

3 Competence without Comp?

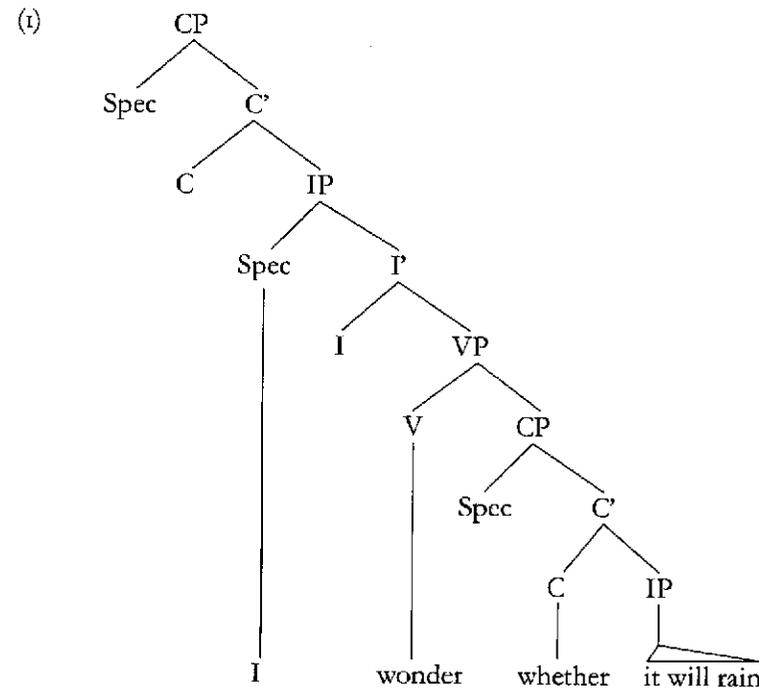
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1 Introduction

Over the last two decades the category 'complementiser', often abbreviated to 'Comp' or 'C', has become part of a widely accepted canon of grammatical categories not only for English but for all languages, via 'Universal Grammar'. Like so many other categories it has a double identity, as a word-class and as a position in abstract sentence-structure. It is the class to which words such as *that, if, whether* and *for* (the *for* which precedes an infinitive) are said to belong. I shall reserve the name 'complementiser' for this word-class. It is also the position at the head of the sentence (in both senses of 'head'), otherwise described as the abstract functional category which heads the 'CP' (alias 'sentence') and which may be phonologically empty. The structure in (1) illustrates this analysis. In the text I shall call this abstract position 'Comp'. These assumptions are standard in Chomskyan syntax (e.g. Haegeman 1991: 111), but the belief in the word-class 'complementiser' goes much further (e.g. Gazdar et al. 1985: 112).

In this chapter I shall question both these assumed categories. I shall argue that *that, if, whether* and *for* do not all belong to the same word-class; specifically, I shall suggest that *whether* is an interrogative pronoun, whereas either the others are syncategorematic – belonging to no general word-class – or they belong to the much bigger class that Quirk et al. call 'subordinators' (1985: 998). As for Comp, there is evidence against the reality of this assumed abstract position. Whatever structural similarities the supposed complementisers share, they also share with relative and interrogative pronouns, subordinating conjunctions and even prepositions; and in the absence of an overt complementiser, there are reasons for doubting the existence of an empty Comp slot.



2 Classification of *that, if, whether* and *for*

I could call these four words 'the so-called complementisers', but for brevity I shall call them just 'the linkers'. The motivation for grouping them together in the first place was the fact that they can all introduce a clause which is the complement of a higher verb – hence the name 'complementiser' (Rosenbaum 1967). Relevant examples follow:

- (2)
- a. I think *that* it's going to stop raining.
 - b. I wonder *if* it's going to stop raining.
 - c. I wonder *whether* it's going to stop raining.
 - d. I'm waiting *for* it to stop raining.

This similarity in itself does not prove that they all belong to the same word-class, because there are many other words that can be used in the same way (i.e. to link a verb to a complement clause) – most obviously *to* (infinitival *to*), but also words like *when* and *on*:

- (3)
- a. I want *to* go home.
 - b. I wonder *when* it's going to stop raining.
 - c. He insisted *on* going out.

