. Ducks, on the other hand, have many. Compare *ducks lay eggs* where the prototypical duck has to be female, and *ducks have colourful feathers* where the prototypical duck has to be male.

[113] A closely related analysis (Declerck 1986) views generic reference as universal quantification over the stereotypical elements of a concept (a stereotype is a list of properties conventionally believed to be characteristic for the concept; in contrast to prototypes, which are typical members of a concept). Although a stereotype analysis might offer an

More promising is the pragmatically oriented adaptation suggested by Declerck (1991). In Declerck's view, generic reference by plural NPs must be seen as universal quantification over all relevant entities. On the basis of his pragmatic information the addressee assumes *ducks lay whitish eggs* to be an utterance about all female, non-sterile ducks. The problematic part of this analysis, however, is finding out what the relevant entities are (cf. Krifka et al. 1995 and Papafragou 1996). In examples like *ducks lay whitish eggs* our knowledge of nature selects the relevant entities. In a sentence like *women are bad conversationalists*, by contrast, is it by no means clear to which relevant entities the utterance refers. How to decide whether *women* refers to all women in the world, to all women that converse or even to all women that converse badly?

This problem seems to be answered by Papafragou (1996), who makes use of the theory of possible worlds for the analysis of generics.[114] She views plural generic NPs as universal quantification over the contextually determined set of possible worlds. According to Papafragou, a sentence like *lions are animals* expresses a law of nature. Therefore, in every world where the laws of nature hold, whatever is a lion, will be an animal (Papafragou 1996: 191 ff.). Similarly, a deontic generic like *a gentleman escorts a lady* expresses an ideal with respect to good behaviour. Thus, in every ideal word where men obey the rules of good behaviour, a gentleman will escort a lady. Note that for the interpretation of an utterance, it is only the existence of *relevant* entities that matters. For the interpretation of *pheasants lay speckled eggs*, for instance, only worlds where fertile female pheasants exist, are considered.[115]

So, although Papafragou's contextually determined set of possible worlds closely resembles Declerck's contextually determined set of all relevant entities, Papafragou's analysis seems to be more promising in that it

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explanation for some generic NPs (for example, the difference in acceptability between *peacocks are male* and *peacocks have richly ornamented tails* can easily be explained, as the latter does and the former does not describe a stereotypical element of peacocks), stereotypical reference cannot be true of all generic NPs. For some concepts lack stereotypes, whereas others have various. Moreover, generic and stereotypical reference cannot be equated, as sentences like *foxes are sly* express true stereotypes, but false generalisations (Papafragou 1996: 175–177).

[114] As a detailed summary of the possible-worlds-semantics would be getting too far off the subject under discussion, I will sketch the outlines only. The summary may, then, be a little oversimplified.

[115] The language user does not mind that such a world is highly abnormal (Papafragou 1996: 193). Note that a addressee who does not know that only females lay eggs, will select the wrong worlds and hence conclude that the utterance is false.

is more successful in explaining how the context decides what entities are relevant, i.e. which kind of worlds are selected (or more technically spoken: what the modal base is). Therefore, it seems best to modify Kleiber's somewhat vague formulation that the definite plural (the X) refers to 'the ensemble of members of the kind X' into 'all X in the contextually determined set of possible worlds' (or less technical: all relevant X).

The question now is in which respect these plural generics referring to all X in the contextually determined set of possible worlds differ from singular generics. Kleiber (1990) described this difference in terms of homogeneity: whereas singular generics refer to a homogeneous class, plural generics refer to the set of all X, irrespective of whether this set makes up a homogeneous whole. My data illustrate that the decision for a plural NP may indeed depend on the question of whether the set does or does not form a sufficiently homogeneous whole:

(125) ἐν γὰρ **τῇσι μεταβολῇσι** τοῖσι ἀνθρώποισι **αἱ νοῦσοι** μάλιστα γίνονται, τῶν τε ἄλλων πάντων καὶ δὴ καὶ τῶν ὡρέων μάλιστα.

For in **changes** (lit. the changes), of all things and especially of the seasons, lies the prime cause of **diseases** (lit. the diseases) to men (lit. the men). (Hdt. 2.77.3)

(126) νόμος δέ ἐστι **περὶ τῶν θηρίων** ὧδε ἔχων. μελεδωνοὶ ἀποδεδέχαται τῆς τροφῆς χωρὶς ἑκάστων καὶ ἔρσενες καὶ θήλεαι τῶν Αἰγυπτίων, (...).

There exists the following law for **wild beasts** (lit. the wild beast): caretakers—both Egyptian men and women—have been appointed to each kind of them, who take care of their food, (...). (Hdt. 2.65.3)

In (125) μεταβολῇσι is not, as the specifying apposition clause makes clear, seen as a homogeneous class. Similarly, χωρὶς ἑκάστων in (126) indicates that τῶν θηρίων must be considered as consisting of different kinds of beasts. The use of a plural NP could thus be due to the fact that the referent is too heterogeneous for the use of a singular NP.

Much more often, however, it is not the nature of the referent itself, but the context that inspires the choice of a plural generic. In example (127), for instance,

(127) **τὰς** δὲ **μυγαλᾶς καὶ τοὺς ἴρηκας** ἀπάγουσι ἐς Βουτοῦν πόλιν, **τὰς** δὲ **ἴβις** ἐς Ἑρμέω πόλιν.

Field-mice and hawks (lit. the field-mice and the hawks) they bring to Boutous city, **ibises** (lit. the ibises) to Hermopolis. (Hdt. 2.67.1)

the choice for plural generics has nothing to do with a non-homogeneous nature of the referents, but with the fact that the verb of the sentence

is a distributive generic predicate. As the object of such a verb, a plural generic referring to all relevant members of the kind is much better suited than a singular generic NP referring to the kind itself.[116] If the plurals were replaced by singular NPs, the sentence would most probably be interpreted as an iterative utterance about a specific field mouse, hawk and ibis.

In the preceding I argued that definite plural generics refer to all relevant members of the kind (or rather: all X in the contextually determined set of possible worlds) and are used either if the referent is not sufficiently homogeneous, or if, on the basis of the context, reference to all relevant X is more appropriate that reference to the kind itself. The actual questions of this section, viz. why are generic plurals marked by the definite article and what is the function of this article, however, remain to be answered.

In my view, it is not a matter of accident that NPs referring to all X in the contextually determined set of possible worlds are marked with a definite article. As I have argued throughout the preceding chapter, the definite article in Ancient Greek indicates that the referent is identifiable, i.e. unequivocally relatable to available knowledge. In my view, this also holds true for plural generics, even though the process of identification may be somewhat more complicated than for (non-)specific NPs.

I assume that on hearing an NP like *the beavers*, the addressee will first check whether he can anchor the referent of the NP to some available cognitive structure. If anchoring succeeds, the addressee will assume the referent to be a (non-)specific part of this structure. However, if there is no set of *beavers* available in or relatable to his current pragmatic information (i.e. his available knowledge), the addressee will assume the NP to refer to the only set of beavers he can identify, i.e. the set of all beavers in the contextually determined set of possible worlds.

That the only identifiable set left is the set of all beavers in the relevant worlds is a consequence of the inclusiveness implicature (discussed in more detail in section 5.2.2). Just as the addressee of the request to remove *the books* from the table infers that reference is made to the totality of books lying on the table (as the totality of books is the only set he can identify, because no subsets have been defined), the addressee of

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[116] The same holds for NPs that function as distributive-iterative modifiers: the NP has to be plural as a singular NP blocks a generic interpretation of the sentence. Consider for example ὑπὸ τοὺς θανάτους ('in the time of deaths', Hdt. 2.36.1) and ἐν τῇσι συνουσίῃσι ('in meetings', Hdt. 2.78).

an utterance like ἱροὺς τούτους τοῦ Νείλου φασὶ εἶναι καὶ τῶν ὀρνίθων τοὺς χηναλώπεκας (example 121) will infer that reference is made to the totality of fox-geese in the Egyptian worlds, as that is the only identifiable set in this case.

5.6. *Conclusion*

Although recent research seemed to hint in another direction, the use of the article in Ancient Greek is, in general, comparable to its use in modern European languages. That means that an Ancient Greek NP, like its modern European counterparts, is definite if the referent is presented as identifiable, viz. as unequivocally relatable to the knowledge of the addressee(s). The referent of a generic NP, referring to the kind x (in the case of a singular NP) or to all relevant x (in the case of a plural NP) is to be related to general knowledge. In the case of NPs referring to some (non-)specific referent, on the other hand, the referent has to be related to some *available* cognitive structure. The general rule that an NP is definite if the referent can be related to the knowledge of the addressee can account for the use of the article in all generic NPs and 94 % of the NPs referring to some (non)specific referent (for an overview of the number of NPs per category, see Table 1).

Of the remaining 6 percent, in which the NP is definite although the referent cannot be related unequivocally to available knowledge, or—much more often—the NP lacks an article although the referent can be related unequivocally, more than a third can be explained by one of the refinements discussed in section 5.3.2:

(i)   a classifying genitive cannot function as the anchor of a relatable entity;

(ii)   a fixed adverbial expression is always bare;

(iii)   a relatable subject of a copular verb may be bare, even if it is identifiable;

(iv)   in coordinations one or more elements may lack an article if the coordinated entities are depicted as one whole or concept;

(v)   an NP with distributive force is always definite, irrespective of the identifiability of the referent.

The majority of these refinements, although conflicting with the general rule, are not language specific exceptions, but are also attested in other European languages. In the discussion of refinement (i), (ii) and (iv), I have provided similar examples from other languages.

	book 2	book 7
NP referring to (non)specific referent[117]		
evoked (textually or situationally)	1009	958
relatable	1000	703
new, non-relatable[118]	1061	1013
non-referential NP		
evoked (textually or situationally)	25	23
relatable	51	73
new, non-relatable	82	85
generic NP		
evoked (textually or situationally)	69	3
relatable	15	—
new, non-relatable	61	3
problematic cases		
evoked (textually or situationally)	13	73
relatable	74	87
new, non-relatable	—	—
total	3460	3021

Table 1. Number of NPs per category

But although the basic rules for the use of the article in Ancient Greek are analogous to those in other languages marking definiteness, there are some notable differences. First of all, Ancient Greek considers the marking of definiteness in NPs with a demonstrative or possessive more important than other European languages. Whereas other languages prefer to be economical by only giving expression to the demonstrative or possessive (assuming the marking of definiteness to be superfluous as the great majority of the NPs with a possessive or demonstrative is identifiable), Ancient Greek prefers to be more precise by also marking the iden-

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[117] In book 2, there are 770 NPs referring to non-specific referents (25 %), in book 7, 425 NPs (16 %). That the use of non-specific NPs in book 2 is more common than in book 7 has, of course, to do with the different character of the books. As a great part of book 2 consists of a description of Egypt and the manners and customs of its inhabitants, it is only natural that it contains many non-specific NPs (e.g. *if the Egyptians sacrifice an animal* (non-spec), *they bring him to an altar* (non-spec), *make a fire* (non-spec), etc.). Book 7, on the other hand, has a narrative character: Herodotus (and the internal speakers put on stage in direct speech) narrates Xerxes' Greek campaign. Because they narrate one specific historical event, they mainly use specific NPs to refer to the specific army, the specific soldiers, the specific people they meet on their way to Greece, etc.

[118] That more than a third of the NPs refers to a new, unrelatable entity will be due to the text type of my corpus (historical narrative). In a conversation between two bosom friends, the number of unidentifiable referents will be significantly smaller.

tifiability of the referent. Another notable difference is that in Ancient Greek a non-referential NP (whether a predicate NP, third argument or adjunct) is always bare. Apparently, the marking of the relatability of the property expressed by the NP was considered less important than the marking of the non-referential nature of the NP.

In all probability, the differences in use of the article between Ancient Greek and modern languages with definiteness marking would have been more extensive if NPs with proper names, geographical names, abstracts and substantivised adjectives, participles etc. were also taken into consideration. As I argued in the introduction of this chapter, however, these NPs were not included in my analysis of definiteness, since this chapter is not meant to be an exhaustive overview of the use of the Ancient Greek article (which would readily become a book in itself), but only as preface to the analysis of the articulation of NP constituents, which is the topic of the next chapter.

THE ARTICULATION OF NP CONSTITUENTS

The first part of this book discussed the order of the constituents within the NP. As argued already in the introduction, however, knowledge of the factors that determine the order of the constituents is not sufficient for a complete understanding of the structure of definite NPs, as each of the various constituents may or may not be preceded by an article. As a first step in the direction of a complete description of the structure of the NP, the previous chapter analysed in which circumstances an Ancient Greek NP is marked with an article. This chapter will analyse which factors determine the presence or absence of this article before the various NP constituents and what exactly these 'articles' mark.

6.1. *The articulation of modifiers*

Although this may feel a bit counterintuitive, the articulation of modifiers will be discussed first, since—as I will argue in the next section—the articulation of the noun partially depends on the articulation of the modifiers. In Greek, every modifier of a definite NP may, but need not be preceded by an article:[1]

(1)   Leonidas had gained the kingship at Sparta unexpectedly.

δίξων γάρ οἱ ἐόντων πρεσβυτέρων ἀδελφεῶν, Κλεομένεός τε καὶ Δωριέος, ἀπελήλατο **τῆς φροντίδος περὶ τῆς βασιληίης**.

Since he had two older brothers, Kleomenes and Dorieos, he had renounced **all thought of the kingship** (lit. the thought about the kingship).   (Hdt. 7.205.1)

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[1] Although the element before a modifier may in theory also be a relative (the article and relative being isomorphic in the Ionic dialect), comparison with other Greek dialects reveals that the element should be considered an article (at least in form) and not a relative. Ancient Greek can thus not be compared to Mandarin Chinese, in which the presence of the particle *de* (which can also be used as a relative) after an adjective indicates that this adjective is actually a reduced relative clause (cf. Sproat and Shih 1988). That in Greek the 'article' before a modifier does not introduce a (reduced) relative clause is also

(2)   νόμος δὲ τοῖσι Λακεδαιμονίοισι κατὰ τῶν βασιλέων τοὺς θανάτους
ἐστὶ ὡυτὸς καὶ **τοῖσι βαρβάροισι τοῖσι ἐν τῇ Ἀσίῃ·**

The Lakedaimonians have the same custom at the deaths of their kings as
the barbarians in Asia (lit. the barbarians the in the Asia). (Hdt. 6.58.2)

(3)   αὗται μέν νυν **αἱ ἠπειρώτιδες Αἰολίδες πόλιες**, (…) αἱ δὲ τὰς νήσους
ἔχουσαι πέντε μὲν πόλιες τὴν Λέσβον νέμονται, (…).

These then are **the Aeolian cities on the mainland** (lit. the mainland
Aeolian cities) (…) Among those on the islands, five divide Lesbos
among them, (…).   (Hdt. 1.151.1)

(4)   οὗτος δὲ ὁ Ὠλὴν καὶ **τοὺς ἄλλους τοὺς παλαιοὺς ὕμνους** ἐποίησε ἐκ
Λυκίης ἐλθὼν **τοὺς ἀειδομένους ἐν Δήλῳ**.

This Olen, after coming from Lykia, also made **the other ancient hymns
that are sung at Delos** (lit. the other the old hymns the sung at Delos).
                                                                (Hdt. 4.35.3)

In this section, I will try to answer the question of what determines the
difference between the articular modifiers in examples (2) and (4) and
the non-articular ones in examples (1) and (3). After an overview of the
existing theories on the articulation of modifiers (in section 6.1.1.1), I
will present an alternative solution based on the analysis of the definite
NPs in my corpus (in section 6.1.1.2). In sections 6.1.2 and 6.1.3, this
alternative view on the articulation of modifiers will be illustrated and
further refined.

6.1.1. *Introduction*

6.1.1.1. Articular modifiers: existing views

In the course of time various theories have been developed about the
function of the articulation of modifiers. As far as I know, Heinrichs
(1954: 30 ff.) was the first to give his view on this function. He argued
that the articles before adjectives are '*Gelenkartikeln*', articles that—in
contrast to common articles—do not have an anaphoric or 'general' func-

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apparent from the fact that modifiers other than adjectives can also be articular. Especially
in the case of participles, an interpretation of the modifier as a reduced relative clause is
problematic.

tion,[2] but link the various constituents of the NP.[3] Although the traditional grammars do not use the term *Gelenkartikeln* as such, their descriptions reveal that they take a very similar position; for they distinguish between a so-called attributive and predicative position of adjectives:

	prenominal	*postnominal*
'attributive position'	aXN	(a)NaX
'predicative position'	XaN	aNX

Table 1. Attributive vs. predicative position[4]

According to the traditional view, adjectives placed in between the article and noun or after the noun with repetition of the article have an attributive value, i.e. describe a feature of the referent of the head of the NP (e.g. 'I like the black door'). Adjectives placed outside the combination of noun plus article, by contrast, are predicative, i.e. are the predicate adjective after a copular verb (e.g. 'the door is black') or an adjunct of state that expresses a temporary state of the referent (e.g. 'I like the door black' = I like the door when black).[5] For the adjectives in my corpus, this rule seems indeed to hold true:

(5)   **ὁ** δὲ **βασιλήιος πῆχυς** τοῦ μετρίου ἐστὶ πήχεος μέζων τρισὶ δακτύλοισι.

      The royal measure is greater by three fingers' breadth than the common measure.   (Hdt. 1.178.3)

(6)   καὶ αἱρέουσι **ἔρημον τὸ ἄστυ** καί τινας ὀλίγους εὑρίσκουσι τῶν Ἀθηναίων ἐν τῷ ἱρῷ ἐόντας, (…).

      When they took the town it was deserted (lit. they took **deserted the town**) and in the sacred precinct they found a few Athenians.
                                                                              (Hdt. 8.51.2)

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[2] With the 'generalisierende' or 'generelle' function of the article Heinrichs refers to the use of the article in generic NPs (Heinrichs 1954: 25 ff.). For the use of the article in generic NPs, see Chapter 5, section 5.5.

[3] However, both his observation that these articles 'beton die determinierende Funktion des Attributs' and his translation of ὁ ἀνὴρ ὁ ἀγαθός ('der Mann, nämlich der gute/und zwar der gute') seem to contradict this statement and suggest that Heinrichs actually saw articular modifiers as appositions. For the view of articular modifiers as appositions, see below.

[4] For the non-existence of the aXaN pattern, see section 6.2.

[5] For a more detailed account of the function of predicative modifiers and the difference with attributive modifiers, see section 6.1.3.2. That adjectives following the combination article plus noun have predicative value, is also argued by Stavrou (1996) for Modern Greek.

In example (5), the articular adjective describes a feature of the referent of the noun. The non-articular adjective in example (6), by contrast, is used predicatively: it does not describe a feature of the city, but expresses a temporary state of the city at the moment of being taken.

In the case of modifiers other than adjectives, the grammars also speak of an attributive and predicative position (cf. Kühner-Gerth 1904: I 613–614, Smyth 1956: 294 and Schwyzer-Debrunner 1950: 26). On the basis of my data I doubt, however, whether it is useful to speak of an attributive and predicative *position*, as the difference between the two positions cannot satisfactorily be explained by the difference between an attributive and predicative *value*.[6] Participles in the predicative position (PTCaN or aNPTC), for instance, may, but need not have predicative value:

(7)   μετὰ δὲ ταῦτα **πεπληρωμένῃσι τῇσι νηυσὶ** παρῆσαν οἱ Ἴωνες, σὺν δέ σφι καὶ Αἰολέων οἵ Λέσβον νέμονται.

The Ionians then came there **with their ships manned** (lit. manned the ships), and with them the Aeolians who dwell in Lesbos.   (Hdt. 6.8.1)

(8)   τὸν μὲν δὴ εἰρύσαντα τῶν τόξων τὸ ἕτερον (δύο γὰρ δὴ φορέειν τέως Ἡρακλέα) καὶ τὸν ζωστῆρα προδέξαντα παραδοῦναι τὸ τόξον τε καὶ **τὸν ζωστῆρα ἔχοντα ἐπ᾽ ἄκρης τῆς συμβολῆς φιάλην χρυσέην**, δόντα δὲ ἀπαλλάσσεσθαι, (…).

So he drew one of his bows (for until then Herakles always carried two), and showed her the belt, and gave her the bow and **the belt, which had a golden vessel on the end of its clasp** (lit. the belt having a golden vessel …); and, having given them, he departed, (…).   (Hdt. 4.10.1)

The participle in example (7) is in predicative position and has indeed predicative value: it does not describe a feature of the ships, but only informs us that the ships were manned at the moment the Ionians arrived in Lade.[7] In example (8), by contrast, the participle does not express a

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[6] Of course, the grammars do not claim that genitives, prepositional phrases and possessives have predicative *value* if they are used in the XaN or aNX pattern. They do, however, speak of the attributive and predicative position in these cases, as if the terms attributive and predicative are meaningful in these cases as well. On Kühner-Gerth's observations on the difference between the attributive and predicative position for genitives, see section 6.1.3.1 (footnote 45).

[7] This example shows that in Ancient Greek the use of predicative elements is much more wide-ranging than in modern European languages like English, Dutch, German and French. While these modern European languages can only use a predicative element to express a temporary state of the subject or object (e.g. *hij kwam blij binnen* (lit. he entered happy), *er hat seine Hemden sauber in den Schrank gelegt* (lit. he has laid his shirts

temporary state of the belt when Herakles handed it over. It is therefore debatable whether the participle, although in predicative position, does indeed have a predicative value.

While participles sometimes behave like adjectives and sometimes do not, genitives, prepositional phrases and possessives in the predicative position never have predicative value. The genitive in example (10), for instance, does not differ from the genitive in example (9) with respect to its attributive value:

(9)   τοῖσι δὲ αὐτομόλοισι τούτοισι οὔνομά ἐστι Ἀσμάχ, δύναται δὲ τοῦτο τὸ ἔπος **κατὰ τὴν Ἑλλήνων γλῶσσαν** ῾οἱ ἐξ ἀριστερῆς χειρὸς παριστά- μενοι βασιλέϊ᾿·

These Deserters are called Asmakh, which translates, **in the Greek lan- guage** (lit. in the of Greeks language), as 'those who stand on the left hand of the king'.   (Hdt. 2.30.1)

(10)   ὡς δὲ ἤγαγον τὸν Ἆπιν οἱ ἱρέες, ὁ Καμβύσης, οἷα ἐὼν ὑπομαργότερος, σπασάμενος τὸ ἐγχειρίδιον θέλων τύψαι **τὴν γαστέρα τοῦ Ἄπιος** παίει τὸν μηρόν·

When the priests led Apis in, Kambyses—for he was all but mad—drew his dagger and meaning to stab **the belly of the Apis** stuck the thigh.
                                                                               (Hdt. 3.29.1)

Not for all modifiers, apparently, the choice for the presence of a preced- ing article depends on the attributive or predicative function or value of the modifier. That implies that the traditional view, however useful when describing the difference between articular and non-articular adjectives, cannot explain the difference between articular and non-articular mod- ifiers in general.

An additional problem for the traditional view are multiple-modifier NPs. The difference between examples like (3) and (4) (repeated below) cannot be explained by an attributive or predicative position (let alone: value) of the modifier, as in both examples, both modifiers are placed attributively, i.e. in between the article and noun:

(3)   αὗται μὲν νυν **αἱ ἠπειρώτιδες Αἰολίδες πόλιες**, (…) αἱ δὲ τὰς νήσους ἔχουσαι πέντε μὲν πόλιες τὴν Λέσβον νέμονται, (…).

These then are **the Aeolian cities on the mainland** (lit. the mainland Aeolian cities) (…) Among those on the islands, five divide Lesbos among them, (…).   (Hdt. 1.151.1)

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clean in the closet)), Ancient Greek can add a predicative element to every constituent of the clause, irrespective of its syntactic function.

(4)   οὗτος δὲ ὁ Ὠλὴν καὶ **τοὺς ἄλλους τοὺς παλαιοὺς ὕμνους** ἐποίησε ἐκ
       Λυκίης ἐλθὼν **τοὺς ἀειδομένους ἐν Δήλῳ**.

This Olen, after coming from Lykia, also made **the other ancient hymns
that are sung at Delos** (lit. the other the old hymns the sung at Delos).

(Hdt. 4.35.3)

Examples like these show that it is not the position of the modifier inside
or outside the combination article plus noun, but the articulation of the
modifier that is decisive.

This latter point is acknowledged by Himmelmann (1997). In his
extensive discussion of *Gelenkartikeln*, he—surprisingly—claims that in
Greek the article in between the noun and following modifier in the
aNaX pattern is not a *Gelenkartikel*, but a marker of *Definitheitskongruenz*
(Himmelmann 1997: 178–179). In his view, a postnominal modifier in
Greek, like in the Semitic languages, agrees with the preceding noun in
definiteness.[8] This means that the articulation of the modifier has no
special function, but is a consequence of the fact that a feature of the
noun is expressed on the modifier as well.[9] For the Semitic languages,
Himmelmann defends his view with the argument that postnominal
adjectives also agree with indefinite nouns ('a man a good'). For Greek,
however, an argumentation for the interpretation of the article as an
agreement marker is omitted.

There are two very strong indications against Himmelmann's idea
that the articulation of modifiers has to do with agreement. First of all,
modifiers in a definite NP need not agree in definiteness with the noun:
in patterns like XaN, aNX (cf. example 1), aXXN (cf. example 3) or
aNaXX the noun is, but at least one of the modifiers is not marked for
definiteness. Moreover, there are countless examples where the noun is
not marked for definiteness, whereas the modifier is:[10]

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[8] The same has been suggested for modern Greek by Tredinnick (1992), Androut-
sopoulou (1994), Kolliakou (1995) and Alexiadou and Wilder (1998). Androutsopoulou
argues that the article has spread from the head to the following modifiers. From a
diachronic perspective, however, definiteness spreading is very unlikely, since the NaX
pattern occurred—as far as we know at least—before the aNaX pattern (for some exam-
ples, see Devine and Stephens 2000: 238–239).

[9] Compare, for instance, French adjectives, which agree with the noun in gender, e.g.
un beau tableau vs. *une belle maison*.

[10] In the case a noun is modified by a prenominal articular modifier (aXN) it is
uncertain whether noun and modifier do or do not agree in definiteness, as it is unclear
whether the article belongs to the modifier or noun, or both. For a tentative answer, see
section 6.2.

(11)   ἀνακρεμασθέντος ὦν αὐτοῦ, λογιζόμενος ὁ Δαρεῖος εὗρέ οἱ πλέω
        ἀγαθὰ τῶν ἁμαρτημάτων πεποιημένα **ἐς οἶκον τὸν βασιλήιον·**

        When Sandokes had been hung on the cross, Dareios found on consid-
        eration that his good services to **the royal house** (lit. to house the royal)
        outweighed his offences.   (Hdt. 7.194.2)

(12)   Λεωνίδῃ δέ, τῷ με κελεύεις τιμωρῆσαι, φημὶ μεγάλως τετιμωρῆσθαι,
        ψυχῇσί τε **τῇσι τῶνδε ἀναριθμήτοισι** τετίμηται αὐτός τε καὶ οἱ ἄλλοι
        οἱ ἐν Θερμοπύλῃσι τελευτήσαντες.

        As for Leonidas, whom you would have me avenge, I think that he has
        received a full measure of vengeance; **the uncounted souls of these that
        you see** (lit. souls the of these here uncounted) do honor to him and the
        rest of those who died at Thermopylae.   (Hdt. 9.79.2)

Agreement can thus not be the explanation for the articulation of modi-
fiers.

