CHAPTER 4: FUNCTIONS IN THE SENTENCE

From Elly van Gelderen, An Introduction to the Grammar of English, draft of the second edition, 7 July 2009

In chapter 3, groups of words that go together were called phrases and labelled as NP, VP, AdjP, AdvP, and PP depending on what headed them. Phrases (and pronouns since they replace phrases) have functions in the sentence, e.g. subject, direct object, indirect object, and subject and object predicate. The name, label, or realization of the function (e.g. NP) and the function itself (e.g. subject) should be kept separate.

As mentioned, we will not be putting functions in the tree structures since (most of) the functions follow from the tree structure. Certain functions such as subject and direct object occupy specific positions in the tree (daughter of S and sister of V respectively), and to label them would be redundant.

The four basic functions are subject, predicate, complement, and adverbial (see next chapter for adverbials). As explained in section 1, a subject and predicate are needed in every sentence. Most verbs need complements as well, as section 2 discusses. Complements come in different varieties; the ones dealt with in this chapter are direct object, indirect object, subject predicate, and object predicate. Some people equate object and complement, but technically complement is a broader category than object. In section 3, verbs will be named depending on the type of complement they appear with. Section 4 provides trees for the different verbs, and section 5 explores one additional verb type, the light verb.

1. Subject and Predicate

Every complete sentence has a subject and a predicate. The subject is usually realized by an NP (sometimes by a clause, see chapter 7), and the predicate is always realized by a VP. In (1), the moon is the subject and has risen in the sky is the predicate. The predicate says something about the subject:

(1) [The moon] [has risen in the sky].
Other examples of subjects and predicates are given in (2). Note that subjects can be more than one or two words, as *their long-term survival in Florida* shows!

(2) [Manatees] [are large, marine mammals]. [They] [can live up to 60 years and can weigh up to 1200 pounds]. [Their long-term survival in Florida] [is uncertain].

Typically, subjects start off a sentence, as in (1) and (2), but there are a number of constructions where they don’t. For instance, in (3), the Adverb Phrase *fortunately for us* precedes the subject; in questions such as (4), the auxiliary verb does; and in (5), the sentence is a complex one and there are multiple subjects. (We’ll go into complex sentences in more detail in chapters 7, 8, and 10).

(3) Fortunately for us, [she] managed to join the government.

(4) Do [those people] like anything?

(5) [He] made no answer, and [they] were again silent till [they] had gone down the dance, when [he] asked her if [she and her sisters] did not very often walk to Meryton.

(Jane Austen, *Pride & Prejudice*, chapter 18)

Since the subject is not always the initial word or phrase of the sentence, we need other ways to determine the subject. Table 4.1 lists three diagnostics for determining what the subject is.
a. Inversion with the AUX in Yes/No questions
   *The pig from Malacandra* will want to eat soon

   **Will the pig from Malacandra** want to eat soon?

b. Agreement with the Verb/AUX
   *The pfiftrigg* is nice

   *The pfiftriggs are* nice.

c. Tag questions
   *The hross* is nice, *isn't he?*

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**Table 4.1: Subject tests (subject is in italics; verb is in bold)**

Let’s apply these tests to (1). The first test of Table 4.1 shows that *the moon* is the subject since it can change places with *has*, as in the question (6):

(6) Has [the moon] just risen in the sky?

The second test involves subject verb agreement. We discussed this rule in chapter 3 because it is helpful in finding the head of an NP. The NP that determines agreement on the verb is the subject. In English, this marking is fairly limited. In (7) and (8), some instances of subject verb agreement are marked, which most of you know already. In English, the verb *be* shows the most inflection, as seen in (7), but most other verbs just show the singular third person, as in (8b), and leave the other subjects unmarked, as in (8a):

(7) a. **I am** happy.  (first person singular subject *I* with first person singular *am*)
   b. **You are** happy.  (second person subject *you* with second person *are*)
   c. **He/Matthew is** happy.  (third person singular subject with third person singular *is*).
   d. **We/they are** happy.  (plural subject with third person plural *are*).

(8) a. **I/you/we/they walk** regularly.  (unmarked *walk*).
b. She/Emma walks regularly. (third person singular subject with third person singular verb)

Thus, to find the subject in (1), we could change its number (singular to plural or plural to singular) and see if that changes the form of the verb as well. In (1), the subject the moon is singular and, if we pluralize it to the moons, as in (9), the verb becomes plural as well (i.e. loses the third person singular ending):

(9) The moons have just risen in the sky.

This shows that the subject in (1) is indeed the moon (and in (9), it is the moons of course). Sentence (9) is a bit strange since there is only one moon surrounding earth. However, if we were on Jupiter, (9) would be appropriate. Hence, the strangeness is not caused by the grammar, but by our knowledge of the world.

The third test for determining the subject involves adding a tag question and seeing what the pronoun in the tag replaces. In (10), the it in the tag refers to the moon and not to the sky and that's why the former is the subject:

(10) The moon has just risen in the sky, hasn't it?

Having discussed three criteria for identifying subjects, I turn to a kind of subject that, at first, does not look like a subject, namely, there in (11):

(11) There are five unicorns in the parking lot.

If we apply the three tests of Table 4.1 to sentence (11), there and five unicorns each pass some, but not all, of the tests for subject. For instance, in a question there and are switch places; the tag will be formed with there, as in aren't there; but the agreement on the verb is determined by five unicorns. To account for this, we'll assume that both there and five unicorns function as the subject. There is called a dummy or pleonastic or expletive subject. It is used when no other subject occupies the position in the beginning of the sentence. A variant of (11) is (12), where five unicorns
is in subject position and *there* is not needed:

(12) **Five unicorns** are in the garden.

Turning to the predicate, we will just define it as everything in the sentence that is not the subject. In the tree, the predicate is always the VP that is under the right branch right below the S and the subject is the NP right below the branch off the S on the left side, as in (13).

(13)     S
         ei
        NP    VP

2. **Complements**

A complement is what has to follow the verb. Complements come in different flavors, as direct and indirect objects and as subject and object predicates.

2.1 **Direct and Indirect Object**
A common function in the sentence is the direct object, usually realized as an NP, as in (14) (see chapter 7 for the use of a clause as direct object):

(14)    a. Harry Potter played [a game].
        b. I read [the letter from Hogwarts].

Objects occur as sisters to the verb, as in (15), and can be turned into subjects in a passive construction, as in (16):
In (16), *the letter from Hogwarts* functions as the subject because, for instance, in a question it would switch with the auxiliary verb *was*. Make the subject in (16) plural and see what that shows!

Passive sentences are variants of non-passive or active ones and come about by switching the subject and the object and by adding a form of *to be* as in (17b), the passive variant of (17a). The subject of the active sentence (17a) becomes optional in the passive and, if expressed at all, is preceded by *by*:

(17) a. I saw him. (active)
    b. He was seen (by me). (passive)

Passives are useful when we don’t know who the agent of the action is and they often occur when the object is more definite than the subject, as in (18), but this is a complex matter:

(18) **The decision** was made by **a small group of people**.

(Talk of the Nation, 1998, COCA)
Passivization is a way to distinguish between objects (both direct and indirect) on the one hand and subject predicates, object predicates, and adverbials on the other, as we'll see in the next chapter.

The indirect object, which is always an NP, expresses the goal (Santa in (19a)) or the beneficiary of the action (Harry in (19b)):

(19)  
   a.    I gave Santa a letter.  
   b.    I made Harry some soup.

Indirect objects can be passivized as well, and in a sentence with both a direct and indirect object, it is the indirect object that becomes the subject. For instance, (20) is the passive counterpart of (19a), and the indirect object Santa becomes the subject, not the direct object a letter:

(20)  [Santa] was given a letter by me.

Indirect objects can be preceded by the prepositions to, in the case of the goal, and for, in the case of a beneficiary, as in (21) and (22):

(21)  I gave a letter to Santa.  
(22)  I made some soup for Harry.

When to and for are added the order of indirect and direct object switches, as you can see by comparing (18) with (21). Some grammarians call the PPs to Santa and for Harry indirect objects; others call them adverbials since they seem less important to the sentence (e.g. some can be left out) and they cannot become the subject of a passive sentence, as the unacceptable (23) shows:

(23)  *Santa was given a letter to.

I will call the PPs in (21) and (22) indirect objects but am happy to listen to other views.

A list of verbs that take a direct object and those that take both a direct and indirect object is given in Table 4.2. In section 3, we will label the former transitive verbs and the latter ditransitive.
Many verbs have optional indirect objects. Table 4.2 is based on a limited search of the British Nation Corpus and the Corpus of Spoken American English; see Exercise N for more on this issue. You will have to decide each time you see them in a sentence if they have a direct or a direct and an indirect object.

<table>
<thead>
<tr>
<th>Verbs with only direct objects</th>
<th>with direct and mostly obligatory indirect objects</th>
<th>with direct and less obligatory indirect objects</th>
</tr>
</thead>
<tbody>
<tr>
<td>see, eat, love, hit, hear</td>
<td>give, teach, offer, tell, show, ask, lend</td>
<td>buy, bring, bake, read, pay, earn</td>
</tr>
<tr>
<td>watch</td>
<td>provide, send, hand, promise, grant, award, begrudge, mail, throw</td>
<td>build, cook, knit, prepare</td>
</tr>
</tbody>
</table>

Table 4.2: Verbs with direct and indirect objects

Making this table, I was very surprised how few verbs only have a direct object. The reason is that we can imagine doing almost anything for the benefit of others, e.g. running a mile for the ASPCA and reading someone a book.

2.2 Subject and Object Predicate

The subject predicate is usually realized as an AdjP. It makes a claim about the subject, as in (24), and can also be an NP, as in (25), or a PP, as in (26) (see chapter 7 for the use of a clause as subject predicate):

(24) He is [pleasant].
(25) He is [a nice person].
(26) He is [in the garden].

The verb used in sentences with a subject predicate is usually either be or become or can be replaced by it. Thus, in the first line of the poem by Dylan Thomas, discussed in the exercises from chapter 2, the adjective gentle goes with the unexpressed subject and the verb go could be replaced by become. Other verbs that typically occur with a subject predicate are feel, look, grow, and smell, when used as in (27):
In (27abd), the verb can be replaced by a form of be and in (27c) by a form of become, with some loss of specific meaning. If you replaced the transitive verb in (13) and (14) with be or become, the results would be strange, to say the least.

As mentioned in the special topic to chapter 2, many speakers overreact or panic when they produce an adjective right next to a verb, as in (27). The combination is correct, however, since the adjective modifies a noun (functioning as subject). It need not be changed to an adverb and in many cases it can't. A list of verbs that may have a subject predicate in English appears in Table 4.3.

<table>
<thead>
<tr>
<th>act, appear, be, become, get, go, grow, fall, feel, keep, look, remain, seem, smell, sound, stay, taste, turn</th>
</tr>
</thead>
</table>

Table 4.3: Examples of verbs with subject predicates

Most of the verbs in Table 4.3 can be used in other ways too and that's why it is important to think about the entire sentence and not just to look at the verb. For instance, each of the verbs in (27) can be used without a subject predicate, as (28) shows:

(28) a. He felt his pulse.
    b. They looked around.
    c. She grew strawberries in her garden.
    d. I smell trouble.

In (24) and (27), the adjective functioning as a subject predicate says something about the subject, but an adjective can also say something about a direct object. The adjective then functions as an object predicate. There are relatively few verbs that take a direct object and an object.
predicate, so don’t overuse the function in your analysis! It is safe to say that if you see a verb such as *consider*, you need to think about the possibility of an object predicate, but not with verbs such as *see*, *read*, and *go*.

The object predicate is usually an adjective phrase, as in (29), but can also be an NP, as in (30), or a PP, as in (31):

(29) The students found the exam [difficult].
(30) Jane considers *Pride and Prejudice* [a classic].
(31) She put the cup [on the table].

A few examples are given in Table 4.4.

<table>
<thead>
<tr>
<th>Verb</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>consider</td>
<td>I considered Sabina very smart.</td>
</tr>
<tr>
<td>think</td>
<td>I thought Timber (to be) nice.</td>
</tr>
<tr>
<td>find</td>
<td>They found Einstein interesting.</td>
</tr>
<tr>
<td>know</td>
<td>I know Chandra to be nice.</td>
</tr>
<tr>
<td>put</td>
<td>She put snails on the table.</td>
</tr>
<tr>
<td>place</td>
<td>They placed a jar upon a hill.</td>
</tr>
<tr>
<td>call</td>
<td>They called the ship <em>The Lauderdale</em>.</td>
</tr>
</tbody>
</table>

Table 4.4: Verbs with direct objects and object predicates

Here too, it sometimes depends on your analysis whether you consider a phrase an object predicate or a direct object. For instance, *a good chairperson* in (32) can be an object predicate to the direct object *him*, in which case *to be* can occur between them, as in (33), and *him* is the same person as *a good chairperson*. Alternatively, *him* can be an indirect object and *a good chairperson* a direct object, in which case *for* can precede *him*, as in (34), and *him* and *a good chairperson* are not the same person. Hence, the verb *find* is ambiguous:

(32) They found him [a good chairperson]. (ambiguous)
(33) They found him to be [a good chairperson]. (Object Predicate)
They found for him [a good chairperson].  

The terms for the two functions discussed in this section are much debated. Some grammarians call them subject and object complements; others subject and object predicatives; yet others call them subject and object attributives. I have chosen subject and object predicate to show that their function is similar to that of the VP predicate. It is as if the AdjP is more important than the verb in these constructions. That is the reason the verb in (24) to (26) can be left out in many languages and, in English, no verb appears to link object and object predicate, even though to be can be included in (33) and in (35):

Jane considers *Pride and Prejudice* to be [a classic].

Four suggestions on identifying the Object Predicate are: (a) only use this label if you have a (direct) object, (b) if you see the verb *consider*, it is a good candidate for having a direct object and object predicate, (c) if you leave out the Object Predicate, the sentence is incomplete or has a different meaning, and (d) don’t overuse the function!

In short, some of the major functions of phrases in the sentence are subject, predicate, direct and indirect object, subject predicate and object predicate. There are special objects such as prepositional objects and objects of phrasal verbs. These will be dealt with in chapter 5 together with the optional adverbial function.

3. **Verbs and functions**

Verbs are distinguished depending on what objects or object predicates they select. Verbs that select objects are called transitive verbs and those that don't, as in (36) below, intransitive. If the verb selects one object, as in (13) and (14) above, it is (mono)transitive; if it selects two objects, as in (19), it is ditransitive. Verbs that select a subject predicate, as in (24) to (27), are called copula verbs or linking verbs and those that have both an object and an object predicate, as in (29) to (31), are called complex transitive. Two more types of verbs will be discussed in the next chapter: prepositional and phrasal verbs. Since adverbials can always be added to any verb, they do not play
a role in the classification of the verb. I will now provide examples of each kind of verb.

Examples of intransitives are swim, walk, arrive, cough, sleep, and sneeze. They do not need a complement:

(36) He sneezed and sneezed.
(37) He slept during the meeting.

As mentioned before, you should look at the entire sentence before you can be completely sure of the classification of the particular verb. Thus, walk in I walk the dog is transitive, but in I walked for hours it is not. (In the next chapter, section 5, I give some reasons why during the meeting in (37) is not an object but an adverbial).

Examples of (mono-)transitives are eat, read, see, hear, plant, write, compose, paint, love, hate, drink, hit, and hug, as in (38). They have a direct object complement:

(38) He hugged the ball.

As also seen in Table 4.2, give, tell, bake, cook, and play are ditransitives. A typical ditransitive appears in (39). However, many transitive verbs have optional indirect objects as mentioned before. The example given in (40) contains a fairly optional indirect object him:

(39) They told the public a lie.
(40) I played (him) a tune.

If a verb selects a subject predicate, it is called a copula or linking verb. A number of copula verbs are given above in Table 4.3, namely be, become, go, feel, look, grow, seem, smell. Complex transitives are verbs such as consider, know, elect, keep, prove, deem, judge, reckon, make, and regard. They have direct objects and object predicates as their complements. They are similar to regular transitives except that their object needs some modification. Please notice (again) that many verbs belong to more than one category. For instance, make can be a transitive, as in I made a sweater, or a complex transitive, as in She made them happy, or a ditransitive, as in She made them a cake.
Distinctions such as transitive and intransitive are useful to explain when to use verb forms such as lay/lie, set/sit, and fell/fall. The first verb in these three sets is the transitive one and the second is the intransitive. The verbs are irregular in that the normal rules for past tense (add –ed) and participle do not apply (add –ed or –(e)n). Sentences (41a) and (42a) are in the present tense, (41b) and (42b) in the past tense, and (41c) and (42c) in the present perfect. (We’ll discuss these terms in chapter 6):

(41) a. This chicken **lays** an egg every day. (transitive irregular)
    b. He **laid** that book on the table yesterday.
    c. I have **laid** the table like this for years.

(42) a. I **lie** down regularly. (intransitive irregular)
    b. I **lay** down yesterday.
    c. I have **lain** here for hours.

An added problem with these verbs lies in the past tense of the intransitive being the same as the present of the transitive. Both of these are irregular verbs since they are not predictable. In addition, there is an intransitive **lie**, meaning ‘not telling the truth’, that is regular in form, as (43) shows:

(43) a. They always **lie** under oath . (intransitive regular)
    b. They always **lied** under oath
    c. They have always **lied**.

To finish this section, I’ll just again list some intransitive, transitive, and ditransitive verbs, as well as copulas and complex transitives with their complements. Seeing all together might give a better picture.

<table>
<thead>
<tr>
<th>Intransitive</th>
<th>no complement</th>
</tr>
</thead>
<tbody>
<tr>
<td>walk, go, arrive, sneeze, go, lie (as in both lie to congress and lie down), sit, die, and swim</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transitive</th>
<th>one (direct) object</th>
</tr>
</thead>
<tbody>
<tr>
<td>see, eat, love, hit, hug, drink, break (as in break the vase), and paint.</td>
<td></td>
</tr>
</tbody>
</table>
Ditransitive: one direct and one indirect object (see Table 4.2)
give, teach, offer, tell, show, ask, lend, buy, bring, bake, read, provide, send, hand, promise, grant,
cook, prepare, award, begrudge, mail, and throw

Copula: one subject predicate
be, become, seem, appear, look, remain, keep, stay, fall, turn

Complex Transitive: one (direct) object and an object predicate
consider, find, know, name (as in name the ship the Albatros)

Table 4.5: Examples of the verb classes so far with their complements

4. Trees for all verb types

As I have mentioned before, the tree structure reflects what the function of each phrase is. Thus, the
subject and the predicate are the daughters of S, and the objects and subject predicate are sisters to
V. The object predicate is a bit more complex but can be argued to be a sister of V too. The
adverbial elements, as we'll see in the next chapter, are not sisters to V, but the prepositional objects
and objects to phrasal verbs are.

Intransitives may occupy the entire VP, as in (44):

(44) S
   ei
   NP VP
   I !
   V
   laughed

A structure for the (mono)transitive verb of (38) above is (45), and for the copula verb of (27a)
above, it is (46):
In general, we try to make trees show hierarchies, i.e. we seek to avoid triple branches in (47). However, to show that both the direct and indirect object in (47) are objects, I have drawn them as sisters to the V:
There are ways of expressing this in a non-flat/hierarchical structure but they are complicated and still controversial. Hence, this book will use (47), noting the problem of the flatness of the VP.

The other complement where flatness is a problem is the one to the complex transitive verb, as in (29) to (31) above. Since the object and predicate in some way form a unit (unlike the direct and indirect object), I'll represent it as in (48a), labeling the node above NP and AdjP a small clause (SC), i.e. a clause with the verb deleted. If the verb is present, the structure will look like (48b). More on (48b) in chapter 8, however:

(48) a. S    b. S
    ei    ei
    NP   VP   NP   VP
    She ei    She ei
    V    SC   V    S
    found ei    found ei
    NP   AdjP   NP   VP
    it !    it ei
    Adj nice    V    AdjP
to be    |    Adj
    nice

If the small clause in (48a) really has a be verb left out, we can think of the object predicate as a sister to V as well.

5. Light Verbs (Optional)

This is an introductory grammar text, and hence not all kinds of verbs can be dealt with. To give an example of such a group, we'll look at light verbs, an interesting set of verbs in English that combines with mainly indefinite nouns (and sometimes prepositions also). Examples of light verbs
with nouns are given in (49):

(49) have a look, take a look, take a rest, take a tumble, take the initiative, take heart, take measures, give advice (on), make a decision (on), do a translation (of), do harm, give a hand, make trouble (for).

The verb and noun together have the meaning of a verb, e.g. have/take a look is similar to the verb look, give advice to the verb advise, and make a decision to the verb decide. With some, e.g. do a translation, the noun is still a real object and can be passivized, as in A translation of Homer was done by that famous writer although the indefinite subject sounds unusual; with some, e.g. take a look, the passive sounds ungrammatical, as in A look was taken by me. We won't draw trees for these or analyze them further.

6. Conclusion

In this chapter, we have discussed six major functions for which phrases are used: subject, predicate, direct and indirect object, subject predicate, and object predicate. Particular functions are realized by particular phrases, e.g. the subject is often an NP. In Figure 4.1, a schematic representation for the functions of the phrases NP, VP and AdjP is given. Apart from VP, which is always a predicate (and the other way round), there is no one-to-one relationship between a phrase and a function. In chapter 5, PPs and AdvPs will be discussed.

\[
\text{Subject (the driver laughed) \quad \rightarrow \quad \text{Subject Predicate (is a student) }}
\]
Figure 4.1: A schema of the functions of NPs, VPs, and AdjPs

The classification of verbs is dependent on the kinds of objects and predicates they have. The obligatory elements following the verb are called complements. We have seen five classes of verbs. Intransitives have no objects, (mono)transitives have one, and ditransitives have two objects, a direct and an indirect. Copula verbs have a subject predicate and complex transitive verbs have an object and an object predicate. See what you find easier to recognize: the verb (as transitive or ditransitive) or the functions. Tree structures are also provided for each of these verbs with the complements as sisters to the V.

Key terms are the six functions (subject, predicate, direct and indirect object, subject predicate and object predicate); and the classification of five verb types (intransitive, (mono)transitive, ditransitive, copula, and complex transitive). Be careful to keep function and phrase separate!

Exercises
A. Provide an example of each of the six functions we have discussed so far.

B. Examples of subjects are given in brackets in (50), which is adapted from a wikipedia entry on javelinas. Do you agree with this selection of subjects?

(50) [Peccaries] are medium-sized animals, with a strong superficial resemblance to pigs. Like pigs, [they] have a snout ending in a cartilagenous disc, and eyes [that] are small relative to their head. Also like pigs, [they] use only the middle two digits for walking, although,
unlike pigs, [the other toes] can be altogether absent. [Their stomach] is non-ruminating, although it has three chambers, and is more complex than [that of pigs] is. (http://en.wikipedia.org/wiki/Peccary)

C. Identify the subjects in the text used in chapter 2, repeated here:

At last, we had begun filming. Should I say `we'? I was living in the house and extremely curious about everything connected with the film. Fortunately, they let me hang around and even gave me a job. As an historian, I kept an eye on detail and did not allow the filmmakers to stray too far from the period of Louis Philippe. The project was to make an hour-long film about Houdin and it was decided to shoot the picture in Switzerland. This may have been a bad idea. It certainly mixed professional and domestic affairs.

D. Identify the functions of the phrases in brackets in the sentences below:

(51) [I] gave [him] [the ticket].
(52) [They] [planted a dogwood].
(53) [The trees in the park] are [unhappy].

E. Identify the different kinds of complements (e.g. direct object, subject predicate) in (54) to (60). Give reasons:

(54) They sold us their furniture.
(55) Tom submits his tax-returns.
(56) She seemed very happy.
(57) He found it easy.
(58) He took the early train.
(59) The politician considered that argument invalid.
(60) That sounds terrible.

F. Provide the labels of the verbs in (54) to (60) (e.g. copula, ditransitive).
G. Draw trees for sentences (54) to (60).

H. List all the functions and names/labels of the phrases in (61) to (64):

(61) I considered the book very helpful.
(62) He baked Joan a cake.
(63) The pig from Mars left.
(64) The hard-working students seemed exhausted.

To what categories do the following words belong: helpful, from, hard-working?

I. Look at the first page of Mavis Gallant's short story "About Geneva" below:

Granny was waiting at the door of the apartment. She looked small, lonely, and patient, and at the sight of her the children and their mother felt instantly guilty. Instead of driving straight home from the airport, they had stopped outside Nice for ice cream. They might have known how much those extra twenty minutes would mean to Granny. Colin, too young to know what he felt, or why, began instinctively to misbehave, dragging his feet, scratching the waxed parquet. Ursula bit her nails, taking refuge in a dream, while the children's mother, Granny's only daughter, felt compelled to cry in a high, cheery voice, "Well, Granny, here they are, safe and sound!"

What kinds of verbs are wait, look, feel, and drive in this text?

What is the function of those extra twenty minutes, the waxed parquet, small, lonely, and patient?

J. Identify the subjects in (65) to (68). Provide two reasons why in each case:

(65) In the rain, it is sometimes hard to see.
(66) Only one of these people is happy.
(67) The book Chomsky wrote when he was young was reissued last year.
(68) Were the Wizard of Oz and Catweazle preparing to go to Alabama?

K. Sentence is (69) is quite complex. What kinds of verbs are grow and look? What are their complements?

(69) We must expect to see her grown thin, and looking very poorly. (Jane Austen, Emma, Vol 2, chap 1).

L. We reviewed the rule for lay, lie, etc in section 3. State it in simple terms and then discuss what is happening in the cartoon?

Luann

Figure 4.2: Lie ahead. (Used with the permission of GEC, Inc. and United Media in conjunction with the Cartoonist Group. All rights reserved).

M. Difficult. The excerpt below is from Roethke's Villanelle 'I wake to sleep and take my waking slow', of which only the first six lines are given. Discuss the types of verbs that are used (intransitive, transitive, etc). If you are interested in literature, you may also look at the function of the adjectives and adverbs.

The Waking
I wake to sleep and take my waking slow.
I feel my fate in what I cannot fear.
I learn by going where I have to go.

We think by feeling. What is there to know?
I hear my being dance from ear to ear.
I wake to sleep and take my waking slow.

....

Class discussion

N. Find two intransitive verbs and two copula verbs (without looking directly in the book). Also, provide two sentences with only a direct object and two sentences with a direct and indirect object.

O. Use the British National Corpus (BNC at http://www.natcorp.ox.ac.uk/) or the Corpus of Contemporary American English (COCA at http://www.americancorpus.org/) to see if any of your copula, transitive, and ditransitive verbs can be found with the complement you selected in the previous question.

Keys to the Exercises

A. Subject and predicate in [He] [left]; in direct object and direct object in I gave [myself] [flowers]; subject predicate in Flowers are [nice]; and object predicate in I thought that [stupid].

B. Peccaries can be inverted in a question, as in Are peccaries medium-sized animals, with a strong superficial resemblance to pigs? It is a pretty obvious subject and if you made it
singular, the verb would change, as in *A peccary is a medium-sized animal*. The third test would give you: *Peccaries are medium-sized animals, aren’t they?*

- The next subject *they* does not appear immediately at the beginning, but making *they* singular would have an effect on the verb, as in *Like pigs, it has a snout ending in a cartilagenous disc.*

- The third subject is trickier since we haven’t talked about relative clauses yet. So, not to worry if you didn’t see that. It wouldn’t be on an exam at this point. The object *eyes* in this sentence is modified by *that are small relative to their head*. In that relative, *that* is the subject.

- The next *they* is pretty obvious again. You could make it singular, as in *Also like pigs, it uses only the middle two digits for walking.*

- The other toes and their stomach are obvious intuitively although the tests are a little hard to apply. You would have to change the sentences to make them into a single sentence question: *Can the other toes be altogether absent?* and *Is their stomach non-ruminating?*

- The next subject is *it* which if plural would cause the verb to be *have*.

- The last subject is again tricky. The original text didn’t have the *is* following the NP *that of pigs*. After *than*, NPs on their own can be analyzed as subjects if you think there is a verb left out, and that’s what I did.