It is true that *on* could have introduced an ordinary Noun Phrase instead of a gerundive clause, but it qualifies as a linker because it links *insisted* to this clause in the same way as the other words.

To was one of the original complementiser list, as part of the compound complementiser *for-to*, but these two words have now been firmly separated into the complementiser *for* and the non-complementiser *to*. No one has ever suggested (so far as I know) that interrogative pronouns like *when* and prepositions like *on* should be reclassified as complementisers.

We can conclude that this class has never been designed to include all and only the words which link a subordinate clause to the verb of a higher clause. In fact, it looks suspiciously like a dustbin for the words which can introduce a complement-clause but which do not seem to belong to any other word-class such as 'pronoun' or 'preposition', rather than a word-class which plays an essential role in the grammar.

This impression is confirmed when we consider the facts. The most important facts that involve the linkers are matters of valency – the valency of the higher verb, and the valency of the linkers themselves. In both cases, the facts tend to refer to specific words or inflectional categories, leaving little room for generalisations in terms of word-classes.

2.1 The valency of the higher verb

Most verbs that allow a linker only allow one or two linkers; and I do not know of a single verb that allows all four linkers. Here are some typical examples:

- (4) a. I believe *that* it's going to stop. (*whether, if, for)
 b. I wonder *whether* / *if* it's going to stop. (*that, for)
 c. I'm longing *for* it to stop. (*that, whether, if)
 d. I'm hoping *that* it's going to stop / *for* it to stop. (*whether, if)
 e. I know *that* / *whether* / *if* it's going to stop. (*for)

This simple observation suggests that all the generalisations that need to be made can and should be expressed in terms of individual words (relating individual verbs to individual linkers), and none will refer to the class 'linker' (alias 'complementiser'). We need to relate *believe* to *that*, and *long* to *for*, but there are no verbs that are allowed to take simply 'a complementiser'.

It is true that all verbs that allow *whether* also allow *if*, and vice versa; but this mini-generalisation does not justify lumping all four words together. Furthermore, in almost every case¹ where these words are possible, it is also possible to use an interrogative pronoun such as *what* or *when* instead, so the generalisation that needs to be expressed has nothing to do with the classification of *whether* and *if* as linkers.

Incidentally, it is these valency facts that show beyond reasonable doubt that a linker is the head of the subordinate clause; in other words, the rest of the subordinate clause, including its verb, is subordinate to the linker, and not the other way round as in traditional analyses. The argument is simple, and rests on a widely accepted principle: the only part of a word's complement which is 'visible' to valency restrictions is its head word. It is clearly the linkers that these restrictions apply to, and not some other part of the subordinate clause such as its verb. (The minor exception of 'subjunctives' will be considered below.) Therefore the linker must be the subordinate clause's head. This conclusion is generally accepted in generative grammar, and I have no quarrel with it.

2.2 The valency of the linkers themselves

The linkers are related 'upwards' to the higher verb for the reasons just stated, but they are also related 'downwards' to the verb of the subordinate clause for rather similar reasons. Each linker restricts the kind of verb that is possible after it, as shown in Table 3.1 and illustrated in (5).

- (5) a. I know *that* it *has* stopped raining. (tensed)
 b. I insist *that* the council *reconsider* its decision.
 (subjunctive; example from Quirk et al. 1985: 155)
 c. I wonder *if* it *has* stopped raining. (tensed)
 d. I wonder *whether* it *has* stopped raining. (tensed)
 e. I'm wondering *whether* *to* take an umbrella. (to)
 f. *I'm wondering *if* *to* take an umbrella. (*to)
 g. I'm longing *for* it *to* stop raining. (to)
 h. *I'm longing *for* it *stops* raining. (*tensed)

Table 3.1 *Linkers and the subordinate verb*

'linker'	following 'verb'
<i>that</i>	tensed verb (or 'subjunctive' ²)
<i>if</i>	tensed verb
<i>whether</i>	tensed verb or <i>to</i> ³
<i>for</i>	<i>to</i>

The main point about the facts in Table 3.1 is that each of the linkers is unique. Each one allows a different range of words as the root of the rest of the subordinate clause. This again suggests strongly that the category 'complementiser' cannot justify itself in terms of generalisations about the

following verb. All the relevant facts are facts about individual words such as *that*, and not about all the linkers together.