A third interpretation of the articulation of modifiers, which is both
found in the grammars and maintained regarding Modern Greek by
Joseph and Philippaki-Warburton (1987), Stavrou and Horrocks (1987)
and Rijkhoff (1992: 234 ff.),[11] is that the article introduces an apposi-
tional phrase.[12] In this view, Greek NPs with articular modifiers do not con-
stitute one integrated whole, but consist of two or more miniature NPs
in apposition (e.g. 'the shields, the wooden ones').[13] For NPs in which
an articular modifier follows an articular noun, as in examples (13) and
(14), the view of the articular, postnominal modifier as an apposition

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[11] Rijkhoff (1992: 118) has a special reason for dividing the aNaX pattern in a matrix
NP and a restrictive appositional phrase, as the position of the second article between the
noun and modifier is against his universal word order principles (see Chapter 2, section
2.3.1).

[12] Although Gildersleeve (1900: 280) and Smyth (1956: 293) do not actually use the
term apposition, their descriptions reveal that they assume that the article-adjective
combination in the aNaA and NaA pattern is not an integrated part of the NP. Smyth
(1956: 293) for instance states that 'the attributive (in the aNaX and NaX pattern) is added
by way of explanation: ἀνθρώποις τοῖς ἀγαθοῖς with men, the good ones (I mean) or
τοὺς κύνας τοὺς χαλεπούς "the dogs, the savage ones (I mean)"'.

[13] In this view, the modifier is not an integral part of the NP, but constitutes an
independent referring constituent by itself, which is not dependent on the preceding
noun. Such independent modifiers are very common in so-called non-configurational
or flat languages, i.e., languages that have a flat instead of hierarchical phrase structure.
Such languages try to avoid hierarchical structures, so that modifiers are not dependents
of the noun, but either constituents of the clause themselves or mini NPs in apposition
to the noun (e.g. 'the trees, these three, the large ones'). References to literature on non-
configurational languages in general and descriptions of noun phrase structure in non-
configurational languages in particular can be found in Devine and Stephens (2000: 142–
143 and 149) and Rijkhoff (2002: 19–22).

could seem very attractive. The highlighted NP in (13), for instance, can be paraphrased as 'the barbarians, viz. the ones in Asia' and in (14) the highlighted NP may be read 'the oracle, viz. the one given to him at Delphi':

(13) (= 2) νόμος δὲ τοῖσι Λακεδαιμονίοισι κατὰ τῶν βασιλέων τοὺς θανάτους ἐστὶ ὡυτὸς καὶ **τοῖσι βαρβάροισι τοῖσι ἐν τῇ Ἀσίῃ·**

The Lakedaimonians have the same custom at the deaths of their kings **as the barbarians in Asia** (lit. the barbarians the in the Asia). (Hdt. 6.58.2)

(14) Βάττος δὲ μετωνομάσθη, ἐπείτε ἐς Λιβύην ἀπίκετο, **ἀπό** τε **τοῦ χρηστηρίου τοῦ γενομένου ἐν Δελφοῖσι αὐτῷ** καὶ ἀπὸ τῆς τιμῆς τὴν ἔσχε τὴν ἐπωνυμίην ποιεύμενος.

He changed his name to Battos on his coming to Libya, taking this new name **because of the oracle given to him at Delphi** (lit. because of the oracle the being in Delphi to him) and the honourable office that he received.   (Hdt. 4.155.2)

However attractive the view of articular modifiers as appositions may seem for examples like (13) and (14), it would lead to meaningless interpretations for those cases where an articular modifier follows a non-articular noun. Most instances of the NaX pattern cannot be analysed as a bare noun with a definite apposition:[14]

(15) ἔχοντος δέ οἱ ἐν χερσὶ τοῦ παιδὸς τὸν γάμον ἀπικνέεται ἐς τὰς Σάρδις ἀνὴρ συμφορῇ ἐχόμενος καὶ οὐ καθαρὸς χεῖρας, ἐὼν Φρὺξ μὲν γενεῇ, **γένεος** δὲ **τοῦ βασιληίου**.

Now while Kroisos was occupied with the marriage of his son, a Phrygian of **the royal family** (lit. family the royal) came to Sardis, in great distress and with unclean hands.   (1.35.1)

(16) εἰ ὦν βουλοίμεθα **γνώμῃσι τῇσι Ἰώνων** χρᾶσθαι τὰ περὶ Αἴγυπτον, οἵ φασι (...), ἀποδεικνύοιμεν ἂν τούτῳ τῷ λόγῳ χρεώμενοι Αἰγυπτίοισι οὐκ ἐοῦσαν πρότερον χώρην.

Now if we want to use **the opinions of the Ionians** (lit. opinions the of the Ionians), who say (...), we can show that there was once no land for the Egyptians.   (Hdt. 2.15.1)

In these cases, it would be awkward to analyse the underlined NPs as 'a family, I mean the royal one' and 'opinions, viz. the ones of the Ionians'.

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[14] The interpretation of the NaX pattern as a non-referential noun followed by an elliptical NP ('with respect to the N, the X one'), as favoured by Devine and Stephens (2000: 250–258) will be rejected in section 6.2.1.

So, however attractive it may seem to analyse the articular modifiers in the aNaX pattern as appositions, these examples of the NaX pattern show that the articulation of modifiers cannot be a general indication of their appositional nature.

A second argument is that there is nothing appositional about prenominal articular modifiers. Although every prenominal modifier may be preceded by an article of its own (e.g. example 17 and 18), the noun itself never has an article if a modifier precedes.[15] The structure in (19) does not occur:

(17) (= 4) οὗτος δὲ ὁ Ὠλὴν καὶ **τοὺς ἄλλους τοὺς παλαιοὺς ὕμνους** ἐποίησε ἐκ Λυκίης ἐλθὼν **τοὺς ἀειδομένους ἐν Δήλῳ**.

This Olen, after coming from Lykia, also made **the other ancient hymns that are sung at Delos** (lit. the other the old hymns the sung at Delos).

(Hdt. 4.35.3)

(18) ἡ δὲ βασιλέος αἵρεσις **ἐς τὴν ὑστέρην τὴν Μαρδονίου ἐπιστρατηίην** δεκάμηνος ἐγένετο.

There were ten months between the kings taking of the place and **the later invasion of Mardonios** (lit. the later the of Mardonios invasion).

(Hdt. 9.3.2)

(19) *aXaXaN

An interpretation of articular prenominal modifiers as independent 'miniature' NPs (e.g. 'the later one, the one of Mardonios, the invasion') is therefore impossible.

Plank (2003: 337 ff.) does not reject an appositional interpretation of articular modifiers on the basis of arguments, but on his feeling that the difference in integration between noun phrases with prenominal non-articular modifiers (aXN) and articular postnominal modifiers (aNaX) is only fractional: 'the difference between such alternative arrangements in respect of structural integration and separate NP-hood are hardly categorical' (2003: 343). In his extensive and well-illustrated article on double articulation, Plank assigns Greek (both Ancient and Modern) to languages that alternate an unmarked prenominal position of modifiers with a marked postnominal one (Plank 2003: 343). This view, however, cannot be correct either, for in Ancient Greek postnominal

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[15] More examples of NPs modified by several articular modifiers can be found in section 6.1.2.

position of modifier is not (as Plank's source Goodwin suggests) the marked one. Re-articulation of postnominal modifiers can therefore not be a means of pragmatically highlighting the modifier. Hence, Plank's pragmatic interpretation is as inadequate as the previous theories for describing the difference between articular and non-articular modifiers.

6.1.1.2. Articular modifiers: an alternative solution

The preceding section argued that the article before modifiers cannot be described adequately in terms of *Gelenkartikeln*, *Definietheitskongruenz*, the integrity of the NP or the pragmatic marking of the modifier, but gave no clue as to what these articles do mark. Given the function of the article in general (see Chapter 5), a very natural answer would be that the difference between articular and non-articular modifiers has to do with the contribution of the modifier to the identification of the referent. However, the obvious conclusion that an 'articular' modifier does and a 'non-articular' modifier does not contribute to the identification of the referent of the NP turns out to be invalid. Although articular modifiers always contribute to the identification of the referent, non-articular modifiers are not by definition useless for the purpose of identification. Sometimes, non-articular modifiers only describe a feature of the referent that is already identifiable on the basis of the information expressed by the noun, as in example (20), where τὸν ζωστῆρα on its own would be perfectly identifiable:

(20)   (= 8) τὸν μὲν δὴ εἰρύσαντα τῶν τόξων τὸ ἕτερον (δύο γὰρ δὴ φορέειν τέως Ἡρακλέα) καὶ τὸν ζωστῆρα προδέξαντα παραδοῦναι τὸ τόξον τε καὶ **τὸν ζωστῆρα ἔχοντα ἐπ᾽ ἄκρης τῆς συμβολῆς φιάλην χρυσέην**, δόντα δὲ ἀπαλλάσσεσθαι, (. . .).

So he drew one of his bows (for until then Herakles always carried two), and showed her the belt, and gave her the bow and **the belt, which had a golden vessel on the end of its clasp** (lit. the belt having a golden vessel . . .); and, having given them, he departed, (. . .).   (Hdt. 4.10.1)

Much more often, however, the feature expressed by the non-articular modifiers does contribute to the identification of the intended referent, as in example (21), where τὰ χείλεα alone is not identifiable:

(21)   Such is the size of the city of Babylon; and it was planned like no other city of which we know. Around it runs first a moat deep and wide and full of water, and then a wall eighty three feet thick and three hundred thirty three feet high.

(…) ἔδειμαν πρῶτα μὲν **τῆς τάφρου τὰ χείλεα**, δεύτερα δὲ αὐτὸ τὸ τεῖχος τὸν αὐτὸν τρόπον.

(…) they built first **the border of the moat** (lit. of the moat the borders) and then the wall itself in the same fashion.   (Hdt. 1.179.2)[16]

But although there is not a clear-cut distinction between articular and non-articular modifiers in their contribution to the identifiability of the referent, there seems to be a difference in the way the referents in examples like (21) and (22) are identified:

(22)   διεξιούσης δὲ τῆς στρατιῆς Βάδρης μὲν **ὁ τοῦ ναυτικοῦ στρατοῦ στρα-τηγὸς** ἐκέλευε αἱρέειν τὴν πόλιν, Ἄμασις δὲ ὁ τοῦ πεζοῦ οὐκ ἔα·

   As the army was passing through, Badres **the admiral of the fleet** (lit. the of the sea army general) was for taking the city, but Amasis the general of the land army (lit. the of the land army) would not consent.
          (Hdt. 4.203.2)

While the genitive in example (22) helps identify the referent by contrasting the intended στρατηγός with another available στρατηγός (viz. the general of the land army), the genitive in (21)—although essential for a correct identification of the referent—does not distinguish the intended referent from other possible entities satisfying the description of the noun.

In the remainder of this chapter, I will argue that this is the general difference between 'articular' modifiers and 'non-articular' modifiers. While the latter only serve to fulfil the basic function of a modifier, i.e. modifying the head of the phrase (whether or not with the intention to make the referent identifiable), the former undertake the additional task of singling out the intended referent by answering the question 'which x is referred to?'. By the information they provide these modifiers separate the intended referent from other available entities that satisfy the description of the noun. One might say that whereas 'non-articular' modifiers characterise the referent, 'articular' ones specify the reference.[17] Therefore, I

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[16] Other examples in which a non-articular modifier contributes to the identification of the referent are examples (1), (3) and (10). In examples (3) and (10) the non-articular modifier is not as essential for the identification as in examples (1) and (21), but it does facilitate the identification.

[17] This general difference, however, does not hold for adjectives, numerals and (some) participles in single-modifier NPs. Although articular adjectives, numerals and participles function in the exact same way as other articular modifiers (specifying the reference), non-articular adjectives, numerals and some participles (in single-modifier NPs, at least) do not describe a feature of the referent, but have predicative value (cf. examples 6 and

will name 'non-articular' modifiers referent characterising modifiers and 'articular' ones reference specifying modifiers:[18]

(23) *Referent characterising modifiers* (in short: referent modifiers)

Referent characterising modifiers give information on a feature of the referent, i.e. are purely descriptive.

(24) *Reference specifying modifiers* (in short: reference modifiers)

Reference specifying modifiers clarify which referent is referred to, possibly, but not necessarily, by describing a feature of the referent.

The reason for the addition that reference specifying modifiers do not necessarily describe a feature of the referent is the occurrence of reference specifying modifiers like *same, latter, former* etc., which do clarify which referent is meant, but do not give information on the nature of that referent:

(25) ὁ μὲν ταῦτα ἐπειρώτα, ὁ δ' αὖτις **τὸν αὐτόν** σφι **χρησμὸν** ἔφαινε κελεύων ἐκδιδόναι Πακτύην Πέρσῃσι.

This he (= Aristodikos) asked; and the god again gave them exactly **the same answer**, that Paktyes should be surrendered to the Persians.

(Hdt. 1.159.2)

The modifier αὐτόν in example (25) is a reference specifying modifier in that it clarifies which answer Paktyes got (the same answer as before, and not another one, as he had hoped for), but does not give any details about the nature of the referent.[19] Similarly, the participle εἰρημένῳ in example (26) indicates which referent is referred to without describing any feature of this referent:

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7). Because of their exceptional behaviour, the non-articular use of these three modifiers will be discussed in a separate section (section 6.1.3.2).

[18] I use the terms referent and reference modifier despite possible terminological confusion, for Bolinger (1967) introduced the terms referent and reference modification with a completely different meaning. In Bolinger's terminology, referent modifiers modify the referent to which the noun refers (e.g. an old man (i.e. the man is old), the green sweater (i.e. the sweater is green)), whereas reference modifiers give information on the (kind of) noun (e.g. *an old friend* is old 'qua friend', not 'qua man'). Bolinger's distinction between reference and referent modifiers is usually described in terms of an extensional or intensional reading of the modifier.

[19] In the end, a modifier like αὐτός does give information on the nature of the referent, but in a very indirect way. By informing the addressee that *x* is the same as *y*, the addressee can infer the features of *x* from his knowledge about *y*.

(26) ἀπολαβὼν δὲ τὴν τυραννίδα **τρόπῳ τῷ εἰρημένῳ** ὁ Πεισίστρατος κατὰ τὴν ὁμολογίην τὴν πρὸς Μεγακλέα γενομένην γαμέει τοῦ Μεγακλέος τὴν θυγατέρα.

Having got back his sovereignty **in the manner that I have described** (lit. manner the described), Peisistratos married Megakles' daughter according to his agreement with Megakles. (Hdt. 1.61.1)

However, reference specifying modifiers like these that do not give any descriptive information form only a small proportion of the total number of reference specifying modifiers. In most cases, the reference specifying modifier indicates which referent is being referred to by describing a feature of the referent (cf. examples 2, 5, 9, 11, 15, 16 and 17). The 'descriptiveness' of the information provided by the modifier is therefore not a good criterion to distinguish reference specifying modifiers from referent characterising modifiers.[20] The two types of modifiers do differ, however, as to the degree in which the information they provide distinguishes the intended referent from other possible referents. In fact, referent characterising and reference specifying modifiers represent the two different functions of NPs (viz. giving a description of a referent indicating its properties on the one hand, and using this description to refer to some discourse entity on the other):[21] while referent characterising modifiers contribute to the description of the referent, reference specifying modifiers ensure the reference works out well.[22]

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[20] The fact that referent characterising and reference specifying modifiers do not necessarily differ in the degree of descriptiveness of the information they provide restrained me from using the Functional Discourse Grammar (FDG) terms ascriptive and referential subacts for the difference between the two types of modifiers. According to the theory of FDG, every Communicated Content contains one or more subacts, which may either evoke a property or relation (ascriptive subact) or a referent (referential subacts). An NP, which is usually a referential subact itself, may contain various ascriptive and referential (sub)subacts; *a beautiful girl*, for instance, contains two ascriptive subacts (viz. beautiful and girl), *John's car* contains an ascriptive subact (car) and a referential one (John). Although referent characterising modifiers can perfectly be described as ascriptive subacts, as they describe a property of the referent of the NP, reference specifying modifiers are not by definition only referential, as they usually indicate which referent is being referred to by describing a feature of the referent.

[21] For the function of the NP see Chapter 2, section 2.3.1.

[22] This interpretation of the presence or absence of the article before a modifier is supported by the position of the 'embryonic' article in NPs in Homer. Devine and Stephens (2000: 238) note that in Homeric Greek NPs consisting of a noun and adjectival modifier, the article, which occurs only once per NP (if it occurs at all), occurs before the adjective if the modifier is restrictive (cf. *Il.* 13.794 ἠοῖ τῇ προτέρῃ 'the morning before (lit. morning the before)', *Od.* 7.326 ἤματι τῷ αὐτῷ 'that same day (lit. day the same)'), and before the noun if the modifier is descriptive (cf. *Il.* 21.317 τὰ τεύχεα καλά 'that

The difference between reference specifying and referent characterising modifiers as described in the preceding sections may seem to resemble the difference between restrictive and non-restrictive modifiers.[23] For a number of reasons, however, they cannot be equated. First of all, the difference between restrictive and non-restrictive modifiers is a semantic distinction, whereas the difference between reference specifying and referent characterising modifiers is pragmatic. As their name suggests, the function of restrictive modifiers is to restrict the set of potential referents. The difference with non-restrictive modifiers, which do not impose a restriction on the set of potential referents, can be most clearly demonstrated with relative clauses, although the distinction is also relevant for other modifiers:

(27a)   The potatoes, which were stored in the cellar, were rotten.

(27b)   The potatoes that were stored in the cellar were rotten.

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beautiful armour (lit. the armour beautiful)', *Od*. 11.492 τοῦ παιδὸς ἀγαυοῦ 'that noble child' (lit. the child noble)'). Although I prefer the terms reference specifying/referent characterising to restrictive/descriptive modifier (see below), these very early examples of article usage support my interpretation of articular vs. non-articular modifiers.

[23] The contrast between referent characterising and reference specifying modifiers also resembles Rijkhoff's distinction between descriptive (i.e. classifying, qualifying, quantifying and localising) modifiers on the one hand and discourse modifiers on the other (Rijkhoff 2002: 100 ff.; for a short overview of Rijkhoff's NP model, see Chapter 2, section 2.3.1). For two reasons, however, I prefer the terms referent and reference modifier to descriptive and discourse modifier. In the first place, I think the definition of a discourse modifier as formulated by Rijkhoff is too restricted. Rijkhoff (2002: 229–231) defines discourse modifiers as 'modifiers that provide the addressee with information on the referent as a discourse entity. They typically (further) specify when or where a referent was introduced in the previous (spoken or written) discourse'. In Rijkhoff's view, the category of discourse modifiers is confined to modifiers like *the former/the latter* and *the same/the other* providing explicit information on the location of the referent in the actual discourse. Contrastive modifiers like *red* in the example 'No, I want the *red* apple', on the other hand, in his view, belong to the category of localising modifiers (Rijkhoff 2002: 173). As argued in Chapter 4, section 4.2.1, however, this view is problematic, as these modifiers do not say anything about the location of the referent in the world of the discourse (e.g. whether it lies in the fruit bowl on the table, or in the bag in the kitchen). They give expression to a feature of the referent (in this case its colour), by which it can be distinguished from other similar entities. The plausible solution to extend Rijkhoff's category of discourse modifiers so as to accommodate contrastive modifiers also, would not resolve my second objection to Rijkhoff's distinction between descriptive and discourse modifiers. In Rijkhoff's model, a modifier is either a descriptive modifier providing information on the kind, quality, quantity or location of the referent, or a discourse modifier providing information on the referent as a discourse entity. As I have argued in Chapter 4, section 4.2.1 and as can for instance be seen in examples (2), (4), (5), (9), (11), (14) and (15) however, a modifier may do both: a modifier may clarify to which referent the speaker refers by giving information on a distinguishing class, quality, quantity or location.

In example (27a) the relative clause does not impose any restrictions on the set of potatoes: all objects in the set share the property of being stored in the cellar. In (27b), by contrast, the relative clause does restrict the number of objects the NP refers to: not all potatoes, but only the subset that was stored in the cellar was rotten. This semantic distinction between reference to the complete and to the not-complete subset of possible referents differs widely from the pragmatic distinction between reference specifying and referent characterising modifiers. Reference specifying modifiers do not differ from referent characterising modifiers in whether they restrict the set of possible referents (referent characterising modifiers can also restrict the set of possible referents, cf. examples 1, 10 and 21), but in whether they restrict the set of *contextually relevant* referents.[24] Whereas referent characterising modifiers are either not restrictive at all (cf. example 8: τὸν ζωστῆρα ἔχοντα ἐπ᾽ ἄκρης τῆς συμβολῆς φιάλην χρυσέην), or impose a 'semantic' restriction on the set of possible referents (cf. example 1: τῆς φροντίδος περὶ τῆς βασιληίης), reference specifying modifiers separate the intended referent from other contextually relevant referents (cf. example 22: ὁ τοῦ ναυτικοῦ στρατοῦ στρατηγός 'the general of the navy (and not the one of the land army)').

The second reason why the difference between reference specifying and referent characterising modifiers cannot be described in terms of restrictiveness is that while restrictive modifiers only narrow down the set of possible referents, reference specifying modifiers have to meet the additional condition that the restriction they impose on the set of possible referents is such that the addressee can find out which of the potential referents is referred to. This difference between restrictive modifiers and reference specifying modifiers explains why the distinction between restrictive and non-restrictive modifiers is relevant for both definite and indefinite NPs, whereas the distinction between referent characterising and reference specifying modifiers is only useful for definite NPs. As the referents of indefinite NPs are inherently unidentifiable, indefinite NPs never contain a reference specifying modifier that clarifies which referent is referred to. They may, however, contain a restrictive modifier that restricts the set of possible referents. In example (28), for instance, the adjectival modifier restricts the set of possible referents: the tributary

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[24] Although the final set (i.e. the set after the restriction) is, of course, always contextually relevant, the various alternatives that are excluded are usually not relevant in the case of a restrictive modifier. In example (1), for instance, the type of thoughts excluded by the restrictive modifier περὶ τῆς βασιληίης are definitely not contextually relevant.

cities are not requested to make all kinds of boats, but only ships of war and ships for the transport of horses:

(28)   (. . .), ἄλλους δὲ κήρυκας διέπεμπε ἐς τὰς ἑωυτοῦ δασμοφόρους πόλις τὰς παραθαλασσίους, κελεύων **νέας** τε **μακρὰς** καὶ **ἱππαγωγὰ πλοῖα** ποιέεσθαι.

Other heralds he sent to his own tributary cities of the coast, commanding that **ships of war** (lit. ships long) and **transports for horses** (lit. cavalry transport ships) be built.   (Hdt. 6.48.2)[25]

In the following sections, I will argue in more detail and on the basis of many more examples that the distinction between referent characterising and reference specifying modifiers (and not between restrictive and nonrestrictive ones) is of crucial importance for an adequate description of the structure of the Ancient Greek NP, as the difference in function between referent characterising and reference specifying modifiers is reflected in the syntax of the actual linguistic expression. Whereas a reference specifying modifier is always preceded by an article, a referent characterising modifier is not.[26]

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[25] For the chiastic ordering of the NPs in this example, see Chapter 3, section 3.3.

[26] The difference between referent chararcterisation and reference specification can also influence the articulation of modifiers in Modern Greek and Maltese. At least, that seems to be the case on the basis of Sutcliffe's (1936) and Kolliakou's (2004) description of the articulation of Maltese and Modern Greek modifiers respectively. Sutcliff states that 'an attributive adjective in agreement with a noun which is accompanied by the definite article itself takes the article only if the article is used with the noun to specify a particular object, and moreover, the article helps to identify the object named. [. . .] On the other hand, the article does not accompany the adjective if this is merely descriptive and does not help to distinguish the object named from others of its kind' (Sutcliffe 1936: 20–21). Fabri's (1993: 38–56) description of the articulation of Maltese modifiers also suggests a similarity with the Ancient Greek situation. Although he only defines the presence of the article in terms of contrastiveness/ restrictiveness ('ein +df Adjektif . . . deutet darauf hin, dass es im Kontext mehr als ein Individuum als möglichen Referenten für die sortale Bedingung des Kopfnomens gibt' Fabri 1993: 47), his explanation of his example (21c) in which an articular modifier is used despite the absence of any contrast, suggests that it is not contrastiveness/restrictiveness that is the distinguishing characteristic of articular modifiers in Maltese, but reference specification, like in Ancient Greek. Although Kolliakou does not provide any examples that cast doubt on her hypothesis that articular modifiers in Modern Greek narrow down the set of referents evoked by the noun, i.e. are restrictive (Kolliakou 2004: 270), the parallels with Maltese and Ancient Greek raise the question of whether the articulation of the modifiers in Modern Greek is not also determined by the function of the modifier rather than its restrictiveness.

6.1.2. *Reference specification*

This section focuses on the use and function of articular modifiers, which were argued in the previous section to specify the reference. The reason for discussing reference specification before the more basic or 'proto-typical' referent characterisation is that reference specification occurs far more frequently in my corpus. Moreover, the somewhat complex situation with referent characterising modifiers is easier to understand against the background of the more uniformly behaving reference specifying modifiers. Table 1 presents an overview of the frequency of the various modifiers in their use as a reference specifying modifier:

modifier	prenominal		postnominal		total
adjective (A)[27]	669	(78%)	187	(22%)	856
adverb (Adv)	48	(91%)	5	(9%)	53
genitive (GEN)	461	(79%)	119	(21%)	580
numeral (num)	86	(87%)	12	(13%)	98
participle (PTC)	216	(53%)	188	(47%)	404
prepositional phrase (PP)	143	(65%)	78	(35%)	221
possessive (pos)	220	(59%)	154	(41%)	374
relative clause (rel)[28]	50	(21%)	188	(79%)	238
total	1893	(67%)	931	(33%)	2824

Table 1. The number of reference specifying modifiers in my corpus

The most remarkable outcome of Table 1 is that the pragmatically marked situation is by far the most frequent one, both for the total of modifiers, and for every single modifier separately (with the exception of relative clauses).[29] In my view, the explanation for this observation—which has often led to the mistaken belief that preposing of the modifier is to be the neutral situation[30]—has to be found in the function of a definite NP with a reference specifying modifier in combination with Grice's maxim

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[27] As defended in Chapter 3 footnote 7, I have included αὐτός ('same' or 'self') under the adjectives, for want of a better category.

[28] For relative clauses, it is for the most part impossible to make a definitive distinction between referent characterising and reference specifying modifiers on the basis of the form of the pattern, since relative clauses that function as reference specifying modifiers are not preceded by an article (most probably because the relative can have exactly the same form as the article). For a discussion of this problem, see section 6.1.4.3.

[29] The exceptional behaviour of relative clauses will partially be due to the heaviness principle (see Chapter 3, section 3.3.1).

[30] For my view on the position of the modifier in relation to the noun, see Chapter 3.

of quantity.[31] On the basis of this maxim it is to be expected that the writer/speaker only adds a reference specifying modifier if the addressee needs the information given by the modifier for a correct understanding of the utterance. It is rather awkward to ask someone to hand 'the red pencil', or to inform someone that Joan dropped 'the souvenirs from Mexico' if 'the pencil' or 'the souvenirs' would have been sufficient information for the identification of the intended referent. It will cause no surprise that the need for a reference specifying modifier indicating which referent is referred to is most urgent in cases of an explicit or implicit contrast between several available referents (for instance a red pencil and a green one, or the souvenirs from Mexico and those from Guatemala). As has been argued in the first part of this book, when the contrast between two entities resides in the feature expressed by the modifier, this modifier tends to be expressed before the noun. It is thus only natural that prenominal reference specifying modifiers are more frequent than postnominal ones.[32]

Some concrete examples of reference specifying modifiers (henceforth: reference modifiers) in contexts with a direct contrast between the intended referent and other entities satisfying the description of the noun can be found in (29)–(31):

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[31] Grice's (1975: 45) maxim of quantity says a contribution to a conversation has to be as informative as, but not more informative than required by the purposes of the current exchange. This maxim is one of the three elaborations of Grice's co-operation principle, which states that communication is based on a mutual expectation of co-operation between speaker and addressee. Besides having to offer enough information, a speaker should not intentionally provide false information (the maxim of quality) and should only contribute information relevant for the continuation of the conversation (the maxim of relevance). An addressee, on the other hand, may assume that the information with which (s)he is provided is sufficient, true and relevant for the sake of purpose.

