REVIEW ARTICLE

# Grammatici certant[1]

## BAS AARTS

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**Rodney Huddleston & Geoffrey K. Pullum** (in collaboration with **Laurie Bauer, Betty Birner, Ted Briscoe, Peter Collins, David Denison, David Lee, Anita Mittwoch, Geoffrey Nunberg, Frank Palmer, John Payne, Peter Peterson, Lesley Stirling** and **Gregory Ward**), *The Cambridge grammar of the English language*. Cambridge: Cambridge University Press, 2002. Pp. xvii + 1,842.

1. INTRODUCTION

The first large-scale modern grammars of English were Quirk et al.'s *A grammar of contemporary English* (1972) and *A comprehensive grammar of the English language* (1985). It has taken 18 years for a major competitor to be published. Many linguists, especially those whose main focus is English, will have looked forward to the publication of the present book. *The Cambridge grammar of the English language* (henceforth *CaGEL*) is first and foremost the brainchild of Rodney Huddleston, whose 1984 *Introduction to the grammar of English* had already established itself as an important text. He was joined by Geoffrey Pullum and the other authors listed above at various points in time.[2]

    *CaGEL* is an awe-inspiring tome which offers a comprehensive descriptive account of the grammar of English. It is based on recent descriptive and

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[1] 'Grammatici certant et adhuc sub iudice lis est' (Grammarians dispute, and the case is still before the courts), from Horace, *Ars Poetica*. I'm grateful to Flor Aarts, Bob Borsley, Geoffrey Leech, Gergana Popova and two anonymous *JL* referees for valuable comments.

[2] *CaGEL* is a bit of a bibliographical oddity. Referring to the book as Huddleston & Pullum (2002) is perhaps rather unfair, given the involvement of thirteen additional authors. One way of getting round this problem, which I've already seen adopted in the literature, is to refer to individual chapters as though they were part of an edited book. Chapter 5 of the grammar (see below) would then be referred to as Payne & Huddleston (2002), and listed in a publication's bibliography as appearing in Huddleston & Pullum (eds.) (2002). However, the book is clearly NOT an edited work, given the massive input of the two lead authors: Huddleston was involved in the writing of all twenty chapters of the book, seven of which he wrote on his own, while Pullum is the co-author of six chapters. Perhaps it is best to refer to this book as Huddleston & Pullum et al. (2002).

theoretical research, and is without doubt the most up-to-date and wide-ranging grammar of English currently available. In what follows I will first discuss the organisation of the book, and then turn to an evaluation of the treatment of a number of topics in the grammar. Given the space limitations and the size of the book, I can only discuss a few of these.

## 2. ORGANISATION AND CHAPTER SUBDIVISION

The first two chapters are introductory: chapter 1 sets out the aims of the book (to provide 'a synchronic, descriptive grammar of general-purpose, present-day, international Standard English', p. 2), and deals with such issues as prescriptivism, speech and writing (including brief remarks about pronunciation and spelling), the methodological outlook of the book (which, in essence, is one where theory informs description, and where analytical choices are justified in meticulous detail), and issues of meaning. No particular theory is mentioned, but most readers will know that Huddleston had an interest in early generative work (see Huddleston 1976a), and that Pullum's interests lie in the domain of modern Phrase Structure Grammar (PSG; see e.g. Gazdar, Klein, Pullum & Sag 1985). The second chapter offers an overview of English syntax and introduces the basic concepts needed to understand subsequent chapters, whose titles are listed here:

1  Preliminaries (Geoffrey K. Pullum & Rodney Huddleston)
2  Syntactic overview (Rodney Huddleston)
3  The verb (Rodney Huddleston)
4  The clause: complements (Rodney Huddleston)
5  Nouns and noun phrases (John Payne & Rodney Huddleston)
6  Adjectives and adverbs (Geoffrey K. Pullum & Rodney Huddleston)
7  Prepositions and preposition phrases (Geoffrey K. Pullum & Rodney Huddleston)
8  The clause: adjuncts (Anita Mittwoch, Rodney Huddleston & Peter Collins)
9  Negation (Geoffrey K. Pullum & Rodney Huddleston)
10  Clause type and illocutionary force (Rodney Huddleston)
11  Content clauses and reported speech (Rodney Huddleston)
12  Relative constructions and unbounded dependencies (Rodney Huddleston, Geoffrey K. Pullum & Peter Peterson)
13  Comparative constructions (Rodney Huddleston)
14  Non-finite and verbless clauses (Rodney Huddleston)
15  Coordination and supplementation (Rodney Huddleston, John Payne & Peter Peterson)
16  Information packaging (Gregory Ward, Betty Birner & Rodney Huddleston)
17  Deixis and anaphora (Lesley Stirling & Rodney Huddleston)

18 Inflectional morphology and related matters (Frank Palmer, Rodney Huddleston & Geoffrey K. Pullum)

19 Lexical word-formation (Laurie Bauer & Rodney Huddleston)

20 Punctuation (Geoffrey Nunberg, Ted Briscoe & Rodney Huddleston)

The individual chapters are well signposted, with chapter titles shown in blue bands at the top of left-hand pages and section numbers and their titles on the right-hand pages. Blue print is used for the titles of sections and subsections. In addition, in various places shaded blue boxes elaborate on topics discussed in the main text for the benefit of specialist readers. It should be noted from the outset, though, that although the blurb tells us that the book is written with linguists and non-linguists in mind, in fact this is very much a book for specialists: the writing is dense and makes few concessions to the uninitiated. The book has Further Reading and References sections, more on which below. Finally, there are two indexes: a lexical index and a conceptual index.

