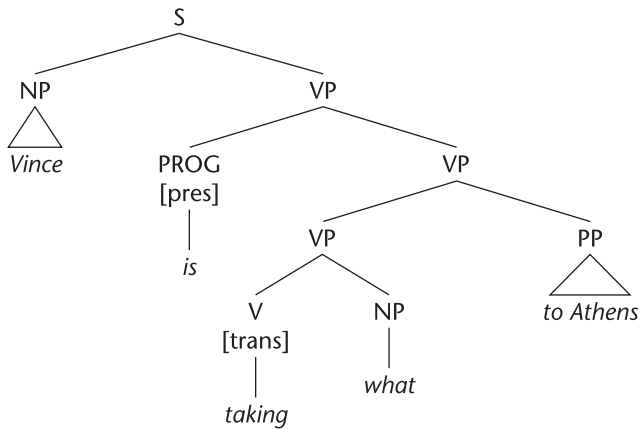
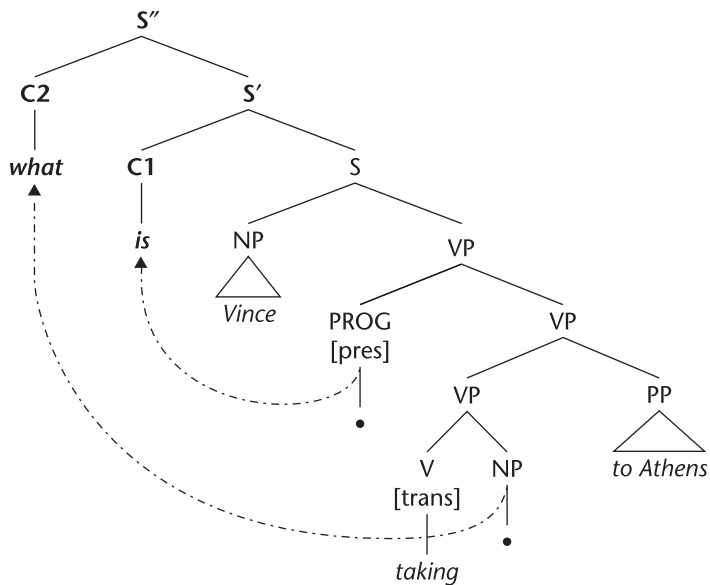


[11a]



[11b]



As before, the dotted movement lines are not part of the phrase marker but they do help to show what's going on here. It may help you to get things right if you draw such movements in your own phrase markers.

To summarise, we now have two C positions:

C1 (lower): Daughter of S-bar (S') and sister of S

Filled, in subordinate clauses, by *that*, *whether*, and subordinating conjunctions.

Filled, in main clauses, by fronted tensed auxiliaries.

C2 (higher): Daughter of S-double-bar (S'') and sister of S-bar (S')

Filled, in both main and subordinate clauses, by fronted wh-expressions.

The major contrast between *that/whether* (and subordinating conjunctions) in C1 and the wh-expressions in C2 is this: *that/whether*, etc. are SIMPLY

complementisers – complementisers and nothing else. They belong to no other syntactic category. They are not fronted from within the clause they introduce and hence have no function *within* that clause. By contrast, wh-expressions in C2 are always fronted *from within* the clause (the basic S). So, in addition to introducing the clause, they do have a function within that clause and this function is indicated by the position of the gap they leave behind. These fronted wh-expressions in the C2 position must, then, belong to categories capable of having clausal functions: NP, AP, PP, AdvP. The fact that *what* in the C2 position in [11b] is an NP is captured by there being an NP gap in the clause (the basic S).

Now give the (auxiliary and wh-) fronted versions of the following sentences:

[12a] You are giving which books to Bill?

[12b] Julia will give the pen to who(m)? (two wh-fronting options here)

[12c] He drank that beer how quickly?

[12d] Max is how tall?

These examples show the variety of phrases that can be fronted. In [12a] it is, again, a (direct object) NP. In [12b] we have two options. In very formal styles, the whole PP (*to whom*) can be fronted – leaving a PP gap in S. In my dialect, the wh-pronoun must then be in the objective case (*whom*). In ordinary conversational style, however, just the wh-NP is fronted. This will leave the preposition (and the PP of which it is head) in place in S and there will be just an NP gap within the PP. In my dialect, when just the NP is fronted from within the PP, it is not (except in *very* formal style) in the objective case (i.e. it's *who* rather than *whom*). As regards [12c–d], *how* is a degree adverb and degree adverbs cannot be fronted alone. So, the whole AdvP *how quickly* must be fronted in [12c]. The same goes for the AP *how tall* in [12d].

[13a] **Which books** are you giving • to Bill? (• = NP)

[13b] (i) **Who** will Julia give the pen to • ? (• = NP)

(ii) **To whom** will Julia give the pen • ? (• = PP)

[13c] **How quickly** did he drink that beer • ? (• = AdvP)

[13d] **How tall** is Max • ? (• = AP)

Notice that the verb in [13d] is the intensive verb, copula *be*. Recall that, although the copula is a full verb, it behaves (when tensed) like an auxiliary. In other words, it fronts to the C1 position in questions. This, together with the fact that the whole AP (*how tall*) has to be fronted, means that very little is actually left in the clause (the basic S) itself. In fact, only the subject (*Max*) is left in its original place!

Take time now to draw a phrase marker for each of the five sentences in [13]. Use triangles for NPs, APs, and AdvPs. Leave yourself plenty of room. **Discussion 1**, pages 211–2.

Now look again at [2]–[5] at the beginning of this chapter. [3]–[5] are unfronted questions. These unfronted question forms are commonly called **echo-questions**: they are used to echo – and ask about – something said earlier. They all have normal (non-echo) alternative forms displaying auxiliary- and wh-fronting, namely [6]–[8]. But what about [2], repeated here as [14]?

[14] Who is taking Violetta's icon to Athens?

[2]/[14] is itself the only possible form for that particular question, and it doesn't sound noticeably echoic. [2]/[14] is distinctive because, there, it's the subject constituent that is questioned. The point is that, as subject, the wh-phrase appears at the beginning of the sentence anyway. So, the first question raised by this example is: **should a wh-SUBJECT be represented as actually being in the subject position or represented as fronted to the C2 position?** In other words, does [14] display wh-fronting – just like [6]–[8] – or not?

In research on wh-questions, both answers have been given. For convenience, I'll make the following general assumption: **without exception, all wh-expressions appearing at the front of clauses are to be represented as occupying the higher C2 position.** In moving to the C2 position, however, a subject doesn't cross any other expression, so the movement makes no difference to the order of words.

The next question is: **does [14] display auxiliary-fronting?** Again, given our assumption that the wh-phrase is up in C2, auxiliary-fronting makes no difference to the order of words. And, again, I'll adopt the strategy of assuming that, **without exception, auxiliary-fronting to C1 occurs in all (non-echo) questions.**

In the light of the above answers (in bold) to our two questions, draw a phrase marker for [14]. Use triangles for the NP and the PP. **Discussion 2**, page 213.

A word now about *where*, *when*, *how*, and *why*. These are often regarded as adverbs and hence as head of AdvP. But, as mentioned at the beginning of the chapter, they don't only stand in place of AdvPs, but also PPs, APs, and even clauses. I've adopted a representation whereby you're not required to give the category of the wh-phrase in the C2 position. But you do still have to decide on the most likely category of the gap it has left behind. In this connection, suggest complete phrase markers for the following. **Discussion 3**, page 213.

[15] How are you? (Possible answer: *well/good*.)