[32] My data warn us thus not to draw conclusions about the markedness of a certain phenomenon on the basis of statistics only, as is generally accepted both in general typological studies and in studies on particular phenomena in particular languages. Both Greenberg's (1966) and Croft's (2003) studies on language universals assume frequency, both textual and cross-linguistic, as one of the criteria to determine markedness. Croft (2003: 111) formulates his text or token frequency criterion as follows: 'if tokens of a typologically marked value of a category occur at a certain frequency in a given text sample, then tokens of the unmarked value will occur at least as frequently in the text sample'. Croft also assumes that the marked value of a grammatical category will be expressed by at least as many morphemes as the unmarked value of that category (Croft 2003: 92). Though that may be true for grammatical categories, my data show that we should not infer that any unmarked utterance is morphologically less complex than the marked one, as NPs with a postnominal reference specifying modifier (aNaX) are more complex than those with a prenominal one (aXN).

(29)   τῶν ἀμφοτέρων λόγον οὐδένα ποιησάμενος τὸ πρόσω ἐπορεύετο, σὺν
        δέ οἱ **ὁ πεζὸς στρατός·** ὁ δὲ ναυτικὸς ἔξω τὸν Ἑλλήσποντον πλέων
        παρὰ γῆν ἐκομίζετο, τὰ ἔμπαλιν πρήσσων τοῦ πεζοῦ.

        But he took no account of either sign and journeyed onward; **the land
        army** was with him. His navy sailed out of the Hellespont and travelled
        along the land, going across from the land army.   (Hdt. 7.58.1)

(30)   καὶ ἢν μὲν τῇ σὺ λέγεις ἀναβαίνῃ βασιλέϊ τὰ πρήγματα, κτεινέσθων **οἱ
        ἐμοὶ παῖδες**, πρὸς δὲ αὐτοῖσι καὶ ἐγώ· ἢν δὲ τῇ ἐγὼ προλέγω, οἱ σοὶ
        ταῦτα πασχόντων, σὺν δέ σφι καὶ σύ, ἢν ἀπονοστήσῃς.

        If the king's fortunes fare as you say, let **my sons** (lit. the my sons) be slain,
        and myself with them; but if it turns out as I foretell, let your sons be so
        treated, and you likewise, if you return.   (Hdt. 7.10ϑ2)

(31)   οὐ μέντοι οἵ γε Σκύθαι ταύτῃ ἐσέβαλον, ἀλλὰ **τὴν κατύπερθε ὁδὸν
        πολλῷ μακροτέρην** ἐκτραπόμενοι, ἐν δεξιῇ ἔχοντες τὸ Καυκάσιον
        ὄρος.

        It was not by this way that the Skythians entered; they turned aside
        and came by **the upper and much longer way** (lit. the upper way much
        longer), keeping the Caucasian Mountains on their right. (Hdt. 1.104.2)

In examples like these, the function of the articular modifier as refer-
ence modifier is most clear: the noun on its own may refer to two iden-
tifiable entities and the modifier clarifies which of these two entities is
the intended one by describing a property that is characteristic for the
intended referent. In example (29), for instance, the noun στρατός on
its own would be ambivalent between the land army and the navy. The
adjective πεζός solves this ambiguity by describing a feature that distin-
guishes the intended referent from the other entity that is identifiable
on the basis of the description of the noun. In a similar way, the articu-
lar possessive in example (30) and the articular adverb in example (31)
guide the addressee in the direction of the intended referent by providing
distinguishing information on its possessor and location respectively.[33]

    Although it may seem in conflict with the word order rules described
in the first part of this book, describing a feature of the referent that
distinguishes this referent from another entity that satisfies the descrip-
tion of the noun can also be done by a postnominal reference modi-
fier. In example (32), for instance, the Pelasgians deliberate on what to
do with the children of their Attic concubines who appear to boss their
legal Pelasgian children. In the sentence in which we are told that the

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[33] The non-articular modifier πολλῷ μακροτέρην in example (31), by contrast, does
not provide distinguishing information.

Pelasgians decide to kill them, an NP with an articular, postnominal prepositional phrase is used to refer to the bastard children, despite the existence of two groups of children in the context:

(32)   μαθόντες δὲ ταῦτα οἱ Πελασγοὶ ἑωυτοῖσι λόγους ἐδίδοσαν· καί σφι βουλευομένοισι δεινόν τι ἐσέδυνε, εἰ δὴ διαγινώσκοιεν σφίσι τε βοη-θέειν οἱ παῖδες πρὸς τῶν κουριδιέων γυναικῶν τοὺς παῖδας καὶ τού-των αὐτίκα ἄρχειν πειρῴατο, τί δὴ ἀνδρωθέντες δῆθεν ποιήσουσι. ἐν-θαῦτα ἔδοξέ σφι κτείνειν **τοὺς παῖδας τοὺς ἐκ τῶν Ἀττικέων γυναι-κῶν**.

When the Pelasgians perceived this, they took counsel together; it trou-bled them much in their deliberations to think what the boys would do when they grew to manhood, if they were resolved to help each other against the sons of the lawful wives and attempted to rule them already. Thereupon the Pelasgians resolved to kill **the sons of the Attic women** (lit. the sons the of the Attic women).   (Hdt. 6.138.3–4)

Like in examples (29)–(31), the articular modifier in example (32) is clearly a reference modifier in that it clarifies which of the two entities that can be identified on the basis of the information of the noun is the intended one. The explanation for the fact that the reference modifier is postnominal instead of prenominal is that from the preceding κτείνειν it is already obvious that the NP will refer to the bastard children. As the modifier is only needed to confirm for the addressee that he has selected the correct referent, it follows instead of precedes the noun.

    Example (33) offers another example of a postnominal reference mod-ifier that confirms for the addressee that he has selected the correct ref-erent on the basis of his contextual information:

(33)   ταῦτα ἔλεγε παρελθὼν ὁ Ἀριστείδης, φάμενος ἐξ Αἰγίνης τε ἥκειν καὶ μόγις διεκπλῶσαι λαθὼν τοὺς ἐπορμέοντας· περιέχεσθαι γὰρ πᾶν τὸ στρατόπεδον τὸ Ἑλληνικὸν **ὑπὸ τῶν νεῶν τῶν Ξέρξεω**·

Aristeides went in and told them, saying that he had come from Aegina and had barely made it past the blockade when he sailed out, since all the Hellenic camp was surrounded **by Xerxes' ships** (lit. by the ships the of Xerxes).   (Hdt. 8.81)

When Aristeides informs his audience that he has had much trouble in passing the blockade, his audience will have inferred that they are sur-rounded by the enemies. Hence, on hearing τῶν νεῶν they will, without any difficulty, identify the ships of the Persians; which the following mod-ifier confirms as being the intended referent.[34]

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    [34] In my view, this example clearly illustrates that although there is always a contrast

In the preceding examples, the noun modified by a reference modifier evoked several identifiable referents and the modifier clarified which of them was the intended one (or confirmed that the addressee selected the intended one). As the following examples show, however, a reference modifier can also be added to a noun that evokes only one identifiable referent. In these cases, the reference modifier just facilitates the identification of the referent, which would be identifiable on the basis of the information provided by the noun only:

(34)   Ἀλυάττης δέ, ὥς οἱ ταῦτα ἐξηγγέλθη, αὐτίκα ἔπεμπε **κήρυκα** ἐς Μίλη-τον βουλόμενος σπονδὰς ποιήσασθαι Θρασυβούλῳ τε καὶ Μιλησίοισι χρόνον ὅσον ἂν τὸν νηὸν οἰκοδομῇ. ὁ μὲν δὴ ἀπόστολος ἐς τὴν Μί-λητον ἦν, Θρασύβουλος δὲ σαφέως προπεπυσμένος πάντα λόγον καὶ εἰδὼς τὰ Ἀλυάττης μέλλοι ποιήσειν, μηχανᾶται τοιάδε· (description of the deceit) ταῦτα δὲ ἐποίεέ τε καὶ προηγόρευε Θρασύβουλος τῶνδε εἵνεκεν, ὅκως ἂν δὴ **ὁ κῆρυξ ὁ Σαρδιηνὸς** ἰδών τε σωρὸν μέγαν σίτου κεχυμένον καὶ τοὺς ἀνθρώπους ἐν εὐπαθείῃσι ἐόντας ἀγγείλῃ Ἀλυ-άττῃ.

Then, when the Delphic reply was brought to Alyattes, he promptly sent **a herald** to Miletos, wanting to make a truce with Thrasyboulos and the Milesians during his rebuilding of the temple. So the envoy went to Miletos. But Thrasyboulos, forewarned of the whole matter, and knowing what Alyattes meant to do, devised the following plan: (...). Thrasyboulos did and ordered this so that when **the herald from Sardis** (lit. the herald the from Sardis) saw a great heap of food piled up, and the citizens enjoying themselves, he would bring word of it to Alyattes.

(Hdt. 1.21.1–1.22.1)

(35)   οἱ δὲ εἶπαν· ὦ βασιλεῦ, οὗτός ἐστι ὅς τοι τὸν πατέρα Δαρεῖον ἐδωρή-σατο **τῇ πλατανίστῳ τῇ χρυσέῃ καὶ τῇ ἀμπέλῳ·**

They (= the Persians) said, 'O king, this is the one who gave your father Dareios **the golden plane-tree and the vine** (lit. the plane-tree the golden and the vine).'   (Hdt. 7.27.2)

In example (34), there is no other identifiable referent that satisfies the description of the noun. Hence, ὁ κῆρυξ ('the herald') alone would provide enough information for the identification of the previously mentioned herald from Sardis. However, because of the switch in perspective from Thrasyboulos to the herald, the addressee needs a more extensive

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between the intended referent and some other entities satisfying the description of the noun in NPs with a reference modifier, the author may, by using a postnominal modifier, choose not to emphasise this contrast.

description than a simple ὁ κῆρυξ ('the herald') to identify the intended referent immediately.[35] So, whereas the modifier does not distinguish the intended referent from other relevant entities, it does help clarify which referent is referred to.[36] Also in example (35), the nouns πλατανίστῳ and ἀμπέλῳ on their own would provide enough information for the identification of the intended plane tree and vine. The only function of the adjective is to signal that the speaker refers to gift-trees rather than real trees and therefore to facilitate the identification of these world-famous presents.[37]

Besides being added to a noun that evokes several referents (as in examples 32 and 33), or to a noun that evokes only one identifiable referent (as in examples 34 and 35), a reference modifier may also be added to a noun that evokes no identifiable referent:

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[35] Although the accessibility of the herald after the description of the deceit of Thrasyboulos is not high enough for a simple ὁ κῆρυξ, it is (apparently) not so low as to require a preposition of the modifier. As was discussed in Chapter 3, section 3.2.2, a modifier may precede the noun if the information it provides is essential for the identification of the referent. One of the examples discussed in that section (example 29) is very similar to this example in that the announcement of a visit of a herald is followed by a small digression on the situation in the city where the herald arrives. That the herald in example (29) of Chapter 3 is picked up again with the aXN pattern while in example (34) of this chapter the aNaX pattern is used will be due to the length of the intervening 'digression'. Because the herald arriving in Miletos is still quite accessible after the relatively short description of Thrasyboulos' deceit, a postnominal modifier confirming that the addressee has identified the correct referent was deemed informative enough. In example (29) of Chapter 3, however, the intervening digression is much more substantial, so that the referent is much less accessible. Incidentally, that I assume the length of the digression to be responsible for the difference between the two examples, does of course not mean that there is a fixed maximum on the number of intervening lines or complexity of information above which the aXN pattern has to be used to pick up a preceding referent.

[36] Given the fact that the information provided by the modifier is a kind of 'extra identification assistance' for the addressee, it is not surprising that the grammars have analysed examples like this as a definite noun followed by an apposition instead of a definite NP with a postnominal modifier. They would have paraphrased the underlined NP in example (34) as 'the herald, I mean the one from Sardis'. Although my view about the function of the reference modifier in examples like (34) is—in the end—not that different from the interpretation of the grammars, I am, however, firmly convinced that postnominal reference modifiers are not appositions, but make up one integrated NP with the preceding noun. My argumentation against an appositional interpretation of postnominal reference modifiers can be found in section 6.1.1.1.

[37] Cf. Macan and How&Wells *ad loc.* The minor significance of the adjective can also be deduced from the fact that the second part of the NP, the vine, is not modified by an adjective.

(36)   σύ νυν, ἢν βούλῃ ἐμοὶ πείθεσθαι, **τῆς περ Ἀστυάγης ἄρχει χώρης**, ταύτης ἁπάσης ἄρξεις.

If, then, you will listen to me, you shall rule all **the country which is now ruled by Astyages** (lit. the exactly Astyages rules country, that in its entirety you will rule).   (Hdt. 1.124.2)

(37)   (= 12) ὁ μὲν ταῦτα ἐπειρώτα, ὁ δ᾽ αὖτις **τὸν αὐτόν** σφι **χρησμὸν** ἔφαινε κελεύων ἐκδιδόναι Πακτύην Πέρσῃσι.

This Aristodikos asked; and the god again gave them **exactly the same answer** (lit. the same answer), that Paktyes should be surrendered to the Persians.   (Hdt. 1.159.2)

(38)   (= 26) ἀπολαβὼν δὲ τὴν τυραννίδα **τρόπῳ τῷ εἰρημένῳ** ὁ Πεισίστρα-τος κατὰ τὴν ὁμολογίην τὴν πρὸς Μεγακλέα γενομένην γαμέει τοῦ Μεγακλέος τὴν θυγατέρα.

Having got back his sovereignty **in the manner that I have described** (lit. manner the described), Peisistratos married Megakles' daughter according to his agreement with Megakles.   (Hdt. 1.61.1)

In contrast to the nouns in the examples above, the nouns in examples (36)–(38) do not evoke one or more identifiable referents: a simple τῆς χώρης, τὸν χρησμόν or τῷ τρόπῳ would not have given any clue as to which country, oracle or manner was meant. But despite this difference with respect to the nouns, the function of the articular modifiers is the same as above. For although they do not select the intended referent, nor confirm that the addressee has identified the intended referent, they are still reference modifiers clarifying which referent is referred to. The relative in example (36), for instance, stresses that it is the country of Astyages, and none other, that will be ruled by Kyros. Similarly, the adjective in (37) reports that Paktyes got the same answer, and not a different one (as he had hoped for). Although the postnominal reference modifier in example (38) does not set up an equally sharp contrast between the intended referent and other possible referents, it does indicate that it was in the manner described above, and not any differently, that Peisistratos got back his sovereignty.[38]

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[38] As was argued in Chapter 3, the position of the modifier in relation to the noun depends on their saliency. That means that if the author/speaker wants to stress that it is this entity and *none other* that he has it in mind, the reference modifier precedes the noun. If, on the other hand, the contrast between the intended referent and other possible referents is not that sharp, or if the noun is for some reason pragmatically marked, the reference modifier follows the noun.

So, irrespective of the number of identifiable referents that the noun of the NP evokes, an articular modifier specifies the reference in that it clarifies which referent is referred to by distinguishing the intended referent from other entities that fit the description of the noun. For a modifier in a multiple-modifier NP to be a reference modifier, it has to be preceded by its own article.[39] Compare the following examples:

(39)   πεντεκαίδεκα δὲ τῶν νεῶν τουτέων ἔτυχόν τε ὕσταται πολλὸν ἐξανα-
       χθεῖσαι καί κως κατεῖδον **τὰς ἐπ᾽ Ἀρτεμισίῳ τῶν Ἑλλήνων νέας·**

       Fifteen of those ships had put to sea a long time after all the rest, and it chanced that they sighted **the Greek ships off Artemisium** (lit. the off Artemisium of the Greeks ships).   (Hdt. 7.194.1)

(40)   (= 18) ἡ δὲ βασιλέος αἵρεσις **ἐς τὴν ὑστέρην τὴν Μαρδονίου ἐπιστρα-
       τηίην** δεκάμηνος ἐγένετο.

       There were ten months between the kings taking of the place and **the later invasion of Mardonios** (lit. the later the of Mardonois invasion).
                                                                    (Hdt. 9.3.2)[40]

(41)   μετὰ δὲ ἑβδόμῳ ἔτεϊ φανέντα αὐτὸν ἐς Προκόννησον ποιῆσαι τὰ
       ἔπεα ταῦτα τὰ νῦν ὑπ᾽ Ἑλλήνων Ἀριμάσπεα καλέεται, ποιήσαντα δὲ
       ἀφανισθῆναι τὸ δεύτερον. (…) τάδε δὲ οἶδα Μεταποντίνοισι τοῖσι
       ἐν Ἰταλίῃ συγκυρήσαντα **μετὰ τὴν ἀφάνισιν τὴν δευτέρην Ἀριστέω**
       ἔτεσι τεσσεράκοντα καὶ διηκοσίοισι, (…).

       But in the seventh year after that, Aristeas appeared at Prokonnesos and made that poem which the Greeks now call the *Arimaspea*, after which he vanished once again. … But this, I know, happened to the Metapontines in Italy, two hundred and forty years after **the second disappearance of Aristeas** (lit. the disappearance the second of Aristeas), (…).
                                                                (Hdt. 4.14.3–15.1)

(42)   ἀνέθηκε δὲ καὶ ἀναθήματα ὁ Ἄμασις ἐς τὴν Ἑλλάδα, τοῦτο μὲν ἐς
       Κυρήνην (…), τοῦτο δὲ τῇ ἐν Λίνδῳ Ἀθηναίῃ δύο τε ἀγάλματα λίθινα
       καὶ θώρηκα λίνεον ἀξιοθέητον, τοῦτο δ᾽ ἐς Σάμον τῇ Ἥρῃ (…). ἐς δὲ
       Λίνδον ξεινίης μὲν οὐδεμιῆς εἵνεκεν, ὅτι δὲ **τὸ ἱρὸν τὸ ἐν Λίνδῳ τὸ τῆς
       Ἀθηναίης** λέγεται τὰς τοῦ Δαναοῦ θυγατέρας ἱδρύσασθαι, (…).

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[39] Coordinated reference modifiers, however, may share an article, cf. Hdt. 5.41.3 (**ἡ δὲ Κλεομένεα τεκοῦσα καὶ δεύτερον ἐπελθοῦσα γυνή**, ἐοῦσα θυγάτηρ Πρινητάδεω τοῦ Δημαρμένου, οὐκέτι ἔτικτε τὸ δεύτερον 'as for the later wife, the mother of Kleomenes and the daughter of Prinetadas son of Demarmenos (lit. as for the wife that give birth to Kleomenes and came in later, being the daughter of Prinetadas the son of Demarmenos), she bore no more children'). Because the modifiers have become—so to speak—one modifying unit (see Chapter 4, section 4.3), they can apparently do with one marker of reference specification.
[40] This example shows (as does example 42) that various reference modifiers can be

> Moreover, Amasis dedicated offerings in Hellas. He gave to Kyrene (...),
> to Athena of Lindos two stone images and a marvellous linen breast-
> plate; and to Hera in Samos (...). What he gave to Lindos was not out of
> friendship for anyone, but because **the temple of Athena in Lindos** (lit.
> the temple the in Lindos the of the Athena) is said to have been founded
> by the daughters of Danaus, (...).   (Hdt. 2.182.1–2)[41]

As was already argued above and is illustrated by these examples, the dif-
ference between referent characterising and reference specifying modi-
fiers does not reside in their position, but in whether they are preceded by
an article. Modifiers that stand between the article and the noun or—in
the case of postnominal modifiers—after the combination noun plus arti-
cle are not by definition reference modifiers. The modifier only specifies
the reference if it is *directly* preceded by an article of its own. In example
(39), the non-articular genitival modifier τῶν Ἑλλήνων 'of the Greeks',
although placed in between the article and noun, does not specify the
reference, but characterises the referent: the Greek ships at Artemisium
are not distinguished from other ships at Artemisium. In example (40),
by contrast, the articular genitive Μαρδονίου 'of Mardonios' does have a
specifying function: Mardonios' expedition against Athens is contrasted
with Xerxes' expedition against Athens. Similarly, the non-articular gen-
itive in (41) does not have a specifying function, as the second disappear-
ance of Aristeas is contrasted with his *own* first disappearance. In exam-
ple (42), by contrast, both articular modifiers have a specifying function,
as they contrast the temple of Athena in Lindos with the temples of other
deities in other cities.[42]

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used to set up one and the same contrast. In this example, both ὑστέρην and Μαρδονίου
are used to set up a contrast between the previous invasion of the King and the later
invasion of Mardonios.

[41]   More examples of multiple-modifier NPs with several pre- or postnominal reference
modifiers can be found at Hdt. 2.10.1 τῶν ὀρέων τῶν εἰρημένων τῶν ὑπὲρ Μ. κειμένων
(lit. the mountains the referred to the above M. lying), 2.145.1 τῶν ὀκτὼ τῶν πρώτων
λεγομένων θεῶν (lit. the eight the earliest said gods), 3.4.3 τἄλλα τὰ Ἀμάσιος πρήγματα
(lit. the other the of Amasis things), 3.68.3 τῇσι ἄλλῃσι πάσῃσι τῇσι τοῦ Καμβύσεω
γυναιξί (lit. the other all the of Kambyses women), 6.46.3 ἐκ τῶν ἐκ Σκαπτῆς Ὕλης
τῶν χρυσέων μετάλλων (lit. from the from Dug Forest the gold mines) and 9.81.1 ὁ
τρίπους ὁ χρύσεος ὁ ἐπὶ τοῦ τρικαρήνου ὄφιος τοῦ χαλκέου ἐπεστεώς (lit. the tripod
the gold the on the three-headed serpent the bronze standing). There are, of course, also
many examples of multiple-modifier NPs with both a prenominal and a postnominal
reference modifier, e.g. Hdt. 2.85.1 τὸ θῆλυ γένος πᾶν τὸ ἐκ τῶν οἰκίων τούτων (lit. the
female sex whole the from the house that) and Hdt. 9.106.3 τῶν μηδισάντων ἐθνέων τῶν
Ἑλληνικῶν (lit. the sides with the Persians nations the Greek). In these cases, however,
there can be no doubt as to the articulation of the modifier.

[42]   That it is not the position of the modifier inside or outside the combination of article

Only 1 % of the articular modifiers invalidates the conclusion that the articulation of the modifier serves to indicate that the modifier does not characterise the referent, but specifies the reference. As Table 2 shows, the number of problematic cases is somewhat higher for genitives and possessives, especially the postnominal ones. Even for these modifiers, however, the number of exceptions is by far too small to cast doubts on the general conclusion:

modifier	prenominal		postnominal		total	
adjective (A)	4	(1 %)	0		4	(0,5 %)
adverb (Adv)	0		0		0	
genitive (GEN)	11	(2 %)	4	(3 %)[43]	15	(3 %)
numeral (num)	1	(1 %)	0		1	(1 %)
participle (PTC)	3	(1 %)	0		3	(1 %)
prepositional phrase (PP)	5	(3 %)	0		5	(2 %)
possessive (pos)	4	(2 %)	6	(4 %)	10	(3 %)
relative clause (rel)	0		0		0	
total	28	(1 %)	10	(1 %)	38	(1 %)

Table 2. Number of articular modifiers
that do not have a specifying function

and noun, but the articulation of the modifier that is decisive, is also evident from the many examples in which a demonstrative occurs in between an articular modifier and the noun, for instance:

(i) οὗτος δὲ ἄλλος λόγος λέγεται περὶ τοῦ Ξέρξεω νόστου, οὐδαμῶς ἔμοιγε πιστός, οὔτε ἄλλως οὔτε **τὸ Περσέων τοῦτο πάθος**.

This is the other tale of Xerxes' return; but I for my part believe neither the story of **the Persians' fate** (lit. the of Persians this fate) nor any other part of it. (Hdt. 8.119)

(ii) καὶ νῦν οἳ ἂν κομίζωνται ἀπὸ τῆσδε τῆς θαλάσσης ἐς Βαβυλῶνα, καταπλέοντες τὸν Εὐφρήτην ποταμὸν τρίς τε **ἐς τὴν αὐτὴν ταύτην κώμην** παραγίνονται καὶ ἐν τρισὶ ἡμέρῃσι.

And now those who travel from this sea to Babylon coming down the river Euphrates come three times **to this same village** (lit. to the same this village) and on three different days. (Hdt. 1.185.2)

As will be discussed in section 6.1.4.1, demonstratives, though genuine reference modifiers, are marked in the same way as referent characterising modifiers. Consequently, in single-modifier NPs they either precede or follow the combination of the article and noun without repetition of the article (demaN or aNdem). The fact that the demonstratives in example (i) and (ii) occur in between an articular modifier and the noun proves that it is not the position of a modifier in between the article and the noun that is decisive for its nature, but its articulation.

[43] In Hdt. 7.139.4 the manuscripts offer another version that is in line with my assumptions about the articulation of the modifier.

Even though the number of examples that do not legitimate the conclusion that articular modifiers specify the reference is very small, a brief impression of the problematic reference modifiers in my corpus could be informative:

(43) Θρασύβουλος δὲ τὸν ἐλθόντα παρὰ τοῦ Περιάνδρου ἐξήγαγε ἔξω τοῦ ἄστεος, ἐσβὰς δὲ ἐς ἄρουραν ἐσπαρμένην ἅμα τε διεξήιε τὸ λήιον ἐπειρωτῶν τε καὶ ἀναποδίζων τὸν κήρυκα **κατὰ τὴν ἀπὸ Κορίνθου ἄπιξιν**, (...).

Thrasyboulos led the man who had come from Periander outside the town, and entered into a sown field. As he walked through the corn, he continually asked why the messenger had come to him from Korinth (lit. **about the from Korinth arrival**), (...). (Hdt. 5.92ζ2)

(44) καὶ τὸν Κῦρον ἀκούσαντα τῶν ἑρμηνέων τὰ Κροῖσος εἶπε, μεταγνόντα τε καὶ ἐννώσαντα ὅτι καὶ αὐτὸς ἄνθρωπος ἐὼν ἄλλον ἄνθρωπον, γενόμενον ἑωυτοῦ εὐδαιμονίη οὐκ ἐλάσσω, ζώοντα πυρὶ διδοίη (...) κελεύειν σβεννύναι τὴν ταχίστην **τὸ καιόμενον πῦρ** καὶ καταβιβάζειν Κροῖσόν τε καὶ τοὺς μετὰ Κροίσου.

When Kyros heard from the interpreters what Kroisos said, he relented and considered that he, a human being, was burning alive another human being, one his equal in good fortune. (...) He ordered that **the blazing fire** be extinguished as quickly as possible, and that Kroisos and those with him be taken down. (Hdt. 1.86.6)

(45) ἀποθανόντος δὲ Δαρείου ἡ βασιληίη ἀνεχώρησε ἐς **τὸν παῖδα τὸν ἐκείνου** Ξέρξην.

After Dareios' death, the royal power descended to **his son** (lit. the son the his) Xerxes. (Hdt. 7.4)

In example (43), the modifier is preceded by an article even though it does not clarify which referent is referred to, as the arrival from Korinth is not distinguished from other possible arrivals. Although the information given by the modifier is salient (Thrasyboulos is curious why the herald came *all the way* from Korinth), it should—according to my theory on the articulation of modifiers—have been placed before the article instead of in between the article and the noun. Probably, the prepositional modifier is placed after the article to prevent an awkward juxtaposition of two prepositions (viz. κατὰ ἀπὸ Κορίνθου τὴν ἄπιξιν). Likewise, the prenominal articular adjective in (44) is highly salient (will Kroisos be saved, now the stake is already on fire?), but does not single out the intended referent and should thus have been placed before the article. In example (45), finally, the articulation of the postnominal possessive is unexpected in that it suggests that Dareios' own son has

to be distinguished from another παῖς that has not been begotten by Dareios. Although there is a grim struggle between the two eldest sons of Dareios, there is, however, no such contrast between sons of Dareios and other παῖδες.