C.  
*we, I, I, they, I, the filmmakers* (this will be clearer after chapter 8), *the project, it, this, it.*

D.  
[I] gave [him] [the ticket]: S, IO, DO  
[They] [planted a dogwood]: S, Pred  
[The trees in the park] are [unhappy]: S, SuPred

E.  
(54) They sold *us* their furniture: IO DO  
(55) Tom submits *his* tax-returns: DO  
(56) She seemed *very* happy: SuPred  
(57) He found *it* easy: DO, ObPred  
(58) He took the early train: DO  
(59) The politician considered *that argument* invalid: DO, ObPred  
(60) That sounds *terrible*: SuPred

F. The verbs are ditransitive, transitive, copula, complex transitive, transitive, complex
transitive, and copula.

G. (54) S  
   ei  
   NP  VP  
   They  
   V  NP  NP  
       sold  us  ei  
           D  N  
               their  furniture

(55) S  
   ei  
   NP  VP  
   Tom  ep 
   V  NP  
       submits  ei  
           D  N  
               his  tax-returns

(56) S  
   ei  
   NP  VP  
   She  ei  
   V  AdjP 
   seemed  ei  
       Adv  Adj  
           very  happy
The tree for (58) is similar to the one for (55); the tree for (59) is similar to the one for (57); and the tree for (60) is similar to (56).

H. Su:NP, Pred:VP, DO:NP, ObjPred:AdjP
   Su:NP, Pred:VP, IO:NP, DO:NP
   Su:NP, Pred:VP
   Su:NP, Pred:VP, SuPred:AdjP

And the categories are: Adj, P, Adj

I. wait: intransitive; look: copula; feel: copula; drive: intransitive (debatable).

   *those extra twenty minutes*: Su; *the waxed parquet*: DO; *small, lonely, patient*: SuPred.

J. In (65), *it*; in (66), *only two of those people*; in (67), *The book Chomsky wrote when he was young*; in (68), *the Wizard of Oz and Catweazle*. I’ll give some reasons.

- In (68), *Were the Wizard of Oz and Catweazle preparing to go to Alabama*, the subject and auxiliary have already inverted since it is a question. Thus, without having to invert the sentence yourself, you can see what the subject is, namely the phrase after the auxiliary. The agreement on *were* is plural which fits if the subject is the coordinated *the Wizard of Oz and Catweazle*. Notice that if you changed it to just *the Wizard*, the agreement becomes singular: *Was the Wizard preparing to go?* The tag question test doesn’t work in a sentence that is already a question.

- In the three remaining sentences, you could use tag-questions in some:

   *In the rain, it is sometimes hard to see, isn't it?*

   *The book Chomsky wrote when he was young was reissued last year, wasn't it?*

And Inversion would work as follows in the non-questions:
In the rain, is it sometimes hard to see?

Is only one of these people happy?

Was the book Chomsky wrote when he was young reissued last year?

If you changed the subject, the following would show the subject (this is hard to do with it in (65) though):

Two of these people are happy.

The books Chomsky wrote when he was young were reissued last year.

K. In this sentence, the verbs grow and look are used as copulas since the adjective thin is used as subject predicate to modify her and poorly is used as subject predicate as well since it modifies the left out her. So, even though poorly looks like an adverb, it is an adjective (the Oxford English Dictionary says that the use of poorly as an adjective is somewhat rare, but it is quite frequent in Jane Austen). Grow can also be a transitive verb and look a prepositional object verb, but not in this sentence.

L. The funny aspect involves hypercorrection. The initial use of lies was correct. Since the future always lies ahead, the content is expressed in a redundant way that we often use. Some people pick on this.

M. Many of the verbs are intransitive (wake, sleep, fear, go, dance) or used as intransitive (learn, think, know). This contributes to the apparent simplicity. The verb take is twice used as a complex predicate (although one could also argue it is light verb). There are two transitives (feel, hear) and one copula (be). There is only one adjective (slow), used twice. The adverbs are -not, where, and there.

An analysis:
Roethke's 'I wake to sleep and take my waking slow' is dominated by verbs. There is symmetry in the two sentences in that both start with similar sounding verbs (wake and take) and the first verb is repeated as a noun (waking). This focuses our attention on the waking and yet the author purports to be interested in sleeping.

As to the use of adjectives, only one is used (slow) and, on first reading, we might think this is incorrect and that it has to be an adverb (slowly). It is not incorrect and, moreover, using the adjective rather than the adverb focuses our attention on waking rather than on the verb take. Both the use of the verbs and the adjective contribute to making the poem puzzling since, if the poet really wanted to sleep, he should not want to be slow in
falling asleep.

**Special Topic: Case and Agreement**

In this special topic section, we’ll discuss case and agreement. Most of these rules have changed in the last 500 years and native speakers of English have lost their intuitions on case endings and agreement. Prescriptive rules die hard, however, so we’ll discuss those and see how subject and object can be helpful here. One prescriptive rule can be formulated as (70):

(70) **Case in English:**
    Subjects have **nominative** case. Direct and indirect objects have **accusative or objective** case. Prepositional objects also have **accusative or objective** case. Possessive nouns have **genitive** case.

In Modern English, cases are only visible on pronouns. For instance, in (71), the subject *she* is nominative and the direct object *him* accusative. *Me* has objective or accusative case because of the preposition *towards*. With full NPs, it is not obvious what the case is. Notice the lack of obvious case on *the garden*.

(71) **She** saw **him** come towards **me** in **the garden**.

In (72), the demonstrative *this* doesn’t show case, but *you* and *me* have accusative case since they are objects of the preposition *between*. In coordinates such as these, however, the rule is often broken in all stages of English. Thus, in (73) and (74), the nominative *I* is used rather than the accusative *me* and in (75), the nominative *he* is used where an accusative would be expected (prescriptively):

(72) **This** (matter) is between **you and me**.
(73) all debts are cleared between **you and I**. Shakespeare, *Merchant of Venice* III, 2, 321
(74) If you are sick and tired of the way it's been going, ..., you give **Al Gore and I** a chance to
bring America back. (Bill Clinton, as reported in the New York Times in the 1990s)

(75) In his speech, Mr. Giuliani said that one of the main differences between he and Mrs. Clinton was that "I'm in favor of reducing your taxes ..." (again as reported in the New York Times, 8 April 2000).

In (76), the accusative thee (a special form for the second person, no longer used in Modern English) is used rather than the nominative thou (again no longer in use). The nominative would be expected since the Diuell and thee are the subject:

(76) How agrees [the Diuell and thee] about thy soule?
(Shakespeare 1 Henry IV I, 2, 126)

Notice that in (76), the agreement on the verb is singular as well even though the subject is the plural the Diuell and thee. This `mistake’ happens often in coordinated subjects.

With wh-questions, the case rule is also often broken. Thus, in (77), whom would sound very artificial even though, as the accusative or objective form, it is the correct form, and whom cares is not but completely appropriate in Figure 4.3.

(77) Who shall I say is calling?

Figure 4.3: Who/whom? (Used with the permission of King Features Syndicate in conjunction with the Cartoonist Group. All rights reserved.)
Similarly, after copulas, many people insist on using the nominative. Before 1600 or so, in sentences with the copula verb to be, both subject and subject predicate have nominative case. Nowadays, this sounds overly formal.

The genitive case is used in cases such as (78) and (79). If the word does not end in s, an apostrophe and s are added, as in (78), but if it ends in an s, as in (79), either an apostrophe and s or just an apostrophe is added. Many people consider the ending in (79) pedantic and hence it often disappears altogether:

(78) Shakespeare's works
(79) Employees'(s) cafeteria

Turning to agreement, we can formulate the rule, as in (80), and we have used it above to find the subject:

(80) Agreement in English
The subject of a sentence agrees in person and number with the finite verb.

In Modern English, there is little agreement left on the verb. In standard English, apart from the verb to be (I am, you are, s/he is, we are, you are, and they are etc.), there is only a third person singular -s ending on verbs in the present tense (e.g. I walk, you walk, s/he walks, we walk, you walk, and they walk). Note that in some varieties of English, words such as police and government are singular, whereas in others, they are plural. In general, as long as you are consistent, either should be ok.

The difficulties with agreement usually occur with long subjects, as in (81), or with dummy subjects, as in (82). How would you change these?

(81) One of the problems that they worried about continuously were solved rather quickly.
(82) There's some problems that they could not solve.

In earlier varieties of English, e.g. in 16th century English, there is much more agreement. For instance, in (83), the verb agrees with the second person singular thou. In some varieties of
English, no agreement is left, as in (84), and in some, both singular and plural are possible, as in (85), from Hiberno-English:

(83) Caes. What sayst thou to me now? Speak once againe.
    Sooth. Beware the Ides of March. (Shakespeare, *Julius Ceasar*, I, 2, 18)

(84) The dog stay outside in the afternoon.

(85) The boys *is/are* leaving.
CHAPTER 5: MORE FUNCTIONS, OF PREPOSITIONS AND PARTICLES

This chapter deals with adverbials, i.e. the optional elements in the sentences that provide background information on when, where, why, and how the event described by the verb and its objects takes place. It is important to be aware that adverbials are not always realized as Adverb Phrases, but can also be realized as PPs or NPs (or as clauses, see chapter 7). Note that the term ‘adverb’ refers to the category that heads the Adverb Phrase (AdvP) and that ‘adverbial’ refers to the function.

Prepositional objects are also discussed since they look like adverbials, but can be argued not to be. Objects to phrasal verbs are regular direct objects. They are discussed here rather than in chapter 4 because they are easily confused with prepositional objects and include a preposition-like element called a particle. Finally, two other kinds of verbs are discussed involving particles and prepositions: the intransitive phrasal verb and the phrasal prepositional verb.

The main point of this chapter is to learn to distinguish between adverbials and objects. I'll provide some tests for this. When a sentence is passivized, the functions of subject and object may be reversed, i.e. an object then functions as a subject, whereas an adverbial can never function as a subject.

1. **Adverbials**

When adverbials modify verbs, they express when, where, how, and why the action takes place. So, they give background information on time, place, manner, and cause of the event. In the tree structure, we make a distinction between direct and indirect objects, subject predicates, and object predicates on the one hand (all referred to as complements) and adverbials on the other: objects, subject predicates, and object predicates are closer to the verb than adverbials. Even if in the tree the functions of the phrases are not indicated, you should be able to tell from the tree which phrase is the object and which is the adverbial, e.g. in (1):
In (1), the NP *the story* is sister to the V *wrote* and is therefore the object; the AdvP *quickly* is sister to the intermediate V' *wrote the story*, and therefore modifies that. *Quickly* tells you how the story was written and is therefore an adverbial. Since the V' that represents *wrote the story* is intermediate inside the VP, we call it a V' (‘V-bar’).

When you draw the tree, perhaps look back to chapter 3 (section 5) and remember possible ambiguities, e.g. in (20) of chapter 3. We’ll go over how to construct the tree in (1) quickly (from top to bottom). First, you start with S, whose daughters are always NP and VP. The NP happens to be a pronoun, so nothing else needs to be done. The VP consists of a V *wrote*, an object *the story*, and an adverbial *quickly*. Be careful not to make the first branch to the left into a V because then you won't have space for all three. Instead, use the V', and then think what should be closest to the V, and fit them in. Remember the V' is a placeholder for lots of branches, a little VP so to speak but still with the V as its head:

There is a difference between a VP-adverbial, e.g. *quickly* in (1), and a sentence adverbial,
e.g. *fortunately, actually, indeed,* and *of course.* Sentence adverbials (or S-adverbials) do not modify the action of the VP but express the views and the mood of the speaker. Trees for a sentence-initial and sentence-final S-adverbial are given in (3). Duplicating the S intends to show that the adverbial is really outside the core sentence:

```
(3) a. S e1 b. S e1
     e1    ep
    | S    S AdvP
     | e1    e1
    | Adv NP VP NP VP Adv

Unfortunately they
| They | unfortunately
    V
    lied

They confidently said "I was going to the party.
| confidently | said
    | "I was going to the party.
    | said
    | "I was going to the party.
    | said
    | "I was going to the party.

The same ambiguity exists for adverbs such as *wisely* and *clearly.* For most speakers of English, *hopefully* too is both a VP-adverbial and an S-adverbial, although for unclear reasons some people object to its use as an S-adverbial (see special topic to chapter 2).

PPs that function as adverbials are typically VP-adverbials. They often provide background information regarding place, as in (5), and time, as in (6):
A sentence can have many adverbials (depending on the speaker's or hearer's patience). For instance, in (7), the speaker's feelings (the AdvP *unfortunately*), the time (the NP *that morning*), and place (the PP *to work*) of driving the car are given, as well as the reason for this action (the sentence *the bus had broken down*) and the way in which the action occurred (the PP *without glasses*):

(7)  [Unfortunately], he drove the car [to work] [that morning] [without his glasses] [because the bus had broken down].
It is possible to add more adverbials to this sentence, e.g. *quickly* or *recklessly*.

As can be seen in (7), adverbials are not only realized as AdvPs such as *quickly*, but also as NPs (*that morning*), PPs (*to work and without his glasses*), and clauses (*because the bus had broken down*, see chapter 7). This means NPs function not only as subjects, indirect and direct objects, subject predicates and object predicates (see previous chapter), but also as adverbials. AdvPs on the other hand only function as adverbials. PPs function mainly as adverbials and subject predicates but, as we'll see in the next section, they also function as objects to certain verbs, namely prepositional ones (and, as we saw in chapter 3 and will see in more detail in chapter 9, they can also be modifiers inside a phrase). Identify the adverbials in Figure 5.1.

![Figure 5.1: Adverbials. (Used with the permission of King Features Syndicate in conjunction with the Cartoonist Group. All rights reserved.)](image)

All adverbials used by Beetle are VP-adverbials, but one could imagine an S-adverbial, such as *unfortunately*, being used! Their realization is through an AdvP (*thoroughly, completely, and expeditiously*) and through a PP (*with gusto and verve, without delay, and with determination*).

We'll now turn to PPs that sometimes resemble adverbials but are actually objects.

### 2. Prepositional verbs

Prepositional verbs are verbs such as *abide by* in (8), *refer to* in (9), *glance at, lean against, add to, allow for, approve of, care for, insist on, resort to, apply for, account for, reply to, absolve from,*
long for, yearn for, result in, argue about, and defer to in which the P with the NP functions as an object:

(8) They abided [by the contract].
(9) He referred [to that article].

These verbs require a PP, i.e. (10) and (11) are ungrammatical, and that's why the PP is considered an object rather than an adverbial. The contract in (8) and that article in (9) can also be passivized, as in (12) and (13), and this test shows that they are real objects, as shown in (14), where the PP is sister to V:

(10) *He abides.
(11) *He refers all the time.
(12) The contract was abided by.
(13) That article wasn't referred to by him.
(14) S
    ei
    NP    VP
    he  ei
    He  V    PP
    referred ei
    P    NP
    to  ei
    D    N
    that article

Native speakers of English know that verbs such as refer are combined with a certain preposition. Non native speakers must learn the meanings of these verbs or look them up in a dictionary, e.g. refer with, refer about, refer at are not possible.
3. **Phrasal Verbs**

Phrasal verbs must be distinguished from prepositional verbs and from verbs with an adverbial. Like prepositional verbs, they are listed separately in a dictionary since their combinations are somewhat idiosyncratic. Examples of phrasal verbs are *call up, bring up, cover up, look over, take away, turn in, put down, take off, put on, switch on/off, hand in, make out* (as in ‘decipher’). Some example sentences are given in (15) to (19):

(15) They **called up** the president.
(16) They **covered up** the scandal.
(17) Helen **turned in** her homework.
(18) She **put down** the nasty people.
(19) She **switched on** the light.

The prepositions *up, in, down,* and *on* accompanying these verbs have become particles rather than prepositions or adverbs since they no longer always express place or direction. The structure of a sentence such as (15) is therefore one of a verb with a particle, as in (20):

(20) S
    ep
    NP VP
    They ei V NP
called up ei
    D N
    the president

Thus, in (20), the verb and particle are placed in V together, whereas the object is a separate NP. We could represent the verb in (20) as a compound verb if you don’t like two words under one category.

One of the easy (but not so well understood) criteria for determining if a verb is phrasal is
whether the (pronominalized) object can be put between the verb and the particle, as in (21) to (25):

(21) They called him up.
(22) They covered it up.
(23) She turned it in with many mistakes.
(24) She put them down.
(25) She switched it on.

This is not possible with prepositional verbs, as the unacceptable (26) shows:

(26) *They abided it by.

The basic distinction, clear from (20), is that the V and particle form a unit and that the object is an NP, not a PP. This is so because (a) a pause can occur between the verb particle complex and the NP object, as in (27), but not between the V and the unit which is not a phrase as in (28); (b) the NP objects of a phrasal verb can be coordinated, as in (29), but the particle and NP cannot be coordinated with another particle and NP, as (30) shows; and (c) moving the NP object to the left by itself, as in (31), is ok, indicating the NP is a unit, but moving the particle and the NP together is not ok, as (32) shows, indicating they do not form a phrase:

(27) She put down --- the customers.
(28) *She put --- down the customers.
(29) She put down the customers and the owner.
(30) *She put down the customers and down the owner.
(31) It was the customers she put down.
(32) *It was down the customers she put.

In (33) and (34), examples are given of phrasal verbs without an NP object:

(33) His career is taking off.
(34) They finally gave in.
Because the verb and particle have lost their independent meanings in (33) and (34), just like the verbs in (15) to (25) above, they are referred to as phrasal verbs. Unlike the phrasal verbs in (15) to (25), the ones in (33) and (34) lack objects. Some other examples are *sleep in*, and *turn in*, as in (35):

(35) Even though I **turned in** early last night, I **slept in**.

Figure 5.2 exemplifies a few more phrasal verbs. Calvin uses them intransitively, but some of these are also possible as transitive ones (*shut them up* and *mix them up*).

**Calvin and Hobbes** by Bill Watterson

![Calvin and Hobbes comic strip](image)

Figure 5.2: More Phrasal verbs (Reprinted with the permission of Universal Press Syndicate. All rights reserved)

In Table 5.1, I am listing some phrasal verbs that just came to mind starting with the letter ‘a’, but there are thousands. For this reason, there are dictionaries of phrasal verbs in English (and some are online).
### Intransitive

- add up: mean something
- drop out: stop participating
- break down: experience a crisis
- catch on: (begin) to understand
- carry on: continue as before
- die out: diminish in intensity

### Transitive

- add up: calculate/add
- back up: put it in reverse
- bring off: accomplish
- bring out: publish
- bring up: raise (a child)
- drop off: deliver

<table>
<thead>
<tr>
<th>Table 5.1: Examples of phrasal verbs</th>
</tr>
</thead>
</table>

Phrasal verbs are in general used in less formal styles; the synonyms in Table 5.1 are much more formal vocabulary choices.

### 4. Phrasal Prepositional Verbs (Optional)

Constructions with phrasal prepositional verbs combine a verb, a particle, a preposition, and an NP. The object of such a verb is a prepositional object, as indicated with brackets in (36) and (37) for the verbs *put up with* and *come up with*:

(36) Orrmm will not put up [with that noise].
(37) Benji came up [with a new solution to Fermat's Theorem].

The reason the verbs are phrasal is that the verb and the particle have lost their independent meaning. They are, however, not very prepositional since the preposition and the prepositional object cannot be passivized very well, as the awkwardness of (38) shows (and I indicate the awkwardness by means of a question mark):

(38) ?That noise will not be put up with.

Other examples are *cut down on, catch up on, get away with, stand up for, face up to,* and *check up on.* Like phrasal verbs, phrasal prepositional verbs are very colloquial and are often
avoided in formal writing. Could you think of a single verb that can replace the phrasal prepositionals in examples (36) and (37)?

5. Objects and adverbials

As a possible help in distinguishing the different functions, Table 5.2 is provided:

<table>
<thead>
<tr>
<th></th>
<th>Objects</th>
<th>Su/Obj Predicates</th>
<th>Adverbials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obligatory</td>
<td>yes</td>
<td>yes</td>
<td>no: optional</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>info on time, place, manner, etc.</td>
</tr>
<tr>
<td>Passive</td>
<td>yes</td>
<td>no</td>
<td>no</td>
</tr>
</tbody>
</table>

Table 5.2: Differences among Objects, Su/Obj Predicates, and Adverbials

I have already mentioned that adverbials are optional but that objects and predicates are not. Thus, in contrast to prepositional objects, such as those in (10) and (11) above, an adverbial PP can be left out, as (39ab) shows.

(39) a. He slept [during the meeting].
    b. He slept.

A second criterion for distinguishing the different functions is passivization. As mentioned, direct and indirect objects and the NP in the prepositional object can be passivized, e.g. (40), (41), and (42) respectively:

(40) Emma was seen. (active: Someone saw Emma.)
(41) Walter was given a book. (active: Someone gave Walter a book.)
(42) The article was referred to. (active: Someone referred to the article.)

After the direct, indirect, and prepositional objects are passivized, they of course function as
subjects.

Not yet mentioned above is that objects of phrasal verbs can also be passivized, as expected if they are objects, as can objects of complex transitives. Respective examples are (43) and (44), where the scandal and that math problem are now the subjects:

(43) The scandal was covered up immediately.
    (active: Someone covered up the scandal immediately.)

(44) That math problem is considered unsolvable by many great minds.
    (active: Many great minds consider that math problem unsolvable.)

In (40) to (43), I have left the original subject unspecified (hence the `someone’ in the active); in (44), I have added by many great minds. Many great minds is the subject of the active sentence, but is optional in the passive. Hence, I would argue that the function of by many great minds is adverbial.

The NPs in adverbials, subject predicates, and object predicates cannot be passivized, as is shown for adverbials in (45) and object predicates in (46):

(45) *The meeting was slept during.

(46) *The chair was elected him. (passivized from the active We elected him (to be) chair)

As expected, the direct object in (46) can be passivized namely as He was elected the chair.

In the previous chapter, we discussed intransitive verbs such as sleep, sneeze, go, and swim. Now that we know there are PP objects as well as PP adverbials, how can we tell which is which using the criteria from table 5.2, e.g. in sentences such as (47) and (48):

(47) I went [to the library].

(48) I swam [in the pool].

Some speakers regard the information contained in the PP as essential and others consider it less so. If the goal of the going is seen as obligatory in (47), one might call the PP an object, a prepositional object in this case; if the goal is seen as optional, the PP would be an adverbial. Hence, for
sentences such as (47) and (48), there are two different analyses: the verbs can be intransitive ones with the PPs functioning as adverbials or the verbs can be prepositional ones with the PPs functioning as prepositional objects. Notice that these sentences differ as to whether or not they can be passivized, as shown in (49) and (50):

(49) *The library was gone to.
(50) ?The pool was swum in.

The results of passivization provided in (49) and (50) make the adverbial analysis plausible for (47) and the object analysis for (48). Those of you for whom (49) and/or (50) are ok consider both or one of the adverbials more like objects.

It could be that (50) sounds awkward because speakers feel ill at ease with the participle of the verb *swim*. Let's therefore try two other sentences and their passives:

(51) He walked on the grass.
(52) Washington slept in this bed.
(53) The grass was walked on.
(54) This bed was slept in.

Sentences (53) and (54) provide evidence that *the grass* and *this bed* are real objects in (51) and (52).

Two other frequently asked questions are (a) how the object predicate, as in (55) and (56), repeated from chapter 4, differs from a modifier to a noun, e.g. *from Mars* in (57), or (b) from an adverbial in (58). I have indicated the most likely analyses by means of brackets:

(55) Jane considers [*Pride and Prejudice*] [a classic].
(56) She put [snails] [on the table].
(57) I saw [a man from Mars].
(58) I saw [a man] [in the garden].

The answer is that, in (57), *from Mars* forms part of the direct object (as indicated by the brackets)
which can be replaced by a single element, as in (59). In a sentence such as (56), on the table is not part of the direct object since they cannot both be replaced by one element as the ungrammatical (60) shows:

(59) I saw him.
(60) *She put it.

The same is true for (55), since (61) has quite a different meaning than (55):

(61) Jane considers it.

6. Conclusion

As a conclusion, I list instances of the eight types of verbs we have discussed in chapters 4 and 5:
<table>
<thead>
<tr>
<th>Name</th>
<th>example</th>
<th>complement</th>
<th>sentence</th>
</tr>
</thead>
<tbody>
<tr>
<td>intransitive</td>
<td>swim, arrive</td>
<td>--</td>
<td>She arrived (early).</td>
</tr>
<tr>
<td>(mono)transitive</td>
<td>see, eat, read, love</td>
<td>Direct Object</td>
<td>She saw me.</td>
</tr>
<tr>
<td>ditransitive</td>
<td>give, tell</td>
<td>Direct and Indirect Object</td>
<td>I gave him flowers.</td>
</tr>
<tr>
<td>copula</td>
<td>be, become</td>
<td>Subject Predicate</td>
<td>She is nice.</td>
</tr>
<tr>
<td>complex transitive</td>
<td>consider, know</td>
<td>Direct Object and Object Predicate</td>
<td>I consider her nice.</td>
</tr>
<tr>
<td>prepositional</td>
<td>refer, glance</td>
<td>Prepositional Object</td>
<td>He glanced at the book</td>
</tr>
<tr>
<td>phrasal</td>
<td>switch on/give in</td>
<td>Direct Object/ --</td>
<td>She turned off the light</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>He gave in.</td>
</tr>
<tr>
<td>(phrasal prepositional)</td>
<td>get down to</td>
<td>Prepositional Object</td>
<td>He got down to business).</td>
</tr>
</tbody>
</table>

Table 5.3: Verb types and their complements

Typically, the direct and indirect objects are realized as NPs and the subject and object predicates as AdjPs, but as was indicated above, there are other possibilities. The prepositional object is always a PP, but the reverse is not true since PPs can have many functions.

Adverbials are not relevant for the classification of verbs since they can always be added or deleted. As mentioned above, they are typically realized as PPs and AdvPs even though NPs and clauses are also possible. As an addition to Figure 4.1 where the functions of NP, VP, and AdjP are given, Figure 5.3 does the same for PP and AdvP:
Passives are relevant since they allow us to find direct, indirect, prepositional, and phrasal objects. After being passivized, these objects of course function as subjects.

Key terms are *adverbial, prepositional verb, and phrasal verb*. Don't worry too much about phrasal prepositional verbs. Also relevant are *VP- and S-adverbials*.

**Exercises**

**A.** Identify all the functions in (62) to (67). Draw trees for (62) and (65):

(62) Fortunately, she found it easily.
(63) I separated it carefully.
(64) She found it easy.
(65) He baked Zoya bread last night (i.e. he baked it for her).
(66) Wisely, the pig from Mars left relatively early.
(67) The hard-working students seemed exhausted after three weeks of classes.

**B.** In the short text below, identify the underlined verbs (e.g. intransitive, complex transitive) and the function of the phrases in brackets:

I have [a shocking news item]. [This little-known tidbit] will stun some of you and put the rest [in a catatonic haze]. This is why I am warning you to brace yourselves. The Olympics are going on [right now].
C. Do the same in the text below. How would you analyze deal in the last sentence?:

Underground nitrogen leak shuts down roads in the city
A worker from T&T Construction punctured [a high-pressure nitrogen line] at about 7 a.m., shutting down [traffic] on the northeast side of town [all day]. The Police Department blocked off a large area because [it] didn't [initially] know what was leaking. "[It] could have been natural gas, so we had to be [careful]," [Tena Ray, a spokesperson], said. "Fortunately, we don't have to deal with things like this very often".

D. Underline the PPs in the text below, and say which ones are adverbials.

In Rapid City, S.D., a buffalo escaped from an auction and ended up in a dressing room. It spent a couple of hours staring into a mirror at the Rushmore Plaza Civic Center. The buffalo jumped over a steel panel during the Black Hills Stock Show & Rodeo on Sunday morning, went down an alley and got into the dressing room reserved for visiting sports teams, said Brian Maliske, the civic center's general manager. "The door happened to be unlocked and he pushed the door open and went in," Maliske said. The crew conducting the Black Hills Classic Buffalo Sale decided to keep the animal locked in the dressing room for the rest of the auction. During its two hour stay, it reportedly became fascinated with the image it saw in a big mirror. When the sale ended, a rodeo crew member coaxed the buffalo out and into captivity. (adapted from the East Valley Tribune, January 2005)

E. Take a verb and combine it with different prepositions and explain what kind of verb is the result. For instance, take sleep, combine it with in, during, off, around, over, outside.

F. Make a sentence containing the verb complain about. What kind of verb is it? Do the same
with resort to, comment on and catch up with.

G. Explain the ambiguity in the cartoon in Figure 5.4.

![Frank and Ernest cartoon image](image)

**Figure 5.4:** Glasses. (Used with the permission of the Thaves and the Cartoonist Group. All rights reserved).

H. How would you describe the difference between `to visit with somebody' and `to visit somebody'? Speakers of English use both. What would you say?

I. Find the adverbials in the text below (adapted from an Amnesty International document). How are they realized, i.e. what kind of phrases are they? Be careful not to list the phrases that modify nouns (*of the failure of justice*) or adjectives. This is a difficult text, I found, so don’t get discouraged!

Human Rights and the Punjab

The organization provides a number of instances of the failure of justice in this report. The government authorities have failed to address the problem of ‘disappearances’ in Punjab. The government has not responded to any of the cases documented since December 1993. The practice of ignoring petitions continues.

The Supreme Court found the police guilty of abducting and killing people but grave concerns remain unaddressed. The report expresses concern about recent allegations in the press that hundreds of people have been killed in Punjab. Continuing allegations of
'disappearances' are indicative of the absence of a serious commitment by the state authorities.

J. Are there prepositional objects in the text of B? Are there phrasal verbs?

K. Please circle and label (transitive etc.) all verbs in the text below.

Streets of Athens

My friends next door are some of the few Athenians who have not moved into a concrete block or sold local building contractors their family home for a handsome profit. The sprawling morass of concrete that spills into the Attica Plain surrounding the suburbs of Athens makes Europe's southernmost capital one of the world's most polluted cities. (adapted from The Guardian, June 1990)

(Difficult) Then, bracket and label all the direct/indirect objects, subject/object predicates, and adverbials of the text in K.

Class discussion

L. What do (68) and (69) tell you about the type of verbs switch on and look up are respectively:

(68) It was the light he switched on.
(69) *I looked up the word and up the quote.

One way to look at this is to focus on the light being preposed in (68) without taking on along. Up the word is not a unit in (69) since it cannot be coordinated with a similar unit.

M. In connection with phrasal verbs, we discussed intransitive phrasal verbs, such as take off
and *give in*, repeated here as (70) and (71). *Take off* can also be a transitive phrasal verb, as in (72):

(70) His career took off.
(71) They finally gave in.
(72) She took off her glasses.

How would you analyze (73)? If you looked up *away* in a dictionary, it would tell you it derives from the PP *on way* and is now an adverb or preposition, just like *off* and *in*:

(73) He went away.

One of the ways to solve this is to see if you can question where he went. If you could, that would mean *away* would be an adverb, and not a particle. It is not a likely P since it has no object (which we suggested in chapter 2 was a way to differentiate between prepositions on the one hand and adverbs and particles on the other).

N. A garbage collection company used (74) as one of its slogans. Explain the ambiguity in terms of verb type:

(74) Our business is picking up

O. Identify the prepositions and particles in Figures 5.5 and 5.6.
In the text in tree (20), I provide a tree for the phrasal verb when the object follows the verb and particle. Discuss some possible trees for sentences where the object intervenes between the
verb and the particle.

**Keys to the Exercises**

A.  
(62) Adv-ial Su Pred DO Adv-ial  
(63) Su Pred DO Adv-ial  
(64) Su Pred DO ObjPr  
(65) Su Pred IO DO Adv-ial  
(66) Adv-ial Su Pred Adv-ial  
(67) Su Pred SuPred Adv-ial  
(62) S  (It doesn’t matter whether or not you connect AdvP and Adv with a line, as (62) shows)  
  AdvP  S  
  Adv  ei  
  Fortunately  NP  VP  
  She  ei  
  V'  AdvP  
  ei  |  
  V  NP  Adv  
  found  it  easily  

B.  
I have: transitive [a shocking news item: DO]. [This little-known tidbit: SU] will stun:  
transitive some of you and put: complex transitive the rest [in a catatonic haze: ObjPr]. This
is: copula why I am warning: transitive you to brace: transitive yourselves. The Olympics are going on: intransitive phrasal [right now: Adverbial].

C. A worker from T&T Construction punctured: transitive [a high-pressure nitrogen line: DO] at about 7 a.m., shutting down: (transitive) phrasal [traffic: DO] on the northeast side of town [all day: adverbial]. The Police Department blocked off: (transitive) phrasal a large area because [it: Su] didn't [initially: adverbial] know: transitive what was leaking: intransitive. "[It: Su] could have been: copula natural gas, so we had to be [careful: SuPr]," [Tena Ray, a spokesperson: Su (appositive)], said. "Fortunately, we don't have to deal with things like this very often".

Deal is a verb taking a prepositional object.

D. In Rapid City, S.D., a buffalo escaped from an auction and ended up in a dressing room. It spent a couple of hours staring into a mirror at the Rushmore Plaza Civic Center. The buffalo jumped over a steel panel during the Black Hills Stock Show & Rodeo on Sunday morning, went down an alley and got into the dressing room reserved [for visiting sports teams], said Brian Maliske, the civic center's general manager. "The door happened to be unlocked and he pushed the door open and went in," Maliske said. The crew conducting the Black Hills Classic Buffalo Sale decided to keep the animal locked in the dressing room for the rest [of the auction]. During its two hour stay, it reportedly became fascinated with the image it saw in a big mirror. When the sale ended, a rodeo crew member coaxed the buffalo out and into captivity.

The adverbials are all of the underlined or bracketed ones EXCEPT of hours (goes with an N couple) and of the auction (goes with the N rest).

E. Sleep in would be an intransitive phrasal, with in a particle, since in does not have it original (locational) meaning. Sleep around is similar. Sleep off is a transitive phrasal since one can say sleep off a hangover and sleep it off; off is a particle, because you would have to look up the meaning in a dictionary. Sleep during consists of an intransitive verb sleep and a preposition during. During is not a particle since sleep it during is ungrammatical, and it is not an adverb since it cannot occur independently of an NP, as in I slept during. Sleep outside contains an intransitive verb sleep and an adverb outside.
F. She complained about the government; He resorted to violence; They commented on the book. They are all prepositional object verbs.

A sentence with the phrasal prepositional verb `catch up with' is: They caught up with him.

G. The question `How do they look?' contains a copula verb, but the joke is that look can also be used in another way, namely as a prepositional verb. In this case, `How do they see?' plays on that meaning.

H. `To visit with somebody' is said to be American English, whereas `to visit somebody' is said to be British English. The difference is that in the former case, visit with is a prepositional verb, whereas in the latter case, visit is a (mono)transitive verb.


J. Respond could be argued to be prepositional; no phrasal ones.

K. My friends next door are some of the few Athenians who have not moved into a concrete block or sold local building contractors their family home for a handsome profit. The sprawling morass of concrete that spills into the Attica Plain surrounding the suburbs of Athens makes Europe's southernmost capital one of the world's most polluted cities.

The names of the verbs are: copula, intransitive or prepositional verb, ditransitive, intransitive (possibly prepositional), transitive, and complex transitive.

(Difficult) The minimum you can do is as follows but that doesn’t catch all complements:

My friends next door are SuPr [some of the few Athenians who have not moved into a concrete block or sold local building contractors their family home for a handsome profit]. The sprawling morass of concrete that spills into the Attica Plain surrounding the suburbs of Athens makes DO [Europe's southernmost capital] ObjPr [one of the world's most polluted cities]. You could look inside these complements, as in:

[some of the few Athenians who have not moved Adv-ial or PO [into a concrete block] or sold IO [local building contractors] DO [their family home] Adv-ial [for a handsome profit]]. The sprawling morass of concrete that spills Adv-ial [into the Attica Plain surrounding DO [the suburbs of Athens]].
I consider the use or non-use of the passive a matter of style not of grammar (not even an issue of prescriptive grammar). In certain kinds of writing, the use of the passive can have advantages and, in others, it is better to be direct and to use the active. Sometimes, it is irrelevant to know who performed the action and then the passive is more appropriate.

Let me start off with some quotes against the use of the passive. George Orwell, in his 1946 essay `Politics and the English Language,’ is perhaps the strictest:

(70) Never use the passive where you can use the active.

Orwell was of course worried about political propaganda. Style books include similar statements:

(71) Use the active voice. The active voice is usually more direct and vigorous than the passive (Strunk The Elements of Style 1918; later Strunk & White 1959[2000]).

The Princeton Writing Center cautions against the use of the passive as recently as 2009 though it doesn’t suggest getting rid of it altogether:

(72) Remember: to use the passive voice effectively, use it sparingly. Otherwise, your writing may well evince the absurdity of this famous example...
(http://web.princeton.edu/sites/writing/Writing_Center/handouts/html/passivevoice.htm)

The passive has of course been in the English language since its beginning, as (73) shows, with the passive auxiliary and verb in bold:

(73) Đa was gylden hilt gamelum rince
then was golden hilt old man
harum hild-fruman on hand gyfen
grey war-chief in hand given
'Then was the golden hilt given into the old man’s, the grey warrior's hand.'
(Beowulf 1677-78)

Since passives use the auxiliary 'to be', rules such as (74) seem to include them:

(74) Avoid the verb 'to be'. One of the most common stylistic mistakes aspiring writers make is to rely too much on the verb "to be." "To be" is the most basic verb in the English language, and writers can all too easily find themselves using it in almost every sentence.
(http://www.essayforum.com/13_5678_0.html)

I think most of the time the copula 'to be' is meant when this rule is stated.

Finally, the dummy subjects 'there' and 'it', also called pleonastics or expletives, are cautioned against by many style guides, as in the following quote from the Purdue University writing center:

(75) Avoid overusing expletives at the beginning of sentences.
(http://owl.english.purdue.edu/owl/resource/572/04).

Many writers use these of course. Adam Smith’s Wealth of Nations, a long text, contains 596 instances of there, many at the beginning of the sentence, and 4676 instances of is. Charles Dickens’ Bleak House, a much shorter text, has 173 occurrences of there and 413 of is.

As with the passive, it is really a matter of style, as reading the following adaptation from Ernest Hemingway’s Hills Like White Elephants shows. I have put the forms of to be and other dummies in bold:

(76) The hills across the valley of the Ebro were long and white. On this side there was no shade and no trees and the station was between two lines of rails in the sun. Close against the side of the station there was the warm shadow of the building and a curtain, made of strings of bamboo beads, hung across the open door into the bar, to keep out flies. The American and the girl with him sat at a table in the shade, outside the building. It was very
hot and the express from Barcelona would come in forty minutes. It stopped at this junction for two minutes and went on to Madrid.
CHAPTER 6: THE STRUCTURE OF THE VERB GROUP (VGP) IN THE VP

In this chapter, the verbs that can appear together in a VP are discussed in more detail. Most of the sentences we have talked about so far have contained one (finite and lexical) verb. In English, a VP can (in principle) have four auxiliary verbs and one lexical verb. English is quite unusual in this respect, compared to other languages that typically do not have this many auxiliaries. This complex of auxiliaries and the lexical verb will be called the Verb Group, abbreviated in the tree as VGP (and used when auxiliaries are present). English is also unusual in that if an auxiliary is not present and the sentence is negative or a question, a `dummy' auxiliary do is needed.

In section 1, the auxiliaries are defined and characterized in general terms. In that section, I also include auxiliaries as part of the (flat, non-hierarchical) Verb Group. We will label the auxiliaries as modal, perfect, progressive, passive, and dummy in section 2. Auxiliaries are associated with a particular ending, i.e. affix, that appears on the verb immediately to their right. This process is called affix-hop and is discussed in section 3. Section 4 provides rules for identifying finite verbs and for distinguishing them from non-finite ones. Section 5 is an optional section that reviews the terminology that is relevant to verbs and tries to justify the different classifications.

1. Auxiliary verbs

Verbs can be divided into lexical and auxiliary verbs. A VP contains one lexical verb and (optionally) up to four auxiliaries. Most of the VPs dealt with in the previous chapters consist of a single verb, and then they automatically are lexical verbs. Lexical verbs can be further divided into intransitive arrive, walk, copula be, transitive see, eat, etc, as we’ve seen. These verbs carry a real meaning and are not dependent on another verb. In addition to a lexical verb, the VP may contain auxiliaries which are then grouped together with the lexical verb in a Verb Group. Auxiliaries depend on another verb and add grammatical information. They are divided into different kinds in section 2.

Auxiliaries are also sometimes called helping verbs since they help out other verbs. For
instance, in (1), *have* does not mean ‘possess’; it merely indicates that the action of the lexical verb *see* was in the past. In (2), on the other hand, *have* has a lexical meaning (‘to possess’) and there is no other verb present. Its classification is transitive since it has a direct object (*a book on sentences*):

(1) The Malacandran **has** seen the hross.  (perfect auxiliary *have* with lexical verb *see*)
(2) I **have** a book on sentences.  (transitive verb *have*)

Unlike lexical verbs, auxiliaries invert in questions, as in (3), can precede the negative *n't* (i.e. the common form of *not*), as in (4), can be used in tag questions, as in (5), and can be used to emphasize that the action did indeed take place, as in (6):

(3) **Has** she gone yet?  (perfect auxiliary *have*)
(4) She **hasn't** done that yet.  (perfect auxiliary *have*)
(5) She **hasn't** done that yet, **has** she?  (perfect auxiliary *have*)
(6) She **DID** actually say that.  (dummy auxiliary *do*)

If *n't/not* appears, as in (4) and (5), this adverb will be included in the Verb Group as well and will be abbreviated as ‘neg’ to save space in the tree. Table 6.1 provides some ways to recognize auxiliaries.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>They must be used with a lexical verb (unless the verb is elided)</td>
</tr>
<tr>
<td>b.</td>
<td>They have little meaning; rather, they express tense, mood, and aspect</td>
</tr>
<tr>
<td>c.</td>
<td>They invert in questions, as in (3)</td>
</tr>
<tr>
<td>d.</td>
<td>They occur before <em>n't</em>, as in (4)</td>
</tr>
<tr>
<td>e.</td>
<td>They are used in tags, as in (5)</td>
</tr>
<tr>
<td>f.</td>
<td>They are used for emphasis, as in (6)</td>
</tr>
</tbody>
</table>

---

Table 6.1: Characteristics of auxiliary verbs

The Verb Group will be represented as a flat tree structure, as in (7). As mentioned in chapter 3,
grammatical categories such as the auxiliary do not head their own phrase (in this book) and hence do not function at sentence level. Grammatical categories function inside a phrase or, in this case, inside the Verb Group (if auxiliaries are present, VGP will be used; otherwise, V will suffice):

(7)