[16] Where did Lisa put it? (Possible answer: *under the bed*.)

To conclude this survey of wh-questions, it's important to notice that a wh-phrase can be fronted, not just from the (immediately following) main clause, but also from a subordinate clause. Here are two examples.

[17a] Whose poem did Stevens suggest would be ideal for the lecture?

[17b] Who did Leopold think Haydn admired?

In each of these, insert a blob (•) exactly where the gap corresponding to the fronted wh-phrase should be. On the basis of that, decide on the function of the wh-expression. Giving Abbreviated Clausal Analyses might help here.

Possible answers to these questions are:

[18a] Stevens suggested S2 [*his own poem* would be ideal for the lecture].

[18b] Leopold thought S2 [Haydn admired *Mozart*].

So, in [17a] there's a subject gap in S2. In [17b] the gap is in the direct object position in S2.

[19a] S1'[Whose poem S1'[did S1[Stevens suggest S2[• would be ideal for the lecture]]]]?

[19b] S1'[Who S1'[did S1[Leopold think S2[Haydn admired •]]]]?

Subordinate wh-clauses

The big idea in this chapter is that wh-clauses are introduced by a fronted wh-phrase occupying the C2 position (daughter of S'', sister of S') and this corresponds to a gap of the appropriate category in the position from which it was fronted.

This goes for all wh-clauses, whether main or subordinate. The one structural difference between a main and a subordinate wh-clause is that only main wh-clauses display auxiliary-fronting as well as wh-fronting. **Auxiliary-fronting occurs only in main clauses.** In the rest of this chapter, I deal with two types of subordinate wh-clause, interrogative clauses and relative clauses.

Subordinate wh-interrogative clauses

The distinction between MAIN wh-interrogative (WH-QUESTIONS) and SUBORDINATE wh-interrogative clauses is exactly the same as that between main and subordinate *yes/no* interrogatives. See Chapter 8, pages 175–6.

The following all contain subordinate wh-interrogative clauses:

[20] Martha enquired why he wore it on his foot.

[21] How he would fare on the trapeze preoccupied him.

[22] It is my affair what I wear at night.

[23] Marcel wasn't certain who he sent the flowers to.

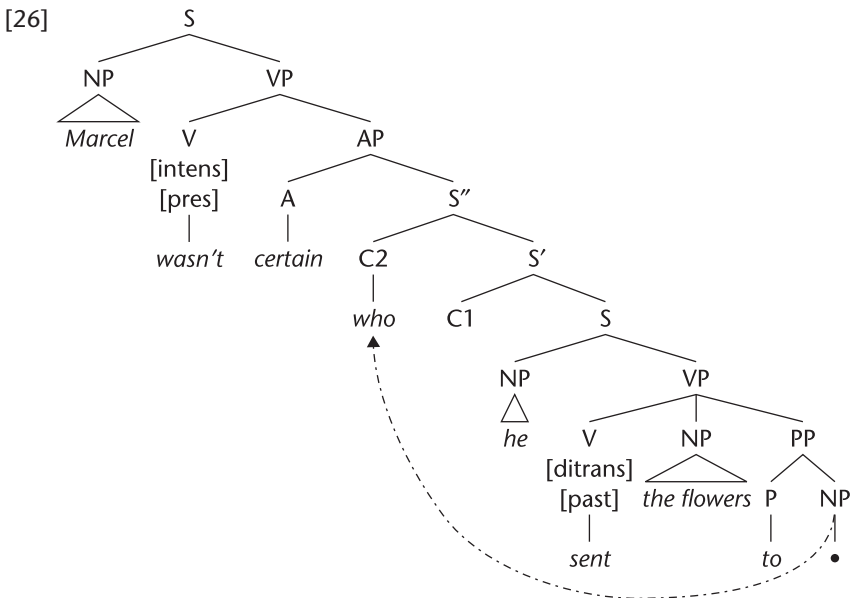
[24] The immediate problem was where they could hide those fritters.

[25] The little matter of who is going to pay for all this has yet to be resolved.

The subordinate wh-clauses in each of these sentences have functions familiar to you from previous chapters. First, identify the subordinate clauses and show the gaps in it. Second, for each clause, give its function. Third, give the function of the wh-phrase.

- [20a] [why [he wore it on his foot •]] – dO of [trans] V, *enquire*.
Why: VP-adverbial.
- [21a] [how [he would fare on the trapeze •]] – subject.
How: VP-adverbial.
- [22a] [what [I wear • at night]] – extraposed subject.
What: dO of trans V, *wear*.
- [23a] [who [he sent the flowers to •]] – complement of A (*certain*) in AP.
Who: complement of P (*to*) in PP.
- [24a] [where [they could hide those fritters •]] – sP of intensive V, *was*.
Where: oP of complex V, *hide*.
- [25a] [who [• is going to pay for all this]] – complement of P (*of*) in PP.
Who: subject.

As mentioned, these subordinate wh-clauses have exactly the same structure as the wh-questions considered in the last section: the fronted wh-phrase occupies the higher C2 position. But since these interrogative clauses are subordinate and therefore don't display auxiliary fronting, the lower C1 position will be empty. Here's the phrase marker for [23]:



Phrase markers for [20] and [22] are given in Discussion 4, page 214.

Relative clauses

It would be understandable if you had formed the impression that all *wh*-clauses are interrogative clauses. Not so. **Relative clauses are non-interrogative *wh*-clauses.** In contrast to interrogative clauses (which can be main or subordinate), relative clauses are, by their nature, subordinate. This is because **relative clauses function as MODIFIERS.** They can modify a range of categories, but I focus here just on their modifying function within NP.

Have a good look at the following NPs, all of which contain a relative clause. Identify (a) the relative clause in each NP and (b) the function of the *wh*-word/phrase within that clause.

- [27] The trampolines which they bought yesterday.
- [28] The fool who lent you all that money.
- [29] A friend whose house we borrowed.
- [30] The usher who I showed my ticket to.
- [31] The place where we had that picnic.

These relative clauses have exactly the same structure as the subordinate *wh*-interrogative clauses discussed in the previous sections. They display *wh*-fronting into the higher C2 position, leaving a gap within the clause:

- [27a] [which [they bought • yesterday]] (*which* = dO)
- [28a] [who [• lent you all that money]] (*who* = subject)
- [29a] [whose house [we borrowed •]] (*whose house* = dO)
- [30a] [who [I showed my ticket to •]] (*who* = complement to P in PP)
- [31a] [where [we had that picnic •]] (*where* = VP-adverbial)

What concerns us here, then, is not their (by now familiar) internal structure but how they fit into the structure of sentences – more specifically, how they fit into the structure of the NPs in which they function as modifiers. In this connection, we need to **compare (*wh*-) relative clauses with noun complement (*that*-) clauses**, introduced in the last chapter. Among the following NPs, the [a] examples contain noun complement clauses, while the [b] examples contain relative clauses.

- [32a] The conclusion [that Mars was inhabited].
- [32b] The conclusion [which Gomez disputes].
- [33a] The thought [that he should have done the washing up].
- [33b] The thought [which occurred to him].
- [34a] The claim [that syntax is good for the brain].
- [34b] The claim [with which he ended his lecture].

The contrast here is that THE NOUN-COMPLEMENT CLAUSES in [a] give us central information about the head noun; it tells us the ACTUAL CONTENT of the conclusion, thought, or claim (what exactly the conclusion etc. was), while THE RELATIVE CLAUSES tell something else about it, something more peripheral. From [32b], for example, we don't know what nature of conclusion Gomez disputes; we only know that it's the one he disputes.

