

1 *Basic properties of English auxiliaries*

1.1 Introduction

This book aims to give an account of the grammar and history of English auxiliaries, that is of words like those italicized here:

- (1) *Could* John *have* written it if Mary *didn't*? – No, it *wasn't* written by a man.

Since this group includes words associated with modality, aspect, tense and voice (as in *could*, *have*, *didn't*, *wasn't*) they have often been labelled 'auxiliary' or 'helping' verbs, where an auxiliary is 'a verb used to form the tenses, moods, voices, etc. of other verbs' (*OED* Auxiliary, *a.* and *sb.* B *sb.* 3). This terminology encodes the traditional view that such properties are fundamentally those of verbs, as they are (for example) in the Latin one-word forms *cantabo*, *cantarem*, *cantabatur* in contrast with the corresponding English (*I shall sing*, *(I) might sing*, *(it) was being sung*).

The problems of the present-day analysis and the historical development of this group of words have been a major area for discussion and disagreement in recent years. In this book I will present and justify new analyses in both structure and history. In the first half of the book I will argue that the most appropriate characterization of some of the major idiosyncrasies of the English auxiliary system follows directly from the nature of the categorial relationship between auxiliary and full verb. Auxiliaries do not share morphosyntactic generalizations appropriate to full verbs. Instead we need a fundamentally lexical account of the interrelationships between their categories. This insight leads to a fresh and illuminating account of ordering restrictions on English auxiliaries, of restrictions on the availability of their morphosyntactic categories, of their distribution in ellipsis and of some other individual properties. It also supplies a freshly argued and more detailed answer to the perennial question of whether auxiliaries are like (main) verbs and essentially just a subclass of verb.

The second half of the book will examine the history of English auxiliaries from the earliest times. It is clear that they developed from full verbs, but there

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is dispute as to whether this happened rather suddenly in the sixteenth century or more gradually. I will show clearly that there was already a subordinate 'auxiliary' word class in Old English with distinctive formal characteristics, not just a group of verbs which happened to have uses which were 'auxiliary' in some loosely semantic or functional way. Then I will discuss and interpret the formal and semantic history of this group in early English and the rapid sharpening of its properties at the beginning of Modern English. The rise of periphrastic *do* will also be shown to fit coherently with the more general history of auxiliaries. This all requires the development of a more structured view of word classes. I will suggest an account which is related to work in psychology and 'cognitive grammar', and in which the lexicon is appropriately seen as a point of contact between principles of generative grammar and more general principles of cognitive organization. I will also develop a coherent view of the nature of processes of grammaticalization within this area, and discuss the relevance of possible universal characteristics of a class 'auxiliary'. But I would not claim to have given a complete account of the history. Instead, I have focussed on a coherent area of study which has proved very illuminating and which will form part of a more complete account.

The general assumptions of the argument are those of a relatively nonabstract lexically based syntax. My basic reason for choosing this type of framework is that I have come to think that a major series of generalizations about the auxiliary system of Present-day English essentially involves the lexicon and word-class structure. So the framework is simply the one which most closely reflects the essential properties of the data as I see it. For most of the book the argument is conducted without formalism, but a brief formal account of the present-day system will be given within Head-driven Phrase Structure Grammar in Chapter 3. This belongs to the general class of unification-based approaches to grammar (represented also, for example, by Generalized Phrase Structure Grammar and Lexical Functional Grammar). It has the advantage that unification formalism is coherent, and offers rather simple, general and insightful accounts. The major current alternative is Government-Binding. What I have to say is, however, largely independent of current preoccupations in that area, though I believe my conclusions are (and should be seen as) relevant. But whatever view is taken of the relative merits of these theoretical approaches, it is important to maintain a healthy pluralism despite (or perhaps because of) the recent rapid development of analyses of clause and auxiliary systems, in particular following Pollock (1989).

The central focus of this book is on the grammar of English, and not on the development of any particular linguistic theory. It is partial in that it focusses

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on the properties of words: the reader will not find here a compositional semantics of auxiliary structures, or an account of the progressive. I have found Head-driven Phrase Structure Grammar most centrally relevant because it supplies an appropriate account for the data as I interpret it. But the general argument is not particular to this framework, and it will be relevant to work within other theories in two kinds of way. First, as complementary. It must surely be common ground within any modular approach that there is a considerable place for lexical and lexical class properties within grammar. What I have done should therefore be more or less directly complementary to other types of account. And secondly, I give distinctive rationales for some of the properties of auxiliaries in Present-day English and for their historical development. These offer distinct ways of thinking about some of these grammatical properties.