```
(7)   VP
      VGP    NP
         modal  pf  progr V D N
      may have been seeing the horse
```

I use abbreviations for the auxiliaries for practical reasons: hard to fit in the tree otherwise. We will now discuss each of the auxiliaries in more detail.

2. The five types of auxiliaries in English

In this section, we’ll discuss the auxiliaries as they appear if all are present in a sentence, namely modal, perfect (pf), progressive (progr), and passive (pass). When no auxiliaries are present, we need do in certain cases.

2.1 Modals

English is exceptional in the numbers of auxiliaries it has and the combinations it allows. Each auxiliary has its own name and position with regard to the others. Modals do not have agreement or tense endings (hence *he cans; *I am canning to go); they are the first to occur in a sequence of auxiliaries; and do not require an ending, i.e. affix, on the verb following them (He can walk, but not: *He can walked). Thus, (8a) and (8b) are typical instances: the modals might and could are first and the verb following it does not have an affix:

(8) a. It **might** rain. (modal auxiliary might)
    b. Rigobertha **could** be going tomorrow. (modal auxiliary could)
There are nine modals in English: *can, could, may, might, shall, should, will, would,* and *must.* Modal auxiliaries express uncertainty, as in (8), necessity (*must, should*), ability, as in (9), or permission, as in (10):

(9)  I **can** swim.  (modal auxiliary *can*)
(10) You **may** go now.  (modal auxiliary *may*)

Modals are also used where some languages would use the subjunctive mood. The Modern English subjunctive is very restricted and examples are given in (11a) and (12a). Alternatives using modals are provided in (11b) and (12b):

(11) a. They insisted that he **go.**  (subjunctive mood)
    b. They insisted that he **should** go.
(12) a. I wish it **were** Friday.  (subjunctive mood)
    b. I wish it **would** be Friday

Since subjunctives are not common in Modern English, I will not go into this more deeply.

Modals are often used when we ask a favor of someone, as in (13), or when we want to be polite. The 'past' form (*could*) in (13) is seen as more polite than the 'present' form (*can*) in (14). Modals have lost the ability to express present and past tense, but they are finite. Thus, the difference between (13) and (14) is not related to when the action happened, but to how likely the event is to happen. *Could* is more polite since it expresses a more remote possibility; *can* is more direct and hence seen as less polite:

(13)  **Could** I borrow some money?  (modal auxiliary *could*)
(14)  **Can** I borrow some money?  (modal auxiliary *can*)

In English, the modal **will** (and **shall** in some varieties of English) is used to express future, as in (15) and (16), the latter of which is the contracted form:
(15) He **will** go to Mars next year. (future expressed by *will*)
(16) She'll walk on Jupiter in two years. (future expressed by 'll)

There are special modals, called semi-modals: *dare (to), need (to), have to, ought to*. They are seen as modals since they express obligation, ability, and necessity. *Used to* is sometimes added to this group, but it is much more a regular auxiliary expressing habituality. Semi-modals are in flux between auxiliary and lexical verb status. In (17), T.S. Eliot does not invert *dare* in a question (see test (c) of Table 6.1) and it therefore looks like a lexical verb, but in (18), acceptable for some speakers, *dare* is inverted and more of an auxiliary:

(17) Shall I part my hair behind? Do I **dare** to eat a peach? (semi-modal *dare*)
    (The Love Song of J.A.P, l 122)
(18) **Dare** I eat a peach? (semi-modal *dare*)

In English, only auxiliaries move, and if the sentence contains just a lexical verb, a dummy *do* will be used (see section 2.5). Since *do* is used in (17), it is usually thought that *dare* in (17) is a lexical verb. The other semi-modals allow a variety of constructions as well. For instance, *ought* in (19) is very much an auxiliary since it moves, but in (20), it is not. Both occur in 19th century texts (see the *Oxford English Dictionary*):

(19) How **ought** I address thee, how ought I revere thee? (semi-modal *ought*)
    (Robert Browning, *Agamemnon* 796)
(20) You didn't **ought** to have received 'em (semi-modal *ought*)
    (Charles Dickens, *Martin Chuzzlewit* 34, 403)

2.2 **Perfect have (pf)**

*Have* follows the modal if there is one. It is called the perfect auxiliary, and abbreviated as `pf`, though it does not make the meaning perfective or finished. It is used to indicate that a past action still has relevance and that mixture of tense and aspect is called the `present perfect’. For instance, in (21), the speaker still lives `here’, whereas in the simple past tense, as in (22), the speaker no longer does:
I have lived here for ages. (perfect auxiliary have, used in present perfect)
I lived here in the nineties. (simple past)

There is currently a shift between British English and American English in that the former prefers the present perfect, as in (23), for the recent past, whereas the latter does the simple past, as in (24):

Well I've, I've seen her today but she said she'd er get me some socks and that…
(BNC – informal conversations)

in fact, I saw him today at the airport (COCA – FOX TV)

When have is used, the verb following it is marked with an -ed ending (if it is regular), e.g. lived in (21). The form of the verb that is the result of 'affix-hop' is called the past participle, or -ed participle. Affix-hop is so called because the affix appears on the verb to the immediate right of the auxiliary it goes with: the affix 'hops' onto the next verb. In (25), the ending related to have appears on be, which is an irregular verb (like see, go, do, etc.) and therefore has an –en ending:

Zoltan may have been playing a terrible game. (perfect auxiliary have)

The term past participle is perhaps somewhat confusing since the presence of the past participle does not make the entire sentence past tense. In fact, (21), (23), and (25) are in the present tense, and hence the name present perfect. There is a past perfect, as in (26), with the form of the auxiliary have in the past but otherwise similar. Its meaning is completion by a certain point in the past (in this case 'by five'):

He had done it by five. (perfect auxiliary had)

I provide (simplified) timelines in Figure 6.1 for the different tense and aspect combinations, where S represents the time of speech and E the event. The present tense is used when the time of the event and the utterance are the same; the past is used when the event is at an earlier time; and the future is used when the event is at a later time. The present perfect is used when the event
(represented by the arrow) started earlier but includes the time of speech and the past perfect is used when there is a reference time in the past, such as five o’clock, and the event occurred before that time. The future perfect has a time reference in the future by which time the event will have occurred.

<table>
<thead>
<tr>
<th>Timeline</th>
<th>example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present</td>
<td>I know the answer</td>
</tr>
<tr>
<td>Past</td>
<td>I knew the answer yesterday</td>
</tr>
<tr>
<td>Future</td>
<td>He’ll do it</td>
</tr>
<tr>
<td>Present perfect</td>
<td>I have lived here for ages</td>
</tr>
<tr>
<td>Past perfect</td>
<td>He had done it by 5 a.m.</td>
</tr>
<tr>
<td>Future perfect</td>
<td>He’ll have done it by 5 a.m.</td>
</tr>
</tbody>
</table>

Figure 6.1: Timelines for tense and aspect

In Figure 6.2, we will list three progressives. If you are a native speaker, you know how to use these, but you might want to know terms such as present and past perfect since these are used. I personally don’t require that you memorize these and the ones in Tables 6.2. I just want you to have a familiarity with the terms.

2.3 *Progressive be (progr)*

The progressive, abbreviated as ‘progr’, indicates that the action is or was in progress. This is the
aspect of a verb, as opposed to the tense of a verb which tells you whether the action took place in
the present, past, or future. In (27) to (29), the aspect is progressive, but the tense is present in (27),
past in (28), and future in (29). Since the progressive indicates that an action is or was in progress, it
is incompatible with verbs that express a state, as shown in (30) and (31):

(27) Zoya **is** walking.  (progressive *be*)
(28) Zoltan **was** playing the piano, when a noise disturbed him.  (progressive *be*)
(29) He will **be** walking the dog.  (progressive *be*)
(30) *He **is** knowing the answer.  (progressive *be*)
(31) *The book **is** being blue.  (progressive *be*)

To form the progressive, a form of *to be* is used, as in (27). The verb that follows this
auxiliary has an -*ing* ending through affix-hop. It is called a present participle, or *ing*-participle.
Again, as in the case of past participles, the term is confusing since the present participle need not
make the sentence into the present tense, as (28) shows.

In Figure 6.1, I showed simplified timelines for some simple tenses and the perfects. Figure
6.2 adds timelines for progressives. A few more combinations can be added but I will leave that for
the class discussion section (see Exercise G, Figure 6.5).

<table>
<thead>
<tr>
<th>Timeline</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>present progressive</td>
<td>I am working</td>
</tr>
<tr>
<td>past progressive</td>
<td>I was working</td>
</tr>
<tr>
<td>future progressive</td>
<td>I will be working</td>
</tr>
</tbody>
</table>

Figure 6.2: Three progressives

Some people argue that sometimes the forms of *be* are not auxiliary verbs but lexical ones,
and that the -ing forms are adjectives. I mention it here as a possible analysis in some cases. For instance in (27) above, one could argue walking is like nice, since like nice, it can be used to modify a noun in (32):

(32) My nice walking shoes are very light. (present participle used as adjective)

My own feeling is that walking in (27), where it refers to an action, is very different from walking in (32), where it describes the qualities of a noun. If we considered the distinctions made in chapter 2, walking would be a verb in (27), but an adjective in (32). The same ambiguity occurs with passives, as will be shown next.

2.4 Passive be (pass)
As seen in chapters 4 and 5, passive constructions, as in (33b), are made from active ones as in (33a) by switching the subject and the object around and by adding a form of to be. This passive auxiliary is abbreviated as 'pass’ in the tree. The verb immediately following this be has a past participle ending, in this case -en, because of the affix 'hopping’ from the auxiliary to the next verb:

(33) a. I see him. (active)
    b. He is seen by me. (passive auxiliary be)

The stylistic effects of passives were discussed in chapter 5. Here, we just discuss the form. In the active (34a), the Verb Group consists of a modal, a perfect, and a lexical verb. Because of the perfect have, the form of the verb see is a past participle. In (34b), the passive be is added and now its form is that of past participle (namely been) because it follows have. Seen appears as past participle as well because it follows the passive be. If this sounds too complex, just look at the ending of the verb on the immediate right of the auxiliary and table 6.3 below:

(34) a. Zoya may have seen Zoltan. (modal may and perfect have)
    b. Zoltan may have been seen by Zoya. (modal may, perfect have, and passive be)
Passive participles can often be analyzed as adjectives (known, mixed, written) and are then not part of the Verb Group. Then, the form of be is not an auxiliary either, but a copula. It is up to the reader to decide whether delighted in (35) is a passive participle or an adjective. Most linguists would argue that (35) is not a passive construction since (a) adding a by-phrase, as in (36), is awkward, and (b) delighted appears after copula verbs such as seem, as in (37), which is typical of adjectives:

(35) She was delighted to get chocolate. (copula be and adjective)
(36) *She was delighted by Edward to get chocolate. (by-NP not possible)
(37) She seemed delighted to get chocolate. (delighted after seem)

The regular passive is constructed with the auxiliary be and that is the one you should probably use in formal writing. There is another passive auxiliary that I mention here but won’t include in the Table or summaries, namely get, as in (38). According to the Oxford English Dictionary, the get-passive is first used in 1652. It seems more forceful than the be-passive:

(38) Then he got knocked out. (passive auxiliary get)
    (BNC, fiction)

As we'll see in the next section, if there are two be auxiliaries in a row, the first is the progressive and the second one is the passive auxiliary. Note that the passive auxiliary gets the affix of the preceding auxiliary through affix-hop, in this case that of the progressive. Seen is a past participle because of the preceding passive be:

(39) He may be being seen. (modal may, progressive be, and passive be)

2.5 The dummy do
Lexical verbs, such as know and think, cannot be used in questions and negative sentences in Modern English, as (40a) and (41a) show for know. Instead, a dummy do is used in (40b) and (41b):
(40)  a.  *Knows he the answer?
    b.  Does he know the answer?
(41)  a.  *He knows not the answer.
    b.  He doesn’t know the answer.

*Do* does not appear together with the other auxiliaries but is only inserted in questions, as in (40b), or negative sentences with *n’t/not*, as in (41b), or for emphasis, as in (42):

(42)  Oh, but I DID know the answer.

In earlier English, dummy *do* does not appear in this way. In Shakespeare's time, for instance, it is optional, as (43) to (45) indicate:

(43)  Or if it were, it *not belongs* to you. (*2 Henry IV*, IV, i, 98)
(44)  *What meanes* your Lordship? (*Hamlet*, III, i, 106)
(45)  *What does* this meane my Lord? (*Hamlet*, I, vi, 7)

Leaving the *do* out has an archaic effect, or just a playful one, as in Figure 6.3.

---

Figure 6.3:  I think not. © 2008 Jan Eliot. Reprinted with the permission of Universal Press Syndicate. All rights reserved.)
3. Auxiliaries, affix hop, and the verbgroup (VGP)

The auxiliaries dealt with in sections 1.1 to 1.4 occur in a particular order: modal, perfect, progressive, and passive. Since dummy do only occurs if no other auxiliary is present, I will ignore it here. As mentioned, the verb that immediately follows a particular auxiliary bears the ending, also called affix, of that auxiliary. Since the affix associated with a particular auxiliary does not appear on the auxiliary but on the next verb, this process is called affix-hop. The auxiliaries and lexical verb go together in a verbgroup or VGP. As a summary of the auxiliaries and affixes, I list them in the table below.

<table>
<thead>
<tr>
<th>Name of AUX</th>
<th>example</th>
<th>affix on the next verb</th>
<th>sentence</th>
<th>name of verb with affix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modal:</td>
<td>may, might, etc</td>
<td>--</td>
<td>He may go infinitive</td>
<td></td>
</tr>
<tr>
<td>perfect:</td>
<td>have</td>
<td>-ed/-en</td>
<td>They have walked past participle</td>
<td>seen/gone</td>
</tr>
<tr>
<td>progressive:</td>
<td>be</td>
<td>-ing</td>
<td>I am going present participle</td>
<td></td>
</tr>
<tr>
<td>passive:</td>
<td>be</td>
<td>-ed/-en</td>
<td>They are loved/seen past participle</td>
<td></td>
</tr>
</tbody>
</table>

Table 6.2: Auxiliaries and their affixes

A sentence that includes all four types of auxiliaries sounds a little contrived. Note the strict order (e.g. have may would be ungrammatical):

(46) That thief may have been being observed.

In (46), there is a modal may, a perfect have, a progressive be marked with -en because of have, a passive be marked with -ing because of the progressive immediately to its left, and a lexical verb observe that bears the affix of the passive auxiliary immediately to its left.

As shown in (7) above, the structure of a sentence with a number of auxiliaries is not very insightful, i.e. it is very flat, since all the auxiliaries are part of the Verb Group. The negative adverb
not in English must be included in the Verb Group as well since it is an affix on the finite auxiliary. A structure for (47) is (48):

(47) He hasn't been doing his homework.

(48) S
    NP ep
    VGP ei
    pf-neg progr V D N
    hasn't been doing his homework

Other structures have been suggested with a less flat structure (see further reading) but they are still controversial and would lead us into a new set of arguments.

4. Finiteness

The sentences we have discussed so far have been complete sentences, not sentence fragments. A complete sentence consists of a subject and a finite verb. A finite verb agrees with the subject (in the present tense) and indicates present or past. Its subject has nominative case, which can only be seen in the case of pronouns in Modern English, i.e. the subject pronoun of finite verbs must be nominative I, you, he, she, it, we and they, not accusative me, him, her, us or them (you and it are both nominative and accusative).

Finite sentences have a Verb Group with a finite verb as its first (or only) member. In (49), have is the finite verb that makes the entire Verb Group finite. As a result, the entire sentence is also finite:

(49) I [have been going] there frequently. (finite have in a VGP)
Have is finite because it shows subject agreement (have rather than has, as in (50)), indicates present tense (have rather than had, as in (51)), and has a nominative subject (I rather than me, as in the ungrammatical (52)):

(50) He has been going there frequently.
(51) He had been going there frequently.
(52) *Me have been going there frequently.

Note that in some varieties of English, sentences such as (52) are grammatical.

Modals, as in (53), are finite even though (for historical reasons) they never display subject-verb agreement:

(53) I might have done that.

Only finite sentences are complete sentences. Most of us, however, use fragments in informal speech, in poetry, e.g. John Keats in (54), or even in writing:

(54) Ode on a Grecian Urn
    Thou still unravish'd bride of quietness!
    Thou foster-child of silence and slow time,
    ...
    What mad pursuit? What struggle to escape?
    What pipes and timbrels? What wild ecstasy?
    ...

Nevertheless, incomplete sentences are generally frowned upon in formal writing. Sentence (55) below is not a complete sentence but is a sentence fragment. How can it be fixed?

(55) Mentioning that point about finite sentences yesterday.

Sentence (55) can become a full sentence by adding a subject and a finite verb as in (56):
I was mentioning that point about finite sentences yesterday.

As will be shown in a later chapter, non-finite sentences can only be part of other sentences. How many lexical verbs are there in (57)? Which are the finite Verb Groups?

I have heard her sing too often.

In (57), there are two lexical verbs, heard and sing, but only the first Verb Group is finite since have is finite (e.g. the subject of have is nominative I whereas the subject of the non-finite sing is accusative her). Other sentences that include a non-finite Verb Group are (58) and (59), with the non-finite Verb Groups in bold. Note that the infinitive marker to is part of the Verb Group, and is abbreviated as `inf'.

Seeing the beautiful sunset in her rearview mirror, she missed her exit.

She forgot completely to go to the store.

In (58), seeing and missed are lexical verbs, but only missed is finite. In (59), forgot and go are the lexical verbs, but only forgot is finite.

A sentence can contain many Verb Groups, a (potentially) indefinite number if, as mentioned in chapter 1, the speaker had enough energy and could continue. Sentences such as (60), containing more than one Verb Group, are discussed in chapters 7 and 10:

I noticed that she mentioned that he was saying that she should tell him ...

Imperatives are used to order someone to do something. They often lack a subject, as in (61), but this need not be the case, as (62) shows:

Draw the trees for these sentences.

You, draw trees for this.
Imperatives are complete sentences and not sentence fragments.

5. Relating the terms for verbs (Optional)

In this section, I’ll review all the terms we have used for verbs. First, we will discuss regular and irregular forms. These are relevant when forming a past tense or using a participle. When we use a perfect and a participle, we may label this as present or past perfect. Then, we will see that the classification of verbs into e.g. transitive and of auxiliaries into e.g. modal belongs to a different type of classification. Finally, we add finiteness to the mix. This is quite a lot, and took me many years to realize! So just read it and don’t worry too much about it.

We have briefly talked about regular and irregular verbs (end of section 2 of chapter 4). Regular verbs have a predictable form, as in I walk, you walk, s/he walks, we walked, and they have walked. If you are a native speaker of English, you know that third person singular present tense has –s, the past tense has –ed, and the past participle has –ed too. If you invent a new verb, you will use these endings without hesitation. Irregular verbs were once more regular but because of changes in the language, they now need to be learned, as in Figure 6.4

![Figure 6.4: Drawed and drew. (Used with the permission of the Baby Blues Partnership and King Features Syndicate in conjunction with the Cartoonist Group. All rights reserved.)](image-url)
Some people make a distinction between weak verbs (such as walk), strong verbs where the vowel changes in the past (such as draw), and irregular ones (such as go, with its past went). Many others just distinguish regular (the weak ones) from irregular verbs (the strong and irregular ones).

The ending is used to build the tense and aspect forms of English that we have seen in Figures 6.1 and 6.2. Thus the present perfect uses a present tense auxiliary (and have is irregular) and the past participle ending of another verb. The latter can be regular, as in the case of walked, or irregular, as in the case of gone. I list a few of the regular and irregular forms in (63):

(63)  

<table>
<thead>
<tr>
<th></th>
<th>present</th>
<th>past</th>
<th>past participle</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>walk(s)</td>
<td>walked</td>
<td>walked</td>
</tr>
<tr>
<td></td>
<td>love(s)</td>
<td>loved</td>
<td>loved</td>
</tr>
<tr>
<td></td>
<td>hike(s)</td>
<td>hiked</td>
<td>hiked</td>
</tr>
<tr>
<td>b.</td>
<td>go(es)</td>
<td>went,</td>
<td>gone</td>
</tr>
<tr>
<td></td>
<td>begin(s)</td>
<td>began</td>
<td>begun</td>
</tr>
<tr>
<td></td>
<td>sing(s)</td>
<td>sang</td>
<td>sung</td>
</tr>
<tr>
<td></td>
<td>write(s)</td>
<td>wrote</td>
<td>written</td>
</tr>
<tr>
<td></td>
<td>put(s)</td>
<td>put</td>
<td>put</td>
</tr>
</tbody>
</table>

I have suggested to not worry too much about the names of all the tense and aspect combinations (see Figure 6.5 below for even more names). Consult a dictionary (or the internet) for longer lists of irregular verbs.

Whether a verb is regular or irregular or used as past or present is not connected to its classification as intransitive or transitive. We have divided verbs in chapters 4 and 5 into intransitive, transitive, ditransitive, copula, complex transitive, phrasal and prepositional verb. These can be regular or irregular and most can be used in all the tense and aspect combinations discussed. Auxiliaries are irregular: modals only have a present form, the progressive and passive auxiliary be is the most irregular, as is shown in (64a), and so is perfect have, as shown in (64b):

(64)  

<table>
<thead>
<tr>
<th></th>
<th>present</th>
<th>past</th>
<th>past participle</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>am, is, are</td>
<td>was, were</td>
<td>been</td>
</tr>
<tr>
<td>b.</td>
<td>has, have</td>
<td>had</td>
<td>had</td>
</tr>
</tbody>
</table>
The copula *be* and transitive *have* work the same way of course.

Finally, we have used finite and non-finite to label verbs. The present and past forms of verbs (*am, was, sings*, etc) are always finite and the past participle (*been*) and present participle (*being*) always non-finite. Sometimes, it is hard to distinguish the simple past (e.g. *had*) from the past participle (e.g. *had*) and you have to look at the sentence. Remember that as long as one finite verb is present, the entire VGP is finite, as is the entire sentence.

6. **Conclusion**

In summary, this chapter has classified the different kinds of auxiliary verbs: the modal, perfect, progressive, and passive which occur in this order; *do* is added in questions and negative sentences when an auxiliary is not available. Several names for tenses, such as the present perfect and past progressive, are also provided. I would suggest that, unless you are going to teach them, to just ignore the names and have some sense for these terms and what they mean on timelines (see also Exercise G).

Finiteness is also discussed: a verb is finite if it agrees with the subject and if this subject bears nominative case. Since finite verbs and their relationship to lexical and auxiliary verbs are often challenging, I end with a list of examples in table 6.3. The clauses are indicated by brackets but their use will not be explained till the next chapter. For now, remember that if you have a lexical verb, there is a clause.
1. [Those people *could* have *been* *going off*].
   AUX/LEX name modal perfect progressive phrasal
   AUX AUX AUX lexical

2. [He *has* *been* wanting *to go there for ages*].
   AUX AUX lexical lexical
   perfect progressive transitive intransitive

3. [I *mentioned* that it *had* *been* said that she *wished* *to leave*]].
   lexical AUX AUX lexical lexical lexical
   transitive perfect passive transitive transitive intransitive

4. [I *saw* him giving her a present]].
   lexical lexical
   transitive ditransitive

5. [[Feeling fine], he *left* early *to put dinner on the stove*]].
   lexical lexical lexical
   copula intransitive complex transitive

Table 6.3: The relationship between finite (in **bold**) and lexical/AUXiliary verbs (underlined).

In Table 6.3, each sentence has at least one finite verb.

Key terms are auxiliary and lexical verb; affix; participle; modal, perfect, progressive, and passive; regular and irregular verbs; finite and non-finite; nominative case, and tense.

**Exercises**

A. Identify the auxiliary/ies in (65) to (68), e.g. are they passive, or modal? List the finite verbs as well:

(65) Rigobertha has been meeting Carlos.
(66) Belo and Horta were awarded the Nobel Peace Prize.
Indonesia was not too happy with the decision.
They may be bringing about a peaceful solution in East Timor.

B. Identify the auxiliaries (e.g. modal, passive) in the passage from chapter 2, repeated here. Again, list the finite verbs as well:

Granny was waiting at the door of the apartment. She looked small, lonely, and patient, and at the sight of her the children and their mother felt instantly guilty. Instead of driving straight home from the airport, they had stopped outside Nice for ice cream. They might have known how much those extra twenty minutes would mean to Granny.

C. Think up a sentence with a perfect and a passive auxiliary.

D. Add a progressive auxiliary to: He might go. Now add a perfect as well.

Take out the perfect in He could have been going.

E. In the following list of verbs, identify the irregular ones:
wait, become, see, look, take, lead, grow, hang, light, run, garden, paint, and drive.

F. Read the two poems below. Then, compare the use of the verbs: lexical as opposed to auxiliary, and finite as opposed to non-finite. What is the effect of this different verb use?

As the cat climbed over the top of the jamcloset first the right forefoot
Fire and Ice
Some say the world will end in fire, Some say in ice.
From what I've tasted of desire I hold with those who favor fire.
But if it had to perish twice, carefully
then the hind I think I know enough of hate
stepped down To say that for destruction ice
into the pit of Is also great
the empty And would suffice.
flowerpot

Robert Frost (1874-1963); www.bartleby.com

william carlos williams
(1883-1963)

Class discussion

G. In sections 2.2 and 2.3, I have given simplified timelines to the different tenses. There are a few more possibilities that I have added together with the previous ones in Figure 6.5. Discuss these in class and perhaps draw some of your own versions.

<table>
<thead>
<tr>
<th>Timeline</th>
<th>example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present</td>
<td>I know the answer</td>
</tr>
<tr>
<td>Past</td>
<td>I knew the answer yesterday</td>
</tr>
<tr>
<td>Future</td>
<td>He’ll do it</td>
</tr>
<tr>
<td>Present perfect</td>
<td>I have lived here for ages</td>
</tr>
<tr>
<td>Past perfect</td>
<td>He had done it by five</td>
</tr>
<tr>
<td>Future perfect</td>
<td>He’ll have done it by 5 a.m.</td>
</tr>
</tbody>
</table>
5 a.m.

**A.**

- Present progressive: ___S___E__ I am working
- Past progressive: ___E__S___ I was working
- Future progressive: ___S___E I will be working
- Progressive present perfect: ___E__S___ I have been working
- Progressive past perfect: ___E__S___ I had been working up to that point
- Progressive future perfect: ___S___E___ I will have been working by then

---

**Figure 6.5:** Timelines for tense and aspect (final version)

**H.** If you have access to the internet in class, search for some sites with irregular verbs. They vary enormously in number. What is the largest number you can find.

**Keys to the Exercises**

**A.** *has* (perfect) and *been* (progressive) in (65); *were* (passive) in (66); no auxiliaries in (67); *may* (modal) and *be* (progressive) in (68).

Finite verbs: in (65), *has*; in (66), *were*; in (67), *was*; in (68), *may*.

**B.** Granny was (progressive) waiting at the door of the apartment. She looked small, lonely, and patient, and at the sight of her the children and their mother felt instantly guilty. Instead of driving straight home from the airport, they had (perfect) stopped outside Nice for ice
cream. They might (modal) have (perfect) known how much those extra twenty minutes would (modal) mean to Granny.

Finite are: was, looked, felt, had, might, would

C. He has been seen.
D. He might be going.
   He might have been going.
   He could be going.

E. Irregular are: become, see, take, lead, grow, hang (can also be regular), light (can also be regular), run, drive. You can tell this by thinking of the past and participle forms, e.g. become has became and become respectively.

F. In the first poem, there are 2 finite lexical verbs; in the second, there are 12 lexical and 4 auxiliary verbs, and only 1 Verb Group is non-finite. Note also that in the second poem, a number of nouns are somewhat verbal, e.g. hate, destruction, fire, desire. They are either based on a verb or can be used as a verb. Discuss the effects of the verb use on the tone of the poems.

Special Topic: Reduction of have and the Shape of Participles

The prescriptive rule against contraction can be formulated as follows:

(69) In formal writing, do not contract auxiliaries and negatives.

Most people do not fully spell out the auxiliaries in speech or informal writing. Thus, have in (70) becomes `ve or a, as in (71), or even of, as in (72):

(70) I should have done that sooner.
(71) Now, that's someone who they shoulda kept out the sun.
(COCA-Fiction 2008)
(72) He should of said something.
(COCA-fiction 1994)
Reduction of *have* is typically done by speakers when *have* is in fact an auxiliary as in (71) and (72), not when it is a main verb, as in (73), formed from (74):

(73) *He shoulda books in his office.*
(74) He should have books in his office.

Reduction of auxiliaries has occurred since medieval times. Sentences (75) to (79) are from the 15th and 16th centuries, and the reduced forms of *have* are in bold:

(75) *it xuld a be seyd*
    'It should have been said'. (*Paston Letters*, #131 year 1449)
(76) *3e wold a be plesyd*
    'You would have been pleased'. (*Paston Letters*, #176 year 1464)
(77) *there xuld not a be do so mykele*
    'There should not have been done so much.' (*Paston Letters*, #205 year 1469)
(78) So would I *ha* done by yonder Sunne.
    (Shakespeare, *Hamlet*, IV, 5, 65 First Folio Edition 1623)
(79) I know you *ha'* practised vpon the easie-yielding spirit of this woman.
    (Shakespeare, 2 Henry 4, II, 1, 126)

Hence, even though the reduction of *have* to *of* and -*a* is common in speech nowadays (and was common in writing in earlier times), it is ‘not done’ (verboten) in formal writing. Since perfect *have* is weakening, we find sentences such as (80):

(80) I feel that American Express **should of not have** paid once they received my call and emails of the merchandise not working. (google – complaints site)

As mentioned, the perfect auxiliary *have* and the passive auxiliary *be* are followed by a past participle. This rule is often violated. Remember the discussion of *lie* and *lay* (with participles as *lain* and *laid* respectively) in chapter 4? Other instances are the past participles *bitten* and *gone.*
They are often replaced by the past tense, as in (81) and (82), but this use is not prescriptively correct in Modern English even though it occurs in writers such as Milton, as in (83), Dryden, Pope, Addison, and Swift:

(81) Some mosquito has bit me.
(82) I should have went to Medical School at the U of A. (overheard on ASU campus)
(83) According to his doom: he would have spoke,
    But hiss for hiss return'd with forked tongue. (Milton, Paradise Lost, X, 517-8)

In earlier stages of English, the affix was often not present, as in (84) and (85):

(84) What have I do? (Chaucer, Miller's Tale, 3739)
(85) If I so ofte myghte have ywedded be. (Chaucer, Wife of Bath's Prol. 7)

The present particle is preceded by the auxiliary be, as we have seen in section 2.3. In many varieties of English, this participle has a prefix, as in (86). More frequently, the verb preceding it is go, as in (87) from an English folksong, or keep:

(86) He was a-working
(87) A Frog he went a-courting.

This is the remnant of an older on that marked the progressive.
I'll start with chapter 6. In this chapter, the Verb Group (VGP) is examined more carefully: a Verb Group contains at least a lexical verb but can also contain one or more auxiliaries. Verbs (and Verb Groups) are either finite or non-finite. If verbs express tense and have a nominative subject, they are finite; if not, they are non-finite. Some verbs are irregular in form. That affects the shape of, for instance, their simple past and present perfect.

In chapters 4 and 5, functions at sentence level are discussed: subject, predicate, direct object, indirect object, phrasal object, prepositional object, subject predicate, and object predicate. These are obligatory parts of the sentence. Verbs are classified in terms of whether or not they have obligatory complements: intransitives do not but transitives, ditransitives, copulas, complex transitives, phrasal and prepositional verbs do.

In contrast to complements, adverbials function to add background and can be added to a sentence optionally and without limitation (except for the speaker's and hearer's level of patience and memory). The difference between direct object, indirect object, phrasal object, and prepositional object on the one hand and subject predicate, object predicate, and adverbial on the other is that the former can be passivized. As a reminder, I'll provide a list of the major verb types with a simple tree for each. Review the Tables of chapters 4 and 5 as well.

(1) **Intransitive: no objects**