Noun 'COMPLEMENT' clauses are so-called because the clause relates to the Noun exactly as a clause complementing a Verb relates to that Verb. Compare the [a] NPs above with the [bracketed] VPs in the following sentences, in which the clauses function as direct object of the Verbs:

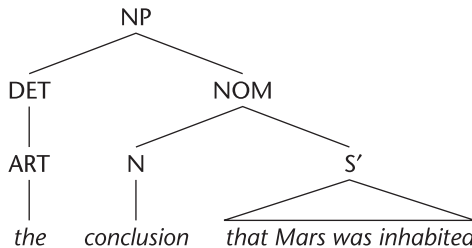
[35] He [concluded *that Mars was inhabited*].

[36] He [thought *he should have done the washing up*].

[37] Surely he couldn't [claim *that syntax is good for the brain*].

As complements, NOUN-COMPLEMENT CLAUSES are sisters to the head N within NOM, just as verb complements are sisters to V within VP. Here, then, is a reminder of how NPs with complement clauses are represented:

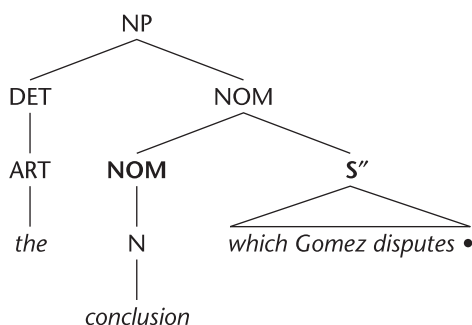
[38] NP WITH NOUN-COMPLEMENT CLAUSE (reminder):



Noun-complement clauses, remember, are introduced by the lower, C1 complementiser *that*, dominated by S-bar (S'). Since nothing has been fronted from within it, the clause itself is complete (no gaps). By contrast, the relative clause is a *wh*-clause: the *wh*-phrase is in the higher, C2 position, dominated by S-double-bar (S''). It's been fronted, leaving a gap.

The points just made serve to distinguish noun-complement clauses and relative clauses quite clearly as regards their internal structure. But we still haven't answered the question of how relative clauses fit into the structure of NPs. Well, relative clauses clearly don't relate to the head noun as noun-complement clauses do. They are modifying clauses, NOT complement clauses; so they can't be represented as sisters of the head N. So, just as VP modifiers (adjunct) are sisters of VP within a higher VP, RELATIVE CLAUSES are represented, not as sisters-of-N, but as sisters-of-NOM within a higher NOM:

[39] NP WITH RELATIVE CLAUSE:



In short, **relative clauses can be thought of as ADJUNCTS in NP**. If you tackled the Appendix of Chapter 7, the distinction between modifier (adjunct) and complement within NP will be already familiar to you, as will the following discussion.

Evidence supporting this distinction between sister-of-N (complement) and sister-of-NOM (modifying adjunct) comes from the pro-form *one*. You'll need to read what follows carefully. ***One* is a pro-NOM**: it stands in place of NOMs. It cannot replace an N by itself unless N is the *only* constituent of a NOM. So we must interpret *one* as replacing, not the noun itself, but the NOM that dominates it. Now, since a noun-complement clause is the sister of the N itself, a NOM is created **ONLY** by the combination of N plus complement clause together. So we predict that the pro-NOM *one* should **NOT** be able to replace just the N in the context of a following complement clause. By contrast, since a relative clause is sister-of-NOM, we predict that its sister should be replaceable by the pro-NOM *one*. In short, **the prediction is that [*one* + complement clause] will be ungrammatical, but [*one* + relative clause] will be fine**. These predictions are fully borne out:

- [40a] *The one that Mars is inhabited.
- [40b] The one which Gomez disputes.
- [41a] *The one that he should have done the washing up.
- [41b] The one which occurred to him.
- [42a] *The one that syntax is good for the brain.
- [42b] The one with which he ended his lecture.
- [43a] *I accept all the conclusions, including the one that Mars is inhabited.
- [43b] I accept all the conclusions, including the one which Gomez disputes.

(For more detail on the distinction between adjuncts and complements in NP, see the Appendix of Chapter 7.)

Now give a complete phrase marker for the NP in [34b] above, *the claim with which he ended his lecture*. **Discussion 5**, page 215.

Omission of the wh-phrase

In many cases, the wh-form in a relative clause can be omitted (by ellipsis). Look again at [27]–[31] above and decide for yourself in which of those it can be ellipted. Under what two different circumstances can it NOT be ellipted? Consider also [32b]–[34b] above.

[44] The trampolines \wedge they bought yesterday (were dangerous).

[45] *The fool \wedge lent you all that money (lent me some, too).

[46] *A friend \wedge house we borrowed (needs it back next week).

[47] The usher \wedge I showed my ticket to (has had it framed).

[48] The place \wedge we had that picnic (is too far away now).

See also: *The conclusion* \wedge *Gomez disputes* (was indeed absurd) vs. **The thought* \wedge *occurred to him* (cheered him up); **The claim with* \wedge *he ended his lecture* (surprised them) vs. *The claim* \wedge *he ended his lecture with* (surprised them).

The fronted wh-form cannot be ellipted, first, when it functions as subject ([45] and [33b]) and, second, when other material has been fronted with it ([46] and [34b]). Generally, ellipsis is possible only when it doesn't interfere with the interpretation or with ease of comprehension. For example, fronted wh-subjects – e.g. in [45] and [33b] – cannot be ellipted because this would create the misleading first impression that *lent/occurred* are the MAIN verbs, whereas in fact each is the verb of a SUBORDINATE clause. In the absence of the wh-form, the mistake would only become apparent when the real main verb (*lent, cheered*) makes its appearance.

That again

Now look at the following NPs:

[49] The fool *that* lent you all that money.

[50] The thought *that* occurred to him.

[51] The trampolines *that* they bought yesterday.

[52] The conclusion *that* Gomez disputes.

In these NPs, the clause is introduced by *that*. What should we make of these? Are they relative (wh-) clauses or noun-complement (*that*) clauses? Try to decide.

Relative clauses always include a gap. In genuine *that*-clauses, by contrast, *that* has not been fronted, so the clause itself (the basic S) is complete. Now, the clauses in [49]–[52] are clearly NOT complete: [\bullet *lent you all that money*], [\bullet *occurred to him*], [*they bought* \bullet *yesterday*], [*Gomez disputes* \bullet]. This indicates that, despite the presence of *that* rather than a wh-form, these are indeed

relative clauses, not *that*-clauses. Compare the relative clauses in the following [a] examples of relative clauses with the noun-complement clauses in the [b] examples:

- [53a] This is *a proposal that we should support* (•).
 [53b] This is *a proposal that we should support the strike*.
 [54a] *The news that she had given John* (•) shocked them all.
 [54b] *The news that she had given John a good kick* shocked them all.

One traditional approach to *that* in relative clauses is simply to say that, in this kind of relative clause, *wh*-forms can be replaced by *that*. In other words, *that* is regarded as an alternative form of the relative word, and the NP [*the conclusion that Gomez disputes*] will be represented exactly like [*the conclusion which Gomez disputes*]. This approach has the merit of simplicity so, for convenience, I'll adopt it here. In the light of this decision, draw contrasting phrase markers for the italicised NPs in [53a] and [53b]. **Discussion 6**, pages 215–16.

An alternative analysis would insist that *that* is not a relative word (in C2) but the familiar C1 complementiser, which is permitted to make an overt appearance in (the C1 position of) a relative clause only when the *wh*-phrase in C2 has been ellipsed.