3. DESCRIPTIVE APPARATUS

The descriptions in this grammar and the grammatical terminology used are largely traditional, as is appropriate for a book of this type. Thus, we find definitions of the word classes that have been in use for centuries, though we also encounter more recent terminology, such as DETERMINATIVE/DETERMINER (the former a class label, the latter a function label). There are also shifts in the assignments of particular elements to word classes. For example, *CaGEL* recognises that prepositions can be transitive or intransitive (Jespersen 1924; Emonds 1976), and re-assigns a large number of items previously analysed as adverbs (*now*, *then*) or subordinating conjunctions (*since*, *although*) to the class of prepositions. However, a number of other recent terms have not been adopted. For example, in the clausal domain the notion of COMPLEMENTISER is not mentioned anywhere. While it is of course perfectly acceptable for the authors of this book to decline using this terminology, it would have been a good idea to have mentioned it somewhere, if only in a footnote (in the way the authors HAVE done for the term SPECIFIER), so that users of *CaGEL* can 'translate' the terms they are used to into the terminology of *CaGEL*. Some of the labels used in this book can lead to confusion. Thus, in the description of the noun phrase we come across DETERMINATIVE PHRASES (DPs), but they are not the DPs of Chomskyan grammar. I will return to DPs below.

In his 1984 book, Huddleston professed that 'there are numerous places in the grammar where it is necessary to recognise categories with a clear prototypical core but a somewhat fuzzily delimited periphery' and that 'some measure of indeterminacy may arise over the delimitation of non-proto-typical instances' (1984: 72). *CaGEL* also recognises intracategorial shadings of class representativeness, but it does not recognise intercategorial gradience.

While the grammar extensively discusses the problematic borderlines between categories, in the end an either-or choice is made, and elements are assigned to one class or another. In part, this insistence on strict categorisation will have been Pullum's influence, given his dismissal of John Ross's squishes almost three decades ago (1976: 20), and given that he later disparagingly, though amusingly, referred to some of the adherents of fluid categorial boundaries as 'Fuzzies' (cf. Pullum 1991: 54–55; see also Aarts 2004).

*CaGEL* makes use of tree diagrams in representing syntactic structures, which is unusual in descriptive work, and these sometimes even contain 'empty categories'. As an example, the tree structure for *I can't remember what Max said Liz bought* (p. 49) involves a position labelled GAP in the direct object position of *bought* with the clause-initial *wh*-element in 'prenuclear' position, the 'nucleus' being the clause *Max said Liz bought*. There is no suggestion of movement of any kind (so that GAP ≠ trace), but we do have co-indexing of *what* and the GAP. This way of dealing with long-distance dependencies is a nice compromise between a transformational grammar account and a PSG account. Other empty categories are also analysed as gaps. Thus, in the sentence *Kim was glad [_ to reach home]* the subordinate clause lacks a subject (p. 1175), and in what are labelled HOLLOW CLAUSES (pp. 1245f.), e.g. *The problem took her only a few minutes [to solve _]*, a nonsubject is missing. Note that there is no gap here for the missing subject of the subordinate clause.

## 4. DATA

Like Quirk et al. (1985), this book is corpus-based to a certain degree: it uses data from a variety of written text collections of British, American and Australian English, although the text example sources are not explicitly identified in the grammar. It is a matter of some regret that *CaGEL* used exclusively written material, especially in an age when spoken material is readily available, even in grammatically analysed form (see e.g. Nelson et al. 2002).

The book is what we might call 'sensibly corpus-based', in that it uses corpus data where they can illuminate a particular grammatical problem under discussion, or demonstrate attested usage. This contrasts with much current 'obsessively corpus-based' work, which manipulates often not very insightful statistical information gleaned from a corpus. The use of corpora in linguistic research is generally still contentious,[3] but there are signs that this is changing rapidly. Geoffrey Pullum, perhaps somewhat surprisingly, enthusiastically embraced the use of corpora while promoting *CaGEL* in a series of talks at the end of 2002, and other theorists have expressed

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[3] Noam Chomsky, asked in an interview with the present author what his views on corpus linguistics are, replied: 'It doesn't exist. If you have nothing, or if you are stuck, or if you're worried about Gothic, then you have no choice' (Aarts 2001: 5). This view is clearly unreasonable, and undervalues the importance of attested data.
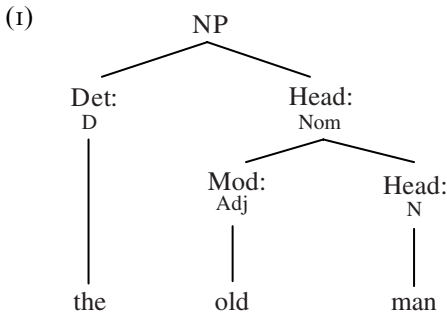
similar opinions. Consider, for example, the views recently expressed by Thomas Wasow:

> [W]hile data from corpora and other naturalistic sources are different in kind from the results of controlled experiments (including introspective judgment data), they can be extremely useful. It is true that they may contain performance errors, but there is no direct access to competence; hence, any source of data for theoretical linguistics may contain performance errors. And given the abundance of usage data at hand, plus the increasingly sophisticated search tools available, there is no good excuse for failing to test theoretical work against corpora. (Wasow 2002: 163)

We might call this methodological stance, which advocates the use of any useful source of data relevant to the research at hand, an 'instrumentalist' one, and it is surely the common sense view of how to use data.