Furthermore, with the exception of the marginal 'subjunctive', the range of 'verbs' that is allowed with the various linkers is precisely the same as we find with other kinds of subordinating words, notably interrogative pronouns. Most interrogative pronouns allow either a tensed verb or *to*, though *why* is a lexical exception:

- (6) a. I'm wondering *when* I should go. (tensed)
 b. I'm wondering *when* to go. (to)
 c. I'm wondering *why* I should go. (tensed)
 d. *I'm wondering *why* to go.

Thus if there is any generalisation to be made, it applies to most interrogative pronouns and to *whether*, but not to *that*, *if* or *for*.

This difference between *whether* and *if* is quite well known, and similar conclusions have been drawn by Chomskyan linguists as well, notably Kayne, following Larson (quoted in Henry 1992). It is true that Henry reports data from Belfast English that appear to show the opposite. In Belfast, interrogative pronouns can combine with *that*:

- (7) I don't know when that he's going.

But *that* is impossible after *whether*, which Henry takes as support for the analysis of *whether* as a complementiser. The objection to this conclusion is that it leaves our differences between *whether* and *if* unexplained. The alternative is to recognise *whether* as an interrogative pronoun, and seek another explanation for its incompatibility with *that*.

This regrouping of *whether* (but not *if*) with the interrogative pronouns is supported by another well-known fact (as well as by the obvious fact that it starts with Wh-). Like all the interrogative pronouns (including *why*), it can occur in all the positions which allow nouns or Noun Phrases.⁴ In this respect it differs from both *that* and *if*. Most obviously, it can occur as the object of a preposition:

- (8) a. I'm thinking *about when* I should go.
 b. I'm thinking *about whether* I should go.
 c. *I'm thinking *about if* I should go.
 d. *I'm thinking *about that* I should go.

It can also occur as the object of verbs like *discuss* which in general have to be Noun Phrases rather than subordinate clauses:

- (9) a. We were discussing *linguistics*.
 b. We were discussing *what* we should wear.

- c. We were discussing *why* we should go.
 d. We were discussing *whether* we should go.
 e. *We were discussing *if* we should go.
 f. *We were discussing *that* we should go.

Slightly less obviously, it can occur as an inverted subject:

- (10) What you wear matters a great deal.
 a. So does *when* you arrive.
 b. So does *whether* you come with someone famous.
 c. *So does *if* you come with someone famous.
 d. *So does *that* you behave well.

And of course it can occur as an ordinary subject as well, though this is also possible for *that*:

- (11) a. *When* you arrive matters a great deal.
 b. *Whether* you come alone matters a great deal.
 c. **If* you come alone matters a great deal.
 d. *That* you behave well matters a great deal.

The facts reviewed so far suggest strongly that *whether* should be classified as an interrogative pronoun, but that *if* and the other linkers should not (Hudson 1990: 375). What can we say about the classification of the other linkers? The easiest one to deal with is *for*, which is explicitly claimed to be a preposition⁵ in Chomskyan analyses (e.g. Haegeman 1991: 155). This classification explains why a noun follows *for*, and it may well be correct. Admittedly it does not in itself explain why there should also be a following *to*, which is not part of the normal valency for a preposition, but there are other prepositions which allow a second complement – *from* and *with* are examples. Thus, '*from* NP *to* NP' can⁶ be a single phrase, as witness (12a) where *from London to Edinburgh* is the focus of an it-cleft, a sure sign of a single phrase.

- (12) a. It was *from* London to Edinburgh that he walked.
 b. It was only *with* him away that we managed to get any work done.

In (12a) *from* has two complements, *London* and *to* (Edinburgh), and likewise in (12b), where the complements of *with* are *him* and *away*.⁷ The two-complement pattern thus cannot be taken as evidence against treating *for* as a preposition, so this analysis must remain on the agenda. Admittedly it is hard to produce clearer evidence for this analysis, because there are very few clear tests for prepositionhood,⁸ and none which are relevant here. But no other classification seems obviously superior, so let's assume, with GB, that *for* is a preposition. The trouble with the Chomskyan analysis is that it does not address the obvious questions: How can a single word be simultaneously a preposition

and a complementiser? And if a phrase headed by a preposition is a PP rather than a CP, why is not this also true of one headed by *for*?