1.2 Traditional criteria for auxiliaries

The first half of this book is devoted to the grammar of auxiliaries in Present-day English. Chapter 2 argues in detail for a particular type of lexical account, and Chapter 3 provides a short formal account. In this chapter I first review the traditional criteria which distinguish English auxiliaries and discuss the semantic identity of this group. Then I briefly discuss the basic assumptions of my analysis and provide a rapid review of previous work within the generative tradition.

The English auxiliaries are rather sharply defined as a group by distinctive formal properties. The group includes both modal auxiliaries (principally *can*, *could*; *may*, *might*; *must*; *shall*, *should*; *will*, *would*) and non-modal auxiliaries (*be*, *have* and *do*); a full list is given below. Here I will briefly review the traditional formal criteria for auxiliaryhood. This is well-trodden territory, and will be familiar to many readers; see especially Palmer (1988: 14ff.), Huddleston (1980) and Quirk *et al.* (1985: §3.21ff.). Notice that the most important criteria largely apply to the finite auxiliary which is often referred to as the ‘operator’.

Criteria distinguishing auxiliaries from full verbs¹

(a) *Negation*. The operator typically has a form with contracted *-n't*: *can't*, *couldn't*, *won't*, *needn't*, *isn't*, *hadn't*, *don't*, etc. unlike full verbs: **prefern't*, **stopn't*, etc. Some dialects lack *mayn't* or have it with only a restricted distribution, for example in tag questions; others (especially American) lack *mightn't*, or *shan't*, though *shall* may itself be uncommon or virtually absent

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(see Quirk *et al.* 1985: §3.39 note [d], §11.8 note [c]). In Standard English *am* lacks such a form, except in inversion: *aren't I?* But dialects in England normally have an *-n't* form for *am*: *aren't*, *amn't* or *ain't* (Hughes and Trudgill 1987: 14). Only a proportion of *-n't* forms is phonologically predictable as the addition of a cliticized *-n't* to the positive, and they are open to analysis as a series of negative forms (as traditionally in e.g. Marchand 1938), or, more recently, as carrying a negative inflection (Zwicky and Pullum 1983). Palmer (1988: 240) observes 'there is indeed a good case for talking about "a negative conjugation"'. Note that imperative *don't* occurs, but that there is no imperative *ben't* or *haven't*.

The *not* of 'sentence negation' follows the operator but not a 'full' verb. Hence the contrasts of (2). 'Periphrastic' *do* is used with the *not* of 'sentence negation' in cases where there is no other auxiliary, as in (2.c). 'Sentence negation' here is a syntactic concept, essentially equivalent to Klima's 'strong sentence negation', and a rather sharp distinction between auxiliaries and full verbs can be constructed using Klima's tests to separate instances like (3.a), which lacks 'strong sentence negation', despite its semantic closeness to (b) (Klima 1964: 270, Stockwell, Schachter and Partee 1973: 232ff.).

- (2) a. She will not hurt him; you need not laugh; she was not happy; they have not the courage to proceed. (some British English)
 b. *She hurt not him; *he left not; *he stopped not the exam; *when he sings he stops not.
 c. She did not hurt him; he did not leave; he did not stop the exam; when he sings he does not stop.
- (3) a. The baby appears not to be awake.
 b. The baby doesn't appear to be awake.
 (examples from Quirk *et al.* 1985: §14.36)

We must also distinguish the restricted usage of *I know not*, and the negative proform *not* (corresponding to positive *so*) of *I think not*, etc. which is not 'sentence negation'.

- (4) a. I know not. *I know not whether they are coming.
 b. I think not. He said not. They hope not. *I think not that they are coming.

(b) *Inversion*. Inversion of subject and finite operator is typical of a range of largely grammaticized contexts: it occurs in main clause interrogatives, in tag questions, after a fronted negative with scope over the auxiliary, in *and neither* and *and so* tags, and restrictedly in conditionals and comparatives (Quirk *et al.* 1985: §§18.24, 15.36). Tag questions may also involve ellipsis (Huddleston 1970).