```
            S
             \   /
            ei

            NP       VP
            Manatees

            V
            swim
```
(2)  \textbf{(Mono)transitive: one direct object}

\begin{verbatim}
S  
\text{ei}  
NP  VP  
They  \text{ei}  
V  NP  
ate  \text{ei}  
D  N  
an  apple  
\end{verbatim}

(3)  \textbf{Ditransitive: one direct and one indirect object}

\begin{verbatim}
\text{Sabina}  \text{ei}  
NP  VP  \text{Amy}  \text{ei}  
V  NP  NP  V  NP  PP  
told  Timber  N  gave  N  ri  
stories  bones  P  NP  
to  Chandra  
\end{verbatim}

(4)  \textbf{Copula: one subject predicate}

\begin{verbatim}
S  
\text{ei}  
NP  VP  
Aster  \text{ei}  
V  AdjP  
is  \text{ei}  
Adv  Adj  
very  nice  
\end{verbatim}
(5) **Complex Predicate: one direct object and an object predicate**

\[
\begin{array}{c}
\text{S} \\
\text{ei} \\
\text{NP} \quad \text{VP} \\
\text{Soly} \quad \text{ep} \\
\text{V} \quad \text{SC (=small clause)} \\
\text{found} \quad \text{ei} \\
\text{NP} \quad \text{NP} \\
\text{him} \quad \text{ei} \\
\text{D} \quad \text{N} \\
\text{a} \quad \text{nuissance}
\end{array}
\]

(6) **Prepositional object verb: one PP object**

\[
\begin{array}{c}
\text{S} \\
\text{ei} \\
\text{NP} \quad \text{VP} \\
\text{She} \quad \text{ep} \\
\text{V} \quad \text{PP} \\
\text{insists} \quad \text{ei} \\
\text{P} \quad \text{NP} \\
\text{on} \quad \text{ei} \\
\text{D} \quad \text{N} \\
\text{an} \quad \text{answer}
\end{array}
\]
Phrasal: no object if intransitive, as in (7a); one direct object if transitive, as in (7b).

a. S ei
   NP  VP
   Jona logged off

b. S ep
   VP  NP ei
   Hermione turned off
   NP ei
   D N
   the light

EXAMPLES OF MID-TERMS COVERING CHAPTERS 4 to 6.

Example 1

A. In Text A, list (or underline) the lexical verbs and label them as e.g. transitive, complex transitive, or phrasal verb.

B. List the adverbials, subjects, and direct objects in paragraph 1 of Text A.

C. List the auxiliary verbs in paragraph 2. Are they modal, perfect, progressive, or passive?

D. Circle the finite verbs in the complete text.

E. Are any of the verbs irregular?

F. Draw a tree for:

(8) Spain was the target at the end of the century

Text A (adapted from: The Good Neighbor, by G. Black). Ever since the US Civil War, the countries of Central America and the Caribbean have
occupied a special place in the American psyche. Cuba, Nicaragua, Panama and their
neighbors have been a magnet for adventurers and pioneers, a proving ground for grand
abstractions of democracy and freedom, and frequently they have given scoundrels a refuge.
For most of the twentieth century people knew them as "banana republics"; by the 1980s, a
chain of clothing stores serving affluent customers in today's travel-mad world had adopted
that name.

This was frontier territory, a land where the whim of the adventurer was often the
only law, where Americans had limitless prerogatives, and where people considered outside
intruders malicious. Senator Hannegan of Indiana saw something else. He saw Britain
hastening ‘with race-horse speed’ to seize all of Central America. Spain was the target of
similar suspicion at the end of the century, but was succeeded in turn by Germany, Mexico
and the Soviet Union. Each of these foreign powers was charged with importing ideologies
alien to the natural order of the region.

Example 2
A. Find all the lexical verbs and classify them (monotransitive, phrasal, etc.) in Text B, a text
from a few years ago, but in many respects still relevant.

B. Find all the complements and classify them (direct object, indirect object, subject predicate,
etc.). How are they realized (NP, PP, AdvP, etc.)?

C. Point out the auxiliary verbs and classify them. Also circle or list the finite verbs.

D. Are result, kill, and carry regular or irregular verbs?

E. Draw a tree for:

(9) Continued hostilities have resulted in terrible abuses inside Afghanistan.

Text B. Afghanistan troubles
Continued hostilities have resulted in catastrophic human rights abuses inside Afghanistan.
All warring factions have carried out attacks against residential areas. The factions have targeted civilians. They have killed tens of thousands of people in various parts of the country. The vast majority of the victims have been Kabul residents. Previous attacks against Kabul stopped when the Taleban forces entered Kabul about five months ago. Now, Taleban has threatened a bombardment. This will leave many people dead and many more wounded.

(adapted from an Amnesty International document)

Example 3
A. List or circle the finite verbs in the second paragraph of Text C.

B. List and identify the lexical verbs (transitive, intransitive, etc.) and the auxiliary verbs (passive, perfect, etc.) in the first paragraph.

C. Draw a tree for (10). Indicate the functions and names/labels by means of brackets.

(10) They met in Paris at the beginning of the 20th century.

D. What is the function and name/label (i.e. realization) of the following phrases in the sentences in which they occur:

(11) a brilliant success (first paragraph).
(12) Picasso's arrival (second paragraph).

Text C (adapted from an article in Arizona State University's State Press)
Imagine if Steve Martin wrote a comedic concept play with the entirely possible idea that Pablo Picasso and Albert Einstein could have met in Paris at the beginning of the twentieth century in a small bistro. He has succeeded, and the Arizona Theatre Company's production of Picasso at the Lapin Agile is a brilliant success. Martin has created a hilarious and thought provoking look at two geniuses.

The play begins with Einstein and several other patrons discussing the probability
that Picasso would venture into the bistro. Einstein is anticipating Picasso's arrival. The players discuss everything from physics to the letter `E'. The play abounds with Steve Martin's bizarre philosophies and even stranger sense of humor.

Questions that are not related to the text:

**E.** Explain (using terminology used in class and in chapter 5) why the following sentence is ungrammatical:

(13) *Down the president she ran.

**F.** Add passive auxiliaries to the following sentences (and make the appropriate changes):

(14) Picasso may have played a part.

(15) Einstein is looking at Picasso.

**Keys to the exams**

**Example 1**

A. The lexical verbs in the first paragraph are occupied (transitive), been (copula), given (ditransitive), knew (complex transitive), serving (transitive; this is tricky), adopted (transitive) and in the second paragraph: was (copula), was (copula), had (transitive), considered (complex transitive), saw (transitive), saw (transitive), hastening (intransitive), seize (transitive), was (copula), succeeded (transitive, but here passivized), charged (complex transitive, but passivized), importing (transitive).

B. The adverbials are: Ever since the US Civil War, (in the American psyche), frequently, For most of the twentieth century, by the 1980s, and (in today’s travel-mad world). The PPs in parentheses could also modify **place** and **customers** respectively.

The subjects are: the countries of Central America and the Caribbean, Cuba, Nicaragua, Panama and their neighbors, they, people, a chain of clothing stores serving affluent customers (in today's travel-mad world). The direct objects are: a special place (in the American psyche), a refuge, them,
and that name and the sole indirect objects is scoundrels. The only subject predicate is long: a magnet for adventurers and pioneers, a proving ground for grand abstractions of democracy and freedom and the object predicate is: as "banana republics".

C. The auxiliaries are had (perfect), was (passive), and was (passive).

D. The finite verbs are: Ever since the US Civil War, the countries of Central America and the Caribbean have occupied a special place in the American psyche. Cuba, Nicaragua, Panama and their neighbors have been a magnet for adventurers and pioneers, a proving ground for grand abstractions of democracy and freedom, and frequently they have given scoundrels a refuge. For most of the twentieth century people knew them as "banana republics"; by the 1980s, a chain of clothing stores serving affluent customers in today's travel-mad world had adopted that name.

This was frontier territory, a land where the whim of the adventurer was often the only law, where Americans had limitless prerogatives, and where people considered outside intruders malicious. Senator Hannegan of Indiana saw something else. He saw Britain hastening 'with race-horse speed' to seize all of Central America. Spain was the target of similar suspicion at the end of the century, but was succeeded in turn by Germany, Mexico and the Soviet Union. Each of these foreign powers was charged with importing ideologies alien to the natural order of the region.

E. The irregular verbs are auxiliaries have (three times), had, was (twice), and copula be (four times), the ditransitive give, the complex transitive know, the transitive see (twice).

F. 