## 5. NOUNS AND NOUN PHRASES

*CaGEL*'s chapter on nouns and noun phrases offers an impressive book-length account (200 pages) of nominal expressions. In dealing with these, the grammar avoids explicitly adopting 'some version of X-bar theory'. In the past this very phrase made one of the lead authors of this book fume (Pullum 1985). But adopting an idiosyncratic X-bar framework is exactly what *CaGEL* seems to be doing in recognising a category NOMINAL (Nom), rather than the more widely known Chomskyan N-bar. (Nom is also found in Sag & Wasow (1999: 37, 75), a PSG textbook.) However, unlike N-bar in modern X-bar theory (see e.g. Haegeman 1994), Nom can function as head.[4] Thus a simple NP like *the old man* is analysed as in (1) below (p. 329):[5]

(1)

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                       NP
              ┌─────────┴─────────┐
           Det:                Head:
            D                   Nom
                          ┌──────┴──────┐
                        Mod:         Head:
                        Adj            N
                         │             │
            the         old           man
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[4] In early X-bar theory N-bars were allowed to be heads, cf. Jackendoff (1977: 30): 'The *head* of a phrase of category $X^n$ can be defined in two different ways, either as the $X^{n-1}$ that it dominates or as the lexical category X at the bottom of the entire configuration'. See also Gazdar, Klein, Pullum & Sag (1985: 50), who also allow bar-level categories to be heads within a Phrase Structure Grammar approach.

[5] The phrasal level is often omitted in the grammar for simplification (p. 57), as is the AdjP here. I'm not sure that this is a good idea from a pedagogical point of view.

Here the overall NP is headed by Nom, which in turn has the noun *man* as its head. This element is the ULTIMATE HEAD of the NP, i.e. 'the final head element in a line running from the NP through any intermediate heads until we reach the level of the word' (p. 330). For other phrase-types intermediate categories are not adopted though it is suggested that clauses are headed by VPs, which in turn are headed by V (pp. 55, 473).

*CaGEL* resists the temptation to analyse nominal phrases as DPs, in the sense of Abney (1987), rather than NPs, although, as we saw above, the grammar does recognise DPs, albeit of a different type. DPs are used here for such strings as *almost all* and *at least* in [NP[DP *almost all*] *copies*] *were lost* and [NP[DP *at least ten*] *people*] *were killed*, but not for *both* in *both those copies*, where *both* is analysed as a PREDETERMINER MODIFIER (or PREDETERMINER), which has scope over the NP *those copies*, to which it is adjoined (p. 331), as in (2).

(2)

NP
Predeterminer: D — both
Head: NP
  Det: D — those
  Head: N — copies
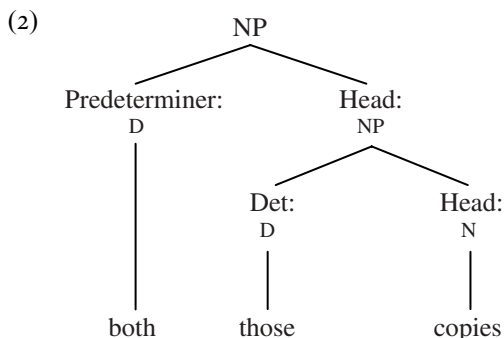
In Quirk et al. (1985) specifying elements like *both* and *those* are analysed in terms of positional classes (PREDETERMINER, CENTRAL DETERMINER, POSTDETERMINER), an analysis that was largely adopted in Huddleston (1984). The Quirk et al. account is unsatisfactory because it does not recognise the hierarchical relationships these words enter into with each other. The present analysis is an improvement because it acknowledges that the element *both* in the tree above modifies not just *those* but the string *those copies*. However, the label PREDETERMINER for *both* is an unfortunate choice, partly because of the historical baggage it carries, alluded to above, and partly because one is inclined to interpret the affix *pre-* in *predeterminer* as a determiner that 'determines' the element it precedes, in the same way that a *premodifier* modifies the element in front of which it is placed. Other questions arise with regard to the analysis above. For example, why are *both* and *those* (and *the* in (1) for that matter) on their own not also DPs? Presumably the reason is that these elements cannot be expanded, but this would be inconsistent with the treatment of pronouns and proper nouns, which also generally resist expansion, but are analysed elsewhere in the grammar as nouns heading

NPs. Another problem concerns what *CaGEL* calls PERIPHERAL MODIFIERS. These are elements that can occur at the peripheries of NPs, as in *even all the preposterous salary from Lloyds that Bill gets* and *the car alone*, where *even* and *alone* are peripheral modifiers. An element like *even* is left-adjoined to NP, even if there is a predeterminer present, as in the [*even all* …] NP above. What is problematic is that it is now impossible to structurally distinguish between peripheral modifiers and predeterminers. If both are adjoined to NP, why can't we say *\*all even the preposterous salary from Lloyds that Bill gets*? An additional complication is that *CaGEL* needs a different label for *both* in *both books*, where it is simply a determiner.