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- (5) a. Will she hurt him? Will she not hurt him? Won't she hurt him?
 b. *Goes he? *Hurts she him?
 c. Does he go? Does he not go? Doesn't he go?
- (6) a. You saw what was intended, didn't you?
 b. At no point could I see what was intended.
 c. I could see what was intended, and so could Harry.
 d. Could I but have anticipated his next move, things would have been very different. (also with *had, might, should, were*)

With nonauxiliary verbs such inversions are very restricted, and there is no general pattern like that above. *How goes it?* is formulaic; the type *and so said Mary* is strictly limited in range (thus not **and neither said Mary*).

Here we must distinguish inversions of subject and verb which occur (particularly in narratives) with a range of pragmatic functions. These have a distinct pattern of distribution, and may involve the 'verbal group' as in (7.c).² See Quirk *et al.* (1985: §§18.23), Green (1980, 1985) for surveys.

- (7) a. Round the corner came the little red engine.
 b. Into the room pranced Morris.
 c. By 'strategy' is meant the basic planning of the whole operation. (Quirk *et al.* 1985: §§18.23)

(c) *Ellipsis*. Auxiliaries both finite and nonfinite may appear in elliptical constructions without their normal complement, where the sense of the complement is to be retrieved from the linguistic context of utterance.

- (8) a. John may come on Tuesday, but I don't think Paul will [sc. come on Tuesday].
 b. – John may come on Tuesday.
 – Well, I don't think Paul will [sc. come on Tuesday].
 c. Paul has written to his grandmother, and I suppose Robert may have too, even if Charlie hasn't [sc. written to his grandmother].
 d. – Mary is happy to eat meat or fish.
 – Is she? Well Paul never has been, and John certainly won't be [sc. happy to eat meat or fish].
 e. Paul will bring Mary because he should [sc. bring Mary].

I will refer to this construction as 'post-auxiliary ellipsis', not 'Verb Phrase Deletion'. The analysis this term implies is unsatisfactory for several reasons. First, there is no general ellipsis of verb phrases in English (contrary to what Akmajian, Steele and Wasow 1979 among others imply); rather ellipsis is dependent on the presence of a particular item (here an auxiliary). Secondly, *be* and *have* equally occur in this construction when the retrieved complement is a predicate phrase or noun phrase. Thirdly, since this retrieval may cross

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discourse, syntactic deletion was always an inappropriate analysis (Napoli 1985).

Here I accept the arguments of Hankamer and Sag (1976) and Sag (1979) that we need to distinguish elliptical constructions which require a linguistic antecedent from those which do not, and that post-auxiliary ellipsis belongs to the first class (for further detail and distinctions see also Quirk *et al.* 1985: §§12.31ff.). There is a good general distinction here, and auxiliaries form a subgroup among items permitting ellipses which require a linguistic antecedent.

But there is also another elliptical construction which gives us a more particular test for auxiliaryhood. In it an auxiliary precedes a partial ellipsis and some of the complementation of the missing head is retained. This construction is discussed by Levin (1978, 1980), who calls it 'pseudogapping'. The examples of (9.a–d) are attested utterances cited from Levin (1980: 76–7).

- (9)
- a. Probably drives him crazy to have her call him all the time. It would — me —.
 - b. If you don't believe me, you will — the weatherman!
 - c. — I just hope it will make you happy.
— Hasn't it — you — ?
 - d. I'm going to call him back on Monday, as I am — several other people —.
 - e. John will eat the bananas, even if he won't — the apples.
 - f. Mary gave money to the orphanage partly because she hadn't — to the church.

It seems clear that pseudogapping should be generalized with post-auxiliary ellipsis, so that essentially one account should be given for both constructions (hopefully within a more general account of ellipsis). Pseudogapping indeed shows an overt similarity to gapping, but its distribution implies that it is more closely related to post-auxiliary ellipsis. The two constructions share the context of a preceding auxiliary (which is *do* in default of another form), and both have the freedom to occur within a range of structures; see (8) and (9).³ Gapped constructions, by contrast, lack their highest auxiliary, and are virtually restricted to coordinate structures in Present-day English; see (10) and Quirk *et al.* (1985: §13.92).⁴

- (10)
- a. Paul will drink tea, and his wife, coffee.
 - b. *If Paul will drink tea, (then) his wife, coffee.
 - c. *Paul will drink tea, partly because his wife, coffee.
 - d. *- Paul will drink tea.
— His wife, coffee.