```
S
  NP Spain
  V'  VP
    V was
    NP ei ei
    P at
    NP ei ei
    D N D NP
    the target the ei
    N PP end ei
    P NP
```
Example 2

A. resulted: prepositional verb; carried out: phrasal; targeted: transitive; killed: transitive; been: copula; stopped: intransitive; entered: transitive; threatened: transitive; and leave: complex transitive.

B. in catastrophic human rights abuses (inside Afghanistan): prepositional object/PP; attacks against residential areas: phrasal object/NP; civilians: direct object/NP; tens of thousands of people: direct object/NP; Kabul residents: subject predicate/NP; Kabul: direct object/NP; a bombardment: direct object/NP; many people: direct object/NP; dead: object predicate/AdjP; many more: direct object/NP; and wounded: object predicate/AdjP.

C. Auxiliaries: five instances of have (perfect), one has (perfect), and one will (modal). The finite verbs are five instances of have, one stopped, entered, has and will.

D. regular.

E. S OR S
   ep ep
   NP VP NP VP
   ei ei 4 ep
   AdjP N VGP PP V’ PP
   Adj hostilities ru ru ei 4
   Continued pf V P NP VGP PP in Afgh.
   have resulted in ei 4 5
   AdjP N pf V in terrible abuses
   Adj ei have resulted
   terrible N PP
   abuses ei
   P NP
   inside Afghanistan

of ei
D N
the century
Example 3
A. The finite verbs are: begins, would, is, discuss, and abounds.
B. Imagine: transitive, wrote: transitive, met: (here) intransitive, succeeded: intransitive, is: copula, and created: transitive.
C. S
   ei
NP       VP
They     ei
   V’     PP
ei     ei
V       PP     P     NP
met   ru     at     ei
   P     NP     D     N’
in Paris the ei
   N     PP
beginning ei
   P     NP
of ei
   D     N’
the ei
   AdjP   N
Adj century
20th
D. SuPr: NP; DO: NP
E. The run down in She ran him down is a phrasal verb and the particle cannot be separate from the verb.
F. A part may have been played by Picasso; Picasso is being looked at by Einstein.
CHAPTER 7: FINITE CLAUSES: EMBEDDED AND COORDINATED

So far, the sentences we have focussed on have included one lexical verb and one or more auxiliaries. These are simple sentences. This chapter gives examples of sentences that include more than one lexical verb, which means that they are composed of more than one clause. Sentences that are part of another sentence, i.e. that have a function in that sentence, are often referred to as embedded clauses, where the embedded clause is seen as subordinate to the other.

There are also coordinated clauses. They involve at least two clauses (and two lexical verbs) that are joined by and (or another coordinator) and both coordinated clauses are of (almost) equal importance. Both embedded and coordinated constructions enable us to make very long sentences (infinite if we have the energy) and ones we had never heard before.

Section 1 provides some examples of complex clauses and section 2 discusses functions, such as subject, object, and adverbial, as they relate to clauses. In section 3, I introduce the structure of the embedded clause, making use of the grammatical category complementizer and the Complementizer Phrase (abbreviated as CP). In section 4, I do the same for coordinated clauses by using the coordinator to form a Coordinator Phrase (also abbreviated as CP). Section 5 reviews some of the terminology.

1. Sentences and Clauses

A simple clause contains one lexical verb. Hence, if there are two lexical verbs, there are two clauses. For instance, in (1), the lexical verbs are noticed and like and hence, there are two clauses: the main clause (I should have noticed that Zelda doesn’t like Zoltan) and the embedded one (Zelda doesn’t like Zoltan). This can be indicated by means of brackets:

(1) [I should have noticed [that Zelda doesn’t like Zoltan]].

In determining the clauses in a text, it will be helpful to first identify the lexical verbs and then to draw the brackets around the clauses.
The embedded clause in (1) is part of the main clause. We could split it up into two clauses, as in (2), but that is awkward:

(2) I should have noticed it. Zelda doesn’t like Zoltan.

Auxiliaries, such as *should* and *does* in (1) and (2), are not relevant for determining the number of clauses or sentences; only lexical verbs are. How many main verbs are there in the middle frame of Figure 7.1?

![Baby Blues cartoon]

Figure 7.1: A pony (Used with the permission of the Baby Blues Partnership and King Features Syndicate in conjunction with the Cartoonist Group. All rights reserved.)

If I counted right, there are ten. If you really want a pony, that may not be so many!

In a coordinated sentence, there are also two lexical verbs (or more, if more clauses are coordinated or if one of them contains an embedded clause) but they are joined by a coordinator. Thus, in (3), we have the main verbs *arrived* and *ate* and the coordinator *and*:

(3) [The food **arrived**] and [they **ate**].

(COCA – fiction 1995)

As we’ll see, it is easier to divide (3) into two separate clauses than (1) and that is because coordinated clauses have a looser connection.
Some linguists call the larger sentence in (1) the sentence or main clause and the smaller sentence the embedded sentence, dependent, or subordinate clause. In section 5, I list some of these terms. I will use both clause and sentence interchangeably to indicate a unit that contains a lexical verb. The complementizer that in (1) functions to link the embedded sentence to the main clause, but can often be left out in English. Try that in (1). For a list of complementizers, look back to chapter 2, Table 2.5.

In (1), both clauses have a VP containing a finite verb, i.e. should and does (remember auxiliaries can be finite), but embedded sentences can be non-finite as well. In this chapter, I discuss the clauses with finite VPs and in the next chapter those with non-finite VPs. Be careful not to confuse finite verbs, such as should or does, with lexical verbs, such as noticed and like: each clause must have a lexical verb, but each clause need not have a finite verb.

2. The Functions of Clauses

As mentioned, embedded clauses function inside another clause as subject, direct or phrasal object, subject predicate, or adverbial. For instance, in (1) above, the embedded clause functions as direct object; in (4), it is a subject; in (5), a subject predicate; in (6), a phrasal object; and in (7), an adverbial. The embedded clauses are indicated by means of brackets here:

(4) [That she left] was nice. (embedded subject)
(5) The problem is [that she reads junk]. (embedded subject predicate)
(6) I figured out [that it didn’t work]. (embedded phrasal object)
(7) He read books [because it was required]. (embedded adverbial)

Embedded clauses do not function as indirect objects or as objects of prepositional objects (see chapter 10). They do not function as object predicates either. Inside an NP or AdjP, clauses function as modifiers (e.g. relative clauses) or complements (e.g. noun complements). Examples of relative and complement clauses will be given in chapter 10.

Coordinated clauses have no function in another clause. They are on an equal footing, most argue, with each other. In (3), this means that you could even make them into two independent
clauses, as in (8), and although that sounds very `choppy’, it is still better than (2):

(8) The food arrived. They ate.

We’ll now turn to the tree structures.

3. The structure of the embedded clause: the Complementizer Phrase (CP)

As mentioned, embedded sentences have complementizers that connect the embedded clause to another clause. These complementizers are sisters to S and a sentence with a complementizer is a Complementizer Phrase, abbreviated as CP. The CP, as in (9), expresses that there is a sentence S that can be independent, i.e. occur on its own but, when it functions in another sentence, it is glued to that sentence by the C. The C determines the nature of the phrase above the C and S, namely the CP:

(9) CP
    ei
    C S
    that ...

Unlike the S, the CP cannot appear on its own, since a sentence such as (10) is a fragment:

(10) That he went to the store.

Using CP, C, and S, a sentence such as (1), has a structure as in (11). I have slightly simplified (1) by taking the auxiliaries out:

(11) S
Using a CP makes it possible to include the complementizer in the sentence and link the embedded S to the main S. In (11), the embedded CP is the sister to \textit{noticed}, which means that it functions as the direct object to \textit{noticed}.

There are also embedded clauses that express questions. In these, the C position can be occupied by \textit{if} or by \textit{whether}, as in (12). The CP here, as in (11), functions as a direct object:

\begin{itemize}
  \item (12)
\end{itemize}
Trees for a CP as subject and a subject predicate clause are given in (13) and (14) respectively:

(13)

```
( S
  (CP ei)
  (VP ei)
  (C ei)
  (S ei)
  (V ei)
  (AdjP ei)
  (that ei)
  (was ei)
  (Adj ei)
  (NP ei)
  (VP ei)
  (nice ei)
  (she ei)
  (V ei)
  (left ei)
```

(14)

```
( S
  (NP ei)
  (VP ei)
  (D ei)
  (N ei)
  (V ei)
  (CP ei)
  (The ei)
  (problem ei)
  (is ei)
  (C ei)
  (S ei)
  (that ei)
  (NP ei)
  (VP ei)
  (she ei)
  (V ei)
  (reads ei)
  (NP ei)
  (N ei)
  (junk ei)
```

Other examples of complementizers are *because, before, after, unless,* and *since.* These particular complementizers are often used to introduce adverbial clauses. An example of an embedded adverbial is given in (15):
The position of clauses functioning as adverbials, like that of non-clausal adverbials, is very flexible. For instance, in a sentence such as (15), the *because*-clause can also precede *he read books*, as in (16):

(16) Because it was required, he read books.

We will assume that the tree structure for this is as in a sentence with an S-adverbial, discussed in chapter 5, namely, as in (17). However, other trees are possible:
Sentences containing embedded subjects, such as (4) above, are often changed into extraposed sentences, such as (18). The reason for the extraposition of the subject clause is that speakers do not like to have embedded sentences in the beginning or middle of the main clause. The dummy subject *it* takes the place of the extraposed clause:

(18) It was nice [that she left].

I'll refrain from drawing a tree here, but if you want to draw one, attach the extraposed CP as if it were an S-adverbial.

After seeing a C and CP, some of you might have wondered if there is a C’ as well. There is, and we will briefly mention this in chapter 11. Until then, we will draw the CP with just a C and S. Now, we’ll continue with the structure of the coordinate clause.

4. **Coordinate Sentences: the Coordinator Phrase (CP)?**

As in the case of coordinate phrases (discussed in chapter 3), there is a debate over how best to represent coordinate sentences, such as (3) above. I think (3) is similar to (19) in that there is a connection between the two clauses. In (20), on the other hand, the two clauses have no causal
relationship (at least not one obvious to me):

(19)  [She arrived] and [he left].
(20)  [Phoenix is a city in Arizona] and [the moon is made of cheese].

We could argue that sentences that are more closely connected have a coordinator and that really means 'and then'. Then, the second clause is subordinate to the first and the structure of (19) would be similar to the adverbial clause in (15) above. I have represented that as (21), where and he left would function as an adverbial to the main clause:

(21)

\[
\begin{array}{c}
S \\
\text{NP} & \text{VP} \\
\text{She} & \text{and he left} \\
\text{arrived} & \text{C} & \text{S} \\
\text{and} & \text{NP} & \text{VP} \\
\text{he} & \text{V} & \text{left} \\
\end{array}
\]

In (20), neither clause is subordinate to the other. This could be represented as (22):

(22)

\[
\begin{array}{c}
S \\
\text{S} & \text{C} & \text{S} \\
\text{ei} & \text{and} & \text{ei} \\
\text{NP} & \text{VP} & \text{NP} & \text{VP} \\
\text{Phoenix} & \text{ei} & \text{ei} & \text{ei} \\
\text{V} & \text{NP} & \text{D} & \text{N} & \text{VGP} & \text{PP} \\
\end{array}
\]
is  
D  N'  
a  
N  PP  cheese 

I leave it to the reader to decide whether (21) or (22) is more appropriate for (19) and (20) (see chapter 3, section 4, for more arguments).

Coordinated structures, especially the ones with a closer connection between the clauses, often leave out the second subject if it is identical to the first, as in (23). This is analyzed as ellipsis, i.e. deletion, of the second subject. The alternative is to repeat the subject, as in (24), but this is only done if you want to emphasize the subject:

(23)  [Streams of people arrived] and [ate arctic anchovies].
(24)  [Streams of people arrived] and [streams of people ate arctic anchovies].

As an alternative to analyzing (23) as a case of ellipsis, you could argue that it involves the coordination of two VPs, as in (25). Again, I leave that to you to decide:

(25)  

```
S
   NP
      ei  Streams arrived
      N    PP    VP
          ei  arrived and ei
                  P    NP    V    NP
```
In this section, I have used the coordinator *and* since that is the most frequent. In some kinds of writing, it is the third most frequent word (after the articles *a* and *the*, and usually in competition with the prepositions *to* and *of*). Other, less frequent coordinators are *(n)or*, *(n)either*, *so* and *but*.

### 5. Terminological labyrinth and conclusion

In this concluding section, I will list some synonyms or near synonyms for terms related to clauses that are used in the grammatical tradition. Remember, in this book, clause and sentence are used interchangeably. Grammar has existed for thousands of years and hence there are many terms that have come to be used. I am sorry about that. We need a United Nations decision on this but, for the moment, perhaps Table 7.1 helps.

| sentence = main clause = matrix clause = independent clause = superordinate clause = S |
| clause = embedded clause/sentence = dependent/subordinate clause = CP (Complementizer Phrase) |
| complementizer = subordinating conjunction = subordinator = C |
| clause = coordinated clause = coordinated sentence = CP (Coordinator Phrase) |
| coordinator = coordinating conjunction = C |

Table 7.1: Terms for clauses

Note that a main clause always has to be finite, but that an embedded clause can be finite or non-
In conclusion, this chapter discusses sentences that contain more than one lexical verb. These are of two types, embedded and coordinated. Embedded clauses are part of another clause and function as subject, direct object, or adverbial in that clause. Examples are given of all the functions that clauses have as well as of their trees. There can be more than one embedded clause in a main clause, and sometimes clauses are extraposed. We represent embedded clauses as CPs (Complementizer Phrases), and these consist of a complementizer C and an S.

Coordinated sentences are like independent sentences but are combined with a coordinator, such as and. Two possible structures are suggested, one when the two clauses are dependent on each other and another when that’s not the case. The reader is invited to choose for him- or herself depending on the kind of sentence. There is also a brief discussion of subject ellipsis which may occur when the subject in coordinate sentences is identical. Here too, there is an alternative analysis.

Key terms are clause and sentence; main clause/sentence; embedded and coordinate, CP, S, and C; complementizer; coordinator; ellipsis; and extraposition.

Exercises:
A. Find the lexical verbs in the sentences below (adapted from the London Times, http://www.timesonline.co.uk/tol/news/uk/article509889.ece). After that, put brackets around the clause that goes with each of these verbs.

(26) Mr. Bell, the Chief Inspector of Schools in England, finds that classroom discipline is worse since the current government took office several years ago.

(27) The proportion of secondary schools with good pupil behavior has fallen from three quarters to two thirds, while 9 per cent have serious discipline problems.

(28) The Chief Inspector worries that so many of the 60 per cent of youngsters from non-professional backgrounds lack the ambition or qualifications to go to university a quarter of a century after he became the first in his family to do so.

(29) Access to good schools is the key. Mr. Bell highlights unacceptable levels of variability in
the performance of state schools.

(30) He focuses particularly on the 10 per cent that make little or no improvement between inspection visits.

(31) Because children in these schools are effectively being written off, it is little wonder that many suffer the greatest problems with discipline.

B. Underline the lexical verbs and put brackets around the clauses that go with them in the following text, adapted from http://www.eva.mpg.de/psycho/dogs/dogs_research.html.

One aim of the Department of Comparative and Developmental Psychology is the investigation of the evolution of different cognitive processes. The comparative approach includes the study of a variety of animal species. Although most of our work is done with the great apes, we also investigate other species such as goats, seals, and dogs. For a number of reasons, the domestic dog (Canis familiaris) is a very interesting model for investigating different questions regarding the evolution of cognitive abilities. The fact that dogs have been living with humans for at least 15,000 years may have led to the selection of cognitive abilities by humans or even the co-evolution of dogs’ cognitive abilities with those of humans. We know from different studies that dogs are sensitive to the attentional state of humans. We also know that dogs understand communicative cues. Those abilities have not been found in nonhuman primates and wolves.

C. Draw trees for:

(32) Zelda noticed that candies disappear.

(33) They suggested that the sketch was done by daughters of the architect.

(34) They fuzzed that the unpleasant computer was down again.

(35) They purified books because they didn't like them.

(36) I heard that a manuscript has been stolen.

(37) Amir didn't know if Zoya was unhappy.

(38) He left the party because she arrived.

D. And for:
Fortunately, Zelda discovered that Zoltan missed her.
Because the snow was bad, the traffic on that street became impossible.
Zoltan mentioned that Bela had gone to the library without his rain jacket.
That two paintings were stolen from the Munch Museum is so sad.
I wondered whether that would happen.

E. List the functions of the embedded clauses in (32) to (43).

F. Draw trees for (44) and (45). The latter is a non-finite and this construction will be discussed in the next chapter:

(44) I wonder what he saw.
(45) He told us where to go.

G. There are a few special types of sentences that we haven't had a chance to talk about above, namely (46) and (47):

(46) If he was rich, (then) he would own an island.
(47) He did that task as well as he could.

We won't draw trees for these, but think about the structures. They are very different from each other.

Class discussion
H. Sentences such as *I mentioned that Sue won the Nobel Prize yesterday* are ambiguous. How are they (draw trees) and how would you change them if you wanted to avoid ambiguity?

I. Find the lexical verbs in:

*We the People of the United States, in Order to form a more perfect Union, establish Justice, insure domestic Tranquility, provide for the common defence, promote the general
Welfare, and secure the Blessings of Liberty to ourselves and our Posterity, do ordain and establish this Constitution for the United States of America. (The Preamble to the Constitution of the United States)

J. How might you bracket the long sentence in Figure 7.1?

Keys to the Exercises
A. The lexical verbs are underlined and the clauses surrounded by brackets:

(26) [Mr. Bell, the Chief Inspector of Schools in England, finds [that classroom discipline is worse] [since the current government took office several years ago]].

(27) [The proportion of secondary schools with good pupil behavior has fallen from three quarters to two thirds, [while 9 per cent have serious discipline problems]]. (I think in this sentence, we could argue that while is a coordinator).

(28) [The Chief Inspector worries [that so many of the 60 per cent of youngsters from non-professional backgrounds lack the ambition or qualifications [to go to university a quarter of a century [after he became the first in his family to do so]]]. (The clause around go should get clear in the next chapter; don’t worry about that now).

(29) [Access to good schools is the key]. [Mr. Bell highlights unacceptable levels of variability in the performance of state schools].

(30) [He focuses particularly on the 10 per cent [that make little or no improvement between inspection visits]].

(31) [[Because children in these schools are effectively being written off], it is little wonder [that many suffer the greatest problems with discipline]].

B. [One aim of the Department of Comparative and Developmental Psychology is the investigation of the evolution of different cognitive processes]. [The comparative approach includes the study of a variety of animal species]. [[Although most of our work is done with the great apes], we also investigate other species such as goats, seals, and dogs]. [For a number of reasons, the domestic dog (Canis familiaris) is a very interesting model for investigating different questions regarding the evolution of cognitive abilities]]. [The fact [that dogs have been living with humans for at least 15.000 years] may have led to the selection of cognitive abilities by humans or even the co-evolution of dogs’ cognitive...]

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abilities with those of humans]. [We know from different studies [that dogs are sensitive to the attentional state of humans]]. [We also know [that dogs understand communicative cues]]. [Those abilities have not been found in nonhuman primates and wolves].

C. (32) S
   ei
   NP  VP
   Zelda ei
       VGP  CP
       noticed ei
       C  S
       that ei
       NP  VP
       N  V
       candies disappear

(33) S
   ei
   NP  VP
   They ep
       V  CP
       suggested ei
       C  S
       that ep
       NP  VP
       ei  ei
       D  N  VGP  PP
       the sketch ti
       pf  pass V  P  NP
       had been done by ei
       N  PP
       daughters 4
       of the architect
(34) S
  ei
  NP VP
  They ei
  V
  fussied C
  that
  N' VP ei ei
  D N' V' AdvP
  the ei ei Adv
  AdjP N V AdjP again
  Adj computer was Adj
  unpleasant down

(35) S
  ei
  NP VP
  They ei ep
  V NP C S
  purified N because ei
  books
  NP VP
  they ei
  VGP NP
  ei them
  do-neg V
  didn't like
Sentence (36) involves an embedded object and is similar in structure to (32), (33), and (34). Sentence (37) is similar too, except that if is in the C. Sentence (38) has the same structure as (35).

D. (39) S
   AdvP  S
   Adv  ei
   Fortunately  NP  VP
   Zelda  ei
   V  CP
   discovered  ei
   C  S
   that  ei
   NP  VP
   Zoltan  ei
   V  NP
   missed  her

(40) S
   CP
   C  S  NP  VP
   Because  ei  ei  the  ei  became  Adj
   D  N  V  AdjP  N  PP  impossible
   ei  the  snow  was  Adj  traffic  ei
   bad  P  NP
   on  4
   that  street

Sentence (41) is similar to the above embedded objects, and so is (43), except that whether is in C.
The structure of (42) is as below, with the embedded clause as subject:

```
(42) S
    CP ei
    VP ei

C S V AdjP
that ep is ei

NP VP Adv Adj
ep so sad

d N VGP PP
two paintings ei

pass V P NP
were stolen from ei (I made the Munch Museum
D N into a compound)
the Munch Museum
```

E. In (32), (33), (34), (36), (37), (39), (41), and (43) it is a Direct Object; in (35), (38), and (40) an Adverbial; and in (42), it is a Subject.

F. In (44), the object of the embedded clause *what* is used as complementizer. We can represent that by saying that *what* moved to the C position.

```
(44) S
    ei

NP VP
I ep

V CP
wonder ei

C S
what ei

NP VP
he ei
```
V (what)
saw

The same is true in (45): the adverb *where* is used as complementizer:

(45) S
    ei
    NP VP
    he V NP CP
told us ei

C S
where ei
NP VP
Ø ei
VGP (where)
to go

G. In (46), the two clauses are coordinated since one is not subordinate to the other. In (47), *as well as he could* is an adverbial, and one could argue that the head is the adverb *well*, so that it is an AdvP in form. The head *well* is modified by a clause *as he could* that is dependent on the adverb *as*, a discontinuous modifier. This is quite a complex construction.

**Special Topic: Preposition or Complementizer: the `preposition' *like***

Especially since the 1980s, *like* has expanded its uses tremendously. It is sometimes claimed that it is the most frequent word in the speech of certain groups of speakers (see cartoon below). Prescriptive grammarians are not too pleased with this development, but tend to focus on the use of *like* as a complementizer. This prescriptive rule goes as follows:

(48) *like* is a preposition and not a complementizer.

That means that *like* can introduce an NP but not a clause. Instead of *like, as* is used to introduce a
sentence. Fowler (1926 [1950]: 325ff.) is not too clear in the following excerpt but is not happy with the use of *like* except as preposition. He writes:

> It will be best to dispose first of what is, if it is a misuse at all, the most flagrant & easily recognizable misuse of *like*. A sentence from Darwin quoted in the OED [Oxford English Dictionary] contains it in a short & unmistakable form: *Unfortunately few have observed like you have done*. Every illiterate person uses this construction daily; it is the established way of putting the thing among all who have not been taught to avoid it . . . in good writing this particular *like* is very rare.

Swan (1980: 73) is more low-key and says that "[i]n informal American English, *like* is very often used as a conjunction instead of *as*".

According to prescriptive authorities, we should allow *like* as a preposition as in (49), but not as a complementizer as in (50) to (54):

(49) Certainly, he is not **like** Mr. Knightley.  
    (Jane Austen, *Emma*, Vol 1, chap 4)

(50) “When we open up our hearts and our minds to those who may not think precisely **like** we do, or believe precisely what we believe, that's when we discover at least the possibility of common ground.”  
    (President Obama, 17 May 2009, Commencement Speech Notre Dame University)

(51) Shop **like** you mean it.  
    (advertisement)

(52) I felt **like** I could tell you anything. Now I don't feel **like** I can anymore.  
    (quoted in Tannen's *That's not what I meant*).

(53) Winston tastes good **like** a cigarette should. What do you want: Good grammar or good taste?  
    (an ad in the 1960s that caused much controversy)

(54) She forgot all about the library **like** she told her old man now.  
    (*Beach Boys' Song*)

Except as complementizer and preposition, *like* is often used to mark direct speech, as in (55), focus, as in (56), or to soften a request or demand, as in (57). These uses are not accepted in formal speech either, even though some are old, as (58) and (59) show, quoted in the OED:
So the other girl goes like: ‘Getting an autograph is like, be brave and ask for it’. So I got it. I just went up to him and he like. ‘O.K ...

I couldn't get to class because, well, like I had this accident on the freeway.

Stephanie, you, like, still owe me that $10.

yon man is lyke out of his mynd.

(Dunbar Poems, xix, 19)

all looking on, and like atonisht staring

(Spenser, Fairie Queen, iv, x, 56)

Figure 7.2: Quotative `like'

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Chapter 7 deals with finite embedded and coordinated clauses, i.e. those sentences or clauses that contain finite verbs. The present chapter deals with non-finite sentences (or clauses), i.e. those that contain only non-finite verbs. Non-finite sentences can only function as parts of another sentence; they are not considered well-formed sentences on their own in formal writing but are seen as sentence fragments. Since they are not complete sentences, they cannot be coordinated unless that coordinated structure is itself embedded. Remember from the last chapter that one lexical verb means one clause, two such verbs two clauses and so on.

In section 1, I list the three kinds of non-finite clauses and review the general characteristics of non-finites. Then, in section 2, I will briefly illustrate the functions that non-finite clauses have. Tree structures are provided in section 3 and using a CP with empty positions is justified. In section 4, we’ll consider coordinated non-finites.

1. Non-finite Clauses

There are three kinds of non-finite clauses, namely those whose verb groups contain infinitives, or present participles, or past participles. We’ll first consider infinitives.

In (1), there are two lexical verbs, expected and go. This means there are two clauses, which I have put brackets around. The non-finite clause her to go is the object of expected. This non-finite clause can of course be rephrased by means of a finite clause, as in (2):

(1) [I expected [her to go]].
(2) [I expected [that she would go]].

The infinitive implies something uncertain or something that will happen in the future perhaps. The corresponding main clause therefore has a modal would, expressing a similar uncertainty.

There are two types of infinitives: one with to, as in (1), and a bare one, without to, as in (3). The bare infinitive lacks the uncertainty:
(3) She made [him leave].

The bare infinitive in (3) occurs only as the object after verbs such as make, see, hear and feel. The to-infinitive is much more frequent. It occurs as object to many verbs, as subject, subject predicate, and adverbial, as we’ll see.

The infinitival clause with to frequently has a for as complementizer, as in (4), or an in order, as in (5), that connects it to the main clause:

(4) I expected [for him to be scared … ]
(from the catsite.com)

(5) [In order to understand the legislative process], it is necessary first of all to know something about the nature of the lawmaking body itself. (from an Alabama Senate document)

As we’ll see when we draw the Verb Group for the non-finite clause, to will be put inside this Verb Group since it is similar to a modal. If you want to name it, call it an infinitive marker.

Apart from infinitives, there are two other kinds of non-finite Verb Groups, usually referred to as participles. They involve the present participle ending in -ing, as in (6), and the past participle ending in -ed or -en, as in (7). Again, I have bracketed the clauses these verbs go with:

(6) [Walking down Rural Road], he was bothered by the traffic lights.
(7) [Kidnapped last night], he is in Central Asia right now.

The form of kidnapped is a regular past participle because it ends in -ed. However, past participles, like simple past tenses, can have irregular endings. The participle clauses in (6) can have while as a complementizer.

As mentioned in chapter 6, non-finites fail to express tense. Thus in (8), the non-finite to walk in the subordinate clause is neither past nor present nor future. Instead, the finite verb is/was/will be in the main clause determines the tense. The same is true for the non-finite in (9):
In addition, the verb in non-finite clauses displays no person or number marking, as is shown by the ungrammaticality of walks in (10):

(10) *[For him to walks in the Superstitions] is nice.

A third characteristic of non-finites is that the subject is not nominative. Thus, (11) and (12) are grammatical with the subject of the infinitive as him, i.e. accusative. Sentence (13) with a nominative he as subject of the non-finite is not:

(11) I want [him to go].
(12) I heard [him playing a song].
(13) *I want he to go.

If the subject of the non-finite clause is not a pronoun, the accusative or objective case on this subject is of course not visible, as (14) shows:

(14) She couldn't bear to see [Edward suffering].

The non-finite verb in (14) can also act like a verbal noun, as in (15a), and then the subject has genitive case, namely his or Edward's, rather than the accusative him or Edward. The construction in (14) is often called the gerund. In (14), suffering is a verb but in (15a) it is a noun because it is preceded by a possessive. Note that you could replace the possessive by an article, as in (15b):

(15) a. She couldn't bear to see [his/Edward's suffering].
 b. She couldn't bear to see [the suffering of him/Edward].

Prescriptive grammarians object to (12) and (14), and prefer (15). We will come back to gerunds as
a special topic. I like to think of present participles as a hybrid category, in between nouns and verbs, and avoid the term gerund.

As we saw in the previous chapter, finite embedded clauses could be separated from the main clause by taking the complementizer out, as in (16). A non-finite clause, as in (17a) can be the object inside another clause but on its own, as in (17b), it is not a complete sentence:

(16)  
a. I know that he left.
   b. He left.

(17)  
a. I want [him to go].
   b. *Him to go.

We’ll now turn to the functions of the non-finite clauses.

2. The functions of non-finites

The functions of non-finite clauses are similar to those of finite ones. They function at sentence level as subject in (18), direct object in (19), adverbial in (20), and subject predicate in (21):

(18)  [Eating pancakes] is a pleasant thing.
(19)  I love [eating pancakes].
(20)  They went there [to eat fry bread and chocolate].
(21)  The problem is [to decide on what to eat].

The present participle clause, as in (18) and (19), and the to-infinitive clause, as in (20) and (21), are the most versatile in function. This is indicated as ‘broad’ in Table 8.1. Past participle clauses, as in (7), are more restricted in that they usually function as adverbials and bare infinitives are mostly objects of certain verbs. This is indicated in the table as ‘narrow’. I think the functions of non-finites are not difficult but, just as a review, see if you can identify the functions of the clauses in (1) to (9)¹.

¹ In (1) to (4), these clauses function as objects, in (5) and (7) as adverbials, and in (6), (8) and (9) as subjects.
Table 8.1 lists the different kinds of finite and non-finite clauses, with examples, their complementizers, and in how many functions they are used.

<table>
<thead>
<tr>
<th></th>
<th>example</th>
<th>C</th>
<th>function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finite</td>
<td>(2)</td>
<td><em>that, because, etc</em></td>
<td>broad</td>
</tr>
<tr>
<td>Non-Finite</td>
<td>infinitive</td>
<td>(1) sometimes: <em>for</em>, as in (4); <em>in order</em>, as in (5)</td>
<td>broad</td>
</tr>
<tr>
<td></td>
<td>bare-infinitive</td>
<td>(3) no</td>
<td>narrow</td>
</tr>
<tr>
<td></td>
<td>present participle</td>
<td>(6) <em>while, after, before</em></td>
<td>broad</td>
</tr>
<tr>
<td></td>
<td>past participle</td>
<td>(7) no</td>
<td>narrow</td>
</tr>
<tr>
<td></td>
<td>(gerund)</td>
<td>(14), (15a) no</td>
<td>broad</td>
</tr>
</tbody>
</table>

Table 8.1: Embedded clauses

In chapter 10, non-finite clauses will be shown to function inside phrases as well. There too, their function is similar to that of finite clauses.

3. **The Structure: CP**

I represent a non-finite clause by means of a CP, as in (22), the structure for (17a). This captures that it is fairly similar in function to the finite clause but, as we’ll see, it is a little more reduced. It doesn’t need a subject and has a non-finite verb.
In (22), I have put in an empty complementizer. This C position can be filled by *for* in a number of cases such as (23). The reason I like to use the C is to show that the non-finite clause is embedded:

(23)  I want [for you to do your homework].

Non-finite clauses need not include a subject. The subject may be understood, as in (24). Since the subject is understood, I will put in a subject position, with an empty subject, as in (25), as well as an empty C since there is no complementizer:

(24)  To hike around Weaver's Needle is pleasant.

(25)  S
       C   S   V  AdjP
       Ø   ει  is  Adj
       NP   VP   pleasant
Could you add the subject and complementizer in (25)? The reason I prefer (25) is that it is pleasant for someone to walk around Weaver's Needle; the tree expresses that there is a subject even if this subject is left out.

The infinitive marker to adds some uncertainty, as we have seen comparing (1) and (3). I think it is somewhat similar to a modal and have therefore placed it in the Verb Group. Be careful in recognizing this to: it goes before a verb. A preposition goes before a noun, as in to us.

Sentences such as (6) and (7) above can also be represented using a CP, as (26) and (27) show:

(26)

\[
\begin{array}{cccc}
\text{CP} & \text{S} \\
\text{ei} & \text{ei} \\
\text{C} & \text{S} & \text{NP} & \text{VP} \\
\text{Ø} & \text{ei} & \text{he} & \text{ep} \\
\text{NP} & \text{VP} & \text{VGP} & \text{PP} \\
\text{Ø} & \text{ei} & \text{ei} & \text{ei} \\
\text{V} & \text{PP} & \text{pass} & \text{V} & \text{P} & \text{NP} \\
\text{walking} & \text{ei} & \text{was} & \text{bothered} & \text{by} & \text{N} \\
\text{P} & \text{NP} & \text{traffic lights} \\
\text{down} & \text{Rural} \\
\end{array}
\]
As in the case of infinitives, there are people who prefer a structure with fewer empty positions. I like seeing which clause is embedded and which clause has a potential subject. This comes in handy with dangling modifiers, as we'll see in the special topic to this chapter.

In the previous chapter, I mentioned extraposed finite clauses. Extraposition is possible with non-finites as well. For instance, (24) might be rendered as (28):

(28) It is nice [to hike around Weaver’s Needle].

In (28), the infinitival clause that functions as the subject of the entire sentence has been moved from the beginning to the end.

Table 8.2 lists some non-finites with a full CP, with an empty C, an empty subject, and an empty C as well as empty subject.

<table>
<thead>
<tr>
<th>To-infinitive</th>
<th>Present participle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full CP</td>
<td>I want [for her to do well].</td>
</tr>
<tr>
<td>Ø C</td>
<td>I want [Ø her to do well].</td>
</tr>
<tr>
<td>C Ø NP</td>
<td>*I want [for Ø to do well]².</td>
</tr>
</tbody>
</table>

² Note that most varieties of English do not accept *for to* here but that certain varieties do.
4. Coordinating non-finites

Non-finite clauses can be coordinated, as in (29). Note that the coordinated non-finites *gossiping about Zelda* and *chewing gum* function as subject to the verb *is*. (Speakers differ as to whether the verb is *is* or *are*):

(29) [[Gossiping about Zelda] and [chewing gum]] is hard to do at the same time.

Other examples of coordinated non-finites are given in (30) to (32):

(30) She could not think of [[Emma losing a single pleasure], or [suffering an hour's ennui]].
(adapted from Jane Austen’s *Emma*)
(31) But Emma, in her own mind, determined that he did not know what he was talking about, and that he shewed a very amiable inclination [[to settle early in life], and [to marry]].
(*Emma*, Vol 2, chap 6)
(32) The point is [[to watch the whales], and [to participate in fun]] …

The coordinated non-finites function as the object to *think* in (30), as the complement to *inclination* in (31) (this will get clearer in chapter 10); and as the subject predicate in (32). So, coordinated non-finite clauses always function as a unit inside another clause.

I will suggest (33) as a tree for coordinated non-finites functioning as a subject. I leave it to your imagination what the verbs are:

(33) 

