Reconceptualising the English determiner class

by

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Thesis submitted to the University of London
in fulfilment of the requirements of the degree of
Doctor of Philosophy

University of London

Department of English Language and Literature
University College London
September 2004
Abstract

This thesis is a defence of the hypothesis that the category of words known in the literature as determiners or determinatives is not a valid word class for English. It is generally assumed that words such as the articles, the demonstratives, the possessives and the quantifiers (e.g. all, both, some, any, many, etc.) constitute the English determiner class. Most work on determiners, however, has been concerned mainly with their semantics and their function in phrase structure, and little has been said about the determiner class itself. In this thesis I look at the makeup of the English determiner class and its significance as a form class for English.

In the first chapter I provide a historical background to the various ways the words under investigation here have been classed before they came to be grouped together as determiners. In the following three chapters I examine the determiner status of the various prenominal elements given as members of the class, and more generally, reconsider the status of determiner as a valid word class for English. I show that English determiners do not display a uniform categorial makeup, and argue that a unified determiner treatment of these elements is therefore not justified. Apart from the fact that they can all occur in front of a noun, these words are rather different from one another, both in their semantics and in their syntax. I show not only that very few of the elements conventionally classed as determiners have the properties associated with the class, but also that the vast majority of these elements display properties which indicate that they belong to other classes. I argue that of the so-called determiners, only three, namely the articles the and a(n) and every, justify the postulation of the class for English. Thus I claim that the so-called determiner class in English is considerably smaller than suggested in the literature, and consists only of these three elements. Finally, and most importantly, I propose that since there is already a category available in the language which accounts for two of these words, namely ‘article’, this category be extended to include every, so that the category determiner can be disposed of. In the final chapter I discuss how the analysis of the English noun phrase as NPs benefits from the re-categorisation proposed here.
Acknowledgements

Many people, in many ways, have contributed to the completion of this thesis.
I would like to acknowledge, first and foremost, my greatest debt to my first supervisor
Prof. Bas Aarts, for his expert guidance, encouragement and constructive criticism
throughout. I am very grateful to him for his faith in me, and for his endless patience. I
am also very grateful to my second supervisor Dr. Gerald Nelson for reading this work
and for his invaluable comments. Thanks also to Prof. Richard Hudson for bringing
determiners into my attention and for his help and advice.

A number of other people were kind enough to read part of this work and offer their
comments and suggestions: my thanks are due to Ms. Valerie Adams, Prof. David
Denison (in his capacity as editor of the journal English Language and Linguistics), Prof.
Lacklan Mackenzie, Prof. Kersti Börjars and Dr. Evelien Keizer. Where faults remain,
they are mine alone. I would also like to express my gratitude to Prof. Rodney
Huddleston for making some of his unpublished work available to me.

I also would like to thank all at the Survey of English Usage at UCL for their support,
particularly Sean Wallis and fellow-PhD-student Gabriel Ozon. My time at UCL will
always be very special to me.

Among the many other people who in many other ways have helped me to complete this
thesis, I would like to thank Silvio Campelo and Steve Hunt. Thanks go also to João
Pedro de Oliveira for showing great interest in my work.

Most of all, I am very grateful to my family who have always and unconditionally
supported me in every possible way, even from afar. I would like to thank my sisters,
Alina and Carla, for being such an inspiration, both as professionals and as people, for
their invaluable friendship and unfailing support. Special thanks also go to three very
special people, Thiago, Luana and Gabriel. Above all, and as ever, I want to thank my
parents, Angelo and Carmen (in memoriam), for their love and encouragement in
whatever I chose to do. I dedicate this thesis to them.
To my parents
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Introduction

The present study is about some of the most common words in the English language: the so-called determiners or determinatives. What makes the determiner class so worthy of note is that although a fairly small class, it is a rather puzzling one. It is generally assumed that words such as the articles, the demonstratives, the possessives and the quantifiers (e.g. all, both, some, any, many, etc.) constitute the English determiner class (Quirk, Greenbaum, Leech and Svartvik, 1985; Biber, Johansson, Leech, Conrad and Finegan, 1999; Huddleston and Pullum, 2002). However, apart from the fact that they can all occur in front of a noun, these words are rather different from one another, both in their semantics and in the way they distribute syntactically.

Most work on determiners has been concerned mainly with their semantics (van der Auwera, 1980; Keenan and Stavi, 1986) and their function in phrase structure (Zwicky, 1985; Abney, 1987; Hewson, 1991; Payne, 1993a; van Langendonck, 1994; Coene and D’hulst, 2003). Yet, to date, little has been said about the determiner class itself. That is, one aspect that has not been extensively discussed in the literature is the makeup of the determiner class and its significance as a form class for English.

It is the goal of the present study therefore to examine the determiner status of the various prenominal elements which are standardly given as members of the class, and more generally, to reconsider the status of determiner as a valid word class for English. I will show that a unified determiner treatment of these elements is less appealing than many scholars have thought at first, and that English determiners do not display a uniform categorial makeup. Closer observation shows that, on the one hand, very few of the elements conventionally classed as determiners in English have the characteristic properties associated with the class, and on the other hand, the vast majority of these elements display a range of properties which both differentiate them from one another, and at the same time bring them together with elements of other classes. Based on these facts, I will argue that the determiner class is not a valid word class for English. The evidence for its existence is weak.

The approach adopted throughout this study assumes the view that grammatical categories are structured around prototypes, and thus it makes use of the notion of gradience, or more specifically, of what Aarts (2004b) calls ‘subsective gradience’ and ‘convergence’. In these introductory notes, I will first briefly outline the basic concept of
subsective gradience (SG), which is necessary for the understanding of the discussion in some of the following chapters. I will then describe the organisation of this thesis and briefly outline the contents of each of its chapters.

Subsective gradience ‘allows for a particular element \( x \) from category \( \alpha \) to be closer to the prototype of \( \alpha \) than some other element \( y \) from the same category, and recognises a core and periphery within the form classes of language’ (Aarts, 2004b: 6). Thus, as we shall see in chapter 4, a word like big, for instance, is a more typical or central member of the adjective class than a word like such, because it fulfils all the criteria for adjectivehood. Nevertheless such displays enough adjectival properties and can reasonably be categorized as a member of the adjective class, though not as a central one, because as Aarts says, ‘if something is less centrally A-like, it does not necessarily become more like some other class’ (ibid: 6).

As for convergence, this refers to the fact that an element from a given word class can display a semantic property (weak convergence) and/or a syntactic property (strong convergence) typically associated with another class, and is therefore said to converge onto it. Thus such, for instance, can also be said to be less of an adjective than big because one or more properties usually associated with classes other than the adjective class, have, to use Aarts’s (2004b) words, ‘rubbed’ onto it. In several other aspects, however, such is an adjective. Thus while firmly within a particular class \( \alpha \), an element \( x \) can be said to converge onto other classes. Word classes are defined by a cluster of properties, but not all members of the class need to display every property of that category. The words which satisfy all or most of these properties are more prototypical or central members of the class than those which satisfy some but not all of the properties.

Like Aarts (2004b) and Langacker (1987), although recognising gradience, I assume a mid-way position between the traditional Aristotelian approach to grammatical categories, i.e. the all-or-none view (Newmeyer, 1998, 2000) and the Rosch-Lakoff approach, i.e. categorial indeterminacy or vagueness (Ross, 1972, 1973; Rosch, 1978; Lakoff, 1987). According to the traditional view, categories have discrete boundaries and are not organised around central ‘best cases’. For linguists like Ross and Rosch, however, categories not only have a prototype structure, in which they have ‘best-case’ or core

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1 For a detailed exposition and discussion of gradience the reader is referred to, among others, Bolinger, 1961; Quirk et al., 1985; Newmeyer, 1998, 2000; Denison, 2001; Aarts, 2004a, 2004b; Aarts et al., 2004 and references therein.
members and 'less-than-best-case' or peripheral or marginal members, but the boundaries between categories are nondistinct, in the sense that one category grades gradually into another. The position assumed here, whereas it recognises degrees of class membership, that is, that some elements are better representatives of the category than others, takes the boundaries between categories to be discrete, i.e. there are no in-between-classes cases.

The organisation of this thesis is as follows. Chapters 1 to 4 are concerned with the make up of the determiner class and seek to examine the determiner status of the various elements standardly taken to comprise the class. Chapter 1 provides a historical background to the various ways these words have been classed before they came to be grouped together as a class in their own right, and can be seen as a review of previous treatments of present-day English determiners. It presents classifications which range from those of the sixteenth-century grammarians to current treatments.

Chapter 2 gives an account of the determiner class as it is presented in most current descriptions (e.g. Quirk et al., 1985; Biber et al., 1999; Huddleston and Pullum, 2002). It considers the syntactic and semantic properties associated with determiners that argue for their treatment as a class, and differentiate them from other syntactic categories. The exercise highlights the need for a closer analysis of the nature of the determiner class because all the treatments present problems and are inadequate even as descriptions.

Chapters 3 and 4 discuss the shortcomings of such descriptions. In these chapters the viability of the postulations in chapter 2 is tested against naturally occurring data, and concludes that they fail to account for the facts. Chapter 3 looks at the elements whose determiner treatment is uncertain, while chapter 4 examines those which are assumed to be representative members of the class. A careful analysis reveals that the vast majority of the elements grouped under the heading of determiner are better analysed as belonging to distinct classes. It is argued further that once these elements have been reassigned to their appropriate classes, there is no role in the grammar of English for a determiner class, because the few remaining elements comprising the now much more constrained determiner class can be dealt with in the already existent article class.

In chapter 5 the emphasis is on the syntactic structure of the constructions so-called determiners are found in. More specifically, this chapter is concerned with what effects the new categorial status of these prenominal elements, proposed in chapters 3 and 4, will have on the structure of the English noun phrase. It looks at how these words
combine with each other, and with other words, and at the properties of the phrases they form. I shall argue that these words project and that their phrasal projections can stand by themselves, or enter into construction with other constituents in larger structures. My discussion will assume the theoretical structures and principles of X-bar theory.

Parts of this thesis have been published as Spinillo, 2000a, 2000b, 2003a, 2003b; and Aarts, Keizer, Spinillo and Wallis, 2002.
Chapter 1
Previous treatments

1.1 Introduction
This chapter looks into the origins of the present-day English word class determiner. The words which have been taken to constitute the class are given in (a) below.

(a) the, a(n);
    this/these, that/those;
    my, your, his, her, its, our, their; we, you;
    which\textsuperscript{rel}, whose\textsuperscript{rel}, what\textsuperscript{rel}; which\textsuperscript{int}, whose\textsuperscript{int}, what\textsuperscript{int}; what\textsuperscript{exc};
    such, half, all, both, some, any, each, every, either, neither, no,
    many, much, several, (a) few, (a) little, more, most, enough, (an)other;
    cardinal and ordinal numerals; next, last, former, latter, same, quite, rather;
    one third, three quarters, etc.; double, twice, three times, etc.

The class of determiners is relatively new, as we will see, but the words which are taken to comprise it have been part of the English lexicon long before the class was established. The aim of the present chapter is to look at the various treatments these words had before they came to be grouped together as determiners. In the sections which follow I offer a historical account of the various approaches to the words under investigation. Such an inquiry requires the analysis of the nature and development of the English word classes, which goes back to the grammatical tradition of both Greek and Latin.\textsuperscript{2}

The organisation of the present chapter is as follows. Section 2 looks into the way words were first classified. It considers the Greek and Latin classifications and the first parts of speech or word classes, and discusses some of the initial attempts at word classification for English. Section 3 is concerned with the early treatments of the words in (a). It presents classifications which range from those of the early modern English grammarians in the sixteenth century, to those of the nineteenth-century grammarians. Section 4 is devoted to the classifications of twentieth-century grammarians, and section

\textsuperscript{2} A discussion of the history of the determiner class is found also in Denison, 2003.
5 presents some of the most representative current treatments. Finally, section 6 sums up the several different treatments, and section 7 is the conclusion.

1.2 Historical background

One of the most distinctive features of work in the grammatical tradition is the elaboration with which words have been categorised, and the wide variety of the parts of speech which have been established. The practice of categorisation goes back to the grammatical tradition of both Greek and Latin. The way English classifies its words has been greatly influenced by the Greeks and Romans. Thus, in order to better understand the classifications available now, I first look at some of the classifications of the tradition. This section provides an overview of how, and into which classes, the Greeks and Romans classified words. My evidence here is drawn mostly from Michael's *English Grammatical Categories and the Tradition to 1800* (1970).

1.2.1 The tradition of categorisation and the first word classes

According to Michael (1970: 48), one of the first uses of the term 'parts of speech' is by Aristotle (*The Poetics*, chapter 20). Aristotle distinguishes only two categories: noun and verb. Michael observes, however, that Aristotle's classification is logical rather than syntactic, and that later the Greek grammarians recognise that syntactically there are other parts of speech, rather than only nouns and verbs, although they still give primacy to these two classes. Their criteria when grouping words and establishing classes vary: for some grammarians it is form that is to be considered, others rely on function and meaning.

Among the Greek classifications is that of the Stoics, who recognised nouns, verbs, articles and conjunctive particles. The articles include the pronoun, and the conjunctive particles comprise prepositions and conjunctions. However, whereas the early Stoics subsume both proper and common nouns under the category noun, the later Stoics treat proper and common nouns as forming two distinct parts of speech. A further class was also recognised, and it is believed to be the adverb class.

It is, however, the classification of the Greek grammarian Dionysius Thrax which became the most popular. Dionysius recognises noun, verb, participle, article, pronoun, preposition, adverb and conjunction, a classification close to those available nowadays. Dionysius' classification is adopted, not only by the Greek grammarians, but also by most of the Latin grammarians, although with some minor alterations. For example, the
interjections, which were included in the adverb class by the Greeks, are treated by the Romans as a separate class, and the class of article is discarded. Other Latin grammarians, however, think that there are more classes, and some that there are fewer than Dionysius's eight parts of speech, and put forward alternative systems. Systems of nine, ten, or even eleven parts of speech have been proposed. However, it is the eight-part-of-speech classification which became widely accepted.

The whole church holds that there are only eight, and I have no doubt that this view is divinely inspired. (Smaragdus, quoted in Michael, 1970: 51)

These brief comments on the parts of speech of the tradition show that, contrary to most present-day English treatments, determiners are not among the classes of either Greek or Latin, nor is there any other class which remotely resembles it.

1.2.2 The first English word classes
Word categorisation has also been a prominent feature of English grammars, and in the course of the development of the English word classes, several classifications have been offered. Some of these classifications are rather inconsistent, and grammarians do not only disagree with each other, but also with themselves. This section offers an outline of the first classifications of words for English.

Greek and Latin are very influential in the early development of the English word classes, and the first English grammars show the same classes which appear in the tradition. Some of these classes have remained part of the system of English until the present day, while others, although well established at one time, were later withdrawn.

According to Michael (1970: 201), William Bullokar (1586) is the first grammarian to offer a classification for English. His classification of words into word classes or parts of speech is, as might be expected, firmly within the tradition, in that eight parts of speech are offered: noun, pronoun, verb, participle, adverb, conjunction, preposition and interjection.

Almost a century later, Ben Jonson (1640) offers a classification which is still within the tradition. Only this time, in addition to the eight parts of speech found in Latin, there is a ninth class, namely the article. That Jonson regards the articles as an autonomous class can be seen from the fact that he lists them in his inventory of word
The early English grammars closely follow the Latin tradition, and the categories they offer are seldom the result of independent thought. At first, grammarians take the traditional eight parts of speech for granted and their own classes are no more than the combination or conflation of the familiar traditional classes. Gradually, however, they begin to realise that it is not always possible to conform to the tradition. As a result, they begin to propose different classifications. The first grammarian to point out that the parts of speech of the tradition are not necessarily a model for English is Wallis (Michael, 1970: 203). Wallis’s (1653) classification is far from being free from the influence of Greek and Latin, because he accepts most of its categories. He innovates, however, in that, contrary to the custom of the tradition, he does not offer a list of word classes. He recognises and discusses the categories substantive, article, adjective, pronoun, verb, preposition, adverb, conjunction and interjection, but he does not make clear which classes are regarded as primary, and which are secondary, i.e. treated as subclasses of other classes. The classification in Lewis’s grammar is another early attempt to free English from the influence of Greek and Latin. ‘Though Lewis gives the eight traditional parts of speech (...), he concludes that six word-classes will suffice ‘to express our thoughts by, fully and distinctly’ in English’ (Padley, 1985: 178). Lewis’s reduction in the number of word classes is achieved by including pronouns in the substantive class and by treating the articles and the prepositions as signs of case.

Another development is the treatment of the category adjective. Priestley (1761) gives adjectives, until then a subclass of the noun, the status of a separate part of speech. He offers the following eight classes: noun, adjective, pronoun, verb, adverb, preposition, conjunction, and interjection. This practice is followed by other eighteenth century grammarians, such as Lowth (1762) and Murray (1795), who also give the adjective the status of primary class. Both Lowth (1762) and Murray (1795), however, differ from Priestley (1761) in that they add the article to their inventory of primary classes. The parts of speech they offer are then the following nine: noun, adjective, pronoun, article, verb, adverb, preposition, conjunction, and interjection.

As seen in the previous section, Latin recognises a system of eight parts of speech, although some variation of this number exists. The diversity of systems among the English grammarians is greater. At one point there are over 200 different classifications and they fall into no fewer than 56 different systems (see Michael, 1970). The first
English word classes are not only diverse, but also very unstable. This instability is shown by the different forms they take, that is, by their different membership and by whether they are given the status of primary or secondary class.

All these variations in arrangement and classification in the first English word classes show that the classes English inherited from Latin are not entirely adequate for the language. Grammarians thus acknowledge the fact that English needs its own system of word classes. They do this in various ways: by simply naming the classes differently, by shifting the elements, by changing the rank of some classes, or by rejecting some classes altogether. Most of the variations encountered are mere refinements of the classical system; some constitute significant departures from it.

This influence of the tradition delayed the development of a genuine system for English. The first classifications of English words were the product of subservience to Latin combined with the belief that what was adequate for Latin should also be adequate for English. The peculiarities of English, therefore, were not considered in a proper light until a much later time.

In the next section I will look at the classifications given to the words in (a) by the early modern English grammarians.

1.3 Early treatments in English grammars
It has been seen in the previous section that determiners are not among the word classes of the early modern English grammarians. This section is concerned with the treatment given to the words in (a) in the early days of modern English. It will be seen that they are found scattered among the nouns, the pronouns, the adjectives, and the articles.

Within the Greek and Latin tradition the definitions given, and the distinctions drawn between classes are mostly semantic. Considerations of a morphological or syntactic nature are rarely taken into account. The semantic approach to the word classes does not prove to be very popular among the English grammarians, and, particularly in the eighteenth century, they show a tendency to rely more on morphological and syntactic criteria than on meaning.

The classifications of the sixteenth and seventeenth centuries are represented by the works of Bullokar (1586) and Butler (1633). The eighteenth century is represented by Priestley (1761), Lowth (1762), Buchanan (1762), and Murray (1795). The nineteenth century is represented by the grammarians Sweet (1891) and Nesfield (1898).
1.3.1  *My, your, his, her, its, our and their*

*My,* *your,* *his,* *her,* *its,* *our* and *their* have been treated as pronouns and as adjectives. The most frequent classification of these words, however, has been as pronouns. They are classed in this way by seventeenth-century grammarians such as Butler (1633) and eighteenth-century grammarians such as Priestley (1761), Lowth (1762) and Murray (1795). One difference between Priestley on the one hand, and Lowth and Murray on the other, is that whereas Priestley classes these words as demonstrative pronouns, Lowth and Murray class them as possessive pronouns.

Although classing these words as pronouns, eighteenth-century grammarians, nevertheless, say that they are adjectival in nature. These words are, therefore, also classed as ‘adjective pronouns’. Adjective pronouns are pronouns which are said to have the nature of adjectives, in that they are joined to nouns, and comprise not only *my, your,* *his,* *her,* *its,* *our* and *their,* but several other words. They contrast with ‘substantive pronouns’, which replace nouns.

In the nineteenth century *my, your,* *his,* *her,* *its,* *our* and *their* are still treated as pronouns, mostly as possessive pronouns. However, whereas Sweet (1891) regards the category of possessive pronouns as a separate category of pronouns, that is, separate from the personal and demonstrative pronouns, Nesfield (1898) regards them as the possessive forms of the personal pronouns.

1.3.2  *This/these and that/those*

Like *my, your,* *his,* etc., *this* and *that,* and their respective plural forms *these* and *those,* have been classed as adjectives as well as pronouns. Their most usual classification, however, has been as pronouns.

When classed as pronouns, *this/these* and *that/those* have been assigned to different subclasses. Butler (1633) and Priestley (1761) treat them as demonstrative pronouns. Murray (1795), on the other hand, places them in a category of pronouns which he calls ‘definitive pronouns’, one of his six types of pronoun. Like with *my, your,* *his,* *her,* *its,* *our* and *their,* although assigning *this/these* and *that/those* to the pronoun class, eighteenth-century grammarians claim that they have adjectival properties, and also class them as ‘adjective pronouns’ (e.g. Lowth, 1762).

Evidence that eighteenth-century grammarians are uncertain about the classification of these words can be found in Buchanan (1762). He classifies *this/these* and *that/those* as demonstrative pronouns, but adds in a footnote that they are in fact
adjectives (which he takes to be a subclass of the noun class), and later concludes that they are best treated as ‘pronominal articles’ (Buchanan, 1762: 98).

Late nineteenth-century grammarians are not much more certain of how to go about classifying these words. Sweet (1891) says that this/these and that/those are primarily adjectives, yet he classes them as demonstrative pronouns. As for Nesfield (1898), he classes them as demonstrative adjectives.

1.3.3 All, both, some, any, each, every, no, either, neither, many, much, (a) few, (a) little, more, most, several, (an)other, enough and such

The treatment of all, both, some, etc. has also been uncertain, and oscillated between pronoun and adjective. The main difficulty in attempting to provide an account of early classifications of these words, however, is the fact that no or few classifications are offered for most of them. For instance, other is the only word accounted for by Priestley (1761), who classes it as a demonstrative pronoun alongside this and that. He has nothing to say about any of the other words.

Lowth’s (1762) treatment of the words all, both, some, etc. is far from being comprehensive, but it is certainly more elucidating. He discusses other, and also any, some and no. These are analysed as pronouns, more specifically, ‘pronouns adjective’. Few and many are also accounted for, but in a rather parenthetical way. When discussing the articles, Lowth refers to few and many as being adjectives which the articles enter in construction with. Buchanan (1762) discusses all, each, every, any, some and other, and classes them as ‘noun adjectives’, therefore as nouns.

Of the eighteenth-century grammarians, it is Murray (1795) who accounts for most of these words. Other, any, some, no, all, and such are definitive pronouns; whereas each, every, and either are distributive pronouns.

With regard to the nineteenth century grammarians, they tend to class the above words as adjectives, rather than pronouns. Sweet (1891) classes all, both, such, some, any, etc. as ‘qualifying adjectives’. These are contrasted with ‘attributive adjectives’ such as big, because ‘[they] do not imply or state attributes, but merely limit or define the noun they are associated with’ (Sweet, 1891: 68). As for Nesfield (1898), he also classifies these words as adjectives. He offers six different kinds of adjectives, namely proper, descriptive, quantitative, numeral, demonstrative and distributive, and it is within the last four categories that we find all, both, some, etc.
1.3.4 *What, which and whose*

Since very early the usual treatment of *what, which* and *whose* has been to regard them as pronouns. They are classed as relative pronouns in Priestley (1761), and as both relative and interrogative pronouns in Butler (1633) and Murray (1795). Lowth (1762), on the other hand, although he refers to these words as relatives, when in relative constructions, and as interrogatives, when they are used in questions, does not make them a separate subclass of pronoun. They are simply grouped with *my, your, his,* etc. and *this* and *that* as 'pronouns adjective'.

As for the nineteenth-century grammarians, both Sweet (1891) and Nesfield (1898) treat them as relative as well as interrogative pronouns, two of their several subclasses of the pronoun class.

1.3.5 *The and a(n)*

The early treatments of the words *the* and *a(n)* are even more uncertain and varied than the treatments of the other words in (α). They have since the beginning of the early modern period been called 'articles', but whether the articles are a kind of pronoun, a type of adjective, or comprise a separate word class altogether, has been a long-standing debate.

The classification of *the* and *a(n)* was a challenge to the first English grammarians. The articles are not part of the Latin tradition, and therefore grammarians have no model to base their classification on. As a result, for the first time they are obliged to describe the words based only on what they can observe.3

Some seventeenth and eighteenth-century grammarians do not describe the articles at all. Butler (1633), for instance, only briefly alludes to them when discussing nouns. In some of the first attempts to describe the articles, for instance in the works of Wharton, Entick and Johnson, they are treated as 'signs of case' (Michael, 1970: 350-351). Here the articles are grouped with words such as *of, to, by, with and from,* and together they are regarded as the signs of case in English: *a(n)* is the sign of the nominative case, and *the* the sign of the accusative case. According to such a treatment, English has cases comparable to Latin, but while these cases in Latin are manifested by endings on the noun, in English they are indicated by signs put before it. Other

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3 Among the Latin Grammarians, Varro is given in Michael (1970: 67) as the only one to have the articles as a separate part of speech.
grammarians, such as Aickin and Priestley, do not treat the articles as case forms, but they nevertheless stress the articles' close relation to the noun by calling them the 'sign of the substantive' (Michael, 1970: 352). In these accounts, the articles are therefore treated as features of the noun, alongside gender and number. Evidence that these grammarians are not certain about how to classify these words can again be seen in Buchanan (1762). Although he says that the category article is one of the features of the noun, alongside gender, case and number (Buchanan, 1762: 77), Buchanan adds that the and a(n) are actually 'nouns adjective', one of the two subdivisions of the noun class, the other being 'noun substantive', as they are added to nouns and do not express any meaning without them (Buchanan, 1762: 87). Later, towards the end of the eighteenth century, this treatment of the articles is considered inappropriate for English and it is abandoned.

The most common practice among the early grammarians, however, is to include the articles within some already existing class. They have been treated among the nouns as 'noun adjectives' by Greaves, Barker and Collyer; as pronouns by Jonson and Henson; as prepositions by Wilkins and Martin; and as particles by Gill and Walker (Michael, 1970: 354-355).

A particularly interesting treatment is that of Turner (1710). Contrary to most grammarians who give the two articles the same classification, Turner places the and a(n) in different classes: the former is a pronoun whereas the latter is an adjective. The classification of the articles with the adjectives is the most usual, and it is, according to Michael (1970: 354), due to the demonstrative nature of the. Those who place the articles within the noun class want to stress their close association with that class, i.e. articles are always used with nouns (Burnett, 1774: 73-74). Only a few grammarians include the articles among the pronouns or the prepositions. Wilkins, for instance, classes the articles with the prepositions on the grounds that they are 'proper to substantives' (Michael, 1970: 354). As for their inclusion with particles, those who do so, include in this class words which lack number, or which are small words.

Towards the end of the eighteenth century it becomes common practice to give the articles the status of primary class (Lowth, 1762; Murray, 1795). Although this becomes the preferred treatment, in the nineteenth century, adjective (Nesfield, 1898) and pronoun (Sweet, 1891) treatments of the articles can still be found.

It is worth noting that since very early the articles are felt to play a significant role in English, and some grammarians, although not including them in their enumerations of
word classes, nevertheless single them out (e.g. Burnett, 1774), and discuss them as if they had the status of a separate word class.

1.3.6 Numerals

The words one, two, three, etc.; first, second, third, etc. did not receive much attention from the early grammarians. Buchanan (1762) classifies the cardinal numerals as noun adjectives, but has nothing to say about the ordinal numerals. In Michael (1970: 305) the only mention of how these words have been classified is in his discussion of Salmon’s (1798) treatment of adjectives. Salmon divides the adjectives into two subclasses: ‘special’ and ‘numerical’, the latter being adjectives which determine quantity or number. However, no examples are offered, and the view that Salmon is referring to the numerals is mere speculation on my part.

The classification of numerals can best be seen in nineteenth-century grammars. Sweet (1891) gives numerals the status of a primary word class. He claims, however, that the cardinal numerals have formal characteristics of pronouns, whereas the ordinal numerals are primarily adjectives (Sweet, 1891: 87). Nesfield (1898) places both cardinal and ordinal numerals, as well as the multipliers double, twice, etc., within the adjective class. They are Nesfield’s ‘definite numeral adjectives’.

1.3.7 We and you

The words we and you are invariably classified as personal pronouns. However, when classifying we and you in this way, grammarians have in mind constructions in which these forms stand on their own and function as the subject or object of a sentence, or where they are the complement of a preposition. In such constructions they have always been, and still are analysed as personal pronouns. It is in constructions such as we linguists and you students, where they are followed by a noun, that we and you have come to be classified as determiners. With the exception of Jespersen (1909-1949), who when discussing the plural in English briefly mentions their occurrence in such constructions, I have not found any mention of these words in such constructions in the grammars consulted.
1.4 Twentieth century treatments

This section considers how the words in (a) have been classified by twentieth-century grammarians. It will be seen that even at this late stage there is still a great variation of treatments.

By the end of the first half of the twentieth century grammarians more or less agree on which classes are needed for English. There is not as yet, however, a uniform system, and the lists of word classes offered by grammarians still vary. For instance, Jespersen (1933) gives six, whereas Fries (1952) has nineteen. Some of the differences are only superficial, others are much deeper and show different approaches to classification. This section gives an overview of the classifications put forward by some of the most representative twentieth-century grammarians.

I will start by looking at what Gleason (1965: 78) refers to as 'the great European reference grammars', all written in the first half of the twentieth century: *A Grammar of Late Modern English* by Poutsma (1914-1929); *A Handbook of Present-day English* by Kruisinga (1925); and *A Modern English Grammar on Historical Principles* by Jespersen (1909-1949). I will also consider the classifications of American linguists such as Bloomfield (1933), Curme (1935) and Fries (1952). The treatments of other grammarians, such as Palmer (1924), Long (1961) and Gleason (1965), will also deserve attention. Glimpses of important developments are given here in order that we may obtain an insight into the forces that have been at work shaping the present-day English word class of determiner. Current treatments such as Quirk et al.’s (1985) and Huddleston and Pullum’s (2002) will follow in a later section.

1.4.1 Poutsma (1914-1929)

Poutsma does not recognise determiners, and the words in (a) are treated in several classes. Some of the words are grouped together as independent classes, others as subcategories of larger classes.

Poutsma gives the articles *the* and *a(n)* the status of word class. The cardinal and ordinal numerals are also grouped together as an autonomous class. In Poutsma’s numeral class we also find the multipliers *double* and *twice*. It is not entirely clear, however, how Poutsma treats the other multipliers, i.e. *three times*, *four times*, etc.

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4 Since Jespersen’s treatment can be more easily seen in his one-volume grammar *Essentials of English Grammar* (1933), this is the work I will be mostly referring to.
Although they are discussed under the heading ‘numeral’, they are also referred to as phrases.

The remaining words in (α) are mostly classed as pronouns. *My, your, his, etc.* are possessive pronouns; *this/these* and *that/those* are demonstrative pronouns; and *such* is a determinative pronoun. *What, which and whose* are classed as interrogative, as well as relative pronouns. Poutsma does not have a class of exclamative pronouns, but speaks of the occurrence of interrogative *what* in exclamative constructions, and in such cases refers to it as ‘exclamatory what’.

The words *all, both, some, any, no, every, each, either, neither, (a) few, (a) little, many, much, more, most, several, enough, other* are treated together under the heading ‘indefinite pronouns and numerals’. It is not entirely clear whether Poutsma is assigning these words to the pronoun class and to the numeral class, in other words, allowing dual classification, or whether the term refers to a third category altogether.

### 1.4.2 Kruisinga (1925)

Kruisinga (1925) does not offer a determiner class. The words in (α) are found within the pronoun class, which is treated as a separate class from the noun.

*This/these, that/those* and *such* are demonstrative pronouns. *My, your, his, her, its, our and their* are possessive pronouns, more precisely ‘attributive possessives pronouns’, contrasting with *mine, yours, his, hers, its, ours* and *theirs* which Kruisinga calls ‘independent possessives pronouns’.

The articles *the* and *a(n)* are treated separately, as if they constituted two distinct subclasses of the pronoun class. *The*, although treated separately from the demonstrative and possessive pronouns, is said to be similar in function to both types of pronouns. However, when occurring in comparative and superlative constructions, Kruisinga regards *the* as an adverb, because he says that in those constructions it modifies adjectives and adverbs rather than nouns.

*What, which* and *whose* are classed as interrogative pronouns and as relative pronouns. Both as an interrogative and a relative pronoun, *what* is said to also have an exclamatory use.

Finally, *all, both, some, any, each, every, either, neither, no, other* and *several* are classed as indefinite pronouns. Kruisinga does not offer any classification for numerals, but he considers the possibility of including them in his pronoun class (1925: 83-84).
1.4.3 Jespersen (1909-1949)

Determiner is not among Jespersen’s classes either, and the words in (a) are mostly found within the adjective and the pronoun classes.

Jespersen offers no definitions, but establishes the classes by means of listing the words he takes to comprise them. He says that ‘it is practically impossible to give exact and exhaustive definitions of these classes’ but that ‘nevertheless the classification itself rarely offers occasion for doubt and it will be sufficiently clear (...) if a fair number of examples are given’ (Jespersen, 1933: 66). He adds that by naming the classes some sort of definition is implied.

The vast majority of the words in (α) are regarded as pronouns, although Jespersen says it is difficult to say why they should all be classed together as such (1933: 68). He offers different subdivisions for the pronoun class. One of them is into personal pronouns, possessive pronouns, demonstrative pronouns, interrogative pronouns, relative pronouns and indefinite pronouns.

My, your, her, etc. are possessive pronouns, whereas this/these, that/those, the, and such are demonstrative pronouns. What and which are classed as both interrogative and relative pronouns. Jespersen also speaks of an exclamative use for interrogative what. The indefinite article a(n), some, any, all, both, every, each, no, either, neither and other comprise the indefinite pronoun class.

In addition to the classification above, Jespersen (also) has a threefold division of the pronoun class: definite pronouns or pronouns of definite indication, indefinite pronouns or pronouns of indefinite indication, and pronouns of totality. This/these, that/those, the relatives what and which, the and such are definite pronouns. A(n), other, some, any, either, and the interrogatives what and which are indefinite pronouns. All, both, every, each, no and neither are pronouns of totality. These are subdivided into two groups: positive and negative. All, both, every and each belong to the first group, while no and neither go into the second.

The words many, much, few and little are first treated as pronouns (Jespersen, 1924). Later (Jespersen, 1933), however, they are classed as adjectives, alongside more and enough. Jespersen calls these words ‘quantifiers’ and contrasts them with the adjectives he calls ‘qualifiers’ (e.g. big, good).

Jespersen’s classification of the numerals has also fluctuated. They are first treated as a subclass of the pronoun class (Jespersen, 1924), but later the cardinal and ordinal numerals together are taken to comprise a class in their own right (Jespersen,
1933: 66-68). It is worth noting however, that although Jespersen lists numerals in his inventory of word classes, he still discusses them within the pronoun class.

1.4.4 Palmer (1924)

Like Jespersen, Palmer (1924) does not recognise a primary class of determiner. His treatment of the words in (a), however, is rather similar to the one found nowadays. He groups the vast majority of these words together in a word class he calls ‘Pronouns and Determinatives’. He calls the words in (a) ‘determinatives’ and says the reason for grouping determinatives with pronouns (i.e. personal pronouns) is because most determinatives may be used without a noun, as well as with a noun. He says that, although it is difficult to draw a rigid distinction between the two sets of words, they should nevertheless be distinguished, and takes the personal pronouns only to be pronouns proper (1924: 42).

Palmer subdivides his determinative class into four subclasses: articles and article-like determinatives; numerical-quantitative; possessives; and ordinals. The, a(n), this/these, that/those, some, any and no are dealt with under the heading ‘articles and article-like determinatives’. Palmer also takes every, each, both, either, neither, all, such and other to be article-like determinatives, but adds that these are in fact intermediate between articles proper and numerical-quantitative determinatives.

The cardinal numerals, half, several, (a) few, (a) little, much, many, less, more, most are among Palmer’s numerical-quantitative determinatives. All, some, any, and no, although already classified as article-like determinatives, are also treated as numerical-quantitative determinatives.

My, your, his, etc. are possessive determinatives, and are referred to as ‘possessives used as modifiers’. These, Palmer (1924) contrasts with the possessive determinatives mine, yours, hers, etc., to which he refers as ‘possessives used pronominally’. The ordinal numerals, alongside the words next and last, are classed as ordinal determinatives.

What, which, and whose are not among Palmer’s determinatives. They belong to the word class he calls ‘connectives’. What, besides being classed as a connective, also features among the members of Palmer’s word class ‘interjections and exclamations’.
In the second edition of Palmer’s grammar (Palmer and Blandford, 1939) the treatment of the words in (a) remains the same. In the third edition (Palmer and Blandford, 1969), however, their treatment is somewhat different. They are still treated as a category in their own right, but the class is now called ‘determiner’. Moreover, the class is now much more inclusive, in that the personal pronouns are now included, as are words such as somebody, anyone, everything, nothing. There are also many more subclasses - ten instead of four: semi-pronouns, pronouns, possessives, demonstratives, articles, partitives, article-analogues, quantitatives, numericals and ordinals. These new subclasses, however, are no more than further divisions of the previous ones. Which and whose continue to be classed as connectives, and what is again treated as a connective, and as belonging to the interjections and exclamations class.