What about the remaining linkers? The only words left on our list are *that* and *if*, but there is another word(-pair) which could have been included (though it is not generally recognised as a complementiser), *as though*. This is used to introduce a complement clause after verbs like *sound* (Gisborne, in preparation), instead of the expected *that*.

- (13) a. It seems *as though* / *that* it's going to rain.
b. It looks *as though* / **that* it's going to rain.

So what can we say about the classification of *that*, *if* and *as though*?

The most obvious fact about these words is that none of them is limited to introducing the complement (or subject) of a higher verb.

- (14) a. So many people came *that* we had to turn some away.
b. We'll get wet *if* it rains.
c. He's behaving *as though* he's got a pain.

Admittedly *if* and *as though* have different meanings in these other uses, so it may be that we should recognise them as distinct homonyms. The same cannot be said, however, of *that*, because its meaning seems to remain constant (at zero); so at least this word seems to recur outside the strict 'complementiser' position.

If our linkers are the same words as we find in sentences like (14), then their classification ought to reflect this fact. But how? The distribution of *that* is simply unique: there is no other word, for example, which can be used as the complement of *so* as in (14a). In contrast, *if* and *as though* are used in (14) as adjuncts of verbs, in much the same way as adverbs or prepositions. But this does not in fact help with their classification because the classification of 'adverbs' is notoriously messy, and remains one of the major challenges for syntactic research, with Greenbaum's contributions summarised in Quirk et al. (1985) as one of the main starting-points. In particular, we cannot be sure that a word is an adverb (or preposition) just because it can occur as an adjunct of a verb.

However, it is important to bear in mind as background to this debate the possibility that there is no word-class of 'adverbs'. There is no reason to believe that every word belongs to a major word-class; some words (e.g. *hello*, *ah*) are obvious candidates for classification simply as 'words', or as members of minor word-classes, with their own unique properties. It is possible that words like *that*, *if*, *for*, *as though*, *because*, *before* and so on are also like this – in contrast with the word-classes 'noun', 'verb' and 'adjective' which strike me as beyond reasonable doubt. The obvious candidate for classifying these words is the traditional class 'subordinating conjunction', but this is virtually the

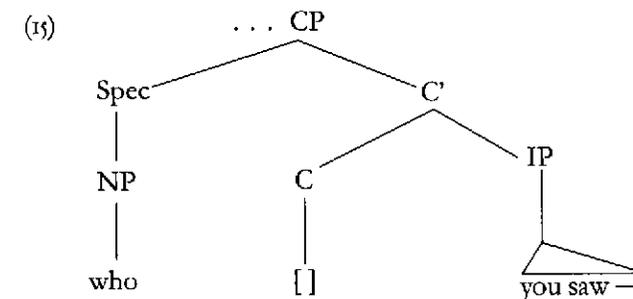
only one of the traditional word-classes which generative linguists have generally not used. It is hard to think of relevant generalisations that could only be made in terms of this class, so we cannot assume that it is a safe place for us to pop our words into. In conclusion, it seems premature to try to classify our linkers (other than *whether* and *for*), so the most conservative position is to leave them unclassified.

3 The structural 'position'

The second question is about the abstract position which has been called 'Comp' since Bresnan (1970). This position may be occupied by the linker, but in the absence of a linker it is assumed still to be present, as an abstract structural slot. This leaves two possibilities: either it is empty, or it is filled by some word other than a linker. Both of these possibilities are exploited in recent Chomskyan analyses.

3.1 Empty Comp

The standard assumption is that initial Wh-phrases are specifiers of Comp, i.e. they are just before it, with Comp empty.



This analysis raises some problems. First, why should the specifier of Comp influence the selection of the complement of Comp, i.e. the IP?⁹ As we noted in (6), most of the interrogative pronouns allow either a tensed verb or *to*, but *why* allows only the former. This is odd, considering how indirect the relation is between the specifier and complement positions.