Thus pseudogapping gives us another and more particular test for auxiliaryhood.

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(d) *Emphasis*. There is a straightforward contrast between the sentences of (11). In the first the tonic (or sentence stress) is on *do*, and what is emphasized is apparently the polarity of the sentence. This is not necessarily contrastive, but may simply be an affirmation of a proposition open to doubt. In the second the tonic (or sentence stress) is on *eat*, and here the scope of the emphasis lies within the verb phrase, centrally involving the verb itself.

- (11) a. I *do* eat chocolates (in case you thought otherwise).
 b. I *eat* chocolates (I don't stuff them in my ears).

Although this may provide a useful test for auxiliaryhood especially in the case of *do*, perfect *have*, and *be*, it is not to be stated as a property peculiar to auxiliaries, but rather follows from the principle that emphasis involves paradigmatic contrast within a relevant semantic field. Thus in *My leg hurts* a tonic on *hurts* would customarily imply contrast with not hurting or with tickling, rather than with being hairy or with stamping. In the case of auxiliaries the point is that the relevant contrasts may be extremely impoverished, so that contextually there may be focus on polarity. But modality and tense/aspect may surely also be included in what is emphasized, as in the following, and indeed quite generally.

- (12) a. – They're on the floor.
 – But they *can't* be on the floor.
 b. They're on the floor. They *must* be on the floor.
 c. If you arrive early enough, there *should* still be some food.
 d. Please go. You simply *must* leave.
 e. If they arrive; my dear fellow, they *have* arrived.

I do not then see this as an independent property of auxiliaries so much as a consequence of the structuring of the semantic fields to which they belong.

(e) *Clitic forms*. Some operators have clitic forms which are available after pronouns, or (in the case of 's) more generally. Some are represented orthographically, as in (13.a). But not all are; Palmer (1988: 243) additionally lists weak nonsyllabic forms for the items in (13.b).

- (13) a. 's (has, is), 'm (am), 'd (would, had), 've (have), 'll (will, ?shall), 're (are)
 b. can, could, must, shall, should, do, does, did, was, were

Here we must distinguish reduced forms with vowel, like [əv] in *They will have eaten*. In *They have eaten*, *They've eaten* this is a possible pronunciation, but so is a further reduction to [v]. The clitic in question is the full nonsyllabic reduction. In the case of 're in nonrhotic dialects the full reduction is to a brief glide, or even to complete absorption into the preceding form in the case of *they're*, *you're*, *we're*.

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(f) *Adverb position.* Some adverbs, in particular epistemic adverbs like *probably*, *certainly*, *maybe* and adverbs of frequency like *often*, *always*, *never*, *hardly* may occur after an auxiliary operator, but do not generally occur after V within VP with the relevant wide scope (unless they form a separate tone group). See Chapter 2 note 10 for some sceptical comments on this criterion.

- (14)
- a. They will probably have eaten by six o'clock.
 - b. They will hardly have eaten by six o'clock.
 - c. ?They intend probably to eat by six o'clock.
 - d. They intend never to eat by six o'clock. (narrow scope)
 - e. *They ate probably their dinner by six o'clock.
 - f. *They ate hardly their dinner by six o'clock.

(g) *Non-occurrence after periphrastic do.* Auxiliary *do* does not occur with a following nonfinite auxiliary except in imperative sentences. I shall distinguish 'periphrastic' and 'imperative' *do* because of their distributional differences. Thus (nonimperative) periphrastic *do* never occurs in construction with *be* and perfect *have*, and it differentiates auxiliary/nonauxiliary constructions with other items. (But see Palmer 1988: 159f. for an exception to this statement.)

- (15) *They didn't have left. *They do be naughty. They don't need *(to) leave yet.

These criteria apply generally to the group of auxiliaries. Modals have some further distinctive properties.

(h) Modals lack nonfinites in Standard English (though not all do in all dialects).

- (16) *They will can come. *They have could come. *For Paul to may go.

The fact that modals may not occur in sequence, or after an initial auxiliary, is taken here to follow from their lack of nonfinites, and not to be a separate property (see Chapter 2).

(i) Modals lack the third person singular present indicative inflection of full verbs. *He will* contrasts with *he wills*. *Dare* allows *if he dares go*, but this is probably better seen as an exception to the next criterion.