1.4.5 Bloomfield (1933) and Curme (1935)

Bloomfield’s (1933) and Curme’s (1935) treatments of the words is (a) are very similar to one another. Like Kruisinga (1925), they also group the words in (a) together in the same word class. Only this time, they are regarded as adjectives rather than pronouns.

The significance of Bloomfield’s classification lies in the fact that he is said to be the first to offer a determiner class. The entry in the *Oxford English Dictionary* (OED) for sense 3 of the word ‘determiner’ gives Bloomfield as being the first to offer determiner as a word class for English. Bloomfield, however, does not consider determiners as a primary class, but as a subclass within the class of adjectives. Moreover, although Bloomfield groups all the words in (a) together as adjectives, only some of them are considered members of the subclass determiner.

Bloomfield divides adjectives into two groups: ‘descriptive’ and ‘limiting’ adjectives. Descriptive adjectives are said to constitute an open class and express quality (e.g. fresh, big, sweet), whereas limiting adjectives constitute a closed class and express limitation. Bloomfield says, however, that the boundary between limiting and descriptive adjectives is blurred (Bloomfield 1933: 203).

The words in (a) are Bloomfield’s limiting adjectives, which are subdivided into ‘determiners’ and ‘numeratives’. Determiners are further subdivided into two classes: definite and indefinite determiners. My, your, his, etc.; the; and this/these, that/those are definite determiners, while a(n), some, any, each, every, either, neither, no, what, which

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3 Revised and rewritten by Roger Kingdom.
are indefinite determiners. All, both, many, much, more, less, few, little and such, together with the cardinal and ordinal numerals are Bloomfield’s numeratives. Numeratives are also said to fall into various subclasses, although only two are mentioned: numeratives which precede determiners, that is all and both; and those which follow them, namely all the other numeratives. Many and such are said to be somewhat special, since although they usually follow determiners, they can precede the indefinite article.

Like Bloomfield, Curme also treats the words in (a) as limiting adjectives, and contrasts them with descriptive adjectives. He says that descriptive adjectives are very simple in nature and do not form classes. Limiting adjectives, on the other hand, are much more varied and form distinct groups (Curme, 1935: 46). However, unlike Bloomfield, whose limiting adjectives have only two subdivisions, Curme’s classes of limiting adjectives are nine in number: possessive, demonstrative, intensifying, numeral, relative, interrogative, indefinite, proper and exclamatory limiting adjectives.

My, your, his, her, etc. are possessive adjectives, whereas this/these and that/those, the definite article, both, either, neither, each and half are demonstrative adjectives. When the demonstrative adjectives occur in constructions such as the/this/that book on the table, ‘where they point forward to a following explanatory phrase or clause’, they are referred to as ‘determinatives’ (Curme, 1935: 53). Some, any, no, many, much, several, more, (a) little, (a) few, less and enough are indefinite limiting adjectives, and so are the indefinite article, all, every and other, which are also classed as demonstratives. Such has multi-classifications. It is classed as a demonstrative, an indefinite, and as an exclamatory limiting adjective.

What and which are classed as both relative and interrogative adjectives. What is also found in the exclamatory adjective class alongside such. The cardinal and ordinal numerals are numeral limiting adjectives, and so is the multiplicative double.

1.4.6 Fries (1952)

Before looking at Fries’ (1952) treatment of the words in (a), a few words about his system of word classes are required. Fries offers a system which is, to a certain extent, an innovation. He claims that the criterion for word class assignment is one of position: all words that occupy the same position in an utterance belong to the same class. He then proposes four big classes and fifteen small ones. He refers to the four big classes as ‘parts of speech’, and says that they make up the bulk of the words in English utterances. The fifteen other classes he refers to as ‘function words’. Fries does not employ the familiar
terminology when naming his classes, but instead he uses arbitrary labels. He calls his four major classes Class 1, Class 2, Class 3 and Class 4. These, in the conventional terminology, correspond to the classes noun, verb, adjective and adverb, respectively. As for his fifteen smaller classes, he gives each a letter from A to O.

Fries groups the great majority of the words in (a) together as a class of their own. They are Fries's Group A. In Group A he compiles all the words which can occupy the same position as the, and can occur with his Class 1 words, i.e. nouns (Fries, 1952: 89). Although naming the class Group A, Fries refers to its members as determiners (Fries, 1952: 118).

**Group A**

*the, a(n); this/these, that/those;*
*my, your, his, her, its, our, their; John's;*
*all, both, some, any, every, each, no, much, many, few, more, most;*
*one, two, three, etc.*

The remaining words in (a) are not accounted for in Fries's word class system. Note, however, that his classification is based on a large body of recorded conversations, and the failure to provide a classification for the other words in (a) may be attributed to the fact that these words do not appear in his corpus.

**1.4.7 Long (1961)**

Long (1961) does not list determiner among his word classes, and the words in (a) are found in the pronoun class. Although he does not have a word class determiner, Long speaks of 'determiner modifiers' or simply, 'determiners'. He uses the term as a functional label, and takes it to be a function typical of pronouns, although he says that not all pronouns perform it (Long, 1961: 46). Long takes pronouns to be of two kinds, and accordingly subdivides the class into two groups: 'determinative pronouns' and 'noumal pronouns'. Determinative pronouns are concerned with the notion of identification, number, or quantity (Long, 1961: 40): they are the pronouns which can be used with a noun as determiner modifiers, as well as without a noun in what Long refers to as 'reduced constructions' (e.g. *this: I need this book; I need this*). Nounal pronouns, on the other hand, cannot be used with nouns as determiner modifiers, and only occur on their own (i.e. personal pronouns).
The vast majority of the words in (a) are classed as determinative pronouns. Long subdivides this class into three subclasses, namely, full determinatives of identification, partial determinatives of identification, and determinatives of number and quantity. The articles the and a(n), this/these, that/those, some, any, either, neither, no, every, each, what, which and whose are full determinatives of identification. Such, (an)other and the ordinal numerals are partial determinatives of identification. All, both, few, little, several, many, much, more, most, enough, and the cardinal numerals are determinatives of number and quantity. Long says, however, that this classification is rather arbitrary, since some determinatives of identification, e.g. some, any, and no also express quantity (Long, 1961: 47).

My, your, his, etc. are nounal pronouns. They are regarded as inflections of the personal pronouns, more precisely, as their short possessive forms. Long (1961: 338) says, however, that my, your, his, etc. are exceptional as nounal pronouns in that their most characteristic function is that of determiner modifier.

1.4.8 Gleason (1965)

Gleason (1965) does not offer a list of the word classes he recognises. There are several occasions, however, where he speaks of a word class determiner.

Gleason’s determiner class is identical to Fries’s (1952) Group A. Gleason agrees with the grouping of the articles, the demonstratives, the possessives and words such as many, much, all, both, etc. together as an autonomous class. He says, however, that the class they form is rather heterogeneous, and requires further division. He points out that these words combine with each other in different ways, and that these differences should be accounted for. Gleason (1965: 127), therefore, puts forward what is probably a first attempt to subdivide the determiner class on syntactic grounds. He suggests a subclassification which distinguishes the following six subgroups:

1. determiners that can occur in sequences, but only as the first member, e.g. all, both;
2. determiners that can occur as the first or second of two or as the second of three, e.g. the, this, that;
3. determiners that can occur only as the last in sequences of two or three, e.g. several, many;
4. determiners that do not ordinarily occur with other determiners except occasionally with numerals, e.g. every, each, any;
5. the numerals e.g. two, three, etc.;
6. the indefinite article which most often occurs as the only determiner in a phrase, but may occur in certain very special combinations such as such a and many a.

The members of Gleason's determiner class, however, are never actually listed, and it is not entirely clear which words are taken to comprise the class. Moreover, some of the words in (a), such as what, which and whose are not accounted for. Also, Gleason seems to oscillate from excluding to including the numerals in the determiner class.

1.5 Current treatments
I conclude the discussion of the treatments of the words in (a) with an account of how they are classified nowadays. I will only present these treatments summarily here, because a more detailed account of the current analyses will be given in chapters 2 to 4. The current treatments are represented by Quirk et al. (1985), Abney (1987), Hudson (1990, 2000) and Huddleston and Pullum (2002). The classifications in Quirk et al. (1985) and Huddleston and Pullum (2002) can be said to be conventional, whereas Abney's (1987) and Hudson's (1990, 2000) are to a certain extent controversial.

1.5.1 Abney (1987) and Hudson (1990, 2000)
Abney's (1987) and Hudson's (1990, 2000) treatments of the words in (a) can be said to be similar, to the extent that they both group the great majority of these words together with words such as I, him, somebody, etc. in a single class. However, their treatments differ in that Abney calls the superclass they form 'determiner', whereas Hudson calls it 'pronoun'.

This difference is more than one of terminology. For Hudson pronouns are a subclass of noun, therefore the words in (a) are ultimately nouns. Abney, however, treats pronouns and nouns as two distinct classes. The two linguists also differ in that whereas Hudson has a uniform analysis for the words in (a), i.e. they are all pronouns/nouns, 6 for Abney, although most of the words in (a) are determiners, some are adjectives, i.e. many, much, few, little, and some are nouns, i.e. the numerals.

6 Although Hudson (1990, 2000) subsumes pronouns and numerals under the noun class, he treats them as being two separate subclasses.
1.5.2 Quirk et al. (1985) and Huddleston and Pullum (2002)

Quirk et al.'s (1985) and Huddleston and Pullum's (2002) treatments of the words in (a) are somewhat similar. They group the articles, 

\[ \text{this/these, that/those, what, which, all, both, every, each, either, neither, no, some, any, many, much, few, little, more, most, (an)other, enough} \]

together in a class of their own. However, whereas Quirk et al. call the class 'determiner', Huddleston and Pullum call it 'determinative'. They also offer the same treatment for the words my, your, his, her, its, our and their. These are regarded as pronouns, more precisely, as the genitive forms of the personal pronouns.\(^7\)

The two grammars differ, however, in their treatment of the remaining words. The cardinal and the ordinal numerals together are taken to comprise a distinct word class by Quirk et al. Huddleston and Pullum, on the other hand, allow a dual classification for the cardinal numerals: they are classed as determinatives as well as as nouns. As for the ordinal numerals, these are not accounted for.

Quirk et al. and Huddleston and Pullum also differ in their treatment of the fractions and multipliers. Whereas these are all determiners for Quirk et al., Huddleston and Pullum offer different analyses: double is classed as a noun, one fifth, two thirds, three times, etc. are analysed as full noun phrases; and twice is an adverb. As for the words such and whose, these are both determiners for Quirk et al., whereas Huddleston and Pullum regard the former as an adjective and the latter as a pronoun. As regards the words we and you when used in combination with a noun, they are determinatives for Huddleston and Pullum, but treated as pronouns by Quirk et al.

1.6 Summing up

This section sums up the discussion of the early twentieth century and current treatments of the words in (a). Table 1 below and the comments which follow it summarise the

\(^7\) It is interesting to note that, although Quirk et al. (1985) do not consider the words my, your, his, etc. or the numerals as determiners, they nevertheless discuss them when discussing the determiner class. When my, your, his, etc. are discussed among the determiners, they are referred to as 'the possessive pronouns as determiners' (Quirk et al., 1985: 256), which suggests that the term 'determiner' is now being used as a functional label. This is indeed how the term is used in the earlier Quirk et al. (1972), where the words in (a) are not grouped as a separate class, determiner or otherwise, but are treated as pronouns alongside words such as I, him, yourself and something, and 'determiner' refers to one of the two functions of pronouns, the other being referred to as a 'nominal' function.
analyses presented in the two preceding sections, and bring out the main features of each analysis, as well as highlighting the similarities and differences between them.

The table shows the treatments given to the articles, the possessives *my, your, his*, etc., the demonstratives *this/these and that/those*, the words *what, which and whose*, the elements usually referred to as quantifiers (e.g. *all, both, some, any*, etc.), and the numerals. The forms *we* and *you* have been left out. It is their occurrence in constructions such as *we linguists* and *you students* that led them to be classed as determiners, but this use is not accounted for by most of the grammarians whose classifications I have looked at, with the exception of some of the current classifications. For the sake of simplification, where the difference is only one of terminology, the term ‘determiner’ has been preferred. Finally, note that ‘(?)*’ means that it is not entirely clear how the words are classified, whereas ‘-’ means that no classification is offered for the words.

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8 Jespersen also briefly refers to the occurrence of *you* and *we* in such constructions when discussing the plural in English (Jespersen, 1909-1949 (vol. 2): 46-47, 85).
<table>
<thead>
<tr>
<th>Author/Year</th>
<th>Time Period</th>
<th>the, a(n)</th>
<th>my, your, his, etc.</th>
<th>this/these, that/those</th>
<th>what, which, whose</th>
<th>all, both, any, some, etc.</th>
<th>numerals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poutsma (1914-1929)</td>
<td>primary class</td>
<td>pronouns</td>
<td>pronouns</td>
<td>pronouns</td>
<td>pronouns</td>
<td>primary class</td>
<td></td>
</tr>
<tr>
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<td>primary class</td>
<td>pronouns</td>
<td>pronouns</td>
<td>pronouns</td>
<td>pronouns</td>
<td>pronouns (7)</td>
<td></td>
</tr>
<tr>
<td>Jespersen (1909-1949)</td>
<td>primary class</td>
<td>pronouns</td>
<td>pronouns</td>
<td>pronouns</td>
<td>pronouns/adjectives</td>
<td>primary class</td>
<td></td>
</tr>
<tr>
<td>Palmer (1924, 1939, 1969)</td>
<td>determiners</td>
<td>determiners</td>
<td>determiners</td>
<td>determiners</td>
<td>determiners</td>
<td>determiners</td>
<td></td>
</tr>
<tr>
<td>Bloomfield (1933)</td>
<td>adjectives</td>
<td>adjectives</td>
<td>adjectives</td>
<td>adjectives</td>
<td>adjectives</td>
<td>adjectives</td>
<td></td>
</tr>
<tr>
<td>Curme (1935)</td>
<td>adjectives</td>
<td>adjectives</td>
<td>adjectives</td>
<td>adjectives</td>
<td>adjectives</td>
<td>adjectives</td>
<td></td>
</tr>
<tr>
<td>Fries (1952)</td>
<td>determiners</td>
<td>determiners</td>
<td>determiners</td>
<td>_</td>
<td>determiners</td>
<td>determiners</td>
<td></td>
</tr>
<tr>
<td>Long (1961)</td>
<td>pronouns</td>
<td>pronouns</td>
<td>pronouns</td>
<td>pronouns</td>
<td>pronouns</td>
<td>pronouns</td>
<td></td>
</tr>
<tr>
<td>Gleason (1965)</td>
<td>determiners</td>
<td>determiners</td>
<td>determiners</td>
<td>_</td>
<td>determiners</td>
<td>determiners</td>
<td></td>
</tr>
<tr>
<td>Quirk et al. (1985)</td>
<td>determiners</td>
<td>pronouns</td>
<td>determiners</td>
<td>determiners</td>
<td>determiners</td>
<td>primary class</td>
<td></td>
</tr>
<tr>
<td>Abney (1987)</td>
<td>determiners</td>
<td>determiners</td>
<td>determiners</td>
<td>determiners</td>
<td>determiners/adjectives</td>
<td>nouns</td>
<td></td>
</tr>
<tr>
<td>Hudson (1990, 2000)</td>
<td>(pro)nouns</td>
<td>(pro)nouns</td>
<td>(pro)nouns</td>
<td>(pro)nouns</td>
<td>(pro)nouns</td>
<td>nouns</td>
<td></td>
</tr>
<tr>
<td>Huddleston and Pullum (2002)</td>
<td>determiners</td>
<td>pronouns</td>
<td>determiners</td>
<td>determiners/pronouns</td>
<td>determiners</td>
<td>determiners/nouns</td>
<td></td>
</tr>
</tbody>
</table>

Table 1: Twentieth century and current treatments of determiners
The broad pattern emerging from the table above is that there is a tendency among the European grammarians (Poutsma, 1914-1929; Kruisinga, 1925; Jespersen, 1909-1949) at the beginning of the twentieth century to classify the words in (α) as pronouns. This tendency is shown to contrast with a later trend among the American linguists (Bloomfield, 1933; Curme, 1935), which is to classify these words as adjectives.

The classifications of Poutsma, Kruisinga and Jespersen only differ where the articles and the numerals are concerned. The articles are given the status of word class by Poutsma, whereas both Kruisinga and Jespersen take them to be pronouns. Also, while Kruisinga is inclined to regard numerals as pronouns, Poutsma and Jespersen take them to constitute a word class in their own right.

A somewhat different classification among the European grammarians is that of Palmer (1924). Although he groups most of the words in (α) together with the personal pronouns in the same class, he draws a distinction between these two sets of words, and refers to the former as ‘determiners’ and to the latter only as ‘pronouns’. Thus, although his treatment of the words in (α), like Poutsma’s, Kruisinga’s and Jespersen’s, also associates these words with the pronoun class, it does so to a lesser extent. In the third edition of his grammar (Palmer and Blandford, 1969), however, this distinction is abandoned.

As regards the American linguists, the classifications of Bloomfield (1933) and Curme (1935) are practically the same, with minor variations. Bloomfield is said to be the first to have proposed a determiner class for English. Note however, that, although he may have been the first to use the term ‘determiner’ to refer to the words in (α), the determiner class he offers is rather different from the one recognised nowadays. Bloomfield’s determiner class is less encompassing. For instance, the words *all, both, many, much* and the numerals are excluded. Also, and most importantly, Bloomfield’s determiners are not an autonomous class, but rather a subclass of adjectives. A closer look at the table will show that it is Palmer, as a matter of fact, who first introduced the word class determiner. He includes virtually all the words listed in (α), and treats them outside the adjective class. The fact that he calls the class ‘determinative’ rather than ‘determiner’ does not invalidate the nature of the classification, and should not deny him the credit of being the first to give shape to the class.

As seen above, the determiner class as it is known now began to take shape earlier than generally thought. However, it is not until 1952 with Fries that the class is given the status of primary class, thus making Fries’s (1952) treatment of the words in (α) the one
which most closely resembles the classifications we have nowadays. As for Gleason's
(1965) treatment, the significance of his classification is not so much how he treated the
words in (a), for his categorization is identical to that of Fries'; the value of his analysis
lies in the fact that he appears to be the one to have set the trend that the position these
words assume in relation to one another constitutes a criterion for class subdivision, a
practice which is still common in most current classifications (cf. Quirk et al., 1985;
Biber et al., 1999).

Now consider the current treatments. Note that the classifications in Quirk et al.
(1985) and Huddleston and Pullum (2002) are not only similar to one another, but they
also bear a great resemblance to Gleason's (1965) and, as a result, to Fries' (1952)
classifications. As for the treatments in Abney (1987) and Hudson (1990, 2000), a glance
at table 1 will show that, although they may appear innovative, they are not entirely new.
Hudson's classification of the words in (a) as pronouns may differ from most present-day
classifications, but it is by no means an innovation. In fact, it can be said to be a return to
the European trend at the beginning of the twentieth century, that is to the classifications
put forward by Poutsma (1914-1916), Kruisinga (1925) and Jespersen (1909-1949).
What distinguishes Hudson's treatment from the others is that he regards pronouns as a
subclass of nouns, whereas for Poutsma, Kruisinga and Jespersen pronoun and noun are
two distinct classes.

Hudson's classification is also similar to that of Long (1961). Both treat the words
in (a) and the personal pronouns together in the same class, namely pronoun. Three
factors, however, distinguish the two classifications. The first is that Long, by grouping
the two sets of words in two different subclasses of pronouns, seems to preserve the
category determiner. Hudson, on the other hand, does away with the determiner class
altogether, and simply refers to the words in (a) as pronouns. The second difference is
that whereas for Long numerals are also pronouns, Hudson treats them separately. A last,
but probably the most significant difference between the two classifications is that
whereas Long considers pronoun and noun as two distinct classes, for Hudson, pronouns
form a subclass of the noun class.

As for Abney (1987), his treatment of the words in (a) is practically the same as
that in the third edition of Palmer (Palmer and Blandford, 1969). He groups most of these
words with words such as I, him, itself, someone, etc., and calls the class they form
determiner.
To sum up, with respect to the different classifications the words in (a) have received, the general picture seems to be as follows. Before they were grouped together as a class in their own right, their treatment varied considerably. At first, they were treated within the pronoun class. Later, however, grammarians seem to attach greater importance to the fact that these words appear before nouns as some kind of modifier, and grouped them with words such as big and sweet as adjectives. This treatment is later abandoned, and the words in (a) are then treated separately on the grounds that they do not share a sufficient number of properties with words such as big and sweet to be assigned to the same class. It is claimed that the words in (a) are not only syntactically distinct from adjectives, but also from other words, and that they deserve separate recognition as an autonomous word class. Grammarians then set about to postulating a new independent class to handle these words, namely the determiner class. Some current treatments, however, have questioned the necessity of a separate class to deal with these words. It is now generally agreed that so-called determiners are distinct from adjectives. The dispute now is whether or not they are better analysed as pronouns.

1.7 Conclusion
The discussion here has shown that the present-day English determiner class is a fairly recent one, and that its status as a word class is still controversial. It is the aim of the following chapters to look at the evidence that supports this category, as well as to present the arguments against its postulation as a valid word class for English. It will be shown that the class as it stands now is too heterogeneous, and that further taxonomic refinement is required.
Chapter 2
The present-day English word class determiner

2.1 Introduction
This chapter considers the syntactic and semantic properties of the present-day English word class determiner as they are presented in most current grammar books, including the three large-scale grammars Quirk et al. (1985), Biber et al. (1999) and Huddleston and Pullum (2002). I look into the properties the alleged members of the class are said to share, which have led grammarians to consider them to constitute a distinct class of words. It is not the purpose of the present chapter to offer a critical analysis of these descriptions, and they will, for the time being, be taken as given. Their shortcomings will be dealt with in the next two chapters.

The need for a detailed account of the class stems from the diversity of elements taken to comprise it. The words which are treated as representative members of the determiner class in English in the current literature are given in (P) below.

(P) the articles the, a(n);
the demonstratives this/these, that/ those;
the possessives my, your, his, her, its, our, their;
which\textsubscript{rel}, what\textsubscript{rel}, whose\textsubscript{rel}; which\textsubscript{int}, what\textsubscript{int}, whose\textsubscript{int}; what\textsubscript{exc};
such, half, the quantifiers all, both, some, any, each, every, either, neither,
no, many, much, few, little, several, more, most, enough, another;
cardinal and ordinal numerals

First, a few words on the use of the term ‘determiner’ are necessary. This term is often used as a form label, contrasting with ‘noun’, ‘verb’ and ‘adjective’, but sometimes also as a functional label, contrasting with ‘head’, ‘complement’ and ‘modifier’. When used as a functional label, the term includes not only the words above, but also genitives such as John’s and the dog’s, and fractions and multipliers like a third, three fifths, three times, etc. As my concern in the present chapter is solely with determiners as a word

\footnote{Note that (β) above differs from (α) in chapter 1 in that in (β) I give only the elements which are offered in most current descriptions. Other elements are sometimes also said to be members of the determiner class. I deal with those later on in this chapter in section 2.4.10.}
class, these forms have been deliberately excluded because they are noun phrases in
form, although I agree that, like the words in (b), they have a specifying function in
nominal constructions such as (1) and (2) below.

(1a)  John's house
(1b)  the dog's house

(2a)  a third the price
(2b)  four times my salary

Given that, despite the close association, we do not find a one-to-one relation between
form and function, it would be more appropriate to employ different terms to refer to the
class of words and to the function. Quirk et al. (1985) implement this strategy and use the
term 'determiner' only to refer to the form class. When referring to the function, they use
the term 'determinative'. Huddleston (1984) and Huddleston and Pullum (2002) also use
different terms. Only this time the term 'determiner' is employed as a functional label,
and they refer to the class of words which they take to typically perform this function as
'determinatives'. Since the words in (b) are most commonly referred to in the literature
as 'determiners', I shall use this term here as a form label only, i.e. to refer to the word
class these words are said to belong to. It will be clear from what follows that due to its
lack of distinctive internal properties, the determiner class is usually described in terms
of the function its members have in phrase structure.

Finally, note that in what follows I will be exclusively concerned with the words
in (b) when in prenominal position in noun phrase structure. When used in different
positions these words are usually not analysed as determiners. I will therefore, in this
chapter, have nothing to say, for instance, about this and that when they stand on their
own as a phrase, or some and many in the so-called partitive constructions (e.g.
some/many of my books), given that in such cases they are no longer treated as
determiners, but rather as pronouns (e.g. Quirk et al., 1985). The widely held assumption
that different uses of the words in (b) should be handled in terms of differences in word
class will be addressed in chapters 3 and 4.

The organisation of this chapter is as follows. Section 2 is concerned with the
syntactic properties of the determiner class, and section 3 with its semantic properties. In
section 4 I take a closer look at the various members of the class. Finally, section 5 is the conclusion.

2.2 The syntax of determiners
In this section I look at the properties the elements taken to comprise the determiner class in English are said to share. Here I look at the class as a whole, rather than at individual members, and consider its syntactic as well as its morphological and phonological properties.

2.2.1 The properties of determiners
Determiners are found within noun phrases and are usually presented in grammar books in discussions of noun phrase structure. They are taken to constitute both a closed class and a functional category. The determiner class is a closed class because it has a small number of members which can easily be listed (see (β) above), and new members are rarely added. It is considered to be a functional category because the words which make up the class are said to have little, if any, descriptive content or meaning, and serve primarily to carry grammatical information, mostly relating to definiteness and indefiniteness, and to quantity. Determiners do not only have little meaning, but also most of them have little phonological and orthographical bulk. Another characteristic of determiners which is typical of function words is that, although few, they are very frequent. In fact, determiners are among the most frequent words in the English language, the articles being the most frequent among them. In the Bank of English, for instance, determiners appear among the 200 most frequent words in English (Berry, 1997: 1), and in the LOB corpus (Johansson and Hofland, 1989), a corpus of approximately one million words, the articles figure amongst the fifty most frequent words.

The morphology of determiners is rather varied. There seem to be no morphological characteristics shared by all of them, apart from the fact that they are

10 Unlike most grammarians, I prefer to treat the property of being a closed class separately from the property of being a functional category. These properties are usually taken to be a consequence of each other, i.e. to belong to a closed class is evidence for functional status, and functional elements constitute closed classes. Hudson (2000), however, shows that, although this may be a tendency, it is not always the case.
mostly short words, and that, with the exception of the demonstratives and some quantifiers (see section 2.4), they are invariable.

Since determiners do not seem to have any distinguishing morphological properties, they are, probably more than any other word class in English, usually defined syntactically, that is, in terms of their distribution. As mentioned above, determiners are usually dealt with within the description of noun phrase structure, particularly when discussing the dependent elements within the noun phrase. These dependents are said to be optional, and in theory there is no limit on how many can be present in a noun phrase.

Determiners are pre-head dependents because they invariably occur before the noun. They are the leftmost elements in the noun phrase, preceding premodifiers, and are distinguished from them in that premodifiers are frequently lacking and when they occur, they can usually be omitted without rendering the phrase ungrammatical, or changing its meaning. Determiners, on the other hand, seem to be less optional dependents. They are often required and their omission either changes the meaning of the phrase, as in (3), or renders it ungrammatical, as in (4).

(3a) I like the books. (specific, e.g. the ones you’ve bought/given me, etc.)
(3b) I like books. (books in general)

(4) *(a) (nice) (brick) house

Thus, when we say that determiners are optional elements, what is meant is that some noun phrases may not contain a determiner, but not that in any noun phrase the determiner can be omitted. In fact, in some descriptions (cf. Börjars and Burridge, 2001:

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11 Some analyses of the noun phrase see the determiner as the head of the phrase rather than as a dependent (cf. Abney, 1987; Hudson, 1990). Since here I focus on the words themselves, for the time being I will leave aside the issue of the role determiners have in noun phrases, and will simply take them to be dependents.

12 There is one determiner which can follow the noun, namely enough (see 2.4.6.7).

13 When the modifier is introduced by intensifiers such as how, so, too, etc. as in how large a house, so great a success, too strong a word, the determiner follows the modifier. This is sometimes referred to as ‘shifted premodification’ (Aarts and Aarts, 1982: 110).
determiners are taken to be obligatory elements in the noun phrase.\textsuperscript{14} There are complex conditions which regulate when determiners can or cannot be omitted from a noun phrase. For example, in general, noncount and plural count nouns can be used without a determiner, but singular count nouns cannot. It is not my purpose here to deal with the complex conditions under which determiners can be omitted in English, and I will confine my attention to noun phrases containing determiners.

A further difference between determiners and premodifiers is that, whereas there is no limit to the number of premodifiers in a noun phrase, the number of determiners is restricted. Determiners, unlike premodifiers, are also said to not allow modification.\textsuperscript{15} Thus, several differences are said to keep determiners and other prenominal elements well apart.

I finish this section with a table summarising the properties of determiners. The first five are not exclusive to the determiner class, but are shared by all functional categories. The last three refer to determiners as constituents of noun phrase structure.

<table>
<thead>
<tr>
<th>Features</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Membership</td>
<td>few members</td>
</tr>
<tr>
<td>Descriptive meaning</td>
<td>little or none</td>
</tr>
<tr>
<td>Morphology</td>
<td>no internal structure, usually short and invariable</td>
</tr>
<tr>
<td>Phonology</td>
<td>usually monosyllabic</td>
</tr>
<tr>
<td>Frequency</td>
<td>high</td>
</tr>
<tr>
<td>Modification</td>
<td>not allowed</td>
</tr>
<tr>
<td>Position (in noun phrase structure)</td>
<td>prenominal</td>
</tr>
<tr>
<td>Number permitted in a noun phrase</td>
<td>limited</td>
</tr>
<tr>
<td>Optionality</td>
<td>not always optional</td>
</tr>
</tbody>
</table>

Table 2: Properties of determiners

\textsuperscript{14} In such descriptions a zero determiner (\(\varnothing\)) is assumed in order to account for noun phrases such as the ones in (i) and (ii). The zero determiner will be discussed in the next chapter.

(i) \(\text{Books} \) are expensive.

(ii) \(\text{Tea} \) is better than \(\text{coffee} \).

\textsuperscript{15} I will show later that some of the words in (\(\text{P}\)) permit modification. This has somewhat weakened their analysis as determiners, and has led to their exclusion from the class in some analyses (see e.g. Payne, 1993a).
2.2.2 Types of determiners

Determiners can occur in a number of patterns. They can occur as the sole determiner in the noun phrase, or can be preceded or followed by other determiners.

(5) those books
(6) all those books
(7) those many books

A noun phrase is said to be able to contain up to three determiners, and three distinct subgroups are usually distinguished: predeterminers, central determiners and postdeterminers. In the example below I use subscript numbers to show which subgroup the determiner has been assigned to. Thus, 1 indicates that all is a predeterminer, 2 shows that those is a central determiner, and 3 that many is a postdeterminer.

(8) all\(_1\), those\(_2\), many\(_3\) books

The rationale for these subclasses is their distribution. The three subgroups have been set up on the basis of the position the determiners assume in noun phrases in relation to one another. Disregarding some differences between different descriptive accounts for the moment, membership of the three subclasses is as follows: \(^{16}\)

Predeterminers

\(all,\) both; such, what\(\text{etc.};\) half

Central determiners

the, a(n); this/these, that/those;
my, your, his, her, its, our, their;
which\(^\text{rel}\), what\(^\text{rel}\), whose\(^\text{rel}\); which\(^\text{int}\), what\(^\text{int}\), whose\(^\text{int}\);
some, any, no, either, neither, each, every,
enough, another

Postdeterminers

much, many, few, little, several, more, most;
cardinal and ordinal numerals

\(^{16}\) These differences will be discussed in chapter 4.
Central determiners are taken to be the most common, and it is among them that we find the most frequent determiners, namely the articles *the* and *a(n)*. The other determiners are assigned to the other two subclasses according to their ability to precede central determiners, i.e. predeterminers, or follow them, i.e. postdeterminers. Predeterminers are said to be mutually exclusive, i.e. only one predeterminer is allowed in a noun phrase. Central determiners are also said to be in paradigmatic relation with each other. Moreover, determiners which are said not to combine syntagmatically with any other determiner are assigned to the central determiner subclass, e.g. *some, any, each* (Huddleston, 1984: 234). As for the postdeterminers, these are not mutually exclusive and more than one postdeterminer can occur in a noun phrase. This does not mean, however, that there are no constraints on the selection of postdeterminers, and that any two postdeterminers can cooccur, as shown by the ungrammaticality of (9) below.

(9) *many3 two3 books*

Further subdivisions of the determiner class are sometimes offered. Biber *et al.* (1999), for instance, subdivide the postdeterminers into two subgroups: (i) ordinal numerals and semi determiners, and (ii) cardinal numerals and quantifying determiners. Quirk *et al.* (1985), on the other hand, subdivide the central determiners (see section 2.2.3 below). The tripartite approach to determiners, namely into pre-, central and postdeterminers, is not the only way in which the class has been subdivided. Radford (1997), for instance, distinguishes only two types of determiners: quantifying determiners and referential determiners. His distinguishing criterion, however, is semantic rather than distributional.

### 2.2.3 Cooccurrence restrictions between determiners and nouns

Some determiners are indifferent as to the kind of noun they cooccur with, e.g. singular count, plural count or noncount nouns.

(10) *the book/books/sugar*

(11) *my book/books/sugar*

Other determiners, on the other hand, show restrictions on the choice of noun they precede. For instance, some determiners occur only with singular or plural nouns.
The restriction between the demonstrative determiners and the nouns they combine with is different from the restriction between the other determiners and the nouns that follow them (Huddleston and Pullum, 2002: 352-353). The demonstrative determiners this/these and that/those agree in number with the following noun. This and these are inflectional forms of the lexeme THIS, and that and those are inflectional forms of the lexeme THAT. The cooccurrence restrictions between the other determiners and the noun, on the other hand, is one of selection, that is, some determiners require or select a singular noun, e.g. a(n), one, each, every, whereas others, e.g. both, many, three, require or select a plural noun.

The restrictions which hold between determiners and nouns, however, cannot always be explained in terms of number. To account for the distribution of some determiners, it is necessary to resort to the notions of countability or boundedness. Consider the following examples.

(12a) all this/that/each book
(12b) *all this/that/each books

(13a) *these/those/many/three book
(13b) these/those/many/three books

(14a) the information
(14b) *an information

(15a) some accommodation
(15b) *each accommodation

(16a) my equipment
(16b) *every equipment

(17a) the outskirts
(17b) *both outskirts

(18a) my news
(18b) *many news
A distinction between singular and plural cannot account for the ill-formedness of the (b) examples. The elements *a(n), each and every* all require a singular noun and should be able to cooccur with the nouns in (14)-(16) which are all singular in form. The same should be true of (17) and (18) where the plural-noun selecting determiners *both* and *many* are followed by nouns which are plural in form. However, although the nouns in (14)-(16) are singular in form, and those in (17) and (18) are plural in form, they are uncountable nouns, i.e. they are taken to be continuous entities with no natural bounds, and are therefore not compatible with numerically quantifying determiners such as the cardinal numerals, *a(n), each, both or many.*

Many nouns, however, can be used with either a count or a noncount interpretation. In such cases, the use of a particular determiner can establish which of the two is appropriate. As shown in (19), a noun like *coffee,* which has both count and noncount interpretations, when preceded by a determiner such as *another,* is perceived as a separable entity, and is therefore countable. On the other hand, when preceded by *much, coffee* refers to the substance and is uncountable.

(19a) another coffee
(19b) much coffee

Further illustration is given in (20)-(22) (Huddleston and Pullum, 2002: 335). Again the nouns have a count interpretation in (a), where they are preceded by determiners requiring countable nouns, but a noncount interpretation in (b), where the preceding determiners require noncount nouns.

(20a) There are *three* details I would add.
(20b) They didn't go into *much* detail.

(21a) *Several* improvements were made.
(21b) There's been *little* improvement.

(22a) Bear *these* truths constantly in mind.
(22b) There's *some* truth in what he says.
The notions of number and countability are crucial when trying to establish the constraints which hold between determiners and the nouns they enter into construction with. Quirk et al. (1985: 255-257), for instance, divide the central determiners into five categories according to their cooccurrence with the noun classes singular count, plural count, and noncount nouns. They also include a 'zero article' among the determiners which occur with plural count and noncount nouns: 

(23) [Ø Books] are expensive.
(24) Do you like [Ø wine]?

Table 3 below summarises the cooccurrence restrictions between determiners and nouns.