■ Restrictive vs. non-restrictive

All the relative clauses considered so far are **RESTRICTIVE** relative clauses. The other kind of relative clause is described as **NON-RESTRICTIVE (OR APPOSITIVE)**. The internal structure of these two kinds of relative clause is identical. **The difference between restrictives and non-restrictives lies in the way they relate to the head noun within the overall NP.** In the following sentences, all the subject NPs contain relative clauses. Those in the [a]s are restrictive, those in the [b]s are non-restrictive.

- [55a] The books which John has consulted are out of date.
 [55b] The books, which John has consulted, are out of date.
 [56a] The dogs which have rabies are dangerous.
 [56b] The dogs, which have rabies, are dangerous.

As you can see, the non-restrictives are distinguished in writing from restrictives by being marked off by commas. The difference between them, though, doesn't consist in the presence vs. absence of commas, so we need to ask what the commas in the [b] examples are telling us about the relation between the main clause and the relative clause. This can be brought out by showing that certain relative clauses can **ONLY** be used non-restrictively in certain contexts:

[57a] *The dogs which are mammals need treatment.

[57b] The dogs, which are mammals, need treatment.

[58a] *Triangles which have three sides are fascinating.

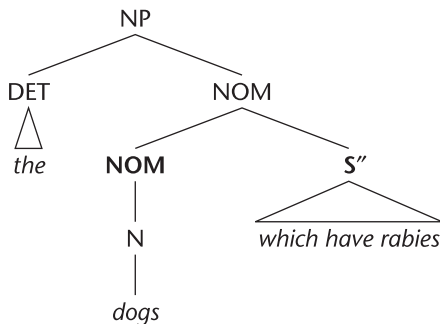
[58b] Triangles, which have three sides, are fascinating.

The oddity of the (restrictive) [a] examples is due to the fact that **RESTRICTIVE** relative clauses specify more exactly which of the things picked out by the head noun are being mentioned. In [55a], for example, the relative clause tells us *which* books are out of date. It's described as 'restrictive' because it serves to restrict the set of books to a SUB-SET of books, namely those consulted by John. It is that more restricted set of books that are said, in [55a], to be out of date. But the relative clauses in [57] and [58] can't be used to pick out a restricted set of dogs or triangles, because all dogs are mammals, and all triangles three-sided, anyway. You can't (as in [58a]) use *which have three sides* to pick out a SUB-set of triangles. Nevertheless, there's nothing to stop us, PARENTHETICALLY, adding the extra information that triangles have three sides or that dogs are mammals. This is precisely what the non-restrictive clause allows us to do. **NON-RESTRICTIVE** relative clauses serve to add extra – parenthetical – information, without restricting the set of things (triangles, dogs, books, etc.) being mentioned.

In the light of this, compare [56a] and [56b]. [56a], with the restrictive clause, does not imply that all the relevant dogs are dangerous; it's only the rabid ones that are said to be dangerous. But [56b], with the non-restrictive clause, does imply that all the relevant dogs are dangerous – and it adds the FURTHER INFORMATION that they also have rabies. **The big difference, then, is that [56a] makes just ONE statement – a statement about the rabid dogs to the effect that they dangerous – but [56b] makes TWO separate statements: (1) that the dogs are dangerous, (2) that the dogs have rabies.**

The representation of NPs containing a restrictive relative clause has already been given. As a reminder, that in [56a] is given here as [59]:

[59] NP with **RESTRICTIVE** relative clause (reminder):

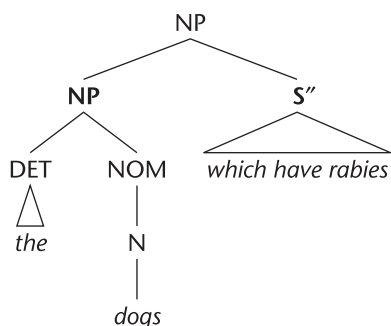


Notice that in [59], the determiner is the sister of a constituent that INCLUDES the relative clause – the NOM [*dogs which have rabies*]. This means that the

restrictive clause falls WITHIN THE SCOPE OF the determining function of the definite article (i.e. *the* is determining, not *dogs*, but *dogs which have rabies*). So, in [56a], there is no NP of the form *the dogs* that is the subject of the VP *are dangerous*. This seems right: we've agreed that, in [56a], no statement is made about the dogs as such, only about a sub-set of them, the rabid dogs.

What about [56b], with its non-restrictive clause? Well, we agreed (I hope) that in [56b] two statements are made, both of them about the dogs. Here, the subject of the main clause predicate VP (*are dangerous*) is indeed *THE DOGS*. So, the non-restrictive clause is a modifier, not just of *dogs*, but of *the dogs*, which is an NP in its own right. As the modifier of a complete NP, the non-restrictive relative clause must be represented as the sister of that NP within a higher NP, as in [60]:

[60] NP with NON-RESTRICTIVE relative clause:



There are a couple of further differences between restrictive and non-restrictive relative clauses: in contrast with restrictives, the wh-phrase/word in non-restrictives can't be ellipted and it can't be replaced by *that*.

In conclusion, let's briefly review the **THREE kinds of clauses that can appear within NP**: (a) noun-complement clauses, (b) restrictive relative clauses, and (c) non-restrictive relative clauses. Restrictive relatives are more peripheral than noun-complement clauses, and non-restrictive relatives more peripheral still. This three-way distinction corresponds with the three levels of NP structure: (a) the lexical (lowest) level, N itself, (b) the intermediate level, NOM, and (c) the phrasal (highest) level, the NP itself.

Noun-complement clause: sister of N (within NOM).

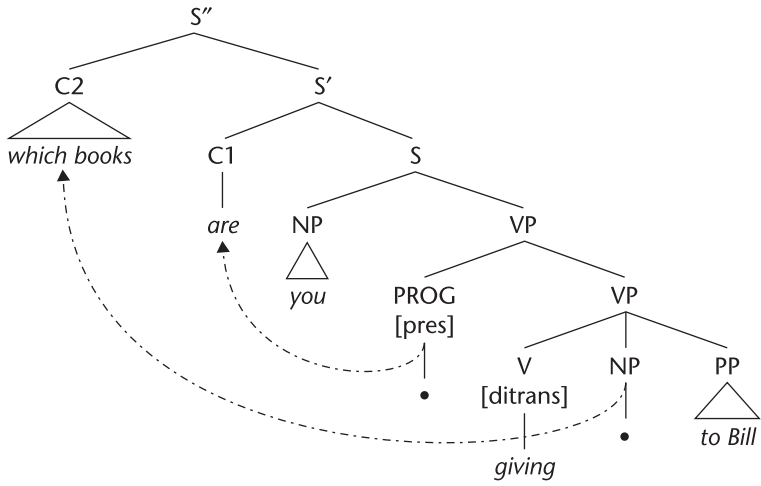
Restrictive relative clause: sister of NOM (within NOM).

Non-restrictive relative clause: sister of NP (within NP).