Second, why should *where* and *whether* both have the same effect on extraction, if they are in different positions (specifier of Comp and Comp)? The following judgements are Radford's (1981: 220):

- (16) a. *What might he ask where I hid?
b. *What might he ask whether I hid?

It would be much easier to explain this similarity if *where* and *whether* were related in the same way to the rest of the sentence; but such an analysis is incompatible with one in which *where* and *whether* occupy distinct positions.

And third, why are preposed adjuncts possible at the start of a Wh-interrogative main clause whereas they have to follow an overt *that* in a subordinate clause?

- (17) a. Tomorrow what [_C] are you going to wear?
 b. ?What [_C] tomorrow are you going to wear?
 c. He told me [_C that] tomorrow he's going to wear a suit.
 d. *He told me tomorrow [_C that] he's going to wear a suit.

There is no reason to expect preposed adjuncts to stand in different positions relative to Comp according to whether the clause concerned is embedded or not. So if we make the standard assumptions about Comp and Wh-pronouns, we can locate Comp after *what* in (17a), which means in turn that Comp follows the preposed adjunct *tomorrow*, and it is doubtful whether this order can be reversed, as in (17b). But if we try to repeat this pattern in a subordinate clause, where Comp is overtly filled by *that*, we get the ungrammatical sentence in (17d).¹⁰ To be grammatical, in this case the reverse order is required: Comp followed by preposed adjunct.

The evidence suggests that the standard assumptions about Comp may be wrong. The problem arises only because we assume an empty Comp, marking the position where *that* would supposedly have been. If we abandon that assumption, then the problem disappears: whatever rules or principles are responsible for the position of a preposed adjunct must simply ensure that it follows *that*, and precedes a Wh-pronoun.

3.2 Filled Comp

Since Chomsky (1986) the otherwise empty Comp node has been available for the 'operators' of Quirk et al. (1985) – i.e. tensed auxiliary verbs. This has provided an apparently explanatory account of subject-auxiliary inversion, which is now seen as the result of 'inverting' the auxiliary round the subject and into the empty Comp position.

- (18) a. [_C] He is ready.
 b. [_C Is] he [] ready?

One of the attractions of this analysis is said to be that it explains why inverted auxiliaries never cooccur with overt complementisers.

A number of serious problems arise. First, is an inverted auxiliary an auxiliary or a complementiser? Put another way, if a tensed verb projects to a phrase which reflects this classification (e.g. to Tense-P or IP), why doesn't an

inverted tensed verb also project to such a phrase, instead of to CP? This is the same problem as the one we noted above in connection with *for*: how can a word belong to two otherwise incompatible word-classes at the same time?

Second, why is inversion impossible in subordinate clauses without overt *that*?

- (19) a. *I know [_C that] is he ready.
 b. *I know [_C] is he ready.
 c. *I know [_C is] he ready.

If the explanation is that Comp is actually filled, though inaudibly, then why does this filler not block extraction out of subject position in 'Comp-trace' examples? For instance, the standard GB explanation for the difference between the sentences in (20) is that the Comp filled by overt *that* is fundamentally different from the unfilled one, to the extent that only the filled one acts as a barrier to government. If Comp in (20a) is genuinely empty, it is hard to see why it could not, in principle, have been filled by raising the tensed auxiliary into it.

- (20) a. Who do you think [_C] will come?
 b. *Who do you think [_C that] will come?

Third, why is inversion in fact compatible with an overt *that*, contrary to the original claims?

- (21) I admit [_C that] only here *does* it rain every day.

The inversion in this example is triggered by the initial negative *only*, according to very general rules which ignore the initial *that*. The problem is well known to Chomskyan linguists (though not widely publicised in textbooks!), and various solutions have been suggested, but so far without success. For example, Authier (1992) suggests that *only here does it rain every day* is a CP, so *that* is allowed to have either an IP or a CP as its complement. The solution creates as many problems as it solves, because it has to stipulate that a CP complement must have an inversion-trigger like *only* in its specifier, and must not have an overt complementiser.

The last problem is that inversion is triggered by interrogative pronouns in main clauses but not in subordinate clauses. If this is because there is some general mechanism that somehow fills Comp in any subordinate clause, then why are sentences like (22) possible?¹¹

- (22) Here are the results, none of which *were* we expecting.