---

17 I return to data such as (23) and (24) in chapter 3, where I will argue that although some analyses of the noun phrase may benefit from the postulation of a zero determiner, I regard it as unnecessary, and take the above noun phrases to be determinerless.
<table>
<thead>
<tr>
<th></th>
<th>singular count</th>
<th>plural count</th>
<th>noncount</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>all</em></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><em>both</em></td>
<td>X</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td><em>such</em></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><em>half</em></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><em>the</em></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><em>a(n)</em></td>
<td>✓</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><em>this, that</em></td>
<td>✓</td>
<td>X</td>
<td>✓</td>
</tr>
<tr>
<td><em>these, those</em></td>
<td>X</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td><em>my, your, his, etc.</em></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><em>what</em></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><em>what</em>\textsuperscript{rel}, <em>whose</em>\textsuperscript{rel}, <em>which</em>\textsuperscript{rel}</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><em>what</em>\textsuperscript{int}, <em>whose</em>\textsuperscript{int}, <em>which</em>\textsuperscript{int}</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><em>some, any</em></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><em>no</em></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><em>every</em>,\textsuperscript{20} <em>each, either, neither</em></td>
<td>✓</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><em>many, several, (a) few</em></td>
<td>X</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td><em>much, (a) little</em>\textsuperscript{21}</td>
<td>X</td>
<td>X</td>
<td>✓</td>
</tr>
<tr>
<td><em>more, most</em></td>
<td>X</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><em>another</em></td>
<td>✓</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><em>enough</em></td>
<td>X</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><em>one</em></td>
<td>✓</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><em>cardinal numerals</em></td>
<td>X</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td><em>ordinal numerals</em></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Table 3: Determiner and noun cooccurrence restrictions

Some of the above determiner-noun cooccurrences are restricted to certain uses of the determiners. For instance, the cooccurrence of *all* with singular count nouns is said to

\textsuperscript{18} Only when followed by the indefinite article *a(n)*. See 2.4.8.

\textsuperscript{19} Only when followed by the indefinite article *a(n)*. See 2.4.5.

\textsuperscript{20} We will see in 2.4.6.3 that it is possible for *every* to combine with some nouncount nouns.

\textsuperscript{21} It is important to distinguish *little* here from the homonymous adjective *little* meaning 'small in size', which can occur with both singular and plural count nouns, as shown below:

(i) *a little\textsubscript{adj} baby*

(ii) *little\textsubscript{adj} babies*
be limited to the meaning ‘the whole’, and is mostly found preceding nouns expressing periods of time, such as *morning, day, month* and *year*, as in (25).

(25) *all day*

*All* is also found before other singular count nouns, as in (26) from Berry (1997: 7).

(26) One sister is *all* head, the other is *all* heart.

Berry (1997) claims that in (26) what looks at first glance like a singular count noun has in fact been converted into a noncount noun with a metaphorical meaning.

The cooccurrence of *some* and *any* with singular count nouns is also restricted. *Some* cooccurs with singular count nouns only when meaning ‘a certain’, and the cooccurrence of *any* with singular count nouns is restricted to its use with the meaning ‘no matter which’ (see section 2.4.6.2).

(27) She’ll come back *some* day.
(28) *Any* book will do.

While table 3 represents the general picture, it is not uncommon to find the following combinations, which seem to be counterexamples to the restrictions just presented:

(29) *this* next two miles
(30) *that* twenty dollars
(31) *another* three bodies
(32) *every* ten days

The demonstratives *this* and *that*, and *another* and *every*, all require singular nouns. In (29)-(32), however, the nouns they enter into construction with, namely *miles, dollars, bodies* and *days*, are plural nouns, but the constructions are grammatical nonetheless. Huddleston and Pullum (2002) argue that this is possible because, although the above noun phrases have plural nouns as heads, they are conceptualised as single entities (e.g. a distance, a sum of money, a quantity, a period of time, respectively). ‘This
singular conceptualisation overrides the plurality of form, so that they are treated as singular heads' (Huddleston and Pullum, 2002: 354).

2.2.4 Coocurrence restrictions between determiners
Determiners are restricted in occurrence not only with nouns, but also amongst themselves. As seen above, determiners can cooccur. The choice of a given determiner, however, is said to impose restrictions on the selection of determiners which can follow it, and only a relatively small number of combinations are possible. Moreover, the ordering of determiners is said to be fixed. These restrictions are generally explained on distributional grounds, and the usual way of accounting for the ordering of these combinations is in terms of the three positions presented in 2.2.2: predeterminer(1) + central determiner(2) + postdeterminer(3).

(33) both\textsubscript{1} these\textsubscript{2} books
(34) all\textsubscript{1} five\textsubscript{2} children
(35) any\textsubscript{2} two\textsubscript{3} books
(36) all\textsubscript{1} his\textsubscript{2} many\textsubscript{3} books

Thus, (33)-(36) above are grammatical because the order has been observed, and the ungrammaticality of (37) below is said to be due to the fact that the order has not been respected.

(37) *many\textsubscript{3} his\textsubscript{2} all\textsubscript{1} books

As seen in section 2.2.2, it is also generally maintained that determiners belonging to the same position class are in paradigmatic relation with each other. There cannot be more than one predeterminer, or more than one central determiner in a given noun phrase. This mutual exclusiveness, however, is relaxed with the postdeterminers.

(38) *all\textsubscript{1} both\textsubscript{1} books
(39) *the\textsubscript{2} my\textsubscript{2} sister
(40) three\textsubscript{3} more\textsubscript{3} days

Tables 4 and 5 show some common combinations of two determiners.
<table>
<thead>
<tr>
<th>the$_2$</th>
<th>a(n)$_2$</th>
<th>this$_2$/these$_2$, that$_2$/those$_2$</th>
<th>my$_2$, your$_2$, his$_2$, etc.</th>
<th>numerals$_3$</th>
</tr>
</thead>
<tbody>
<tr>
<td>all$_1$</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>both$_1$</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td>half$_2$</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td>such$_1$</td>
<td>x</td>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>what$_1$</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
</tr>
</tbody>
</table>

Table 4: Predeterminers + central/postdeterminers cooccurrence patterns

<table>
<thead>
<tr>
<th>many$_3$</th>
<th>much$_3$</th>
<th>few$_3$</th>
<th>little$_3$</th>
<th>numerals$_3$</th>
</tr>
</thead>
<tbody>
<tr>
<td>the$_2$</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>a(n)$_2$</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>this$_2$, that$_2$</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>✓</td>
</tr>
<tr>
<td>these$_2$, those$_2$</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td>my$_2$, your$_2$, her$_2$, etc.</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>some$_2$</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>✓</td>
</tr>
<tr>
<td>any$_2$</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>✓</td>
</tr>
<tr>
<td>no$_2$</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>each$_2$</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>every$_2$</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>either$_2$</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>neither$_2$</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>enough$_2$</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>what$_2$, which$_2$, whose$_2$</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Table 5: Central + postdeterminers cooccurrence patterns

A quick glance at the tables above will show that different determiners exhibit a variety of different combinatorial possibilities and that it is almost impossible to formulate a general rule governing their behaviour. Table 4 shows that the

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22 Quirk et al. (1985: 260) say that *half* can occur with *enough* in the colloquial negation *n't half*, as in (i).

(i) He hasn't *half enough* money.

23 Again, it is important to distinguish *little* here from the adjective *little* meaning 'small in size', which can occur with practically all determiners, as shown below.

(i) this/that/my/some/no/each *little* baby

(ii) these/those/all/both/some/many *little* babies

24 Cardinal *one* only, and ordinals.
predeterminers *all* and *both* can be followed by the definite article, the demonstratives, and the possessives. Also, *all*, although not *both*, can be followed by all the cardinal numerals, except *one*. As for *half*, whereas it can be followed by both articles, the demonstratives as well as by the possessive determiners, it does not allow numerals to follow it. *Such* and *what* exce have a much more limited distribution, and can cooccur only with the indefinite article.

As for the central determiners, as shown in table 5, the definite article combines more freely with the postdeterminers than the indefinite article. It cooccurs with most quantifying determiners, as well as the numerals. The indefinite article may be followed by the quantifiers *few* and *little*. The resulting *a few* and *a little*, however are seen as complex determiners rather than as combinations of two determiners. The indefinite article can also be followed by the numerals, but whereas the definite article can be followed by both cardinal and ordinal numerals, the indefinite article only enters into construction with the ordinals.

The demonstratives in their singular form precede the quantifier *little*, as well as *other* and the numerals. In their plural form, they precede the quantifiers *many* and *few* and the numerals. *This* and *that* can sometimes precede *many* and *much*. The forms *this*/*that* *much*, *this*/*that* *many*, as in *this much confusion* and *that many mistakes*, however, are usually seen as single determiners, rather than a combination of two determiners.\(^25\)\(^26\)

The possessives combine with nearly all postdeterminers. It is also possible for them to precede *every*. The fact that *every* can follow the possessives has led some grammarians to class it as a postdeterminer rather than as a central determiner (see chapter 4).

The central determiners *some*, *any* and *no*, unlike the possessives, cooccur only with a handful of determiners. As for *each*, *either*, *neither* and *enough*, these do not combine with other determiners (see footnote 22).

Finally, *what*, *which* and *whose*, as relative as well as interrogative determiners, combine with the quantifiers *few* and *little*, and the numerals.

I have included here only the patterns offered in most grammars, which are said to justify the tripartite classification of determiners given in section 2.2.2. The problems


\(^{26}\) I will have more to say about these constructions in chapter 5.
presented by such a classification will be discussed in the next two chapters. I will show that ungrammatical combinations are generated by this schema, and grammatical combinations exist which are not accounted for by this approach to determiner ordering. Such patterns are usually taken to constitute exceptions, but, as will be seen, the issue is far more complex.

2.3 The semantics of the determiners

Determiners help to identify the referent of a noun and are typically involved with one or more of the following semantic notions: definiteness, number and countability. The kind of reference a noun phrase has, i.e. definite or indefinite, is said to depend on the determiner (Quirk et al., 1985: 253). Thus, semantically two types of determiners are often distinguished: definite and indefinite determiners. Some determiners also express quantity, and the twofold division is sometimes between referential and quantifying determiners (Radford, 1997). The four groups pair off, with the definite determiners matching the referential determiners, and the indefinite determiners corresponding to the quantifying determiners.

Definiteness in English is typically conveyed through the use of the definite article the, but other determiners can also mark the noun phrase as definite. The definite determiners are therefore the following: the, the demonstratives this/these and that/those; the possessives my, your, his, her, its, our and their and the quantifier both. They determine the noun by referring to something familiar, established or identifiable by both speaker and listener. The definite article solely marks the referent as known, whereas the other definite determiners in addition to marking the entity the noun refers to as known, indicate how it is known (see sections 2.4.1, 2.4.2 and 2.4.3).

Indefiniteness, on the other hand, is conveyed mainly through the use of the indefinite article a(n). Other determiners can also mark the noun phrase as indefinite, e.g. all, some, any, much, many, few, little. When these precede a noun, although they mark its referent as indefinite, they specify it in terms of quantity, and are accordingly commonly referred to as quantifiers or quantifying determiners. The numerals are also indefinite determiners. The cardinal numerals, like the quantifiers, contribute quantity, but differ from them in that they provide a numerical specification, whereas the quantifiers give a more general specification. As for the ordinal numerals, these specify nouns in terms of order rather than quantity.
The restrictions involving determiners and proper nouns can be explained by the fact that proper nouns are inherently definite. The use of a definite determiner with a proper noun would be redundant, whereas the use of an indefinite determiner would be conflicting.\(^{27}\) This does not mean, however, that determiners never occur with proper nouns. It is possible for determiners to precede proper nouns, but in such cases, the proper noun is being used as a common noun meaning something like 'a person or persons with that name', as in (41)-(43).

(41) I don’t know any Ann.
(42) A Robert came in looking for you.
(43) There were three Johns at the party.

Another interpretation is the one in (44), where the proper noun Chomsky is interpreted as 'having the qualities comparable to those of the person bearing that name'.

(44) He thinks he’s another Chomsky.

The definite nature of the personal pronouns also rules out their use with determiners. There is, however, a special use of determiners with personal pronouns, which, as with proper nouns, also involves a common-noun use of the pronoun. In such cases, the pronoun is not only preceded by a determiner, but usually also followed by a postmodifier of some description, as shown in (45) (Bennett, 1995: 87).

(45) the me you once knew

In addition to the semantic distinction of definiteness, determiners are also involved in the distinction between specific and non-specific noun phrases, as well as in

\(^{27}\) Note that the use of the in The United States, The Hague, The Netherlands, The Thames, for instance, does not indicate definiteness. In these cases, the article is part of the proper name. This is shown by the fact that the cannot be omitted, neither can it be contrasted with other determiners, or separated from the noun by modifiers.

(i) *(The) United States
(ii) *a Thames
(iii) *the big Hague

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the generic and non-generic contrast. Here, however, the distinction is less clear-cut, since, with the exception of any and either which are said to be inherently non-specific, both definite and indefinite determiners can occur in specific and non-specific noun phrases, and in generic and non-generic ones. I will return to these distinctions in section 2.4 below where I offer a more detailed description of the individual determiners.

All in all, determiners are a rather heterogeneous class semantically. The different determiners do not only express a variety of different meanings, but also, although in general they are said to carry little or no meaning, some determiners seem to contribute more to the interpretation of the noun phrase than others. The demonstratives, the possessives and the quantifiers, for instance, although they may be said to lack lexical content, contribute more to the interpretation of the noun phrase than the articles.

2.4 Membership
Having considered the properties of the determiner class as a whole, in this section I take a closer look at its individual members. The reason for doing so is the heterogeneous character of this word class.

For the sake of simplicity, the determiners have been arranged in groups according to the particular meaning they express, and these are as follows: the articles, the demonstrative determiners, the possessive determiners, the interrogative determiners, the relative determiners, the quantifiers and the numerals. Note that what follows is not meant to be a comprehensive treatment of each determiner, but rather a concise account of their properties in order to draw a broad picture of the word class they are said to constitute.

2.4.1 The articles
The articles provide the most common expression of definiteness and indefiniteness. They are said to have no lexical meaning but to solely contribute definite or indefinite status to the noun phrase, without containing any further identification within themselves.

The definite article the is compatible with all kinds of common noun: count singular, count plural and noncount. Biber et al. (1999: 270) attribute the broad distribution of the definite article to its neutrality. The use of the definite article indicates

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that the speaker expects the addressee to be able to identify the referent.\footnote{For a full account of how identifiability can be established see Quirk \textit{et al.} (1985) and Huddleston and Pullum (2002), among others.} With countable nouns the definite article stands for a particular individual or group of individuals known to both speaker and addressee. With uncountable nouns, the stands for a definite part of what is denoted by the noun. Although constant in form, the pronunciation of the definite article depends on the word that follows it. It is pronounced /\textipa{ðə}/ before consonant sounds, and /\textipa{Di}/ before vowel sounds, as shown below.

(46)  \textit{the (/\textipa{ðə}/) man} \\
(47)  \textit{the (/\textipa{Di}/) animal}

The indefinite article \textit{a(n)} is the most common marker of indefiniteness. It narrows down the reference of the following noun to a single member of a class. The entity it singles out, however, contrary to the one singled out by the definite determiners, is presented as new or unknown to the speaker. The indefinite article is not only phonologically, but also morphologically dependent on the following noun, or following modifier, if there is one. It has the form \textit{a} /\textipa{a}/ before a consonant sound, and \textit{an} /\textipa{an}/ before a vowel sound.

(48)  \textit{a (/\textipa{a}/) man} \\
(49)  \textit{an (/\textipa{an}/) animal}

The indefinite article can express two kinds of indefiniteness, namely quantitative, meaning ‘one’ as in (50), and non-quantitative indefiniteness, as in (51). The non-quantitative use of \textit{a} is found in noun phrases functioning as predicative complements, and indicates membership of a set.

(50)  I bought \textit{a} book and three magazines.  \\
(51)  Jill is \textit{a} doctor.

In general, the indefinite article does not cooccur with noncount nouns. There is, however, an exception, and this is, according to Huddleston and Pullum (2002: 339),
when the noncount noun is modified as in (52) below. The occurrence of the indefinite article with noncount nouns is said to individuate an amount of whatever the noncount noun refers to, in this case, an amount of knowledge of Greek. Note, however, that it is also possible for the indefinite article to precede the noncount noun knowledge even when it is not modified

(52a)  a good knowledge of Greek
(52b)  a knowledge of Greek

Earlier, I noted the fact that determiners are also involved in the distinction between specific and non-specific noun phrases, and generic and non-generic noun phrases. Both definite and indefinite articles can occur in specific and non-specific noun phrases, and in generic and non-generic ones. Huddleston (1984: 255) claims this is because whether a noun phrase has a specific or a non-specific interpretation, or a generic or a non-generic interpretation, depends on the sentence containing it rather than on the form of the noun phrase itself. This is shown by (53) below, where the same indefinite noun phrase has a specific interpretation in (a), but a non-specific interpretation in (b). The same is true of (54), where the definite noun phrase is specific in (a), but non-specific in (b). In fact, as Huddleston (1984: 254) points out, in (53b), the noun phrase is ambiguous since a specific interpretation of the noun phrase is also possible.

(53a)  John bought a flat in Honour Avenue.
(53b)  John would like to buy a flat in Honour Avenue.

(54a)  John’s found the right house.
(54b)  John is still looking for the right house to buy.

The above considerations also apply to the distinction between generic and non-generic noun phrases, as shown in (55) and (56), where the noun phrases have a generic interpretation in the (a) sentences, but not in the (b) sentences.

For further discussion on the use of the articles in generic constructions see Platteau (1980).
(55a) The whale is in danger of extinction.
(55b) The whale was found on the beach.

(56a) A cat has whiskers.
(56b) A cat is following me.

2.4.2 The demonstrative determiners

Like the definite article, the demonstratives also mark the noun phrase as definite. They do so by indicating the location of the referent of the noun phrase with respect to the speaker, i.e. whether it is close to them (this/these) or distant from them, (that/those).

This notion of proximity and distance associated with the demonstratives is not only limited to spatial orientation (spatial deixis), but can also have a temporal orientation (temporal deixis). Thus this/these may be used to refer to recent events or ideas, and that/those to refer to events which are more remote in time.

(57) this book here
(58) that book over there
(59) these (recent) days
(60) those (past) days

Both demonstrative determiners inflect for number and agree with the following noun.

(61) these books here
(62) those books there

Finally, a further use of this/these is also recognised. Berk (1999) refers to it as 'indefinite this', and says that in such cases, this no longer has a demonstrative (i.e. pointing) function.

(63) I was walking home when this man stopped me.

In (63), like the indefinite article, this is being used to introduce a new topic into the discourse. Berk says this phenomenon is fairly recent, and although its occurrence is on the increase in casual spoken English, it is rare in written English (see Berk, 1999: 62).
2.4.3 The possessive determiners

Like the demonstrative determiners, the possessive or genitive determiners *my, your, his, her, its, our* and *their* mark the noun phrase as definite, and do so by relating its referent to the speaker (*my, our*), the addressee (*your*), or to other entities in the context (*his, her, its, their*).

The possessive determiners combine with all three kinds of noun, and cooccur with most quantifying determiners (see tables 3 and 5). The semantic relationships expressed by the possessive determiners extend beyond possession, and refer to other relations between things. This can be illustrated by the different readings a noun phrase such as *my book* can have: ‘the book I possess’, ‘the book I’ve chosen’, ‘the book I’ve written’, etc.

The set of possessive determiners corresponds closely to the set of personal pronouns, and for that reason, the former are sometimes taken to be possessive or genitive forms of the latter (Quirk *et al.*, 1985; Huddleston and Pullum, 2002).

2.4.4 The interrogative and relative determiners

The interrogative and relative determiners are *what, which* and *whose*, and are sometimes referred to as the ‘*wh*-determiners’. They enter into construction with all three types of noun (see table 3).

As interrogative determiners, *what* and *which* mark the noun phrase as indefinite. Interrogative *which* is said to have a ‘selective’ meaning, which is absent from *what*. In other words, *which* implies a set that is identifiable by the addressee, and it involves selection from this set. No such pre-selected set is implied by *what* (see Aarts *et al.*, 2002). (64) and (65) illustrate the contrast.

(64)  *What* languages are taught in the school?
(65)  *Which* languages are taught in the school: French, Spanish or German?

As relative determiners, *what* and *which* are said to mark the noun phrase as definite or indefinite. Huddleston and Pullum (2002: 398) offer (66) as a definite use of *what*, with the italicised noun phrase meaning ‘the tickets that were available’, and (67) as an indefinite use of *what*, where the noun phrase *what tickets* means ‘any tickets’.

(66)  We bought *what tickets* were available.
Buy *what* tickets are available.

As for *whose*, as an interrogative determiner, it marks the noun phrase as indefinite, whereas as a relative determiner, it marks it as definite.

*Whose* car was stolen?

This is the man *whose* car has been stolen.

### 2.4.5 Exclamative *what*

In contrast with the interrogative determiner *what*, exclamative or exclamatory *what* always cooccurs with the indefinite article *a(n)* when determining a singular count noun.

*What* *(a) nightmare!*

*What* beautiful children!

Exclamative *what*, is sometimes referred to as a degree intensifier. I will have more to say about the syntax and semantics of exclamative *what* in chapter 4 (section 4.5.1).

### 2.4.6 The quantifying determiners

As Berk (1999: 63) points out, most determiners express quantity, whatever other functions they may have. Some determiners, however, have the expression of quantification as their main function. Thus, in contrast with the determiners we have looked at so far, the quantifying determiners or quantifiers, as the name suggests, have the general function of indicating the quantity of elements referred to by the noun phrase. Apart from *both*, they all express imprecise quantification and mark the noun phrase as indefinite. Another aspect that distinguishes the quantifying determiners from the other determiners is that, unlike the other determiners, most quantifiers permit modification.\(^\text{30}\)

almost *all* doctors

not *many* students

very *little* time

---

\(^{30}\) We will see later that this fact is seen by some scholars as a reason for arguing that these words are not determiners.
nearly every day

2.4.6.1 All and both

All and both are usually referred to as the universal quantifiers. All is said to be neutral in that there is no explicit indication of the size of the set or quantity. Both, on the other hand, is dual and applies only to sets with two members. The duality meaning restricts both to count plural nouns, but all has no such restriction, and occurs with all three kinds of nouns, namely singular and plural count nouns and noncount nouns.

(76) all books/ morning/water
(77) both books/ *morning/ *water

Like most quantifiers, all marks the noun phrase as indefinite. Both, conversely, marks the noun phrase as definite, and it is in fact the only quantifier to do so. That both is definite can be shown by the contrast, or lack of it, between the noun phrases in (78) and (79). In (78) the definite article is responsible for the definite character of the noun phrase. In (79) both phrases are definite, independently of the presence of the article.

(78a) all books
(78b) all the books
(79a) both books
(79b) both the books

When it comes to classification, however, the quantifying aspect of both seems to take priority over its definiteness. This is shown by the fact that both is more commonly found among the quantifying determiners, rather than among the definite determiners (cf. Biber et al., 1999: 269).

2.4.6.2 Some and any

Some and any are sometimes referred to as the existential determiners. Some combines with all three types of noun, namely singular and plural count nouns, and noncount nouns. When used before plural countable nouns and uncountable nouns, two different meanings of some are usually distinguished: a proportional meaning and a non-
proportional meaning. Proportional some implies a contrast with all, i.e. some but not all.
It allows modification and is pronounced /sʌm/. This use is exemplified in (80).

(80a) At least some students liked the lecture.
(80b) I like some modern music.

Non-proportional some, also referred to as ‘assertive’ some, on the other hand, means ‘a certain amount or number’. It cannot be modified, and is normally unstressed and pronounced /som/. This use is illustrated in (81).

(81a) There are (*at least) some books in my bag.
(81b) We need (*almost) some milk.

In constructions like (81a), some is said to contrast with the indefinite article a(n) (There is a book in my bag), and for this reason is regarded by some grammarians as the plural indefinite article (Berk, 1999: 59). When it occurs with a singular count noun, as in (82), some means ‘a certain, but unknown or unspecified person or thing’, and in this case it is also stressed and pronounced /sʌm/.

(82) Some student must have left it there.

In addition to the above uses, three more uses of some are usually recognised. In these uses some is always stressed and pronounced /sʌm/. The first of these uses is shown in (83).

(83a) We’ve known each other for some years.
(83b) The topic was discussed at quite some length.

When expressing quantity some usually indicates a relatively small quantity or number. In (83), however, it indicates a large number/quantity. In this use some occurs with plural count and non-count nouns only, and, as shown in (83b), allows modification.

Some is also used with the meaning ‘approximately’, and in this use it is restricted to pre-numeral position. With this sense, some is sometimes regarded as an adverb rather than as a determiner (Huddleston and Pullum, 2002: 385).
Finally, *some* can occur in constructions like (85) below.

(85a) That was *some* party/wine!
(85b) *Some* doctors they are! They can’t even treat flu.

This usage is informal and here *some* is being used to express an opinion about someone or something, usually admiration, as in (85a), but it can also sometimes be used ironically, as in (85b). In this use, *some* occurs with all three types of noun.

*Any* also combines with all three types of noun. A distinction is made between two uses of *any*: ‘non-affirmative’ (or ‘non-assertive’) *any*, and ‘free choice’ *any*.

Non-affirmative *any* does not permit modification, and it is so called because, as the name suggests, it is restricted to non-affirmative contexts. Non-affirmative *any* has a proportional use and a non-proportional use, which contrast with the proportional and non-proportional uses of *some*. The proportional and non-proportional uses of *any* are shown in (86) and (87), respectively.

(86) I don’t think (*almost) *any* student liked the lecture.
(87) Are there (*nearly) *any* books in that bag?

Before singular count nouns, a further use of non-affirmative *any* is sometimes recognised (Huddleston and Pullum, 2002: 383). In (88) below *any* means ‘not a member of the set’.

(88) Jill wasn’t *any* student of mine.

As seen above, there are some contexts which favour *some*, and other contexts in which *any* is preferred. The usual way of accounting for this is to say that *some* has a positive orientation, whereas *any* has a negative orientation (cf. Huddleston and Pullum, 2002).

(89) We’ve got *some* money.
(90) We haven’t got *any* money.
(91) Have we got any money?

Bolinger (1977) points out, however, that the choice between any and some is not syntactic, that is, it is not the case that some is limited to affirmative sentences, and any is limited to non-affirmative sentences. He argues that the choice between some and any is semantic (Bolinger, 1977: 26). For instance, he shows that some is not excluded from interrogative constructions.

(92) Will you have some breakfast?
(93) Didn’t you publish some papers last year?

Nor is any limited to negative and interrogative sentences.

(94) If you eat any candy, I’ll whip you.

Bolinger says, however, that the slightest suggestion of a negative meaning, even without the presence of a negative word, favours any, rather than some (Bolinger, 1977: 31). Thus he argues that the occurrence of some in (92) and (93) is because such interrogatives induce a positive answer. As for (94), he argues that any is used because the speaker has a negative meaning in mind, contrary to (95) below where some is used because a positive meaning is intended.

(95) If you eat some spinach, I’ll give you $10.

Finally consider free choice any. It occurs with all three types of noun and it has the meaning ‘no matter which’. In contrast with non-affirmative any, free choice any is not restricted to non-affirmative contexts and permits modification, as shown in (96).

(96a) I like almost any wine.
(96b) Any bus will take you there.
(96c) Any latecomers should be denied entry.
2.4.6.3 *Each and every*

*Each* and *every* are referred to as the distributive quantifiers. They both refer to individual members of a group, and accordingly, select singular count nouns. Although they mark the noun phrase as indefinite, they have specific reference, referring to a member of a particular set. There are, however, differences between the two. Whereas *each* focuses on the individual entity, *every* refers to the entity as a member of a group. Moreover, when the set has just two members, *each*, but not *every*, is used.

(97) *each* side of the road
(98) *every* side of the road

Furthermore, in addition to occurring with singular count nouns, *every* can also combine with some noncount nouns.

(99) *every* encouragement

Finally, *every*, but not *each*, permits modification, as shown below.

(100) almost *every* student
(101) *almost each* student

2.4.6.4 *Either and neither*

*Either* and *neither* are sometimes called the disjunctive quantifiers. They select a count singular noun. *Either* is in many ways similar to *any*. Like *any*, it has a non-affirmative use as well as a free-choice use, shown by (102) and (103), respectively.

(102) He didn't like *either* teacher.
(103) You can take *either* computer.

On the other hand, *either* differs from *any* in several ways. Whereas *any* can occur before all three kinds of nouns, *either* only occurs with singular count nouns. Another difference is that *either* presupposes a selection from a set of two members, while *any* is used with reference to more than two. Moreover, this set of two must be known by both speaker and addressee. Its dual character makes *either* like *both*, but whereas *both*
indicates totality, either indicates only one member. This is shown by the fact that both combines with plural nouns, whereas either combines with singular nouns. In addition, whereas both marks the noun phrase as definite, either, like the other quantifiers, marks the noun phrase as indefinite.

As for neither, it is taken to be the negative counterpart of either. It also has a dual character and presupposes a set of two entities familiar to both speaker and addressee. Its meaning is ‘not the one or the other of the two members of the set’.

(104) Neither solution was satisfactory.

2.4.6.5 No

No is the negative determiner. It occurs with all three types of noun, and it means ‘not one member or subquantity of the set’.

(105) no candidate/letters/bread

Like most quantifiers, no also allows premodification.

(106) almost no money

A further use of no is in (107) below, where it indicates that the noun referent does not have the expected properties or is the opposite of what is referred to by the noun. With this use, no does not allow modification.

(107) Sam is (*almost) no singer/fool.

2.4.6.6 Many, much, few, little and several

The determiners many, much, few and little are sometimes called the degree quantifiers. Many and few select plural count nouns, whereas much and little select noncount nouns. Many and much express a large number or quantity, whereas few and little suggest a small number or quantity. Moreover, whereas many occurs freely in both affirmative and nonaffirmative contexts, much is typically used in nonaffirmative contexts.

(108) I've got many books.
I haven’t got many books.
I have *(not) got much money.

Both few and little occur with the indefinite article. The resulting a few and a little are usually included among the determiners as separate forms from few and little. They are treated as complex determiners rather than as a sequence of two determiners. A semantic distinction is drawn between a few and a little, on the one hand, and few and little on the other: whereas the former are positive, with approximately the same meaning as some, the latter are negative, meaning ‘not many’ or ‘not much’.

Like most quantifying determiners, many, much, few and little allow modification. However, these words form a distinct group in that they are gradable, and can also be modified by intensifying adverbs, as shown in (111)-(114). They are also distinctive in that they have comparative and superlative forms, as seen in (115)-(118) below.

(111) so many people
(112) too much time
(113) amazingly few candidates
(114) very little interest

(115) many mistakes/more mistakes/(the) most mistakes
(116) much progress/more progress/(the) most progress
(117) few mistakes/fewer mistakes/(the) fewest mistakes
(118) little progress/less progress/(the) least progress

Less and least, as comparative and superlative forms of little, respectively, occur typically with noncount nouns. There is a growing tendency, however, to use them also with plural count nouns. Although on the increase, this usage is not considered standard (Denison, 1998: 124).

As seen above, more and most are regarded as the comparative and superlative forms of many and much, contrasting with fewer, fewest and less, least. They occur with plural count nouns and noncount nouns only.

In addition to its comparative meaning, given in (115) and (116) above, an ‘additional’ meaning of more is also recognised.
(119) There's more butter in the fridge.
(120) Only two more days to go.

A second use of *most*, besides its superlative use, is also distinguished. This is referred to as 'proportional' *most*, and with this sense *most* means 'a number or subquantity that is at least greater than half of the set or quantity concerned' (Huddleston and Pullum, 2002: 394).

(121) Most people enjoyed it.
(122) Most cheese is made from cow's milk.

As for *several*, it selects plural count nouns, and like *few* and *little*, indicates a small quantity or number. However, in contrast with *many*, *much*, *few* and *little*, and other quantifiers, for that matter, *several* does not allow modification.

(123) (*nearly) several books

2.4.6.7 *Enough*
*Enough* is sometimes called the sufficiency quantifier. It selects plural count or noncount nouns. Like most quantifiers, *enough* conveys imprecise quantification, but it has the additional property of alluding to the minimum number or quantity required.

(124) enough students (to form a class)
(125) enough food (to feed everyone)

Unlike the other quantifiers, and the other determiners in general, *enough* can also occur after a noun.

(126) food enough

This construction, however, is considered old-fashioned by some grammarians (Quirk et al., 1985: 263).
2.4.7 Cardinal and ordinal numerals

The cardinal numerals also express quantity, but differ from the quantifiers, with the exception of both, in that they give an exact number of members of a set. Like the quantifiers, they also allow modification.

(127) almost fifteen mistakes
(128) nearly twenty people

The cardinal numerals solely express quantity. A further meaning of the cardinal numeral one, however, is sometimes distinguished, namely its singulative use. In its numerical sense one contrasts with other numerals. In its singulative use, on the other hand, there is no such contrast, and one is said to act like a stressed version of the indefinite article.

(129) They have one son/ two sons.
(130) She arrived one rainy day/*two rainy days.

A further difference between the two ones is that modification of singulative one is much more restricted than modification of numerical one.

(131) They have at least one son.
(132) *She arrived at least one rainy day.

As for the ordinal numerals, these specify entities in terms of order, rather than quantity, and are usually preceded by another determiner, most commonly the definite article.

(133) the fourth month of the year
(134) a first time
(135) my third year

The cardinal and ordinal numerals can cooccur, and both the combinations [ordinal + cardinal] and [cardinal + ordinal] are possible. Note, however, that the two constructions differ in meaning.
For instance, in the context of a competition, in (136) we are referring to the order of the contestants, that is to contestants one and two, as opposed to contestants three and four. In (137), on the other hand, we are referring to the two contestants who were the best ones, regardless of the order in which they competed.\textsuperscript{31}

\textbf{2.4.8 Such}

\textit{Such} occurs with both count and noncount nouns. When determining a singular count noun, \textit{such} requires the indefinite article.

(138) \textit{such} *(a) house

(139) \textit{such} houses

(140) \textit{such} love

\textit{Such} also cooccurs with quantifiers and numerals, and in such constructions, it follows, rather than precedes them. This is illustrated in (141) below, from Quirk \textit{et al.} (1985: 258).

(141) Outbreaks of small-arms fire along the frontier became more frequent in May,
\begin{itemize}
  \item \text{... but } \begin{cases} \text{no} \\
  \text{hardly any} \end{cases}
  \item \text{... and } \begin{cases} \text{many} \\
  \text{forty-one} \end{cases}
\end{itemize}
\textit{such} incidents were officially investigated.

A distinction between two senses of \textit{such} is usually made: identifying \textit{such} and intensifying \textit{such} (cf. Bolinger, 1972; Altenberg, 1994; De Mônnink, 1996; Spinillo 2003a). Identifying \textit{such} is said to be like the demonstrative determiners, whereas intensifying \textit{such} acts like an intensifier, modifying an element in the noun phrase.

\textsuperscript{31} See Huddleston (1984: 236) for discussion.
Identifying *such* is illustrated by (141) above, whereas intensifying *such* is exemplified in (142) below.

(142) *such* wonderful stories

Bolinger (1972: 60) points out that the difference between the two senses of *such* is not always clear-cut, and ambiguity occurs. As we will see in chapter 4, some grammarians feel so strongly about the two uses of *such*, that they argue for a class distinction rather than a distinction between two senses of the same word (Altenberg, 1994; de Männink, 1996). The analysis of *such* is problematic and I will have a great deal more to say about it in chapter 4 (section 4.4.1.3).

2.4.9 *Another*

Huddleston and Pullum (2002: 391) refer to *another* as the ‘alternative-additive’ determiner. This is because two senses of *another* are usually recognised: an alternative and an additive sense. These are illustrated by (143) and (144), respectively.

(143) This room is too small. Do you have *another* one?
(144) She bought yet *another* car.

It is not always obvious, however, which of the two senses is being used. Thus constructions such as (145) below can be ambiguous, since *another* can be interpreted in either way —‘I want a different cup’ or ‘I want one more cup’.

(145) I want *another* cup.

*Another* selects singular count nouns. It can, however, occur with what Huddleston and Pullum (2002: 354) refer to as ‘quantified nominals’ as in (146). In such constructions, although the noun is plural, the overall noun phrase is singular, as shown by the fact that the verb can occur in its plural or singular form.

(146) *Another* three days are/is going to be needed.
2.4.10 Other determiners

In addition to the words in (β), the words next, last, same, other, former, latter; quite, rather; we and you are also sometimes given as instances of determiners in some descriptions. In what follows I look at the reasons for their inclusion in the class.

2.4.10.1 Next, last, same, other, former and latter

Next, last, same, other, former and latter, are taken to be postdeterminers because when they occur with central determiners they follow rather than precede them. They are members of the subclass of postdeterminers that Biber et al. (1999: 258, 280-281) call ‘semi-determiners’.

Quirk et al. (1985: 262) refer to next, last and other as the ‘general ordinals’, this is because next and last, like the ordinal numerals, specify the noun in terms of order. They mark the noun phrase as definite, and frequently combine with the definite article, or with some other definite determiner.

(147) the next/last day
(148) this next/last point
(149) our next/last opportunity

They also cooccur with quantifying determiners.

(150) the next/last few days

Other, on the other hand, marks the noun phrase as indefinite. It is used with plural count nouns and noncount nouns.

(151) other information
(152) other places
(153) *other place

It often occurs with other determiners, e.g. the articles, the possessive, the demonstratives and quantifying determiners, and when preceded by the indefinite article, the resulting form another is treated as a determiner in its own right (see previous section).
(154) the other day
(155) my other shoes
(156) any other questions

*Same* is typically preceded by the definite article, but never by the indefinite article, as shown in (157) and (158).

(157) the same person
(158) *a same person

It can also be preceded by the demonstratives.

(159) that same day

*Next, last, other and same* are also said to resemble the ordinal numerals syntactically, because they precede cardinal numerals.

(160) the next six months
(161) the last two pages
(162) the other three candidates
(163) the same five men

It is also possible for *next, last and other*, but not for *same*, to follow cardinal numerals. The two constructions, however, differ in meaning, and (164) is not a synonym of (161), nor is (165) a synonym of (162).