## 6. VERBS: CATENATIVES

It's gratifying to see the 'auxiliaries as main verbs' analysis adopted in this grammar (here called the CATENATIVE-AUXILIARY ANALYSIS, as opposed to the DEPENDENT-AUXILIARY ANALYSIS). Ever since Ross (1969) and Pullum & Wilson (1977), this has been the most sensible way to analyse auxiliaries. In his 1984 textbook Huddleston did not adopt the analysis, though the shorter, 1988, version of that book did. There is a lengthy comparison of the two analyses (in blue boxes), which essentially sets out the arguments put forward in the debate between Rodney Huddleston and Frank Palmer during the 1970s (e.g. Huddleston 1974, 1976b; Palmer 1974/1987, 1979). While conceding that the dependent-auxiliary analysis has some descriptive advantages, in the end the authors adopt the catenative-auxiliary analysis (see pp. 1214ff.).

This brings me to the label CATENATIVE, which is applied to verbs (auxiliaries included) taking non-finite complements (CATENATIVE COMPLEMENTS), as in the following example (p. 65):

(3)   She intends to try to persuade him to help her redecorate her flat.

The catenative verbs here are *intend*, *try*, *persuade* and *help*. Constructions that involve a postverbal NP, as is the case for *persuade* and *help* in (3), are labelled COMPLEX CATENATIVE CONSTRUCTIONS. For *CaGEL* catenative complements are a separate type of complement, and are not to be regarded as direct objects, predicative complements, etc. To my mind the term catenative is completely superfluous (as are its compound derivatives) – because all catenatives are main verbs – and indeed misleading. Consider the following examples (pp. 1195 and 1202):

(4)   Liz **hoped** to convince them.
(5)   Liz **seemed** to convince them.
(6)   Pat **persuaded** Liz to interview both candidates.
(7)   Pat **intended** Liz to interview both candidates.

The differences in syntactic behaviour of the verbs in these constructions are difficult for students of syntax to grasp, even at advanced levels. Of course,

*CaGEL* carefully explains the differences between the simple catenatives *hope* and *seem*, and between the complex catenatives *persuade* and *intend*, but the fact that the grammar labels each of the highlighted elements in (4)–(7) as catenative verbs makes understanding this area of grammar more difficult than is necessary. The reason is that readers are led to believe that there must somehow be something other than their superficial concatenative properties that leads the authors to assign the same label to these verbs.

The different ways in which constructions like (4)–(7) have been analysed have been well-documented (cf. e.g. Chomsky 1973 vs. Postal 1974 on what Bach (1977: 624) decribed as a 'monumental battle' over the rule of Raising, also discussed in Huck & Goldsmith 1995; see also Postal 2004, chapter 3, 'A new raising mystery', which appeared when this article went to press). The authors of *CaGEL* analyse (4) as involving an ordinary subject and a catenative complement, while (5) involves a raised subject. Sentences (6) and (7) are analysed as complex catenative constructions involving an ordinary object and a raised object as internal arguments, respectively. There are of course good reasons for analysing *Liz* in (7) as the subject of a subordinate complement clause. I won't go into all of them here because most of the arguments have been well-rehearsed. Let's merely consider the contrasts shown in (8) and (9).

(8) (a) Pat persuaded Liz to interview both candidates. ( = (6))
    (b) Pat persuaded both candidates to be interviewed by Liz.
(9) (a) Pat intended Liz to interview both candidates. ( = (7))
    (b) Pat intended both candidates to be interviewed by Liz.

For Chomsky-inspired linguists these data show that *Liz* is an object in (8), but not in (9): after all, if the postverbal NP is exchanged for another, which is what is happening with these passivisation facts, we would expect this to make a difference in meaning if an element is a direct object, but not if it functions as the subject of a subordinate clause. These linguists prefer a description which does not allow non-arguments of a particular predicate to have a grammatical function vis-à-vis that predicate because in this way syntax/semantics mismatches are avoided – or at least ALMOST avoided, because Subject-to-Subject Raising constructions like (5), in which the matrix clause subject is not an argument of the matrix predicate, are of course a problem for those who accept this reasoning. In citing the data in (8) and (9) (p. 1202), *CaGEL* recognises that the meaning changes in the former, but not in the latter. It nevertheless opts for an analysis in which the syntax does not match the semantics, leading the authors to observe, with regard to (7), that '[w]ith *intend*, therefore, we have three complements but only two arguments' (p. 1201).[6] In effect, the postverbal NP is grammatically, but not

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[6] Note that in *CaGEL* subjects are regarded as verbal complements.

semantically, a direct object. Clearly, this analysis is inspired by the 1970s transformation of Subject-to-Object Raising (SOR; Postal 1974). *CaGEL* uses the term 'raising' metaphorically, without explaining that nothing is really raised at all, given that the description is a monostratal one.