Indeed, why should inversion be obligatory in main Wh-interrogatives, given that the inversion is not necessary as a bearer of interrogative semantics? It

seems that inversion is triggered by the interrogative pronoun, because there is at least one pronoun that does not allow it, *how come*:¹²

- (23) a. How come this is grammatical?
 b. *How come is this grammatical?
 c. *Why this is grammatical?
 d. Why is this grammatical?

These subtleties are very hard to reconcile with the Chomskyan assumption that inversion is simply the result of optionally moving an auxiliary into an empty Comp position.

4 Conclusion

I have suggested that the four words *that*, *if*, *whether* and *for* do not comprise a word-class. Their syntactic behaviour is controlled by rules which refer to them as individual words, not by rules that refer to the category 'complementiser'. I have also argued that assuming the abstract syntactic position called 'Comp', with the properties that are typically assigned to it, creates more problems than it solves. If my arguments are valid, there is no justification for postulating either a word-class 'complementiser', containing just *that*, *if*, *whether*, *for* and (possibly) *as though*, or a syntactic position 'Comp' which is typically filled by a member of this non-class.

Where, then, does this very negative discussion leave us? As far as the list of word-classes is concerned, it returns us to the traditional view, in which 'complementiser' has no place. This is one of the innovations of modern linguistics, but in my view it is an invention rather than a discovery; traditional grammarians were right not to recognise it. (I would say the same about the other major innovative word-class, 'determiner', but that is a different story.¹³) The same is true for the supposed 'position' called 'Comp'; traditional grammarians ignored it and were right to do so.

On the other hand, the view of structure that survives is a definite advance on traditional views, now that we can distinguish 'heads' and 'complements'. In an example like *I know that he came*, we can recognise *know* as the head of *that* (or, changing terminology, as the head of its own phrase, with the phrase headed by *that* as its complement); and we can recognise the same relation repeated between *that* and its complement (the phrase headed by) *came*. It is in this sense that the word *that* is a 'subordinator', marking the following clause as subordinate to the higher verb. But in this respect it is no different from a host of other words, including not only interrogative pronouns but also the traditional subordinating conjunctions like *although*, whose status in

modern grammars has always been uncertain. Nor need we restrict the comparison to words that subordinate one verb to another; if we generalise to those which link other word-classes we can bring in all the prepositions as well. In this broader context, the notion 'complementiser' dwindles into insignificance as a very special case of a much more general, and interesting, pattern.

Notes

1. The only exception that I know of is the verb *doubt*, which allows either *if* or *whether* but not an interrogative pronoun; and significantly, of course, it can also take *that* without change of meaning (cf. for example the entry at *doubt*₄ in *Collins Cobuild English Language Dictionary*):
 - (i) I doubt that/if/whether/*when it will rain.
2. The so-called 'subjunctive' is at best marginal for most speakers, so it should not be allowed to influence the analysis seriously. It is true that the higher verb determines whether the lower verb is tensed or subjunctive, which suggests a direct link between them rather than the indirect one mediated by *that* which I am assuming. One way to show this link is to distinguish a sublexeme for *that*, *that*_{subjunctive}, which is selected by verbs such as *insist* and which in turn selects a subjunctive inflection; but there are other possibilities. This pattern of selection is an exception to the general pattern, in which the subordinate 'verb' is selected by the linker, and *not* by the higher verb; for example, *whether* allows *to* but *if* does not, regardless of the higher verb.
3. I am including *to* among the list of 'verbs', but nothing hangs on the classification of *to*. As in Chomskyan analyses, I assume that *to* takes a bare infinitive as its (optional) complement, so there is no need to mention the infinitive in this table (any more than we need to mention, say, the fact that the tensed verb after *that* has to have an overt subject).
4. I am trying to balance between the majority view of syntax based on phrase-structure and my own view which is based on dependencies between individual words. In the former view the complement of a preposition is a Noun Phrase, but in the latter it is a noun.
5. Actually, *for* is called a 'prepositional complementiser', but this is presumably a subtype of preposition, because it is only if it is a preposition that *for* can assign Case to the following NP. This terminological fudge obscures the logical inconsistency of assigning *for* to two supposedly non-overlapping word-classes at the same time.
6. Admittedly *to* NP' can also be a separate phrase, as in *From London he walked to Edinburgh*, but that is irrelevant.
7. It is common in GB to analyse the structure after *with* in examples like *with John away* as a small clause – i.e. a single constituent. For a particularly clear presentation of this position see Aarts (1992). There is clearly some kind of subject-predicate relation between *John* and *away*, but the small-clause analysis