(164) the two last pages
(165) the three other candidates

*Finally consider former and latter*. These are also said to be like the ordinal numerals because they specify the noun by evoking order. They typically follow the definite article, but can also occur after the demonstrative and possessive determiners.

(166) the former/latter option
2.4.10.2 *We* and *you*

When they occur in front of a noun, *we* and *you* are also sometimes given as instances of determiners and are referred to as the personal determiners. They invariably indicate definiteness, and are the only determiners to inflect for case.\(^{32}\)

(169) \(\text{You}_{\text{nom}}\) French don’t like \(\text{us}_{\text{acc}}\) English.

*We* and *you* can only cooccur with plural common nouns, except in vocative noun phrases where *you* can be followed by a singular noun.

(170) Come here, *you* fool!

In addition to definiteness, *we* and *you* express person deixis: *we* denotes a set containing the speaker, *you* a set containing the addressee(s), but not the speaker.

When nouns are used with the other determiners such as the articles and the demonstratives, the noun phrase is interpreted as having third-person reference. The personal determiners *we* and *you*, however, give the noun phrase first and second-person reference, respectively. Therefore, it is sometimes argued that the personal determiners are the first and second person forms of the definite article. However, Payne (1993b: 2850) points out that the definite article does not always imply third-person reference, and that the personal determiners are, therefore, better treated separately.

2.4.10.3 *Quite* and *rather*

*Quite* and *rather* are regarded as determiners when they occur before the indefinite article, as in (171) and (172) below, and their occurrence is therefore limited to singular noun phrases.

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\(^{32}\) The occurrence of *we* and *you* with nouns is seen by some grammarians as a case of apposition, rather than as a [determiner + noun] combination (cf. Delorme and Dougherty, 1972). I will have a lot more to say about this construction in the next chapter (section 3.2.4).
They do not occur with any other determiner besides the indefinite article. There are occurrences of *quite* and *rather* with the quantifiers *a few* and *few*, as shown in (173) and (174) below. In these constructions, however, they are taken to be adverbs, rather than determiners, because here they are seen as modifying *a few* and *few*, rather than the nouns *people* and *pages*.

(173) *quite a few people*

(174) *rather few pages*

I will have more to say about *next, last, same, other, former, latter; we, you; quite* and *rather* in the next chapter where I will argue that their determiner treatment is not justified.

2.5 Conclusion

The diverse makeup of the English determiner class calls for a detailed examination of its properties and of the elements which are said to comprise it. Although the elements in (β) are taken to constitute a class, from what we have seen, it can be concluded that the individual words are rather different from each other both syntactically and semantically. In fact, the picture that emerges from the present survey is rather anomalous.

If we assign words to the same word class, this implies that they share a number of properties. Word-class membership rests on at least two kinds of properties, namely morphological and syntactic properties. The morphological shape of the words in (β) does not provide any indication of their classification. Having neither inflectional nor derivational endings, they have no morphological features which characterise them as a class. As for their syntactic properties, the only distinguishing syntactic property, which is not unique to them, is their connection with the leftmost pronominal position in the structure of the noun phrase.

As for identifying these words semantically, this is problematic too. Leaving aside the fact that semantic criteria are the least reliable indicators of word-class membership, it seems fruitless to look for semantic homogeneity among the elements in (β). At the
most general level, they all serve to 'specify', but the meanings conveyed by the various members of the class are rather different.

Thus, morphologically, syntactically and semantically it is hard to find properties that all determiners share, and it would not be unreasonable to say that they do not seem to have any distinctive properties, apart from the fact that they are pronominal elements in the noun phrase. It is not surprising then, that the descriptions of the determiner class found in the literature are far from being satisfactory.

Having discussed the makeup of the determiner class in English, and more generally, the practice of grouping the words in (β) into a single word class, it is my purpose in the next two chapters to focus in more detail on the shortcomings of the classifications found in the literature.
Chapter 3
Constraining the membership of the determiner class

3.1 Introduction
In the previous chapter I looked at the properties attributed to the English determiner class and at the words assigned to it in some detail. In this chapter and the next I will show that determiners are a very problematic class in a number of different ways. On the one hand, there are problems with defining class membership: there is no agreement on which members comprise the class, and grammarians are far from sure about where to draw the line. On the other hand, there are several class-internal inconsistencies which defy the principles claimed to apply to the class as a whole. Finally, the different determiners behave very differently from one another.

The purpose of the present chapter is to examine the determiner status of what I would like to refer to as the ‘uncertain’ members of the class. Here I will deal with the words whose classification as determiners is rather inconsistent. That is, I will consider the elements which are included in the determiner class in some classifications, but are found elsewhere in others. I will take the classifications in Huddleston (1984), Quirk et al. (1985), Biber et al. (1999) and Huddleston and Pullum (2002) as the basis for my analysis. I will argue that a determiner analysis of these words is not justified, and provide what I consider to be a better analysis of these items.

3.2 Uncertain members
In what follows I consider the following items: next, last, former, latter, same, other; quite, rather, we, you; as well as the cardinal and ordinal numerals. I also look at the words half, double and twice; and the so-called zero article. All of these are given as instances of determiners in some descriptions.

3.2.1 Next, last, former and latter
A problem concerning membership of the determiner class involves the words next, last, former and latter. Next and last are included in the class in both Quirk et al.’s (1985) and Biber et al.’s (1999) classifications. Former and latter, on the other hand, only feature among Biber et al.’s (1999) determiners. None of these words is included in the inventory of determiners in Huddleston (1984), or in Huddleston and Pullum (2002).
The reason for the inclusion of next, last, former and latter in the determiner class is that semantically they are like ordinal numerals in that they evoke order. A further reason for classing next and last as determiners is that syntactically they share with ordinal numerals the fact that they can precede cardinal numerals and words such as many, few and little which are alleged to be determiners.

(1) the next three weeks
(2) his last few years

And as Berry (1998: 3) points out, 'there is an (unwritten) assumption in the analysis of determiners that they cannot be discontinuous; thus, if numerals are determiners, so is anything that can precede them'.

Although next and last are like determiners in that they specify the nouns they precede, making their reference more precise, I would like to argue that they are in fact adjectives. Adjectives too can express order, and next and last are in this respect not different from words such following, previous, preceding and subsequent which are regularly treated as adjectives. In fact, next and last have more in common with central members of the adjective class than following, previous, preceding and subsequent do, as we will see below.

First, whereas following, previous, preceding and subsequent can only occur attributively, both next and last can be used predicatively as well as attributively.

(3a) next patient
(3b) He is next.

(4a) last candidate
(4b) He is last.

(5a) the following day
(5b) *The day is following.

(6a) my previous job
(6b) *My job is previous.
(7a) the *preceding chapter
(7b) *The chapter is preceding.
(8a) the *subsequent events
(8b) *The events were subsequent.

Second, although next and last, like following, previous, preceding and subsequent, are not gradable and do not have comparative or superlative forms, they can be used with very for emphasis, whereas following, previous, preceding and subsequent cannot.

(9) the very next day
(10) my very last question
(11) *the very subsequent day
(12) *my very following move

Finally, next as well as last, like adjectives, have adverbial counterparts.

(13) Lastly, I need to ask you a few questions.
(14) The thing I'm going to do next is find a job.

The above facts are strong enough evidence that next and last are adjectives. Together with following, previous, preceding and subsequent, next and last are instances of what are sometimes referred to in the literature as 'classifying adjectives', i.e. adjectives which, rather than qualifying the noun they occur with, place them in a class (Sinclair, 1990: 70).

Now consider former and latter. These are adjectives according to Huddleston and Pullum (2002), and this is the analysis I believe best accounts for the facts.

First, unlike the articles, the possessives and the demonstratives, but like adjectives, former and latter, although they enter into construction with singular count nouns, cannot occur as the sole determiner in singular noun phrases.

(15) *(the) former place
(16) *(my) latter job
(17) *(the) tall guy

Note also, that *former and latter are like adjectives in that they contain the 
comparative suffix -er. Like adjectives such as upper, inner and outer, they are what 
Huddleston and Pullum (2002: 1163) refer to as ‘lexical comparatives’. These authors 
argue that the suffix here is a derivational one rather than an inflectional one, because 
there are no basic adjective forms form, latt, up, in or out to which the suffix -er can be 
added. Such adjectives only occur attributively, as shown by the ungrammaticality of the 
(b) examples below.

(18a) the former Prime Minister
(18b) *The Prime Minister was former.

(19a) the latter option
(19b) *The option was latter.

(20a) the upper floor
(20b) *The floor is upper.

(21a) the inner courtyard
(21b) *The courtyard is inner.

Moreover, in the manner of adjectives, *former and latter have adverbial 
counterparts as shown in (22) and (23).

(22) This University was formerly called the Polytechnic of Central London.
(23) She hasn’t been feeling very well and latterly she’s hardly been out.

Thus, although not typical adjectives, *former and latter display properties 
which justify their treatment as members of the adjective class.
3.2.2  *Same and other*

Two other words sometimes included in the determiner class are *same* and *other* (cf. Biber *et al.*'s, 1999).

The reason for treating *same* as a determiner is the fact that it can precede cardinal numerals.

(24)  the *same* five students

Notice, however, that unlike other determiners, *same* does not on its own combine with a noun,

(25)  *(that) same* day
(26)  *(the) same* students

and it can occur after adjectives.

(27)  the exact *same* lamp

Like *next, last, former* and *latter*, *same* shares more properties with members of the adjective class than it does with the articles, the demonstratives or the possessives.

(28)  They are the *same* age.
(29)  Their ages are the *same*.
(30)  They were taught by the very *same* teacher.

As shown in (28)-(30), *same* can occur attributively as well as predicatively, and it allows premodification by *very* for emphasis. Note that although it could be argued that (29) is not a predicative use given that there is a determiner present, this is typical of adjectives when they occur in their superlative form.

(31)  They are the *best/biggest/oldest*.
I would like to argue that *same* is semantically inherently superlative: to be *the same* is to have the highest degree of similitude. This explains why *same* occurs only with definite determiners, and mostly with the definite article.

One could also argue that when *same* enters into construction with *very, very* modifies the noun rather than *same*. In fact, the possibility of omitting *same* in (32) below suggests that *very* modifies the noun *moment* rather than *same*.

(32a) She realised what she's said the very *same* moment she said it.
(32b) She realised what she's said the very moment she said it.

Notice, however, that the omission of *same* in (30) renders the sentence ungrammatical, as shown by (33), and is therefore evidence that *same* allows premodification by *very*.

(33) *They were taught by the very teacher.

Also, unlike determiners, but like adjectives, *same* can take an *as*-clause as a complement.

(34) the *same* as you had

The adjective treatment of *same* is thus to be preferred. This is the treatment found in Huddleston and Pullum (2002) and Quirk *et al*. (1985). Biber *et al*. (1999), although listing *same* among the determiners, recognise its adjectival properties, and also class it as an adjective. They place *same* in a class they call ‘relational classifier adjectives’, and say that it contrasts with the adjective *different* (Biber *et al*., 1999: 514).

Now consider *other*. *Other* does not appear among Huddleston’s (1984) and Huddleston and Pullum’s (2002) determiners, but both Quirk *et al*. (1985) and Biber *et al*. (1999) list *other* among their determiners. A further determiner treatment of *other* is found in the Collins Cobuild English Grammar (Sinclair, 1990).33

The classification of *other* as a determiner is due to it occurring before numerals and quantifiers such as *many*. These are alleged determiners, and under the

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33 Although Huddleston (1984) and Huddleston and Pullum (2002) do not have *other* among their determiners, they offer *another* (see chapter 2).
assumption that a word preceding a determiner can only be a determiner itself, other is thus also classed as a determiner.

(35) the other three examples
(36) all those other many occasions

Note, however, that other can also follow these words, and this mobility makes it rather different from the other determiners.

(37) eleven other countries
(38) many other things

Moreover, in contrast with other determiners, it is possible for other to occur after adjectives.

(39) some wonderful other books
(40) perfectly good other juices

Notice also that, despite combining with singular count nouns, other, unlike the articles, the demonstratives or the possessives, can only do so when preceded by a determiner.

(41) the/that/his daughter
(42) *other daughter

The argument for a determiner treatment of other is thus rather weak. On the other hand, I will show below that there is strong evidence for the analysis of other as an adjective.

First, as shown above, like adjectives, other on its own cannot occur with a singular count noun. This fact is illustrated by the ungrammaticality of (42) above and (43) and (44) below.

(43) *(the) other daughter
(44) *(the) young daughter
Secondly, in the manner of adjectives, *other* can occur attributively, predicatively and postpositively, as shown in (45)-(47). Note also that, like adjectives, *other* can take a *than*-clause as complement, as shown in (46) and (47).

(45) some *other* day
(46) The US policy is in fact *other* than he stated.\(^{34}\)
(47) any university *other* than Oxford

Further evidence that *other* is an adjective comes from the fact that it coordinates with adjective phrases, as shown in (48).\(^{35}\)

(48) (...) space inhabited by *other* and *more exciting* ones (...).

Finally, consider (49).

(49) The *other* was Asian.

*Other* is usually analysed as a pronoun in constructions such as (49) above. But unlike pronouns, *other* cannot stand on its own as a phrase but requires a preceding determiner, as shown by the ungrammaticality of (50).

(50) *Other* was Asian.

I take the string *the other* in (49) to be parallel to the italicized strings in (51) below, where the adjectives *rich* and *poor* appear in what is typically a noun position.

(51) Take from *the rich* and give to *the poor*.

Like *rich* and *poor* in (51), *other* in (49) is associated with an implicit noun. The difference between *the rich* and *the poor* on the one hand, and *the other* on the other, is that whereas in the former the implicit noun is always interpreted as being 'people',

\(^{34}\) From Huddleston and Pullum (2002: 1145).

\(^{35}\) From Huddleston and Pullum (2002: 1145).
whatever the context, in the latter it can only be recovered from the particular context. Thus (49) could be a shorter version of any of the constructions below.

(52) The other student was Asian.
(53) The other cat was Asian.
(54) The other car was Asian.

Huddleston and Pullum (2002) also regard other as an adjective. In constructions like (49), however, they say it is a common noun (2002: 429-430), derived from the adjective by conversion. They argue that in constructions like (49) other has a plural counterpart, and the fact that it inflects for number clearly shows that it is a common noun.

(55) The others were Asian.

Whether other should be regarded as an adjective in all the above constructions, and others treated separately (i.e. not as a plural inflection), or whether, like Huddleston and Pullum (2002), we should distinguish between the adjective other and the common noun other is not entirely obvious. However, it is evident that there is no determiner other.

Next, last, former, latter, same and other may not be typical members of the adjective class, but they certainly share more properties with words such as young, big, rich, etc., than they do with words such as the articles, the possessives and the demonstratives. The uncertainty surrounding the classification of these words can be seen in Biber et al. referring to them as ‘semi-determiners’ (1999: 280-281). They class next, last, former, latter, same and other as determiners, but admit that they are not ‘determiners proper’. They argue that they are not adjectives either, because they lack descriptive meaning and because of their limited cooccurrence patterns with other determiners (ibid: 280). They are right in saying that the lack of descriptive content of these words semantically rules them out as typical adjectives. However, their treatment fails in that it does not show that these words have several other properties, i.e. syntactic properties, which make them more like adjectives than determiners.^^

36 Recall from page 81 that Biber et al. (1999) class same as a determiner as well as as an adjective.
3.2.3 * Quite and rather*

Another two words which feature among the determiners in some descriptions (cf. Sinclair, 1990), but not in others, are *quite* and *rather*. *Quite* and *rather* owe their inclusion in the determiner class to the fact that they can occur before the indefinite article, as in (56) and (57).

(56) *quite a shock*
(57) *rather a surprise*

However, unlike the articles, the possessives and the demonstratives, it is not possible for *quite* or *rather* to occur as the sole determiner in a noun phrase, as shown by the ungrammaticality of (58) and (59).

(58) *quite shock*
(59) *rather surprise*

Further evidence against a determiner analysis of *quite* and *rather* is their position in the noun phrase. Unlike determiners, *quite* and *rather* are external to the noun phrase. That is, in (56) and (57) above they do not enter into construction with the nouns *shock* and *surprise*, respectively, but rather with the noun phrases *a shock* and *a surprise*. Thus the ungrammaticality of (58) and (59).

Note further that when an adjective is present in the noun phrase, as in (60) and (61), *rather* and *quite* modify the adjective, rather than the noun.

(60) *quite a small flat*
(61) *rather a difficult question*

This can be better shown by the alternative construction in (62), where *rather* immediately precedes the adjective.

(62) *a rather difficult question*
Even in cases where there is no alternative construction available, as for *quite* in (60), it can still be interpreted as modifying the adjective rather than the noun, as shown by (64), a paraphrase of (60).

(63)  *a quite small flat
(64)  a flat which is quite small

In constructions such as (62) above, *rather* is taken to be an adverb, but it is considered a determiner in (61). Despite occupying different positions, *rather* modifies the adjective *difficult* in the two constructions, and should accordingly be analysed as an adverb in both. As for *quite* in (60), it also modifies the adjective, although it does not immediately precede it, and an adverb analysis is thus also to be preferred.

Having argued that *quite* and *rather* are adverbs in (60) and (61), I would like to argue that they are also adverbs in (56) and (57). As in (60) and (61), *quite* and *rather* are intensifiers in (56) and (57), only this time they intensify nouns, or more specifically, whole noun phrases, rather than adjectives. Unlike determiners, which specify or quantify the noun they precede, *quite* and *rather* intensify them. The noun phrases they enter into construction with contain ‘gradable’ nouns (Quirk *et al.*, 1985: 451; Leech and Li, 1995: 189). In (56), *quite* intensifies the noun phrase *a shock*, i.e. it refers to how great the shock was, and *rather* in (57) intensifies the noun phrase *a surprise*, i.e. how big a surprise it was.

It could be argued that *quite* and *rather* also enter into construction with noun phrases containing non-gradable nouns. Note, however, that in constructions like (65), for instance, although the noun *car* is not inherently gradable, it can be intensified. *Quite* here is used to show that the *car* in question is, or has, qualities which are impressive or unusual in some way.

(65)  It must be *quite a car*.

The fact that there is no adjective present does not make *quite* and *rather* less adverb-like, or more to the point, the sole fact that they precede the indefinite article does not make them determiners.
3.2.4 *We and you*

There is also disagreement as far as the words *we* and *you* are concerned. They feature among Huddleston's (1984) and Huddleston and Pullum's (2002) determiners and are referred to as 'personal determiners'. Neither Quirk *et al.* (1985), nor Biber *et al.* (1999), however, have them in their inventory of determiners.

The inclusion of *we* and *you* in the determiner class is due to their appearing before nouns in constructions such as (66) below.

(66) *We linguists don’t always agree with you philosophers.*

When no noun follows, as in (67), *we* and *you* are classed as pronouns.

(67) *We don’t always agree with you.*

I want to argue that this class split is not justified and that they are pronouns in both (66) and (67), that is whether there is a following noun or not.

The analysis of *we* and *you* in noun phrases such as those in (66) as determiners or as pronouns depends partially on the analysis of the overall noun phrase. Two major competing analyses have been proposed: one under which the phrase is taken to be headed by the common noun and *we* and *you* are in the specifier position (Postal, 1966; Jackendoff, 1977; Pesetsky, 1978; Huddleston and Pullum, 2002); and another under which the noun is taken to be an appositive modifier of the pronominal heads *we* and *you* (Delorme and Dougherty, 1972).

The determiner treatment of *we* and *you* (Postal, 1966; Jackendoff, 1977; Huddleston, 1984; Huddleston and Pullum, 2002) arises from the assumption that the noun phrases in (66) are parallel in structure to those in (68) below, which are taken to be of the form $\text{NP}[\text{Det N}]$.\(^{37}\)

(68a) the linguists

(68b) those philosophers

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\(^{37}\) Strictly speaking they are definite articles for Postal (1966). Jackendoff (1977) also refers to them as articles, because he makes a distinction between articles and other determiners.
On the assumption that determiners occupy the specifier position in noun phrases, it follows that if *we* and *you* are in [Spec, NP] in (66), it is because they must be determiners. Such an assumption is not justified. Not only can a variety of elements be placed in [Spec, NP], but also some of these elements are phrasal level categories rather than lexical items, e.g. genitives such as *my neighbour’s* as in *my neighbour’s cat*.

I consider Postal’s (1966) analysis of *we* and *you* in (66) as determiners ill-founded, because although distribution is an important factor for word-class assignment, it should not constitute the sole basis for it. Note that even when they are positioned in what might be typically a determiner position, *we* and *you* retain their pronoun properties in that they inflect for case. Thus we have the form *we* in (69) but *us* in (70).

(69) *We* students don’t like examiners.
(70) Examiners don’t like *us* students.

Delorme and Dougherty (1972), Abney (1987) and Hudson (1990) are also of the opinion that a class split is uncalled for. Delorme and Dougherty (1972) and Hudson (1990) argue that *we* and *you* in constructions such as (66) are better analysed as pronouns. Under this analysis these elements head their phrases. They differ, however, in that for Delorme and Dougherty (1972) the following noun is an appositive modifier of the pronoun head, whereas for Hudson (1990) it is a complement.

Pesetsky (1978) provides some compelling evidence that an appositive analysis of these constructions is inadequate. Firstly, he points to the fact that number agreement between a head and a modifier in apposition is semantic, whereas number agreement between a specifier and its following head is syntactic.

(71) *We*, Parliament under God assembled, declare you are an honest yeoman.
(72) *We* Parliament under God assembled declare you are an honest yeoman.

In (71) *Parliament* is clearly an appositive modifier of *we*, hence the comma, and does not need to agree with it syntactically. The unacceptability of (72) shows that, although semantically plural, the noun *Parliament* is syntactically singular, and therefore fails to agree with the plural specifier *we*.

Secondly, Pesetsky (1978) observes that the head of an appositive construction can be a conjoined structure, whereas conjoined specifiers are not possible in English.
You and we, linguists from conviction, know we have found the truth.

*You and we linguists should get together some time.

He argues then that the ungrammaticality of (74) shows that we here is not the head of the phrase.

Thirdly, Pesetsky (1978) argues that differences in quantifier scope also show that the noun phrases in (66) are not instances of apposition. He says that when a quantifier precedes an appositive construction, it has scope over the head, but not over the element in apposition.

some of us, linguists = [some us] [linguists]

By contrast, in noun phrases such as those in (66), the preceding quantifier has scope over the whole noun phrase.

some of us linguists = [some [us linguists]]

A further fact against an appositive analysis that Pesetsky (1978) puts forward has to do with a constraint he refers to as the ‘surface constraint’. According to this constraint ‘a pronoun direct object must immediately follow its verb’ (Pesetsky, 1978: 355).

*He looked up us, linguists, in the phone book.

He looked up us linguists in the phone book.

Pesetsky (1978) argues that an appositive analysis of us linguists cannot account for the difference in grammaticality between (77) and (78), since they would then be parallel structures, differing only by the absence of a comma. He argues that if it is assumed that us in (78) is not the head of the noun phrase, but rather occupies the specifier position, then the constraint would not apply.

Finally, Pesetsky (1978) argues that case marking is also evidence that we and you are not in apposition in relation to the following noun. He argues that a pronoun in subject position is always in the nominative case, and that the fact that nominative case marking is optional in (79) shows that we is not a subject.
(79) *We/Us students don’t like examiners.*

Pesetsky (1978) is thus right in saying that an appositional analysis cannot explain the above facts, and in arguing that an analysis according to which the common noun is the head and *we* and *you* are specifiers can. His analysis, however, falls short in its assumption that because these forms occupy the specifier position, they must therefore be regarded as determiners, rather than as pronouns. The analysis of these forms as determiners is by no means a necessary consequence of analyzing these constructions as being of the form \( \text{NP}[\text{Spec N}] \). The above facts, although evidence that *we* and *you* are specifiers in phrases such as those in (66), do not provide evidence that they are determiners.

Pesetsky argues that a ‘category switching rule’ is responsible for *we* and *you* appearing both with and without a following noun. He claims that they are originally pronouns, but that the category switching rule turns them into determiners, without any derivational morphology (Pesetsky, 1978: 357). I consider the assumption of such a rule unnecessary. It is simply a fact of English, that words can appear in positions which are not their typical position. It is well known that nouns, for instance, can occur in what is typically an adjective position, as in (80) and (81) below, but they are nevertheless not treated as adjectives.

(80) *computer games*

(81) *science book*

To introduce such a rule adds an unnecessary complication to the grammar of the language without any additional gain. The pronouns *we* and *you* can have functions, and occupy positions, different from their typical ones, i.e. although they are typically heads in noun phrase structures, they can also function as specifiers.

As a final point, consider (82) below, which constitutes a further argument against a determiner analysis of *we* and *you*.

(82) *We linguists are proud of ourselves.*

Rigter (1980) argues that the fact that the reflexive in (82) agrees with *we* rather than with the noun *linguists* is evidence that *we* is the head of the noun phrase, and therefore a
(pro)noun. Note that, although an argument in favour of the pronoun-treatment of *we* and *you*, (82) is a counterargument to the claim that in phrases such as *we linguists*, *we* is a specifier.

Finally, Abney (1987) also argues for a unified analysis of *we* and *you* in (66) and (67). However, he regards these elements as determiners in both constructions, because for him pronouns are determiners. I will have more to say about the dispute whether determiners are pronouns or pronouns are determiners in chapter 4. For now I hope to have shown that the analysis of *we* and *you* as determiners is not justified, and that there are strong reasons for analysing them as pronouns in all their occurrences.

### 3.2.5 Numerals

The numerals can be said to constitute a special case. Although usually classed as determiners, they are often also regarded as forming a class in their own right, distinct from the other word classes. This is the treatment found in Quirk *et al.* (1985) who list the numerals among their determiners, but also treat them separately as an independent class. A similar analysis is found in Biber *et al.* (1999).

Huddleston (1984: 328-329) says that the cardinal numerals have nominal properties and are better classed as nouns. The treatment in Huddleston and Pullum (2002) is somewhat different. Whereas Huddleston (1984) opts for classing the cardinal numerals as nouns only, Huddleston and Pullum (2002) allow a dual classification, and assign the cardinal numerals to both the determiner and the noun classes. As for the ordinal numerals, these do not feature in Huddleston’s (1984) or Huddleston and Pullum’s (2002) inventories of determiners.

The reason for classing the cardinal numerals as determiners is that they refer to quantity in the same way as the quantifiers *all, both, some, many*. The only difference drawn between them is that whereas the former refer to specific amounts, the latter, with the exception of *both* (see chapter 2) refer to non-specific amounts. As for the ordinals, they are taken to be determiners, because they also specify nouns, but they do so in terms of order, rather than quantity. I would like to argue that numerals are not determiners, and in what follows I provide evidence that cardinal as well as ordinal numerals are better treated as nouns.

Consider the cardinal numerals first, and the reasons for not classing them as determiners. Determiners are said to constitute a closed class, i.e. a class whose
membership is small. However, the cardinal numerals make up a very large class. In fact, they are the largest class of all, as they have unlimited membership.

In addition, while cardinal numerals can be said to be semantically similar to words such as all, both, some, etc., syntactically they are rather different. Unlike all, both, some, etc., the cardinal numerals come later in the noun phrase,

(83) every twelve minutes
(84) any two people
(85) the next six months

and it is possible for them to follow adjectives.

(86) the previous three years
(87) a tedious two hours
(88) an excellent three months

Furthermore, the ordering of cardinal numerals seems to be somewhat freer than that of other determiners. For instance, as we have seen, they can be used both before and after other, and they can either precede or follow ordinal numerals.

(89a) the two other books
(89b) the other two books
(90a) the two first prizes
(90b) the first two prizes

A further reason for not classing the cardinal numerals as determiners, but rather as nouns, is that, in contrast to the other determiners, but like nouns, they inflect for number.

(91) People arrived in twos and threes.
In addition to allowing pluralisation, some larger cardinal numerals such as *hundred*, *thousand* and *million*, share with common nouns the fact that they may also be preceded by the indefinite article.

(92) \textit{a hundred/ thousand/ million}

Moreover, whereas it can be argued that only larger cardinal numerals occur with the indefinite article, cardinal numerals in general can be preceded by the definite article, the demonstratives, as well as by quantifiers.\(^{38}\)

(93) \textit{the two}
(94) \textit{these three}
(95) \textit{another six}
(96) \textit{many thousands}

They can also be postmodified by a prepositional phrase, a typical nominal postmodifier.

(97) \textit{the two on the table}
(98) \textit{many thousands of people}

Note further that, like nouns, cardinal numerals can occur on their own as phrases and these phrases have functions typical of noun phrases, namely subject, object and complement of a preposition.

(99) \textit{Four is more than enough.}
(100) \textit{I've bought two.}
(101) \textit{He cut it in threes.}

\(^{38}\) McCawley (1988: 372) also offers constructions like (93) and (94) as evidence against the analysis of cardinal numerals as determiners. He claims that the fact that cardinal numerals can be preceded by words such as the articles and the demonstratives rules out their treatment as determiners, because a determiner cannot be preceded by another determiner. However, this fact alone does not rule out the analysis of cardinal numerals as determiners, because, as seen above, many so-called determiners can co-occur.
Now consider (102) and (103).

(102) we two
(103) you three

As seen in the previous section, it is possible for the personal pronouns *we* and *you* to occur before a noun, as in (102) and (103) above. Such constructions are usually analysed as being of the form \( \_N^P[Spec \_N] \), with the pronoun acting as the specifier to the head noun. A determiner treatment of cardinal numerals cannot account for these constructions, because they would have to be analysed as containing two specifiers, the pronoun and the numeral, and no nominal head. If we assume that numerals are nouns, however, the facts fall out easily. Note also that the analysis according to which these phrases are instances of apposition does not benefit from the treatment of cardinal numerals as determiners either. Under this analysis the pronoun heads the phrase, and the numeral is an appositive modifier. If we treat numerals as determiners, we are then left with an appositive headless noun phrase.

Further evidence that cardinal numerals are better regarded as nouns is found in Huddleston (1984: 236). He offers (104) and (105) and argues that only a noun treatment of the cardinal numerals can provide the correct structural analysis of these constructions.

(104) another two candidates
(105) an enjoyable three days

Huddleston (1984) argues that the strings *another two* and *an enjoyable three* are constituents, more specifically they are noun phrases headed by the cardinal numerals *two* and *three*, respectively, with *another* and *an enjoyable* as their respective dependents. These phrases, in turn, function as dependents of the nominal heads *candidates* and *days*, respectively. He offers proof for this by showing that the omission of the cardinal numerals renders the constructions ungrammatical, as shown by (106) and (107) below.

(106) *another candidates
(107) *an enjoyable days
The singular forms *another* and *an* cannot be dependents of the plural heads *candidates* and *days* because they fail to agree in number. *Another* and *an* are dependents of the cardinal numerals *two* and *three*, respectively, which, although semantically plural, are syntactically singular. One could argue, however, that Huddleston’s (1984) arguments may be evidence that the strings *another two* and *an enjoyable three* are phrasal constituents headed by the cardinal numerals, but not that cardinal numerals are nouns. Note, however, that both *another* and *enjoyable* are typical noun modifiers (*another day/book/time; enjoyable days/books/times*), and this fact added to the evidence given above leads to a noun analysis of the cardinal numerals.

All the above facts are compelling evidence that cardinal numerals are better treated as nouns, rather than as determiners. The fact that numerals inflect for number alone has led them to be classed as nouns in some descriptions (cf. Jackendoff, 1977; Hudson, 1997). I have shown here that cardinal numerals share several other features with members of the noun class, which justifies their inclusion in the class.

Now consider the ordinal numerals. These are determiners for Quirk *et al.* (1985) and Biber *et al.* (1999), and the reason for classing them as such has already been given above, namely, they also specify nouns. They are not, however, amongst Huddleston’s (1984) or Huddleston and Pullum’s (2002) determiners.

Huddleston (1984) does not offer any classification of the ordinal numerals. They are not included in any of his word classes. In Huddleston and Pullum (2002), on the other hand, they are regarded as adjectives, more specifically, ‘ordinal adjectives’ (2002: 416). No justification for their adjective treatment is offered, however. In what follows I will argue that ordinal numerals, like cardinal numerals, are best analysed as nouns.

A first reason for not classing the ordinal numerals as determiners is that, like cardinal numerals, they belong to an open class. Also, like the cardinals, the ordinals occur much later in the noun phrase: they follow the articles, as well as the demonstrative and possessive determiners.

(108) a *first* time
(109) that *second* day
(110) my *third* attempt

They can also occur after adjectives.
(111) a real \textit{first} step
(112) an optional \textit{second} display
(113) the late \textit{fourth} century

Ordinal numerals also have a more flexible ordering, as shown in (90a) and (90b) above, repeated here as (114a) and (114b), where \textit{first} occurs after as well as before a cardinal numeral.

(114a) the two \textit{first} prizes
(114b) the \textit{first} two prizes

Ordinals can also precede as well as follow adjectives. The former is shown in (115) below and the latter is illustrated by (111)-(113) above.

(115) my \textit{first} real author

Moreover, the ordinal numerals are semantically different from the other alleged determiners in that they express order or ranking, rather than definiteness or quantity.

Now consider the rationale behind treating the ordinal numerals as adjectives. First, like adjectives, ordinal numerals occur before nouns, and after a determiner, if there is one.

(116) \textit{first} prize
(117) the \textit{fifth} commandment

Second, they can occur after a copula verb.

(118) He was \textit{fourth}.

And third, they can occur with \textit{very} for emphasis.

(119) the very \textit{first} day

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I will argue below that the above facts do not justify an analysis of ordinal numerals as adjectives, and that they are better treated as nouns.

Notice that although (116) and (117) are instances of attributive uses of the ordinal numerals, the equivalent predicative use is not possible.

(120) *The prize is first.
(121) *The commandment was fifth.

This fact alone does not rule out the analysis of ordinal numerals as adjectives, because it is a well-known fact of English that some adjectives do not have both attributive and predicative uses. Note, however, that it is also a well-known fact of English that nouns can modify other nouns, that is, they can occur in attributive position. The corresponding predicative constructions, however, are not possible.

(122a) computer games
(122b) *The games are computer.

(123a) a linguistics book
(123b) *The book is linguistics.

(124a) a beach house
(124b) *The house is beach.

Now consider (118). Here fourth follows copula be, and can be said to have a predicative use. Although typical of adjectives, nouns too can occur in this position.

(125) She was chairman.
(126) He is King.

As for (119), first seems to be the sole ordinal numeral to accept modification by very, as shown by the ungrammaticality of (127).

(127) *the very second/third/fourth/fifth day
Consider now some further motivation for classing ordinal numerals as nouns. Like nouns, ordinal numerals inflect for number, and can take prepositional phrases as complements.

\begin{enumerate}
\item two \textit{thirds} of the house
\item three \textit{fifths} of my salary
\end{enumerate}

In addition, they can head phrases whose functions are typical of noun phrases, such as subject, object and complement of a preposition.

\begin{enumerate}
\item The \textit{first} is bigger.
\item I prefer the \textit{second}.
\item The population was reduced by a \textit{third}.
\end{enumerate}

Moreover, ordinal numerals are like countable common nouns in that they do not occur alone, and require determination, as shown by the ungrammaticality of (133)-(135) below.

\begin{enumerate}
\item *First is bigger.
\item *I prefer second.
\item *The population was reduced by third.
\end{enumerate}

Finally, consider (136).

\begin{enumerate}
\item She left her job for three reasons: firstly, the low wages; secondly, the long hours; and thirdly, there was no chance of promotion.
\end{enumerate}

In (136) the italicised forms seem to suggest that ordinal numerals are indeed adjectives. \textit{Firstly, secondly} and \textit{thirdly} are adverbs, and adverbs in `-ly' are mostly formed by attaching this suffix to the equivalent adjective. There are, however, instances of `-ly'-adverbs in English which are related to nouns as opposed to adjectives, e.g. \textit{namely}, \textit{purposely}, \textit{partly}.

Thus, taking into consideration all the facts above, it is fair to say that there are strong reasons for treating ordinal numerals, alongside cardinal numerals, as nouns. They
share several properties with members of the noun class to justify their being grouped together, their differences being better handled by means of subcategorization, that is, by treating them as special subclasses of nouns. This conclusion confirms the claim made earlier that numerals are not determiners.

3.2.6 *Half, double and twice*

The words *half, double* and *twice* are also sometimes listed amongst the determiners (Quirk *et al.*, 1985; Biber *et al.*, 1999). Their inclusion in the determiner class is on account of the fact that these forms refer to quantity, and can precede the articles, the demonstrative and the possessive determiners, as shown in (137)-(142).

(137) *half* the work  
(138) *half* that money

(139) *double* the speed  
(140) *double* this amount

(141) *twice* the size  
(142) *twice* my age

In what follows, I will argue that the analysis of *half, double* and *twice* as determiners is not justified and that they are best treated as nouns.

Consider *half* first. The occurrence of *half* before the articles and the demonstrative and possessive determiners may suggest that *half* itself is a determiner. Note, however that *half* can also occur much later in the noun phrase, following the articles, as well as after numerals and after the words *last* and *next*.

(143) a *half* share  
(144) the second *half* hour  
(145) the last *half* mile  
(146) the next *half* hour

This fact would make *half* an unusual determiner, because it would be both a predeterminer and a postdeterminer (see chapter 2). It is a predeterminer in (137) and
(138), but a postdeterminer in (143)-(146). Those who argue for a determiner treatment of *half* (Quirk *et al*., 1985; Biber *et al*., 1999), however, seem to ignore this fact and class it as a predeterminer.