6.1.3. *Referent characterisation*

As argued in section 6.1.1.2, non-articular modifiers characterise the referent. They merely give information on a feature of the referent without the purpose of distinguishing the intended referent from other possible referents of the head noun. At least, that is what most non-articular modifiers do. As can be inferred from the discussion of the traditional view on modifier articulation in section 6.1.1.1 and has been more explicitly mentioned in footnote 17, the general rule that non-articular modifiers describe a feature of the referent does not hold for adjectives, numerals and (some) participles in single-modifier NPs. In contrast to the other modifiers, these modifiers support the traditional view that modifiers that are not preceded by an article have predicative value. This does not imply, however, that adjectives and numerals in single-modifier NPs cannot be used to ascribe a feature to the referent, but that for these modifiers the use of the XaN or aNX pattern is not the appropriate way of doing do so. Section 6.1.3.2 discusses the alternative they use.

Before passing over to the discussion of the use of referent characterising modifiers, a statistical overview of the occurrences of the various modifiers provides some valuable observations:

modifier	prenominal		postnominal		total
adjective (A)	0		3	(100%)	3
adverb (Adv)	—		—		—
genitive (GEN)	235	(36%)	416	(64%)	651
numeral (num)	10	(45%)	12	(55%)	22
participle (PTC)	8	(11%)	66	(89%)	74
possessives (pos)	60	(30%)	142	(70%)	202
prepositional phrase (PP)	10	(50%)	10	(50%)	20
relative clause (rel)	2	(2%)	85	(98%)	87
total	325	(31%)	734	(69%)	1059

Table 3. The number of referent characterising modifiers in my corpus

First of all, the statistical overview shows that not every modifier used as a reference modifier is also frequently used as referent characterising modifier. Non-articular adverbs appear not to occur in my corpus and

adjectives and numerals do so only very rarely. The complete absence of non-articular adverbs must be a consequence of their semantics. Because adverbs, in their function as modifiers, always set up a contrast between the intended referent and other possible entities (e.g. the temple there (vs. the one here), the way back (vs. the way there), the days before (vs. the days after)), they are much better suited as reference specifying modifiers than as referent characterising modifiers. The very low frequency of adjectives and numerals is due to the fact that in single-modifier NPs adjectives and numerals use an alternative construction if they are meant to characterise the referent (see section 6.1.3.2).

Even for those referent characterising modifiers that are attested, their numbers are generally far smaller than their articular counterparts (except for the genitive that is slightly more often non-articular than articular). Grice's maxim of quantity, which prescribes not to provide more information than strictly necessary for the purpose of the communication,[44] could be held responsible for this. Modifiers which clarify to which referent the speaker refers are obviously more necessary for the purpose of communication than modifiers applying information on the characteristics of the referent.

The final remarkable observation on the basis of statistics is that, in contrast to reference modifiers, referent characterising modifiers prefer to follow the noun. The preference for a postposition may again be explained by the different function of the referent characterising modifier. It was argued in section 6.1.2 that the frequent preposition of the reference modifier could be explained if we assume that the need for a reference modifier indicating to which referent the speaker refers is most urgent in the case of an explicit or implicit contrast between several available referents. However, since referent characterising modifiers do not contrast the intended referent with other available referents, it is only natural that the number of pragmatically marked, prenominal referent characterising modifiers is far less high.

6.1.3.1. Referent characterisation in general

This section discusses the use of non-articular modifiers other than adjectives, numerals and participles. I will argue that whereas the information given by an articular modifier always distinguishes the intended

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[44] For Grice's maxim of quantity, see footnote 31.

referent from other possible referents of the head noun, there is no such contrast between intended referent and other entities if the modifier is non-articular:[45]

(46)　τάδε γὰρ οὐκ ἡμεῖς κατεργασάμεθα, ἀλλὰ θεοί τε καὶ ἥρωες, οἵ ἐφθό-
νησαν ἄνδρα ἕνα τῆς τε Ἀσίης καὶ τῆς Εὐρώπης βασιλεῦσαι, ἐόντα
ἀνόσιόν τε καὶ ἀτάσθαλον· ὃς τά τε ἱρὰ καὶ τὰ ἴδια ἐν ὁμοίῳ ἐποιέετο,
ἐμπιπράς τε καὶ καταβάλλων **τῶν θεῶν τὰ ἀγάλματα·**

It is not we who have won this victory, but the gods and the heroes, who deemed Asia and Europe too great a realm for one man to rule, being wicked and impious; one who dealt alike with shrines and private places, burning and overthrowing **the images of the gods** (lit. of the gods the images). (Hdt. 8.109.3)

(47)　τοὺς δὲ ἵππους αὐτῶν εἶναι λασίους ἅπαν τὸ σῶμα καὶ ἐπὶ πέντε
δακτύλους **τὸ βάθος τῶν τριχῶν**, σμικροὺς δὲ καὶ σιμοὺς καὶ ἀδυνά-
τους ἄνδρας φέρειν, ζευγνυμένους δὲ ὑπ᾽ ἅρματα εἶναι ὀξυτάτους·

Their horses are said to be shaggy along their whole body and **the length of their hair** (lit. the depth of the hairs) is five fingers; they are small, blunt-nosed, and unable to bear men on their backs, but very swift when yoked to chariots. (Hdt. 5.9.2)

(48)　(…), τοῦ δαιμονίου παρασκευάζοντος ὅκως πανωλεθρίῃ ἀπολόμενοι
καταφανὲς τοῦτο τοῖσι ἀνθρώποισι ποιήσωσι, ὡς τῶν μεγάλων ἀδικη-
μάτων μεγάλαι εἰσὶ καὶ **αἱ τιμωρίαι παρὰ τῶν θεῶν**.

(…), the divine powers provided that they (= the Trojans), perishing in utter destruction, should make this clear to all mankind: that **retribution from the gods** (lit. the retributions of the gods) for terrible wrongdoing is also terrible. (Hdt. 2.120.5)

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[45] Kühner-Gerth (1904: I 617) assume that in the case of a genitival modifier the difference between the reference pattern (or as they call it: the attributive position) and the referent pattern (or: predicative position) is that in the former 'das Substantiv mit seinem Genitive einen Gegensatz zu einem anderen Gegenstande derselben Gattung bildet, als ὁ Ἀθηναίων δῆμος: das athenische Volk im Gegensatze zu einem anderen Volke', while in the latter 'das Substantiv einen Teil des im Genitive stehenden Substantivs bezeichnet, und dieser Teil einem anderen Teile desselben Substantivs entgegengesetzt wird, als: ὁ δῆμος τῶν Ἀθηναίων: das Volk der Athener und nicht die Vornehmen'. Although I do agree with Kühner-Gerth's description of the function of the 'attributive' genitive, their definition of the function of the 'predicative' genitive is too narrow. Although in examples like (49) the aNGEN pattern does contrast two parts of the same entity, such a partitive reading is not a prerequisite for the use of the aNGEN pattern (cf. examples 47 and 48) and (at least in my corpus) never applies for the GENaN pattern. Furthermore, I do not agree with Kühner-Gerth's observation that in the case of a reference modifier the stress is on the genitive, whereas a referent modifier stresses the head noun. In my view,

In examples (46) and (47), the non-articular genitives,[46] although indispensable for the identification of the referent, are not meant to distinguish the intended referent from other possible referents: the statues of the gods are not contrasted with other statues, nor is the length of the hair contrasted to another length.[47] In the same way, the non-articular prepositional phrase in example (48) does not distinguish revenge of the gods from some other type of revenge. The non-articular modifiers in these examples do thus not indicate which referent is referred to, but simply describe a feature of the statues, length and revenge, by which these nouns happen to become identifiable.

Although referent characterising modifiers (henceforth: referent modifiers) never set up a contrast between the intended referent of the head noun and some other entity that satisfies the description of the noun (e.g. the general of the navy and the one of the infantry), the noun modified by a referent modifier itself may be, and often is, contrastive. In these cases, aN$_1$X is opposed to aN$_2$X:

(49)   (= 10) ὡς δὲ ἤγαγον τὸν Ἆπιν οἱ ἱρέες, ὁ Καμβύσης, οἷα ἐὼν ὑπομαρ-
       γότερος, σπασάμενος τὸ ἐγχειρίδιον, θέλων τύψαι **τὴν γαστέρα τοῦ
       Ἄπιος** παίει τὸν μηρόν·

       When the priests led Apis in, Kambyses—for he was all but mad—drew
       his dagger and, meaning to stab **the belly of the Apis**, stuck the thigh.
                                                                    (Hdt. 3.29.1)

(50)   ὁμοίως γάρ μοι νῦν γε φαίνομαι πεποιηκέναι ὡς εἴ τις πατέρα ἀπο-
       κτείνας **τῶν παίδων αὐτοῦ** φείσαιτο·

       For it seems I have acted like one who slays the father and spares **his
       children** (lit. the children of him).   (Hdt. 1.155.1)

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the pragmatic marking of the modifier depends on its pre- or postposition rather than its articulation. The other grammars either hint at the same direction as Kühner-Gerth (cf. Schwyzer-Debrunner 1950: 26, Goodwin 1879: 209 + 231), or do not discuss the difference in meaning between the attributive and predicative genitive at all (Gildersleeve 1900, Smyth 1956).

[46] Perhaps unnecessarily, it should be emphasised that non-articular does not mean that the modifier itself has to be indefinite, but that the modifier is not preceded by an article that agrees with the head noun in gender, case and number. Thus, the modifiers in τὰ τῶν θεῶν ἀγάλματα (lit. the of the gods statues) and τὸ βάθος τὸ τῶν τριχῶν (lit. the depth the of the hairs) are articular, whereas the ones in τῶν θεῶν τὰ ἀγάλματα (lit. of the gods the statues) and τὸ βάθος τῶν τριχῶν (lit. the depth of the hairs) are not.

[47] Even though the horses have more body parts with a certain length, the author does evidently not intend to contrast the length of their hairs to another length.

In examples (49) and (50), the contrast is between Apis' belly and his thigh and between a father and his children respectively. Although the genitive and possessive are helpful for the identification of the intended referent, they are not reference modifiers, for they do not distinguish Apis' stomach from someone else's stomach or the father's children from someone else's children.[48]

Not only the noun modified by a referent modifier may be contrastive, but also the referent modifier itself. For although a referent modifier never sets up a contrast between the referent of the head noun and other entities fitting the description of the noun, there can be a contrast between the referent of the modifier itself and some other entity. In that case, the difference with reference modifiers is that it is the referent of the modifier on its own (the genitive or possessive) that is opposed to some other entity and not the referent of the NP in its totality. This rather abstract difference can be illuminated by the following three examples:

(51)   μετὰ δὲ οὐ πολλὸν χρόνον τὠυτὸ φρονήσαντες **οἵ** τε **τοῦ Μεγακλέος στασιῶται** καὶ οἱ τοῦ Λυκούργου ἐξελαύνουσί μιν.

But after a short time **the partisans of Megakles** (lit. the of Megakles partisans) and of Lycourgos made common cause and drove him out.
(Hdt. 1.60.1)

(52)   ἐνθαῦτα ἀπικομένους τοὺς ἐναντίους (…) αὐτοῖσι ἐπιχυθέντας νυκτὸς μῦς ἀρουραίους κατὰ μὲν φαγεῖν τοὺς φαρετρεῶνας αὐτῶν, κατὰ δὲ τὰ τόξα, πρὸς δὲ **τῶν ἀσπίδων τὰ ὄχανα·**

Their enemies came there, too, (…) and during the night were overrun by a horde of field mice that gnawed their quivers and bows and **the handles of shields** (lit. of the shields the handles). (Hdt. 2.141.5)

(53)   (…) ἔφευγον ἐς τὰς Θήβας, οὐ τῇ περ οἱ Πέρσαι καὶ **τῶν ἄλλων συμμάχων ὁ πᾶς ὅμιλος** οὔτε διαμαχεσάμενος οὐδενὶ οὔτε τι ἀποδεξάμενος ἔφευγον.

(…) they fled to Thebes, but not by the way which the Persians had fled and **the whole multitude of the allies** (lit. of the other allies the whole multitude) which had fought no fight to the end nor achieved any feat of arms. (Hdt. 9.67)

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[48] Although there are two stomachs available in example (49), viz. the stomach of the Apis and the stomach of Kambyses himself, the modifier is not meant to distinguish between these two possible referents of the noun. As the remainder of the sentence clarifies, Herodotus did not want to communicate that it was the stomach of the Apis (and not that of Kambyses himself) that Kambyses wanted to stab, but that Kambyses wanted to stab the Apis' belly, but struck his thigh.

In example (51), the articular genitival modifier separates the partisans of Megakles from those of Lykourgos. In example (52), by contrast, the contrast is between the shields (the referent of the genitive) and the quivers and bows, not between the handles of the shields, on the one hand, and those of the quivers and bows, on the other, as would have been the case if an articular genitive had been used. Similarly, the non-articular genitive in (53) sets up a contrast between the Persians and the other allies and not between the multitude of the allies and some other multitude. So, whereas a reference modifier is used if the author wants to clarify which referent is referred to by contrasting the intended referent of the *head* noun to other possible referents, a referent modifier is used if it is the referent of the *modifier* that is contrasted to some other entity.

However, this hypothesis seems to be falsified by examples like (54) and (55) where there does seem to be a contrast between the referent of the head noun and some other referent, despite the fact that the modifier is non-articular:

(54)   **τοῦ** μὲν δὴ **πρώτου κύκλου οἱ προμαχεῶνές** εἰσι λευκοί, τοῦ δὲ δευτέρου μέλανες, τρίτου δὲ κύκλου φοινίκεοι, τετάρτου δὲ κυάνεοι, πέμπτου δὲ σανδαράκινοι.

   Of the first circle the battlements are white, of the second black, of the third circle purple, of the fourth blue, and of the fifth orange.

   (Hdt. 1.98.5)[49]

(55)   οἱ δὲ Ἕλληνες, ἐπείτε οὐκ οἷοί τε ἐγίνοντο ἐξελεῖν τὴν Ἄνδρον, τραπόμενοι ἐς Κάρυστον καὶ δηιώσαντες **αὐτῶν τὴν χώρην** ἀπαλλάσσοντο ἐς Σαλαμῖνα.

   As for the Greeks, not being able to take Andros, they went to Karystos. When they had laid waste **their land** (lit. of them the land), they returned to Salamis.   (Hdt. 8.121.1)

Although it might seem that in example (54) the battlements of the first circle are contrasted with those of the second, third etc. and that the land of Karystians in (55) is contrasted with the land of the inhabitants of Andros, I would like to argue that the referents of the modifiers (the circles and the two nations), and not those of the NP in its totality (the battlements of the circles and the land of the nations), are opposed to each other. The difference between these two options can be illustrated more clearly by the following examples about the seating plan of a cinema:

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[49] I cannot explain why τρίτου κύκλου, τετάρτου and πέμπτου lack an article, nor why with τοῦ δευτέρου, τετάρτου and πέμπτου the noun is omitted, while it is expressed with τρίτου.

(56a)   The chairs of the even rows are black, those of the uneven are white.

(56b)   Of the even rows the chairs are black, of the uneven white.

In example (56a) the chairs of the even rows are contrasted with those of the uneven rows. Hence, in my terminology, the genitival modifiers 'of the even rows' and 'of the uneven rows' are reference modifiers, indicating which referent is referred to. In example (56b), by contrast, it is the rows instead of the chairs that are contrasted, even though the contrast between the even and uneven rows is set up *via* the chairs. The modifiers in this example do not set up a contrast between the referents of the head of the NP (the chairs), but between their own referents (the rows). In Greek, a contrast between the referents of the nouns like in (56a) would be expressed by a noun modified by a reference modifier; a contrast between the referents of the modifiers like in example (56b), on the other hand, would be expressed by a noun modified by a referent modifier (cf. examples 54 and 55).

That a reference modifier is used in the case of a contrast between the referent of the head noun and some other entity, while a referent modifier may only set up a contrast between the referent of the modifier and some other entity is supported by the following two examples:

(57)   διεξιούσης δὲ τῆς στρατιῆς Βάδρης μὲν **ὁ τοῦ ναυτικοῦ στρατοῦ στρα-τηγὸς** ἐκέλευε αἱρέειν τὴν πόλιν, Ἄμασις δὲ **ὁ τοῦ πεζοῦ** οὐκ ἔα·

   As the army was passing through, Badres **the admiral of the fleet** (lit. the of the sea army the general) was for taking the city, but Amasis the general of the land army would not consent.   (Hdt. 4.203.2)

(58)   καλέονται δὲ οὐ κροκόδειλοι ἀλλὰ χάμψαι· κροκοδείλους δὲ Ἴωνες ὠνόμασαν, εἰκάζοντες **αὐτῶν τὰ εἴδεα** τοῖσι παρὰ σφίσι γινομένοισι κροκοδείλοισι τοῖσι ἐν τῆσι αἱμασιῆσι.

   They (= the Egyptians) do not call them crocodiles, but khampsae. The Ionians named them crocodiles, comparing **their form** (lit. of them the forms) to the lizards that they have in their walls.   (Hdt. 2.69.3)

In example (57), the repetition of the article before the modifier τοῦ πεζοῦ 'of the infantry' verifies that the *strategos* of the navy is contrasted with ὁ 'the one' of the infantry. In example (58), by contrast, the form of the *khampsae* is not compared to τοῖσι τῶν κροκοδείλων 'those of the crocodiles' but with τοῖσι κροκοδείλοισι 'the crocodiles' themselves. These two examples support the view that a referent modifier, in contrast to a reference modifier, does not contrast the intended referent of the head noun to other entities fitting the description of the noun.

6.1.3.2. Referent characterisation by adjectives, numerals and participles

Although adjectives, numerals and participles are frequently non-articular, I have not discussed these modifiers in the previous section on referent characterisation, because (at least in single-modifier NPs) non-articular adjectives, numerals and (some) participles are not attributive elements modifying the head of the NP, but have predicative force. In contrast to attributive adjectives/numerals/participles, which modify the head of an NP, predicative adjectives/numerals/participles are used either as the predicate after a copular verb or as an adjunct of state, in which case they express the state of the referent during, according to or resulting from the SoA.[50] Assuming that the recognition of predicative adjectives/numerals/participles as the predicate after a copular verb will cause no problems, I will focus on the difference between attributive adjectives/numerals/participles and predicative adjectives/numerals/participles used as adjuncts of state. This difference can be clarified by the following three examples:

(59a)   I like the *black* door better than the white one.

(59b)   I like the *black* door. (*better than the white one)

(59c)   I like the door *black*.

In example (59a), the adjective attributes the property 'black' to the head of the NP (the door). As this property helps the addressee find out which referent is referred to (the black door instead of the white one), in my terminology, this attributive adjective can be called a reference modifier. The adjective in (59b) also attributes the property black to the head of the NP, but in this case without the purpose to clarify which of the referents is meant. In my terminology, this adjective may be called a referent modifier. In example (59c), on the other hand, the adjective *black* no longer characterises the head of the NP, but expresses a momentary state of the door ('I like the door when black'). An adjective like this is said to be an adjunct of state or have predicative value (in the traditional grammars, at least).[51]

   The crucial difference between reference and referent modifiers, on the one hand, and adjuncts of state, on the other, is that the former express a feature of the referent, whereas the latter provide an indication of a

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[50] For this definition of an adjunct of state, see Haeseryn et al. (1997: 1182 ff.)

[51] For a very clear analysis of the use of 'predicative' adjectives as adjuncts of state in English (although he does not name them as such), see Bolinger (1972).

temporary state of the referent. Consequently, adjuncts of state never set up a contrast between two different referents that contrast with respect to some property (e.g. the black door vs. the white one), but contrast the same referent in different states (e.g. the door black and the very same door white). In English (like in other European languages), the use of adjuncts of state is rather limited as they can only express a temporary state of the subject or object of the sentence. In Ancient Greek, however, the use of adjuncts of state is far more extensive, as can be illustrated by the following two examples, where the predicative element is added to an adjunct in the dative case and a noun in a prepositional phrase respectively:

(60)   (= 7) μετὰ δὲ ταῦτα **πεπληρωμένῃσι τῇσι νηυσὶ** παρῆσαν οἱ Ἴωνες, σὺν δέ σφι καὶ Αἰολέων οἵ Λέσβον νέμονται.

The Ionians then came there **with their ships manned** (lit. manned the ships), and with them the Aeolians who dwell in Lesbos.   (Hdt. 6.8.1)

(61)   μαρτύριον δέ οἱ εἶναι ὡς ἀληθέα ταῦτα λέγει, ὅτι **ἐπὶ ψυχρὸν τὸν ἰπνὸν** Περίανδρος τοὺς ἄρτους ἐπέβαλε.

Then, as evidence for him that she spoke the truth, she added that Periander had put his loaves **into a cold oven** (lit. into cold the oven).

(Hdt. 5.92η2)

Although predicative modifiers like πεπληρωμένῃσι in example (60) and ψυχρόν in example (61) fall outside the scope of my research since they do not (only) modify the head of the NP and are therefore no constituents of the NP proper, I will dedicate some words to the difference between the adjectival modifiers πᾶς, αὐτός and the adjectives of place ἄκρος/μέσος/ἔσχατος in their role as reference modifier and in their role as adjuncts of state, before turning to the alternative construction used by adjectives and numerals that characterise the referent.

The difference in meaning between the adjectival modifiers πᾶς, αὐτός and ἄκρος/μέσος/ἔσχατος in 'predicative' and 'attributive' position is discussed by almost all grammars on Ancient Greek.[52] However, they

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[52] With respect to adjectives of place, they all agree that when used in the 'predicative' position they indicate a position (*the top, the middle* or *the last*) within the referent to which the noun refers (e.g. *the middle of the market*), while in the 'attributive' position, they designate the position of the referent itself, e.g. *the middle market* (cf. Gildersleeve 1900: 299 ff., Goodwin 1879: 211, Kühner-Gerth 1904: I 620 ff., Smyth 1956: 295). Although most grammars are less explicit on πᾶς, there seems to be agreement on the fact that it expresses the sum total or the collective when it is in 'attributive' position (*the whole of the city/the entire city*), whereas in the more usual 'predicative' position it simply

cannot explain their observations. Yet, if we assume that the general feature of the articular modifiers is reference specification rather than their attributive position, the different meanings of the adjectival modifiers πᾶς, αὐτός and ἄκρος/μέσος/ἔσχατος in the various patterns can be accounted for easily.

Like other adjectives, the modifiers πᾶς, αὐτός and ἄκρος/μέσος/ἔσχατος when articular (or, as the grammars would say, in 'attributive' position) help the addressee find out which referent is referred to; when non-articular (or in 'predicative' position), on the other hand, they describe a temporary state of the referent.[53] This can be illustrated most convincingly by the adjective πᾶς. While non-articular πᾶς is used as an adjunct of state contrasting the referent in its totality to a part of the same referent (example 62), articular πᾶς clarifies which referent is referred to (example 63):

(62) εἰ γὰρ ἐθελήσομεν ἐσδέξασθαι τοὺς πολεμίους ἐς τὴν χώρην, ὅδε τοι ἐν αὐτῷ κίνδυνος ἔνι. ἑσσωθεὶς μὲν προσαπολλύεις **πᾶσαν τὴν ἀρχήν**.

This is the danger if we agree to let the enemy enter your country: if you lose the battle, you lose **your whole empire** (lit. whole the empire) also.
(Hdt. 1.207.3)

(63) οὔτε γὰρ ἔθνεος ἑκάστου ἐπάξιοι ἦσαν οἱ ἡγεμόνες, ἔν τε ἔθνεϊ ἑκάστῳ ὅσαι περ πόλιες τοσοῦτοι καὶ ἡγεμόνες ἦσαν. εἵποντο δὲ ὡς οὐ στρατηγοὶ ἀλλ' ὥσπερ οἱ ἄλλοι στρατευόμενοι δοῦλοι, ἐπεὶ στρατηγοί γε οἱ **τὸ πᾶν** ἔχοντες **κράτος** καὶ ἄρχοντες τῶν ἐθνέων ἑκάστων, ὅσοι αὐτῶν ἦσαν Πέρσαι, εἰρέαταί μοι.

The leaders of each nation are not worthy of mention, and every city of each nation had a leader of its own. These came not as generals but as slaves, like the rest of the expedition; I have already said who were **the generals of supreme authority** (lit. the generals having the whole authority) and the Persian commanders of each nation.   (Hdt. 7.96.2)

Whereas πᾶσαν in (62) implicitly contrasts the loss of that part of the empire where the fight takes place to the loss of the empire in its totality,

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means *all* (*all the city*) (cf. Gildersleeve 1900: 304 ff., Goodwin 1879: 211–212, Kühner-Gerth 1904: I 631 ff., Smyth 1956: 296). Αὐτός, finally, which receives less attention, is said to mean *the same* in 'attributive' position, while in 'predicative' position its meaning is *self* (cf. Goodwin 1879: 212, Smyth 1956: 296).

[53] I do not agree with Basset (1991: 248) that adjectives like πᾶς and μέσος are any different from other adjectives in 'predicative' position. According to Basset, adjectives like πᾶς and μέσος are specifiers specifying the amount of the entity defined by the noun, while other adjectives in 'predicative' position are elements that describe a mode of being or non-inherent property of the referent. In my view, however, all adjectives in 'predicative' position are adjuncts of state that describe a temporary state of the referent.

πᾶν in (63) helps the addressee find out which referent is referred to, as πᾶν contrasts the supreme power of the *strategoi* to the power of the leaders of the various nations. However small the difference may be in individual examples, the underlying principle is that non-articular πᾶς contrasts the *x* in its totality to the non-complete *x*, whereas πᾶς in its function as a reference modifier always sets up a contrast between the supreme/total *x* and parts of the *x*, or, in plural NPs, between the collective *x*s and its individual members.[54]

Similarly, αὐτός in 'predicative' position with the meaning *self* is used as an adjunct of state (example 64), while in 'attributive' position with the meaning *same* it is a reference modifier that helps the addressee to find out which referent is referred to (example 65):[55]

(64)   οὗτοι γὰρ θεραπεύουσι τοὺς ἂν **αὐτὸς ὁ βασιλεὺς** κελεύσῃ, ἀργυρώ-
       νητοι δὲ οὐκ εἰσί σφι θεράποντες.

       For those whom **the king himself** (lit. self the king) tells to do so serve,
       and they (= the Skythians) do not have servants bought by money.
                                                           (Hdt. 4.72.1)

(65)   (= 12) ὁ μὲν ταῦτα ἐπειρώτα, ὁ δ' αὖτις **τὸν αὐτόν** σφι **χρησμὸν** ἔφαινε
       κελεύων ἐκδιδόναι Πακτύην Πέρσῃσι.

       This he (= Aristodikos) asked; and the god again gave them exactly **the
       same answer**, that Paktyes should be surrendered to the Persians.
                                                           (Hdt. 1.159.2)

Non-articular 'predicative' adjectives of place (e.g. ἡ ἀγόρα μέση), finally, contrast a position within the referent to a different position within the same referent (*the middle of the market* vs. *the periphery of the same market*). When articular, however, the adjectives clarify which referent is referred to by contrasting the first, middle or last *x* to another *x* (e.g. *the middle market* as opposed to *the one on the left*).