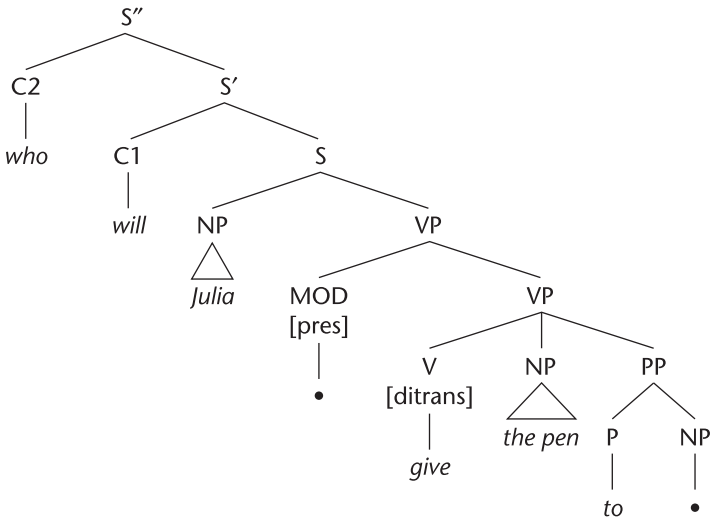
■ Discussion of in-text exercises

(I show the movements only in the first example.)

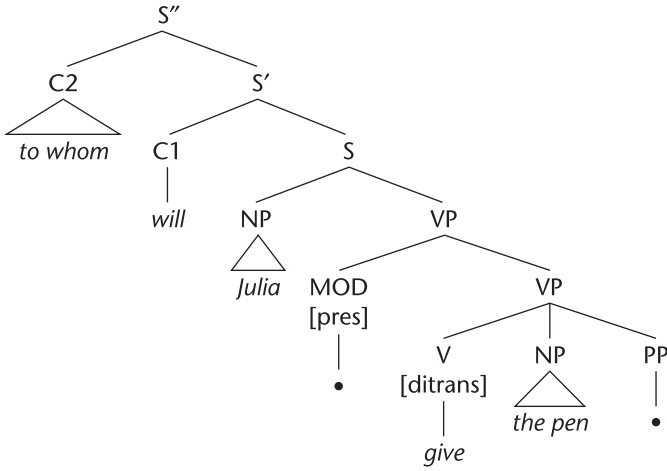
1. (a)



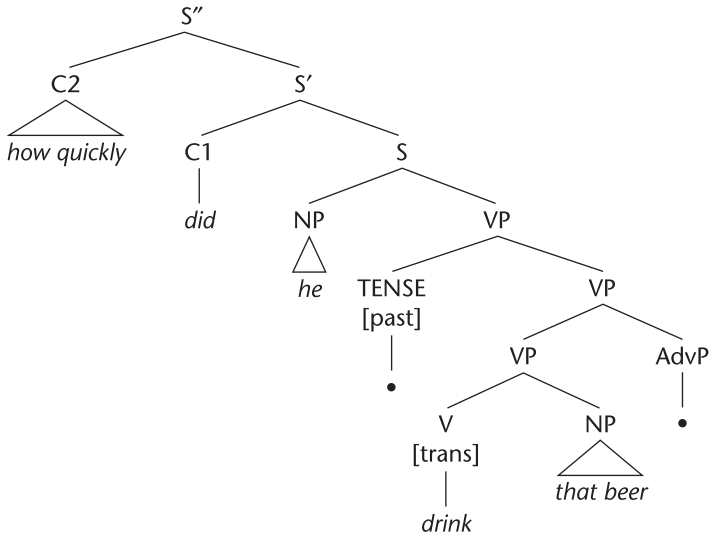
(b) (i)



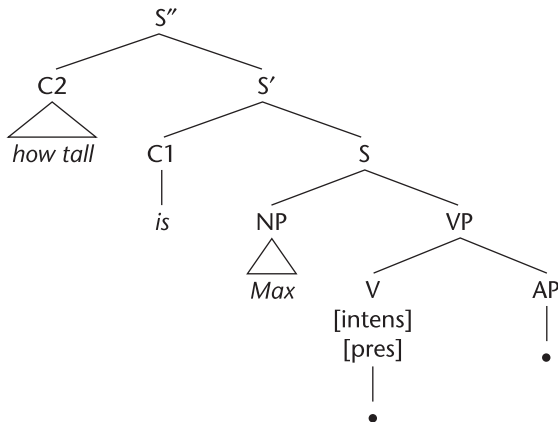
(ii)



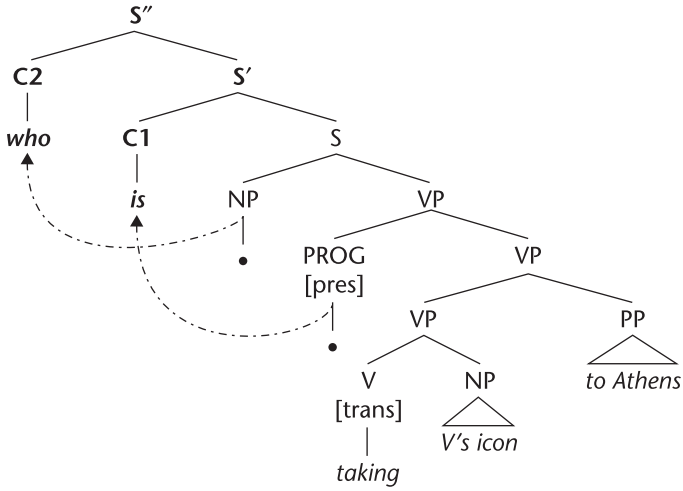
(c)



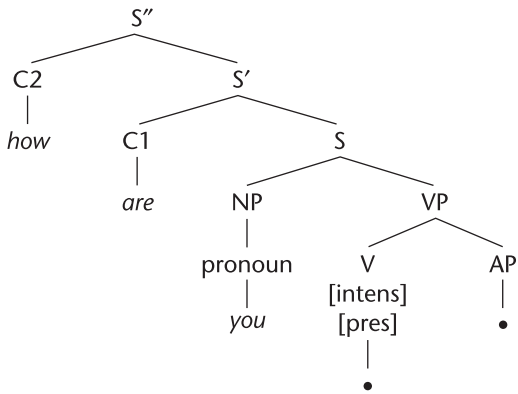
(d)



2.

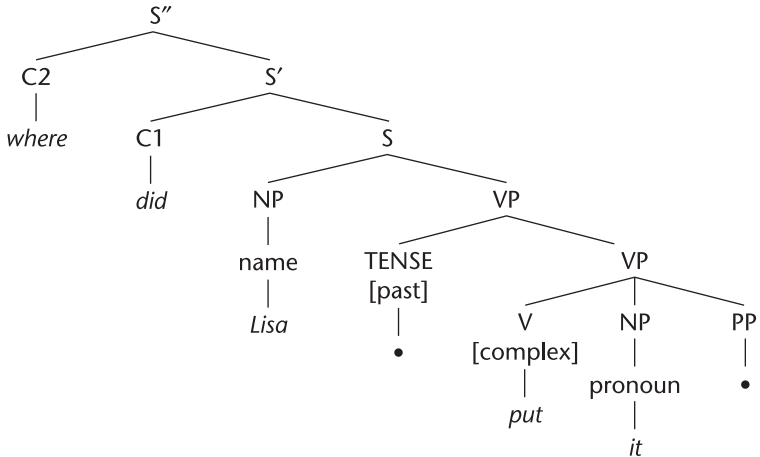


3. (a)