is only one way of showing it, and maybe not the best way. A more conservative analysis would relate both *John* and *away* directly to *with*, in which case *with* has two complements. Notice that *away* cannot be treated as a modifier of *John*, because the sequence *John away*, in this semantic relation, is possible only after *with* and various verbs (such as *find*). Nor can we treat *away* as some kind of adverbial modifier of *with*, because it can be replaced by virtually any word or phrase that can express a (stage-level, i.e. temporary) predicate e.g. *with John to sign the cheques*, *with John playing*, *with John ill*.

8. Prepositions are surprisingly hard to identify because the main characteristic of the class is a matter of subcategorisation (i.e. valency), namely the ability to take an NP as complement. In all other word-classes this is a matter for individual lexical items within the class; e.g. some verbs take an object, and others do not, but we do not define verbs as words which can take an object. There are very few rules (if any) which apply to all PPs, and to no other phrasal class. This makes it virtually impossible to decide conclusively whether *for*, or any other word, is a preposition.
9. I am aware that the phrase that I have labelled 'IP' ('Inflection Phrase') is now given a variety of different labels such as Tense-P and Agreement-P; the labelling is not relevant to my argument here, so I have stuck to the relatively simple label, old-fashioned though it is.
10. It is tempting to explain the badness of (17d) by invoking the principle proposed in Chomsky (1986: 6) that bans all adjunction (by movement) to complements. However, the same restriction applies to all subordinate clauses, regardless of their function or position in sentence structure. The following all seem to be equally bad:
 - (i) *I wonder tomorrow what will happen
 - (ii) *Tomorrow what will happen is unclear
 - (iii) *It's unclear tomorrow what will happen.
 - (iv) *I'm thinking about tomorrow what will happen.
 - (v) *The big question is tomorrow what will happen.
 - (vi) *We're considering the question tomorrow what will happen.
11. An example of this type was uttered by one of my colleagues. The style is high, and the relative clause has to be non-restrictive, but native speakers seem to agree that the pattern is possible.
12. The etymology of *how come* is irrelevant, because *that* is no longer possible, *come* shows no agreement, and *come* is not an invertible auxiliary verb.
13. I tell the story in Hudson (1990: 268ff).

References

- Aarts, B. (1992) *Small clauses in English*. Topics in English linguistics 8. Berlin and New York: Mouton de Gruyter.
- Authier, J.-M. (1992) Iterated CPs and embedded topicalization. *Linguistic Inquiry* 23, 329–336.
- Bresnan, J. (1970) On complementizers: towards a syntactic theory of complement types. *Foundations of Language* 6, 297–321.
- Chomsky, N. (1986) *Barriers*. Cambridge, MA: MIT Press.
- Gazdar, G., Klein, E., Pullum, G. and Sag, I. (1985) *Generalized phrase structure grammar*. Oxford: Blackwell.
- Gisborne, N. (in preparation) The syntax and semantics of English perception verbs. PhD Dissertation University of London.
- Haegeman, L. (1991) *Introduction to Government and Binding Theory*. Oxford: Blackwell.
- Henry, A. (1992) Infinitives in a for-to dialect. *Natural Language and Linguistic Theory* 10, 279–301.
- Hudson, R. (1990) *English word grammar*. Oxford: Blackwell.
- Quirk, R., Greenbaum, S., Leech, G. and Svartvik, J. (1985) *A comprehensive grammar of the English language*. London: Longman.
- Radford, A. (1981) *Transformational syntax: a student's guide to Chomsky's Extended Standard Theory*. Cambridge University Press.
- Rosenbaum, P. (1967) *The grammar of English predicate complement constructions*. Cambridge, MA: MIT Press.