In analysing constructions like (7), linguists are really in a no-win situation. Thus, with its SOR analysis the price for *CaGEL* to pay is the mismatch alluded to above. For Chomsky-inspired analyses Subject-to-Subject Raising constructions are problematic, as we've seen, and in addition a number of troublesome morphosyntactic facts need to be explained, e.g. the fact that postverbal NPs after *intend* behave like direct objects because they can be fronted under passivisation and because they are assigned accusative case. In GB/P&P theory the 'solution' was to say that (7) is an Exceptional Case Marking (ECM) construction. But the concept of ECM was always unsatisfactory (who likes exceptions?), and balked at by many. Furthermore, Postal & Pullum (1988) noticed that expletive elements can occur in subcategorised positions (as in e.g. *They never mentioned IT to the candidate that the job was poorly paid*; Postal & Pullum 1988: 643), which is unexpected. SOR was excluded from mainstream generative work because it results in a violation of the Theta Criterion in that the raised NP, or rather the chain of which it is a part, is assigned two thematic roles: one by the matrix predicate, the other by the predicate of the subordinate clause (see e.g. Haegeman 1994: 439). Some GB linguists allowed SOR on the grounds that although the postverbal NP is assigned two thematic roles, they are assigned by two different predicates.

SOR is resuscitated in the work of Authier (1991), who allows the grammar to generate a position in which the expletive *it* (in the sentence from Postal & Pullum cited above) receives Case, but not a theta role, which is instead assigned to the clause. This position would also be occupied by nominal phrases in ECM structures, such that *I believe him irrefutably to be a liar* involves movement of *him* from inside the CP to the newly-created position before the adverb. In effect, this is SOR.

For Bowers (1993), too, SOR is a possibility: direct objects are positioned in Spec-of-VP, and '[s]ince Spec positions can in general be Θ bar-positions, it should be the case that object position, as well as subject position, is a possible Θ bar-position. In fact, Postal & Pullum (1988) have argued that one of the crucial tests for a Θ bar-position, namely, occurrence of expletives, holds for object position as well as subject position. This in turn makes it possible, contrary to the current view, to have raising-to-object (RO), as well as raising-to-subject (RS), without violating the Θ-criterion' (Bowers 1993: 618; see also Bowers 2001). For Bowers subjects are generated in the specifier position of a Predicate Phrase (PrP); they then move to Spec-of-IP.

SOR is also adopted in HPSG (though again in a metaphorical sense; see Pollard & Sag 1994: 112ff., 132ff.) through 'structure sharing' (*ibid.* 140). For raising verbs structure sharing is handled by the Raising Principle, which

states that if a lexical entry E (a raising verb) subcategorises for a non-expletive element X, then X is not assigned a thematic role, provided that X is subcategorised for by a non-subject element Y (the lower VP) which also forms part of E. It seems to me that the Raising Principle is rather stipulative. But then, so is the stipulation in GB syntax that subjects of RS predicates can be non-arguments of those predicates.

The problems signalled above for the analyses proposed in the literature could be said to stem from the fact that they are all formulated within a strictly Aristotelian (all-or-none) framework of thinking: the postverbal NP in a sentence like (7) is either a direct object within the matrix clause, or it is not, in which case it must be the subject of a subordinate clause. In actual fact, the postverbal NP displays both object-like characteristics (e.g. it can become the subject of a passive sentence, attracts accusative case, etc.), as well as subject-like characteristics (e.g. it has a thematic role to play with regard to the lower predicate, it can be realised as a dummy element, etc.). But it would violate Aristotelian principles to regard the postverbal NP as a direct object and a subject AT THE SAME TIME, and presumably for this reason an either-or choice is opted for in most accounts. We then arrive at the stalemate noted above where all solutions have problematic aspects. In the final analysis a framework that minimises syntax–semantics mismatches is perhaps to be preferred, mainly on the grounds that it allows for a more streamlined, and hence more learnable, grammar.

### 7. VERB PHRASES: THE ELEMENT *TO*

An interesting innovation within the domain of VPs is Huddleston's analysis in chapter 14 of the infinitival marker *to* as a VP subordinator (pp. 1183–1186), so that the tree for *for you to lend him money* in e.g. *It's mad for you to lend him money* is as in (10).