(j) Modals are followed by a plain infinitive, and so is *do*. Only *help* among full verbs has this possibility, though some verbs take a plain infinitive with preceding NP, for example *make*, *see*. *Ought* and *used* occur with the *to*-infinitive. *Dare* and *need* only do so when they are not characterized as modals.

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(k) 'Tense' relationships in modals are not parallel to those of verbs. Some lack preterites (*must, need*). Where 'preterites' are found, as in the 'secondary' modals *could, might, should* and *would*, they are distributed very differently from those of verbs. They may appear in a range of hypothetical, tentative or polite expressions where contextual support is not always required. But reference to past time is uncommon and typically restricted.⁵ The preterites of verbs in contrast are freely used of past time, but typically restricted in their hypothetical, tentative and polite uses. It seems rather doubtful that the secondary modals should be identified as containing the same morpheme 'tense' as is found in verbs, despite the common identification of the 'unreal', 'tentative', or 'remote' past tense (or wider category of which tense is one manifestation) as a component of all these hypothetical senses.⁶ If it is the same, this raises the problem why its use to refer to past time is so limited in modals, and why its use for the present (with little or no reflex of the supposed force of the preterite, at least with *might* and *should*) is so free.⁷ *Could, might, should* and *would* with their final dentals could indeed all be interpreted as members of a morphological schema for the preterite (Bybee and Slobin 1982). But *could, should* and *would* could also show an interrelated modal subgroup in *-ould*, as is perhaps argued by the historical transfer of *could* into the group. Thus it makes equal sense to suggest that secondary modals do not carry the tense morpheme of verbs but show a distinction proper to modals which may occasionally realize tense.

1.3 Auxiliaries as a word class

Given the substantial coincidence between these properties, it is no surprise that most analysts have agreed in isolating a class or subclass consisting of auxiliaries, or consisting of modals where there is some further relationship to *do, have* and *be*. Some such conclusion seems unavoidable. I will first outline my assumptions about the nature of word classes, then discuss the structuring of the class of auxiliaries.

1.3.1 Word classes

Within a lexical model of syntax which avoids the postulation of highly abstract structures (and of movement) a rather surfacey and traditional set of assumptions about the word-class structure of a language is appropriate. Let me first say what these assumptions are, then add something in further justification. The first two statements here simply apply the basic methods of structuralism to the properties by which categories are discriminated.

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- (i) Classification is grouping by relevant similarities and differences. A word class exists in opposition to other classes, so that a group of properties typical of one class stands in opposition to the group of properties typical of another. Consequently, within the class properties (and groups of properties) tend to correlate with each other, or be mutually predictive.
- (ii) Formal and distributional properties (which in practice are largely syntactic and morphological) are of central importance for word-class membership and structure. Purely semantic properties have no special place in establishing the membership of classes. (Indeed they may be secondary; see Maratsos and Chalkley 1980, and traditional structuralist practice, e.g. Harris 1951.) Thus the semantic near equivalence of *fond* and *love* does not prevent them from belonging to different classes.
- (iii) To this basic position we may add the commonly made observation that a class need not be homogeneous, but normally has some internal differentiation whereby a 'nuclear' or 'prototypical' set of members shows more of the properties of the class than other less fully characterized members. A class may also not show sharply definable boundaries.
- (iv) Finally, the typical semantics of a class has a separate importance for the cross-linguistic identification of classes, and this point will be taken up below.

How should we take these assumptions? On one view they might be seen as a pretheoretical descriptive statement about word classes, bearing no interesting relationship to an appropriate theory of the area. But equally we might suppose that linguistic categorization is essentially like other areas of human categorization. On this view 'Parts of speech are much more like biological species than has generally been recognized' (McCawley 1986: 12). This is an economical and plausible hypothesis; indeed it is the 'null hypothesis'. This general approach is adopted in work in psychology by Rosch (1978, 1988) and her associates, or in linguistics by Lakoff (1987) and others. The assumptions above can be theoretically based in Rosch's work, and what is distinctive about the application to 'parts of speech' is (ii), the predominance of the formal properties of words over their semantic properties, and (iv) the consequent status of semantics in identification. There are many questions here (e.g. about the interpretation of (iii)), some of which will be taken up when this is considered in more detail in Chapter 4. A general issue is clearly that of the