In the examples above, the modifiers πᾶς, αὐτός and ἄκρος/μέσος/ ἔσχατος when non-articular did not modify the noun, as would have been expected on the basis of the description of non-articular modifiers in the previous section, but had predicative force. As argued above, a predicative interpretation of the modifier in these positions is not con-

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[54] In singular, Dutch seems to be able to express a similar distinction by *heel de wereld* ('whole the world') vs. *de hele wereld* ('the whole world').

[55] The semantics of αὐτός falls outside the scope of my research on word order in the NP. Yet, irrespective of the exact meaning of αὐτός, the difference between αὐτός as a predicative element and as a reference modifier is apparent.

fined to this group of modifiers, but applies to all adjectives and numerals in single-modifier NPs alike.[56] This does not imply, however, that adjectives and numerals cannot be used as a common referent modifier at all, but that for these modifiers the XaN and aNX patterns are not the appropriate way of expressing referent characterisation.[57] In single-modifier NPs, referent characterisation by adjectives and numerals is only possible if the adjective or numeral is combined with a form of the participle of εἰμί, as in examples (66) and (67):[58]

(66)   ἐνθαῦτα ὡς οὐκ εἶχε φιάλην ὁ ἔσχατος ἑστεὼς αὐτῶν Ψαμμήτιχος, περιελόμενος **τὴν κυνέην ἐοῦσαν χαλκέην** ὑπέσχε τε καὶ ἔσπενδε.

So the last in line, Psammetichos, as he had no vessel, took off **his bronze helmet** (lit. the helmet being bronze) and held it out and poured the libation with it.   (Hdt. 2.151.2)

(67)   μνημόσυνα δὲ ἐλίπετο πρὸ τοῦ Ἡφαιστείου ἀνδριάντας λιθίνους δύο μὲν τριήκοντα πήχεων, ἑωυτόν τε καὶ τὴν γυναῖκα, **τοὺς** δὲ **παῖδας ἐόντας τέσσερας**, εἴκοσι πήχεων ἕκαστον.

To commemorate his name, he set before the temple of Hephaistos two stone statues thirty cubits high, of himself and of his wife, and of **his four sons** (lit. the sons being four), each twenty cubits.   (Hdt. 2.110.1)

By combining the adjective or numeral with a participle of εἰμί, the author makes it clear that the adjective in (66) and the numeral in (67) modify the head of the NP and ascribe a permanent property instead of a temporary state to the referent. Psammetichos in (66) does not take off his helmet bronze, but takes of his bronze helmet; and Sesoostris in (67) does not set up a statue of his children when they are four, but sets up a statue of his four children.

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[56] A numeral with predicative force that occurs regularly in my corpus is ἀμφότερα. Cf. Hdt. 5.86.3 (…) οὐ δυναμένους δὲ ἀνασπάσαι ἐκ τῶν βάθρων αὐτὰ οὕτω δὴ περιβαλομένους σχοινία ἕλκειν, ἐς οὗ ἑλκόμενα **τὰ ἀγάλματα ἀμφότερα** τὠυτὸ ποιῆσαι, ἐμοὶ μὲν οὐ πιστὰ λέγοντες, ἄλλῳ δέ τεῳ· ('… unable to drag them from the bases, they fastened cords on them and dragged them until **the statues both**—this I cannot believe, but another might—did the same thing …').

[57] The use of non-articular participles will be discussed separately below.

[58] In my corpus, this construction occurs 21 times in single-modifier NPs. In all these cases, the combination of adjective or numeral and participle follows the noun. As the following example of a more complex NP shows, however, preposing is in principle possible: τοῦτο μέν, τὸ Ἀρτεμίσιον, ἐκ τοῦ πελάγεος τοῦ Θρηικίου ἐξ εὐρέος συνάγεται **ἐς στεινὸν ἐόντα τὸν πόρον τὸν μεταξὺ νήσου τε Σκιάθου καὶ ἠπείρου Μαγνησίης**· ('The former, Artemisium, is where the wide Thracian sea contracts **until the passage between the island of Skiathos and the mainland of Magnesia is but narrow** (lit. to the passage between … being narrow).' Hdt. 7.176.1).

The addition of a participle of εἰμί may not only be helpful to prevent a predicative interpretation of the adjective or numeral, but may also avoid a wrong segmentation of the sentence (example 68), or prevent the interpretation of the modifier as the predicate of an unexpressed copular verb (example 69). As in the previous examples, the participle has to make clear that the postnominal adjective or numeral belongs to the preceding noun phrase.[59]

(68)   But they harassed and plundered all their neighbours, as a result of which the Tyrrhenians and Karthaginians made common cause against them, and sailed to attack them with sixty ships each.

οἱ δὲ Φωκαιέες πληρώσαντες καὶ αὐτοὶ **τὰ πλοῖα, ἐόντα ἀριθμὸν ἑξήκοντα**, ἀντίαζον ἐς τὸ Σαρδόνιον καλεόμενον πέλαγος.

The Phocaeans also manned **their ships, sixty in number** (lit. the ships being in number sixty), and met the enemy in the sea called Sardonian.
                                                                        (Hdt. 1.166.2)

(69)   **τὰ οὐνόματά σφι ἐόντα ὅμοια τοῖσι σώμασι καὶ τῇ μεγαλοπρεπείῃ** τελευτῶσι πάντα ἐς τὠυτὸ γράμμα, τὸ Δωριέες μὲν σὰν καλέουσι, Ἴωνες δὲ σίγμα.

Their names, which agree with their appearance and their magnificence (lit. the names being similar to . . .), all end in the same letter, that which the Dorians call san, and the Ionians sigma.   (Hdt. 1.139)

In example (68), the participle prevents the numeral from being interpreted as an argument of the verb ἀντίαζον ('they encountered sixty') instead of the modifier of the preceding πλοῖα ('ships'). In example (69), the omission of the participle could have led to the erroneous interpretation of ὅμοια as the predicate adjective ('the names are similar to their bodies').[60]

The use of the participle construction in examples like (68) and (69) explains why modifiers other than adjectives and numerals may also be combined with a participle of εἰμί. Although genitives, possessives and prepositional phrases cannot have predicative value, it may be uncertain whether they modify the preceding noun. In such cases, the addition of

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[59] In the reference patterns (a)NaX, such a strategy is of course unnecessary as the repetition of the article makes clear that the following modifier must be understood as modifying the preceding noun.

[60] Of course, this false interpretation would have been corrected by the remainder of the sentence, which clarifies that an interpretation of the adjective as the predicate is not correct. Such a re-analysis of the sentence is not necessary, however, now the participle ἐόντα is included before the adjective.

a participle of εἰμί may clarify the intention of the author.[61] In example (70), for instance, the participle clarifies that the prepositional phrase is a modifier belonging to the preceding noun rather than a satellite of the verb ('so that they were at Mykale under shelter of their army'):[62]

(70) ἐς δὲ τὴν ἤπειρον ἀπέπλεον, ὅκως ἔωσι **ὑπὸ τὸν πεζὸν στρατὸν τὸν σφέτερον ἐόντα ἐν τῇ Μυκάλῃ**, ὃς κελεύσαντος Ξέρξεω καταλελειμμένος τοῦ ἄλλου στρατοῦ Ἰωνίην ἐφύλασσε.

The reason for their making for the main land was that they might be under the shelter of **their army at Mykale** (lit. the land army the theirs being at the Mykale), which had been left by Xerxes' command behind the rest of his army to hold Ionia.   (Hdt. 9.96.2)

Whereas in single-modifier NPs the addition of a participle to a nonarticular adjective or numeral with a referent function is obligatory, irrespective of the question of whether the context gives rise to a possible wrong interpretation of the modifier,[63] in multiple-modifier NPs a

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[61] Theoretically, a relative clause could also be used to prevent a predicative interpretation of a modifier or to avoid a wrong segmentation of the sentence (e.g. 'the names, which are similar to their appearance' instead of 'the names being similar to their appearance'). In practice, however, such relative clauses do not occur. Apart from a very small number of exceptions, relative clauses with a copular verb only occur if the head noun (the antecedent) has no subject function in the relative clause (e.g. Hdt. 2.65.4 τῷ θεῷ τοῦ ἂν ᾖ τὸ θηρίον 'the god, to whom the animal was dedicated' and Hdt. 6.52.2 τὴν γυναῖκα, τῇ οὔνομα εἶναι Ἀργείην 'the woman, whose name was Argeia (lit. to whom was A. as a name)')).

[62] My interpretation of the participle of εἰμί as indication that the modifier in question has a function at the level of the NP instead of the level of the sentence contravenes the view of Rijksbaron et al. (2000: 103), who—for some reason—consider the constructions with a participle of εἰμί to be appositions. In their view, the construction with a participle of εἰμί indicates that the modifier in question is no fully integrated part of the NP, but a somewhat separate constituent. Yet, in my corpus, I see no indications for a nonintegral interpretation of the modifier. In almost all instances, however, I do see that the absence of the participle would lead to an unwanted interpretation of the modifier as a sentence constituent instead of a noun phrase constituent. Furthermore, these participle constructions may precede the noun (see footnote 58, which is—to be honest—the only example in my corpus), which seems incompatible with an appositional interpretation. A third argument against the interpretation of the constructions with a participle of εἰμί as appositions is that for an appositional interpretation of a modifier, the addition of a participle of εἰμί is not necessary, e.g. Hdt. 1.179.3 **πύλαι** δὲ ἐνεστᾶσι πέριξ τοῦ τείχεος **ἑκατόν, χάλκεαι πᾶσαι** (…) ('there are **a hundred gates** in the circuit of the wall, **all of bronze** (lit. gates hundred, bronze all) …'). On the basis of these three arguments, I assume that the function of the participle construction is to indicate that the modifier with which it is combined is a referent modifier characterising the preceding noun, rather than to ascribe an appositional character to this element.

[63] Cf. Hdt. 2.95.1 πρὸς δὲ **τοὺς κώνωπας ἀφθόνους ἐόντας** τάδε σφί ἐστι μεμηχανημένα ('against **the mosquitos that abound** (lit. against the mosquitos plentiful being), the

participle is not automatically added. The difference between examples (71) and (72) without participle and examples (73) to (75) with participle seems to suggest that in multiple-modifier NPs a participle of εἰμί is only added if the non-articular modifier can be interpreted wrongly:

(71)   τὴν γὰρ Ἀσίην καὶ **τὰ ἐνοικέοντα ἔθνεα βάρβαρα** οἰκηιοῦνται οἱ Πέρσαι, τὴν δὲ Εὐρώπην καὶ τὸ Ἑλληνικὸν ἥγηνται κεχωρίσθαι.

         For the Persians claim Asia and **the barbarian peoples that inhabit it** (lit. the inhabiting peoples barbarian) for their own; Europe and the Greek people they consider to be separate from them.   (Hdt. 1.4.4)

(72)   τῶν δὲ κροκοδείλων φύσις ἐστὶ τοιήδε. **τοὺς χειμεριωτάτους μῆνας τέσσερας** ἐσθίει οὐδέν, (…).

         The nature of crocodiles is as follows. **For the four winter months** (lit. the winter months four), it eats nothing, (…).   (Hdt. 2.68.1)

(73)   πρὸς ὃ δὴ ὦν ἔμοιγε δοκέει οὐδὲ **τὸ Πελασγικὸν ἔθνος, ἐὸν βάρβαρον**, οὐδαμὰ μεγάλως αὐξηθῆναι.

         Besides, I think that **the Pelasgic race, a barbarian nation** (lit. the Pelasgic race being barbarian), never increased much in number.   (Hdt. 1.58)

(74)   When the first king Min had made dry land, he first founded in it the city of Memphis and dug a lake.

         τοῦτο δὲ **τοῦ Ἡφαίστου τὸ ἱρὸν** ἱδρύσασθαι ἐν αὐτῇ, **ἐὸν μέγα τε καὶ ἀξιαπηγητότατον**.

         … and, secondly, he built in it **the great and most noteworthy temple of Hephaistos** (lit. of the Hephaistos the temple being great and most noteworthy).   (Hdt. 2.99.4)

(75)   ὡς δέ οἱ ταῦτα ὠνείδισε, ἀχθέντων τῶν παίδων ἐς ὄψιν, ἠναγκάζετο ὁ Πανιώνιος **τῶν ἑωυτοῦ παίδων, τεσσέρων ἐόντων, τὰ αἰδοῖα** ἀποτάμνειν, (…).

         After these words of reproach, he brought Panionios' sons before him and compelled him to castrate **all four of his own children** (lit. to cut off of the of his own children, being four, the genitals), (…).   (Hdt. 8.106.4)

Whereas the adjectives in examples (71) and (72) can only be interpreted attributively, an attributive interpretation of the adjectives in examples (73)–(75) is not guaranteed without the addition of the participle. In

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following has been devised by them') and Hdt. 6.125.3 ὁ δὲ Ἀλκμέων πρὸς τὴν δωρεήν, ἐοῦσαν τοιαύτην, τοιάδε ἐπιτηδεύσας προσέφερε· ('considering the nature of the gift (lit. the gift being this), Alkmeon planned and employed this device') in which a participle is added although the adjective cannot be interpreted predicatively.

example (73), for instance, the adjective βάρβαρον would most probably have been interpreted as the predicate of an unexpressed copular verb ('I don't think that the Pelasgic stock was barbarian') if the participle had been left out.[64] In example (74), the adjective would have been understood as a predicative element ('he dedicated it marvellously', i.e. it was marvellous at the time of dedication) without the addition of the participle. In example (75), finally, the omission of the participle might have led to an erroneous segmentation of the NP ('of four of his children he cut off the genitals' instead of 'of his four children he cut off the genitals'). Why the addition of a participle of εἰμί is limited to potentially problematic instances in multiple-modifier NPs, while it is compulsory after all adjectives and numerals used as referent modifiers in single-modifier NPs (even if a predicative reading of the adjective or numeral is very unlikely on the basis of the context, cf. example 66 and 67) is not clear.

Although adjectives and numerals in their function as referent modifier are marked differently from adjectives and numerals with predicative value, at least in those instances in which confusion might arise, there is no such formal distinction between participles with a referent characterising function and predicative participles.[65] Non-articular participles may thus be both predicative elements expressing a temporary state of the referent and referent modifiers describing a feature of the referent. Whereas participles of εἰμί and ἔχω tend to be used as referent modifiers (cf. examples 66–70 and 76), other participles seem to prefer expressing a temporary state of the referent (cf. example 77 and 78):

(76)   (= 8) τὸν μὲν δὴ εἰρύσαντα τῶν τόξων τὸ ἕτερον (δύο γὰρ δὴ φορέειν
        τέως Ἡρακλέα) καὶ τὸν ζωστῆρα προδέξαντα παραδοῦναι τὸ τόξον
        τε καὶ **τὸν ζωστῆρα ἔχοντα ἐπ᾽ ἄκρης τῆς συμβολῆς φιάλην χρυσέην**,
        δόντα δὲ ἀπαλλάσσεσθαι, (…).

        So he drew one of his bows (for until then Herakles always carried two),
        and showed her the belt, and gave her the bow and **the belt, that had a
        golden vessel on the end of its clasp** (lit. the belt having a golden vessel
        …); and, having given them, he departed, (…).   (Hdt. 4.10.1)

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[64] Of course, this false interpretation would have been corrected by the remainder of the sentence, which clarifies that an interpretation of the adjective as the predicate is not correct. Such a re-analysis of the sentence is not necessary, however, now the participle ἐόν is included before the adjective.

[65] Obviously, the solution to mark adjectives and numerals unmistakably as a referent modifier (i.e. adding a participle of εἰμί) does not apply to participles.

(77) (= 7) μετὰ δὲ ταῦτα **πεπληρωμένῃσι τῇσι νηυσὶ** παρῆσαν οἱ Ἴωνες, σὺν δέ σφι καὶ Αἰολέων οἳ Λέσβον νέμονται.

The Ionians then came there **with their ships manned** (lit. manned the ships), and with them the Aeolians who dwell in Lesbos.   (Hdt. 6.8.1)

(78) ἡ δὲ ἔχει τοσαύτην δύναμιν ὥστε ἅμα ἑωυτῇ τὴν νηδὺν καὶ **τὰ σπλάγχνα κατατετηκότα** ἐξάγει·

It has such great power as to bring out with it the internal organs and **the intestines all dissolved**.   (Hdt. 2.87.3)

As examples (79) and (80) show, however, the semantics of the participle does not have decisive force. The choice for an interpretation of the participle as either a referent modifier or a predicative element also depends on its (syntactic) context:

(79) ἅτε γὰρ **τοῦ αἰγιαλοῦ ἐόντος οὐ μεγάλου** πρόκροσσαι ὅρμεον τὸ ἐς πόντον καὶ ἐπὶ ὀκτὼ νέας.

Since the beach was not large (lit. the beach being not large), they lay at anchor in rows eight ships deep out into the sea.   (Hdt. 7.188.1)

(80) ποιεῦντες δὲ ταῦτα καὶ διεξιόντες πᾶσαν τὴν Μιλησίην, ὅκως τινὰ ἴδοιεν **ἐν ἀνεστηκυίῃ τῇ χώρῃ** ἀγρὸν εὖ ἐξεργασμένον, ἀπεγράφοντο τὸ οὔνομα τοῦ δεσπότεω τοῦ ἀγροῦ.

They did so and made their way through all the territory of Miletos, and whenever they found any well-tilled field **in the depopulated land** (lit. in depopulated the land), they wrote down the name of the owner of that field.   (Hdt. 5.29.1)

In example (79), ἐόντος is used in a genitive absolute construction, so that this participle, which is usually a referent modifier, has to be interpreted predicatively. In example (80), on the other hand, the context makes clear that the participle expresses a permanent characteristic rather than a temporary state.

Although the number of non-articular participles used as referent modifiers is not high enough (24 examples) to determine which factors exactly determine an interpretation of the participle as referent modifier, they do make clear that a participle in 'predicative' position need not be a predicative element, as is traditionally assumed.[66] A non-articular participle may, just as adjectives and numerals in multiple-modifier NPs, both express a temporary state of the referent and describe a feature of it. These two possibilities have in common that—despite a difference in

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[66] Cf. Gildersleeve (1900: 287 ff.), Kühner-Gerth (1904: I 623 ff.), Smyth (1956: 294).

the duration of the property expressed by the participle—the modifier gives information about the referent instead of specifying the reference. Apparently, in Ancient Greek a formal marking of the difference between reference specifying and referent characterising modifiers was deemed more relevant than marking the difference between attributive modifiers and predicating elements, as in some modern European languages.[67]

6.1.3.3. Conclusion

Traditionally, the positions before or after the combination of article and noun (XaN and aNX) were called predicative, which seemed to imply that the modifiers in these positions have predicative value. As the examples discussed above showed, however, non-articular modifiers may be as attributive as their articular counterparts. Non-articular adjectives and numerals are the only modifiers with a clear predicative function. Even in these cases, however, it can be maintained that although the modifier expresses a temporary state of the referent instead of a permanent characteristic, it still provides information on the referent rather than specifying the reference. The fact that the difference between predicative participles and participles with a referent characterising function is not formally marked also seems to indicate that the difference between a referent modifier and a predicative element is only a minor one and of secondary importance to the difference between referent characterisation and reference specification, which *is* formally marked. On the basis of these considerations, I assume referent characterisation to be the general feature of non-articular modifiers.

For modifiers other than adjectives and numerals, being non-articular means ascribing a feature to the referent without the purpose of clarifying which referent is referred to. Although the modifier may help to identify the referent (and often does), it does not distinguish the intended referent from another entity fitting the description of the noun. This does not imply, however, that non-articular modifiers do not set up any contrast at

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[67] Some modern European languages mark predicating elements formally different from attributive modifiers (e.g. English: *the black door* vs. *the door black*; Dutch: *de zwarte deur* vs. *de deur zwart*). The difference between referent characterisation and reference specification, on the other hand, does not play a significant role in the syntax of NPs in modern European languages. This might be an explanation for the fact that the difference between articular and non-articular modifiers in Ancient Greek is traditionally described by the attributive or predicative value of the modifier instead of the nature of modifier (referent characterising or reference specifying).

all, but whereas reference modifiers set up a contrast between the referent of the NP in its totality and another entity fitting the description of the noun (e.g. 'the king of Sparta' vs. 'the king of Athens'), referent modifiers can only set up a contrast between the referent of the modifier and some other entity (e.g. 'in Sparta the king' vs. 'Athens').

The conclusion that a non-articular modifier is used if the modifier characterises the referent does not apply for 3 % of the examples in my corpus (see Table 4), which is acceptable. Even the relatively high number of problematic prenominal possessives does not seem to cast doubt on the general conclusion that non-articular modifiers characterise the referent.

modifier	prenominal		postnominal		total	
adjective (A)	0		0		0	
adverb (Adv)	—		—		—	
genitive (GEN)	12	(5 %)[68]	10	(2 %)	22	(3 %)
numeral (num)	0		0		0	
participle (PTC)	0		1	(2 %)	1	(1 %)
possessives (pos)	6	(10 %)	4	(3 %)	10	(5 %)
prepositional phrase (PP)	0		0		0	
relative clauses (rel)	0		0		0	
total	18	(6 %)	15	(2 %)	33	(3 %)

Table 4. The number of problematic
referent modifiers in single-modifier NPs

Since I cannot determine general patterns in the problematic cases, I will just give two randomly chosen examples and explain why, in my view, they are problematic:

(81)   δῆλά μοι ὦν γέγονε ὅτι ὕστερον ἐπύθοντο οἱ Ἕλληνες **τούτων τὰ οὐνόματα** ἢ τὰ τῶν ἄλλων θεῶν·

It is therefore plain to me that the Greeks learned the **names of these two gods** (lit. of these the names) later than the names of all the others.

(Hdt. 2.146.2)

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[68] Two of these exceptions can be explained by the fact that the genitive expresses the topic of the sentence. Since topics prefer to be expressed at the very first position of the sentence, the genitives are expressed even before the article although they are actually reference modifiers (aGENN 〉 GENaN). Cf. Hdt. 4.118.1 **ἐπὶ τούτων** ὦν **τῶν καταλε-χθέντων ἐθνέων τοὺς βασιλέας** ἁλισμένους ἀπικόμενοι τῶν Σκυθέων οἱ ἄγγελοι ἔλε-γον ἐκδιδάσκοντες ὡς ὁ Πέρσης, … 'the kings of the aforesaid nations (lit. of these the aforesaid nations the kings) having gathered, then, the Skythian messengers came and laid everything before them, explaining how the Persian, …'

(82) ἀναθήματα δὲ ἀποφυγὼν τὴν πάθην τῶν ὀφθαλμῶν ἄλλα τε ἀνὰ τὰ
ἱρὰ πάντα τὰ λόγιμα ἀνέθηκε καί, τοῦ γε λόγον μάλιστα ἄξιόν ἐστι
ἔχειν, **ἐς τοῦ Ἡλίου τὸ ἱρὸν** ἀξιοθέητα ἀνέθηκε ἔργα, ὀβελοὺς δύο
λιθίνους, ἐξ ἑνὸς ἐόντας ἑκάτερον λίθου, μῆκος μὲν ἑκάτερον πήχεων
ἑκατόν, εὖρος δὲ ὀκτὼ πήχεων.

Most worthy of mention among the many offerings which he dedicated
in all the noteworthy temples for his deliverance from blindness are the
two marvellous stone obelisks which he set up **in the temple of the Sun**
(lit. in of the Sun the temple). Each of these is made of a single block, and
is over one hundred cubits high and eight cubits thick.   (Hdt. 2.111.4)

In example (81) there is a contrast between the names of Dionysos and
Pan and the names of the other gods. Despite this contrast, the modifier
referring to Dionysos and Pan (τούτων) is placed before instead of after
the article. Similarly, the contrast between several shrines in example
(82) would in my view ask for a reference modifier instead of a referent
one.

6.1.4. *A few particular modifiers*

Now the general difference between articular and non-articular modi-
fiers has been analysed, some more detailed attention has to be paid to the
articulation of demonstratives, possessives and relative clauses. Demon-
stratives, first of all, need consideration because their articulation does
not seem to be in correspondence to their function. Possessives and rel-
ative clauses, on the other hand, do not falsify the hypotheses on referent
characterisation and reference specification set up in the previous sec-
tions, but need to be *shown* to conform to the rules. In the case of pos-
sessives, it is argued that their articulation should not, as is traditionally
assumed, be explained by their form, but rather (like other modifiers) by
the distinction between referent characterisation and reference specifica-
tion. For relative clauses, finally, it is argued that the distinction between
referent characterisation and reference specification, although not for-
mally marked, is nonetheless useful.

6.1.4.1. Demonstratives

An attentive reader of this chapter may have noticed that demonstratives
were not discussed in the previous sections, nor included in the tables
that presented the number of reference and referent modifiers in my cor-
pus. Their total absence from the previous sections has two reasons. First

of all, demonstratives differ from other modifiers in that it is impossible to use them as either a reference or a referent modifier dependent on their function in a particular context. Secondly, (or perhaps, as I will argue below, consequently) there is no such relation between the function of a demonstrative and its articulation.

In contrast to other modifiers, which, on the basis of their function in a particular context, can either be classified as a referent modifier describing a feature of the referent or a reference modifier clarifying which referent is the intended one, the nature of demonstratives makes them reference modifiers by definition, as demonstratives serve to distinguish one referent from another on the basis of their relative distance from the speaker. The intended referent and the one(s) it is distinguished from may be present either in the speech situation (in which case the use of the demonstrative is traditionally called deictic and the referents are physically more or less close to the speaker, e.g. example 83) or in discourse itself (in which case the use of the demonstrative is traditionally called anaphoric and the referents are 'cognitively' more or less close to the speaker, e.g. example 84).[69]

(83)   ἐγὼ γὰρ βεβούλευμαι ζεύξας γέφυραν **ἐκ τῆσδε τῆς ἠπείρου** ἐς τὴν ἑτέρην ἤπειρον ἐπὶ Σκύθας στρατεύεσθαι.

        For I have planned to make a bridge **from this continent** (lit. from this the continent) to the other continent and lead an army against the Skythians.   (Hdt. 3.134.4)

(84)   (…) ὁ Μιλήσιος Ἀρισταγόρης (…) ἀπίκετο ἐς τὰς Ἀθήνας· **αὕτη** γὰρ **ἡ πόλις** τῶν λοιπέων ἐδυνάστευε μέγιστον.

        (…) Aristagoras the Milesian (…) came to Athens. For **this city** (lit. this the city) was more powerful than any of the rest.   (Hdt. 5.97.1)

But although the nature of demonstratives seems to suggest that they are reference modifiers, their use and especially articulation present the following two problems to the theory of modifier articulation expounded above. First of all, I argued in the introduction (section 6.1.1.2) that reference modifiers do not occur in indefinite NPs, which was explained by the fact that the function of reference modifiers to clarify which referent

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[69] As has been noted in footnote 69 of Chapter 5, there are some examples of demonstratives in my corpus that are neither deictic, nor anaphoric. Although the small number of examples does not make clear what does legitimate the use of a demonstrative in these cases, it does make clear that the traditional division into deictic and anaphoric reference is not adequate.

is referred to is naturally incompatible with the inherently unidentifiable nature of the referents of indefinite NPs. Demonstratives, however, do occur in indefinite NPs:[70]

(85) ἔθαψαν δὲ Σαῗται πάντας τοὺς **ἐκ νομοῦ τούτου** γενομένους βασιλέας ἔσω ἐν τῷ ἱρῷ.