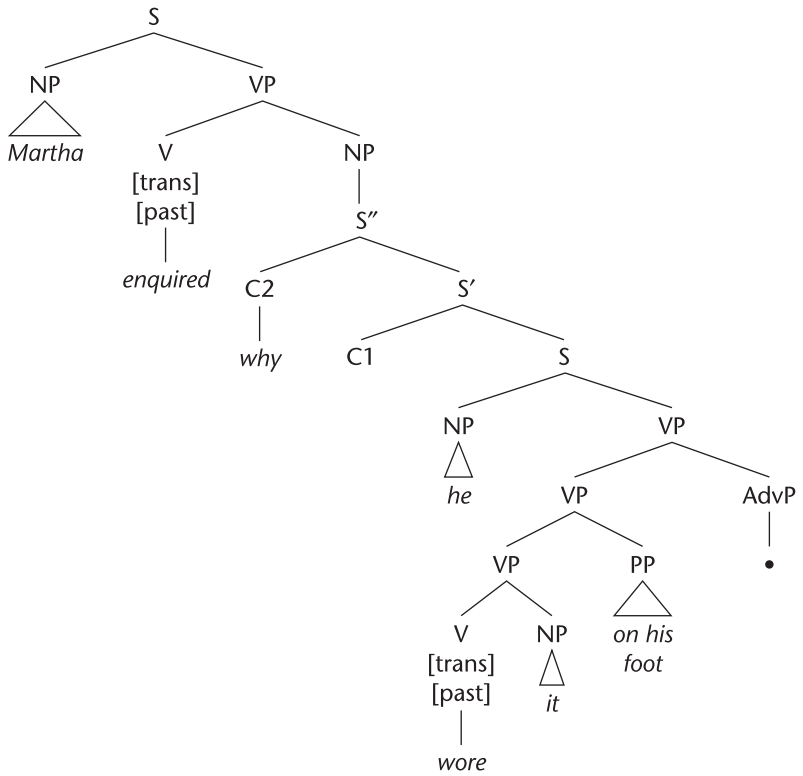
Since most answers to the question are APs (*well, good, awful, too busy*), I've assumed that *how* corresponds to an AP gap. But a PP is possible (*in good spirits*).

(b)

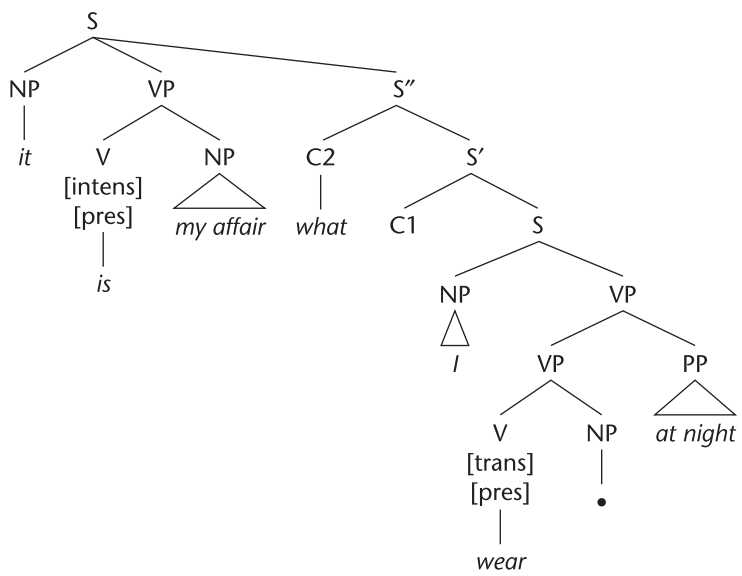


As indicated, *put* is complex transitive, taking an NP and a PP as complements. So I've represented *where* as corresponding to a PP gap.

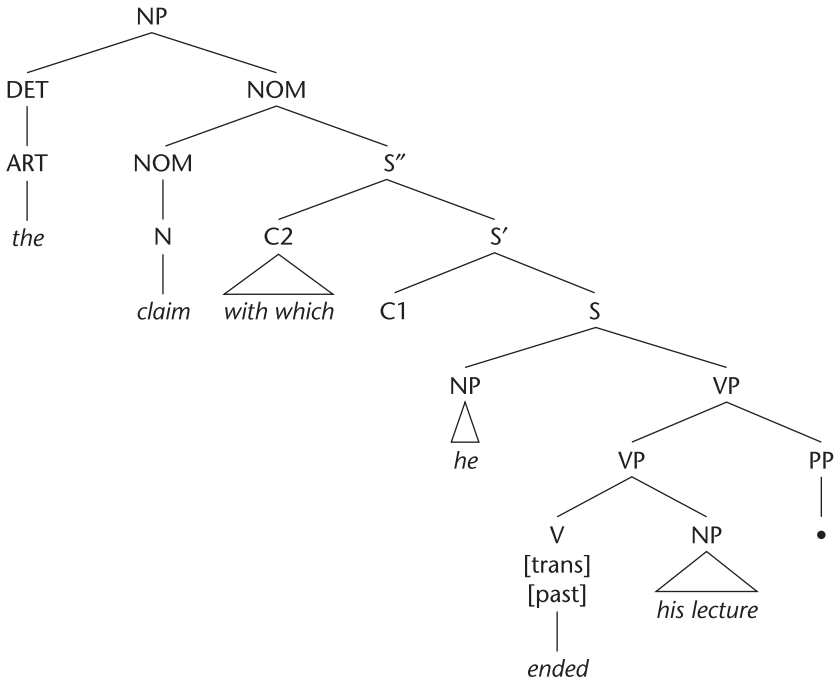
4. [20]



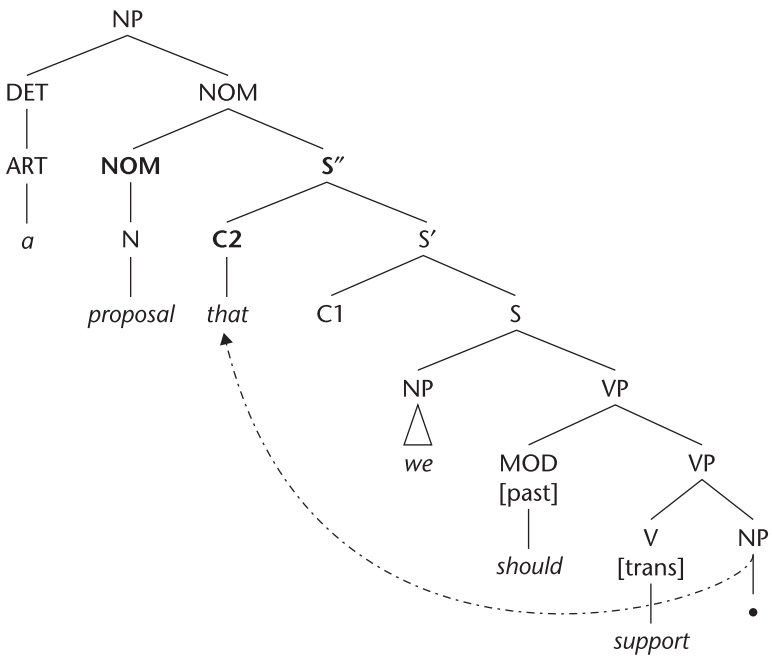
[22]



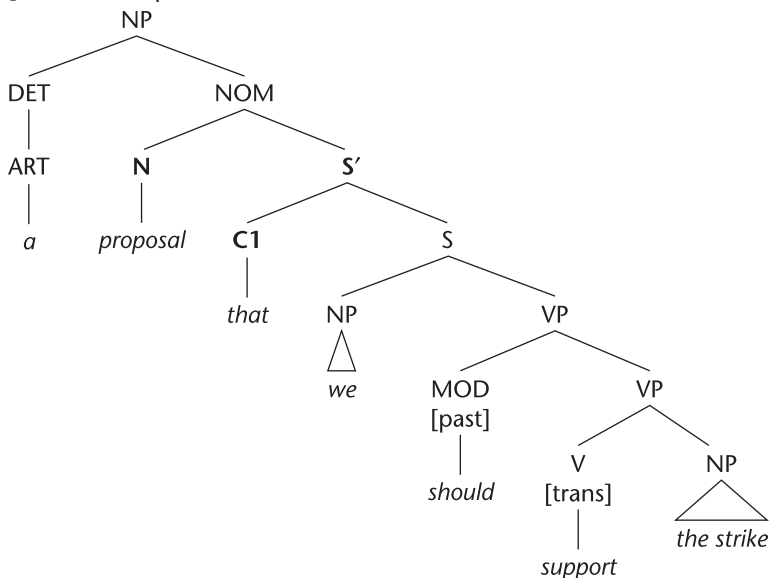
5.