```
S
 / \ 
 CPVP
 /   ei
```

Table 8.2: The non-finite CP
Note that I am using 'coathangers' in (32). That means that I am not indicating that the VPs can be divided into a V, an NP, and a PP. It shows that in this particular tree, we are not really interested in the structure of the VP. However, I have typically tried to avoid doing that in this book.

5. Conclusion

In this chapter, non-finite clauses are discussed. Their structure and function is quite similar to that of finite clauses. They are CPs and function inside another clause as subjects, object, adverbial, and subject predicates.

They differ from finite clauses in that the complementizer often does not appear and the subject can be absent. They also cannot be coordinated on their own. If they are coordinated, they have to function together as an embedded clause.

Key terms are non-finite Verb Group, infinitive, bare infinitive, present participle, past participle, gerund, CP, empty C, and empty subject.

Exercises

A. Please find the non-finite clauses that function as direct objects and adverbials in the sentences below, adapted from an article in the East Valley Tribune (4 April 2005, by Jason Emerson). You might try to find the lexical verbs first.
Arizona State University wants to make wholesale changes to the undergraduate curriculum.

The effort is still in the early stages but could result in a fundamental shift in the knowledge and skills gained from a university education.

The discussion intends to transform ASU into what President Crow calls the "New American University."

Changing a university’s curriculum is often controversial. It can erupt into full-blown controversies, as Stanford University discovered in the 1980s when faculty members voted to replace a number of books that had been considered part of the Western Canon.

The task force is focusing on what the ideal ASU student should know upon graduation.

The task force hasn’t talked yet about specific changes. But some early ideas include adding interdisciplinary classes and continuing them over four years until graduation. Now, general studies are clustered in the first two years.

Carlson said the task force continues to debate how to make undergraduate education more meaningful.

Are there any coordinated sentences? Is there ellipsis?

Draw trees for the following sentences:

Drawing trees is easy.

Emma wanted to do that.

For Ed to be resigning from that job is stupid.

Anselm made Vicky read the paper.

I saw turkeys crossing the street.

Santa set the alarm to be on time.

In the text below, find the non-finite clauses.

When movie producers for *Star Trek III* needed someone to produce alien-sounding dialogue for the Klingons, they turned to Marc Okrand, a linguist who has done scholarly
work on Native American languages. Okrand, however, didn't limit himself to creating lines of dialogue. He also developed a language, complete with phonological, morphological, and syntactic rules, in addition to vocabulary. His hard work paid off not only by giving him subsequent film work, but also by making him a sort of celebrity among Star Trek fans across the world, who are studying Klingon. These fans are also teaching their children to speak it, and are translating major works into Klingon. Any short sentence will show you the complexities of Klingon. All nouns may be followed by one or more suffixes divided into five types. If there are two or more suffixes, the suffixes must occur in a specific order.

E. Construct a sentence with two embedded sentences, one of which must be a non-finite clause functioning as direct object.

F. Construct a sentence with three non-finite clauses.

Class discussion

G. The following sentences are ambiguous. Why?

(47) Flying planes can be dangerous. (from chapter 1)
(48) Visiting aliens should be amusing on a Monday morning.

H. Bracket the clauses in the sentence in Figure 8.1.
I. Read Keats' poem "To Autumn" and circle/list the finite verbs in the first two stanzas.

Discuss the difference between the two paragraphs in class.

To Autumn
Season of mists and mellow fruitfulness,
Close bosom friend of the maturing sun,
Conspiring with him how to load and bless
With fruit the vines that round the thatch-eaves run;
To bend with apples the mossed cottage-trees,
And fill all fruit with ripeness to the core;
To swell the gourd, and plump the hazel shells
With a sweet kernel; to set budding more,
And still more, later flowers for the bees,
Until they think warm days will never cease,
For summer has o'er-brimmed their clammy cells.

Who hath not seen thee oft amid they store?
Sometimes whoever seeks abroad may find
Thee sitting careless on a granary floor,
Thy hair soft-lifted by the winnowing wind;
Or on a half-reaped furrow sound asleep,
Drowsed with the fume of poppies, while thy hook
Spares the next swath and all its twined flowers:
And sometimes like a gleaner thou dost keep
Steady thy laden head across a brook;
Or by a cider-press, with patient look,
Thou watchest the last oozings hours by hours.

Where are the songs of spring? Ay, where are they?
Think not of them, thou hast thy music too, --
While barred clouds bloom the soft-dying day,
And touch the stubble-plains with rosy hue;
Then in a wailful choir the small gnats mourn
Among the river sallows, borne aloft
Or sinking as the light wind lives or dies;
And full-grown lambs loud bleat from hilly bourn;
Hedge-cricketts sing; and now with treble soft
The red-breast whistles from a garden-croft;
And gathering swallows twitter in the skies.

J. Make up some sentences with an infinitival and participial object, as in (49) and (50). Try to think about the difference between the use of infinitive and present participle. You might look back to Table 8.2 as well:

(49) I want to visit Iceland, Israel, India, and Indonesia.
(50) I like traveling.

This is quite complex and has to do with to. I think verbs with the present participle as complement are more auxiliary-like and the two clauses are not as independent as when an infinitive is involved. What do you think?

Keys to the Exercises

A. The lexical verbs are underlined and the non-finite clauses functioning as objects and adverbials are indicated by brackets:

(34) Arizona State University wants [to make wholesale changes to the undergraduate curriculum]. (=Object, DO)
(35) The effort is still in the early stages but could result in a fundamental shift in the knowledge and skills gained from a university education. (coordinated clause and reduced relative)
(36) The discussion intends [to transform ASU into what President Crow calls the "New American University]." (=Object, DO)
(37) [Changing a university’s curriculum] is often controversial. It can erupt into full-blown controversies, as Stanford University discovered in the 1980s when faculty members voted [to replace a number of books that had been considered part of the Western Canon]. (=Adverbial)
(38) The task force is focusing on what the ideal ASU student should know upon graduation.
(39) The task force hasn’t talked yet about specific changes. But some early ideas include
adding interdisciplinary classes] and [continuing them over four years until graduation].
(=Object that consists of coordinated non-finite clauses). Now, general studies are clustered in the first two years.

(40) Carlson said the task force continues [to debate [how to make undergraduate education more meaningful]]. (=Object twice, DO)

B. Coordinated clauses occur in (35), since but can be seen as a coordinator. There is ellipsis of the subject before could. In (39), two present participle clauses are coordinated and form a complement.

C. (41)

```
S
  CP       VP
  ei       ei
C  S  V  AdjP
Ø  ei  is  Adj
NP  VP  easy
Ø  ei  V  NP
drawing  trees
```

(42)