(10)
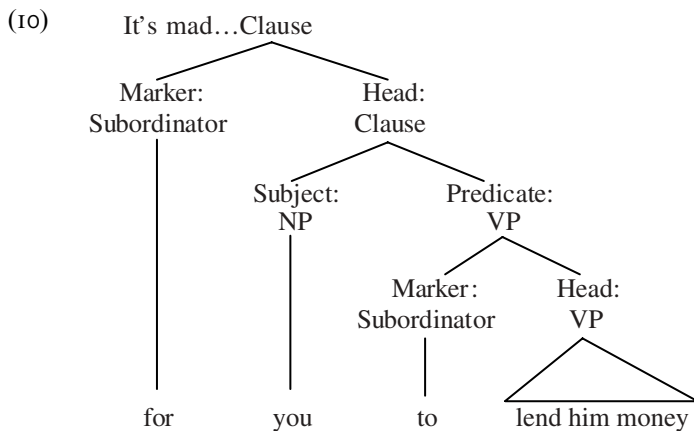
Huddleston rejects an analysis of *to* as an auxiliary verb, but admits that there is some justification for it, although the arguments which support this view are not systematically discussed, which is a shame because readers will not be able to evaluate the verb analysis of *to* for themselves. He notes that 'some linguists have defended that view' (p. 1185). This is being a little bit coy, because one of those linguists was Pullum, who defended this analysis at great length (Pullum 1982).[7] Instead, it is argued that *to* has no meaning, like ordinary subordinators, and that it functions with respect to the VP as do typical subordinators like *whether* or *that*: 'It would seem both syntactically and semantically appropriate to place *to* in the same category as *whether* and *that*, the category of subordinators' (p. 1185). After this conclusion there follows a discussion of two recalcitrant differences between typical clause subordinators and *to*, which are nevertheless not reasons for Huddleston to abandon his analysis. The first of these concerns the fact that *to* can be stranded, like auxiliaries, and must then not be stressed. Secondly, *to* can be preceded by other elements:

(11)   She taught her children **always to tell the truth**.
(12)   I'll try **not to underestimate the opposition next time**.

In these cases *always* and *not* structurally form part of the subordinate clause. This is not possible for typical clause subordinators where elements preceding a subordinator are construed as belonging to the matrix clause, while elements following a subordinator belong to the subordinate clause:

(13)   He thought always [that there would be some way to work it out].
(14)   He thought [that always there would be some way to work it out].

Huddleston concludes (p. 1186) that *to* 'is of course unlike the other subordinators anyway, in that it is a marker of VPs rather than clauses, so what we have to say is that the VP subordinator allows for various adjuncts in its VP to precede it'.

The argumentation regarding *to* is less than compelling for a number of reasons. One is that there are other possible analyses of *to*, which are ignored (see Pullum 1982 for an overview), most notably analyses which take *to* to be an inflectional element, as in GB-theory, or a meaningful preposition, as argued in Duffley (1992).[8]

Secondly, and more importantly, what's not addressed is the question of why VPs need subordinators in the first place. In the sentence above, the *for*-clause functions as an adjectival complement, and the subordinator occurs after the adjective to grammatically mark the following clause as subordinate. But there seems to be no grammatical need for the VP to be

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[7] An entry for this article does not appear in the references section. See below on *CaGEL*'s inadequate referencing. Thanks to Bob Borsley for pointing out this paper to me.

[8] This book appears in the references section of *CaGEL*, but is not referred to anywhere.

formally marked as subordinate. What is it subordinate to? One might object that, if anything, the subordinator is the head and the VP its complement. The same would apply to the subordinator *for* and the clause that follows it. However, the grammar specifically argues, in blue box sections in chapter 11 (pp. 955–956, 1011–1014), that the subordinators *that*, *whether* and *if* (to which we must now add *to* and *for*) are not heads, but 'markers' (a term borrowed from modern PSG) of subordination. (By contrast, the traditional subordinating conjunctions, minus *that*, *whether* and *if*, are analysed as prepositions, functioning as complement-taking heads.) One of the reasons that is given for not analysing these words as heads is that they can be omitted (p. 1186):

(15)   I think (that) this is true.
(16)   All I did was (to) ask a question.

The argument is weakened by the fact that in the case of *to* the hedge 'under certain conditions' needs to be added and by the fact that *whether* can't be omitted. Notice also that *for* cannot be omitted if the subject of the sub-ordinate clause is overt (cf. *It's mad *(for) you to lend him money*). We also need to ask why bare infinitival VPs complementing auxiliaries, perception verbs and causatives apparently do not require a subordinator.
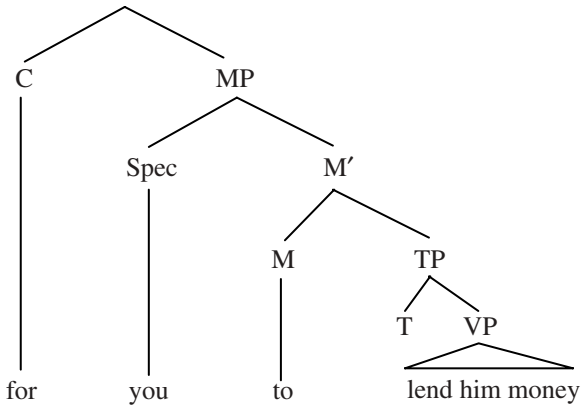
According to Huddleston, the principal reason for not analysing *to* as a verb is the fact that it flouts the generalisation that all verbs can function as heads of main clauses; infinitival *to* would be the only exception to this. However, it is not clear that this is actually true, given the possibility of the following sentence, which I saw on a sign: *All visitors to report to the reception*. Here we could regard *to* as a verb which takes *report to the reception* as its clausal complement.[9] In any case, even if it were true that *to* is an exception to Huddleston's generalisation, it's also true that *CaGEL*'s proposed analysis cannot do without a number of exceptions of its own.