Consider now the data in (147)-(149) below. While Quirk *et al*. (1985) and Biber *et al*. (1999) analyse *half* as a determiner in (137) and (138) and (143)-(146) above, they analyse it as a noun in (147)-(149).

(147) *half* of the time
(148) *half* of that amount
(149) *half* of my salary

I regard this class split unnecessary, and take *half* to be a noun in all these constructions. Its leftward position in noun phrases such as (137) and (138) does not constitute enough grounds for treating *half* as a determiner. Moreover, although the absence of *of* in constructions like (137) and (138) seems to suggest a determiner analysis, note, however, that an alternative version of (137) and (138) with *of* is also possible:

(150) *half* of the work
(151) *half* of that money

There is no difference in meaning between the two constructions and they can be said to be shorter and longer versions of each other. ³⁹

That *half* is a noun can be shown by the fact that it inflects for number,

(152) the two *halves*

and by the fact that it can be modified by adjectives:

(153) the mountainous *half*
(154) the southern *half*

³⁹ See Estling (2000) for a quantitative account of the two constructions, and factors which might influence the choice of construction (e.g. regional or stylistic differences).
Moreover, as seen above, like nouns, *half can take a postmodifying prepositional phrase, as illustrated in (150) and (151).

Furthermore, like nouns, *half can stand on its own as a phrase and can assume functions typical of noun phrases, namely subject, direct object and complement of a preposition.

(155) *Half is frozen.
(156) They've analysed *half.
(157) I divided it in *half.

Note also that, again, there is no difference in meaning between the three types of constructions, namely, the *of-construction, the *of-less-construction, and the *half-only construction.

(158a) *Half of the students are immigrants.
(158b) *Half the students are immigrants.
(158c) *Half are immigrants.

(159a) I've only read *half of the book.
(159b) I've only read *half the book.
(159c) I've only read *half.

One potential counterargument against a uniform noun-treatment of *half is the fact that the *of-version is not always possible, as shown in (160)-(162).

(160) *half of a day
(161) *a half of share
(162) *every half of mile

The ungrammaticality of the above constructions, however, is not due to *half being a determiner here rather than a pronoun, and therefore unable to take a postmodifying prepositional phrase, but it is rather due to the type of construction it is in. (160)-(162) are instances of partitive constructions, and in this sort of construction the noun phrase following partitive *of must be definite (cf. Selkirk,
1977; Baker, 1995; Huddleston and Pullum, 2002). Selkirk (1977) refers to this constraint as the 'partitive recursion constraint'. It 'rules out as ungrammatical any partitive construction containing some, all, no, Δ (= indef), and so on, in the lower noun phrase' (Selkirk, 1977: 304). Thus the ungrammaticality of (160)-(162) is not due to half, but rather to the fact that the postmodifying noun phrases are indefinite.

As for double and twice, as mentioned above, the reason given in the literature for classing them as determiners is that they express quantity. Also, like words such as all and both, they can precede the articles as well as the demonstrative and possessive determiners, as shown in (163)-(166).

(163) double the speed
(164) double that figure
(165) twice the size
(166) twice my age

Note however, that unlike all and both, and determiners in general, neither double nor twice can occur as the sole determiner in a noun phrase.

(167) all (the) money
(168) both (his) parents
(169) double *(the) speed
(170) twice *(the) size

Huddleston and Pullum (2002) do not class double and twice as determiners. They take double to be a noun and twice to be an adverb. I will argue below that the noun treatment of double is indeed preferable. I will argue, however, that the adverb analysis of twice is not entirely justified, and that it too should be regarded as a noun.

Huddleston and Pullum (2002: 434) class double as a noun on the basis of the fact that it occurs in constructions such as (171) below.

(171) in doubles
It is not entirely clear, however, if by that they are referring to the fact that like nouns, *double* inflects for number, or to its ability to occur as the complement of a preposition, or both. I would like to argue that both these facts suggest that *double* is a noun. Note also that, like nouns, *double* does not only stand on its own as a phrase as the complement of a preposition, as in (171) above, but also as a direct object, as in (172).

(172) He gets paid *double*.

Despite their analysing *double* as a noun, Huddleston and Pullum (2002: 434) claim that in construction like (173) and (174) below, 'double is probably to be analysed as an adjective'. This is because in these constructions *double* is an internal modifier in noun phrase structure, a function typical of adjectives.

(173) two *double* whiskies
(174) a *double* meaning

This fact on its own, however, does not justify an adjective analysis of *double* because nouns can also function as noun modifiers.

Huddleston and Pullum (2002: 434) argue that *twice* is an adverb because it can function as a frequency adjunct, as in (175).

(175) She was here *twice*.

Note, however, that, although this role is typical of adverbs, it is not unusual for noun phrases to have an adjunct function, as shown in (176).

(176) She was here *several times/this morning/last week*.

The category status of *twice* is not evident. *Twice* does not seem to exhibit any one property which clearly indicate its class membership. However, the claim that it is a determiner is the weakest of all analyses. In the absence of sounder evidence, I will take *twice* to be a noun on the basis of its distribution, or rather, of the distribution of its phrasal expansion, which is parallel to that of *times*-noun phrases. Like these phrases,
*twice* can occur as an external modifier in noun phrase structure, and can function as a frequency adjunct, as shown below.

(177) *three times* a day
(178) *twice* a day

(179) We've met *three times*.
(180) We've met *twice*.

3.2.7 The zero article

Finally, there is the so-called ‘zero determiner’ or ‘zero article’ (Ø). Whereas this determiner is listed among the central determiners in both Quirk *et al*.’s (1985) and Biber *et al*.’s (1999) treatments, Huddleston (1984) and Huddleston and Pullum (2002) have nothing to say about it.

For those who have it (cf. Christophersen, 1939; Yotsukura, 1970; Quirk *et al*., 1985; Radford, 1997; Biber *et al*., 1999), the zero article is a determiner which has no phonetic content. It is said to occur in front of plural count nouns and noncount nouns as in (181) and (182) below, as well as before proper nouns, as in (183). The zero article is also said to occur before singular count nouns in constructions such as (184).

(181) [Ø Students] are always complaining.
(182) I prefer [Ø coffee] to [Ø tea].
(183) I live with [Ø Rob].
(184) He’s been appointed [Ø head of department].

Even amongst those who accept the existence of such a determiner, there is disagreement about where exactly it occurs. For instance, whereas Christophersen (1939) claims that the zero article occurs in all the above constructions, for Quirk *et al*., (1985) it only occurs in (181), (182) and (184). They claim that there is no determiner in (183) because proper nouns incorporate their own determiner (Quirk *et al*., 1985: 246).

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40 See Quirk *et al*. 1985 (276-281) for several other uses of the zero article with singular count nouns.
Radford (1997: 152-154) claims that the **zero article, or null determiner as he calls it, is a normal determiner in its syntactic and semantic properties.** He says that it has a determiner-like meaning, which is either existential or generic, and that it has the same selectional restrictions as **enough,** in that it selects only plural count and noncount nouns. Its only peculiarity therefore is its lack of phonetic content. We will see below that these arguments are open to criticism.

The zero article has been proposed as a way of accounting for the syntactic representation of noun phrases such as (181)-(184) above. By assuming such a determiner it is possible to analyse these noun phrases as being identical to noun phrases containing an overt determiner, and by so doing to offer a uniform analysis of these phrases. In other words, the zero article allows linguists to treat all noun phrases as having a determiner of one kind or another, that is, overt or non-overt, so that they can therefore all be assigned the same structure. This symmetric analysis would certainly make the account of English noun phrases neater, for it would provide the uniformity so much desired in syntactic descriptions, but it can be rather confusing.

Firstly, the zero determiner would have to be a rather peculiar kind of determiner. Contrary to the other determiners, which are either definite or indefinite, the zero determiner would have to be both: indefinite in (181) and (182), but definite in (183) and (184).41

Secondly, as for Radford’s reference to the selectional properties of the zero article being similar to those of the overt determiner **enough,** this does not hold. Another look at the examples above will show that, unlike **enough,** the zero article has a much wider distribution, in that it does not seem to be limited to plural count and noncount nouns, but it also occurs before singular count and proper nouns.

(185)    **enough** books
(186)    **enough** coffee
(187)    *enough* head of department
(188)    *enough* Paul

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41 Stowell (1991) groups nouns like *head, as in head of department, president, king, captain, treasurer,* etc. in a semantic class of nouns that he calls the ‘president-class’. He says that ‘these
Moreover, as will be argued in chapter 4 (section 4.4.1.2), *enough* is an adjective, which weakens the argument for a zero article, as it could be equally argued to be a zero adjective.

Hudson (2000: 18) points out that what this zero determiner does, if anything, in noun phrases like those in (181) and (182) is to exclude definite reference. However, as Hudson observes, common nouns are inherently indefinite and the indefiniteness of noun phrases such as (181) and (182) is due to the common noun not being preceded by a determiner, rather than to the presence of a zero determiner.

Furthermore, the postulation of a zero article does not provide the expected uniformity of treatment of the English noun phrase. Although its existence may account for constructions such as (181)-(184) above, it does not explain pronominal noun phrases such as those in (189) below.

(189)  *I need to see him.*

No zero article has been posited for pronominal noun phrases, and noun phrases like those in (189) are regarded as being head-only phrases. If these noun phrases can be treated as being determinerless, so can those in (181)-(184).

Note further, that the idea that the zero article would allow all noun phrases to be assigned the same structure, namely \textit{NP[Det N]}, only takes into account NPs containing no more than one determiner, leaving unaccounted for those containing two or more determiners, such as (190) and (191) below.

(190)  *both my dogs*

(191)  *all his many interests*

Although the postulation of a zero determiner is not a new one (cf. Chomsky, 1965: 108), it is particularly advantageous for those who defend the more recent DP analysis of the noun phrase (cf. Fukui, 1986; Abney, 1987; Longobardi, 1994; Radford, 1997). In order to claim that noun phrases are DPs, these phrases must be projections of nouns refer to an elected, inherited, or appointed office' (Stowell, 1991: 49) and 'denote kinds that have just one member at a given time' (ibid: 53).
the determiner. The assumption that there is a zero article in (181)-(184) would allow these noun phrases to be analysed as being headed by an empty determiner, rather than allowing for headless phrases.

Thus if the aim is to attain a completely uniform characterisation of the syntax of the English noun phrase, the postulation of a zero article only partially helps to achieve it. I consider the postulation of a zero determiner to be awkward and better avoided. My view is, therefore, that there is no zero article in English, and that noun phrases such as those in (181)-(184) as well as those in (189), do not contain a determiner.

3.3 Conclusion
In this chapter I have shown that determiners are a very problematic class as far as membership is concerned. There is a great deal of uncertainty surrounding the membership of the class, and there is no agreement among grammarians as to exactly which elements comprise the class. As a result, different descriptions present different inventories.

I have considered here the uncertain members of the class, namely next, last, former, latter, same, other, quite, rather, we, you; the numerals; half, double, twice; and the zero article and I have argued that their determiner treatment is not justified. They do not only lack the properties said to be typical of determiners, but they also do not have enough in common to justify their all being placed in the same class. My claim is thus that they have either (a) been misplaced (e.g. next, last, same, other, and the numerals); or (b) they do not exist altogether (e.g. the zero article).

The ultimate goal of this chapter was therefore to reassign these elements to their appropriate classes, and by doing so, to show that membership of the determiner class is much more limited than it is often thought to be. In the next chapter I will show that the restricted determiner class that we have arrived at at this point is still not free of problems. I will deal with some of the elements that are treated as representative members of the determiner class, and show that even these are not in fact determiners.

I will have more to say about the NP-DP debate in chapter 5. So I shall simply note at this point that the zero article, and the word class determiner for that matter, has always been taken for granted in discussions of the DP hypothesis.
Chapter 4
Constraining the class further

4.1 Introduction
In the previous chapter we saw that there is great uncertainty surrounding the issue of membership of the determiner class in English. I showed that elements which are included in the class in some descriptions, e.g. the words *next, last, former, latter, same, other, quite, rather, we, you,* the numerals, are left out in others. I argued that these elements are not determiners, and assigned them to different word classes.

The reassignment of these elements to other word classes makes determiners a more constrained class. The remaining elements are those whose membership to the class grammarians seem to agree on, and which are often considered to be representative members of the class. These are given in (γ) below.

(γ) the, a(n);
    this/these, that/those;
    my, your, his, her, its, our, their;
    what\textsuperscript{int}, which\textsuperscript{int}, whose\textsuperscript{int}, what\textsuperscript{rel}, which\textsuperscript{rel}, whose\textsuperscript{rel}, what\textsuperscript{exc};
    such, all, both, some, any, each, every, either, neither, no,
    much, many, few, little, several, more, most, enough, another

In this chapter I will show that even this more constrained determiner class is not free of problems. More importantly, I will consider the determiner status of the items in (γ) and show that these elements are also better classed elsewhere.

4.2 Class internal inconsistencies
Recall from chapter 2 that a noun phrase can contain more than one determiner. The maximum number of determiners a noun phrase is said to be able to contain is three. However, (1) shows that noun phrases containing four determiners also occur.

\textsuperscript{43} Part of this section and the next have been published as Spinillo (2000a).
\textsuperscript{44} Also (i) and (ii) for those who regard the numerals, *other* and *last* as determiners.

(i) \textit{both these last two days}
(ii) \textit{all those other many occasions}
We also saw that the usual way of accounting for the ordering of determiners is in terms of three positions, and determiners are subdivided into three subclasses according to the position they take in a noun phrase: predeterminers first, central determiners second and finally postdeterminers. These are repeated here for convenience.46

<table>
<thead>
<tr>
<th>Predeterminers</th>
<th>all, both; such; what\textsuperscript{exc}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central determiners</td>
<td>the, a(n); this/these, that/those;</td>
</tr>
<tr>
<td></td>
<td>my, your, his, her, its, our, their;</td>
</tr>
<tr>
<td></td>
<td>what\textsuperscript{int}, which\textsuperscript{int}, whose\textsuperscript{int}; what\textsuperscript{rel}, which\textsuperscript{rel}, whose\textsuperscript{rel};</td>
</tr>
<tr>
<td></td>
<td>some, any; either, neither; each, every; no; enough; another</td>
</tr>
<tr>
<td>Postdeterminers</td>
<td>much, many, few, little, several, more, most</td>
</tr>
</tbody>
</table>

This order is said to be fixed, and when it is not respected the resulting construction is ungrammatical. We will see below, however, that there are several exceptions to this three-position approach to determiner ordering.

We have seen that grammarians differ in their inventories of determiners. Their differences in treatment, however, do not only concern which elements they assign to the class, but also their treatment of the elements they agree on classing as determiners.


Huddleston (1984: 234) claims that much is a central determiner because it does not occur with other determiners, and in his classification determiners which cannot combine with any other determiners belong to the central determiner group. This view, however, leads to problems for Huddleston's framework, as he cannot account for a construction such as (2) below.

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\footnotesize

\textsuperscript{45} From Berry (1998: 3).

\textsuperscript{46} Minus the elements which were removed from the class in chapter 3.
much more time

(2) does not only contradict the general assumption that central determiners are mutually exclusive, because for Huddleston (1984) more is also a central determiner, but also his claim that much does not cooccur with any other determiner. Quirk et al.'s (1985) and Biber et al.'s (1999) classifications, on the other hand, face no such problems, because for them both much and more are postdeterminers and there are no constraints on the cooccurrence of postdeterminers.

There is also disagreement where every is concerned. Whereas Huddleston (1984) and Biber et al. (1999) assign every to the postdeterminer class, Quirk et al. (1985) put it among the central determiners. What led Quirk et al. (1985) to consider every a central determinant is that it can occur in front of few, other and the numerals, which are usually classed as postdeterminers.

(3) every few weeks
(4) every other day
(5) every two years

As for classing every as a postdeterminer, this is because it can occur after the possessive determiners, as shown in (6).

(6) her every whim

If we agree with Quirk et al. (1985) and call every a central determinant, we can explain (3)-(5) but not (6), which contradicts the assumption that central determiners are mutually exclusive. For this reason, the classification in Huddleston (1984) and Biber et al. (1999) seems to be superior. By classing every as a postdeterminer, an account of (3)-(5) is possible, because, as mentioned above, there are no restrictions on the cooccurrence of postdeterminers, as well as of (6), which can then be analysed as a regular combination of a central determinant and a postdeterminer.

Finally, consider more. Whereas Huddleston (1984) regards more as a central determinant, for Quirk et al. (1985), more is the comparative form of much and many, and therefore a postdeterminer. More is also a postdeterminer according to Biber et al. (1999).
The classification of more as a central determiner is problematic. It cannot account for (7)-(9) below, because these data contradict the assumption that central determiners are mutually exclusive.

(7) some more juice
(8) any more candidates
(9) no more birds

On the other hand, they pose no problem for Quirk et al. (1985) or Biber et al. (1999), for whom (7)-(9) are regular combinations of a central determiner plus a postdeterminer. As for (2) above, where we find both much and its comparative form more, Quirk et al. (1985: 386) say that 'the absolute forms many/much (...) can precede the comparative forms more, fewer, and less in the comparison of different totals or amounts.'

The criteria used to allocate the members of the determiner class to subclasses thus appear to be rather arbitrary. None of the analyses offered can fully account for the facts, and the inconsistencies of treatment weaken the description. In the next section I consider the members of the determiner class, which, although they have a uniform treatment, nevertheless pose problems for the system.

4.3 Further inconsistencies
It could be argued that the conflicting data looked at in the previous section can nevertheless be explained depending on the subclassification assumed, i.e. whether the item is treated as a pre-, a central or a postdeterminer. Further data, however, are more difficult to account for. In this section I will show that it is not only the members whose subclassification linguists disagree about that pose problems for the description; constructions involving determiners whose subclassification is settled are also problematic, because they too contradict the tenets said to apply to the class. Before discussing these problematic data, let me first recap the tenets associated with the distribution of determiners:

(i) Determiners belonging to the same group or position are in a paradigmatic relationship with one another, i.e. they cannot cooccur. An exception is made for postdeterminers.
(ii) Where there is more than one determiner the order is fixed as predeterminer + central determiner + postdeterminer.

Data such as (10) below show that (i) does not always apply. The predeterminers such and all can cooccur.⁴⁷

(10)  all₁ such₁ things

The distribution of the predeterminer such shows that (ii) is not watertight either. (11)- (13) show that the order central determiner + predeterminer occurs, while (14) and (15) show that postdeterminer + predeterminer is also possible.

(11)  no₂ such₁ plans
(12)  any₂ such₁ pretence
(13)  some₂ such₁ place
(14)  many₃ such₁ parents
(15)  several₃ such₁ people

Also, for those, like Huddleston (1984), who treat more as a central determiner, sequences such as the ones in (16) and (17) challenge (ii), proving that the order postdeterminer + central determiner also occurs.

(16)  many₃ more₂ people
(17)  several₃ more₂ guests

As a way out of the problem, Huddleston (1984: 235) suggests that (16) and (17) are cases of complex determiners, rather than a sequence of two determiners. Note, however, that many/several and more are independent of each other, as shown below.

(18)  many/several people

⁴⁷ Again I use subscript numbers to show which group the element has been assigned to. Thus 1 indicates that the element in question is a predeterminer, 2 that it is a central determiner and 3 that it is a postdeterminer.
Thus, as the description stands, there is no alternative but to see constructions like (16) and (17) as deviations from the norm.

Now consider (20) below.

(20) \textit{many}_3 a_2 \textit{man}

(20) also challenges (ii). \textit{Many} is classed as a postdeterminer, and therefore it should not be possible for it to occur before the indefinite article, a central determiner.\textsuperscript{48} Huddleston (1984: 234-235) and Berry (1997: 4) argue that \textit{many a} is best accounted for as a complex determiner because it does not behave as a combination of determiners, as shown by the ungrammaticality of (21).

(21) \*\textit{many} \textit{man}

I will have more to say about this particular combination below (section 4.4.1.1). For the moment I will agree with Berry (1997) and Huddleston (1984), and take the string \textit{many a} not to be a sequence of two determiners.

Finally, consider \textit{several}. \textit{Several} is classed as a postdeterminer but it can also appear in front of \textit{such}, a predeterminer, and \textit{more}, a central determiner for some grammarians.

(22)=\textit{several}_3 \textit{such}_1 \textit{people}
(23)=\textit{several}_3 \textit{more}_2 \textit{guests}

The above data seriously challenge the precepts said to apply to the determiner class. They involve several members of the class and cannot be simply taken to be exceptions to the norm. They show that tenets (i) and (ii) are no more than speculations, i.e. they are neither observationally nor descriptively adequate, in Chomsky’s (1965) terms. The cooccurrence restrictions on determiners cannot be explained by means of the three-position approach. The professed ordering of determiners is not always respected,

\textsuperscript{48} This construction is rather archaic, but nevertheless possible and still in use.
and the issue of mutual exclusiveness appears to be semantic in nature, rather than syntactic. Take the articles, for instance. The fact that *the* and *a(n)* cannot cooccur is not because they are both central determiners, but because they are semantically incompatible: *the* gives definite reference to the phrase, whereas *a(n)* contributes indefinite reference. The same is true for the incompatibility of most determiners. The reason why most determiners are in paradigmatic relation with each other is that free combinations would be either semantically deviant (e.g. *all* and *both, some* and *no*) or redundant (e.g. *the* and *that, the* and *my*). As argued in Haspelmath (1999), the complementarity between the definite article and the possessive determiners, for instance, is not purely constrained by structural factors, that is, it is not attributed to the fact that they occupy a pronominal position which can only be filled once (the ‘determiner-position’ analysis). He claims that the article-possessor complementarity is instead economically motivated, i.e. due to both the article and the possessive being definite, and the presence of both therefore redundant. 

Finally, the principles in (i) and (ii) also generate ungrammatical constructions.

(24) *both₁ many₃ books

According to tenets (i) and (ii) above, (24) should be grammatical: *both* and *many* belong to different subclasses, predeterminer and postdeterminer, respectively, and the order is respected. (24) is nevertheless ungrammatical. This is because (24) is the result of a semantically illicit combination of determiners. There is a semantic clash here, because whereas *both* limits the set of books to two books only, *many* refers to a number greater than two (see chapter 2).

The internal classification of determiners, as well as the stipulations said to apply to the class are seriously faulty. Furthermore, in allowing ungrammatical sequences such as (24), this approach becomes inadequate even as a description.

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49 Haspelmath (1999: 233-234) says that although the motivating factor of economy is universal, not all languages exhibit article-possessor complementarity, e.g. Italian and Portuguese. He says that this is because another factor, namely explicitness, also plays an important role, and whereas some languages are economical inexplicit languages, and favour economy over explicitness (e.g. English), languages such as Italian are explicit uneconomical languages, and rank explicitness over economy.
4.4 Further reassignment

As shown in the previous section, the re-classification of the elements dealt with in chapter 3 (e.g. next, last, same, other) does not eliminate the inconsistencies which pervade the determiner class. In this section I consider some of the items often regarded as representative members of the determiner class in English, and show that these too should be classed elsewhere.

4.4.1 The adjective status of some determiners

In what follows I consider the words many, much, few, little, several and enough. I will show that there are more grounds for classing them as adjectives than there are for a determiner treatment.

4.4.1.1 Many, much, few, little and several

Consider the following sets of data.

(25a) many mistakes
(25b) The mistakes were many.
(25c) so many mistakes
(25d) how many mistakes

(26a) much money
(26b) The money is not much.
(26c) too much money
(26d) how much money

(27a) few questions
(27b) The questions were few.
(27c) very few questions
(27d) how few questions
Many, much, few and little share with members of the adjective class the fact that they can occur both attributively and predicatively, as shown by the (a) and (b) examples. Also, like adjectives, they allow premodification by degree words and by interrogative how, as shown by the (c) and (d) examples. Moreover, like adjectives, many, much, few and little are gradable and have both comparative and superlative forms:

(29) many questions/more questions/(the) most questions
(30) much success/more success/(the) most success
(31) few questions/fewer questions/(the) fewest questions
(32) little success/less success/(the) least success

In addition, when used together with the articles, the demonstratives, the possessives, or with quantifiers such as all, then many, much, few and little follow these elements in an adjective-like manner, as shown in (33)-(36) below.

(33) his many children
(34) those few days
(35) the little time
(36) all that much money

Much is only possible in these constructions when modified.

(i) all*(that) much money

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The sequence many a, as in many a man, is an exception. This, however, does not make many less of an adjective, since adjectives too can precede the indefinite article, as shown in (37) and (38).

(37) too strong a word
(38) so beautiful a house

What differentiates many from adjectives such as strong and beautiful, however, is that these adjectives must be intensified in order to occur in constructions like (37) and (38), whereas many does not.

Another testimony to the adjective status of many, much, few and little is (39)-(42) below.

(39) as many books as you like
(40) as much time as you want
(41) as few people as possible
(42) as little noise as possible

(39)-(42) show that in the manner of adjectives, many, much, few and little take a postmodifying as-clause. Also, like adjectives, it is possible for them to take a than-clause when in their comparative forms.

(43) more books than they wished for
(44) more time than it is necessary
(45) no fewer than ten people
(46) less noise than expected

A further argument in support of the adjective treatment of many, much, few and little is that they can be coordinated with other adjectives.

(47) The questions were many and complex.
(48) His money is regular but not much.
Car-parks are few and outrageously expensive.\(^{51}\)

My time is little and precious.

*Many, much, few and little* possess more adjectival properties than a word like *utter*, which is standardly classed as an adjective. *Utter* is limited to attributive position, it cannot be modified, nor does it have comparative or superlative forms, as shown in (51).

(51a) an utter disgrace
(51b) *The disgrace was utter.
(51c) *very/so utter
(51d) *utter/utterer/the utterest

Finally, I also want to argue for an adjective treatment of *several*. *Several* exhibits fewer adjectival properties than *many, much, few and little* in that it is not gradable. However, it possesses two of the most characteristic adjectival features, namely, the ability to be used attributively as well as predicatively, as shown in (52).

(52a) his several problems
(52b) His problems are several.

Hudson (1990:307) argues that the analysis of *several* as an adjective is to be rejected because ‘the only property of *several* that makes it look at all like an adjective is its ability to occur before a common-noun’. He claims that it cannot be used predicatively and it cannot be used after a possessive. (52) above, however, shows that this is not the case. Moreover, *several* can be coordinated with other adjectives.

(53) His requests were several and unreasonable.

Hockey and Mateyak (2000: 224) acknowledge constructions like (52b), but nevertheless also hastily discard an adjective analysis of *several* on the grounds that these constructions are, to use their term, peculiar.

\(^{51}\) From Berry (1997: 133).
It could be argued that *many, much, few, little* and *several*, in contrast with typical adjectives, lack descriptive content. Note, however, that this is also true of *utter*, and of adjectives such as *following, previous, preceding* and *subsequent*, as we saw in chapter 3. Another factor which may be said to differentiate *many, much, few, little* and *several* from adjectives, is that the former can occur in partitive constructions whereas the latter cannot.

(54)  *many/several/few of them*

(55)  *much/little of it*

(56)  *big/good/strong of them*

Note, however, that adjectives are not entirely excluded from partitive constructions. They do occur in such constructions, but only in their superlative forms.

(57)  *the biggest/the best/the strongest of them*

What is peculiar about *many, much, few, little* and *several* compared with most adjectives is their semantics: instead of qualifying the noun they enter into construction with, they quantify it. *Many, much, few, little* and *several* may not be the most representative members of the adjective class, in that they lack descriptive meaning, but they certainly share more properties with words such as *big* and *strong*, than they do, for instance, with the articles and the demonstratives. In fact, as shown above, the differences between *many, much, few, little* and *several* on the one hand, and adjectives such as *big* and *strong* on the other, are minor in comparison with the likenesses. A similar analysis of these words is found in Giusti (1997). For Giusti these words are also adjectives, only distinguished from other adjectives by the fact that they are quantitative adjectives, rather than descriptive ones.

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52 Note that although the sequence [adjective + of + NP], such as in (i) and (ii) below, are possible, these are not instances of partitive construction.

(i)  It was good of your parents.
4.4.1.2 *Enough*

Now consider the word *enough*. I also want to argue for an adjective analysis of *enough*. *Enough* is not only like *many, much, few, little and several* in that it expresses quantity, but also in bearing a considerable resemblance to adjectives.

First, like adjectives, *enough* can occur both attributively and predicatively.

(58a) There wasn’t *enough* food.
(58b) The food wasn’t *enough*.

Second, although, it does not have comparative or superlative forms, *enough* is gradable and allows modification by the degree modifier *quite*.

(59) *quite enough*

Third, in the manner of adjectives, *enough* has a corresponding adverb. Like the adjectives *hard* and *fast*, the corresponding adverb does not take *-ly*, but has the same form as the adjective.

(60a) They’ve had *enough* practice.
(60b) They’ve practised *enough*.53

An apparent hindrance to the adjective treatment of *enough* is that, like the articles, the demonstratives and the possessives, but unlike adjectives, it imposes number restrictions on the noun it enters into constructions with, i.e. it occurs with plural count and noncount nouns, but not with singular count nouns. Note, however, that the same restrictions are imposed on the adjective *sufficient*, as Hudson (2000:17) observes.54

(61) *enough* books/money/*book

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53 The adverb *enough* is also found in constructions such as the one below.

(i) He’s happy *enough*.

54 Huddleston and Pullum (2002: 396) claim that *sufficient* belongs to both the determiner and the adjective classes.
A further apparent hindrance to an adjective analysis of *enough* is the fact that, like *many, much, few, little* and *several*, it enters into partitive constructions.

(63) I've had *enough* of this.

(64) That's *enough* of my problems.

Recall, however, that adjectives too can occur in partitive constructions, as shown in (57) above.

Finally, note that, unlike the articles, the demonstratives and the possessives, but like adjectives, it is also possible for *enough* to occur after a noun. This use is less common, but nevertheless possible.

(65) *something* expensive

(66) *the person* responsible

(67) *time* enough

As Hudson says (2000:31), *enough* is a poor example of a determiner. Although not a typical token of the adjective class, like *many, much, few, little* and *several*, *enough* shares more properties with the members of this class than it does with the articles, the demonstratives or the possessives, and is therefore better treated as an adjective.

4.4.1.3  *Such*  

*Such* is conventionally classed as a determiner when it occurs before a noun, as in constructions like (68) and (69) (Huddleston, 1984; Quirk *et al.*, 1985; Biber *et al.*, 1999).

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55 It is possible for *sufficient* to precede a singular count noun as in (i).

(i) a *sufficient* reason

However, in such cases *sufficient* assumes a somewhat different meaning, namely 'satisfactory'. In these constructions, *sufficient* does not quantify the noun but qualifies it.

36 This section has been published as Spinillo (2003a).
Grammarians seem only to consider certain properties when classifying *such* as a
determiner, listing other properties as exceptions, and, consequently, give only a partial
picture. In what follows I will argue that the determiner treatment of *such* in not
warranted and that it is best regarded as an adjective.

The treatment of *such* as a determiner is problematic in several ways for
several current grammatical treatments. First, *such* is taken to be a predeterminer due to
its occurring before the indefinite article, as in (68). However, *such* can also cooccur with
*all*, and in so doing becomes an exception to the tenet that predeterminers are mutually
exclusive (Huddleston, 1984; Quirk et al., 1985).

(70)=(10) all\textsubscript{1} *such\textsubscript{1} things

Second, *such* can occur after several so-called central determiners, e.g. *no, any*
and *some*:

(71)=(11) no\textsubscript{2} *such plans
(72)=(12) any\textsubscript{2} *such pretence
(73)=(13) some\textsubscript{2} *such place

and even after postdeterminers such as *many, few*, and the numerals.

(74)=(14) many\textsubscript{3} *such parents
(75) few\textsubscript{3} *such questions
(76) two\textsubscript{3} *such mistakes
(77) the first\textsubscript{3} *such unit

These facts on their own make *such* a rather peculiar element, as it would be at the same
time a pre- and a postdeterminer. Note further that as a predeterminer *such* only occurs
before the indefinite article, as in (68), whereas as a postdeterminer it allows a much
wider range of combinations with other determiners, as in (70)-(77).
Despite (70)-(77) above, *such* is nevertheless mostly treated as a predeterminer (Huddleston, 1984; Quirk *et al.*, 1972, 1985), and (70)-(77) are described as exceptions to the tenet that predeterminers are mutually exclusive and are always the first in a sequence of determiners. Such an account is far from satisfactory.

More recent treatments, however, attempt to account for (70)-(77) in different ways. Altenberg (1994: 231-232) suggests that since *such* follows rather than precedes quantifying determiners, it could be analysed as a restrictive adjective. However, Altenberg himself points out that the fact that *such* can precede *other*, which he analyses as a determiner, weakens its analysis as an adjective.  

(78) no *such* other organization  
(Altenberg, 1994: 232)

Like Altenberg (1994), Biber *et al.* (1999) recognise that *such* is an unusual determiner. They try to account for its peculiarities by placing it in a category they call ‘semi-determiner’. They suggest semi-determiners are like adjectives, but do not make it clear what properties semi-determiners share with adjectives, unlike Altenberg (1994) who suggests (and rejects) the adjective analysis of *such* on syntactic grounds. Instead, they highlight the semantic differences between the two, i.e. that semi-determiners differ from prototypical adjectives in that they lack descriptive meaning and specify rather than qualify the noun (Biber *et al.*, 1999: 280-282). Although a step ahead of traditional treatments, in that it recognises that *such* has properties which differentiate it from other determiners, Biber *et al.*’s treatment of *such* is not very different from the conventional account, given that their semi-determiners apparently form a subclass of determiners.

Another problem with the classification of *such* as a determiner has to do with its semantics. Consider (79) below.

(79) *Such* an idea would please the committee.

It has been argued that *such* in (79) is similar to the demonstratives *this/these* and *that/those* in that it points to something in the linguistic or discourse context, and

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57 Note, however, that according to the analysis proposed here *other* is an adjective (see chapter 3, section 3.2.2), and thus the occurrence of *such* before *other* does not pose a problem to an adjective treatment.
linguists often refer to it as ‘identifying’ such. However, unlike the demonstratives, which express full identity, such expresses partial identity. In other words, whereas the demonstratives point out an object, such does not point out the object itself, but something similar to it, i.e. of the same kind or class (Altenberg, 1994: 229-230; Berry, 1997: 147). Thus, whereas in (80) we are talking about the same books as someone else, in (81) we mean books of the same kind.

(80) We don’t use those books anymore.
(81) We don’t use such books anymore.

This ‘comparative reference’, to use Halliday and Hasan’s term (1976: 76-87), is supported by the fact that such in these phrases is equivalent to the expressions like this/that or of this/that kind. This is illustrated in (82) below which is a paraphrase of (79).^58

(82) An idea like this/of this kind would please the committee.

We will see below that this partial identity or comparative reference of such is due to its property-identifying, as opposed to referent-identifying, function. Such establishes partial identity because by identifying properties, it does not identify a specific entity, but its kind, and hence its comparative reference. By identifying properties, such refers to a class whose members are comparable to the entity in question by means of sharing the same properties.

Note also that, although such in (79), by helping establish the reference of the noun phrase, is comparable to the demonstratives, this does not make it a determiner.\(^59\)

The ability to specify noun phrases is not exclusively a property of determiners. Adjectives such as same, similar, equal and identical, for instance, as Altenberg (1994:

\(^{58}\) Bolinger (1972: 61) says that there is a difference in register between the use of such and like this/that, such being more formal.

\(^{59}\) In fact, it has been argued (Hudson, 2000; Spinillo, 2000a) that so-called demonstrative determiners are pronouns.
observes, also help to specify the reference of a noun phrase, and like *such*, they do so by establishing comparative reference, which is absent in the demonstratives.\(^60\) \(^61\)

Now consider (83) below.

(83) It makes *such* a difference having you.

Unlike in (79), *such* in (83) does not express class identity. This can be shown by the fact that (83) cannot be paraphrased as (84),

(84) *It makes a difference like this/of this kind having you.*

but rather as in (85).\(^62\)

(85) It makes quite a difference having you.

*Such* in (83) is an intensifier. As Altenberg (1994: 233) points out, in these constructions *such* does not allude to a class, but expresses the degree or extent of a quality. This becomes more apparent when an adjective is present.

\[^60\] Mackenzie argues that 'comparison is not the essential purpose of *such*, but rather a possible effect of its use' (Mackenzie, 1997: 93). He offers (i) as an example of a construction where there is no comparison involved.

(i) *<a long description of the house> I don't wonder that my uncle got a little jumpy if he lived all alone in such a house as this* (Conan Doyle 21, in Mackenzie, 1997: 93).

As we will see, comparison, although an important property of *such*, is not the only aspect which distinguishes it from the demonstratives *this* and *that*, and from determiners in general. Thus the lack of comparison in (i) does not undermine the contrast made here.

\[^61\] It could be argued that identifying *such*, alongside *same*, *similar*, *equal* and *identical*, belongs to neither the determiner nor the adjective classes, but is rather intermediate between the two. However, with the exception of their determiner-like specifying property, *same*, *similar*, *equal* and *identical* are otherwise adjectives, e.g. they can be used attributively and predicatively, and are gradable. It will be seen below that *such* too exhibits several adjective properties.

\[^62\] The two constructions in (83) and (85) are not true paraphrases of each other, if indeed there is such a thing in language. The meaning of *such* differs from that of *quite* in that *such* is more emphatic. The two constructions, nevertheless, can be said to have similar readings.
(86) It makes *such* a big difference having you.