      The people of Saïs buried within the temple precinct all kings who were natives of **their district** (lit. from district this, i.e. the district of which Saïs was the capital).   (Hdt. 2.169.4)

Does this inconsistency force us to conclude that when demonstratives occur in indefinite NPs they are not reference modifiers indicating which referent is the intended one? Or is the solution rather that reference specification and indefinite NPs are not as incompatible as they seem to be? On the basis of the use of the demonstrative in the indefinite NPs of my corpus I think we have to opt for the second solution. In example (85), for instance, the addressee is, thanks to the information given by the demonstrative, perfectly capable of understanding which district is being referred to. The demonstrative can thus rightfully be named a reference modifier. But although the information of the demonstrative helps to understand which district is being referred to, it does not make the relation between this referent and the knowledge structure to which it has to be related (Egypt) unequivocal. For this reason, the combination noun plus reference modifier is not marked with a definite article. So, even in indefinite NPs demonstratives are reference modifiers, but very special ones: they help the addressee find out which referent is the intended one, but do not necessarily make this referent unequivocally relatable to an available cognitive structure.

The second problem with respect to demonstratives does not concern their use but their articulation. Although demonstratives clarify which referent is referred to, they are not preceded by an article, cf. examples (83), (84), (86) and (87):

(86) οὗτος δὲ ἄλλος λόγος λέγεται περὶ τοῦ Ξέρξεω νόστου, οὐδαμῶς ἔμοιγε πιστός, οὔτε ἄλλως οὔτε **τὸ Περσέων τοῦτο πάθος**.

      This is the other tale of Xerxes' return, not credible to me, neither any other part of it, nor the story of **the Persians' fate** (lit. the of Persians this fate).   (Hdt. 8.119)

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[70] For more examples and a description of the difference between definite and indefinite NPs with a demonstrative, see Chapter 5, section 5.3.3.

(87) καὶ νῦν οἳ ἂν κομίζωνται ἀπὸ τῆσδε τῆς θαλάσσης ἐς Βαβυλῶνα, καταπλέοντες τὸν Εὐφρήτην ποταμὸν τρίς τε **ἐς τὴν αὐτὴν ταύτην κώμην** παραγίνονται καὶ ἐν τρισὶ ἡμέρῃσι.

And now those who travel from this sea to Babylon coming down the river Euphrates come three times **to this same village** (lit. to the same this village) and on three different days.   (Hdt. 1.185.2)

The fact that demonstratives are formally marked as referent instead of reference modifiers seems to be another indication that demonstratives are not real reference modifiers. Yet, apart from the formal marking of demonstratives, I do not see in which respect demonstratives differ from 'real' reference modifiers. A possible explanation for their being non-articular could be that since demonstratives can only be used as a reference modifier, there is no need to mark a demonstrative as either a referent or reference modifier. As the distinction between referent and reference patterns is useless for this modifier, it was perhaps the most economical pattern, i.e. the shortest one, that was preferred.[71] Although I have no evidence for this possible explanation of the inconsistency between the function and articulation of demonstratives (for instance by means of similar phenomena in other languages), it seems more attractive than to assume on purely formal grounds that demonstratives are not reference but referent modifiers.

6.1.4.2. Possessives

What may have become clear from the description of the function of referent and reference modifiers in the previous sections, but nevertheless ought to be formulated explicitly, is that it depends on the function of a possessive whether the author uses a reference or referent pattern, and not on its form/type, as is assumed traditionally. The standard grammars of Ancient Greek observe that while the genitive of the demonstrative (τούτου), reflexive (ἐμαυτοῦ, ἑαυτοῦ) and the possessive pronoun (ἐμός, σός) stand in the 'attributive' position, the genitives of the personal

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[71] Like demonstratives, adverbs are only used as reference modifiers, but they *are* marked as reference modifiers. I have to thank the reviewer of this book for the suggestion that this might have to do with the fact that adverbs do not show agreement, so that they might be construed with the predicate if they are not clearly marked as part of the NP. In the case of adverbs, marking the modifier as part of the NP might thus have felt more important than the economic motivations that may have played a role in the case of demonstratives.

pronouns (e.g. ἡμῶν, αὐτοῦ, μου), especially if they have partitive value, stand in the 'predicative' position.[72]

Although this generally holds true for the NPs with a possessival modifier in my corpus, the exceptions cast doubt on the validity of the observation. The genitive of the demonstrative, for example, stands in the expected attributive position 32 times (cf. example 88), but also occurs 8 times in the predicative position (cf. example 89):

(88)   ἐγώ μοι δοκέω συνιέναι τὸ γεγονὸς τοῦτο, ὦ βασιλεῦ· οἱ μάγοι εἰσί τοι οἱ ἐπανεστεῶτες, τόν τε ἔλιπες μελεδωνὸν τῶν οἰκίων Πατιζείθης καὶ **ὁ τούτου ἀδελφεὸς** Σμέρδις.

I think, sire, that I understand what has been done here; the rebels are the Magi, Patizeithes whom you left steward of your house, and **his brother** (lit. the of him brother) Smerdis.   (Hdt. 3.63.4)

(89)   εἰ μέν νυν καὶ τοῦτο παρ᾽ Αἰγυπτίων μεμαθήκασι οἱ Ἕλληνες, οὐκ ἔχω ἀτρεκέως κρῖναι, ὁρέων καὶ Θρήικας καὶ Σκύθας καὶ Πέρσας καὶ Λυδοὺς καὶ σχεδὸν πάντας τοὺς βαρβάρους ἀποτιμοτέρους τῶν ἄλλων ἡγημένους πολιητέων τοὺς τὰς τέχνας μανθάνοντας καὶ **τοὺς ἐκγόνους τούτων**, (...).

Now whether this, too, the Greeks have learned from the Egyptians, I cannot confidently judge. I know that in Thrace and Skythia and Persia and Lydia and nearly all foreign countries, those who learn trades and **their offspring** (lit. the offspring of them) are held in less esteem than the rest of the people.   (Hdt. 2.167.1)

Exceptions like example (89) can be explained if we assume that the position of the possessive does not depend on its form, but on its function. Just like other modifiers, possessives specifying the reference are placed in the 'attributive' position, while those characterising the referent stand in the 'predicative' position. In example (88), the possessive contrasts the Magus' brother Smerdis with Kambyses' brother Smerdis. Its 'attributive' position is thus perfectly in line with the fact that the possessive specifies the reference. The possessive in (89), by contrast, merely gives information on the offspring without contrasting the offspring to other contextually relevant offspring. This possessive is thus used as a referent modifier and is for this reason placed in the 'predicative' position.

The difference between reference specification and referent characterisation may similarly explain the difference between the position and

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[72] Cf. Goodwin (1879: 209 + 11), Kühner-Gerth (1904: I 619) and Smyth (1956: 297–298).

use of the 'attributive' possessive pronoun (e.g. ἐμός, σός, etc.) and the 'predicative' possessive genitives of the personal pronoun (e.g. μου, σοῦ, etc.):

(90) ἡμῖν γὰρ καταγελᾶτε, ὦ Σκύθαι, ὅτι βακχεύομεν καὶ ἡμέας ὁ θεὸς λαμβάνει· νῦν οὗτος ὁ δαίμων καὶ **τὸν ὑμέτερον βασιλέα** λελάβηκε, καὶ βακχεύει τε καὶ ὑπὸ τοῦ θεοῦ μαίνεται.

You laugh at us, Skythians, because we play the Bacchant and the god possesses us; but now this deity has possessed also **your own king** (lit. the your king), so that he plays the Bacchant and is maddened by the god.   (Hdt. 4.79.4)

(91) ἐπαρθέντες γὰρ κιβδήλοισι μαντηίοισι ἄνδρας ξείνους ἐόντας ἡμῖν τὰ μάλιστα καὶ ἀναδεκομένους ὑποχειρίας παρέξειν τὰς Ἀθήνας, τού-τους ἐκ τῆς πατρίδος ἐξηλάσαμεν, καὶ ἔπειτα ποιήσαντες ταῦτα δή-μῳ ἀχαρίστῳ παρεδώκαμεν τὴν πόλιν, ὃς ἐπείτε δι᾽ ἡμέας ἐλευθερω-θεὶς ἀνέκυψε, ἡμέας μὲν καὶ **τὸν βασιλέα ἡμέων** περιυβρίσας ἐξέβαλε, (...).

For, led astray by lying divinations, we drove from their native land men who were our close friends and promised to make Athens subject to us. Then we handed that city over to a thankless people, which had no sooner lifted up its head in the freedom which we gave it, than it insolently cast out us and **our king** (lit. the king of us), (...).   (Hdt. 5.91.2)

The possessive pronoun in (90) is a reference modifier clarifying which of the two contextually relevant kings is referred to. For that reason it is expressed in between the article and noun. The possessive genitive in (91), by contrast, is a referent modifier just providing information on a property of the referent (viz. its possessor) without distinguishing the intended referent from other possible entities. Its non-articular position after the noun is thus perfectly in line with its function.[73]

By assuming the position of the possessive to depend on its function instead of its form, we may explain some of the preferences signalled by the grammars. The observation that the genitives of the reflexive pro-nouns (e.g. ἐμαυτοῦ, ἑαυτοῦ) have a preference for the reference pattern (the traditional attributive position), for instance, can be explained by the fact that reflexives tend to set up a contrast between the intended referent and another entity that does not belong to the subject of the SoA (cf. the difference in acceptability of the examples 92a–d):

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[73] The fact that possessive genitives do not distinguish the intended referent from other contextually relevant entities explains why they are often felt to give less prominent expression to the possessory relation than possessive pronouns that do set up such a distinction.

(92a)   He did not paint his own house, but mine.

(92b)   ?He did not paint his house, but mine.

(92c)   ?He did not paint his own house, but his garden fence.

(92d)   He did not paint his house, but his garden fence.

The preference of reflexive pronouns for the 'attributive position' can thus be perfectly explained by the fact that they tend to be reference modifiers distinguishing the intended referent from similar objects of another possessor. So, there is no direct relation between the type of the possessive and its position in the NP, as the grammars have us believe, but rather between the function of the possessive and its position, although some types of possessives tend to have the same function, and therefore tend to be placed in the same position.[74]

6.1.4.3. Relative clauses

The final modifier that deserves consideration is the relative clause. For this modifier, there is no formal difference between the reference patterns aXN (relN) and aNaX (aNrel), on the one hand, and the referent patterns XaN (relN) and aNX (aNrel), on the other.[75] This is due to the fact that a relative clause that functions as a reference modifier is—in contrast to other modifiers—not preceded by an article.[76] The article is probably left

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[74] Although I cannot explain the author's choice for a referent or reference pattern in 9 % of the cases in which a definite noun is modified by a possessive, I am inclined to accept this relatively high number of exceptions more readily than the far smaller number of exceptions to the traditional view that the position of the modifier is determined by its form (3 %). The reason for my higher tolerance for exceptional cases to the hypothesis that the position of the possessive depends on its function is that erroneous cases are hardly imaginable if the choice for a particular pattern depends on the form of the possessive, especially in a written text (just as it is very implausible that an Englishman would write 'the of his bike' instead of 'his bike'). However, since the difference between reference specification and referent characterisation, although fully exploited in Ancient Greek, is rather abstract, I can imagine that a language user selects the 'wrong' pattern if the choice for a particular pattern depends on the function of the possessive.

[75] The Nrel pattern, by contrast, is unmistakably a reference pattern, for there is no referent pattern that lacks a first article. Cf. Hdt. 6.125.3 ἐνδὺς κιθῶνα μέγαν καὶ κόλπον βαθὺν καταλιπόμενος τοῦ κιθῶνος, **κοθόρνους τοὺς εὕρισκε εὐρυτάτους ἐόντας** ὑποδησάμενος, ἤιε ἐς τὸν θησαυρὸν ἐς τόν οἱ κατηγέοντο ('he donned a wide tunic, leaving a deep fold in it, and put on **the most spacious boots that he could find** (lit. boots that he found most spacious being), then went into the treasury to which they led him').

[76] For the Ionic dialect, it can of course not be determined whether it is the article or the relative that is left out, as the two are identical in form. Comparable constructions

out to prevent the somewhat awkward juxtaposition of the article and relative which, dependent on the function of the relative in the relative clause, can be identical in form (*τὴν τὴν ἔχεις γυναῖκα or *τὰς στήλας τὰς τὰς ἵστα).[77]

Although most relative clauses cannot be formally marked as either a reference or referent modifier, the distinction between these two types of modification is still useful. In the first place, because the modifier position of the Nrel pattern (= NaX) can only be occupied by reference modifiers (see the example in note 75), and secondly, because the distinction between reference specification and referent characterisation, although not formally marked, helps us understand the two different functions a relative clause may have. The formally indistinguishable relative clauses in (93) and (94), for instance, serve two different goals:

(93)   (…) ἐβουλεύοντο ἰθυμαχίην μὲν μηδεμίαν ποιέεσθαι ἐκ τοῦ ἐμφανέ-
        ος, (…) ὑπεξιόντες δὲ καὶ ὑπεξελαύνοντες **τὰ φρέατα τὰ παρεξίοιεν**
        αὐτοὶ καὶ τὰς κρήνας συγχοῦν, τὴν ποίην τε ἐκ τῆς γῆς ἐκτρίβειν, διχοῦ
        σφέας διελόντες.

        (…) they (= the Skythians) determined not to meet their enemy in the
        open field, (…) but rather to fall back driving off their herds, choking
        the wells and springs **on their way** (lit. the wells that they passed by and
        the springs) and destroying the grass from the earth; and they divided
        themselves into two companies.   (Hdt. 4.120.1)

(94)   **τὸ** δὲ δὴ **λήδανον, τὸ καλέουσι Ἀράβιοι λάδανον**, ἔτι τούτου θωμα-
        σιώτερον γίνεται.

        But **ledanon, which the Arabians call ladanon**, (lit. the ledanon, which
        the Arabians call ladanon) is produced yet more strangely than this.
                                                                    (Hdt. 3.112)

Whereas the relative clause in example (93) clarifies which referent is referred to by implicitly contrasting the wells the Skythians pass with

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in the Attic dialect, however, which does have different forms for articles and relatives, make clear that it is the article that is left out.

[77] I do not see what the explanation is for the absence of the article in the XaN pattern with a relative clause. Although we would expect a relaN pattern (e.g. τὴν ἔχεις τὴν γυναῖκα, lit. which you have the woman; the first 'article' being in fact a relative), we get a relN pattern (e.g. τὴν ἔχεις γυναῖκα, lit. which you have woman) without an article before the noun. In these cases, the absence of the article cannot, as in the cases above, be explained by the awkward juxtaposition of the article and relative. As a consequence of the inexplicable drop of the article in the relaN pattern, Ancient Greek cannot mark the difference between relaN (definite) and relN (indefinite). τὴν ἔχεις γυναῖκα could therefore either mean 'the woman you have' or 'a woman you have'. The latter option, however, does not occur in my corpus.

other possible wells, the relative clause in example (94) merely gives some additional information on a property of the previously mentioned ledanon without contrasting the ledanon the Arabians call ladanon with some other type of ledanon.[78] So, despite the fact that the formal differences between the reference and referent pattern are neutralised for the majority of the NPs modified by a relative clause, the distinction between referent characterisation and reference specification is still useful for these modifiers.

6.2. *The articulation of the noun*

In the introduction of this chapter, I argued that the articulation of modifiers had to be discussed before the articulation of the noun, because the latter was partially dependent on the former. Now the difference between articular and non-articular modifiers has been analysed, it is time to focus on the noun itself and to answer the question of under which circumstances the noun of a definite NP receives an article.

For NPs with prenominal modifiers, this question can be answered easily, as in these cases the articulation of the noun is directly influenced by the articulation of the preceding modifier(s). The noun lacks an article if a preceding modifier is articular, while the noun has an article if the preceding modifier is not:[79]

(95)   μετὰ δὲ ταῦτα Κύρου τε καὶ **Περσέων τοῦ καθαροῦ στρατοῦ** ἀπελά-
         σαντος ὀπίσω ἐπὶ τὸν Ἀράξην, λειφθέντος δὲ τοῦ ἀχρηίου, (...).

         Kyros and **the sound portion of the Persian army** (lit. of Persians the
         sound army) marched back to the Araxes, leaving behind those that were
         useless, (...).   (Hdt. 1.211.2)

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[78] Traditionally, the distinction between the relative clause in (93) and (94) is described in terms of restrictiveness or identifiability: the relative clause in (93) is called restrictive or determinative and the one in (94) non-restrictive or digressive. As I argued in the introduction of this chapter, however, the contrast between reference specification and referent characterisation is crucial for the choice of a word order pattern in the Ancient Greek NP, rather than the question of whether the modifier restricts the reference or whether it is essential for the identifiability of the referent. Because the formal distinction between referent characterisation and reference specification is less explicit in the case of relative clauses, it is difficult to prove that also in the case of these modifiers it is the type of modification instead of the restrictiveness or identifiability of the modifier that is essential. In the absence of any evidence to the contrary, however, I assume that modification by a relative clause functions similarly to modification by other kinds of modifiers.

[79] For an explanation of this observation, see section 6.2.2.

(96) ὁ δὲ Αἰάκης (. . .) παῖς μὲν ἦν Συλοσῶντος τοῦ Αἰάκεος, τύραννος δὲ ἐὼν Σάμου ὑπὸ τοῦ Μιλησίου Ἀρισταγόρεω ἀπεστέρητο τὴν ἀρχὴν κατά περ **οἱ ἄλλοι τῆς Ἰωνίης τύραννοι**.

This Aiakes (. . .) was the son of Syloson son of Aiakes, and had been tyrant of Samos until he was deposed from his rule by Aristagoras of Miletos, just like **the other Ionian tyrants** (lit. the other of the Ionia tyrants). (Hdt. 6.13.2)

(97) ταῦτα μὲν **Αἰγυπτίων οἱ ἱρέες** ἔλεγον, (. . .).

The Egyptians' priests (lit. of Egyptians the priests) said this, (. . .). (Hdt. 2.120.1)

(98) συνήνεικε ὦν οὕτω ὥστε **Ἰώνων** τε **τοὺς στρατηγοὺς** μὴ ἀπολέσθαι Φοινίκων τε τοὺς διαβάλλοντας λαβεῖν τοιόνδε μισθόν·

It turned out that **the Ionian generals** (lit. of Ionians the generals) were not put to death, and those Phoenikians who slandered them were rewarded as I will show. (Hdt. 8.90.1)

The articulation of the noun in NPs with postnominal, or pre- and postnominal, modifiers, however, is much harder to account for. In these cases, the articulation of the modifier is not the only influential factor, as examples (99)–(101) show:

(99) ἀναβαίνοντες γὰρ ἐπὶ τοὺς προμαχεῶνας τοῦ τείχεος οἱ Βαβυλώνιοι κατωρχέοντο καὶ κατέσκωπτον Δαρεῖον καὶ **τὴν στρατιὴν αὐτοῦ**, (. . .).

The Babylonians came up on to the ramparts of the wall and taunted Dareios and **his army** (lit. the army of his) with gesture and word, (. . .). (Hdt. 3.151.1)

(100) εὑρίσκω δὲ ὧδε ἂν γινόμενα ταῦτα, εἰ λάβοις τὴν ἐμὴν σκευὴν πᾶσαν καὶ ἐνδὺς μετὰ τοῦτο ἵζοιο ἐς τὸν ἐμὸν θρόνον καὶ ἔπειτα **ἐν κοίτῃ τῇ ἐμῇ** κατυπνώσειας.

I believe that this is most likely to happen, if you take all my apparel and sit wearing it upon my throne, and then lie down to sleep **in my bed** (lit. in bed the mine). (Hdt. 7.15.3)[80]

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[80] The NaX pattern in this example is preceded by two aXN patterns. The reason why the possessive in these two NPs is prenominal is that the possessive of these NPs is (implicitly) contrastive: Artabanos has to sit on Xerxes' throne in Xerxes' apparel instead of on this own seat in his own apparel. Although there is still a contrast between Xerxes' bed and Artabanos' own bed in the last NP, the contrast between Xerxes' throne (on which Artabanos has to seat himself) and Xerxes' bed (on which Artabanos has to lie down to sleep) was apparently felt to be more prominent than that between the possessives, so that the noun in the last NP was placed before the possessive.

(101) ἐν δὲ Πλαταιῇσι οἱ Πέρσαι, ὡς ἐτράποντο ὑπὸ τῶν Λακεδαιμονίων, ἔφευγον οὐδένα κόσμον **ἐς τὸ στρατόπεδον τὸ ἑωυτῶν** καὶ ἐς τὸ τεῖχος τὸ ξύλινον τὸ ἐποιήσαντο ἐν μοίρῃ τῇ Θηβαΐδι.

> At Plataia, however, the Persians, routed by the Lakedaimonians, fled in disorder **to their own camp** (lit. to the camp the of themselves) and inside the wooden walls which they had made in the territory of Thebes.
>
> (Hdt. 9.65.1)

Although in examples (99) and (100) the difference in articulation of the noun may be explained by a difference in articulation of the modifier, this explanation is clearly not adequate to account for the difference between examples (100) and (101). Although both nouns are followed by an articular modifier, one of them is articular, whereas the other is not. Apparently, there is another factor that influences the articulation of the noun. In section 6.2.1, the nature of this factor will be examined by analysing the difference between the aNaX and NaX pattern. Section 6.2.2, subsequently, will provide an overview of the rules for the articulation of the noun plus a possible explanation for these rules.

6.2.1. *The aNaX vs. the NaX pattern*[81]

Examples (100) and (101) above showed that two otherwise exactly identical NPs can differ in the presence or absence of an article before the noun. Clearly, this difference is not limited to the aNaX and NaX patterns, but can also occur in more complex patterns:

(102a) ὁ δὲ ὡς παρέλαβε, αὐτὰ ταῦτα ὑπονοέων **τὴν στρατιὴν τὴν τῶν συμμάχων ἅπασαν** ἀπῆκε καὶ ἐκείνους ἀγαγὼν ἐς Κόρινθον διέφθειρε.

> He (= Pausanias), however, had that very suspicion of them, and when they were put into his hands he sent away **the whole allied army** (lit. the army the of the allies whole) and carried the men to Korinth, where he put them to death.   (Hdt. 9.88)

(102b) (= 12) Λεωνίδῃ δέ, τῷ με κελεύεις τιμωρῆσαι, φημὶ μεγάλως τετιμωρῆσθαι, **ψυχῇσί** τε **τῇσι τῶνδε ἀναριθμήτοισι** τετίμηται αὐτός τε καὶ οἱ ἄλλοι οἱ ἐν Θερμοπύλῃσι τελευτήσαντες.

> As for Leonidas, whom you would have me avenge, I think that he has received a full measure of vengeance; **the uncounted souls of these that you see** (lit. souls the of these here uncounted) have done honour to him and the rest of those who died at Thermopylae.   (Hdt. 9.79.2)

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[81] For a description of the difference between the aNaA and NaA pattern, see Bakker (2006).

(103a) ὑπεροικέοντας δὲ τὸ Πάγγαιον πρὸς βορέω ἀνέμου Παίονας Δόβηράς
        τε καὶ Παιόπλας παρεξιὼν ἤιε πρὸς ἑσπέρην, ἐς ὃ ἀπίκετο ἐπὶ ποταμόν
        τε Στρυμόνα καὶ πόλιν Ἠιόνα (...). **ἡ δὲ γῆ αὕτη ἡ περὶ τὸ Πάγγαιον
        ὄρος** καλέεται Φυλλίς, (...).

> Marching past the Paeonians, Doberes, and Paeoplae, who dwell beyond
> and northward of the Pangaean mountains, he kept going westwards,
> until he came to the river Strymon and the city of Eion; (...) **All this
> region about the Pangaion range** (lit. the region this the around the
> Pangaion range) is called Phyllis, (...).   (Hdt. 7.113.1–2)

(103b) ἰδών τε τὴν Αἴγυπτον προκειμένην τῆς ἐχομένης γῆς κογχύλιά τε
        φαινόμενα ἐπὶ τοῖσι ὄρεσι καὶ ἅλμην ἐπανθέουσαν (...) καὶ ψάμμον
        μοῦνον Αἰγύπτου **ὄρος τοῦτο τὸ ὑπὲρ Μέμφιος** ἔχον, (...).

> For I have seen that Egypt projects into the sea beyond the neighbouring
> land, and shells are exposed to view on the mountains, and things coated
> with salt (...) and the only sandy mountain in Egypt is that which is
> above Memphis (lit. I have seen that **mountain that the above Memphis**
> as the only one in Egypt has sand), (...).   (Hdt. 2.12.1)

However, since the general characteristic of all these examples is that the
noun is followed by one or more reference modifiers, I will study the
difference in articulation of the noun on the basis of the most simple
patterns that display this characteristic, viz. aNaX and NaX.

    Before the difference in articulation between these two patterns can
be analysed, I first have to prove that the elements of the NaX pattern
constitute one integrated NP,[82] for this has been doubted from various
angles, most recently and extensively by Devine and Stephens (2000:
250–258). They assume that, at least in historical Greek, the NaX pattern
does not constitute one integral NP, but consists of a non-referential
noun,[83] followed by an elliptical NP ('as/with respect to *x*, the *y* one(s)').
In order to prove this, they provide fragments of the Lex Opuntiorum
(460 BC), claiming its punctuation confirms that the non-referential noun
is phrased with the verb instead of constituting a unity with the following
modifier:

(104)   : διομοσαι hορϙον : τον νομιον : *Locr* 45

> To swear as an oath the prescribed one (lit.: swear oath: the prescribed)

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[82] For my arguments against the view that the aNaX pattern does not constitute one
integrated NP, but consists of a definite noun followed by an apposition, see section
6.1.1.1.

[83] For the difference between referential and non-referential elements, see Chapter 5,
section 5.4.

Although Herodotus wrote his Histories no more than 50 years after the enactment of the Lex Opuntiorum, I am very reluctant to use its punctuation as an indication for a non-integral interpretation of the NaX patterns in my corpus. First of all, I seriously doubt the evidential value of the fragments of the Lex Opuntiorum, for closer investigation proves that its punctuation is rather messy and irregular. For example, we find punctuation marks after articles (cf. *Locr* 5 τους : επιϝοικους Λοϙϙων) and inside a participle (cf. *Locr*. 7 καταλειπον : τα).[84] Furthermore, similar expressions differ in their punctuation (cf. Λοϙϙων : των Υποκναμιδιων and : Λοϙϙοις τοις Υποκναμιδιοις : *Locr*. 5 / 6) and the number of elements in between two punctuation marks varies considerably.[85]

But even if the punctuation of example (104) is correct and a pause was perceived between the noun and the following modifier, it is questionable whether this example (and other, comparable, cases) should automatically lead to the conclusion that the noun in a NaX pattern always has to be a non-referential element. In my view, if the punctuation is correct, the only legitimate conclusion is that not every sequence of a noun, article and modifier forms an integrated NP. This conclusion seems to be supported by my data, for there are several examples in my corpus in which the sequence noun, article and modifier definitely does not form a well-integrated noun phrase:

(105) λίνον μοῦνοι οὗτοί τε καὶ Αἰγύπτιοι ἐργάζονται κατὰ ταῦτά. καὶ ἡ ζόη πᾶσα καὶ ἡ γλῶσσα ἐμφερής ἐστι ἀλλήλοισι. **λίνον** δὲ **τὸ** μὲν **κολχικὸν** ὑπὸ Ἑλλήνων Σαρδονικὸν κέκληται, τὸ μέντοι ἀπ' Αἰγύπτου ἀπικνεόμενον καλέεται Αἰγύπτιον.

They and the Egyptians alone work linen and have the same way of working it, a way peculiar to themselves; and they are alike in all their way of life, and in their speech. **The Kolchian linen** (lit. with respect to linen, the Kolchian) is called by the Greeks Sardonian; that which comes from Egypt is called Egyptian.   (Hdt. 2.105)

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[84] Because of the strange punctuation, some editors read αἰ δείλητ' ἀγχωρεῖν, καταλείπων τὰ ἐν τᾶι ἱστίαι παῖδα ἡβατὰν ἢ 'δελφεόν, ἐξεῖμεν ἄνευ ἐνετηρίων instead of καταλείποντα ἐν τᾶι ἱστίαι. I fail to see, however, how we should interpret καταλείπω with a double accusative ('to leave something/someone behind as …') in this context. Despite the intervening punctuation mark, the reading καταλείποντα therefore seems more accurate to me, even though ἐξεῖμεν with an accusative instead of dative is rare (but compare Ar. *Ach*.1079 and Pl. *Plt*. 290d).