It is a pity that Huddleston suppresses some of the arguments given in Pullum (1982) for the various competing analyses of *to* and for the analysis proposed there, which regards this element as 'a kind of empty auxiliary verb with the function of marking infinitival verb phrases (or clauses)' (1982: 205). On balance, I find this analysis quite plausible. I would go further, though, and suggest that *to* is a non-finite modal auxiliary verb. A distributional argument supporting this view has often been observed in the literature, namely the fact that the modal verbs and *to* are in complementary distri-bution, which suggests that they belong to the same category. In addition, this view is also supported by the meaning of *to*. Contrary to received opinion, infinitival *to* is not without semantic content because it frequently expresses modal meaning. Thus, after desiderative verbs *to* expresses an

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[9] *To* is then analysed in the same way as *be* in *He was writing a letter* in *CaGEL* (p. 1218), namely as a main verb, *was*, which takes *writing a letter* as its clausal complement.

unrealised event or situation (*I want* (*him*) *to go*), and it can express deontic obligation (as in the above-mentioned text sign *All visitors to report to the reception*). In phrase structure terms, we might adopt Miller's (2002) proposal and regard *to* as heading a Mood Phrase (MP):
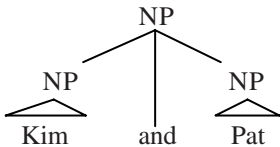
(17) It's mad... CP

```
                  CP
                 /  \
                C    MP
                |   /  \
                | Spec  M′
                |  |   /  \
                |  |  M    TP
                |  |  |   /  \
                |  |  |  T    VP
               for you to  lend him money
```
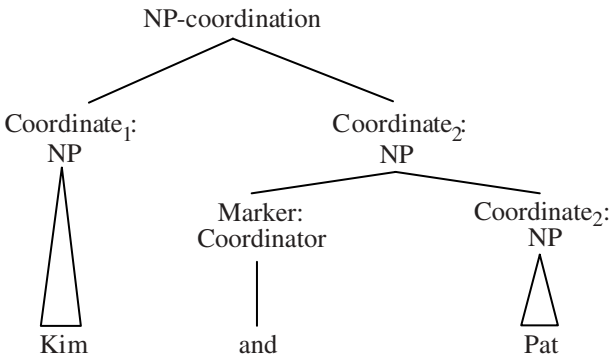
## 8. COORDINATION

Coordinate structures are widely treated as expansions of the conjoins (or COORDINATES, as Huddleston, Payne & Peterson call them) that constitute them, such that two coordinated NPs together form a new NP:

(18)

```
           NP
         /  |  \
       NP  |   NP
       |   |   |
      Kim and  Pat
```

*CaGEL* deviates from this analysis by analysing NP coordinations as follows (p. 1277):

(19)

```
                NP-coordination
              /                  \
     Coordinate₁:            Coordinate₂:
        NP                       NP
        |                    /        \
        |              Marker:      Coordinate₂:
        |             Coordinator       NP
        |                  |            |
       Kim               and          Pat
```

Huddleston, Payne & Peterson note that they 'refer to *Kim and Pat* as an NP-coordination, not an NP: it is functionally like an NP but does not have the structure of one' (p. 1276). The evidence for analysing the Coordinator and Coordinate₂ in (19) as a constituent is three-fold. Firstly, it concerns data like the following:

(20) (a) They allowed **the others but not me** a second chance.
    (b) They allowed **the others** a second chance **but not me**.
(21) (a) Did **the boss or her secretary** tell you that?
    (b) Did **the boss** tell you that **or her secretary**?

In each case a string involving the coordinator and the second coordinate has been displaced, which demonstrates that these elements form a constituent. Secondly, it is claimed that the coordinators can occur sentence-initially in such interchanges as (22).

(22) A: She thoroughly enjoyed it.
    B: And so did her mother.

Here B's rejoinder is said to form a constituent. Finally, it is pointed out that intonational breaks in coordinations occur before, not after, the coordinator: *He invited his brother | and his sister | and his mother*. While we might agree with the evidence for analysing 'Coordinator' and 'Coordinate₂' as constituents, the proposed analysis does raise a number of questions. Firstly, what is the categorial status of an 'NP coordination', if not an NP? Secondly, while the grammar defines coordination as 'a relation between two or more elements of syntactically equal status' (p. 1275), this is not what the representation in (19) above suggests, unless you cheat a little by assigning two nodes the identical label 'Coordinate₂'. (The higher one is called the EXPANDED COORDINATE, while the lower one is the BARE COORDINATE.) Above I quoted Huddleston, Payne & Peterson as saying that *Kim and Pat* is 'functionally like an NP but does not have the structure of one'. Maybe so, but surely in the proposed analysis *and Pat* is functionally, structurally and distributionally even less of an NP, as the data below show:

(23) *__And Pat__ turned up. (where *and Pat* is the subject of the sentence)
(24) *We visited **and Pat**.
(25) *She gave it to **and Pat**.