When occurring in constructions like (83) above, *such* has been compared to the degree adverbs *quite* and *rather* (cf. Quirk *et al.*, 1985; Allerton, 1987; Altenberg, 1994; Mackenzie, 1997; de Mönink, 2000) which are all said to intensify a following gradable adjective or noun, and their meaning is close to that of *very*.

(87) It makes a very big difference having you.

The parallelism between *such* and degree adverbs is further supported by the former's correspondence with the degree adverb *so* (cf. Bresnan, 1973).*

(88) *such* a splendid car
(89) *so* splendid a car

Thus, although it occurs in what is taken to be a typical determiner position, the role of *such* in (83) is other than that usually ascribed to determiners: it does not contribute to the reference of the noun phrase, nor does it express quantity. Although most treatments recognise this peculiarity of *such*, the element is nevertheless analysed as a predeterminer in both (79) and (83), alongside words like *all* and *both*, mainly on the grounds that it can occur before the indefinite article (Bolinger, 1972; Huddleston, 1984; Quirk *et al.*, 1985; Allerton, 1987; Sinclair, 1990). Quirk *et al.* (1985: 451), for instance, recognise the intensifying function of *such*, but whereas they class *quite* and *rather* as adverbs, they class *such* as a predeterminer. Sinclair (1990: 60), on the other hand, makes no distinction and classifies *such, quite* and *rather* as predeterminers.

4.4.1.3.1 The binary analysis

Altenberg (1994: 226) observes that 'the analysis of *such* is obviously complicated by conflicting semantic and syntactic criteria and its word-class status is far from clear cut'. And Wood (2002: 114) notes that 'the dual nature [of *such*] as both a demonstrative and quantifier and its ability to apparently belong to more than one category make it a

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* The parallelism between *such* and *so* led Bresnan (1973: 299-305) to conclude that *such* is formed from *so*. I do not subscribe to this analysis.
challenging item to analyze (…)'. Having shown that the conventional determiner treatment of *such* is not appropriate, I turn now to what I would like to call the 'binary analysis' of *such*.

Of the peculiarities of *such*, the difference in meaning when occurring in constructions such as (79) and (83) has been the most discussed. As we have seen, it has been suggested that two uses of the determiner *such* should be distinguished: an identifying or demonstrative use, as in (79), and an intensifying use, as in (83) (Bolinger, 1972; Allerton, 1987; Mackenzie, 1997; Biber *et al.*, 1999).44 This difference has long been noticed, but some more recent treatments take it further and regard it as compelling enough evidence to justify a categorical split such that identifying *such* and intensifying *such* are two separate words. This is the analysis proposed in Altenberg (1994) and de Mônnink (1996) who assign identifying *such* and intensifying *such* to different word classes.

Let me review the differences between identifying and intensifying *such* on which both Altenberg (1994) and de Mônnink (1996) build their cases. Identifying *such* establishes comparative reference. It helps to restrict the reference of the noun phrase by identifying it and comparing it to a class of referent in the linguistic or situational context. It occurs with any kind of noun, i.e. gradable or non-gradable, and it is equivalent to the expressions *like this/that or of this/that kind*. Intensifying *such*, on the other hand, is an intensifier, and as such it is dependent on the occurrence of a gradable element in the noun phrase, i.e. an adjective or a gradable noun. It corresponds to degree adverbs such as *quite, rather and so*.

Identifying and intensifying *such* also differ syntactically. Identifying *such* can occur with several other determiners besides the indefinite article, and it follows rather than precedes them. Intensifying *such*, on the other hand, only combines with the indefinite article and invariably precedes it.

In the light of the above observations, Altenberg (1994) and de Mônnink (1996) argue that identifying and intensifying *such* belong to two distinct word classes. Altenberg’s treatment differs from de Mônnink’s in that, whereas both analyse intensifying *such* as a degree adverb, Altenberg analyses identifying *such* as a

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44 Some refer to these two uses as the 'phoric' and the 'exclamatory' uses of *such* (Halliday and Hasan, 1976; Allerton, 1987). Biber *et al.* (1999) use the term 'classifying' rather than 'identifying', whereas Carlson (1980) prefers 'extent' to 'intensifying'.

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determiner, whereas for de Mõnink it is an adjective. In what follows I examine the motivation for these analyses in more detail.

4.4.1.3.1.1 Intensifying such
Let me first look at the reasons for treating intensifying such as an adverb. Like degree adverbs, intensifying such is a degree modifier. Moreover, it is closely related to the adverb so, in that constructions with intensifying such can often be paraphrased by constructions containing the degree adverb so, and vice-versa.

(90a) such a terrible collection of letters
(90b) so terrible a collection of letters

(91a) such an ancient event
(91b) so ancient an event

Note however, that although the adverb treatment may explain its similarities to degree adverbs such as quite, rather and so, there is a fundamental difference between intensifying such on the one hand and adverbs on the other. Contrary to quite, rather and so, and adverbs in general, intensifying such cannot modify verbs or other adverbs.

(92) I quite/rather like it.
(93) *I such like it.

(94) She paints quite/rather/so well.
(95) *She paints such well.

Intensifying such does not modify adjectives either, as first suggested (cf. Quirk et al., 1985; Allerton, 1987; Altenberg, 1994; Mackenzie, 1997; de Mõnink, 2000). This can be shown by the ungrammaticality of (98b).

(96a) quite/rather a splendid car
(96b) The car is quite/rather splendid.

(97a) so splendid a car
(97b) The car is so splendid.

(98a) such a splendid car
(98b) *The car is such splendid.

Unlike these adverbs, intensifying such modifies noun phrases, as shown by the brackets in (99).

(99) such NP[a splendid car]

Also, although the fact that such can occur outside the noun phrase, as in (99) above, may be regarded as a reason for treating it as an adverb (Mackenzie, 1997: 88), this is not compelling evidence, since intensified adjectives, or rather, the phrases they form, can also be external, as shown in (100).

(100) so low NP[a scale]

4.4.1.3.1.2 Identifying such
Let me now consider identifying such. The motivation for its determiner analysis has already been discussed, and I look now into the reasons for regarding it as an adjective.

De Mønnink (1996: 149; 2000: 77) argues that identifying such resembles other adjectives in that it can be postponed when an as- or that- clause follows.

(101a) as beautiful a house as yours
(101b) a house as beautiful as yours

(102a) so beautiful a house that everybody was jealous
(102b) a house so beautiful that everybody was jealous

(103a) such a house as yours
(103b) a house such as yours

There is a further kind of occurrence of the word such with the word as, which should be distinguished from the one treated here.
such a house that everybody was jealous

She argues that the (a) constructions are instances of 'discontinuous modification', i.e. constructions where the adjective and its postmodifying clause are not adjacent to each other. The postponement of the adjective in the (b) constructions shows that the adjective together with the clause is a postmodifying adjective phrase made up of a head and a postmodifier clause (see also Mackenzie, 1997: 87).

De Mönink also claims that an analysis of identifying such as an adjective can better explain (69) above, repeated here as (105).

such thoughts

She argues that an adjective analysis of such here would avoid the ambiguity created by the determiner treatment, where it could be analysed as both a predeterminer occurring before the zero article, or as a postdeterminer occurring after it, as shown in (106) and (107), respectively.66

such\textsubscript{predet} \(\emptyset\) thoughts

\(\emptyset\) such\textsubscript{postdet} thoughts

Further evidence for the adjective analysis of identifying such is offered by Siegel (1994: 482), who argues that 'syntactically, (identifying) such behaves much like a typical adjective like tall or red, appearing prenominally or, more rarely, predicatively':

Such people never admit to being guilty.

The guilty person never admitted to being such.

(i) I wish I would feel relaxed about certain aspects of my life, such\textsubscript{as} work and exams. In (i) the meaning is not 'similar to' but 'for example', and the string such\textsubscript{as} here is usually regarded as a complex unit (see Carlson, 1980; Mackenzie, 1997). The analysis of this construction is beyond the scope of the present study. For discussion see Quirk \textit{et al.} (1985: 1307).

66 Recall, however, that the analysis proposed in this study does not assume a zero article, and (105) therefore does not constitute evidence for, or against, the adjective analysis of identifying such.
(109a) *Such* vacations rarely turn out to be perfect.

(109b) (...) But perfect vacations rarely turn out to be *such.*

(Siegel, 1994: 482)

She argues further that the adjective treatment can explain the occurrence of *such* after quantifiers, as in (70)-(77) above. She also adds that the fact that *such* can appear either before or after adjectives, as in (110) and (111), is evidence that it is itself an adjective (Siegel, 1994: 482).

(110) two *such* new problems

(111) two new *such* friends

(Siegel, 1994: 482)

Data such as (111) above also constitute evidence of adjective status to Huddleston and Pullum (2002: 529, 540), who argue that the syntactic distribution of identifying *such* is that of adjective phrases. Like adjective phrases, identifying *such*, or rather, its phrase, can occur as an external as well as an internal adjunct modifier in noun phrase structure, the former being illustrated by (79) above, and the latter by (111) above and by (112)-(114) below (from Carlson, 1980: 247; Huddleston and Pullum, 2002: 435 and Siegel, 1994: 485, respectively), where *such* follows rather than precedes the adjective.

(112) future *such* events

(113) a further *such* error

(114) more destructive *such* children

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67 Or indeed between two adjectives, as shown in (i) below from Denison (2003: 52).

(i) The latest *such* gratifying eye-popper comes from Manhattan.

68 Sinclair (1990: 357, 392-393) talks about *such* ‘behaving like’ or ‘being used as’ an adjective when it occurs in constructions like (i) and (ii).

(i) any *such* pretence

(ii) Her surprise was *such* that she couldn’t speak.

But I take it that by saying that it ‘behaves like’ or ‘is used as’, he is not actually classing *such* as an adjective.
While analysing identifying *such* as an adjective, Siegel (1994) claims that semantically it is like a pronoun. She argues that, like pronouns, identifying *such* is a pro-form, in that it takes its meaning from an element within or outside its containing sentence. She also argues that identifying *such* obeys binding conditions in the same way that pronouns do. In other words, it follows Principle B of the Binding Theory and it must be free in its governing category (Siegel, 1994: 481-482).

(115) Conscientious students know that everyone resents *them*.
(116) Conscientious students know that everyone resents *such* students.

(Siegel, 1994: 481-482)

Thus, Siegel argues that *such* in (116), like *them* in (115), can be interpreted as referring to an element within the sentence, or alternatively, it can be identified with an earlier element in the discourse. However, unlike the pronoun *them*, which, if bound structurally, refers to the referent of the noun phrase ‘conscientious students’, *such* in (116), if bound structurally, does not refer to the conscientious students in question, but rather to students like them. This can be shown structurally by the fact that *such* does not substitute for the whole noun phrase ‘conscientious students’, but solely for the adjective phrase ‘conscientious’.

(117) NP[Conscientious students], know that everyone resents NP[them],
(118) NP[AP[Conscientious], students] know that everyone resents NP[ [such], students]

Identifying *such* is thus a pro-form in that it substitutes for other items. Also, in the manner of pro-forms, it is deictic, taking its meaning from another element in the immediate context. Unlike pronouns, however, *such* does not refer to entities, but to qualities.

As a way of accounting for the mixed properties of identifying *such*, i.e. the combination of adjective-like syntax and pro-form-like semantics, Siegel analyses it as a ‘pro-adjective’. By using this term Siegel spells out the complex nature of identifying *such*. The term is, however, somewhat misleading. To call identifying *such* a ‘pro-adjective’ suggests that it can only be associated with adjective phrases. However, as Siegel herself notices, identifying *such* can also be associated with noun phrases.
They say he’s a liar, but I’ve never known him to be [such].

What makes it possible for such to be bound by the noun phrase ‘a liar’ in (119) is that the phrase here is not entity-referring, but property-referring. In other words, it is not being used to refer to a particular liar in the universe of discourse, but rather to the properties attributed to liars in general. Identifying such, as Evelien Keizer observes (personal communication), is not a marker of coreference of entities, but rather of codenotation. What identifying such shares with the NP a liar in (119) is a denotation rather than a referent. Thus, as regards the syntactic nature of the element it can be structurally bound to, identifying such can be said to be a ‘pro-noun’, as much as a ‘pro-adjective’.

All the above facts constitute strong evidence for treating identifying such as an adjective. In the following section I will provide further arguments in support of the view that an adjective analysis of such, in both its identifying and intensifying uses, is the one which best explains the facts.

4.4.1.3.2 The uniform analysis

It has been shown above that neither a determiner treatment nor an adverb analysis of such is justified. On the other hand, it has been shown that there are, however, strong grounds for treating such as an adjective. In this section I will show that the analysis according to which such is an adjective, whether it is identifying or intensifying, is the one that best accounts for the facts. I will refer to this treatment as the ‘unifying’ or ‘uniform’ analysis of such. This uniform treatment is found in Huddleston and Pullum (2002), and in this section I reinforce their analysis by providing further evidence for a uniform adjective treatment of such. The advantage of this uniform analysis is threefold: it highlights the differences between such and elements such as the articles, the

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69 Huddleston and Pullum (2002: 1462-1463) make use of what they call ‘pro-X formulation’ when talking about pro-forms. They say, however, that this only applies when the pro-form and what it replaces belong to the same category X, as in (i) and (ii), where both the car and it, and both in Paris and there, are noun phrases or prepositional phrases, respectively.

(i) The car is being serviced at the moment but it should be ready soon.
(ii) I met her last time I was in Paris but she doesn’t live there now.

Carlson (1980) seems to avoid this terminological problem by calling such a ‘pro-kind’. Note, however, that this term does not offer any indication as to the form-class of such.
possessives and the demonstratives, while at the same time it brings out the similarities between the two uses of such, namely, the identifying and the intensifying uses, as well as the similarities between such and other adjectives.

Contrary to Altenberg (1994) and de Mønink (1996), Huddleston and Pullum (2002) do not make a categorial distinction between identifying and intensifying such and treat both as adjectives. They claim that the distribution of such, whether identifying or intensifying, is evidence of its adjective status. They say that 'such is an adjective functioning as modifier in NP structure' and that 'it may be concerned with either degree ((120)) or kind ((121))' (Huddleston and Pullum, 2002: 1546).

(120) His first film was a major film, but this one has not been such a success.
(121) Cricket, football and such games are played with the aim of instilling team spirit in the children.

Let me briefly go over the evidence for treating identifying such as an adjective. Identifying such shares several properties with members of the adjective class. Firstly, in the manner of adjectives, identifying such can occur both attributively and predicatively (see (108) and (109)). Secondly, identifying such is also like adjectives in that it can be postponed when an as- or that- clause follows (see (103) and (104)). Thirdly, like adjectives, identifying such can be an internal (see (112)-(114)) or external modifier in noun phrase structure (see (99)).

A potential counterargument against an adjective analysis of identifying such is that it fails some of the main syntactic criteria for adjectivehood. Unlike most adjectives, identifying such lacks descriptive content. In addition, it does not share with adjectives the ability to appear with degree adverbs, and does not have comparative or superlative forms.

(122) *very/ extremely such books
(123) *sucher/the suchest books

Note, however, that none of these facts rule out an adjective treatment of such, because there are other words, like utter, for instance, which also fail these criteria but are nevertheless regarded as adjectives (see section 4.4.1.1). Moreover, I will show below that there is a semantic explanation for the facts in (122) and (123). Note further that,
although it could be argued that the predicative use of identifying *such* is somewhat marked, it is nevertheless possible, whereas this is not at all possible for *utter*.

Finally, whereas one could argue that the occurrence of *such* in constructions like those in (112)-(114) is somewhat limited, in that *such* occurs in this pattern only with a handful of adjectives, *such* occurs freely after adjectives in their superlative forms, as shown in (124) below.  

(124) the biggest/the smallest/the longest/the most risky *such* operation

Consider now intensifying *such* and the justification for an adjective treatment. It was shown above that, like adjectives, intensifying *such* is a nominal modifier. However, I would like to argue that the justification for regarding intensifying *such* as an adjective stems from its similarities to identifying *such*. The identifying-intensifying distinction between the two uses of *such* is not as pronounced as some treatments make it out to be. As Bolinger (1972: 60) points out, intensifying *such* also has identifying properties, and the difference between the two uses of the word is that intensifying *such* identifies a degree, whereas identifying *such* identifies a class. Identifying *such*, in turn, also has intensifying properties, as de Mónnik (1996: 152) and Carlson (1980: 224) observe. This explains why *such* does not share with other adjectives the ability to take modification by intensifying adverbs: because it already has an inherently intensifying quality, further adverbial intensification leads to infelicitous results. This also explains the parallel distribution of *such*, whether it is identifying or intensifying, and other adjectives in constructions like the ones below.

(125) so massive an instrument
(126) too great a tendency

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70 I thank Evelien Keizer (personal communication) for pointing this out to me. She argues that this may be a partitive construction. Note, however, that when partitive *of* is present, the noun needs to be in its plural form, which shows that (i) and (iii) are not alternative versions of each other.

(i) the biggest *such* operation

(ii) *the biggest of *such* operation

(iii) the biggest of *such* operations

The question whether (124) is or is not a partitive construction does not affect the claim that *such* is an adjective and I will, therefore, not pursue it further here.
such a plan

such a shame

Only adjective phrases headed by intensified adjectives can occur outside the noun phrase, and *such*, being inherently intensifying, enables its phrase to occur in this position without requiring further intensification. Huddleston and Pullum (2002: 550-551), although they recognize this similarity in distribution between *such* and adjectives, and in fact offer it as evidence of the adjective status of *such*, do not attribute it to its inherently intensifying quality.

Thus the lack of modification by adverbial modifiers of *such* does not raise a problem for the adjective treatment. This is due to its inherently built-in intensifying quality. Moreover, *such* would not be the only adjective not to take modification. According to Quirk *et al.* (1985:404), there is a whole category of adjectives, namely, ‘intensifying adjectives’, which do not occur with degree adverbs or have comparative forms (e.g. absolute, sheer, total, etc.).

The above facts are in harmony with the view that *such* is at the same time identifying and intensifying, and are, therefore, evidence that identifying and intensifying *such* are one-and-the-same word. Hence these facts reinforce the uniform analysis. The distinction between identifying and intensifying *such* is not determined by *such* per se, but by whether the noun phrase is seen as gradable or not. In fact, Bolinger (1972: 60) says that ‘the difference [between the identifying and the intensifying interpretations] can be assigned to the semantic component of the noun that happens to be determined by *such*, ‘individuality’ with nondegree nouns, ‘degree’ of some quality with degree nouns’ (my italics). This explains why in (129), where it is possible to be a snob to a lesser or greater extent, the intensifying reading is favoured over the identifying reading, whereas in (130), an identifying reading is more natural, given that a thing either is, or is not, a telescope.

such a snob

such a telescope

Note however, that in (1), *such* is intensifying although the noun *house* is not gradable. Thus, to say that the difference lies in how the noun phrase as a whole is seen, rather than in the semantic component of the noun is preferable.
It also explains why in some cases ambiguity arises, as in (131) below from Bolinger (1972), which can be interpreted as ‘extremes like these’ or as ‘extremes so great’.

(131) Who can be patient in such extremes? (Bolinger, 1972: 60)

One further matter worthy of note is that, as with other adjectives, but unlike determiners, the constraints between such and the noun are semantic rather than syntactic. That is, whereas there are no syntactic restrictions on which type of noun such can occur with (i.e. singular count, plural count or noncount noun), whether such is going to be interpreted as identifying or intensifying depends on whether the noun phrase is seen as gradable or not.

Finally, consider (132) below.

(132) Such was the demand.

Whereas when in construction with a noun such is usually regarded as a determiner, when it occurs without a noun, as in (132) above, such is usually regarded as a pronoun (cf. Quirk et al., 1985; Altenberg, 1994; Biber et al., 1999). In what follows I will show that this categorical split is not justified, and that in constructions like (132) such is also best analysed as an adjective (cf. Huddleston and Pullum, 2002).

It is not obvious what motivated Huddleston and Pullum’s (2002) adjective treatment of such in constructions like (132) above. I want to argue here that part of the explanation for analysing such in these constructions as an adjective, rather than as a pronoun, follows from the identifying properties of such. Although such in (132) can be said to be pronoun-like in that it is deictic and takes its meaning from another element in the immediate context, unlike pronouns, such in (132) is property-referring rather than entity-referring, as Mackenzie (1997: 92) points out. In (132) such alludes to the properties of the entity in question, namely the demand. Thus, unlike pronouns and like adjectives, such in (132) is predicative in that it has to do with properties being predicated of entities, rather than with the entities themselves. The property-referring

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(i) Such a house they showed us!

72 As with the determiner such, Altenberg (1994) distinguishes between an identifying use of the pronoun and an intensifying use. To my knowledge, his is the only account to draw the distinction.
nature of such is even more apparent in constructions like (133) below, where the property such refers to can be found in the sentence domain: such = very interested in music. As Postal (1969: 232) remarks, pronouns are markers of coreference whereas such is a marker of identity of sense.

(133) They say he’s very interested in music, but I’ve never known him to be such.

The fact that such is a pro-form in (132) and (133) does not make it a pronoun. Recall that in Siegel (1994), for instance, the pro-form properties of such are recognised, but it is nevertheless analysed as an adjective.

Further evidence for the analysis of such in (132) as an adjective is that, like adjectives in predicative position, it can take a that-clause as a dependent.

(134) Hisaloneness was such that it was a numbing coldness.
(135) Hisaloneness was *(so) great that it was a numbing coldness.

Remember that only intensified adjectives can occur in this construction. However, such does not require a degree modifier because of its inherent intensifying quality.

An apparent hindrance to the analysis of such in constructions like (132) as an adjective is its position in the sentence. Adjectives do not normally occur in pre-copular position. Note, however, that, although unusual, adjectives can occur at the beginning of a sentence.

(136) Green were his eyes.

Huddleston and Pullum (2002: 1546) claim that (136) is an instance of ‘inverted predicative order’, and so is (132) above. In these constructions, the subject and its predicative complement have swapped places. They argue, however, that when the predicative complement is such the inverted order is the only possible option, as shown by the ungrammaticality of (138).

(137) His eyes were green.
(138) *The demand was such.
Such, then, appears to differ from other adjectives in that its unmarked position seems to be the pre-copular position. An explanation for this can be found in Mackenzie (1997: 91), who argues that the position of such follows from its focality. He claims that such is a 'communicatively salient word' because it establishes an implicit contrast, and one of the ways of indicating focus is to place the information that is communicatively salient in initial position. This not only explains the position of such in sentences like (132), but also its typical initial position in the noun phrase.

Thus, although not a typical member of the adjective class, as stated in Siegel (1994: 482), in that it lacks some of the criteria for adjectiveness, as well as presenting properties not usually attributed to this word class, such exhibits several properties which secure its membership in the adjective class. Such shares more properties with members of the adjective class than it does with members of the determiner, the adverb or the pronoun classes, and it is therefore best analysed as an adjective. In spite of the fact that it does not exhibit all the properties usually associated with adjectives, such should not be excluded from it, but should rather be seen as one of its many peripheral members. The adjective analysis of such also has the additional advantage of allowing a uniform treatment of such, in that it obviates the need for a categorical split and treats such as one-and-the-same word, or more precisely, one-and-the-same adjective, whether it occurs with or without a noun, and whether it is identifying or intensifying.

4.4.2 The pronoun status of some determiners
In the previous section I considered the determiner status of the words many, much, few, little, several, enough and such. I argued that their determiner treatment is not justified, and that they are better treated as adjectives. If the previous arguments are right, we now have a considerably more restrictive determiner class than the one we started off with. Its members are shown in (6).

(6) the, a(n);
this/these, that/those;
my, your, his, her, its, our, their;
what\textsuperscript{int}, which\textsuperscript{int}, whose\textsuperscript{int}, what\textsuperscript{rd}, which\textsuperscript{rd}, whose\textsuperscript{rd}, what\textsuperscript{exc};
all, both, some, any, each, every, either, neither, no, another
Note that the great majority of the words in (6) are also listed as members of the pronouns class (cf. Quirk et al., 1985: 345, 376). In this section, I consider these words and argue that their dual classification as determiners and as pronouns is not justified and they are best regarded as pronouns only.

4.4.2.1 The unnecessary split
Consider (139)-(159) below.

(139) I like all (books).
(140) Both (sisters) live by the sea.
(141) What*(cars) they have!
(142) I live in a *(flat).
(143) She’s bought the *(tickets).
(144) Look at this/that (photo).
(145) I’ll take his (car).
(146) What*(paper) did you buy?
(147) Which*(paper) did you buy?
(148) Whose*(bags) are these?
(149) You can read what*(book) you want.
(150a) He arrived at midnight at which* time I was already in bed.
(150b) This is the book which* I was looking for.
(151) That’s the boy whose* *(father) I know.
(152) There’s some (milk) in the fridge.
(154) You can have either *(seat).
(155) Neither *(answer) is correct.
(156) Every *(room) has a shower.
(157) I’ve given each *(student) a different assignment.
(158a) There’s no coffee left.
(158b) There’s none left.
(159) They have a house in the city, and another *(house) in the country.

Observe that nearly all of the italicised words above can occur either with or without a following noun. These words are said to be determiners in the former case, but pronouns
in the latter. Table 6 summarises this observation. A tick (✓) indicates that the word is categorised in the way shown and a cross (✗) that it is not.

<table>
<thead>
<tr>
<th>Determiner</th>
<th>Pronoun</th>
</tr>
</thead>
<tbody>
<tr>
<td>all</td>
<td>✓</td>
</tr>
<tr>
<td>both</td>
<td>✓</td>
</tr>
<tr>
<td>what</td>
<td>✓</td>
</tr>
<tr>
<td>the</td>
<td>✓</td>
</tr>
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<td>✓</td>
</tr>
<tr>
<td>that/those</td>
<td>✓</td>
</tr>
<tr>
<td>my, your, her, etc.</td>
<td>✓</td>
</tr>
<tr>
<td>which</td>
<td>✓</td>
</tr>
<tr>
<td>whose</td>
<td>✓</td>
</tr>
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<td>some</td>
<td>✓</td>
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<tr>
<td>any</td>
<td>✓</td>
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<tr>
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<tr>
<td>no</td>
<td>✓</td>
</tr>
<tr>
<td>another</td>
<td>✓</td>
</tr>
</tbody>
</table>

Table 6: The pronoun status of some determiners

It is a well-known fact of English that some words belong to more than one word class, e.g. book\text{noun} and book\text{verb}. In such cases, the words behave very differently, e.g. book\text{noun} inflects for number and has singular and plural forms (one book; two books), whereas book\text{verb} inflects for person (I book; he books) and has different tense forms (booked; booking/booked). Their meanings are also different, e.g. book\text{noun} meaning 'printed work' and book\text{verb} meaning 'arrange', 'make a reservation'. This is not true of the words in table 6. Note that in both cases, that is, when they are classed as determiners and when they are classed as pronouns, the same constraints apply. For instance, the
demonstratives *this* and *that* become *these* and *those* when associated with a plural noun whether this noun is present or not. The same is true of the possessives, which reflect the person (and some of them the gender) of the possessor, independently of the presence of the (possessed) noun. Also, the meaning is essentially the same whether there is a noun present or not. The determiners are very closely related to the corresponding pronouns. They differ only with respect to the fact that the former appear with a following noun whereas the latter do not. Thus to claim that they are different words and belong to two different classes does not seem justified. The view that a class split is not justified in cases such as this is consistent with, and supported by, the fact that many transitive verbs in English, such as *read, write, eat, drink* and *cook*, to name just a few, can, with the same basic meaning, also occur without a following noun phrase complement.

(160a) I *cooked* dinner for five people.
(160b) I *cooked* for five people.

(161a) Don’t disturb me when I’m *eating* my lunch.
(161b) Don’t disturb me when I’m *eating*.

*Cook* in (160) is not only considered to belong to the same verb category, i.e. transitive verb, in both the (a) and (b) constructions, but it is also regarded as one-and-the-same verb. The same is true of *eat* in (161), and of some transitive prepositions, as shown in (162) and (163) below.

(162a) The car is parked *outside* the house.
(162b) The car is parked *outside*.

(163a) Dogs are not allowed *inside* the shop.
(163b) Dogs are not allowed *inside*.

As with the above verbs and prepositions, I would like to argue that it is also possible for the words in table 6 to occur with or without a following noun. The usual way of accounting for (160)-(163) is simply by saying that some transitive verbs and some transitive prepositions can also be used intransitively, that is, without a following noun phrase. Thus in the same way that there is no need to postulate an intransitive verb
cook and an intransitive preposition outside in order to account for (160b) and (162b), it is not necessary to set up a separate word category to account for the possibility of words such as this, his, some and all to occur with a following noun as well as without one.

It could be argued that some of the words in table 6 behave differently when they occur with and without a following noun. I will show below that these differences are minor and do not justify a divide.

One of the differences is the fact that some of these words have a more general interpretation when they occur without a noun. What\textsuperscript{int} and what\textsuperscript{rel} assume a more general interpretation when the noun is omitted. In (146), for instance, whereas the answer to the question with the noun paper would have to be a paper of some description, the answer to the nounless version is not limited to papers. And in (149), whereas you can read anything in the nounless construction (e.g. books, magazines, newspapers), in the version with the noun this is limited to books. The same is true of the verbs and prepositions in (160)-(163) above. In (160) and (161), the implicit elements in the (b) constructions will be interpreted as food in general, rather than as a particular kind of food or meal. As for (162) and (163) the implicit elements would be taken to be a building of some kind, but not necessarily a house or a shop.

There is also some difference in interpretation where the demonstratives are concerned. These do not usually refer to people when no noun follows. This is nevertheless possible, and is in fact common practice when we are providing or asking about identification.

(164) Who is \textit{that}?
(165) \textit{These} are my sisters.

A further difference is that some of the words in table 6, namely the possessives and no, vary morphologically according to whether they appear with or without a following noun,

(166a) This is my/your/her/ book.
(166b) This is mine/your/her.

(167a) I've got no doubts.
(167b) I've got none.
This, as Hudson (2000: 22) points out, should be left to the morphology and ignored in the syntax. *My/mine, your/yours, her/hers, our/ours, their/theirs* and *nonone* should all be treated as different forms of the same word in the same way that *a* and *an* are treated as being the two forms of the indefinite article. This observation is also true of relative *whose*, which, instead of being treated as a separate word, should be seen as the genitive form of the relative pronoun *who*, in the same way that *whom* is seen as the accusative form of this pronoun (cf. Huddleston and Pullum, 2002: 428).

(168a) the architect *who* designed the building
(168b) the architect with *whom* I worked
(168c) the architect *whose* design was criticised

In fact, as Huddleston and Pullum (2002: 1049) point out, relative *whose* is the genitive form of both relative pronouns *who* and *which*.

(169) a man *whose* opinion I respect
(170) a war *whose* consequences are unknown

The variations which occur when the above words are used with a noun or without a noun are minor and should not affect the validity of the point which is being made here, namely that they should be unified under the same class. As Hudson (2000: 20) observes, a unifying analysis of the above words has the advantage that it captures a generalization which will otherwise be missed if they continue to be treated at times as determiners and at other times as pronouns, namely the fact that the properties of these words are to a large extent the same whether they are used with a noun or without one.

4.4.2.2 Pronouns as determiners vs. determiners as pronouns

I argued above that a dual classification of the words in (6) which can occur with as well as without a following noun is not justified, and that they should be treated as belonging

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73 Barber (1976: 161) refers to the use of *none* before nouns in Early Modern English. And Denison (1998: 115) points out that *none* was also found before nouns in Early Present Day English when the dichotomy between *no* and *none* had already been established:

(i) (...) and now when *none* such troubles oppress me

to the same word category whether they are used with or without a noun. The resemblance and overlap of membership between determiners and pronouns has long been noticed, and has led to different analyses. These analyses have in common the fact that they all group the two classes together as a single word category. They differ, however, in that in some of these analyses this category is claimed to be determiners (Postal, 1966; Abney, 1987; Radford, 1997), whereas in others, it is taken to be pronoun (Hudson, 1984, 1990, 2000; Spinillo, 2000a). I will present the arguments behind these two opposing views, and argue that the treatment which takes the category comprising these words to be pronoun is the one which best accounts for the facts.

Postal (1966) argues that the superclass is determiner. Within a transformational framework he argues that personal pronouns are determiners, more precisely definite articles, in underlying structure. These articles occur with nouns in deep structure, and when this noun is one, it gets deleted in the course of the derivation. Three facts can be said to have motivated Postal's analysis: (i) the fact that some pronouns can occur before nouns (e.g. *we* students, *you* soldiers), (ii) the assumption that the definite or indefinite character of a noun phrase is specified by its determiner, coupled with the fact that pronominal noun phrases such as *I, he, she, us, etc.* are definite; and (iii) his analysis of the element *self* in reflexive forms such as *myself, themselves, etc.* as a noun stem.

Postal argues that the fact that some pronouns can occur before nouns, as in the noun phrases *we students* and *you soldiers*, provides the strongest evidence for his claim, since the pronouns here are also articles in the surface structure. Rejecting an appositive analysis of these constructions (see chapter 3, section 3.2.4), Postal claims that there are no other possibilities but to see the cooccurrence of pronouns and nouns as evidence that all pronouns are articles, and therefore determiners. This is a result of the parallelism he draws between these phrases and those containing the definite article, e.g. *the students*. Thus he takes his claim to be a necessary consequence of assuming that pronouns are noun specifiers. However, as I argued in chapter 3, the fact that an element may occupy a position typically filled by members of a particular word class does not necessarily entail that it must belong to that class.

Postal's (1966) two other arguments do not prove his claim either. Despite his assumption that the determiner is responsible for the definiteness or indefiniteness of a noun phrase, Postal admits that the definite or indefinite status of noun phrases is not entirely due to its determiner (1966: 203-204). He offers noun phrases containing proper
nouns and says that, although they occur without an article, they are definite. Thus, it is not unreasonable to argue that noun phrases containing personal pronouns also owe their definite character to the inherent definite nature of these words, rather than assuming that because the phrases are definite, these words must therefore be determiners.

Finally, Postal argues that the element *self*/*selves* in reflexive forms such as *myself* and *ourselves* are noun stems, and concludes that the preceding elements, i.e. *my, him, our*, etc. are consequently articles. However, even if his analysis of *self*/*selves* as noun stems is correct, in the face of the facts above, this alone does not constitute conclusive grounds for the analysis of *my, him, our*, etc. as articles, as claimed.

Further counterarguments to Postal’s analysis are found in Rigter (1980). He argues that the pronoun-as-determiner analysis is incompatible with the structure of the noun phrase that Postal assumes, namely NP. Rigter (1980: 138) observes that it is the head of the phrase which agrees with coreferential reflexives, and therefore, under the assumption that the noun heads the phrase and that personal pronouns are determiners in [Spec, NP], in (171) below the reflexive should agree with *guys*. That this is incorrect appears from the ungrammaticality of (171b).

(171a) You guys should be ashamed of yourselves.
(171b) *You guys should be ashamed of themselves.

According to Rigter (1980), the fact that the reflexive in (171) agrees with *you* and not *guys* is evidence that the former and not the latter is the head of the phrase, and therefore a (pro)noun.

Rigter argues further that Postal is mistaken in his assumption that the third person pronouns *he, she, it* and *they* (and their respective objective forms *him, her, it* and *them*) are forms of the definite article *the*. Postal claims that the third person pronouns are underlying definite articles derived by the deletion of *one(s),*

(172) She one married he one → She married him

and that, if there is a restrictive postmodifying phrase or clause, the pronouns are neutralised becoming *the*, and *one* is not deleted.  

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74 These derivations are simplified versions of Postal’s derivations.
Rigter (1980: 139) offers (174)-(176) below to show that this is not the case.

(174) She there, she is my sister.
(175) He who laughs last laughs the longest.
(176) Nixon is the one.

(174) and (175) show that third person pronouns do occur with postmodifying phrases or clauses, and (176) shows that *one* does not need to be postmodified in order not to be deleted. These facts thus contradict Postal’s claim that the third person pronouns *he, she, it, they* are variations of the definite article, and therefore determiners, in the absence of a postmodifying construction.

Postal’s (1966) analysis also suffers from the fact that it posits a number of highly restricted rules and hypothetical forms. But the analysis fails mostly because it considers only a very limited set of pronouns, namely the personal pronouns. Postal offers no account of the many other pronouns. Thus even if his analysis provided an adequate treatment for constructions such as *we linguists* and *you soldiers*, and those containing reflexives, it would leave several other pronominal noun phrases unaccounted for, therefore not making his claim that pronouns are determiners an all-encompassing one.

Abney (1987) also recognizes that pronouns have a lot in common with determiners, and accounts for the similarities between the two by assigning them to the same class. Like Postal (1966), Abney (1987) regards the overall class to be determiners. According to Abney, pronouns are ‘intransitive’ determiners, that is, determines which occur without a following noun. Within his DP treatment of the noun phrase, Abney argues that pronouns are determiners (i) because they are in complementary distribution with articles and demonstratives (e.g. *the/these/we linguists*) and (ii) following his assumption that grammatical features reside in D, pronouns are marked for person, gender, number and case, and must therefore be determiners.