6. [53a] – relative clause.



[53b] – noun complement clause.



Exercises

1. Replace the italicised constituent in the following sentences by an appropriate wh-word, and give the question that results from wh- and auxiliary fronting.

- We shall feed the cat *smoked salmon* today.
- He got to London *by hitch-hiking*.
- The man at the front* was laughing.
- A recidivist is *a persistent offender*.
- Lola showed up in *dark glasses*.
- Tessa pocketed the fried egg *because it was too greasy to eat*.
- He cleaned his keyboard with *his sister's toothbrush*.
- Mary suggested *Lomax should be fired*.
- Albie thought Sophie had said she would buy him *a new buggy*.

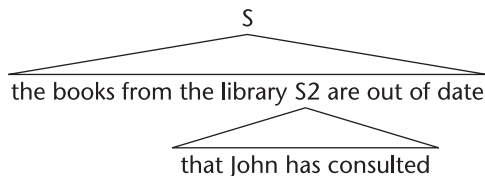
2. For each of the following, embed the (i) clause as a relative clause in an NP of the (ii) clause, giving the sentence that results.

Example: (i) and (ii) would yield (iii):

- You mislaid some cheese last Christmas.
- The cheese has just strolled into the bedroom.
- The cheese which you mislaid last Christmas has just strolled into the bedroom.

- (a) (i) I had been trying to extract a cork.
(ii) The cork suddenly launched itself at Widmerpool.
- (b) (i) Some officer issued this ridiculous order.
(ii) I am going to override the officer.
- (c) (i) Crusoe said he had been marooned on an island.
(ii) The island has never been discovered.
- (d) (i) I had borrowed a passenger's toothbrush.
(ii) The passenger complained bitterly.
3. For each of the following sentences, decide whether the relative clause that follows it could be (i) only restrictive, (ii) only non-restrictive, or (iii) either, when included in the italicised NP. Then draw the phrase marker for sentence (a) including the relative clauses. (Use triangles for PP and the NP *the penal code*.)
- (a) *Napoleon* died in exile.
who inaugurated the penal code.
- (b) I haven't owned *a pig* in my life.
which could fly.
- (c) I prefer (i) *cats* to (ii) *cats*.
(i) which have stripes.
(ii) which have spots.
- (d) *The acrobat* ate ravenously.
who I had just hired.
- (e) *The source of the Nile* was discovered by Speke.
which I have just visited.
4. Give Abbreviated Clausal Analyses of the following sentences. For each subordinate clause, state what type of clause it is (*that*-clause, interrogative, or relative (restrictive or non-restrictive)) and give its function.

Example: *The books from the library that John has consulted are out of date.*



S2: restrictive relative clause – modifier of NOM (*books from the library*).

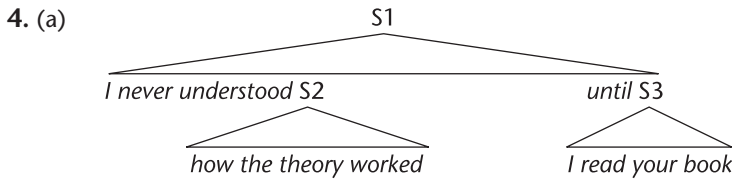
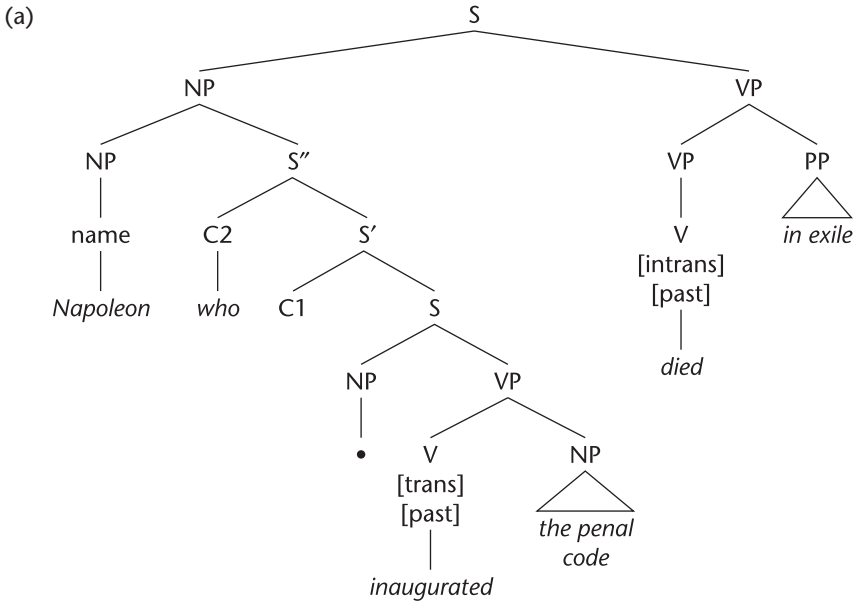
- (a) I never understood how the theory worked until I read your book.
- (b) Why Max didn't answer the accusation that he had cheated is a mystery.
- (c) Why Max didn't answer the poor man that he had cheated is a mystery.
- (d) The acrobat, who is injured, is insistent that the high-wire is strengthened if it is used again.

■ Discussion of exercises

1. (a) What shall we feed the cat today?
 (b) How did he get to London?
 (c) Who was laughing?
 (d) What is a recidivist?
 (e) What did Lola show up in?
 (f) Why did Tessa pocket the fried egg?
 (g) Whose toothbrush did he clean his keyboard with? (Or: With whose toothbrush did he clean his keyboard?)
 (h) Who did Mary suggest should be fired?
 (i) What did Albie think Sophie had said she would buy him?

2. (a) The cork which/that I had been trying to extract suddenly launched itself at Widmerpool.
 (b) I am going to override the officer who issued this ridiculous order.
 (c) The island on which Crusoe said he had been marooned has never been discovered. (Or: The island which Crusoe said he had been marooned on . . .)
 (d) The passenger whose toothbrush I had borrowed complained bitterly.

3. (a) Non-restrictive only. Since *Napoleon*, a name, already uniquely identifies a particular individual, it's impossible to restrict the range of reference of this NP further.
 (b) Restrictive only. If we included the clause as non-restrictive, the whole sentence would be equivalent to *I haven't owned a pig and a pig could fly* which hardly makes sense. In the context of this (negative) sentence, the expression *a pig* does not pick out any particular pig. Only if it did pick out a particular pig could we add the further information that it could fly.
 (c) (i) and (ii) must both be restrictive. If either or both of them were non-restrictive, the resulting sentence would be contradictory, as indeed (c) is without the relative clauses.
 (d) Both restrictive and non-restrictive are possible here.
 (e) Non-restrictive only. *The source of the Nile* already uniquely identifies a fully specified thing.