[85] If we are to believe Larfeld (1914: 430–431), the inaccuracy of the punctuation in the Lex Opuntiorum is not characteristic of this inscription, but a general feature of epigraphic material. He illustrates his statement that punctuation marks 'vielfach aber

In this example, the particles used make clear that the sequence of noun, article and modifier does not form a unified noun phrase, but should be interpreted as a non-referential noun expressing the theme of the sentence (λίνον δέ, 'with respect to linen') followed by an elliptical noun phrase (τὸ μὲν κολχικόν 'the Kolchian' as opposed to τὸ ἀπ' Αἰγύπτου ἀπικνεόμενον, 'that which comes from Egypt'). Besides examples like (105) where a non-integrated interpretation is inevitable, there are some instances where the combination of a noun, article and modifier *may* be interpreted as a non-referential noun and an elliptical NP. In example (106), for instance, πεζὸς ὁ Περσέων and ἵππος ἡ Σακέων could be interpreted as 'with respect to infantry, the one of the Persians and with respect to cavalry, the one of the Sacae', even though there are no explicit signs that hint in that direction:

(106)   ἠρίστευσε δὲ τῶν βαρβάρων **πεζὸς** μὲν **ὁ Περσέων, ἵππος** δὲ **ἡ Σακέων,** ἀνὴρ δὲ λέγεται Μαρδόνιος·

   Among the barbarians, the best fighters were **the infantry of the Persians** (lit. infantry the of Persians) and **the cavalry of the Sacae** (lit. cavalry the of Sacae), and of men, it is said, the bravest was Mardonios.

                                                                  (Hdt. 9.71.1)

However, apart from these ambiguous examples there are many cases where it is very hard, if not impossible, to interpret the noun in the succession noun-article-modifier as a non-referential element. A non-referential interpretation of the noun is especially difficult in the genitive or dative case (example 107) and after prepositions (example 108):

(107)   ὅτι δὲ τῆς αὐτῆς ἡμέρης συνέβαινε γίνεσθαι **μηνός** τε **τοῦ αὐτοῦ,** χρόνῳ οὐ πολλῷ σφι ὕστερον δῆλα ἀναμανθάνουσι ἐγίνετο.

   That the two fell on the same day and **the same month** (lit. month the same) was proven to the Greeks when they examined the matter not long afterwards.   (Hdt. 9.101.2)[86]

(108)   (= 11) This man (= Sandokes), who was one of the king's judges, had once before been taken and crucified by Dareios because he had given unjust judgement for a bribe.

   ἀνακρεμασθέντος ὦν αὐτοῦ, λογιζόμενος ὁ Δαρεῖος εὗρέ οἱ πλέω ἀγαθὰ τῶν ἁμαρτημάτων πεποιημένα **ἐς οἶκον τὸν βασιλήιον·**

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ohne Rücksicht auf Wortzusammenhang und Satzgliederung angewendt werden' with many remarkable examples.

[86] For the order of the constituents in the NPs τῆς αὐτῆς ἡμέρης ('the same day') and μηνός τε τοῦ αὐτοῦ ('month the same'), see Chapter 3, sections 3.2.2 and 3.3.

> When he had been hung on the cross, Dareios found on consideration that his good services **to the royal house** (lit. house the royal) outweighed his offences.   (Hdt. 7.194.2)

The great number of NaX sequences where the noun cannot be interpreted non-referentially makes it highly unlikely that that is a general characteristic of NaX sequences. I see therefore no reason to interpret the noun of NaX sequences that do allow a non-referential interpretation (such instances as the NaX sequence in example 106) non-referentially, as the fact that they allow a non-referential interpretation is not sufficient proof that they should be interpreted in that way. I assume all NaX sequences to be wholly integrated noun phrases, unless there is clear evidence to the contrary (as in example 105).

Now that it is clear why I do not interpret the noun of a NaX pattern as a non-referential element, but as the noun of a fully integrated NP, the difference with the aNaX pattern has to be considered. The examples in my corpus seem to indicate that while the aNaX pattern is used if the addressee can identify one or more referents on the basis of the information of the noun only, the use of the NaX pattern presupposes that the modifier is essential for the identification of the (correct) referent.[87] So, whereas in the NaX pattern the information provided by the modifier is crucial for the identification of the referent, the omission of the modifier in the aNaX pattern would not cause serious problems for the addressee with respect to the identification of a referent, although the process of identification might go less smoothly.

That the modifier of the aNaX pattern is not essential for the identification of the referent is most clear in those cases where the function of the reference modifier was called facilitating in the section on reference specification (section 6.1.2). Just as the κῆρυξ in example (109) and the πλατανίστῳ and ἀμπέλῳ in example (110), the χοῦν in (111) would be identifiable on the basis of the information of the noun only:

(109) (= 34) Ἀλυάττης δέ, ὥς οἱ ταῦτα ἐξηγγέλθη, αὐτίκα ἔπεμπε **κήρυκα** ἐς Μίλητον βουλόμενος σπονδὰς ποιήσασθαι Θρασυβούλῳ τε καὶ Μιλησίοισι χρόνον ὅσον ἂν τὸν νηὸν οἰκοδομέῃ. ὁ μὲν δὴ ἀπόστολος ἐς τὴν Μίλητον ἦν, Θρασύβουλος δὲ σαφέως προπεπυσμένος πάντα λόγον καὶ εἰδὼς τὰ Ἀλυάττης μέλλοι ποιήσειν, μηχανᾶται τοιάδε· (description of the deceit) ταῦτα δὲ ἐποίεέ τε καὶ προηγόρευε Θρασύβουλος τῶνδε εἵνεκεν, ὅκως ἂν δὴ **ὁ κῆρυξ ὁ Σαρδιηνὸς** ἰδών τε σωρὸν μέγαν σίτου κεχυμένον καὶ τοὺς ἀνθρώπους ἐν εὐπαθείῃσι ἐόντας ἀγγείλῃ Ἀλυάττῃ.

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[87] For the process of identification of referents, see Chapter 5, section 5.2.2.

Then, when the Delphic reply was brought to Alyattes, he promptly
sent **a herald** to Miletos, wanting to make a truce with Thrasyboulos
and the Milesians during his rebuilding of the temple. So the envoy
went to Miletos. But Thrasyboulos, forewarned of the whole matter, and
knowing what Alyattes meant to do, devised the following plan: (…)
Thrasyboulos did and ordered this so that when **the herald from Sardis**
(lit. the herald the from Sardis) saw a great heap of food piled up, and the
citizens enjoying themselves, he would bring word of it to Alyattes.

(Hdt. 1.21.1–1.22.1)

(110)   (= 35) οἱ δὲ εἶπαν· ὦ βασιλεῦ, οὗτός ἐστι ὅς τοι τὸν πατέρα Δαρεῖον
ἐδωρήσατο **τῇ πλατανίστῳ τῇ χρυσέῃ καὶ τῇ ἀμπέλῳ·**

They (= the Persians) said, 'O king, this is the one who gave your father
Dareios **the golden plane-tree and the vine** (lit. the plane-tree the golden
and the vine).'   (Hdt. 7.27.2)

(111)   ἐκ δὴ ὦν τῶν σφετέρων οἰκίων ἀρξάμενοι οἱ κλῶπες ὑπὸ γῆν στα-
θμούμενοι ἐς τὰ βασιλήια οἰκία ὤρυσσον, **τὸν δὲ χοῦν τὸν ἐκφορε-
όμενον ἐκ τοῦ ὀρύγματος**, ὅκως γένοιτο νύξ ἐς τὸν Τίγρην ποταμὸν
παραρρέοντα τὴν Νίνον ἐξεφόρεον, ἐς ὃ κατεργάσαντο ὅ τι ἐβού-
λοντο.

They surveyed their course and dug an underground way from their own
house to the palace, carrying **the clay taken out of the passage** (lit. the
clay the taken out of the passage) by night to the Tigris, which runs past
Ninos, until at last they accomplished their end.   (Hdt. 2.150.3)

Even though the referent of the highlighted NP in example (111), unlike
those in (109) and (110), has not been introduced before, it would be
identifiable without the addition of the modifier, as clay is part of our
knowledge of digging an underground way. 'They dug an underground
way from their own house to the palace, carrying the clay by night to
the Tigris' is perfectly understandable. The postnominal participle phrase
facilitates the identification, but is not essential.[88]

As we saw in the section on reference specification (section 6.1.2),
the modifier of the aNaX pattern can, besides facilitating the identifi-
cation of the referent, also be used to select the intended referent from
a number of potential referents. Though this may sound contradictory,

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[88] Probably, the extra help for the identification provided by the modifier is needed
because the NP does not immediately follow on the cognitive structure to which the
referent is to be related (for the process of identification, see the previous chapter). If
the first sentence of the example were ordered in such a way that it ended with ὑπὸ
γῆν ὤρυσσον (without the intervention of ἐς τὰ βασιλήια οἰκία), the reference modifier
would probably be left unmentioned.

even in these cases, the modifier of the aNaX pattern is not essential for the identification of the referent. It has been argued above on the basis of examples (32) and (33) (repeated below for convenience) that the reason why the modifier, despite the contrast between several potential referents, follows instead of precedes the noun is that in the given context it is evident which of the potential referents is being referred to:

(32)   μαθόντες δὲ ταῦτα οἱ Πελασγοὶ ἑωυτοῖσι λόγους ἐδίδοσαν· καί σφι βουλευομένοισι δεινόν τι ἐσέδυνε, εἰ δὴ διαγινώσκοιεν σφίσι τε βοηθέειν οἱ παῖδες πρὸς τῶν κουριδιέων γυναικῶν τοὺς παῖδας καὶ τούτων αὐτίκα ἄρχειν πειρῷατο, τί δὴ ἀνδρωθέντες δῆθεν ποιήσουσι. ἐνθαῦτα ἔδοξέ σφι κτείνειν **τοὺς παῖδας τοὺς ἐκ τῶν Ἀττικέων γυναικῶν**.

When the Pelasgians perceived this, they took counsel together; it troubled them much in their deliberations to think what the boys would do when they grew to manhood, if they were resolved to help each other against the sons of the lawful wives and attempted to rule them already. Thereupon the Pelasgians resolved to kill **the sons of the Attic women** (lit. the sons the of the Attic women).   (Hdt. 6.138.3–4)

(33)   ταῦτα ἔλεγε παρελθὼν ὁ Ἀριστείδης, φάμενος ἐξ Αἰγίνης τε ἥκειν καὶ μόγις διεκπλῶσαι λαθὼν τοὺς ἐπορμέοντας· περιέχεσθαι γὰρ πᾶν τὸ στρατόπεδον τὸ Ἑλληνικὸν **ὑπὸ τῶν νεῶν τῶν Ξέρξεω**·

Aristeides went in and told them, saying that he had come from Aegina and had barely made it past the blockade when he sailed out, since all the Hellenic camp was surrounded **by Xerxes' ships** (lit. by the ships the of Xerxes).   (Hdt. 8.81)

Formulated differently, within the given context of examples (32) and (33), the information provided by the noun itself is sufficient for the identification of the correct referent. The modifier, which confirms the addressee that he has selected the correct referent, is just added for safety's sake.

What has not been discussed in the section on reference specification is that the modifier of the aNaX pattern can also specify a subgroup of a referent that is identifiable on the basis of the information given by the noun. In example (112), for instance, we are told that, after a horrible journey in which many soldiers died of hunger and diseases, Xerxes' army arrives in Abydos, where they can recover a little. Ironically, many soldiers die in Abydos by eating too greedily. In the last line of this example, reference is made to Xerxes' army by the NP τοῦ στρατοῦ τοῦ περιεόντος (lit. 'the army the surviving'):

(112)   ἐνθαῦτα δὲ κατεχόμενοι σιτία τε πλέω ἢ κατ᾽ ὁδὸν ἐλάγχανον, οὐδένα
         τε κόσμον ἐμπιπλάμενοι καὶ ὕδατα μεταβάλλοντες ἀπέθνῃσκον **τοῦ**
         στρατοῦ τοῦ περιεόντος πολλοί.

> There their march halted, and more food was given them than on their
> way. Then by reason of their immoderate gorging and the change of the
> water that they drank, many of **the army that had survived** (lit. the army
> the surviving) died.   (Hdt. 8.117.2)

Although the addressee would not have been able to identify the sub-
group of the still surviving soldiers without the help of the information
provided by the modifier, the information given by noun is sufficient for
the identification of the referent of the head noun (the army). Similarly,
the noun in example (113) provides enough information for the identi-
fication of the collection of barbarians, of which the modifier selects the
(also identifiable) subgroup of barbarians in Asia.[89]

(113)   (= 2) νόμος δὲ τοῖσι Λακεδαιμονίοισι κατὰ τῶν βασιλέων τοὺς θανά-
         τους ἐστὶ ὡυτὸς καὶ **τοῖσι βαρβάροισι τοῖσι ἐν τῇ Ἀσίῃ·**

> The Lakedaimonians have the same custom at the deaths of their kings **as**
> **the barbarians in Asia** (lit. the barbarians the in the Asia). (Hdt. 6.58.2)

In sum, the aNaX pattern is used if the noun provides enough informa-
tion on its own for the identification of a referent. The postnominal refer-
ence modifier is added either to facilitate the identification, or to specify
the intended referent, either by confirming that the addressee has picked
the correct referent out of a group of potential referents, or by selecting
the intended subgroup.

    The entity to which the NaX pattern refers, in contrast, cannot be prop-
erly identified without the information expressed by the modifier. The
month in example (107) and the house in example (108), for instance,
would not have been identifiable if the modifiers had been left out (*the
two fell on the same day and the month; *his good services to the house
outweighed his offences). So whereas the reference modifier in the aNaX
pattern only facilitates the identification, or specifies the referent that
is already identifiable on the basis of the information expressed by the
noun, the modifier of the NaX pattern is essential for the identification
of the correct referent.

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[89] The reason that the modifier in examples (112) and (113) follows the noun is that it
selects a subgroup of the collection identified by the noun without explicitly underlining
the contrast between the intended subgroup and the remainder of the collection (e.g. the
Asian barbarians vs. the other barbarians).

In most of the NaX patterns that occur in my corpus, the addressee would be incapable of finding any referent whatsoever without the information provided by the modifier. On the basis of the information of the noun, the addressee can construe some referent, but he cannot identify this referent, as the relation between the referent and the cognitive structure to which this referent has to be related is not unequivocal. In example (114), for instance, one of Themistokles' servants delivers the following message to the Persian camp:

(114) ἔπεμψέ με **στρατηγὸς ὁ Ἀθηναίων** λάθρῃ τῶν ἄλλων Ἑλλήνων (. . .).

The Athenian general (lit. general the of Athenians) has sent me without the knowledge of the other Hellenes (. . .). (Hdt. 8.75.2)

(114a) *ἔπεμψέ με ὁ στρατηγός.

*The general has sent me.

The Persian admirals would not have understood who had sent them this message without the information of the modifier, as there is no one-to-one relation between the intended general and the Greek camp. The addition of the reference modifier, however, does make the referent unequivocally identifiable, for there is only one general of the Athenians.[90]

Similarly in example (115), the addressee cannot identify 'the chariot' as there is no unequivocal relation between the Spartan honouring ceremony and a chariot, but he can identify the finest chariot:

(115) ἀριστήια μέν νυν ἔδοσαν ἀνδρηίης μὲν Εὐρυβιάδῃ ἐλαίης στέφανον, σοφίης δὲ καὶ δεξιότητος Θεμιστοκλέϊ, καὶ τούτῳ στέφανον ἐλαίης· ἐδωρήσαντό τέ μιν **ὄχῳ τῷ ἐν Σπάρτῃ καλλιστεύοντι·**

They bestowed on Eurybiades a crown of olive as the reward of excellence and another such crown on Themistokles for his wisdom and cleverness. They also gave him **the finest chariot in Sparta** (lit. chariot the in Sparta finest. (Hdt. 8.124.2)

(115a) *ἐδωρήσαντό τέ μιν τῷ ὄχῳ.

*They gave him the chariot.

The NaX pattern is also used if the noun alone would provide enough information to identify a referent, but would cause the addressee to

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[90] The reason that the reference modifier follows the noun is probably that the servant does not want to stress that it was the general of the *Athenians* (and not the general of, for instance, the Thebans), but that it was a *general* (and not a common soldier) that is the sender of the message.

identify the wrong referent. In these cases, the information of the modi-
fier is essential for the identification of the *correct* referent:

(116)   οἱ δὲ Πελασγοὶ οὗτοι (…) ἐλόχησαν Ἀρτέμιδι ἐν Βραυρῶνι ἀγούσας
        ὁρτὴν τὰς τῶν Ἀθηναίων γυναῖκας, ἐνθεῦτεν δὲ ἁρπάσαντες τουτέων
        πολλὰς οἴχοντο ἀποπλέοντες καί σφεας ἐς Λῆμνον ἀγαγόντες παλλα-
        κὰς εἶχον. ὡς δὲ τέκνων αὗται αἱ γυναῖκες ὑπεπλήσθησαν, **γλῶσσάν**
        τε **τὴν Ἀττικὴν** καὶ **τρόπους τοὺς Ἀθηναίων** ἐδίδασκον τοὺς παῖδας.

        These Pelasgians (…) set an ambush for the Athenian women celebrating
        the festival of Artemis at Brauron. They seized many of the women,
        then sailed away with them and brought them to Lemnos to be their
        concubines. When these women bore more and more children, they
        taught their children **the Attic language** (lit. language the Attic) and **the
        manners of the Athenians** (lit. manners the of Athenians).

                                                                    (Hdt. 6.138.1–2)

(117)   (…) ἐπολιόρκεε τὴν Μίλητον τρόπῳ τοιῷδε. ὅκως μὲν εἴη ἐν τῇ γῇ
        καρπὸς ἁδρός, τηνικαῦτα ἐσέβαλλε τὴν στρατιήν· (…) ὡς δὲ ἐς τὴν
        Μιλησίην ἀπίκοιτο, **οἰκήματα** μὲν **τὰ ἐπὶ τῶν ἀγρῶν** οὔτε κατέβαλλε
        οὔτε ἐνεπίμπρη οὔτε θύρας ἀπέσπα, ἔα δὲ κατὰ χώρην ἑστάναι·

        This was how he attacked and besieged Miletos: he sent his army to
        invade when the crops in the land were ripe (…) and whenever he came
        to the Milesian territory, he neither demolished nor burnt nor tore the
        doors off **the country dwellings** (lit. dwellings the in the fields), but let
        them stand unharmed.   (Hdt. 1.17.1–2)

In example (116), the most natural interpretation of τὴν γλῶσσαν and
τοὺς τρόπους would have been the Lemnian language and the Lemnian
manners, for Lemnos is the place the women and children live. Since this
is not the intended interpretation, the first article is left out to signal
that the identification of the referent should be postponed until the
information of the modifier becomes available. Likewise, the addressee
of example (117) on reading that Sadyattes did not destroy τὰ οἰκήματα
would most naturally have identified all the houses in Miletos. Since the
NP only intends to refer to the subgroup of the houses in the fields,
the NaX pattern is used to warn the addressee that he should postpone
the identification of the referent until he receives the information of the
modifier.[91]

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[91] Although the modifiers are essential for the identification of the correct referent,
they are still less salient than the nouns and for that reason postnominal. In both example
(116) and (117), the nouns are contrastive and for that reason the most salient—and
therefore the first—element of the NP.

The NaX patterns in which the modifier is essential for the identification of the *correct* referent bear resemblance to the aNaX patterns in which the referent specifies the referent. Like the modifier in the aNaX pattern, the one in the NaX pattern can select the correct referent from a number of potential referents (example 116) or specify a subgroup (example 117). However, while the aNaA pattern always refers to the most accessible or most obvious referent or subgroup that fits the description of the noun, the intended referent of the NaX pattern is by definition not the most accessible, but only identifiable with the help of the modifier. In examples (32) (τοὺς παῖδας τοὺς ἐκ τῶν Ἀττικέων γυναικῶν) and (33) (ὑπὸ τῶν νεῶν τῶν Ξέρξεω), the information of the noun was sufficient for the identification of the referent, which the modifier confirmed to be the intended one. In examples (116) and (117), by contrast, omission of the modifier would definitely have led to the identification of the wrong referent.

In the examples discussed so far, the absence of the first article signalled that the noun did not provide sufficient information for the identification of the intended referent. In a very small number of examples in my corpus, however, the omission of the first article is not due to the unidentifiability of the information given by the noun, but to the rules for the use of the article. In those cases, the NaX patterns are in fact aNaX patterns whose first article is not expressed (a̶NaX). These 'handicapped' aNaX patterns occur in coordinations (example 118) and in NPs that are the subject of a copular verb (example 119):

(118)   μετὰ δὲ τὴν ἐπειρώτησιν τῶν χρησμῶν καὶ **παραίνεσιν τὴν ἐκ Μαρ-δονίου** νύξ τε ἐγίνετο καὶ ἐς φυλακὰς ἐτάσσοντο.

   After Mardonios' inquiry about the oracles and his exhortation (lit. after the inquiry about the oracles and **exhortation the of Mardonios**) night fell, and the armies posted their sentries.   (Hdt. 9.44.1)

(119)   (…), **ἔτεα** δὲ σφίσι ἐπείτε γεγόνασι **τὰ σύμπαντα** λέγουσι εἶναι ἀπὸ τοῦ πρώτου βασιλέος Ταργιτάου ἐς τὴν Δαρείου διάβασιν τὴν ἐπὶ σφέας χιλίων οὐ πλέω ἀλλὰ τοσαῦτα.

   (…), and they (= the Skythians) say that neither more nor less than a thousand years in all passed from the time of their first king Targitaus to the entry of Dareios into their country (lit. they say that the total number of years (lit. **years the all**) was no more than thousand).   (Hdt. 4.7.1)[92]

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   [92]   I analyse ἔτεα τὰ σύμπαντα as the subject of the sentence, because χιλίων οὐ πλέω ἀλλὰ τοσαῦτα predicates over ἔτεα τὰ σύμπαντα, and not the other way round (i.e. it is

In example (118), the absence of an article before παραίνεσιν is not meant to signal that we should delay identifying the referent until the modifier has become available, but is due to the fact that παραίνεσιν is coordinated with another noun. As we saw in Chapter 5, section 5.3.2, the second element in a coordination can lack an article if the enumerated entities are depicted as a whole. The omission of an article before παραίνεσιν should thus be interpreted as indication that it forms one unit with ἐπειρώτησιν, with which it shares its article. In example (119), the absence of an article before ἔτεα is due to another refinement of the general rule for the use of the definite article discussed in Chapter 5, section 5.3.2. Although the reason and exact conditions for this refinement did not become clear, I have shown that a relatable subject of a copular verb can omit its article. ἔτεα τὰ σύμπαντα should thus not be interpreted as a real NaA pattern, but as an aNaA pattern whose first article is not expressed.

Apart from this very limited number of aNaXs that occur in very specific circumstances, the NaX pattern differs from the aNaX pattern in that the information of the noun is not sufficient for identifying the referent. In contrast to the modifier of the aNaX pattern, the modifier of the NaX pattern *is* essential for the identification of the referent, either because it makes the relation between the referent and the cognitive structure to which the referent has to be related unequivocal, or because it provides essential information for the identification of the correct referent.

By way of conclusion to this section on the difference between the aNaX and NaX pattern, I will argue that the difference between the aNaX and NaX pattern as described above also holds true for more multiple-modifier NPs. As in single-modifier NPs, the noun of a multiple-modifier NP—if not preceded by a reference modifier–[93] is preceded by an article if the information it provides is sufficient for the identification of a referent, while it lacks an article if the referent cannot be properly identified without the information expressed by the following modifier(s):

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said of the total amount of years that there were no more than a thousand, not of no more than a thousand that they were the total amount of years). For classifying sentences and the distinction between their subject and predicate, see Chapter 5, section 5.4.1.

[93] For the influence of a prenominal reference modifier on the articulation of the noun (and a possible explanation), see section 6.2.2.

(120)   (= 42) ἀνέθηκε δὲ καὶ ἀναθήματα ὁ Ἄμασις ἐς τὴν Ἑλλάδα, τοῦτο
        μὲν ἐς Κυρήνην (…) τοῦτο δὲ τῇ ἐν Λίνδῳ Ἀθηναίῃ δύο τε ἀγάλματα
        λίθινα καὶ θώρηκα λίνεον ἀξιοθέητον, τοῦτο δ’ ἐς Σάμον τῇ Ἥρῃ (…).
        ἐς δὲ Λίνδον ξεινίης μὲν οὐδεμιῆς εἵνεκεν, ὅτι δὲ **τὸ ἱρὸν τὸ ἐν Λίνδῳ τὸ
        τῆς Ἀθηναίης** λέγεται τὰς τοῦ Δαναοῦ θυγατέρας ἱδρύσασθαι, (…).

        Moreover, Amasis dedicated offerings in Hellas. He gave to Kyrene (…),
        to Athena of Lindos two stone images and a marvellous linen breast-
        plate; and to Hera in Samos (…). What he gave to Lindos was not out of
        friendship for anyone, but because **the temple of Athena in Lindos** (lit.
        the temple the in Lindos the of the Athena) is said to have been founded
        by the daughters of Danaus, (…).   (Hdt. 2.182.1–2)

(121)   (= 12) Λεωνίδῃ δέ, τῷ με κελεύεις τιμωρῆσαι, φημὶ μεγάλως τετιμωρῆ-
        σθαι, **ψυχῇσί τε τῇσι τῶνδε ἀναριθμήτοισι** τετίμηται αὐτός τε καὶ οἱ
        ἄλλοι οἱ ἐν Θερμοπύλῃσι τελευτήσαντες.

        As for Leonidas, whom you would have me avenge, I think that he has
        received a full measure of vengeance; **the uncounted souls of these that
        you see** (lit. souls the of these here uncounted) have done honour to him
        and the rest of those who died at Thermopylae.   (Hdt. 9.79.2)

In example (120), the noun is preceded by an article since the noun on its
own provides enough information for the identification of the referent, as
the larger context together with the prepositional phrase ἐς Λίνδον ('to
Lindos') at the beginning of the sentence already indicate that reference
is made to the temple of Athena in Lindos. The two reference modifiers
that follow the noun confirm that this is indeed the correct interpretation
of the noun. In example (121), by contrast, the information provided by
the noun is not sufficient for the identification of a referent. Without the
mention of the following reference modifier τῇσι τῶνδε ('the of these'),
the addressee would have no clue to which referent the NP refers.[94]

6.2.2. *The rules for the articulation of the noun*

Now the difference between the aNaX and NaX pattern has been anal-
ysed, it is time to present an overview of the rules for the articulation of
the noun. In contrast to the articulation of modifiers, which only depends
on the function of the modifier itself, the articulation of the noun is

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[94] Other examples of multiple-modifier NPs differing in the articulation of the noun
can be found at the beginning of this section (examples 102–103). In the a-examples, the
noun is articular as the information of the noun provides enough information for the
identification of the correct referent, in the b-examples, on the other hand, the noun on
its own would have led to the identification of the wrong referent.

determined by a number of factors. As we saw in the introduction to this section, one of the main rules is that when an articular modifier precedes the noun, the noun itself has no article. Patterns like aXaN, aXaNaX or aXaNX do not occur. The reason for the fact that a noun is not articular when it is preceded by a reference modifier is probably an economic one: as articular modifiers can only occur in definite NPs there is no need to mark the noun for definiteness as well.