Clearly a string like *and Pat* cannot occur in canonical NP-positions.[10]

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[10] Bob Borsley (p.c.) has suggested to me that an additional problem for (19) is that we should expect to be able to interchange *Pat* and *and Pat*, which is patently not the case. He notes that *and Pat* is 'an NP in much the same way as *that*+S is a clause' and '[t]here are positions where both NP and *and*+NP can appear, as shown by *Tom*, (*and*) *Dick and Harry*, and positions where just one can appear. Similarly, there are positions where both *that*+S and S can appear, e.g. object of a verb, and positions where just one can appear.

## 9. THE FURTHER READING AND REFERENCES SECTIONS

A serious flaw of this book is the very sparse bibliographical information that it supplies. In a publication of 1,842 pages one would expect to find a sizeable bibliography. *CaGEL* has only just over six pages of suggestions for Further Reading while the References section itself has fewer than eight full pages! This is woefully inadequate for a number of reasons. First, by not listing all the sources that they used, the authors do not sufficiently acknowledge their indebtedness to work carried out by scholars in the field over many decades, indeed centuries. Secondly, bibliographies are indispensable for users of a book of this type to enable them to trace the original sources of the ideas that are defended or argued against. To take an example, in chapter 1 the notion of 'conversational implicature' is discussed; however, the classic 1975 paper by Paul Grice, in which implicatures were first introduced does not appear in the References section (though mention is made of the Syntax and Semantics series volume edited by Peter Cole & Jerry L. Morgan, *Speech acts* (1975), in which it appeared). How will readers interested in implicatures find out that Grice was the *auctor intellectualis* of the concept? Similarly, although this grammar carefully argues for the analyses it proposes, it does not point readers to the work of scholars who have argued for conflicting viewpoints. As we have seen, the dependent-auxiliary and catenative-auxiliary analyses mentioned above were a hot topic of debate during the seventies, but the references to this discussion are missing. Doing research is to a large extent a matter of disentangling and critically evaluating different viewpoints and strands of thinking, and it is of real importance for readers to be able to trace the provenance of the analyses described. It is also essential for grammar instructors to be able to direct their students to books like this, which, ideally, have extensive bibliographies where references to publications on all areas of grammar are included. Unfortunately, *CaGEL*, which is so admirably up-to-date, does not offer its users adequate assistance with these tasks.

## 10. ENGLISH GRAMMAR IN THE TWENTY-FIRST CENTURY

At the beginning of this article I mentioned Quirk et al. (1985). How does *CaGEL* compare with this book? Clearly *CaGEL* is much more up-to-date, and as such has the edge over its competitor in advancing a treatment of grammar that benefits from almost two decades more research. It is also far

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Only the former is possible in subject position and only the latter is possible after *before*, *after*, *since* and *until*. I assume, therefore, that it's reasonable for NP and *and*+NP to have similar labels although they cannot have exactly the same label.' Crucially, however, *that*+S distributes like a clause and behaves like a constituent, whereas *and*+NP does not distribute like an NP, as we have just seen.

more argumentationally adequate in thoroughly defending particular analyses, while rejecting others. However, Quirk et al. is stronger in explicitly situating its findings in the larger linguistic tradition (both descriptive and theoretical), and in acknowledging its indebtedness to that tradition. What's more, its style of writing is more accessible.

Do we need large reference grammars like *CaGEL* in the twenty-first century? Is this kind of book perhaps really rather old-fashioned? And does this book represent 'an unholy marriage between two irreconcilable linguistic approaches, (early) generative grammar and Phrase Structure Grammar', as one anonymous referee suggested to me? To my mind the answer to the first question is emphatically 'yes', while that to the second is an equally emphatic 'no'. *CaGEL* is a modern book which has a number of major strengths. Firstly, it consolidates a vast amount of knowledge, accumulated over time, that linguists generally agree about. Secondly, it allows readers to find in one place comprehensive and up-to-date accounts of particular areas of grammar which can act as starting points for their own thinking and research. Thirdly, as we have seen, it offers analyses of grammar as viewed from different perspectives with extensive motivation for the conclusions eventually arrived at. And finally, it is an immensely valuable pedagogical tool which no teacher or serious student of English can do without. As for the objection against 'fusion grammar', as we might call it, it's worth stressing that *CaGEL* doesn't have a 'pick-and-mix' philosophy, even though it's true that in places we can discern a degree of 'principled eclecticism'. While this might be problematic for purely theoretical accounts, it isn't really an issue for a grammar of this kind: both good and bad ideas have been proposed in different frameworks, and the analytic choices that have been made in *CaGEL* are generally all well-motivated and sensible.

As should be clear from the above, despite my earlier critical engagement with the book under review, there is no doubt that the publication of this important and outstanding grammar by some of the most distinguished experts in the field is a landmark event in English linguistics. Perhaps the most remarkable feature of *CaGEL* is that it debunks the false opposition that is often set up between description and explanation, and the idea that 'mere description' is inferior to explanation. In the history of grammar writing we have seen, especially in the work of Jespersen, amongst others, that this is simply false, and that a maximally explicit, accurate and argumentationally dependable description of a language *ipso facto* also has explanatory force: good descriptions lie at the heart of good explanations. *CaGEL*, perhaps more than any grammar before it, succeeds in presenting descriptions and explanations of the facts of English by implementing a dynamic dialectic between the two notions, thus offering an integrative and comprehensive account of the complex and ever-challenging system of English grammar.

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