```
S
  VP
  ei
NP  VP
Emma  ei
  V  CP
  wanted  ei
  C  S
Ø  ei
  NP  VP
Ø  ei
  VGP  VP
  ty  that
  inf  V
```
Sentence (45) has the same structure as (44).

(46)  

S
D. Non-finite clauses are in brackets: When movie producers for *Star Trek III* needed [someone to produce alien-sounding dialogue for the Klingons], they turned to Marc Okrand, a linguist who has done scholarly work on Native American languages. Okrand, however, didn't limit himself to [creating lines of dialogue]. He also developed a language, complete with phonological, morphological, and syntactic rules, in addition to vocabulary. His hard work paid off not only by [giving him subsequent film work], but also by [making him a sort of celebrity among *Star Trek* fans across the world, who are studying Klingon]. These fans are also teaching [their children to speak it], and are translating major works into Klingon. Any short sentence will show you the complexities of Klingon. All nouns may be followed by one or more suffixes [divided into five types]. If there are two or more suffixes, the suffixes must occur in a specific order.

E. Kim and Paul hoped [to see unicorns in the parking lot] [because they had studied their habits].

F. They intend [to find out if [looking out the window more often] makes [them work better]].

**Special Topic: Dangling Participles and Gerunds**
There are two topics discussed here that involve the present participle. Both have been much criticized by prescriptivists.

As we have seen in chapter 3, PPs can go with a noun (e.g. \textit{woman} in \textit{the woman with glasses}) or with a verb (e.g. \textit{saw} in \textit{saw her with glasses}). Sometimes, it is hard to tell. In this special topic, we’ll look at non-finite adverbial clauses that are misplaced and often result in a funny reading. There are prescriptive rules about how to place the modifier. In (51), there is one relevant for a non-finite clause:

(51) Avoid Dangling Participles: The subject of a clause with a participle in it (i.e. without a subject of its own) must be the same as the subject of the main clause.

Swan (1980: 455) provides the following rule: "It is usually considered a mistake to make sentences like these in which the subjects are different: \textit{Looking out of the window of our hotel, there were lots of mountains}. . . However, there are some very common expressions which break this rule. \textit{Generally speaking, . . . Judging from his expression, . . . Considering, . . ."}. Fowler (1926 [1950]: 675) says that "it is to be remembered that there is a continual change going on by which certain participles or adjectives acquire the character of prepositions or adverbs, no longer needing the prop of a noun to cling to". Hence, neither Swan nor Fowler are very critical of the use.

'Incorrect' uses are given in (52) to (56). Some of these are funny because we automatically think of the modifiers as having the same subject as the main clause:

(52) Running down the street, the house was on fire.
(53) Referring to your letter of 5 September, you do not state ... 
(54) Although spoken in Shakespeare's First Folio, we do not speak that way today. 
(55) Lying in a heap on the floor, she found the clothes. 
(56) Being a student, the challenges are many.

Sometimes, the left out subjects seem to be able to refer to the subject of the main clause, or to the closest NP, or to neither. The first meaning we come up with in (57) is the one where the waiter is drenched in syrup:
(57) The waiter brought the waffles to the table drenched in maple syrup.

Misplaced modifiers are not new. One from Shakespeare appears in (58). I have put brackets around it:

(58) It's giuen out, that [sleeping in mine Orchard], A Serpent stung me: so the whole eare of Denmarke, Is by a forged processe of my death Rankly abus'd: But know thou Noble youth, The Serpent that did sting thy Fathers life, Now weares his Crowne. (Hamlet I, v, 35)

The gerund was mentioned in section 1. Many grammarians avoid the term `gerund’; I use it since it seems to be a pervasive term among my audience. It is a present participle that looks either as a noun or as a verb, as in (59) and (60) respectively:

(59) I like [his doing that].
(60) I like [him doing that].

Fowler calls the present participle used as a verb the `fused participle’ (1926 [1950]: 206), probably because it gets the same case as the noun preceding it. He calls the one used as a noun the gerund. In the Modern English Usage, Fowler doesn’t quite define the fused participle, except by providing examples, as in (61):

(61) [Women having the vote] reduces men’s political power.

About its users, Fowler says “[i]t need hardly be said that writers with any sense of style do not, even if they allow themselves the fused participle, make so bad a use of the bad thing as is shown above to be possible” (1926 [1950]: 207).

In conclusion, the dangling modifier can result in an amusing ambiguity, and the present participle used, as in (60), has been denounced but has occurred for centuries.
Chapters 7 and 8 cover embedded and coordinated sentences. If a sentence contains more than one lexical verb, it contains multiple sentences or clauses. An embedded clause functions (as subject, object, adverbial, or subject predicate) inside another clause. This is true for finite and non-finite embedded clauses. The finite clauses discussed in chapter 7 all contain a finite verb. The non-finite clauses come in a number of shapes, as an infinitive, present participle, or past participle.

A coordinated clause can be split into two independent clauses but only if it its clauses are finite. Coordinate sentences can leave the second subject out after a coordinator, and that is called ellipsis. Some coordinated sentences are borderline embedded sentences since the second clause can be seen as an adverbial.

The structure of the embedded sentence is a CP which accommodates the complementizer C and the S. A typical embedded clause is given in (1), with the CP embedded in the main S as sister to the V:

(1) S
   ei
   NP VP
   Sam ei
   V CP
   said ei
   C S
   that ei
   NP VP
   Diane ei
   V NP
   was ei
   D N
   a poetess
The structure of coordinate sentences is also a CP with a coordinator C and S. Subjects and complementizers can be absent and we use empties to represent these.

**Exercises**

A. In the following sentences, please identify by means of brackets and labels the finite and non-finite clauses that function as subjects, direct objects, subject predicates, and adverbials:

(2) Some linguistic historians prefer to believe that languages live and die by social evolution.
(3) They saw him cross the street without looking.
(4) It is gratifying to see that idea becoming more accepted.
(5) Since the advent of printing, the standard language may have developed that way because of increased standardization.
(6) The president that founded this organization was arrested twice before he was replaced.

B. Which are the lexical verbs in (2) to (6) and which are the finite Verb Groups (i.e. a VGP containing a finite verb)?

C. Draw a tree for (7):

(7) Poirot thought that he had sufficient evidence to solve the mystery.

**Keys to the exercises**

A. (2) Some linguistic historians prefer [OBJECT: to believe [OBJECT: that languages live and die by social evolution]]. Note that I consider ‘live and die’ as coordinated verbs not as separate clauses.
(3) They saw [OBJECT: him cross the street [ADVERBIAL: without looking]].
(4) It is gratifying [(extraposed) SUBJECT: to see [OBJECT: that idea becoming more accepted]].
(5) Since the advent of printing, the standard language may have developed that way because of
increased standardization. NOTHING

(6) The president that founded this organization was arrested twice [ADVERBIAL: before he was replaced]. Note that this sentence also contains a relative clause. Relative clauses modify a N and do not function independently. For more on this, see chapter 10.

B. In (2), prefer, believe, live, die are lexical. In (3), saw, cross, and looking are; in (4) is, see, becoming; in (5), developed; in (6), founded, arrested, replaced are.

Finite VGPs in (2) are prefer, live and die; in (3), saw; in (4), is; in (5), may have developed; and in (6), founded, was arrested, was replaced.

C. (7) S
   ei
   NP  VP
   Poirot  ei
   V  CP
   thought  ei
   C  S
   that  ei
   NP  VP
   he  ei
   V'  CP
   ei  ei
   V  NP  C  S
   had  eu  Ø  ei
   AdjP  N  NP  VP
   Adj  evidence  Ø  ei
   sufficient  VGP  NP
   ru  ei
   inf  V  D  N
   to  solve  the  mystery

SAMPLE QUIZ/EXAM, covering chapters 7 and 8
A. What is prescriptively wrong with sentence (1)? Provide the name of this phenomenon and explain why it is wrong.

(1) Although spoken by Shakespeare, we don't speak that way today

B. Identify the (main and subordinate) clauses by means of brackets in the short text below. Indicate which clauses are finite:

The future of 100,000 refugees was dealt another blow this week after the Bhutanese government rejected a UN formula. Bhutan and Nepal started negotiations to solve the problem of the people in refugee camps in 1992. Since then 9 high-level meetings have taken place without resulting in a solution, however.

C. Draw trees for (2), (3) and (4):

(2) Those Martians decided that they would take along some chickens on their trip.
(3) They wanted to see him before leaving Malacandra.
(4) For us to accompany penguins on that trip is a wonderful opportunity.

**Keys to the Quiz/Exam**

A. The subject of the main clause (*we*) and that of the embedded clause (a hidden subject that is probably *language/English*) are not the same. That’s why the prescriptive problem is that of a dangling participle.

B. The clauses are bracketed and the finite clauses have FIN marking that:

FIN[The future of 100,000 refugees was dealt another blow this week FIN[after the Bhutanese government rejected a UN formula]]. FIN[Bhutan and Nepal started negotiations [to solve the problem of the people in refugee camps in 1992]]. FIN[Since then 9 high-level meetings have taken place [without resulting in a solution, however]].

(2)  
```
S
```
Those Martians decided that they would take along some chickens on their trip before leaving Malacandra.

They wanted him to see.
for us a V' PP AP N

ei 4 A opportunity

VGP NP on that trip wonderful

N

ei

inf V penguins
to accompany

ep
CP VP

ei ei

C S V NP

for ei is ei

NP VP D N'

us ei a ei

V' PP AP N

ei

VGP NP on that trip wonderful

N

ei

inf V penguins
to accompany
Up to now, we have mainly seen phrases function at sentence level (as subjects, direct objects, subject predicates, adverbials, etc.). In this chapter, examples are given where phrases function inside other phrases, as modifiers and complements to the heads of these phrases. Grammatical categories such as the determiner also function inside phrases, whereas auxiliaries function in the Verb Group, see chapter 6, and complementizers link one sentence to another.

Some of the structure of the NP, AdjP, AdvP, and PP has already been provided in chapter 3. There, we noted that PPs could be modifiers to a noun (or adverbials in a sentence). In this chapter, we discuss the modifier function in more detail and add the complement. The four possible functions inside a phrase are determiner, head, modifier, and complement. There can be more than one modifier in a phrase, but not more than one complement or determiner.

In section 1, I review the structure for the simple phrase, the PP, AdjP, and the AdvP, and examine the function of its modifiers and components. In section 2, we discuss the NP. It can have a modifier as well as a complement and a determiner. The distinction between modifier and complement is elaborated on section 3, which can be skipped depending on how much detail you want to (or have time to) explore.

1. The structure of the PP, AdjP, and AdvP and the functions inside

The structure of the Prepositional Phrase is relatively straightforward, with a P head and an NP complement, as in (1a). The PP can of course be longer, as in on the roof of the very fancy gingerbread house, with a tree as in (1b):

(1) a. PP
   ei
   P
   on
   D

   b. PP
   ei
   P
   on
   D
   N
   D
   N’
The preposition is the head of the PP and the NP that follows always functions as complement. There are a limited number of modifiers to PPs, e.g. right and straight, as in right to school. We won’t draw a tree including those here.

Instances of Adjective Phrases are very fancy in (1b), blatantly illegal in (2), perfectly safe, nice, interesting, and too good:

(2) That was [blatantly illegal].

These phrases are called AdjPs because their heads are adjectives, i.e. illegal in (2). A structure for an AdjP would be as in (3), where illegal is the head and the adverb blatantly modifies it:

(3) AdjP
    ei
    AdvP Adj
    Adv    illegal
    blatantly

The adverb blatantly expresses the manner of the illegality. I have made it into an AdvP because

---

3 I treat gingerbread house as a compound noun.
you can expand it into *very blatantly*, but most modifiers to Adjectives are degree adverbs, so just Adv.

Thus, (3) contains an Adj head and an AdvP modifier. In very rare cases, there can be a complement to the adjective as well (not to the adverb though). For instance, in (4a), *of his catch* does not describe the manner or the place of being proud but what someone is proud of, i.e. *of his catch* is the complement of *proud* (inside the VP we'd call it a direct object). The same is true of *about that waste* in (4b):

(4)  
   a. He was [blatantly proud of his catch].
   b. There is something that is [very illegal about that waste].

A tree for the AdjP in (4b) is given in (5). I have indicated the different functions of the elements of the phrase. As in the case of VPs where objects are sisters to V, the complement *about that waste* is sister to the Adjective. In (5), I have put in the (intermediate) label Adj’ (pronounced `Adjective-bar`). In chapters 3 and 5, we mentioned intermediate nodes in connection with the NP and the VP. As mentioned, as much structure as in (5) is unusual for an AdjP:

(5)

Some other examples of adjectives that have complements are *able, afraid, aware, conscious, fond, glad, happy, mad, proud, reasonable, and successful*.

Very frequently, adjectives are `stacked’, as in (6), which is a bit exaggerated:
The beautiful, large, fast, young, spotted leopard jumped out of nowhere.

Adjectives occur in a particular order that native speakers don’t even pay attention to, but that is very complex to work out. Try ordering the adjectives in (6) in a different way and see how that works out. If you are curious about the order and the tree for (6), look at question D and its answer.

AdvPs have a simple structure. The ones listed in (7) came up after a search for happily in the British National Corpus (all from written non-fiction):

(7)  a. One day he will happily walk along a busy road.
    b. I'd happily buy her this.
    c. It is a contradiction which thousands happily go along with because they are keen to advance up the social ladder.
    d. He was a gentle man, happily dominated by his competent wife.
    e. I turned to find the young Mr. Cardinal beaming happily at me.

So, these have just a head, as in (8a), or as I often put them, as in (8b):

(8)  a. AdvP
    b. AdvP
        |     Adv
        Adv happily
        |
    happily

The AdvPs can be expanded by a modifier that precedes the head, e.g. by the degree adverb very in very happily in (9), also from the BNC non-fiction collection, with the AdvP drawn in (10):

(9)  The majority of popular community fish will survive very happily on this diet.

(10)  AdvP
      e
      Adv Adv
very happened

The adverbs that modify adverbs are few in number. Some examples are very, so, too, extremely, really, and quite. They are all degree adverbs and cannot be expanded. That’s why they do not head their own AdvP, but are represented as just an Adv in (10). A summary table is provided.

<table>
<thead>
<tr>
<th>PP</th>
<th>P head and NP complement</th>
<th>(on the roof)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AdjP</td>
<td>Adv(P) modifier and Adj head and occasional PP complement</td>
<td>(very proud of his mother)</td>
</tr>
<tr>
<td>AdvP</td>
<td>Degree Adv modifier and Adv head</td>
<td>(very happily)</td>
</tr>
</tbody>
</table>

Table 9.1: Typical structure of the PP, AdjP, and AdvP

Note, when drawing a tree, you need not put the functions in, just D, Adj, etc.

2. The structure of the NP and the functions inside

Typical instances of NPs are provided in (11a) and (11b):

(11) a. NP b. NP

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ei</td>
<td>ei</td>
<td></td>
<td>ei</td>
</tr>
<tr>
<td>D</td>
<td>N’</td>
<td></td>
<td>D</td>
</tr>
<tr>
<td>that</td>
<td>ei</td>
<td>the</td>
<td>ei</td>
</tr>
<tr>
<td>AdjP</td>
<td>N</td>
<td>N</td>
<td>PP</td>
</tr>
<tr>
<td>Adj</td>
<td>manatee</td>
<td>manatee</td>
<td>ei</td>
</tr>
<tr>
<td>blue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>P</td>
<td>NP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>from</td>
<td>Florida</td>
</tr>
</tbody>
</table>

In (11a), the AdjP blue modifies the head in that it describes a quality or characteristic of the manatee. We can add many such modifiers, e.g. where the manatee comes from, if it is fast or slow, and whether we think it is nice or not. From Florida in (11b) modifies the head as well since it tells
you where the manatee is from. So modifiers can precede or follow the head: AdjPs precede and PPs follow. Hence, they are sometimes called pre-modifiers and post-modifiers respectively. Determiners function as pointers: that points to a particular manatee and the makes it a specific manatee. In (12a) and (12b), I repeat these structures with the functions added, but we don’t usually clutter up the tree that way since the functions are predictable from the tree.

(12) a. NP
    D  N'  NP
    that

b. NP
    D  N'  NP
    the

An NP in English can also contain what is called a complement to the noun. Unlike objects in the VP, complements to N and Adj are optional and that’s what makes it hard to distinguish between modifiers and complements. See how helpful the following discussion and that in section 3 are and decide if the distinction is important or interesting for you.

Examples of NPs with complements to the head nouns are given in (13) to (16), with the complement in brackets:

(13) The teacher [of Martian]
(14) Their discussion [about genetics]
(15) The student [of elephants]
(16) Your reply [to my letter]

The nouns that can have complements are verb-like. One way to check if a PP is a complement is to

---

4 From my own experience, this is difficult material and, since it less crucial to the understanding of the NP (and AdjP), I sometimes skip complements.
make the noun into a verb. If you change the nouns into verbs in (13) to (16), the PP complements change into NP objects (direct objects in (17) to (19) and prepositional object in (20)):

(17) You teach [Martian].
(18) They discussed [genetics].
(19) She studied [elephants].
(20) You replied [to my letter].

The NPs in (13) to (16) change into full sentences in (17) to (20) as well. A table with typical modifiers and complements to nouns is given as Table 9.2.

<table>
<thead>
<tr>
<th>modifiers</th>
<th>complements</th>
</tr>
</thead>
<tbody>
<tr>
<td>the manatee [from Florida]</td>
<td>the teacher [of English]</td>
</tr>
<tr>
<td>the student [with red hair]</td>
<td>the student [of physics]</td>
</tr>
<tr>
<td>a boy with [with green hair]</td>
<td>an appeal [to reason]</td>
</tr>
<tr>
<td>a book [on the table]</td>
<td>the investigation [of corruption]</td>
</tr>
<tr>
<td>a glass [on the table]</td>
<td>the allegations [of murder]</td>
</tr>
<tr>
<td>green tea [from Korea]</td>
<td>recruitment [of new staff]</td>
</tr>
<tr>
<td>a computer [with sound]</td>
<td>his attack [on that celebrity]</td>
</tr>
</tbody>
</table>

Table 9.2: Examples of nouns with modifiers and with complements

Note that modifiers are quite free, e.g. with red/green hair and on the table can occur with many nouns. Complements are more restricted and only go with certain nouns, e.g. student, teacher, discussion, disgust and investigation. Adding of physics to teacher and student is fine but adding it to boy results in a very strange phrase!

As in the case of objects inside the VP (chapter 4), complements to the N can be represented in the tree as sisters to the head, in this case N, as in (21) and (22):
So far, we have seen that the elements of an NP in English function as determiner, head, modifier, and complement. This is summarized in Table 9.3. The name (i.e. label or realization) of each of these functions is listed underneath the function. Note that there can be many modifiers but only one determiner and one complement.

<table>
<thead>
<tr>
<th>determiner</th>
<th>modifier^</th>
<th>head</th>
<th>complement</th>
<th>modifier^</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>AdjP^</td>
<td>N</td>
<td>PP</td>
<td>PP^</td>
</tr>
<tr>
<td>the</td>
<td>nice</td>
<td>student</td>
<td>of chemistry</td>
<td>from Macedonia</td>
</tr>
<tr>
<td>several</td>
<td>interesting</td>
<td>discussions</td>
<td>about politics</td>
<td>at night</td>
</tr>
<tr>
<td>a</td>
<td>delicious</td>
<td>pie</td>
<td>--</td>
<td>from my friend</td>
</tr>
<tr>
<td>those</td>
<td>noisy</td>
<td>teachers</td>
<td>of linguistics</td>
<td>from outer space</td>
</tr>
</tbody>
</table>

Table 9.3: Functions inside the NP (the ‘^’ indicates that there can be more than one)
In tree form, the expanded NP in the first example of Table 9.3 looks like (23):

(23) 
```
NP
  ei
  D    N'
  The   ep
      AdjP   N'
    Adj    ep
    nice   N'    PP
    ei      ei
          N    PP    P    NP
          student ei  from    Macedonia
  P    NP
  of    chemistry
```

As indicated by the ^^ in Table 9.3, modifiers can be repeated on both sides of the noun. Multiple premodifiers often result in ambiguities, as in (24):

(24) a. On a menu: `Vegetarian Chicken Soup’. (Was the chicken vegetarian?)
b. An o/Old English French teacher. (When spoken, the punctuation doesn’t appear!)

In this section, we have spent most time on the head, the modifier, and the complement. The determiner is relatively easy. Check chapter 2 for a list of determiners. If the D is there, it appears right underneath the NP, as in (25):

(25) 
```
NP
  ei
  D    N
  Determiner
    my/the
  ```
The determiner is special in that it is both an umbrella category name, which includes articles, quantifiers, demonstratives, possessives, etc. (see chapter 2), as well as a function name.

As you may remember from chapter 2, the pre-determiner may be added as a function inside the NP. In (26), three quantifiers that function in this way are given. In a tree, they would precede the D, but I won't go into this here:

(26) **All** the nice books; **half** the people; **both** my pictures.

The last element we are adding to the NP is the focusser or emphasizer, but these are relatively rare. Some of the ones that occur in English are *just*, *only*, *especially*, and *even*, as in (27). Most of these are tricky in that they can be used in other ways too, e.g. *even* and *just* are also adjectives, and most are adverbs as well:

(27) then it will perhaps gravel [*even* a philosopher] to comprehend it.

*(George Berkeley, *Treatise* 97)*

### 3. Arguments for distinguishing complements from modifiers (Optional)

As was mentioned in the previous section, inside the NP, some elements are more closely related to the head N than others. We can refer to these as complements and modifiers respectively. They can be compared to the objects (even though the latter are more obligatory) and the adverbials in the VP. Above, I have suggested that, if you can change the noun into a verb (*discussion* into *discuss*), the PP complement will change into an NP object (or PP depending on the verb). To me, that is the most crucial argument. In this section, I provide several additional arguments for distinguishing complements from modifiers (summarized in Table 9.4) and provide trees that show the distinction.

#### 3.1 Complement and modifier follow the head N

The NP in (28) has a modifier *from England* that tells you where the teacher is from and a complement *of physics* that tells you what the teacher teaches:
A teacher of physics from England.

In the tree structure, we represent the difference between the complement and the modifier by having complements be sisters to N and modifiers sisters to N’. For instance, in (29), *of physics is sister to N and is therefore the complement, whereas *from England is a sister to the N’ and is therefore the modifier:

There can only be one PP complement and the order between complement and modifier cannot be reversed as the ungrammaticality of (30) shows:

* A teacher [from England] [of physics].

The impossibility of complement modifier reversal is the first argument that you can use to distinguish between complements and modifiers.

Apart from word order (complement is closest to the head), there is a second way to distinguish complements from modifiers and it involves determining what pronoun one can use to pronominalize certain parts of the NP. In (28), *teacher of physics and *teacher of physics from England are N’s. The N’ can be replaced by one, but the N (and NP) cannot be replaced by one. In

150
(31), one replaces teacher of physics, i.e. an N', and the sentence is grammatical; in (32), one replaces teacher, i.e. an N, and this results in an ungrammatical sentence:

(31) I know the [teacher of physics] from England and the one from France.
(32) *I know the [teacher] of physics from England and the one of chemistry.

Hence, the first piece of evidence for distinguishing complement and modifier is that the complement is closer to the head, as in (29). Secondly, there is also evidence for the special status of the intermediate category N' in that it can be replaced by one, as in (31), unlike the N in (32).

A third test for distinguishing complements from modifiers is coordination. It is possible to coordinate two complements, as in (33), or two modifiers, as in (34), but not a complement and a modifier, as in (35):

(33) The teachers of physics and of chemistry.
(34) The teachers from Turkey and from Spain.
(35) *The teachers from Turkey and of physics.

3.2 Complement and modifier precede the head N
Complements and modifiers can also precede the N, as in (36). The modifier English again says something about the teacher, i.e. where he or she is from, and the complement physics clarifies what the teacher teaches:

(36) That English physics teacher.

There cannot be an additional complement following the noun, of course, as (37) shows:

(37) *That physics teacher and of chemistry

Again, the complement is closer to the head than the modifier, as (38) shows, even though it is on the other side of the N, and the complement is sister to the N whereas the modifier is sister to the
The same three arguments to distinguish complements and modifiers hold as in the case of (29). First, their order cannot be reversed, as the ungrammaticality of (39) shows, and there can only be one complement but many modifiers, as in (40):

(39) *That physics English teacher.
(40) That nice, patient, English [chemistry] teacher.

Secondly, replacement by one of the N’ physics teacher in (36) is possible. See (41). The N teacher cannot be replaced. See (42):

(41) That English one.
(42) That English physics one.

The N’ English physics teacher can also be replaced of course.

A question that often comes up in class is what the category of some of these pre-nominal modifiers and complements is. When complements precede the head, it is often unclear what the category is, an N or an Adj. For instance, English in (38) is a clear adjective when it tells you where someone comes from. However, it looks like a noun when the teacher teaches the English language, as in the ungrammatical (39). I will treat it as a noun when it is a complement and an adjective
when it is a modifier.

In this section, I have shown that there is evidence that complements and modifiers are distinguished in an NP: their order, coordination, and pronominalization by one differ. I will finish by summarizing the differences that are the easiest to use, and among these it is (a) and (b) that may be clearest. See also Table 9.2.

<table>
<thead>
<tr>
<th>Modifiers</th>
<th>Complements</th>
</tr>
</thead>
<tbody>
<tr>
<td>a all Ns have modifiers</td>
<td>only certain Ns have complements:</td>
</tr>
<tr>
<td></td>
<td>those Ns that are verb-like</td>
</tr>
<tr>
<td>b gives general background info</td>
<td>gives information pertinent to the N</td>
</tr>
<tr>
<td>c position is relatively free</td>
<td>occurs either right before or right after the N</td>
</tr>
<tr>
<td>d more than one are possible in</td>
<td>only one per NP</td>
</tr>
<tr>
<td>one NP</td>
<td></td>
</tr>
</tbody>
</table>

Table 9.4: Modifiers and complements to N: a summary

4. Conclusion

In this chapter, we have discussed the different functions of elements inside the AdjP, AdvP, PP, and NP. The functions include head, determiner, modifier, and complement. Not all phrases include all these functions, only the NP does. The other phrases are less complex. The PP has a head and a complement, the AdjP a head, a modifier, and a complement, and the AdvP just a modifier. The most important part is to recognize a phrase and its head and to be able to draw a tree.

The functions of modifier and complement are similar to the functions of adverbial and object in the VP, discussed in chapters 4 and 5, with the exception of the names given and their optionality. This is not something you need to think about further if it makes the matter more complex. The adverbial of the VP is called modifier when it occurs in the AdjP, AdvP and NP, and the different kinds of objects in the VP are not differentiated but just called complements in the AdjP, PP, and NP. The NP may also contain a determiner where the VP has a subject. The complements in the NP and AdjP are usually optional, whereas objects and predicates in the VP are obligatory.

Key terms in sections 1 and 2 are determiner, modifier, head, and complement; in section
Exercises

A. In the sentences below, adapted from *The Death of Ivan Ilych* by Leo Tolstoy, find the PPs that function as modifiers inside phrases, i.e. as modifiers to nouns or adjectives:

(43) During an interval in the Melvinski trial, the members and public prosecutor met in Ivan Egorovich Shebek's private room, where the conversation turned on the celebrated Krasovski case.

(44) On receiving the news of Ivan Ilych's death, the first thought of each of the gentlemen in that private room was of the changes and promotions it might occasion among themselves or their acquaintances.

(45) Leaning against the wall in the hall downstairs near the cloak-stand was a coffin-lid covered with cloth of gold, ornamented with gold cord and tassels.

B. Provide a tree structure for the following NPs (use NP, AdjP, D, etc.). Also list the functions of the different elements.

(46) one of their irrational responses
(47) the attack on the conclusions of that report
(48) a hilarious look at two geniuses
(49) four fluffy feathers on a Fiffer-feffer-feff (from Dr. Seuss's *ABC*)

C. Provide a tree structure for the following sentences:

(50) This wonderful fridge is available in Montana.
(51) A very curious, red book with ink stains was found.
(52) He hides behind the pile of books on his desk.
The lovely pig from Wyoming told the bureaucrat in Washington the story of his life.

Optional (section 1)
D. In (6) above, repeated here as (54), we saw five adjectives in a row. Try to see how the classes listed in (55) are ordered in relation to each other:

(54) The beautiful, large, fast, young, spotted leopard jumped out of nowhere.
(55) opinion size appearance speed age shape color origin material pretty, ugly large soft, sweet fast old round pink Israeli golden

Now try to draw a tree for (54).

Optional (section 3)
E. Try to draw trees for (56) and (57) expressing the difference between complements and modifiers. Which PPs and NPs are complements? Provide reasons for your answer:

(56) Canadian students of English
(57) a French Old English student.

Class discussion
F. My own favorite ambiguous NP is given in (58):

(58) The chocolate toy factory.

I can think of three interpretations and a few trees. Two of my favorite trees are as follows. Discuss the difference!

(59) a. NP b. NP
    ei       ei
Remember that sisters to N categories are complements, so that the NP complements to the N *factory* would be the products of the factory, and that sisters to N’ nodes describe physical properties of the factory.

G. The first sentence of Exercise A is actually as in (60). Do you think there is ambiguity? Is the *trial* postmodified by the PP that follows, or is that PP an independent adverbial?

(60) During an interval in the Melvinski trial in the large building of the Law Courts the members and public prosecutor met in Ivan Egorovich Shebek's private room, where the conversation turned on the celebrated Krasovski case.

H. Compare the NP in (61a) with the S in (61b). What are the similarities/differences?

(61) a. Stella's destruction of that awful set of dishes.
b. Stella destroyed that awful set of dishes.

**Keys to the Exercises**

A. The below PPs all modify an N:

(43) During an interval [in the Melvinski trial], the members and public prosecutor met in Ivan Egorovich Shebek's private room, where the conversation turned on the celebrated Krasovski case.

(44) On receiving the news [of Ivan Ilych's death], the first thought [of each [of the gentlemen [in...
that private room] was of the changes and promotions it might occasion among themselves or their acquaintances.

(45) Leaning against the wall [in the hall downstairs] near the cloak-stand was a coffin-lid covered with cloth [of gold], ornamented with gold cord and tassels.

B. The structure for (46) is as follows, with one as the head and of their irrational responses as the modifier. In this phrase, the determiner one is functioning as noun head (see chapter 2 for other determiners that do this). A test for picking the head is making the phrase into a subject and then checking the agreement on the verb (One of their responses was to ... and not One of their responses were...):

(46) NP
    ei
    N  PP  (and if you want to show that irrational is a modifier, one ei i.e. sister to an N’):
    P  NP  …  N’
of    ei ei
    D  N’  AdjP  N’
    their ei Adj  N
    AdjP  N  irrational  responses)
    Adj  responses
    irrational

In (47), the is the determiner, attack the head, and the rest is the complement (because attack is a verb-like noun):

(47) NP
    ei
    D  N’
    the ei
    N  PP
    attack ei
    P  NP
    on ei
    D  N’
conclusions of that report

In (48), \textit{a} is the determiner, \textit{hilarious} the modifier, \textit{look} the head, and the PP the complement:

\begin{center}
\begin{tabular}{ll}
  NP & \\
  \textit{hilarious} & \textit{look} \\
  \textit{at} & \textit{two} \\
  \textit{feathers} & \\
\end{tabular}
\end{center}

In (49), \textit{four} is the determiner, \textit{fluffy} is the modifier, \textit{feathers} the head, and the PP is the (post-) modifier. I could have shown that the PP is the modifier by making it a sister to an N’ but haven’t:
(49) NP
ei
  D  N'
  four  ei
  AdjP  N'
  Adj  ei
  fluffy  N  PP
  feathers  ei

  P  NP
  on  ei
  D  N'
  a  ei
  AdjP  N
  Adj  -feff
  Fiffer-feffer

C. (50) S
  NP  VP
  ei  ep
  D  N'  V'  PP
  This  ei  ty  ei

  AdjP  N  V  AdjP  P  NP
  Adj  fridge  is  Adj  in  Montana
  wonderful  available
There are other correct trees for (51). You could put *red* and *book* more closely together than *book* and the PP, as I've done above. Also, if you wanted to express that the PP in (51) is a modifier not a complement, you could make it sister to N' rather than N, as in:

(51)  b.    N'
   ei
   N'    PP
   N    4
   book    with ink stains

A structure for (52) is as follows. There are again other possible trees for (52), e.g. one could indicate that the PPs are modifiers by making them sisters to N'. Notice in (52) that *on his desk* is modifying *the pile of books*. If it were an independent adverbial, it would mean that he hides on his desk behind a pile of books:
(52)  S
    ei
   NP  VP
He ei
   V  PP
  hides ei
   P  NP
 behind ei
  D  N'
  the ei
  N  PP
 pile ei
  P  NP
 of ei
  N  PP
books ei
  P  NP
 on ei
  D  N
 his desk

A tree as in (53) is a challenge if you don't have enough space. Doing it by hand (in draft form) will save you a lot of time over drawing it using a computer. Note that I could have made the PPs from Wyoming and from Washington sisters to an N’, showing their modifier status:
The adjectives are usually seen as ordered in the way that I have listed the types in (55). In (54), tall is an adjective of dimension, thin of physical characteristic, as is strong, young is age-related, and clever expresses a value. The tree for the NP in (54) is as below (and of course the last AdjP could be sister to an N’ too):

(54)  NP

  D    N’
   The  ei

  AdjP    N’
    Adj  ei

  beautiful  AdjP    N’
    Adj  ei

  large  AdjP    N’
    Adj  ei

  fast  AdjP    N’
    Adj  ei

  young  AdjP    N
    Adj  leopard

  spotted

D. The adjectives are usually seen as ordered in the way that I have listed the types in (55). In (54), tall is an adjective of dimension, thin of physical characteristic, as is strong, young is age-related, and clever expresses a value. The tree for the NP in (54) is as below (and of course the last AdjP could be sister to an N’ too):
E. The structure for (56) is as in (38) above, with *Canadian* as modifier and *of English* as complement. One of the reasons is that you can say *The Canadian one*, but not *the one of English*:

(56) \[
\text{NP} \\
\text{ep} \\
\text{AdjP} \quad \text{N'} \\
\text{Adj} \quad \text{ei} \\
\text{Canadian} \quad \text{N} \quad \text{PP} \\
\quad \text{students} \quad \text{ei} \\
\text{P} \quad \text{NP} \\
\quad \text{of} \quad \text{English}
\]

In (57), since *Old* is capitalized, it goes with *English*, and I have made it into a D, but modifier would be ok too. The modifier is *French* and the complement is *Old English*:

(57) \[
\text{NP} \\
\text{ei} \\
\text{D} \quad \text{N'} \\
\text{a} \quad \text{ep} \\
\text{AdjP} \quad \text{N'} \\
\text{Adj} \quad \text{ei} \\
\text{French} \quad \text{NP} \quad \text{N} \\
\quad \text{ei} \quad \text{student} \\
\text{D} \quad \text{N} \\
\text{Old} \quad \text{English}
\]

**Special Topic: Pronoun resolution**

In this special topic, we’ll look at some problems that speakers and writers encounter when they are deciding on which pronoun to use. The choice of the pronoun, of course, depends on the antecedent, the phrase that the pronoun refers to. Some are easy, as in (62), but some are ambiguous, e.g. the *he* in (63) could in principle go back to Obama or to Putin:
(62) I noticed a woman in that store. She was wearing a greenish purple jacket.
(63) Obama met Putin at the Kremlin. He wanted to discuss Afghanistan.

Writers are usually advised not to be ambiguous, as in (64), but it is not grammatically incorrect to use he in (63):

(64) Avoid ambiguity: “There should not be two parties justifying even a momentary doubt about which the pronoun represents.” (Fowler 1926 [1950]: 464)

The use of the plural they and their to refer to a singular antecedent is still frowned upon. The rule could be formulated as (65) and an example appears in (66):

(65) Avoid ‘singular they’: do not use they, them, or their to refer to a singular antecedent.
(66) The student should be aware not to leave their computer unattended in the library.

‘Singular their’ in (66) is of course used because English lacks a gender-neutral third person pronoun.

The OED is not prescriptive on this topic and lists the following function of they. It also cites examples of this use from the 16th century:

(67) They: “Often used in reference to a singular noun made universal by every, any, no, etc., or applicable to one of either sex (= ‘he or she’).”

There are many other rules to help writers decide on the use of pronouns. In chapter 10, we’ll discuss, as special topic, the prescriptive rules for which relative pronoun to use for which antecedent.
In chapters 7 and 8, the functions of finite and non-finite clauses are discussed at sentence level (e.g. as subjects or objects). The present chapter shows that clauses can also function inside the phrase as modifiers or complements. Traditionally, modifier clauses are called relative clauses and we'll continue that practice. Relative clauses come in many kinds, as we’ll see.

In section 1, I provide a brief introduction to the shape and function of relative clauses. In section 2, examples are given of relative clauses and complement clauses inside the NP. The non-finite reduced relative is also discussed. These two first sections are the most important. In section 3, we look at the internal structure of phrases other than the NP, and in section 4, we explore some different types of relative clauses. In section 5, we examine the tree structure. If necessary, this last section can be skipped.

1. Relative Clauses (RC)

Throughout the book, we have seen that PPs can function as adverbials and as modifiers. A PP used as modifier has a function very similar to that of a relative clause, as (1) and (2) show:

(1) The student [from Zombie Island] has yellow hair. (modification by PP)
(2) The student [who is from Zombie Island] has yellow hair. (modification by RC)

A relative clause (RC) typically starts with a who, which, or that relative pronoun and provides further information about a noun.

Let’s look at the short text in (3), from the Times of London, and see where the RCs are:

(3) “Changes have to be made,” said a 34-year-old political activist [who asked to remain anonymous]. Her first target would be headscarves, [which are mandatory in Iran]. “The least of the freedoms [we need] is the ability to choose what to wear. For women this is
really an issue. Whenever you go out, you have to be vigilant because the moral police may not think it is appropriate and they may even take you to jail. A woman’s integrity is judged by the colour of your dress – well, isn’t that stupid?” (June 2009)