Abney’s (1987) motivation for claiming that the overall class is determiner rather than pronoun is mostly theory-internal and aims to support his general claim that
noun phrases are DPs rather than NPs. For instance, Abney recognises that most determiners can stand alone, but, unlike Postal (1966), he rejects the underlying noun head analysis, and argues that the determiner heads the phrase, which must therefore be a DP (determiner phrase). He claims that the analysis of pronouns as determiners allows us to account for the similarities between the two classes, and to generate them in the same position without being forced to generate pronouns with empty noun heads (Abney, 1987: 284). Abney’s treatment, however, does not succeed in avoiding the postulation of empty elements. Under the assumption that the determiner heads the phrase, an empty determiner is assumed in order to account for noun phrases such as John, books and water. The postulation of such an element is ad hoc and weakens the analysis (see chapter 3, section 3.2.7).

Also, some of the evidence provided by Abney is from languages other than English. For example, Abney argues that pronouns and determiners are the locus of the grammatical features of the noun phrase, namely person, gender, number and case. However, although this may be true of other languages, it does not fully apply to English. For instance, in English only the possessive determiners are marked for person, and only two determiners are marked for gender (i.e. his and her).

In sum, there is no compelling evidence for the analysis of pronouns as determiners. It is equally possible to account for the similarities between determiners and pronouns if we reverse the analysis and treat determiners as pronouns. In fact, the same basic facts that lead Abney (1987) to call pronouns ‘intransitive determiners’ lead Hudson (1984, 1990, 1997, 2000) to call determiners ‘transitive pronouns’. Hudson claims that ‘there is no word-class of determiners in English, because determiners are simply transitive pronouns’ (1997: 253), that is, determiners are pronouns which can occur with a following noun. In addition, as argued in Hudson (2000: 23), the treatment of pronouns as determiners would entail that the personal pronouns, e.g. I/me, he/him, they/them, etc. are also determiners, even though these never occur with a following noun, not to mention the fact that almost every determiner can occur without a following noun, whereas most pronouns cannot appear with a following noun. The data claimed to support a pronoun-as-determiner analysis can be at least as well accounted for by a determiner-as-pronoun analysis. Since most determiners behave like pronouns but most pronouns do not behave like determiners, I will agree with Hudson that the superclass

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75 I will have no more to say about the NP vs. DP debate here, as this will be discussed in the next chapter.
that contains both determiners and pronouns should be pronoun, and argue that the
determiner-as-pronoun analysis is thus to be preferred.

Finally, note that, although I subscribe to a pronoun-analysis of determiners,
the analysis I am defending here is only partially consistent with Hudson's (1984, 1990,
1997, 2000). It differs from his in that whereas he re-assigns all the words in (3) to the
pronoun class, I will argue below that some of them, namely the articles, every and
what
determine are not pronouns.

4.5 Remaining items
I argued above that most of the words in (3) are pronouns. By re-assigning the
demonstratives, the possessives, the relatives and the interrogatives, as well as the
quantifiers all, both, some, any, no, either, neither, and each to the pronoun class, we are
now left with only a handful of items: the articles the and a(n), what
determine and every. This
much more constrained class is shown in (6).

(e) the, a(n);
what
determine, every

These items are the only ones which cannot occur without a following noun, and,
therefore arguably, the only 'true' determiners. However, in this section I will show that
this characteristic alone does not justify grouping them together as determiners. I will
argue that the analysis of what
determine as a determiner is unwarranted, and that it is better
analysed as an adjective. In contrast, I shall argue that every patterns with the articles the
and a(n), and that these three elements, and these three only, are justifiably labeled
determiners.

4.5.1 What
determine
What
determine is distinguished from what
individual and what
relative. Whereas what
individual and what
relative are both
classed as determiners as well as pronouns in the grammar books (see section 4.4.2.1
above), what
determine is usually classed as a determiner only, because it never occurs without a
following noun (cf. Quirk et al., 1985; Biber et al., 1999).

(177) What
determine * (names) they've got!
A further difference between what\textsuperscript{int} and what\textsuperscript{rel} on the one hand and what\textsuperscript{exc} on the other is that when it is followed by a singular count noun, the indefinite article is required with what\textsuperscript{exc}, but it is unacceptable with what\textsuperscript{int} and what\textsuperscript{rel}.

(178)  What\textsuperscript{exc} *(a) room!
(179)  What\textsuperscript{int} (*a) room is he in?
(180)  I noticed what\textsuperscript{rel} (*a) number he dialled.

It is precisely the fact that what\textsuperscript{exc} occurs before the indefinite article that caused it to be classed as a predeterminer, whereas what\textsuperscript{int} and what\textsuperscript{rel} are classed as central determines (cf. Huddleston, 1984; Quirk et al., 1985).

Another aspect of what\textsuperscript{exc} that differentiates it from what\textsuperscript{int} and what\textsuperscript{rel}, as well as from the other alleged members of the determiner class is its semantics. Although it is positioned in what is taken to be a determiner position, what\textsuperscript{exc} does not signal number or definiteness for the noun phrase. Instead, it has an intensifying function. This is particularly apparent when an adjective is present in the noun phrase, as in (181),

(181)  What\textsuperscript{exc} an amazing room!

but it is also noticeable when there is no adjective present. In (178), for instance, what\textsuperscript{exc} intensifies or emphasises some understood attribute of the room in question. Thus the semantic structure of constructions containing what\textsuperscript{exc} can then be said to be something along the lines of (182) below.

(182a)  [a [what\textsuperscript{exc} ADJECTIVE] noun\textsubscript{sing}]
(182b)  [[what\textsuperscript{exc} ADJECTIVE] noun\textsubscript{pl}]

Notice that what\textsuperscript{exc} is intensifying regardless the type of noun it occurs with, i.e. gradable nouns, as in (183) and (184) below, or nongradable nouns, as in (177) and (178) above. Whatever the nature of the noun, what\textsuperscript{exc} forces a 'degree enhancing' reading of understood qualities.

(183)  What\textsuperscript{exc} a mess!
(184)  What\textsuperscript{exc} grief!
The determiner analysis of what\textsuperscript{exc} is unsatisfactory. Although its inability to occur without a following noun may suggest that it is a determiner, semantically, what\textsuperscript{exc} bears no relation to the other alleged members of the class. Allerton (1987: 25) suggests that what\textsuperscript{exc} should be regarded as a determiner with intensifier-like characteristics, but intensification is not a property typical of determiners. Recall from section 4.4.2.1 that I argued that a class split is uncalled for as regards what\textsuperscript{int} and what\textsuperscript{rel} and that these elements are pronouns in all their occurrences. It is tempting, then, to also assign what\textsuperscript{exc} to the pronoun class. This treatment is implied in Hudson (2000: 22-23) when he claims that all so-called determiners are pronouns. However, apart from having the same form as what\textsuperscript{int} and what\textsuperscript{rel}, what\textsuperscript{exc} is rather different from them. As noted earlier, unlike what\textsuperscript{int} and what\textsuperscript{rel}, what\textsuperscript{exc} never occurs without a following noun, which automatically excludes it from the pronoun class. Moreover, as Trotta (2000: 102) points out, even when accompanied by a noun, what\textsuperscript{int} and what\textsuperscript{rel} maintain their pronominal properties because, although they are not pro-forms as such in these constructions, they refer to a set of items which can be regarded as ‘anticipated antecedents’, as shown in (185) and (186) below. Such a link does not exist with what\textsuperscript{exc}.\footnote{Trotta’s (2000) observations relate to wh-words in general and not only to what.}

(185)  
A. What\textsuperscript{int} room is he in?  
B. Room 134.

(186)  
I noticed what\textsuperscript{rel} number he dialed. It was 0208 520 1797.

Because of its intensifying quality, what\textsuperscript{exc} has been compared to, but not treated as, a degree adverb (e.g. quite and rather) (Bolinger, 1972; Allerton, 1987; Altenberg, 1994; Berry, 1997).\footnote{Bolinger, 1972; Allerton, 1987; Altenberg, 1994; Berry, 1997.} The analysis of what\textsuperscript{exc} as an adverb is not justified, as can be seen from the fact that, unlike degree adverbs, and adverbs in general, what\textsuperscript{exc} is limited to noun phrases, as shown by the ungrammaticality of (189b).

(187a)  
quite a surprise

(187b)  
quite surprising
A less conventional treatment of what, but one I feel is supported by the facts, is found in Huddleston and Pullum (2002). They argue that what is an adjective because its distribution, or rather, that of its phrase, is comparable to that of other adjective phrases. Like premodified adjectives, what is external to the noun phrase.

Although what does not exhibit some of the characteristics commonly associated with adjectives, that is, the ability to be used predicatively as well as attributively, and gradability,

and although intensification is not typically associated with adjectives, the adjective analysis of what is still superior to its determiner treatment. We have already seen that several other words standardly classed as adjectives (e.g. utter) do not display the properties illustrated in (192)-(194). Moreover, there are numerous adjectives which, rather than qualifying the noun they enter into construction with, intensify them, e.g. utter, complete, sheer. The inability of what to be premodified by very and its lack of comparative and superlative forms may be said to follow from its semantics. In other words, by being inherently intensifying, what does not take further intensification

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77 As mentioned above, Sinclair (1990) groups all these words together, and also treats quite and rather as determiners. The only treatment of what as an adverb I have encountered is in the Oxford Advanced Learner's Dictionary, where it is regarded as an adverb when it occurs before an adjective.

78 See Quirk et al. (1985: 429-430) for further examples.
(Quirk et al., 1985: 404). This is not only true of what, but also of intensifying adjectives in general (see section 4.4.1.3 on such above).

(195)  *very utter/complete/sheer nonsense

Finally, note also that the analysis of what as an intensifying adjective explains its parallel distribution to adjectives, i.e. its external position in noun phrases. Recall that only adjective phrases containing intensified adjectives can occur outside the noun phrase (see 4.4.1.3 above).

An adjective analysis can better account for the properties of what, syntactically as well as semantically. As an adjective, what is a peripheral member of the class, in that it possesses few of the characteristics associated with the class. It nevertheless shares more properties with other adjectives than it does with the possessives, demonstratives and articles.

4.5.2 The articles and every

With the exclusion of what from the determiner class, we are then left with the articles the and a(n), and every.

(0)  the, a(n); every

The definite article the, the indefinite article a(n) and every are standardly treated as determiners. In this section I shall argue that this analysis is to a certain extent warranted.

Consider the articles first. Recall that determiners are commonly assumed to be words which exhibit the following two properties:

(i) they always occur with a following noun, and
(ii) they serve to specify the referent of that noun.

The articles exhibit both these properties and thus qualify for membership in the determiner class. In fact, the articles the and a(n) are considered to be core determiners, and for some grammarians it is the number of ‘article properties’ that a particular element possesses that establish the determiner status of that element (cf. Börjars, 1998).
Now consider *every*. *Every* is mostly analysed as a determiner, given that it cannot occur without a following noun.

(196) \( \text{*every *(student)} \)

A pronoun treatment of *every*, however, is found in Hudson (2000), for whom all so-called determiners are pronouns. Note, however, that by being unable to occur without a following noun *every* fails the basic criterion for pronounhood. Quirk *et al.* (1985: 345, 383) also list *every* among their pronouns, as well as among their determiners, but it is in fact the string *every one* and the *every* series, namely *everyone, everybody* and *everything*, that are being treated as pronouns.

Like the articles, *every* requires a following noun, as shown in (196) above, and identifies or restricts that noun’s reference. By combining these two properties *every* meets the criteria for determinerhood. Moreover, as suggested in Börjars (1998: 12), ‘for an element to be considered a determiner it must share certain crucial properties with the articles’. Cullicover (1999: 63) also shows that *every* is like the articles in various aspects. He shows that, like the articles, *every* displays the following syntactic properties:79

(a) It precedes the noun.
(197) \( \text{every girl} \)
(198) \( \text{a/the girl} \)

(b) It cannot occur without a following noun.
(199) \( \text{every *(girl)} \)
(200) \( \text{a/the *(girl)} \)

(c) It cannot appear in predicative position, after a copular verb.
(201) \( \text{*Girl is/seems every.} \)
(202) \( \text{*Girl is/seems a/the.} \)

(d) It does not enter into partitive constructions.
(203) \( \text{*every of the girls} \)

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79 This is a simplification of Cullicover’s (1999: 63) chart.
Now consider the properties in (i) and (ii) above and the words in (β), repeated here for convenience.

(β) the articles the, a(n);
the demonstratives this/these, that/those;
the possessives my, your, his, her, its, our, their;
which\textsuperscript{rel}, what\textsuperscript{rel}, whose\textsuperscript{rel}, which\textsuperscript{int}, what\textsuperscript{int}, whose\textsuperscript{int}, what\textsuperscript{exc};
such; half; the quantifiers all, both, some, any, each, every, either, neither,
no, many, much, few, little, several, more, most, enough, another;
cardinal and ordinal numerals

Note that by the first criterion only what\textsuperscript{exc}, the articles and every are determiners, and according to the second criterion most words in (β) qualify for determinerhood. Only three of the words in (β), however, display both properties (i) and (ii), namely the, a(n) and every. Moreover, it has been seen that the great majority of the words in (β) display other properties, which make a much stronger case for their membership in other classes. The lax approach to determinerhood is at the root of the heterogeneity and consequent inconsistencies of the present-day English determiner class. One way of reconciling this problem is to claim that for an element to qualify for membership in the determiner class it must combine the above two properties. Notice that now only the articles and every qualify. Thus the point I want to make here is that, although (i) and (ii) are both necessary criteria for determiner status, each on its own is not sufficient, and an element must exhibit both properties to be considered a determiner.

Once the criteria for determiner status have been properly established, and membership of the class redefined, the other properties commonly associated with determiners will follow. For instance, recall that determiners are considered to be function words, and function words are characterised by the following properties (Abney, 1987: 64-65):
(a) They do not occur on their own. They permit only one complement and are inseparable from it.  

(b) They lack descriptive content and carry primarily grammatical meaning.  

(c) They are generally phonologically and morphologically dependent.  

The great majority of the words in (b) do not exhibit these properties. On the other hand, the above properties are exhibited by the articles, and, although to a lesser extent, by *every*. (a) and (b) apply to the articles as well as to *every*. *Every* and the articles are inseparable from the noun. Neither *every* nor the articles can be left in place while the rest of the noun phrase is topicalised, for instance.

(205a) I’ve written the *a* letter.  
(205b) *Letter, I’ve written the.*  

(206a) I answered *every* question.  
(206b) *Question, I answered every.*  

What is more the articles have very little semantic content, if any at all, and all three words lack descriptive meaning. Criterion (c), on the other hand, only applies to the articles because *every* is not morphologically or phonologically dependent on the following noun or on other nominal elements.

(207a) a student  
(207b) an intention  

(208a) the (/ðə/) student  

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80 I will leave open for the time being whether the relation between the determiner and the noun is one of head-complement or modifier-head.  

81 Further evidence for the functional nature of the articles is provided in Hudson (2000: 26) who adds two more facts to this list, which he says are particularly relevant to English:  

(i) Only function words can have a schwa /ə/ as their only vowel.  
(ii) Only function words can have fewer than three letters.  

He also adds a third, namely, that only function words are consistently left without capital letters in titles of books and articles, but I take this to be more a matter of convention.
Furthermore, if, in addition to the two properties above, we assume, as does Börjars, that determiners serve to ‘turn a nominal into a term’ (Börjars, 1998: 12), that is, ‘they allow nouns that couldn’t function as full noun phrases on their own to do so’ (Börjars, 2001: 191), then it is possible to explain the fact that the articles and every combine with singular count nouns, and by so doing, allow them to function as full-referential noun phrases. This property is not definitional, though, as it is not unique of the articles and every.

In addition to property (c) above, there are other aspects in which the articles and every differ. Every permits modification whereas the articles do not.

almost/nearly every day

*almost/nearly the/a day

A further difference between every and the articles is that every can occur with the possessives my, your, his, etc. as well as genitive phrases, whereas the articles cannot.

his every move

*his the/a move

Sam’s every move

*Sam’s the/a move

This is because my, your, his, etc. and genitive phrases contribute to the definiteness of the noun phrase through the idea of possession, and therefore leave no other function for the articles to realize. Every, on the other hand, having the additional individual/distributional meaning, contributes to the overall meaning of the phrase, even if it is just for emphasis.

None of the above differences, however, detract from the analysis proposed here, namely that the articles and *every* should be grouped together as a class, because although elements belonging to the same category must share certain properties, they do not need to behave in the same way in every aspect.

Finally note that, *every* complements the article paradigm in that it shares properties with both *the* and *a(n)*. As shown in table 7 below, whereas *the* occurs with singular and plural count nouns, as well as with noncount nouns, *a(n)* occurs with singular count nouns only. *Every* occurs with singular count and noncount nouns, and is therefore a hybrid of the two articles.

<table>
<thead>
<tr>
<th></th>
<th>singular count noun</th>
<th>plural count noun</th>
<th>noncount noun</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>the</em></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><em>a(n)</em></td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td><em>every</em></td>
<td>✓</td>
<td>✗</td>
<td>✓</td>
</tr>
</tbody>
</table>

Table 7: Cooccurrence restrictions between *the/a(n)/every* and nouns

Notice further that, whereas *every*, like *a(n)*, conveys an 'individual' or 'unit' sense, it also has a plural idea, in that the referred individual item must belong to a set containing more than two items.

The articles and *every* share several properties which justify grouping them together. In addition, they present properties which differentiate them from the other words of the language and therefore justify a separate class. Since these three elements would be the only determiners in English, and two of them are already referred to as 'articles', I propose that the article class be extended to include *every*, and that the determiner class be withdrawn from the inventory of word classes for present-day English. One could argue that there is no net gain here in that we still need a class to accommodate these words, and that it does not matter whether we call the class 'article' or 'determiner'. Recall, however, that the term 'determiner' in the literature is usually used both as a form and a functional label, and that as a functional label, it refers not only to the function that *the*, *a(n)* and *every* have in noun phrases, but also to that of several other elements, including full phrases. By disposing of the form label 'determiner' and calling the class 'article', we avoid the confusion between form and function which surrounds these words.
4.6 Conclusion

In this chapter I looked at the inconsistencies which pervade the several descriptions of
the determiner class in English. From the multitude of problems discussed in detail, it can
be concluded that there are various angles from which this class may be queried.

Despite an apparent orderliness, i.e. a class with members distributed in
subgroups with a set of restrictions regulating them, the determiner class is a rather
baffling class. I showed that most of its inconsistencies are the result of
misclassifications, and argued that the vast majority of the elements in (γ) (see page 108),
which are standardly classed as typical determiners, belong to other word classes, and
that once they have been reassigned, most of the problematic data are readily accounted
for. I argued that several so-called determiners are adjectives, whereas others, and indeed
the great majority of them, are in fact pronouns.

Finally, and most importantly, I have redefined the criteria for determiner
status. I argued that the two properties commonly taken to define the determiner class are
effective only if taken concurrently, i.e. for an element to be considered a determiner it
must combine both these properties. In other words, the element must always occur with
a following noun, and specify the referent of the noun it occurs with. I maintained that
every, the and a(n) are the only elements which qualify for determiner status, given that
they are the only elements that meet the criteria for determinerhood. I claimed, however,
that since there is already in the language a category which accommodates two of these
three elements, i.e. the and a(n), namely the category of articles, this category should be
extended in order to include the third item, i.e. every.

Thus the postulation of both a determiner as well as a class of articles for
English is not justified. As observed in Hudson (2000: 20), its postulation makes the
grammar more complex without permitting any additional generalisations. 83

83 Although the analysis presented here and that in Hudson (1984, 1990, 2000) overlap in that they both
deem the postulation of a determiner class for English unnecessary, they differ in that they offer different
treatments of the elements traditionally analysed as determiners.
Chapter 5
Determiners and the structure of the English noun phrase

5.1 Introduction
In the previous chapters I looked at the ways in which the words in (α) (see page 12) have been classified. In this chapter, I turn to address the rather different question of how these words combine with other words, and with each other, to form phrases. I am interested in the way X-bar theory accounts for their presence in phrases, and I look at how under this theory such phrases thereby formed are represented structurally. Almost all contemporary theories of grammar incorporate some version of the X-bar system. In one way or another, most theories of grammar draw on the basic structures X-bar makes available in defining their own concepts, and make use of the structural distinctions it established and the form of phrase structure it employs.

Throughout the following discussion, I will assume what I would like to call the standard version of X-bar theory (Chomsky, 1970; Bresnan, 1982), or what Komai and Pullum (1990) call a ‘maximally strong’ version of X-bar theory (see 5.2 below). In this chapter I will consider its content in the light of the problem of establishing the appropriate phrase structure for the phrases the words in (α) appear in.

The aim of the present chapter is therefore to account for the presence of the words in (α) in noun phrases, and to provide a suitable analysis for noun phrases containing these words. I will do so by considering X-bar’s restrictions on phrase-structure rule systems, and by discussing these restrictions with regard to the extent to which they have consequences for the analysis of phrasal constructions in English containing these words.

The analysis presented in this chapter takes noun phrases to be NPs, and thus differs from the analysis adopted in much recent work where noun phrases are taken to be headed by the determiner, and are therefore DPs (cf. Abney, 1987; Hudson, 1990). I subscribe to the view that it is the head element that determines the selectional restrictions of the phrase, and in noun phrases, it is the noun that defines the selectional properties of the phrase. For example, a verb like sleep selects an animate noun phrase as subject, whereas there is no verb in English which selects a subject phrase specified by the as opposed to that. I will show that the re-categorization of the words in (α) does away with several of the problems purported by an NP-treatment of the noun phrase. If
they are treated as determiners, the NP-analysis cannot provide a principled account of the phrases the words in (α) appear in, but once re-classified, these words allow the phrases they appear in to fit into the theory.

The organisation of the chapter is as follows. In section 2 I begin by giving an overview of X-bar theory, and I briefly survey the main assumptions and major properties of this theory of phrase structure. This discussion is intended as preparation for the later discussion of how X-bar theory accounts for the presence of the words in (α) in phrases. In sections 3 and 4, I examine the structure of noun phrases according to the NP analysis, and the canonical NP specifier position of the words in (α). Here I will argue that these words project, and that it is their phrasal projection, rather than the lexical item, that enters into construction with the head noun. Such an analysis provides a sufficient number of positions in a two-bar level X-bar theory to account for the complex range of pre-nominal elements to be found in the structure of the noun phrase. In the remaining sections, namely sections 5, 6, 7, 8 and 9, I look at a number of nominal constructions containing some of the words in (α), and show how they benefit from the analysis proposed here. Finally, section 10 is the conclusion.

5.2 X-bar theory: an outline

This section provides the background against which the rest of this chapter is set. Until the late 1960s, the system of phrase structure rules was a virtually unrestricted system. The kinds of phrase structure rules posited in the 1960s were not only unable to generate all the structures that we find, but they also generated structures that we do not find. Chomsky's (1970) proposals for X-bar theory and subsequent elaborations by Emonds (1976) and Jackendoff (1977) improved the situation somewhat. In his paper Remarks on Nominalization (1970), Chomsky introduced X-bar theory in the context of arguing that derived nominal constructions, such as the army's destruction of the city should be generated directly by phrase structure rules rather than be derived by transformation from clausal structures. That is, they are not derived from a sentence, but rather are generated in the deep structure. This is referred to as the lexicalist position.

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84 For a critical analysis of X-bar theory see Pullum (1985), and Kornai and Pullum (1990).
85 Although some concepts of X-bar theory were expressed by a number of pre-generative linguists, Chomsky (1970) was the first to make X-bar theory explicit and systematic in generative grammar.
Let me now briefly outline the major principles which encapsulate the claims of X-bar theory. The principles which follow are given by Kornai and Pullum (1990) and Pullum (1985) as the constitutive principles of X-bar theory.\(^6\)

(i) **Lexicality** – Probably the primary claim of X-bar theory. It is the requirement that all phrases are projections of lexical categories. Each phrase is built up around a lexical category X (X = N, V, A, P, etc.), which is taken to be the head of the phrase, and from which the phrase takes its name and its main properties. Phrases must be endocentric, i.e. all phrases must minimally contain a head, and heads are of the same category as the phrase itself. Thus, the head ‘projects’ its phrasal structure, and any phrase is the elaboration of the properties of its head.

(ii) **Maximality** – Apart from its head X, a phrase can also consist of other elements. Maximality is the requirement that all nonhead material is a maximal projection.

(iii) **Optionality** – The requirement that nonhead material is optional.\(^7\)

(iv) **Uniformity** – The requirement that all heads project uniformly. According to this requirement, all maximal projections, that is, all types of phrases, have the same number of bar levels. According to Chomsky, three levels of projection, namely X, X' and XP are available for any phrase, even if there is no overt material to attach to the different levels.\(^8\)

The general X-bar format for phrase structure can be summarised in the phrase structure rules (PS-rules) given in (1a). (1b) illustrates the layered representation by means of a tree diagram.


\(^7\) By this is meant that not all phrases need to have specifiers or complements. E.g. VPs headed by intransitive verbs (He left), NPs headed by plural count or noncount nouns (We like books/fruit).

\(^8\) The maximum value for bar levels is fixed by the theory, and consequently varies from one version of X-bar theory to another. I am referring here to the standard version which takes three (i.e. \(X^0, X^1\) and \(X^2\)) to be the maximum number, but in Jackendoff’s (1977) version of the theory, for instance, this number is four (i.e. \(X^0, X^1, X^2\) and \(X^3\)), and in Hellan (1991) it is two (\(X^0\)and \(X^1\)).
X stands for any lexical category that can be the head of a phrase (e.g. noun (N), verb (V), preposition (P), adjective (A), etc). The semicolon separating the constituents indicates that their linear order is not fixed. The Kleene star (*) indicates that the constituent is recursive, whereas parenthesised constituents are those which are not always present. Complements are the closest elements of the head, and are determined by the lexical properties of the head. Together, head and complement form the intermediate phrasal constituent X'. Adjuncts do not have a close relation with the head, and they combine with X' to form further X' projections. Specifiers, which combine with the topmost X' to form the maximal projection XP, also have a more distant structural relation with the head. According to X-bar theory, whenever there is a head X, there will also be a maximal projection XP, and at least one intermediate projection X'. Thus, by being nonhead material, specifiers, complements and adjuncts are maximal projections, i.e. complete phrases in themselves, in accordance with the maximality constraint. Also, in keeping with the optionality constraint, specifiers, complements and adjuncts are optional, and may or may not be present in phrases.

The fact that an X' may be expanded into another X' makes it a recursive level, so that each modifying phrase appears at a different hierarchical level in a phrase marker, accounting for the theoretically limitless number of modifiers, and their semantic scope properties. The fact that there is no limit to the number of adjuncts differentiates them from complements and specifiers. Whereas phrases can have an unlimited number of adjuncts, at least in theory, the number of complements is limited and determined by the lexical entry for the head. Specifiers are also non-recursive. Note that specifier, complement and adjunct are not syntactic categories but functional labels for positions in the structure which may be filled by syntactic categories such as NPs, PPs, etc.

In addition to the four tenets outlined above, namely lexicality, maximality, optionality and uniformity, two others are also said to be part of the set of constraints that constitute X-bar theory, namely succession and centrality. The former states that every non-terminal node X^n (where n > 0) has a daughter of the form X^{n-1}. The latter is the
requirement that the initial symbol, i.e. the topmost category, is the maximal projection of some lexical category. By embodying the above six principles of phrase-structure rule systems, X-bar theory claims to narrow down the set of possible structures to one universal structure, and to eliminate the need for language-specific phrase structure rules. Most frameworks assuming the X-bar system as a theory of phrase structure, such as Government and Binding theory (GB) (Chomsky, 1981), Lexical-Functional grammar (LFG) (Bresnan, 1982), Generalised Phrase Structure Grammar (GPSG) (Gadzár et al., 1985), and Head-Driven Phrase Structure Grammar (HPSG) (Pollard and Sag, 1994), do not fully observe all the above constraints. However, for present purposes, this optimal version of X-bar provides a neutral standard for the discussion of phrases containing the words under investigation here. I will show below that some of these constraints have strong consequences for the way such phrases are analysed.

5.3 The structure of the noun phrase

Having looked at X-bar's characterisation of phrases in general, I now turn to the structure of the phrases so-called determiners are found in. These are unanimously taken to be nominal in nature. Several proposals, however, have been made in the literature as to their proper structural analysis.

If, according to the lexicality principle, all lexical items must function as heads of XPs, then determiners must appear as the head of their phrases. The structural relation between these phrases and the noun they enter into construction with is therefore either (2a) or (2b):

(2a) \[ NP [XP N'] \]
(2b) \[ XP [X NP] \]

I subscribe to the structure in (2a). In other words, I take the overall phrase to be headed by a noun, and to be therefore an NP.

There has been a growing conviction among linguists that the determiner, rather than the noun, is the head of the noun phrase (cf. Sommerstein, 1972; Lyons, 1977; Brame, 1982; Hudson, 1984; Kornfilt, 1984; Fukui, 1986; Hellan, 1986; Kuroda, 1986; Stowell, 1981) proposes a seventh principle, peripherality, which is the requirement that lexical heads must be phrasal-peripheral, i.e. occur either in leftmost or rightmost position.
1986; Abney, 1987; Dryer, 1989; Szabolcsi, 1994), that is, that noun phrases are DPs rather than NPs. This analysis is the analysis assumed by most linguists nowadays.

The credit for introducing the DP analysis is standardly given to Abney (1987). As the list above shows, however, others have much earlier argued that there are reasons to consider the determiner to be the head of the noun phrase. Abney’s (1987) goal is to provide a satisfactory structural analysis of what he refers to as the ‘Poss-ing gerundive construction’ in English, e.g. John’s hitting the ball. In order to do so, he puts forward the analysis of noun phrase structure as DPs, upon which his solution depends. He argues that the DP analysis does not only provide a better analysis of the Poss-ing gerundive construction, but it also constitutes a better analysis of the English noun phrase in general. According to Abney, all noun phrases are DPs.

In this thesis I will not contribute to the debate on noun phrase headedness. I am concerned here with how noun phrases containing the words in (a) are best represented structurally, and I will show that, as far as these words are concerned, an NP treatment of the English noun phrase can be maintained, and noun phrases containing these words can be fully accounted for structurally.

The DP analysis is not the only way forward. The Zwicky-Hudson criteria for headedness (Zwicky, 1985; Hudson, 1987) show that the evidence in favour of a DP analysis is by no means compelling, and there is no definitive evidence in favour of the head status of the determiner. Both Zwicky (1985) and Hudson (1987) consider the following six properties to be characteristic of head elements: the semantic factor (‘the kind of’), the morphosyntactic locus, the subcategorizand, the governor, the distributionally equivalent constituent, and the obligatory constituent. I will look at them in turn below.

The first criterion is semantic, rather than syntactic. With regard to this criterion the noun is the head of the phrase since it is the noun that determines the reference of the overall construction. In those books, for instance, the head is books because those books refers to a “kind of” book.

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90 See Ernst (1991) for some arguments against a DP treatment of the noun phrase, and Stowell (1989) for some in favour.

91 These criteria are in fact Hudson’s (1987) modified version of Zwicky’s (1985) criteria for headedness. Hudson has left out the notion of ‘controller of concord’. He says that the direction of concord determination is not relevant to the notion head. According to Hudson, the features number, gender, etc. will extend from the noun whether it is the head or not.
The second criterion, morphosyntactic locus, is not conclusive in determining the head of the phrase because both the determiner and the common noun can be the morphosyntactic locus. The argument for taking the noun as the morphosyntactic locus is the distinction between singular and plural, which is marked on the common noun in phrases like *the book* and *the books*. Several so-called determiners, however, also bear the singular-plural distinction, e.g. *this/these, that/those, a, both, some, many*. Moreover, some common nouns do not show the number contrast morphologically, e.g. *some sheep, many fish.*

The third criterion, the subcategorizand, seems to point to the determiner as the head of the phrase. The determiner is the subcategorizand because it is lexically subcategorised according to whether it can combine with singular count nouns, plural count nouns or mass nouns, as shown by (3)-(5).

(3a)  *a/each/every student*
(3b)  *a/each/every students*
(3c)  *a/each/every sand*

(4a)  *both/many students*
(4b)  *both/many student*
(4c)  *both/many sand*

(5a)  *much sand*
(5b)  *much student*
(5c)  *much students*

However, the argument can be reversed. It can equally be said that it is the common noun that subcategorises for a determiner, and one can argue that whether or not a determiner is needed is decided by the noun: singular count nouns cannot be used without a determiner, whereas plural count and mass nouns can.

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92 The form *fishes* is also possible, but it is used to refer to different species of fish rather than to more than one token of the same species.

93 'Subcategorizand' refers to an element's ability to determine or select, i.e. to subcategorise for, its sister nodes.
The fourth criterion, the governor, identifies the head as the constituent which determines the morphosyntactic form of a sister unit. This criterion, like the morphosyntactic locus criterion, is inconclusive with regard to which element heads the phrase, for both determiner and common noun can be said to determine the morphosyntactic form of a sister constituent, as shown in (6).

(6a) [That man] is English.
(6b) [Those men] are English.

The fifth criterion does not throw any light on the issue of headedness in nominal phrases either. It states that the head is the constituent which has the same distribution as its mother. Syntactic data show that it is not obvious which of the two constituents in nominal constructions is the distributional equivalent. If we consider phrases such as the books, books is clearly the distributional equivalent as we can have books only, but we cannot have the standing on its own. On the other hand, constructions like that book point in the opposite direction. That is the distributional equivalent since book on its own cannot stand as a phrase, whereas that can. The situation becomes even more unclear when we consider phrases such as the book and those books. In the former neither the nor book can be said to be the distributional equivalent, whereas in the latter both those and books can.

The last criterion, the obligatory element, though closely related to the fifth criterion, does more for the issue of headedness. With few exceptions, the determiner is the obligatory element in nominal constructions. Apart from three determiners, namely the, a(n) and every, which must always be followed by a common noun, the common noun can easily be omitted and determiners can stand on their own as a phrase. As we saw in chapter (4), however, when no noun follows, determiners are usually regarded as pronouns.

Table 8 below summarises the above facts.
Thus there is as much evidence in favour of viewing the noun as the head of the noun phrase as there is in favour of viewing the determiner as the head of the noun phrase (cf. Giorgi and Longobardi, 1991; Borgars, 1996; Spinillo, 2000a; Hudson, 2004). Which element one chooses to be the head of the phrase will depend very much on which criteria one finds more important. In fact, in Hudson (2004) it is argued that either the determiner or the common noun can be the head of the noun phrase: in some constructions it is the common noun, while in others it is the determiner. As evidence in favour of viewing the common noun as the head Hudson offers the following four facts: (i) whether or not a noun phrase can be used as an adjunct depends on the noun only; (ii) possessive determiners are similar to dependent genitive possessives; (iii) the noun decides whether or not the determiner is obligatory; (iv) in English only one determiner is possible per common noun (the ‘single-determiner constraint’). I will look at each of the above in turn.

According to Hudson (2004: 12), ‘the head of a phrase is (...) the word which links to words outside that phrase’. He argues that the possibility of adjunction of a noun phrase depends on the meaning of the noun. He offers (7) below, and argues that it is the common noun way that decides that the NP my way can be used as an adjunct. He argues that the fact that the NP my way cannot be replaced by a pronoun, as shown by the ungrammaticality of (8), and the fact that it cannot be replaced by its synonym manner,

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Table 8 Zwicky-Hudson criteria for headedness

<table>
<thead>
<tr>
<th></th>
<th>DETERMINER</th>
<th>NOUN</th>
</tr>
</thead>
<tbody>
<tr>
<td>The ‘‘kind of’’</td>
<td>×</td>
<td>✓</td>
</tr>
<tr>
<td>The morphosyntactic locus</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>The subcategorizand</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>The governor</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>The distributionally equivalent element</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>The obligatory element</td>
<td>✓</td>
<td>×</td>
</tr>
</tbody>
</table>

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94 Giorgi and Longobardi (1991: 200) take noun phrases to be NPs. They say, however, that the choice between NP and DP ‘is not obviously decidable in many Germanic languages’.
95 Recall from chapter 4 that for Hudson determiners are a kind of (pro)noun. Thus whether the determiner or the common noun is taken to be the head, the overall phrase will always be an NP.
as shown by the unacceptability of (9), are evidence that the noun is the relevant element for adjuncthood, and therefore the head of the phrase.

(7) It's best to do it my way.
(8) *It's best to do it mine.
(9) *It's best to do it my manner.

Whereas he says that (i) is undeniable evidence that N is the head, Hudson (2004: 14-15) says that (ii) is less compelling, because it concerns Dutch and German rather than English. He surmises, however, that because these languages are so similar, one would expect them to have similar analyses. He says that both in Dutch and in German possessive nouns satisfy the common noun’s need for a determiner, and, in the manner of a modifier, they depend on the second noun.

(10) moeders jurk
    ‘mother’s dress’
(11) Karls Freund
    ‘Charles’s friend’

He claims that this suggests that possessive nouns and determiners have the same structural status. In other words, if possessive nouns depend on the second noun, the same must be true of determiners. Hudson, for whom the possessive ‘s in English is a determiner (Hudson, 1990), argues further that if the determiner depends on the noun in Dutch and German, it should also be a dependent in English.

As a further argument in favour of the noun as the head, Hudson claims that it is the noun which decides whether or not a determiner is needed: singular count nouns require a determiner, whereas noncount and plural count nouns do not. According to Hudson, this fact makes the determiner a pre-complement of the noun.