If the NP does not contain any prenominal reference modifiers, but does contain one or more postnominal reference modifiers, the articulation of the noun is determined by the identifiability of the information provided by the noun. As we saw in the section on the difference between the aNaX and NaX pattern, nouns modified by postnominal reference modifiers are preceded by an article if the noun on its own provides enough information for the identification of a referent, whereas it lacks an article if the information of the modifier is essential for the identification of the (correct) referent.

A third possibility, which has not yet been considered above, is that an NP does not contain any articular modifier, neither pre- nor postnominal, but is only modified by referent modifiers. In these cases, the noun is always preceded by an article, irrespective of the question of whether the noun on its own provides sufficient information for the identification of a referent. For instance,

(122) μετὰ δὲ τοῦτον βασιλεῦσαι **τὸν ἱρέα τοῦ Ἡφαίστου, τῷ οὔνομα εἶναι Σεθῶν**.

The next king was **the priest of Hephaistos whose name was Sethos** (lit. the priest of the Hephaistos to whom was Sethos as a name).

(Hdt. 2.141.1)

(123) Δημάρητε, τέῳ τρόπῳ ἀπονητότατα τῶν ἀνδρῶν τούτων ἐπικρατήσο-μεν; ἴθι ἐξηγέο· σὺ γὰρ ἔχεις **αὐτῶν τὰς διεξόδους τῶν βουλευμάτων**, οἷα βασιλεὺς γενόμενος.

'And how, Demaratos, can we overcome those men with the least trouble to ourselves? Come, disclose that to me, for you—being their king— know **the plan and order of their counsels** (lit. of them the paths of the counsels).'

(Hdt. 7.234.3)

In examples (122) and (123), the information provided by the noun is definitely not sufficient for the identification of the intended ἱρεύς or διέξοδοι. Nevertheless, the nouns are preceded by an article. The reason for the articulation of the noun in these cases is, clearly, that since the non-articular modifiers that surround the noun do not give a hint of

the definiteness of the NP, the NP would otherwise lack a marker of definiteness altogether. Hence, in contrast to the NPs with postnominal reference modifiers (aNaX), in which the article only relates to the noun itself, indicating whether it provides sufficient identifying information, the articles in examples like (122) and (123) do not relate to the noun alone, but to the NP in its totality. Schematically, the rules that determine the presence of an article before the noun may be summarised as follows:

(124) 1. if an articular modifier precedes, the noun has no article;
      2. if no articular modifier precedes, the noun has an article,
          a. if it provides sufficient information for the identification of a referent, or
          b. if the NP in its totality would otherwise have no marking of definiteness.

This schema shows that the presence of an article before the noun depends on more factors than the articulation of a modifier. Whereas the articulation of a modifier only depends on the question of whether it specifies the reference or characterises the referent, the presence of an article before the noun does not only depend on its own contribution to the identifiability of the referent, but also on economic motivations and the question of whether the NP in its totality is recognisable as a definite NP.

6.3. *Summary and conclusion*

In this chapter, I have analysed what determines the articulation of the various constituents of a definite NP with one or more modifiers. For modifiers, I argued that their articulation does not, as is traditionally assumed, depend on their attributive or predicative value, but on their function. Modifiers are articular if they specify the reference, i.e. if they clarify which referent is referred to by providing information that distinguishes the intended referent from other possible entities satisfying the description of the noun. Non-articular modifiers, on the other hand, do not specify the reference, but characterise the referent. They provide descriptive information on the referent without the purpose of distinguishing this referent from other entities.

For adjectives, numerals and some participles the opposition reference specification vs. referent characterisation has turned out to be inappropriate. For although articular adjectives, numerals and participles are genuine reference modifiers, their non-articular counterparts (in single-

modifier NPs at least) are predicative elements instead of referent modifiers. Yet, even though these predicative modifiers do not express a feature but a temporary state of the referent, they still provide information on the referent rather than the reference. For that reason, I have argued that referent characterisation is the basic characteristic of all non-articular modifiers.

The articulation of the nouns of NPs with one or more modifiers turned out to be somewhat more difficult to describe, as it is influenced by a number of factors. Besides the function of the noun itself, economic motivations and the recognisability of the NP as a definite NP also play a role. As for the first factor, an NP modified by one or more postnominal reference modifiers is only articular if the noun on its own provides enough information for the identification of a referent. If, on the other hand, the information provided by the modifier is essential for the identification, the noun lacks an article. The economic motivations come into play if the noun is modified by one or more prenominal reference modifiers. In these cases, the noun is always non-articular, most probably because the articulation of the noun was felt to be redundant, as reference modifiers can only occur in definite NPs. The last factor, the recognisability of the NP as a definite NP, plays a role in NPs modified only by referent modifiers. In these cases, the noun is always articular to prevent the NP from lacking a marker of definiteness altogether.

This brief summary of the factors that influence the articulation of NP constituents clearly shows that—with the exception of the article in NPs only modified by referent modifiers—the article in modified NPs does not relate to the NP in its entirety, but only to the following constituent, indicating whether (in the case of nouns) or in which way (in the case of modifiers) it contributes to the identification of the referent. It is for this reason that I prefer to speak about the articulation of a particular constituent rather than the position or repetition of the article before this constituent, to exclude the idea that the 'article' before an NP constituent does not only have the form, but also the function of a 'common' article, viz. indicating that the NP in its totality refers to an identifiable referent.

CHAPTER SEVEN

OVERVIEW

The aim of this book was to provide a functional analysis of the structure of the Ancient Greek NP. To this end, the previous chapters have discussed various aspects of the order and articulation of the constituents of the NP. Chapter 3 and 4 discussed the order of the constituents in single-modifier and multiple-modifier NPs respectively. Chapter 5 discussed the definiteness of the NP and Chapter 6, finally, the articulation of the various NP constituents. By way of conclusion, I will try to show how these various aspects determine the structure of the Ancient Greek NP together. Hence, I will not give a detailed summary of the outcome of each chapter, but present an overview of the various possible NPs patterns with a short description of the circumstances under which they are used.

7.1. *The XN and NX pattern*

The general characteristic of the XN and the NX patterns is that they lack an article. The absence of the article may either be due to the fact that the NP is non-referential (see Chapter 5, section 5.4), or to the fact that the referent to which the NP refers is not identifiable (with the exception of four well-defined cases, see Chapter 5, section 5.3.2). In that case, the referent is not unequivocally relatable to the knowledge of the addressee, either because the relation between the referent and the addressee's knowledge is not one-to-one or because the referent cannot be related to his knowledge at all. Actually, I should say that the referent is not *presented* as unequivocally relatable, for my data showed that it is the speaker and not the nature of the entity itself that determines whether the NP is identifiable. The speaker may choose to present an unequivocally relatable referent as identifiable or unidentifiable (see Chapter 5, section 5.3.1).

While the XN and NX pattern are similar with respect to their indefiniteness, they differ in the degree of saliency of their modifier. Whereas the modifier of the XN pattern is more salient than the noun, the modifier

of the NX pattern is either less or equally salient compared to the noun (postposition of the modifier being the default situation, see Chapter 3, section 3.3). Being more salient was defined as either being explicitly or implicitly contrastive, or being more informative or more important than the other NP constituent. The last two options vary in that being more informative relates to the information status (the newness or givenness of the information), while being more important relates to the information value (the importance or relevance the author ascribes to the information).

That modifiers that are more salient than the noun they modify are prenominal does not apply to heavy modifiers, i.e. modifiers accompanied by more than one dependent (e.g. an argument or adverb). Heavy modifiers tend to follow the noun, irrespective of their saliency (see Chapter 3, section 3.3.1). The saliency principle is also overruled if one of the constituents gives expression to the topic of the sentence. Since word order rules at the level of the sentence are stronger than those at the level of the NP, the topical constituent is always preposed, regardless of the saliency of the information it provides (see Chapter 3, section 3.4). An NP element that does, rather unexpectedly, follow the saliency principle is the 'postpossessive possessive' (e.g. μου, σφεων, αὐτοῦ). Although the possibilities for its position are severely limited by syntactic constraints (Wackernagel's Law), its position in relation to the noun turned out still to depend on its saliency (see Chapter 3, section 3.5.2).

7.2. *The aXN, aNaX and NaX pattern*

The first characteristic shared by the aXN, aNaX and NaX pattern is that their referent is presented as identifiable, i.e. as unequivocally relatable either to the general knowledge of the addressee (in the case of generic reference to the kind *x* or to all relevant *x*, see Chapter 5, section 5.5) or to his available knowledge (in the case of reference to some (non-)specific referent, see Chapter 5, section 5.3). The second point of similarity between these patterns is that the modifier is articular. In Chapter 6, section 6.1.1 I argued that this should not be interpreted as an indication that the modifier is attributive, as the grammars maintain, but rather that the modifier specifies the reference. An articular modifier indicates which referent is referred to by distinguishing the intended referent from other possible entities satisfying the description of the head noun, possibly, but not necessarily by describing a feature of this referent.

Although the need for a reference specifying modifier is most urgent in the case of an explicit contrast between several possible referents of the head noun, I argued in Chapter 6, section 6.1.2 that such a contrast is no prerequisite for the use of a reference specifying modifier. A reference specifying modifier may also be added to a noun that evokes only one (or even no) referent, as long as the function of the modifier is to indicate that it is the intended referent (and no other) that is being referred to.

The difference between the three reference patterns resides in a) the saliency of the modifier and b) the identifiability of the information of the head noun. The first factor, the saliency of the modifier, is responsible for the difference between the aXN pattern, on the one hand, and the aNaX and NaX patterns, on the other. While the latter are used if the modifier is either less salient than or equally salient as the noun, the former is used if the modifier is more salient than the noun. In my corpus, the number of prenominal, and thus salient, reference specifying modifiers is considerably higher than that of postnominal, and thus non-salient, reference specifying modifiers. It has been argued (in Chapter 6, section 6.2) that this should be explained by the function of a reference specifying modifier: as the need for a reference specifying modifier is most urgent in the case of an explicit contrast, it is only natural that contrastive—and therefore prenominal—reference specifying modifiers are more frequent than postnominal ones. Incidentally, that pragmatically marked reference specifying modifiers are more frequent than unmarked ones warns against using frequency as a criterion to determine markedness: quantitative analyses should thus always be supplemented with qualitative ones (see Chapter 3, section 3.1).

In the past, the two reference patterns with postnominal modifiers, aNaX and NaX, have frequently been claimed not to form one integral NP, but to consist of a definite noun followed by an apposition ('the x, the y one(s)') and a non-referential noun followed by an elliptical NP ('with respect to x, the y one(s)') respectively. In Chapter 6, sections 6.1.1.1 and 6.2.1 it has been argued that this view, despite some rather strong arguments in its favour, is not tenable. Although not every succession of (article-)noun-article-modifier makes up a single integrated NP, the aNaX and NaX combinations are usually reference patterns in their own right, only differing from their sister-pattern (aXN) in the degree of saliency of the modifier.

The difference between the aNaX and NaX pattern resides in the identifiability of the referent (see Chapter 6, section 6.2.1). The aNaX pattern is used if the addressee can identify the referent on the basis of

the information of the noun only. The modifier is added either to confirm that this referent is the intended referent, or to specify a subgroup of this referent. The use of the NaX pattern, by contrast, presupposes that the modifier is essential for the identification of a referent: without the help of the modifier, the addressee would identify the wrong referent or no referent at all. The absence of a first article might thus be interpreted as a signal that the identification of the referent should be postponed until the information of the modifier becomes available. In a very small number of cases, however, the absence of a first article does not signal that the noun on its own provides insufficient information for the identification of the referent, but is due to general rules for the use of the article. In these cases, the NaX pattern is in fact an aNaX pattern whose first article is not expressed (a̶NaX).

7.3. *The XaN and aNX pattern*

Like the reference patterns discussed above, the XaN and aNX patterns refer to an identifiable referent and like in the reference patterns, the position of the modifier in relation to the noun depends on its saliency. The difference with the reference patterns resides in the marking and function of the modifiers. Traditionally, the modifiers of the XaN and aNX pattern are said to stand in predicative position. In Chapter 6, section 6.1.1.1, I showed, however, that it is not the position, but the articulation of the modifiers that is decisive. Furthermore, I argued that since only non-articular adjectives, numerals and some participles in single-modifier NPs can be interpreted predicatively, predicative value cannot be the general characteristic of the modifiers in the aNX and XaN pattern. What does unite the modifiers in these patterns (see Chapter 6, section 6.1.1.2) is that they characterise the referent, i.e. that they give information on the referent without the intention to distinguish this referent from other possible entities. While 'common' referent characterising modifiers describe a more permanent feature of the referent, non-articular adjectives and numerals (having predicative value) express a temporary state of the referent. Participles in the aNX and XaN patterns were argued to unite these two aspects, as they may both express a temporary state of the referent and ascribe a more permanent feature to it.

That the modifiers in the aNX and XaN patterns characterise the referent does not mean that they are by definition unnecessary for the identification of the referent. Non-articular genitives, possessives and

prepositional phrases often provide information that is essential for the identification. In contrast to the reference specifying modifiers discussed above, however, these non-articular referent characterising modifiers do not identify the referent by distinguishing it from other entities fitting the description of the noun. This does not imply that referent modifiers never set up a contrast between two entities, for there may be a contrast between the referent of the modifier itself and some other entity (e.g. τῶν ἀσπίδων τὰ ὄχανα 'of the shields the handles' vs. τὰ τόξα 'the bows'). In cases like this, however, it is the referent of the modifier on its own that is opposed to some other entity and not the referent of the NP in its totality.

As indicated above, adjectives and numerals in the aNX and XaN pattern differ from other referent characterising modifiers in that they describe a temporary state of the referent instead of a more permanent feature. This is not to say to that these modifiers can never be used to ascribe a permanent feature to a referent, but that for these modifiers the use of the XaN or aNX pattern is not the appropriate way to do so. Adjectives and numerals in single-modifier NPs can only express a permanent feature of the referent if they are combined with a form of the participle of εἰμί (e.g. τὴν κυνέην ἐοῦσαν χαλκέην 'the bronze helmet (lit. the helmet being bronze)', see Chapter 6, section 6.1.3.2). As a participle of εἰμί may also be added to modifiers other than adjectives and numerals if it is for some reason necessary to indicate that they belong to the NP proper and do not have a function at the level of the sentence, it has been argued that the addition of a participle of εἰμί is a general demarcating strategy indicating the boundaries of the NP.

Whereas adjectives and numerals in the aNX and XaN pattern, despite the fact that they express a temporary state instead of a more permanent feature of the referent, can still be argued to be referent characterising modifiers (as they still provide information on the referent rather than specifying the reference), demonstratives cannot. In Chapter 6, section 6.1.4.1, I suggested that the reason why demonstratives occur in the referent patterns, although they are by definition reference specifying modifiers is the fact that demonstratives cannot be used as either referent characterising or reference specifying modifiers. As it was no use to mark a demonstrative as either a referent characterising or a reference specifying modifier, probably the most economical pattern was preferred.

7.4. *Multiple modifiers*

It is impossible to give a complete overview of all possible word order patterns for multiple-modifier NPs. As the two, three or even more modifiers may be ordered around the noun in every possible way and (almost) each of them may or may not be preceded by an article, the various ordering possibilities—especially in definite NPs—are numerous (e.g. aNXX, NaXX, aXXN, aXaXN, aXNaX, XaNX, see Chapter 4, section 4.2.2). But even though the various possible word order patterns in multiple-modifier NPs are too numerous to give a complete overview, it is not impossible to give a systematic account of the rules that determine the ordering and articulation of their constituents.

To start with the latter, multiple-modifier NPs are—like single-modifier ones—indefinite if the NP is either non-referential or refers to an unidentifiable referent, while they are definite if the NP refers to an identifiable referent. In the definite NPs, each modifier may be preceded by an article, depending—as in single-modifier NPs—on their function: modifiers that specify the reference are articular, whereas modifiers that characterise the referent are not. Besides the modifiers, the noun of a definite NP may or may not also be preceded by an article. Although this was not discussed in the previous two sections, the articulation of the noun in multiple-modifier NPs is, again, comparable to that in single-modifier ones.

The rules for the articulation of the noun can be summarised as follows: if an articular modifier precedes, the noun has no article (e.g. aXN, aXXN), most probably because of the fact that articular modifiers may only occur in definite NPs, so that there is no use in marking the noun for definiteness as well. If no articular modifier precedes, the noun has an article either if it provides sufficient information for the identification of the referent, or if the NP in its totality would otherwise have no marking of definiteness. So whereas the articulation of a modifier is only dependent on the question of whether it specifies the reference or characterises the referent, the presence of an article before the noun depends on its own contribution to the identifiability of the referent, economic motivations and the question of whether the NP in its totality is recognisable as a definite NP (see Chapter 6, section 6.2).

Not only with respect to the articulation of the constituents, but also with respect to their order, multiple-modifier NPs are comparable to single-modifier ones. It is the saliency of the modifiers that determines their position, both in relation to the noun and in relation to themselves

(see Chapter 4, section 4.2.2). That implies that multiple-modifier NPs are ordered in a diminishing degree of saliency from more salient constituents on the left to less salient constituents on the right. The fact that not only the position of the modifiers before or after the noun, but also the order between themselves is determined by pragmatics makes Ancient Greek different from many other languages, in which the order of the NP constituents is determined by semantic factors (see Chapter 4, section 4.1). In Chapter 4, sections 4.2.3 and 4.4, I argued that this deviant behaviour of the Greek language should not be explained by its musical accent, nor by a (contemporary) appositional or non-hierarchical structure of the NP, but could be a consequence of a non-configurational past.

It should be stressed, however, that there may be no need to answer the question of why the Greek language takes an exceptional position. Although it is commonly assumed that pragmatics play only a minor role at the level of the NP, I would not be surprised if the NP structure in many more languages—at least partially—depends on pragmatic factors. The fact that we often have to rely on grammars that usually only present very basic examples without any context should make us very careful about drawing premature conclusions with respect to the influence of pragmatics on the structure of the NP.

Irrespective of whether Ancient Greek takes an exceptional position and, if so, why, the fact that the order and articulation of the NP constituents depends largely on the message the speaker wants to convey implies that knowledge and awareness of these factors will directly lead to a much more precise interpretation of Ancient Greek texts. If the results of my analysis of the structure of the NP in Herodotus also apply to other authors, we may judge on the basis of the structure of the NP itself, even if there is no relevant, clear or readable context, whether it is (one of) the modifier(s) or the noun that is most salient, whether the referent is assumed to be identifiable and whether it is or is not to be distinguished from other entities satisfying the description of the noun.

INDEX OF LINGUISTIC TERMS

The definitions given below are not generally accepted and complete definitions, but are meant as indications of what I understand the various linguistic terms to mean within the context of this book.

adjunct a non-obligatory complement of the verb, expressing the location, time, manner etc. of the state of affairs; e.g. *she sat **on the couch**, he arrived **yesterday**.*

adjunct of state an adjunct that expresses the state of the referent of the noun during, according to or resulting from the state of affairs (e.g. *they came with their ships **manned**, I like the door **black**, John cooked the meat **dry***). An adjunct of state may also be called the secondary predicate.

agreement correspondence in gender, case, number, person etc. between a head and its dependent(s); e.g. *un beau garçon, une belle fille*.

apposition a nominal constituent that is added to a noun (phrase) to provide further information about its referent, without being part of the hierarchical structure of which the noun is the head; e.g. *my brother, **the lawyer**, goes to Spain for three months* or *he gave her a bottle of wine, **a very good one***.

argument a complement that is required by the verb, noun or adjective; e.g. *she likes **linguistics**, the destruction of **Rome**, full of **sunshine***.

attributive position the position of a constituent in between the article and noun (aXN), or after the noun with repetition of the modifier (aNaX). Traditionally, it was assumed that constituents in attributive position (as opposed to the ones in predicative position) have attributive value, i.e. are modifiers that modify the preceding or following noun (as opposed to predicative modifiers).

centripetal ordering two or more constituents are centripetally ordered if their position is determined by their relative distance from the head. The result of a centripetal ordering is a kind of mirror image around the head, e.g. $X_3 \, X_2 \, X_1 \, N \, X_1 \, X_2 \, X_3$.

classifying modifier a term introduced by Rijkhoff (2008a) to refer to a modifier that specifies to which kind of entity the noun refers, i.e.

indicates to which subclass the entity belongs; e.g. *a corporate lawyer*, *a steam train*.

coordinated modifiers two or more modifiers that are linked by the means of an explicit coordinator (e.g. a conjunctive, disjunctive or adversative connection particle) or a pause; e.g. *nice and quiet children* or *beautiful, old cars*.

cognitive structure my theory-unspecific term to refer to frames, scripts and schemata, i.e. data structures representing generic concepts stored in memory. These data structures are hierarchical networks of the various elements that are generally related to some object or (sequence) of event(s).

definite NP an NP that contains a definite article; e.g. ἡ γυνή ('the woman'). An NP that refers to an identifiable referent, but lacks an article (e.g. ἀνθρώπου ψυχή 'the human soul') is thus considered indefinite.

dependent a constituent that is dependent on a modifier; e.g. *the same age **as his brother***, *camels running **faster than horses***.

derivational noun a derivational noun is a noun that is derived from a verb; e.g. *the observation* from the verb *to observe*.

descriptive modifier a modifier that describes a property of the referent, e.g. its class, a quality, its quantity or its location (see at classifying, qualifying, quantifying and localising modifier).

discourse modifier a term introduced by Rijkhoff (1992) to refer to a modifier that provides information about the status of the referent as a discourse entity, i.e. provides information about the existence and position of the referent in the discourse; e.g. *former*, *same*.

discontinuous NP an NP whose constituents are not expressed adjacently, e.g. *I saw **a man** yesterday **whose nose looked like a cauliflower***.

domain a domain is a phrase consisting of a head and its dependents. Three different domains of constituent ordering can be distinguished: the clause, the noun phrase and the modifier phrase.

embedded modifier a modifier that contains a noun; e.g. *the red hat **of the professor***, *the book **on the table***.

focus the term focus is used to refer to that part of the utterance that is not known or presupposed to have a certain relationship with the remainder of the sentence. The difference between focal constituents and new constituents is that whereas the latter mark the newness/unfamiliarity of the constituents as such, focus marks the newness of the relation between the constituent(s) in question and the remainder of the sentence. A focal constituent does thus not necessarily provide new

information; e.g. (*who wrote that very readable book on information structure?*) **Lambrecht** *wrote that book* or (*do you want yoghurt or fruits for desert?*) *I would like some* **yoghurt**.

generic NP an NP that refers to a kind or to all relevant referents that satisfy the description of the head noun, e.g. *the* **whale** *is a mammal*, **PhD-students** *work hard*.

given information information that is available to the addressee by means of the preceding discourse or the speech situation.

head the principal constituent of a phrase, which is the point of orientation for the other constituents of the phrase. The noun is the head of the NP.

heaviness principle the principle that predicts that heavy (i.e. complex or long) constituents tend to be expressed at the end of the NP and may be even displaced to a position later in the sentence.

hyperbaton the traditional term for the discontinuous expression of the various subconstituents of a constituent; e.g. οὕτω μὲν δὴ **τὴν τρίτην** ἐσηγάγετο **γυναῖκα** ὁ Ἀρίστων 'in this way Ariston married his third wife (lit. in this way the third married wife the Ariston)'.

indefinite NP an NP that lacks a definite article; e.g. Δαρείου θυγατέρα ('a daughter of Dareios').

inferrable information information that can be inferred from the information that is available by means of the preceding discourse or the speech situation.

information status the degree of familiarity (the newness or givenness) of a constituent to the addressee.

information value the importance or relevance that is attributed to a constituent by the speaker or writer.

intensifier a constituent (usually an adverbial) that provides information about the intensity of the feature expressed by an adjective. An intensifier is also called a degree adverbial; e.g. **very** *bad*, **rather** *simple*.

juxtaposed modifiers two or more modifiers that are placed side by side without any linking element (i.e. a coordinator or pause); e.g. *beautiful old cars*.

kind-predicate a predicate that can only be applied to a kind; e.g. *be extinct, abound*.

localising modifier a term introduced by Rijkhoff (1992) to refer to a modifier that provides information about the location of the referent. Apart from spatial location (e.g. *this book, the book on the table*), a localising modifier may also indicate location in time (e.g. *the book I bought yesterday*) or possession (e.g. *John's book*).

pragmatic factors factors that relate to the communicative aim of the utterance, i.e. the message the speaker or writer wants to convey.

predicate adjective an adjective that is used to predicate a feature of the subject of the clause. In English, a predicate adjective has to be combined with a copular verb, e.g. *her dress was **purple***.

predicate NP an NP that is used to predicate a feature of the subject of the clause. In English, a predicate NP has to be combined with a copular verb, e.g. *John is **a teacher***.

predicative position the position of a constituent before or after the combination of article and noun (XaN or aNX). Traditionally, it was assumed that constituents in predicative position (as opposed to the ones in attributive position) have predicative value, i.e. are not part of the NP proper, but are used either as the predicate of the clause or as an adjunct of state.

prefield the area in front of the head; viz. prefield [head] postfield.

prenominal modifier a modifier that is expressed before the noun it modifies; e.g. *John's proposal*.

presentative sentence a sentence that introduces a new topic into the discourse; e.g. *there was once a miller who was poor, but he had one beautiful daughter*. A presentative sentence can also be called a thetic sentence.

prolepsis the traditional term for the left-dislocation of the topic of the subordinate sentence into the main sentence. The left-dislocated noun may, but need not be syntactically adjusted to the main clause; e.g. εἰσάγγελλε Τειρεσίας ὅτι ζητεῖ νιν 'announce that Teiresias is looking for him (lit. announce Tereisias that he is looking for him)'.

qualifying modifier a term introduced by Rijkhoff (1992) to refer to a modifier that specifies inherent features of the referent, such as colour, size and age; e.g. *a red ball*, *an enormous statue*.

quantifying modifier a term introduced by Rijkhoff (1992) to refer to a modifier that specifies the quantitative properties of the referent; e.g. *the two books*, *the seven children*.

referent characterising modifier (in short: referent modifier) a modifier that gives information on a feature of the referent, i.e. is purely descriptive; e.g. *the newborn foal*.

reference specifying modifier (in short: reference modifier) a modifier that clarifies which referent is referred to, possibly, but not necessarily by describing a feature of the referent; e.g. *the other day* or *the Greek language*.

referential NP an NP that refers to a specific or non-specific discourse referent.

restrictive modifier a modifier that restricts the set of referents to which the head noun refers. The relative clause in the example *the potatoes that were stored in the cellar were rotten*, for instance, restricts the number of objects to which the head noun refers: not all potatoes, but only those in the cellar were rotten.

saliency a constituent may be the most salient element of the NP either because it is the most informative element of the NP or because the speaker/writer considers it to be the most important or relevant part of the message expressed by the NP. In the former case, the saliency of the modifier is related to the (supposed) knowledge of the addressee, to whom the unknown information expressed by the constituent in question is more informative than the given or inferrable information of the remainder of the NP. In the latter case, however, the constituent in question and the remainder of the NP do not differ in information status, but in the information value the speaker/writer ascribes to them.

saliency principle the ordering principle that predicts that the more salient the information of an NP constituent, the further to the left it is expressed.

semantics factors factors that relate to the meaning of the constituents or utterance in question.

state of affairs the situation, event or process expressed by the verb.

topic the constituents that express what the sentence 'is about'; e.g. Q: What did you do yesterday afternoon? A: **I** went to the new city centre to buy a present for my little brother.

zero-coordination the coordination of two or more elements by means of a pause instead of an explicit coordinator; e.g. beautiful, old cars.

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