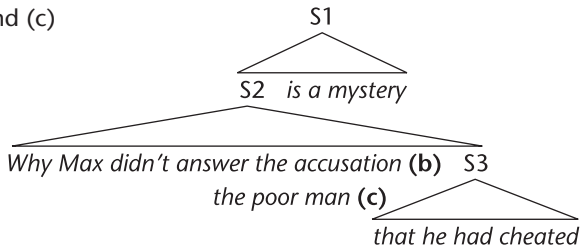


S1: Main clause.

S2: Wh-interrogative clause: Complement (dO) of V (*understood*).

S3: Complement of P (*until*).

(b) and (c)

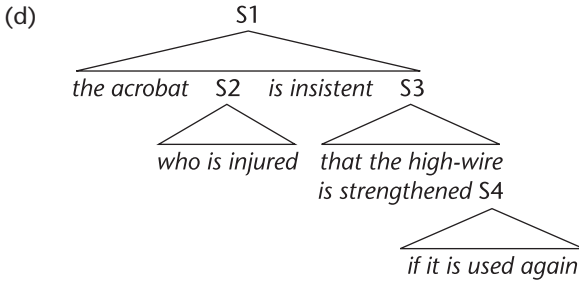


S1: Main clause.

S2: Wh-interrogative clause: subject of S1.

(b) S3: *That*-clause: complement to noun (*accusation*). *Cheat* is [intrans] here.

(c) S3: Restrictive relative clause: modifier of NOM (*poor man*). *Cheat* is [trans] here, with a gap in dO position.



S1: Main clause.

S2: Non-restrictive relative clause: modifier of NP (*the acrobat*).

S3: *That*-clause: complement to A (*insistent*).

S4: Adverbial clause.

Further exercises

Questions and interrogatives

1. Draw complete phrase markers for the following.

Set I

- (1) Which salami shall we buy?
- (2) Where have I put my glasses?
- (3) Where did they have the picnic?
- (4) Who's been eating my porridge?
- (5) How much food should I give the dog?
- (6) Which of these books does John recommend?
- (7) Do you know what they ate?
- (8) What do you think they put in that soup?

(In (8), notice, *what* has been fronted from a subordinate clause.)

Set II

- (9a) I don't know who he found an amusing companion.
- (9b) I don't know whether he found an amusing companion.
- (10a) Who did Granny say should play?
- (10b) Who did Granny say I should play?
- (11a) Who is a phonologist?
- (11b) What is a phonologist?

Set III

(These need care.)

- (12) Which exam was it certain Julia would pass?
- (13) Who has been sacked?
- (14) Who were they given to?
- (15) Did you discover who was giving the lecture?
- (16) Who did you discover was giving the lecture?
- (17) Who did John ask which films they had seen?

(Note that (15) is a yes/no question, with *wh*-fronting in the subordinate clause. (16) requires a double *wh*-fronting. In (17) there are two separate *wh*-frontings.)

■ Relative clauses and other matters

2. Draw complete phrase markers for the following NPs:

- (1) The chef who I fired.
- (2) The woman in whose care we left you.
- (3) The spy who loved me.
- (4) The place where we had the picnic.
- (5) The reason why it spits.
- (6) A style he thought appropriate.

3. Draw complete phrase markers for the following sentences:

- (1a) The man they cheated is furious.
- (1b) The reason they cheated is clear.
- (2a) I have an idea we should think about.
- (2b) I have an idea we should think about exams.
- (3a) The fact that I communicated with Mona is crucial.
- (3b) The fact that I communicated to Mona is crucial.

4. I've discussed only relative clauses appearing in the structure of NPs. A difference between restrictive and non-restrictive relatives is that, while restrictives only ever function as modifiers within NP, non-restrictives can modify a range of categories. Give the constituents (and their categories) that the non-restrictive relative clauses are modifying in (1)–(3). Then draw a complete phrase marker for (1).

- (1) He was very rude, which I never am.
- (2) Lomax argued for trampolines, which surprised me.
- (3) Hedda got out with the aid of a trampoline, which seemed a sensible way of doing it.

5. (1)–(2) below illustrate a function of *wh*-clauses not explicitly discussed in this chapter. Decide on their function and then draw a phrase marker for each sentence.

- (1) Lola merely smiled when I proposed marriage.
- (2) They pitched the tent where they always pitch it.

6. Give Abbreviated Clausal Analyses of the following sentences. Indicate the gaps. For each subordinate clause, state what type of clause it is (*that*-clause, *yes/no* interrogative, *wh*-interrogative, or relative (restrictive or non-restrictive)) and give its function. For all *wh*-clauses, identify and give the function of the *wh*-phrase/word that introduces it (whether overt or not). For examples of what I'm asking for here, see Discussion of Exercise 4 on pages 219–20.

- (1) The man who broke the bank at Monte Carlo is now my butler.
- (2) Which animals Bertram feeds is his decision.
- (3) We should find out who the visitors to the restaurant were.
- (4) It's hardly surprising you can't get your teeth into the fritters Jim cooks.
- (5) When we are going for a picnic is a question that he is always asking.
- (6) I'm nervous that the hoops that have been alight will topple over when the hippos jump through them.
- (7) Watson, who was never very quick, is wondering if Holmes's theory that the governess is the guilty party can possibly be right.
- (8) Do you know how many players have guessed what instrument Miss Scarlet was murdered with?
- (9) None of the people who went to Narnia when it was first created ever explained how they got there.
- (10) Marcel often wondered whether Gilberte ever asked Swann what the boy she'd seen in the garden was called.

7. The following are ambiguous. For each, draw a phrase marker for each interpretation. Abbreviate them as far as possible (but not so far as to obscure the distinction between the interpretations).

- (a) I forgot how bitter beer tastes.
- (b) When did you say he should go?
- (c) The news that Max left Greta was alarming.
- (d) He asked the man who he had seen.

10

Non-finite clauses

All the sentences/clauses considered so far in this book have been finite. In other words, they all included a finite verb (auxiliary or lexical) – tensed for present or past. A **NON-finite clause is a clause in which there is no tensed verb**. They are **TENSELESS** clauses. Main clauses, remember, are always finite. So **non-finite clauses can only be subordinate**.

This chapter comes in two parts. Part I is about the **FORM** of non-finite clauses and Part II is about their **FUNCTIONS**.

Part I: The form of non-finite clauses

There is in fact more to the difference between finite and non-finite clauses than just the presence vs. absence of tense. So, before we look at non-finite verbs and how to represent them, a general point about non-finite clauses needs to be made.

In addition to lacking tense, **non-finite clauses may lack one or more major overt NPs**. They frequently lack an overt subject, for example. In a finite clause, the finite verb must have an overt subject to agree with. Non-finite verbs are not subject to this constraint.

When this is so, I'll say that the relevant NP is **COVERT**. There are two separate circumstances governing the occurrence of a covert NP:

- (a) the reference of the NP is general (indefinite, non-specific), or
- (b) its reference is identical to a constituent in a higher (superordinate) clause.

Consider, for example, the (three) subordinate clauses in [1] and [2]. Their verbs (*chatting* and *wasting*) are tenseless and they lack an overt subject.

- [1] [*Chatting with the construction workers*] is a good way of [*wasting time*].
- [2] Hedda enjoys [*chatting with the construction workers*].
- [3] Hedda doesn't like [*Anna chatting with the construction workers*].

There's a clear difference between the non-finite clauses in [1] and those in [2] and [3]. In [1], we have two examples of (a) above. [1] mentions chatting with