Hudson’s fourth reason for taking the noun to be the head of the phrase in English is that English does not allow more than one determiner per common noun.96

(12) *the my book

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96 Quantifiers such as all and both, and the numerals are not determiners for Hudson.
He claims that this fact not only shows that the determiner is a dependent, but it also reinforces his analysis of the determiner as the complement of the noun because, like prepositions and transitive verbs, nouns allow no more than one determiner complement.

As proof of the converse, namely that the determiner is the head of the phrase, Hudson offers the following three facts: (v) determiners sometimes fuse with a preceding preposition; (vi) the determiner decides whether or not the noun is obligatory; and (vii) the ellipsis of the noun is an instance of ‘anaphoric ellipsis’, which is not generally possible with heads, but is common among dependents. I consider each of these facts below.

As with (ii) above, Hudson acknowledges that (v) does not apply to English. In several European languages a preposition and a determiner combine into a single word-form, as shown in (13)-(16) below.97

(13) French du (= *de le) village from the village
(14) Italian nella (= *in la) scatola in the box
(15) Spanish al (= *a el) cine to the cinema
(16) Portuguese pela (= *por a) estrada through the road

Hudson argues that since this can only happen when two heads are involved, the determiner must therefore be the head of its phrase. Hudson argues further that, even in English there is an instance of preposition-determiner fusion, and he offers per, as a case in point. He claims that per is the resulting form of the fusion of the preposition for with the determiner each. He says that per is used like a preposition, and its complement is a singular count noun with no determiner. Since such nouns cannot be used without a determiner, Hudson says that this suggests that the determiner is incorporated in the preposition.

(17) Fifty pounds per (= for each) night

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As a further reason for taking the determiner to be the head, Hudson maintains that in the same way that it can be argued that it is the noun that decides whether or not a determiner is required (see (iii) above), it can equally be argued that it is the determiner that decides if a noun needs to be present. Thus, under this analysis, whether or not the common noun books is required is determined by some in (18) and the in (19).

(18) *Some (books) are damaged.
(19) The (*books) are damaged.

Finally, Hudson argues that the kind of ellipsis involving the common noun in phrases such as (18) above is typical of complements. He argues that this is a case of anaphoric ellipsis, i.e. the identity-of-sense of the missing noun is recovered anaphorically, which he claims is characteristic of dependents.

The above facts led Hudson to argue that while the common noun is the head in some noun phrases, the determiner is the head in others. Whereas I agree that which element one chooses to be the head of the phrase will depend on which criteria one finds more important, the view that sometimes it is the noun, while at other times it is the determiner that heads the phrase is not entirely satisfactory. Note that there are not only more reasons for taking the noun to be the head, but also some of the evidence for taking the determiner to be the head does not apply to English, i.e. (v). In what follows I will show that once the words in (a) are no longer treated as determiners, the analysis according to which noun phrases are headed by a noun, namely the NP analysis, can fully account for the different nominal constructions in English.

According to the NP analysis (Chomsky, 1970; Huddleston, 1984; Haegeman, 1994; Huddleston and Pullum, 2002) a noun phrase is a maximal projection of a noun, which heads the phrase. In conformity with (1), the head noun may combine with a complement, typically a prepositional phrase (PP), to form the lowest N' projection. This in turn, may combine with an adjunct to form another N'. Noun phrase adjuncts are typically adjective phrases, but can also be prepositional phrases or relative clauses. The topmost N' combines with the specifier to form the maximal projection NP. Under their

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98 Recall from chapter 4 (section 4.4.2) that for Hudson determiners are transitive pronouns, and take a common noun as a complement. This complement may be explicit or understood.
analysis as determiners, the words in (a) occupy the specifier position in NPs. (20a) and (20b) below illustrate the application of X-bar theory to nominal phrases according to the NP-analysis. (20c) offers an instance of a noun phrase where all positions are realised.

(20a)  \[ \begin{align*} NP & \rightarrow (XP); N' \\ N'^* & \rightarrow N'; (XP) \\ N' & \rightarrow N; (XP) \end{align*} \]

(20c)

The internal structure of noun phrases can be very complex, and some linguists claim that it parallels that of the sentence (Abney, 1987). However, in what follows, I will only be concerned with prenominal positions, particularly with the specifier position of noun phrases, since this is the position the words in (a) are said to occupy. I will thus only be looking at noun phrases such as those below, which, although apparently simple, are not without difficulties.

Complements may also appear before the head noun in English, as pointed out in Radford (1988) and Haegeman (1994). Radford gives the example in (i) as an instance of a noun phrase containing a prehead complement.

(i) a physics student (= a student of physics)

Haegeman, on the other hand, gives genitive constructions such as the following as examples of noun phrases containing a prehead complement.

(ii) Saskia’s painting (=Saskia painted the painting)

Phrases like (ii), however, rather than seen as instances of complement-head constructions, are usually analysed as specifier-head constructions.

Abney (1987) argues that ‘Poss-ing’ constructions, such as the italicised one in (i) below, are evidence that noun phrases have a sentence-like structure.

(i) Paul’s selling the house was a good idea.
5.4 The specifier position of NPs

In this section I examine the specifier position in NPs. The focus will be on its use as the slot in nominal constructions for the words in (α). What concerns me here is the question of how we account for the presence of the words in (α) in noun phrases, and how, according to the NP analysis, they fit into the X-bar schema.

First, let us briefly consider the specifier position in general. According to X-bar theory, as well as heads and complements, phrases contain a third main element in their structure, namely the specifier. The principal justification for the specifier position is said to be the necessity to explain the notion subject structurally (Cann, 1999). The notion specifier is usually defined in structural terms, i.e. in terms of its position in the tree, as being the sister to an intermediate bar-level projection and the daughter of a maximal projection (Chomsky, 1970; Stowell, 1981; Radford, 1997), as shown in (25) where YP is the specifier.

\[(25) \quad XP \rightarrow YP; X'\]

In other words, specifier refers to the material in a phrase to the left of the head that combines with the topmost bar-level projection of a category. Specifiers differ from complements in that while complements are sisters of the head, specifiers are sisters of an intermediate X-bar projection. The material that is located in the specifier position varies from category to category. This position hosts not only the subject in sentences, but also various other elements which occur in a pre-head position: degree words such as so, very and incredibly are typical of AP specifiers; adverbs such as straight, right and just typically occupy the specifier position of PPs, and auxiliary verbs function as VP

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101 The role the specifier plays in current syntactic theory has been questioned recently. For a range of views on the matter see Adger et al. (1999).
specifiers. The existence of this pronominal position within NPs is predicted in X-bar theory, and it is supposed to be structurally parallel to preverbal specifiers in VPs, pre-adjectival specifiers in APs, and to pre-prepositional specifiers in PPs.

According to the NP analysis, noun phrases are headed by nouns and the words in (a) occupy the specifier position of these phrases. Recall that according to the maximality constraint, non-head elements must be maximal projections, i.e. phrases: ‘Every non-head term in the expansion of a rule must itself be a Maximal Projection of some category’ (Stowell, 1981: 70). Thus only maximal projections can function as specifiers. According to the traditional treatment of the words in (a), however, these words are determiners, which do not project. The fact that both lexical items (X\(^0\)), and maximal projections (XP), such as the phrase *the tall man’s*, as in *the tall man’s hat*, can freely occupy [Spec, NP] is anomalous. Only terminal elements can appear in a head position, while only maximal projections can appear in non-head positions. This lack of parallelism between the specifiers of NPs and the specifiers of the other phrasal categories does not seem problematic for some linguists who simply assume what Kornai and Pullum (1990) refer to as ‘weak maximality’, i.e. a weakened version of the maximality constraint, which permits ‘specified grammatical formatives’ in non-head position (Jackendoff, 1977: 36). Jackendoff’s specified grammatical formatives are the members of the lexical categories referred to in the literature as ‘minor’ or ‘defective’, i.e. categories whose members are said not to project to higher-level phrases. This includes determiners. Fukui and Speas (1986) make no distinction between the strong and weak version of the maximality constraint. They simply maintain that ‘non-heads in a rule are either maximal projections or minor lexical categories’ (Fukui and Speas, 1986: 163). This way out of the problem, however, is a rather ad hoc solution, and greatly diminishes the uniformity which is so much desired by the theory, in that it reduces the number of cross-categorial syntactic generalisations.

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102 The identification of specifiers in VPs is a matter of much controversy. Some linguists (cf. Jackendoff, 1977; Radford, 1988) take VP specifiers to be the aspectual auxiliaries *have* and *be* (the association of auxiliary verbs with VP specifiers was also Chomsky’s analysis before he introduced the category ‘T’ (inflection)). Others believe it is the negative particle *not* which occupies the specifier position of verb phrases (Aarts, 2001). There are also reasons to believe that the NP subject originates in the specifier of VP and ends up in the specifier position of NP after movement (VP-Internal Subject Hypothesis) (Roberts, 1997).
A more appealing way out of this undesirable situation, without having to resort to weak maximality, is to say that it is not lexical items that occupy [Spec, NP], but their maximal projections. The structure of NPs would then no longer be that in (26), but the one in (27).

\[(26) \quad \text{NP} \rightarrow \text{Y}; \text{X}^{'},\]

\[(27) \quad \text{NP} \rightarrow \text{YP}; \text{X}^{'},\]

This would certainly make [Spec, NP] a more homogeneous position. The question to be asked, then, is whether the words in (α) project, and if so, whether their phrasal projections have the schematic internal structure indicated in (1); that is, whether the head can be expanded into an intermediate bar-level by taking a complement, and the thereby formed bar-level can be further expanded into a maximal projection by combining with a specifier, just like the other phrasal categories. A projection along these lines lies at the heart of the base schema of X-bar theory, and there is every interest in proving it to be correct because it makes X-bar predictions about the syntax of related categories stronger in that it would achieve the uniformity desired by this theory of phrase structure. In addition to complying with the maximality constraint, the claim that the words in (α) project would also meet with a much more central principle of the theory, namely the lexicality principle. As seen above, the lexicality principle requires that all phrasal categories should be projections of lexical categories. I will show that the postulation of a phrasal category for the words in (α) is not a purely theory-internally motivated assumption, with no independent justification, postulated only to comply with the maximality constraint on phrase structure, but that it reflects the facts. As we shall see below, a variety of nominal constructions confirm this proposal. That is, the words in (α) have their own phrasal projection, and all nominal constructions observe both the maximality and lexicality requirements.

5.5 Pre-modified quantifiers

As a point of departure consider (21), repeated here as (28).

\[(28) \quad \text{nearby all} \text{ tickets}\]
According to the NP analysis, the noun *tickets* is the head of the noun phrase, and is premodified by the prehead elements *nearly* and *all*. Under the assumption that *all* is a determiner, *all* occupies the specifier slot. It is not evident, however, where the adverb *nearly* is positioned in the structure, since there are no more slots to the left of the specifier. An analysis that suggests itself is one that involves adjunction. Under this analysis, the adverb, or rather its phrasal projection, is adjoined to the NP *all tickets* as shown in (29).

(29)  \[
\begin{array}{c}
  \text{AdvP} \\
  \text{nearly} \\
  \text{Spec} \\
  \text{N'} \\
  \text{D} \\
  \text{N} \\
  \text{all} \\
  \text{tickets}
\end{array}
\]

This solution is attractive on the face of it because the element *nearly* is now linearly positioned before *all*, as desired. However, the weakness of the above analysis is that it does not appropriately represent the semantics of the phrase, nor its syntax. The adverb *nearly* in (28) modifies only *all* (*nearly all* as opposed to *completely all*), rather than the whole NP *all tickets*, as (29) above suggests. *Nearly* and *all* form a constituent, i.e. a phrase, and together they modify the head noun. Note also that *nearly* on its own cannot modify the noun *tickets*, as shown by the ungrammaticality of (30).

(30)  \[
\ast \text{nearly tickets}
\]

Moreover, the possibility of having the string *nearly all* substituted by elements such as *many, some* or *few*, as well as its serving as a response to questions such as *How many tickets did you buy?*, shows that it is a constituent. Since *nearly* modifies *all*, and not the other way round, *all* is the head of the phrase. Under the traditional analysis of *all* as a determiner, this is a problematic outcome because determiners are said not to take modification (see chapter 2). Recall, however, that according to the analysis defended here, *all* is a pronoun (see section 4.4.2), and therefore a noun, and the string *nearly all* is, accordingly, an NP. The structure of (28) is then better represented by the tree diagram in (31).
According to (31), the head noun *tickets* projects into N’, which in turn combines with the NP in the specifier position to form the maximal projection NP. The NP in [Spec, NP], a maximal projection itself, is the projection of its head N, *all*, whose intermediate projection N’ combines with an adverb phrase in the specifier position to form the maximal projection NP. It is the adverb and the pronoun taken together as a phrase that modify the head noun *tickets*. Although adverbs do not usually modify pronouns, or nouns in general, some adverbs, e.g. *almost* and *nearly*, can premodify indefinite pronouns (cf. Quirk *et al.*, 1985: 449-50).\(^{103}\)

Now consider (32) and (33) below.

(32) too many questions
(33)=(22) so much effort

The noun phrases above are headed by the nouns *questions* and *effort*, respectively. The former is premodified by the elements *too* and *many*, whereas the elements *so* and *much* premodify the latter. Again, if *many* and *much* are treated as determiners, positioned in the specifier position, it is not clear where the adverbs *too* and *so* are in the structure. Given that there are no further positions to the left of the specifier, once again adjunction suggests itself as an answer.

\(^{103}\) It is also possible for *almost* and *nearly* to modify other pronouns, as well as common nouns, as shown below:
(i) nearly me/you
(ii) almost angels/love/art
But as in (29) above, the structures in (34) and (35) do not reflect the semantics or the syntax of the phrases. In (32), for instance, the adverb too does not modify the noun phrase many questions, as suggested by (34), but many alone. Note also, that in the absence of many, too by itself cannot modify the noun questions, or any other noun for that matter, as shown by the unacceptability of (36).

(36) *too questions/books/people

Too and many form a phrase, and together they modify the head noun questions. The possibility of having the string too many substituted by elements such as some or several, as well as its serving as a response to questions such as How many questions were you asked?, shows that the string behaves as a constituent. Since too modifies many, many is the head of the phrase. Under the traditional treatment of many as a determiner, however, many should not allow modification. Recall, however, that in chapter 4 (section 4.4.1.1), I showed that many is in fact an adjective, and adjectives can take modifiers. The string too many is thus an AP, and the appropriate structure of (32) is that of (37).

(37)

Note that unlike in (34) above, many in (37) is not a specifier, but rather an adjunct. Like with other adjective phrases, the AP headed by many is adjoined to an intermediate bar-level projection.
Further evidence that the structure in (37) is indeed the appropriate representation of (32) and of similar constructions is (38)-(40) below.

(38) those too many times
(39) my too many projects
(40) his too many flirts

In the present analysis \textit{many} does not occupy the specifier position, and consequently this position is available and can be occupied by elements such as a demonstrative or a possessive pronoun, as shown in (41), which is the structural representation of (38) above.

(41)

The same reasoning applies to (33), whose appropriate structural representation is that in (42), rather than the one in (35).

(42)

Like \textit{many}, \textit{much} is an adjective (see chapter 4, section 4.4.1.1). The structure in (42) shows that in (33) \textit{much} is premodified by the AdvP \textit{so} and the AP they form premodifies the head noun \textit{effort}.

Consider now the following noun phrases.
Under the assumptions that all the pre-head elements above are determiners and that determiners are in [Spec, NP], it is difficult to account for the above phrases. This is because the specifier position is non-recursive, and it should thus not be possible for an NP to contain more than one determiner. According to the analysis presented in section 4.4.1.1, however, many and much are adjectives, and more is the comparative form of many and much, and therefore also an adjective. I would like to argue, however, that in the two constructions above what we have is the adverbs many and much, respectively, rather than the adjectives. As with most adjectives, many and much have corresponding adverb forms, and, like the adjectives hard and fast, the adverb has the same form as the adjective. If we accept this approach, two structural analyses for (43) can be proposed.

For the same reasons that (41) and (42) were considered to be better representation of (32) and (33), respectively, (46) is to be considered the appropriate structure of (43). That is, many modifies more alone and not the N' more chairs. Also, the fact that the string many more can be the answer to questions such as Do you need many more chairs? No, not many more, points to the conclusion that these two words in (43) form a constituent, which modifies the head noun. Moreover, topicalization of the head shows that the string in question is a constituent: Chairs, we'll need many more, because what stays behind must be a constituent. The same arguments apply to (44), and I will take (48), rather than (47), to be its correct tree representation.
The tree diagram in (48) suggests that, instead of being successively adjoined to the head, as in (47), the three pronominal elements combine, and together as a phrase they premodify the head noun bread. Again, note that it is the adverb much, or more exactly its phrasal projection, rather than the adjective much that enters into construction with more. Finally, recall from chapter 4 (section 4.4.2) that I take that to be a pronoun, and therefore a noun. In (44), although not in its typical function, i.e. head or noun modifier, that retains its demonstrative quality.

As a final point consider (49) and (50) below.

(49) many of those chairs  
(50) much of that bread

It could be argued that these constructions are problematic for the adjective analysis of many and much defended here. In (49) and (50) many and much take a PP complement, namely of those chairs and of that bread, respectively. In such constructions, many and much are usually taken to be pronouns, and the overall construction is an NP. Note, however, that adjectives can also take a PP complement, as shown in (51)-(53).

(51) proud of her children  
(52) interested in linguistics  
(53) good at dancing

A further counterargument could be the fact that (49) and (50) occur in what is typically NP positions:
Many of those chairs were broken.

Much of that bread was lost.

Note, however, that it is also possible for adjective phrases to occur in subject position, as shown below.

Dishonest is what I call them.

Thus (49) and (50) can also be accounted for by the analysis proposed here, and their structural representations are those in (57) and (58), respectively.

Finally consider the following noun phrase.

every three weeks

In (59), we have another noun phrase containing a sequence of pronominal elements. Once again, if they are taken to be determiners, it is difficult to account for (59). On the other hand, if we assume the analysis defended in chapters 3 and 4, i.e. that cardinal numerals are nouns, and that every is better treated as one of the articles, it is possible to account for (59). Two analyses suggest themselves: (60) where every occupies the specifier slot, and three is a premodifying adjunct, and (61) in which every and three together as a phrase function as the specifier.
(61) is to be favoured as the appropriate structure of (59) for two reasons. First, *every* requires a singular head (*every weeks*), and therefore cannot be a specifier of the plural *weeks*. In (60) there is a number mismatch between the specifier and the head. Second, as argued in Jackendoff (1977: 132), the NP *every three weeks* does not mean 'every one of three weeks', but 'every group of three weeks'.

5.6 The scope problem

Now consider (23) and (24) above, repeated here as (62) and (63) for convenience.

(62) both my parents
(63) all his many ideas

These phrases also contain a sequence of prenominal elements. Under the assumption that all the italicised elements are determiners and that determiners occupy the specifier position in NP constructions, it is hard to explain how two, let alone three determiners can be present in a noun phrase since this position is not recursive. However, if we assume the analyses presented in chapter 4, according to which *many* is an adjective and the quantifiers *all* and *both*, and the possessives are pronouns, i.e. nouns, it becomes possible to account for these constructions.

Consider (62) first. If we take *both* and *my* to be pronouns, a possible representation for (62) is (64) below.
From what has been said so far, one might conclude that the structure in (64) is the appropriate representation of (62). According to (64) the pronouns both and my combine to form the NP both my which occupies the specifier position of the NP both my parents. This is the analysis suggested for (32), (33), (43), (44) and (59) above. It is not, however, the one that correctly represents (62). The structure in (64) does not reflect the fact that both in (62) quantifies 'the parents I possess', and therefore has scope over the whole phrase. If semantic facts are to be represented syntactically, then (64) cannot be the correct structure of (62). I suggest that the appropriate tree representation of (62) is the representation in (65) below.

In the representation in (65) both is outside the NP my parents, which I would like to call the minimal NP (NP_{min}). In (62) both is adjoined to the minimal NP and has scope over the whole phrase.

Consider now the noun phrase in (63). Under the analysis that all and his are pronouns, and many is an adjective two possible representations can be put forward.
In both (66) and (67) *many* is a prenominal modifier, and as such, it is adjoined to the lower intermediate N' level. The two structures differ, however, in that in (66) the two pronouns combine to form a noun phrase, which occupies the specifier position of the NP *all his many ideas*. In (67), by contrast, *his* only occupies the specifier slot. *All* is adjoined to the NP *his many ideas*, and is therefore outside it. For the same reason that the structure in (64) has been ruled out as the proper representation of the noun phrase in (62), (66) will also be discarded as the structure to represent (63). In (63) *all* quantifies over 'the group of many books which belong to a male person', and has scope over the remainder of the phrase, and not only over *his*. Again, a constituency structure is needed in which the quantifier is hierarchically superior to the material to its right, so that it has scope over the whole phrase. (67) is such a structure.

By the representations in (65) and (67) it is claimed that only the pronouns *my* and *his*, and the adjective *many* are internal to the minimal noun phrase, *both* and *all* are adjoined to it, and unlike in (64) and (66), are outside it. The structures in (65) and (67) should be preferred over the structures in (64) and (66) because they solve the scope problem faced by these structures.

A further reason for arguing for an external position for *both* and *all* in (62) and (63) is the fact that these two quantifying pronouns can 'float'. That is, they can occur separated from the rest of the noun phrase (i.e. the minimal NP), of which they are semantically a part, as shown below.
Both my parents like golf.

My parents both like golf.

All his many ideas were useful.

His many ideas were all useful.

In the (b) examples, both and all are said to have ‘floated off’ the NPs both my parents and all his many ideas, respectively. The fact that (68a) and (68b), and (69a) and (69b) are paraphrases has led Sportiche (1988) to propose that they are also syntactically related, i.e. one is derived from the other. Sportiche proposes that the noun phrases both my parents and all his many ideas originate in [Spec, VP] and are moved to the front of their sentences to [Spec, IP]. In the (a) constructions, the noun phrases move as a whole. In the (b) constructions both and all stay behind in [Spec, VP]. The proposal that subject NPs originate in [Spec, VP] is known in the literature as the ‘VP-internal subject hypothesis’.

It is important to see, however, that from the above observations it should not be concluded that both and all cannot be internal to the minimal NP. In (70)- (72) below, for instance, they occur in the specifier position of the NPs, which have the structural representations in (73)-(75), respectively. Note particularly, that in (72) the noun heart, being a singular count noun, cannot stand alone as a phrase, and cannot therefore be a minimal NP.

(70) both parents

(71) all ideas

(72) all heart

(73) NP
   Spec  \_ N'
      NP  \_ N
          both parents

(74) NP
   Spec  \_ N'
      NP  \_ N
          all ideas

(75) NP
   Spec  \_ N'
      NP  \_ N
          all heart
5.7 The category-split treatment

If we take the words in (α) to be determiners, and [Spec, NP] to be their canonical position in noun phrase structure, it is hard to explain nominal constructions in which these words stand on their own as a phrase, such as (76)-(87) below.

(76) I like both.
(77) I’ve answered all.
(78) These are better than those.
(79) Some are good.
(80) I haven’t eaten any.
(81) I gave each a book.
(82) I need three.
(83) Many would agree with you.
(84) I haven’t seen much.
(85) Little was said.
(86) Several came.
(87) Such is life.

We have seen that the usual treatment is to claim that in these constructions the italicised words are pronouns, rather than determiners (cf. Biber et al., 1999; Huddleston, 1984; Quirk et al., 1985). Huddleston and Pullum (2002) offer a somewhat different analysis for noun phrases like the ones above. For them these noun phrases are instances of what they call the ‘fused-head construction’. These are constructions where the head noun is fused with a dependent, which functions as head and dependent simultaneously. ‘Fused-head NPs are those where the head is combined with a dependent function that in ordinary NPs is adjacent to the head, usually a determiner or internal modifier’ (Huddleston and Pullum, 2002: 410). Thus, according to these authors, for whom the italicised elements in (76)-(86) are determinatives when they appear before nouns, these constructions are instances of ‘determiner-head fusion’. (87), by contrast, is an instance of ‘modifier-head fusion’, because for them such is an adjective.104

---

104 Recall from chapter 2 that Huddleston and Pullum (2002) use the term ‘determinative’ for the syntactic category, i.e. the category I have been calling ‘determiner’, and ‘determiner’ for the grammatical function in NP structure, i.e. what is often called the ‘specifier’ function.
Both of the above analyses require an unnecessary category split. Recall that in the previous chapters I showed that the vast majority of the italicised words above are in fact pronouns (76-82), whether they stand by themselves or are followed by a noun, whereas others are adjectives (83-87). I showed that this treatment better explains the properties of these words, and argued that there is no need for the postulation of a determiner class for English. A major advantage of this treatment is that it does away with the unnecessary category split forced by the traditional NP-analysis of noun phrases, namely determiners vs. pronouns, and explain the facts in a more economical way.

5.8 The articles

Now consider (88)-(90) below.

(88) the book
(89) a book
(90) every book

Recall from chapter 4, that I take not only the and a(n), but also every to be articles, and that I see them as constituting a syntactic category in their own right (Art). It could be argued that this category is problematic for the analysis proposed here, according to which the constituent in the specifier position of noun phrases is always a maximal projection. Indeed the, a(n) and every cannot stand by themselves as phrases, and require the presence of a noun, as shown by the ungrammaticality of (91)-(93) below.

(91) I've read the *(book).
(92) I've read a *(book).
(93) I've read every *(book).

Thus to claim that the italicised elements in (88)-(90) are phrasal projections, rather than lexical items, occupying the specifier position of the noun phrases does not seem justified. One could also argue that the and a(n) do not take specification or modification. Notice, however, that every can be premodified by adverbs, which shows that it can project. Its phrasal projection, however, differs from other phrases, in that it cannot stand on its own and have an independent function within a sentence.
I've read \( \text{ArtP}[\text{nearly/almost every}] *(\text{book}) \)

To say that there is a maximal projection \( \text{ArtP} \) does not clash with the principles of X-bar theory. A number of other phrases are headed by elements which do not take any kind of modification or complementation. Phrases headed by pronouns or by so-called intransitive prepositions (e.g. hereby, therein), for instance, are such phrases. These phrases nevertheless have the potential to expand when other nouns or prepositions occupy the head position. Thus to propose a maximal projection \( \text{ArtP} \) is not unfounded. Also, in the most recent version of Chomskyan theory the notion of ‘maximal projection’ has changed. The term is now used to refer to any phrase which does not project further, and it does not need to contain a specifier: ‘A category that does not project any further is a maximal projection \( \text{XP} \), and one that is not a projection at all is a minimal projection \( \text{X}^{\text{min}} (...) \)’ (Chomsky, 1995: 242). This means that an article on its own can also be a maximal projection, i.e. a phrase, and that the structural representations of (88)-(90) above are those in (95)-(97), respectively.

\[
\begin{align*}
\text{(95)} & \quad \text{NP} \\
\text{(96)} & \quad \text{NP} \\
\text{(97)} & \quad \text{NP}
\end{align*}
\]

Finally, note that as with every, the phrasal projections of the and \( a(n) \) cannot stand on their own as independent phrases. This fact is not unknown, and it is found with other lexical items such as the adverbs too and very, as shown in (98) below.

\[
\begin{align*}
\text{(98)} & \quad \text{very/too} *(\text{big})
\end{align*}
\]

This could be seen as a lexical property of these words. In the case of the articles, particularly with the and \( a(n) \), it is because these words have no content meaning but solely contribute definite or indefinite status to the noun phrase, and therefore cannot occur independently of the noun they precede. The other words in (a) all have an additional function besides marking definiteness, such as indicating quantity (e.g. all, both, some, etc.), proximity (this/these and that/those) or ownership (my, his, our, etc.).
5.9 In search of symmetry

Finally I will show that the constructions known in the literature as ‘bare nominals’ can also be accounted for by the analysis presented here. In other words, I will show that by disposing of the so-called ‘zero article’ or ‘null determiner’ (Ø) there is no structural loss.

Consider (99) below from Radford (1997: 151).

(99) We don’t expect students to enjoy the course.

Radford subscribes to the DP analysis, and says that the only way to arrive at a uniform structural analysis of the italicised nominal constructions above is to assume a null determiner (Radford, 1997: 152). Following Abney (1987), he claims that all noun phrases are DPs, and says that the three nominal constructions in (99) are the projection of a determiner. For Radford, the difference between we and the course on one hand, and students on the other, is that the former are headed by overt determiners, we and the, respectively, whereas the latter is the projection of a null determiner.

(100) DP

D’

D

NP

we

Both the DP analysis, under which the words in (a) head the phrase which has the structure \( DP[D \ NP] \), and the traditional NP analysis, under which these words are in the specifier position of the phrase which has the structure \( NP[Det \ N] \), assume a zero determiner. The two treatments differ in that according to the DP analysis, in bare nominals such as students the zero determiner heads the phrase, as shown in (102) above. Whereas according to the traditional NP analysis, in such phrases the zero determiner occupies the specifier position (cf. Quirk et al., 1985; Radford, 1997; Biber et al., 1999), as illustrated in (103) below.

(103) NP

Spec

N’

D

N

Ø

students
However, it is also possible to account for bare nominals and to achieve a uniform structural analysis of nominal phrases without postulating a null determiner. Under the assumption that pronouns are nouns, both the nominals we and students are NPs containing only the head noun element. There is no need to postulate an empty head for students. As for the nominal the course, it is also an NP, only this time besides the head noun course, there is also a specifier.

\[
\begin{array}{cccc}
\text{NP} & \text{(105)} & \text{NP} & \text{(106)} & \text{NP} \\
\text{N'} & \text{Spec} & \text{N'} & \text{N'} \\
\text{N} & \text{ArtP} & \text{N} & \text{N} \\
\text{we} & \text{the course} & \text{students} \\
\end{array}
\]

The rationale behind the postulation of a zero determiner is ultimately the desire to provide a symmetric analysis for all nominal constructions. The structures in (104)-(106), however, also offer the uniformity achieved by (100)-(102). In addition, (106) has the advantage of accounting for bare nominals in a more economical fashion, i.e. without assuming an empty element. As Radford (1997: 152) points out, an important question to ask is ‘whether [the postulation of a zero determiner] is consistent with a minimalist approach to syntax which posits an economy principle (...) which prohibits superfluous projections’. That is to say, if it is consistent with the principle that ‘derivations and representations (...) are required to be minimal (...) with no superfluous steps in derivations and no superfluous symbols in representations’ (Chomsky, 1989: 69).

Radford’s answer to this question is affirmative. As seen in chapter 3, he claims that ‘although lacking phonetic content [the zero determiner] has clear semantic and grammatical properties of its own’ (Radford, 1997: 152). However, I showed in chapter 3 that Radford’s arguments in favour of a zero determiner are not compelling, and argued that there is no such element in English (see section 3.2.7 for discussion). Moreover, I have now shown that there is no structural gain in the assumption that bare nominals contain a zero determiner.

5.10 Conclusion

I have shown in this chapter that the recategorisation proposed for the words in (α) in the preceding chapters has benefited the analysis of nominal constructions in English as NPs.
The treatment of these words offered in chapters 3 and 4 is superior to their traditional treatment as determiners, on both formal and structural grounds.

The traditional treatment of the words in (α) as determiners fails to account for the full range of English noun phrases containing these words. It also makes it difficult to provide a structural representation of the English noun phrase which conforms to the X-bar format.

It has been shown here that the words in (α) project and participate fully in the X-bar system. This makes the analysis of the English noun phrase consistent with that of other phrasal projections, in that it falls into the general pattern in (1).

This treatment is also in line with the maximality constraint, i.e. that non-head nodes are maximal projections, and it provides a structural analysis for nominal constructions which maintains a strict version of X-bar theory.

The analysis presented here is successful in capturing the presence of prenominal adverb phrases in nominal constructions (e.g. nearly all tickets). It also provides a natural way of handling constructions containing a sequence of prenominal elements (e.g. both my parents), by making enough positions available to allow for their co-occurrence, and for the presence of several other pre-nominal elements in the noun phrase. In doing so the present analysis does away with some of the problems faced by the traditional NP-analysis, which makes it a more desirable analysis when accounting for English noun phrases.

A further advantage of the account presented here is that it is a more economical analysis. In order to offer a symmetric analysis of all English noun phrases, both the traditional NP-treatment and the DP-treatment resort to empty elements, and, in the case of the traditional NP-treatment, brings about an unnecessary category split. The analysis suggested here provides a uniform analysis of these phrases in a more economical way in that it does so without having to make use of empty elements or causing an unwarranted category split, and it is therefore to be preferred.
Conclusion

In most current grammars of English it is assumed that there is a word class of determiners or determinatives. In this thesis I question the correctness of this assumption. As argued in Hudson (2000: 8), any proposal as important as the postulation of a word class should undergo rigorous scrutiny, but in the literature this seems not to have been the case with determiners. Instead, the class has been accepted more or less without question, and has become part of most linguistic descriptions of present-day English.

In this study I have looked at the present-day English determiner class and my aim here was twofold: firstly, to find out whether the words often given as the members of the determiner class in English share a sufficient number of properties with each other to be assigned to the same class and to set them apart as a separate category, and secondly, to re-examine the status of the determiner class in the grammar of English.

In chapter 1 I documented the origins and birth of the class, and discussed some of the earlier treatments. I showed that determiners escaped the notice of early grammarians, and that it is a fairly recent class.

In chapter 2 I provided an overview of the class. I presented the criteria for membership of the category of determiner, that is, the syntactic and semantic properties usually associated with it. An important finding was the fact that although superficially similar, the various so-called determiners behave rather differently from one another both syntactically and semantically. The discussions in chapters 3 and 4 subsequently provided further evidence to support this assumption.

I then proceeded to examine the members of the determiner class more closely and to consider their membership status. In chapter 3 I showed that there is a great deal of uncertainty surrounding the membership of the class. Here I considered the elements whose treatment as determiners is inconsistent, and argued that their determiner treatment is not justified, and they are better classed elsewhere.

In chapter 4 I considered the elements which are treated as representative members of the class. I argued that their determiner treatment is not justified either, and reassigned them to what I considered to be their appropriate classes.

To sum up, in the first four chapters I showed that the present-day English determiner class is deeply problematic. The attempts that have been made to define the class are flawed, and the characteristics proposed do not hold. For instance, cooccurrence
restrictions are used as a major criterion for membership of the determiner class, but often they fail. Semantic similarity is also often used, but this too frequently fails. This is not surprising since, as Cullicover (1999: 62) observes, the semantic function of an element does not predict its syntactic category. Thus, in the case of the so-called determiners, elements that are from a semantic point of view identifying and/or quantifying in nature do not behave identically with respect to syntactic constraints.

I argued that the confusion surrounding the determiner class proposed for English results from the fact that the items that have been given as instances of determiners are very different kinds of elements. They do not have enough in common to justify their all being unified in the same class, and, consequently, they do not correspond to a single category with a stable syntactic characterisation. The issue is further complicated by the fact that the very few characteristics they share are not unique to determiners. The so-called determiners have no distinguishing characteristics and the single characteristic uniting them is the fact that they can all occur in front of a noun, but so do a great number of other words in the language. I thus argued for a different syntactic status of these words, and assigned them to several different existing word classes. For instance, I argued that the demonstratives and possessives are in fact pronouns, and the so-called quantifiers were shown to belong to different classes: some are adjectives whereas others are pronouns.

More generally, I argued that of the so-called determiners, only three deserve special status. For the notion of a class to be relevant to a syntactic description, the elements assumed to belong to this class must have one or more properties which distinguish them from other classes. The articles the and a(n) and every exhibit properties which not only justify their being grouped together, but which at the same time set them apart from the other words of the language. The characteristics which single them out are their inability to occur without a following noun, and the fact that their sole function is to specify the referent of the noun they precede. Although separately these properties are also exhibited by other so-called determiners, taken together they are displayed by no other word in the language. This therefore justifies the, a(n) and every being treated as a separate category. Thus, the conclusion is that the so-called determiner class in English is considerably smaller than it is claimed to be, and consists solely of three elements. Figure 1 below shows schematically the reduction proposed here for the English determiner class.

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Although the above facts seem to lead to the conclusion that there is indeed motivation for postulating a determiner class for English, I argued that this is not the case. The postulation of a determiner class for English does not allow any generalisations which are not already permitted by the category article. I showed that every behaves like the and a(n) and, therefore, there is no reason to posit a separate class for these elements, when there is already a category available in the language which allows the same generalisations. I suggested then that the category article be extended in order to include not only the and a(n), but also every. This argument rests on a general principle of categorisation, namely Occam’s razor. According to this principle, ‘a word class should be recognised only if it allows generalisations that would not otherwise be possible’ (Hudson 2000: 10). Thus to recognise a determiner class in addition to the class of articles would only make the grammar of English more complex without enabling it to express any additional generalisation. The analysis proposed here has the advantage of permitting us to preserve the distinction between these three words and the other words of the language without adding an extra category to the syntactic description of English. A further advantage of this analysis is that, by disposing of the label ‘determiner’ and calling the class ‘article’, we avoid the confusion which exists in the literature when referring to the form class of these words and the syntactic function they have.

The thrust of the present study, then, was the claim that there is no need for the postulation of a determiner class for English, or at least the class is redundant.

Finally, I showed that the approach I took to the words under investigation here had an impact on the structure of the phrases these words appear in, namely noun phrases. I showed that a determiner analysis of these elements makes it difficult to provide a coherent structural analysis of the English NP. On the other hand, by assuming the analysis proposed here it is not only possible to account for a wider range of English noun phrases containing these words, but also to do so in a uniform and economical way.
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