As you can see, I have put brackets around the three relative clauses. The first modifies the noun an activist, the second headscarves, and the third freedoms. The third one has the relative pronoun that or which left out, but you could always add it. When you look at the entire text, there are lots of other clauses that are not relative, e.g. whenever you go out is a finite clause functioning as adverbial and it is appropriate is a finite clause functioning as direct object. So, be careful when you see a clause!

2. Inside the NP: Relative and Complement Clauses

In this section, we will divide the finite relative clauses into restrictive and non-restrictive. We also add the complement clause and the non-finite reduced relative.

2.1 Relatives

Clauses that modify NPs, such as the one in (4), are referred to as relative clauses because the noun they modify (stories in this case) plays a role (has a function) in the RC. The RC is related to the noun by means of which:

(4) The stories [which he repeats often] are boring.

The element that connects the noun and the clause, i.e. which in (4), is called a relative pronoun. In (4), the relative pronoun functions as the direct object of repeat. Relative pronouns can also function inside the relative clauses as subjects, as in (2), or have other functions. The first two relative pronouns in (3) are subjects and the third one is an object.

RCs are usually divided into restrictive as in (4) and non-restrictive, as in (5) and (6):

(5) Hillary Clinton, who just returned from a trip to Cuba, intends to write a book.
Queen Elizabeth the first, who was born in 1533, was the last sovereign of the house of Tudor.

The reason we discuss the difference is that the use of one over the other has grammatical (and possibly other) consequences.

Three differences between restrictive and non-restrictive relative clauses are listed in Table 10.1. First, restrictive RCs can have a that as in (7), or a who/which, as in (4). In the non-restrictive RC (5) and (6), on the other hand, that is not possible, as (8) shows:

(7) The stories that he told us often are boring. (restrictive)
(8) *Hillary Clinton, that just returned from a trip to Cuba, intends to write a book. (non-restrictive)

The second difference is that restrictive RCs provide essential information, unlike non-restrictive ones. For instance, in (4), the stories is so general that the RC restricts and specifies the stories that are meant. In the case of (5), everyone living in the US at the beginning of the 21st century is expected to know who Hillary Clinton is and therefore the NP Hillary Clinton does not need to be restricted. The RC just provides background information that is not essential in knowing which noun is meant. That’s why it is called non-restrictive.

Third, since the information in non-restrictive RCs is background information, the non-restrictive RC in (5) can be surrounded by commas or parentheses, and is therefore sometimes referred to as a parenthetical, whereas the restrictive RC in (7) cannot be.

<table>
<thead>
<tr>
<th>Restrictive</th>
<th>Non-Restrictive</th>
</tr>
</thead>
<tbody>
<tr>
<td>wh-pronoun or that</td>
<td>only wh-pronouns</td>
</tr>
<tr>
<td>highly relevant info</td>
<td>additional info</td>
</tr>
<tr>
<td>commas cannot surround it</td>
<td>commas may surround it</td>
</tr>
</tbody>
</table>

Table 10.1: Restrictive and Non-Restrictive RCs

As an illustration of the difference, (9) and (10) are given. The restrictive RC in (9) contrasts interestingly with a non-restrictive in (10). In (9), only a small set of climbers reached the
top, but in (10), all the climbers did:

(9) The hikers who reached the top were very tired.          (restrictive)
(10) The hikers, who reached the top, were very tired.       (non-restrictive)
      (Thanks to Johanna Wood for the examples)

Another set that I sometimes use is (11) and (12). If you were a journalist, you’d get into terrible trouble using (12). And, you could substitute bankers with politicians, investors, house keepers, professors, or doctors as well, of course:

(11) Bankers that are crooks should be fired.               (restrictive)
(12) Bankers, who are crooks, work overtime nowadays.      (non-restrictive)

2.2  Complement clauses

There is a type of clause that looks deceptively like the RC, namely the complement clauses in (13) and (14):

(13) Reports [that he reached Mars] are exaggerated.
(14) The fact [that he reached Mars] went unnoticed.

The finite clause following the noun in (13) and (14) is a complement (and not a RC) for several reasons. The first is that noun (reports and the fact) can be left out, as in (15) and (16):

(15) [That he reached Mars] is exaggerated.
(16) [That he reached Mars] went unnoticed.

The nouns can be deleted because the complement spells out what reports and the fact are.

The second reason this clause is not a relative clause is that the head N reports plays no role inside the clause. If we changed (13) to (17a), we would force it into a relative clause. Now, reports (through that) is the object of reached but the result is very strange (indicated by the question mark)
since report is not an object you would expect with reached. If we change the verb to read, as in 
(17b), we do get a RC because one can read reports:

(17)  a. Reports [that he reached] are exaggerated.  
      b. Reports [that he reads] are (always) exaggerated.

The third reason that the clause in (13) and (14) is a complement and not a RC is that the
complementizer has to be that. This that is not a relative pronoun. When we change that in (13) and 
(14) to which, the result is very strange, indicated by an ungrammatical mark in (18) and (19):

(18) *Reports which he reached Mars are exaggerated.
(19) *The fact which he reached Mars went unnoticed.

Table 10.2 summarizes the differences between relative and complement clauses. I have added a 
fourth one, namely that the type of noun complemented by a clause is quite restricted, e.g. story, 
fact, dream, idea and concept.

<table>
<thead>
<tr>
<th>Relative Clause (RC)</th>
<th>Complement Clause</th>
</tr>
</thead>
<tbody>
<tr>
<td>relative pronoun has a function in the RC</td>
<td>that has no role in the clause, as in (17)</td>
</tr>
<tr>
<td>relative marker: which, who, that, etc</td>
<td>only that as marker, as in (18) and (19)</td>
</tr>
<tr>
<td>noun preceding RC cannot be deleted</td>
<td>noun can be deleted (see (15) and (16)</td>
</tr>
<tr>
<td>any noun can have a RC follow</td>
<td>noun is fact, story, idea, ...</td>
</tr>
</tbody>
</table>

Table 10.2: Relative Clauses and Complement Clauses

2.3 Reduced relative clauses
Non-finite clauses, as in (20) to (22), just like their finite counterparts above, can be modifiers to N:

(20) The stories [to tell him] are the following.
(21) That story [written by him] is awful.
(22) The author [writing those marvellous books] lives in Antarctica.

These non-finite clauses are called reduced relative clauses since one can paraphrase them with full relative clauses. For instance, (20) to (22) are similar to the relative clause structures in (23) to (25):

(23) The stories [which you need to tell him] are the following.
(24) That story [which was written by him] is awful.
(25) The author [who is writing those marvellous books] lives in Antarctica.

In cases where there is a PP present, as in (24), we can often further reduce it, as in (26), in which case the modifier is a PP not a (reduced) RC:

(26) That story [by him] is awful.

We don't generally distinguish between restrictive and non-restrictive in (20) to (22). Unlike finite clauses, non-finite clauses cannot be complements to nouns. Don't memorize this kind of information; just be able to analyze the structure of phrases.

Thus, the functions of finite clauses inside the NP are complement and modifier. Modifiers are referred to as relative clauses (RCs) and can be restrictive or non-restrictive. Non-finite clauses only function as modifiers and are referred to as reduced relatives. Some examples of reduced RCs appear in Table 10.3.

<table>
<thead>
<tr>
<th>Infinitival</th>
<th>The plumber [to find the leak in the White House]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present Participle</td>
<td>The ship [exploring Antarctica]</td>
</tr>
<tr>
<td>Past Participle</td>
<td>The book [written in an Edinburgh café]</td>
</tr>
<tr>
<td></td>
<td>A dictionary [plagiarized in 1803]</td>
</tr>
</tbody>
</table>

Table 10.3: Examples of Reduced RCs

In this section, we have looked at clauses that go with a noun. The next section will look at categories other than a noun that can be modified or complemented.
3. **NPs as compared to AdjPs, AdvPs, and PPs**

As we’ve seen, inside an NP, clauses can often function as relatives (i.e. modifiers) or complements, as (27) shows:

(27) [The man [who crossed Antarctica]] was happy.

Let’s look at the AdjP, AdvP, and PP. Finite and non-finite clauses, as in (28) to (31), can be complements to AdjPs:

(28) They were [happy [that he enjoyed his sugar-coated zucchini]].
(29) Are you [confident [that your full Social Security benefits will be paid to you]]?
(30) He was [unsure [what to do with the elephant in the room]].
(31) She was [proud [to have grown the largest blue eggplant]].

Since adjectives can be compared, we also have comparative clauses, as in (32) and (33). These clauses function as modifiers since they indicate the degree of happiness and niceness. With adjectives, don’t worry too much about the difference between complements and modifiers:

(32) Most people are as [happy [as they want to be]].
(33) She was [nicer [than I had thought]].

As shown in the previous chapter, AdvPs do not have complement or modifier PPs. They have no clausal complements or modifiers either. They only can have degree modification by another adverb.

Prepositions have complement clauses such as in (34) but do not generally admit object clauses with a *that* complementizer, as (35) shows. Instead, a non-finite clause, as in (36) or (37), appears:

(34) I relied [on [what he wrote about clauses]].
(35)  *I insisted [on [that he/Stan should pay the bill]].
(36)  I insisted [on [him/Stan paying the bill]].
(37)  I insisted [on [his/Stan's paying (of) the bill]].

Prepositions that express time, such as before or after as in (38), do introduce a clause but, as I mentioned in chapter 7, they are then complementizers rather than prepositions:

(38)  He left [after she arrived].

4. More on RCs

In this section, we'll briefly discuss a few other facts about English RCs. First, we'll look at relativized adverbials. Then, we'll look at prepositional and possessive relatives.

In sections 1 and 2, most examples have the relative occupying a subject position or an object position. There is another frequently relativized function, namely that of adverbial, such as in (39) to (41):

(39)  The time [when you decide to discuss that] is important.
(40)  The place [where you plan to live] is important.
(41)  The reason [why/that I avoided that party] is clear.

The difference between subject, object, and adverbial relative is in the relative pronoun used. For subjects, who is used for humans, as in (2), (5), (6), (9), and (10) above; which for non-humans, as in (4) above; and that for both if it is restrictive, as in (7). For (direct, indirect, and prepositional) objects, whom is used for humans in very formal English, who in less formal English; which for non-humans; and that in restrictive relatives for both. Relativized adverbials, as in (39) to (41), use the relative pronoun most appropriate, when for a time adverbial, where for place, etc, but can also use that.

RCs that relativize PPs occur and English has many options. They can 'strand' the preposition, as in (42), or 'pied pipe' it (as in the Rat Catcher of Hamelin), as in (43):
The translation [which I insisted on] was unavailable.

The translation [on which I insisted] was unavailable.

The relative pronoun can be left out, as in (44); and *that* can be used, but only when the preposition stays in place, as in (45):

(44) The translation [I insisted on] went missing.
(45) The translation [that I insisted on] went missing.

When *who* is used, there are some other possibilities, depending on whether the objective marked *whom* is used; *that* is still a possibility too:

(46) The man [about whom she heard that rumor] is in prison.
(47) The woman [who(m) I heard this rumor about] is pleasant.
(48) The woman [that I heard this rumor about] is pleasant.

Possessives can be relativized too, as in (49). They have an alternative as in (50), but the use of *whose* is not restricted to human antecedents, as (51) shows. And there’s an alternative in (52):

(49) You start with S, [whose daughters are always NP and VP].
(50) You start with S, [the daughters of which are always NP and VP].
(51) The book, [whose author is well-known], was on NPR this morning.
(52) The book, [the author of which is well-known], was on NPR this morning.

5. **The structure of Modifiers and Complements (Optional)**

Relative clauses and complement clauses have a structure very similar to those clauses discussed in chapters 7 and 8, with a CP, a C, and an S. The CP will be the same for all; the crucial difference between the different kinds of RCs and complement clauses is how close the CP is to the noun, i.e.
what they are sister to. In this section, I provide the trees for some of these, namely for restrictive and non-restrictive RCs, complement clauses, reduced relative clauses, and complements to adjectives.

Structures of NPs with restrictive and non-restrictive RCs are given in (53) and (54) respectively. Structurally, the restrictive RC is said to be closer to the head noun than the non-restrictive. In (53) and (54), this is indicated by being sister to the N’ and to the NP respectively:

(53)
```
NP
  ei
  D       N'
  The    ep
  N'
  CP
  NP
  V
  (woman)
```

(54)
```
NP
  ep
  NP   CP
  Zelda ei
  C     S
  who  ei
  NP   VP
  I    ei
  V    (Zelda)
  V'   AdvP
  Adv
  V     well
```
To indicate the function of the modified noun inside the RC, a copy in parentheses is introduced. For instance, in (53), the woman is met, i.e. the woman functions as the direct object in the RC. Similarly, in (54), Zelda is the object in the RC and a copy indicates that. Note that I am focusing on trees in which the copy is an object since they are the least complex. In the (advanced) exercises, there will be other trees to draw.

Structurally, the restrictive RC is said to be closer to the N head but not as close as the complement clause shown below. The non-restrictive is often said to be sister to the NP, i.e. outside the NP. In chapter 3 (section 3), a number of structures were discussed that have a similar structure (with one NP branching to another), namely, coordinated NPs and appositive NPs. Many grammarians have noticed the similarities between non-restrictive RCs and appositive NPs, hence the alternative name of appositive RC. Thus, as mentioned, the appositive NP We, the people of the United States, ... could be rewritten as We, who are the people of the United States, ...

Now, let’s turn to the clause with the closest connection to the noun, the complement clause as in (55). Note that the CP is sister to the N reports:

(55)  
\[
\begin{array}{c}
\text{S} \\
\text{NP} \quad \text{VP} \\
\text{ei} \quad \text{ei} \\
\text{N} \quad \text{CP} \quad \text{V} \quad \text{AdjP} \\
\text{reports} \quad \text{ei} \quad \text{are} \quad \text{Adj} \\
\text{C} \quad \text{S} \quad \text{exaggerated} \\
\text{that} \quad \text{ei} \quad \text{NP} \quad \text{VP} \\
\text{he} \quad \text{ei} \\
\text{V} \quad \text{NP} \quad \text{reached} \quad \text{Mars}
\end{array}
\]
The reduced RC in (56) is similar to (53) but with more empty positions:

(56)    NP
       ei
    D    N’
The    ei
   N’    CP
  N    ei
book  C    S
Ø    ei
   (book)   VP
       ei
   V    PP
written ei
   P    NP
 by    them

Finally, some trees for complements to adjectives are provided in (57) and (58), one finite and the other non-finite:
To summarize the differences in the positions of the clauses in relation to their heads, I provide Table 10.4.

<table>
<thead>
<tr>
<th>Complement Clause</th>
<th>CP is sister to N</th>
<th>Adjective Clause</th>
<th>CP is sister to Adj</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restrictive RC</td>
<td>CP is sister to N’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>-------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduced RC</td>
<td>CP is sister to N’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-restrictive RC</td>
<td>CP is sister to NP</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 10.4: The sisters of CP

6. Conclusion

In chapters 7 and 8, functions of finite and non-finite clauses were discussed at sentence level, namely subject, direct object, adverbial, and subject predicate. In the current chapter, we have discussed finite and non-finite clauses at phrase-level, namely functioning inside an NP or AdjP. These phrase-internal clauses have two functions: modifier and complement.

Sections 1 and 2 are the most important of the chapter. It is first explained that finite clauses that function as modifiers are called relative clauses and can be divided in restrictive and non-restrictive relatives. Clauses that function as complements to a limited set of nouns are also discussed as are non-finite clauses functioning as modifiers, namely those called reduced relative clauses. Section 3 examines clausal modifiers and complements to the P and Adj heads. Section 4 adds complexity to the RC by providing three additional varieties and section 5 provides tree structures for the clauses discussed in sections 1, 2, and 3.

The key terms are **relative and complement clauses; restrictive and non-restrictive relative clauses**; and **reduced relatives**.

Exercises

A. Label the clauses in (59) to (64) as complements or relatives and as finite or non-finite:

(59) The javelina [that I saw next door] was unafraid of coyotes.
(60) The report [that javelinas are dangerous] is exaggerated.
(61) Gerald, [who lives next door], will be leaving soon.

(62) The yellow fog [that rubs its back upon the window-panes]
(from T.S.Eliot's *Love Song* for J.A.P)

(63) The president [that founded this organization] was arrested twice before he was replaced.

(64) I am the man [to fix this].

(65) The story [that Kissinger went to Moscow for Obama] seems true.

B. In the text below, from Harry Potter, there are three RCs. Find them and label them as restrictive, non-restrictive, or reduced. If there are relative pronouns, what is their function inside the RC?

Harry’s feet touched road. He saw the achingly familiar Hogsmeade High Street: dark shop fronts, and the outline of black mountains beyond the village, and the curve in the road ahead that led off towards Hogwarts, and light spilling from the windows of the Three Broomsticks, and with a lurch of the heart he remembered, with piercing accuracy, how he had landed here nearly a year before, supporting a desperately weak Dumbledore; all this in a second, upon landing – and then, even as he relaxed his grip upon Ron’s and Hermione’s arms, it happened. The air was rent by a scream that sounded like Voldemort’s when he had realized the cup had been stolen: It tore at every nerve in Harry’s body, and he knew immediately that their appearance had caused it. (J.K Rowling, *Harry Potter*, volume 7: 554)

C. Change one of the finite clauses in (63) into a non-finite one.

D. In the (challenging) text below, identify the relative clauses by putting brackets around them:

To educate as the practice of freedom is a way of teaching that anyone can learn. That learning process comes easiest to those of us who teach who also believe that there is an
aspect of our vocation that is sacred; who believe that our work is not merely to share information but to share in the intellectual and spiritual growth of our students. To teach in a manner that respects and cares for the souls of our students is essential if we are to provide the necessary conditions where learning can most deeply and intimately begin.
(from bell hooks *Teaching to Transgress*, 1994: 13)

Optional (section 5)

E. Draw trees for (59) to (65).

Class discussion

F. What is the basic structure of (65)? (Don't draw a tree!) Which are the relative clauses?

(66) Shakespeare, *Loves Labour's Lost*, I, 2, 157

Armado: I doe affect the very ground (which is base) where her shooe (which is baser) guided by her foote (which is basest) doth tread.

G. Can clauses (relative or complement clauses) ever precede the head? If yes, give examples. If no, give ungrammatical examples.

Keys to the Exercises

A. In (59), *that I saw next door* is a (restrictive) RC which is finite; in (60), *that javelinas are dangerous* is a finite complement; in (61), *who lives next door* is a (non-restrictive) RC which is finite; in (62), *that rubs its back upon the window-panes* is a (restrictive) RC, also finite; in (63), *that founded this organization* is a (restrictive) RC which is finite, and in (64), there is a Reduced (non-finite) RC.

B. The first RC is restrictive (and finite), the second reduced (and non-finite), and the third
restrictive (and finite). The two relative markers function as subjects.

Harry’s feet touched road. He saw the achingly familiar Hogsmeade High Street: dark shop fronts, and the outline of black mountains beyond the village, and the curve in the road ahead [that led off towards Hogwarts], and light [spilling from the windows of the Three Broomsticks], and with a lurch of the heart he remembered, with piercing accuracy, how he had landed here nearly a year before, supporting a desperately weak Dumbledore; all this in a second, upon landing – and then, even as he relaxed his grip upon Ron’s and Hermione’s arms, it happened. The air was rent by a scream [that sounded like Voldemort’s when he had realized the cup had been stolen]: It tore at every nerve in Harry’s body, and he knew immediately that their appearance had caused it.

C. The president that founded this organization was arrested twice before being replaced.

D. To educate as the practice of freedom is a way of teaching [that anyone can learn]. That learning process comes easiest to those of us [who teach [who also believe that there is an aspect of our vocation [that is sacred]]]; who believe that our work is not merely to share information but to share in the intellectual and spiritual growth of our students. To teach in a manner [that respects and cares for the souls of our students] is essential if we are to provide the necessary conditions [where learning can most deeply and intimately begin].

E. (59) S
   NP VP
In (60), you could also argue that *exaggerated* is the past participle form of the verb and part of the VGP. Then, *is* will be an auxiliary, not a copula as in the tree below:

\[
(60) \\
S \\
/ \ \\
NP \quad VP \\
/ \ \\
D \quad N' \quad V \quad AdjP \\
The \quad is \quad Adj \\
N \quad CP \quad exaggerated \\
report \quad ei \\
C \quad S \\
that \quad ei \\
NP \quad VP \\
javelinas \quad ei \\
V \quad AdjP \\
are \quad Adj \\
dangerous \\
\]

In (61), I have indicated that *soon* and *next door* are adverbials by making them sisters to V'.
Gerald will be leaving who lives next door soon.

(61)

\[
\begin{array}{c}
S \\
  \text{NP} & \text{VP} \\
  \text{ei} & \text{ep} \\
  \text{NP} & \text{CP} & \text{V'} & \text{AdvP} \\
  \text{Gerald ei} & \text{VGP} & \text{Adv} \\
  \text{C} & \text{S} & \text{soon} \\
  \text{who ei modal progr V} \\
  \text{(Gerald) VP will be leaving} \\
  \text{ei} \\
  \text{V'} & \text{NP} \\
  \text{V ei} \\
  \text{lives D N} \\
  \text{next door}
\end{array}
\]
The yellow fog that rubs upon its back the window-panes
(63)

S

NP   VP

ei   ep

D   N’   V’   CP

The ei   ei   ei

N’   CP   V’   AdvP   C   S

N   ei   VGP   Adv   before   ei

president   C   S   ty   twice   NP   VP

that ei   pass   V   he   VGP

(president)   VP   was   arrested   ey

ei   pass   V

V   NP   was   replaced

founded ei

D   N

this   organization

In (63), I have expressed that twice and before he was replaced are adverbials by making them sisters to V’s. (Note that VGP is used when auxiliaries are present, but that V suffices when there is just the lexical verb).

(64)

S

ei

NP   VP

I   ei

V   NP

am   ei

D   N’

the ei

N’   CP

N   ei

man   C   S

Ø   ei
In spoken language, our most favorite relative marker is *that*. In writing, we predominantly use a *wh*-pronoun. This shows that there are some strong prescriptive rules at work where relatives are concerned. Three of these rules can be phrased as follows:
(67) The case of the relative: "The case of the pronouns who and whom depends on their function within their own clause. When a pronoun serves as the subject, use who or whoever; when it functions as an object, use whom or whomever" (Kirszner & Mandell 1992: 376-7).

(68) The antecedent: "who refers to people or to animals that have names. Which and that usually refer to objects, events, or animals and sometimes to groups of people" (Kirszner & Mandell 1992: 381).

(69) Do not strand prepositions.

Fowler has definite ideas on all of these issues. In the older edition, he says: "Relative pronouns are as troublesome to the inexpert but conscientious writer as they are useful to everyone, which is saying much" (1926 [1950]: 709). Other style books have similar ideas.

The choice between nominative or accusative case has been talked about in the special topic to chapter 4, as well as briefly in the chapter above. The only position where speakers still use whom is directly following a preposition, as in (70):

(70) This is a man about whom I know very little.

The debate about the use of who, which, or that is a very lively one. Many argue that that can only be used in restrictive relatives when the antecedent is non-human. Sentence (71) violates both:

(71) ' was her Brother, that in pure kindnesse to his Horse, buttered his Hay.
(Shakespeare, King Lear II, 4, 128)

Fowler is careful about criticizing the use of that and thinks it will change (1926[1950]: 716) "at present there is much more reluctance to apply that to a person than to a thing. Politeness plays a great part".

The dislike of stranding prepositions started allegedly with John Dryden. Many 'good' writers employ constructions with stranded prepositions, and would rewrite (70) as (72) with a stranded about. Sir Winston Churchill is said to have ridiculed the construction by uttering (73):
(72)  This is a man (who) I know little about.
(73)  This is something up with which I will not put.

Stranding prepositions does not just occur with relatives, but in questions as well, as in (74):

(74)  who did I want to talk to?
CHAPTER 11: SPECIAL SENTENCES

In this chapter, I discuss sentences in which elements have moved around for a particular reason, e.g. to enable the speaker to ask a question, to make an exclamation, or to emphasize something. The latter occurs through topicalization, passive, cleft, and pseudo-cleft. Question sentences are referred to as interrogatives, whereas most of the sentences we have seen up to now assert something and are called indicatives or declaratives.

In section 1, we look at questions, both yes/no and wh-questions and suggest a tree for them using a CP. In section 2, we briefly cover exclamatives and how they differ from questions. Section 3 goes into topicalization, passives, and clefting. Some of the material in this chapter has been covered, e.g. questions and passives, but in slightly different contexts.

1. **Questions/Interrogatives: the CP**

Questions can be main clauses (*Will she leave?*) or embedded clauses (*I wonder if she'll leave*). They can also be classified according to whether the entire sentence is questioned, in which case a *Yes* or *No* answer is expected, or whether another element is questioned using a *wh*-word (also called an interrogative pronoun) such as *who, what, why*, etc., in which case a full answer is expected.

In *yes/no* questions, the only appropriate answer is *Yes* or *No* (or *Perhaps/maybe*). To make a question, e.g. of (1), the auxiliary *has* is fronted, as in (2):

(1) She has gone.
(2) **Has** she gone?

If there is no auxiliary present, a dummy *do* is used, as in (3), as discussed in chapter 6:

(3) **Did** you see Santa?
A structure for yes/no questions is given in (4), where the auxiliary moves to C (indicated by its copy):

(4)  CP
     ei
     C  S
     Can  ei
     NP  VP
     she  VGP
     ei
     modal  V
     (can)  go

A main clause wh-question starts with a wh-word (who, what, why, when, where, or how) and the auxiliary is in second position. There are also empty positions in the sentence, indicated by copies (crossed out to make reading easier). Examples are given in (5) to (7):

(5)  Who will you (will) see (who) in the Highlands?
(6)  How heavy is that box of chocolates (is) (how heavy)?
(7)  How much wood would a wood chuck (would) chuck (how much wood), if a wood chuck could chuck wood?

Evidence that the question word was at some point in the position of the copy is that, with special intonation, movement is not necessary. Thus, (8) is possible with emphasis on what. In this case the auxiliary stays in place too, as (8b) shows:

(8)  a. You saw WHAT?
     b. You would do WHAT?

Questions such as (8) are called `echo-questions'.

As to the structure, I will suggest (9) for wh-questions. The wh-word moves to the position
immediately underneath the CP and the auxiliary moves to the C position. The original position of
the *wh*-word and the auxiliary is indicated by means of a copy:

(9)  

\[ \begin{array}{c}
\text{CP} \\
\text{ei} \\
\text{Who} & \text{C'} \\
\text{ei} \\
\text{C} & \text{S} \\
\text{will} & \text{ei} \\
\text{NP} & \text{VP} \\
\text{you} & \text{ep} \\
\text{V'} & \text{PP} \\
\text{ei} & \text{ei} \\
\text{VGP} & \text{(who)} & \text{P} & \text{NP} \\
\text{ei} & \text{in} & \text{ei} \\
\text{modal} & \text{V} & \text{D} & \text{N} \\
\text{(will)} & \text{see} & \text{the} & \text{Highlands}
\end{array} \]

Using C, C’, and CP makes sense for these sentences and also makes the CP similar to the VP, the
NP, and the other categories that have a phrase, a head, and an intermediate category.

2. **Exclamations**

Sentences such as (10) can be analyzed using a CP as well, namely as structures where the phrase
*what a nasty person* is in the same position as the *wh*-word in (9). Notice that in sentences, such as
(10) and (11), the auxiliary does not move, unlike in the questions in (5) to (7):

(10)  What a nasty person he is (**what a nasty person**)!
(11)  “What an excellent father you have, girls,” said she, when the door was shut.
      (Jane Austen, *Pride & Prejudice*, chapter 2)
This was not always the case in English, as (12) shows. In (12), *have* has moved to before the subject *I*, unlike *is* in (10) and *have* in (11):

(12) O what a Scene of fool'ry **haue** I seene. Of sighes, of grones, of sorrow, and of teene:

(Shakespeare, *Love’s Labor’s Lost*, IV, iii, 163)

Modern English exclamatives differ from questions in not fronting the auxiliary, but they do involve movement of a phrase to a position in the CP.

3. **Topicalization, Passive, Cleft, and Pseudo-cleft**

Even though the structures of topicalizations, clefts, and passives look very different, they have in common that the order of words is rearranged to emphasize a part of the sentence. Examples such as (13) are similar to exclamations but occur without the question word. I have marked where *tomatoes* comes from by means of an arrow. In (14), the topic is preceded by *as for*, and repeated by a pronoun:

(13) **Tomatoes**, I really don’t like __ in my cereal.

(14) and *as for herself*, *she* was too much provoked . . .

(Jane Austen, *Emma*, Vol 1, chap 15)

Some topicalizations serve to front old information, which is convenient to listeners.

In the same way, passives and clefts can shift phrases to put old information at the beginning of a sentence and new information towards the end. In a passive, as seen in earlier chapters, the subject *she* in (15) is the object *her* of the corresponding active in (16). This shifts the attention:

(15) **She** was persuaded to go (by Columbo). (passive)
(16) Columbo persuaded her to go. (active)

Examples of a cleft and pseudo-cleft are given in (17a) and (18a). I have provided a declarative version of each in (17b) and (18b). A cleft starts with *it is* or *it was* and a pseudo-cleft starts with a *wh*-word:

(17)  
   a. **It was** on the wedding-day of this beloved friend that Emma first sat in mournful thought of any continuance. (Jane Austen, *Emma*, vol 1, chap 1)  
   b. Emma first sat in mournful thought of any continuance on the wedding-day of this beloved friend.

(18)  
   a. **What** he threw away was the winning lottery ticket.  
   b. He threw away the winning lottery ticket.

The cleft picks out one phrase from the sentence to focus on, e.g. *on the wedding-day of this beloved friend* in (17a); it separates it from the rest of the sentence which becomes subordinate to the first part. The pseudo-cleft focuses on a phrase by doubling it through a *wh*-word and then having the focussed phrase come after the copula.

The structure of clefts is that of a restrictive relative clause, as in (19). The structure of pseudo-clefts is controversial and will not be given:
Note that I have represented an NP and PP by means of a 'coathanger' since the internal structure is not relevant here; and I haven’t filled in the words to some of the phrases. This is for reasons of space.

4. Conclusion
In this chapter, I briefly describe a number of special constructions, where movement seems to be taking place to achieve a special effect, namely questions, exclamations, topicalization, passive, and clefting. Tree structures using a CP are provided for the yes/no and wh-questions and the cleft.

Key terms are questions (wh and yes/no); exclamations; topicalization, cleft, pseudo-cleft, and passive.

Exercises

A. Identify the special constructions in:

(20) It is his character that I despise.
(21) She was recognized going into the store.
(22) Higgins I hate.
(23) Who did Anne say that she saw?

B. Draw trees for:

(24) Will she go then?
(25) What will they think?

C. Explain the ambiguity in the following headline:

(26) Stolen Painting Found by Tree.

Keys to the Exercises

A. Sentence (20) is a cleft; (21) a passive; (22) a topicalization, and (23) a wh-question.
B. (24) CP
   ei
   C  S
   Will ei
   NP  VP
   she ei
       VGP  AdvP
       ei  Adv
       modal  V  then
     (will)  go

(25) CP
   ei
   What  C’
   ei
   C  S
   will ei
   NP  VP
   they ei
       VGP  (what)
       ei
       modal  V
     (will)  think

C. The sentence can be a passive in which case the meaning is strange/funny since typically trees are inanimate objects and don't find things. The intended meaning is not a passive, but one where by tree is a place adverbial, i.e. the painting was found by someone at the site of a tree; the finder has been left out or is unknown.

Special Topic: Comma Punctuation

Commas are used in writing to indicate a slight pause in speech. Pauses help disambiguate
structural ambiguities, i.e. are syntactic in nature. In earlier English, e.g. in *Beowulf*, Chaucer, and Shakespeare, punctuation is not used to express grammatical information.

The discussion below is not meant to be exhaustive but merely discusses commas in connection to some of the constructions dealt with in this book. The main use of commas is to indicate that some information is not crucial. Since objects and complements are more important than modifiers and adverbials, we don't use commas for the former but we may do so for modifiers and adverbials (some people argue that one must use them there).

Some specific rules are (26), (27), and (28):

(26) Commas are not used inside the core sentence to separate the subject, verb, and object.
(27) Commas may be used for non-restrictive relative clauses and for adverbial clauses but not for restrictive clauses. Sentence adverbials are always surrounded by commas.
(28) Commas are not used between independent clauses. This construction is called comma splice

As to (26), subjects, as in (29), cannot be separated from their verbs, even if the subject is a clause, as in (30), and neither can commas appear before objects, as in (31), or subject/object predicates:

(29) He, left.
(30) *That he didn’t want to meet the Dalai Lama, is true.
(31) *I noticed, that she …

I indicate this use as ungrammatical, which technically these sentences really aren’t.

Commas are used for non-restrictive relative clauses, as in (32), sentence initial adverbials, as in (33), but are not used for restrictive relative and complement clauses, as in (34):

(32) Pure Empiricism, which he was disposed not to accept, leads to scepticism.
(33) Fortunately, she was on an urban safari tour.
(34) *The story, that he met the Dalai Lama, is true.
The comma splice is well-known from composition classes. An example appears in (35):

(35) Scientists think they have detected life on the Moon, visions of people living in lunar colonies that stop off to refuel on the way to Mars can be envisaged.

Where would you put a period in (35) to fix this?

I'll now give some examples where pauses in speech and commas in writing do make a difference. The well-known (36) is ambiguous; it is sexist either way but illustrative. When (36) is pronounced without pauses or written without commas, it is unclear:

(36) Woman without her man is a savage.

The two possible interpretations are either (37) or (38):

(37) Woman, without her, man is a savage.
(38) Woman, without her man, is a savage.

The tree structure of (38) is given in (39), with woman the subject and is a savage as the predicate. The structure of (37) is more complex since woman is topicalized and, as shown in (40), man is the subject and is a savage is the predicate:
A construction where there is no agreement about when to use commas in coordinating three or more elements. Some argue that all commas should be present in (41), e.g. Fowler and Oxford University Press; others argue the last can be left out. Allegedly, it once became the matter of a law suit, when something like (42) appeared in a will:

(41) The books, magazines, and records in this store are on sale.
(42) Equal parts of the estate will go to Mary, Jane, Edward and Michael.

Apparently, Mary and Jane assumed they would each get a third and Edward and Michael each a sixth, whereas Edward and Michael assumed each would get a quarter. I now put all commas in!
REVIEW OF CHAPTERS 9 TO 11

In chapters 9 and 10, the inner structure of the phrase is examined. PPs and AdvPs are the simplest: PPs have a head and a complement and AdvPs have a modifier and a head. NPs and AdjPs are more complex. The NP can have a determiner, a head, several modifiers (both preceding and following the head) and one complement (either preceding or following the head); the AdjP can have a (degree) modifier and a complement. DON'T memorize this; just be able to analyze a given sentence. A relatively complex NP is given in (1):

(1)  NP
    ei
    D  N’
    the  ei
    AdjP  N’
    Adj  tp
    typical  N  PP
    teacher  ei
    P  NP
    from  ei
    AdjP  N
    Adj  space
    outer

In chapter 10, we give names to the different kinds of clauses. These include restrictive and non-restrictive relative clauses, complement clauses, reduced relatives, and complements to adjectives. Trees for these are provided in the last section of that chapter. Chapter 11 gives examples of some special effect sentences such as topicalizations, passives, questions, and clefts. Just be prepared to recognize these. A tree for some of these is also given in that chapter, using a CP, with a C and a C’.

5 If you want to show that the PP in (1) is a modifier, make it sister to an N’.
Rather than providing separate exercises, I include three homework assignments, a short one that covers the special topics, a second one that I use regularly and that students find very helpful, and a third, very comprehensive and difficult one, that covers chapters 7 to 11 and that I often use as a special credit assignment. No keys are given because they are meant to be real homework or take home assignments. There are also three samples of final exams covering the entire book. A key is provided on the website. (I have tried to balance convenience and too much convenience by doing this).

**Homework 1, on chapter 1 and special topics**
The book has discussed prescriptive grammar in chapter 1 and has covered 11 special topics. Some of these topics include well-known prescriptive rules, e.g. the one on the split infinitive (chapter 1), the multiple negative (chapter 3), the dangling participle (chapter 8), and preposition stranding (chapter 10). Some topics help explain a grammatical category, for instance, the adjective and adverb (chapter 2) or the complementizer (chapter 7) and how these categories change over time. Case and agreement phenomena (chapter 4) are very relevant to the grammar of English and the changes it is undergoing while other phenomena are stylistic choices, such as the use of the passive (chapter 5). Thus, in an academic paper, one must use the correct agreement on the verb but, depending on the field, the use of the passive is fine.

Choose one of the special topics and show by means of examples from your own writing whether or not you follow the prescriptive rule. Then choose an audience (perhaps first year students taking a composition class) and write a short (200 words) explanation on how, and possibly how not, to use this construction.

**Homework 2, covering chapters 2-11**
Take a page of your own writing (an academic paper might be the easiest) and analyze it in terms of the grammatical structures it uses. We have seen brief examples of this, e.g. Hemingway ((76) in chapter 5) uses relatively short sentences with copulas and Tolstoy ((43) to (45) in chapter 9) uses lots of PP modifiers.

To analyze your own writing, consider the ten points below. You could mark the page of your writing in a different color or use multiple copies of your text. Then write a paragraph summarizing what you see. If you think it is easier, you could compare your writing to someone
else’s.

A. Modification of nouns. Do you use a lot of adjectives and PPs as modifiers?
B. Types of verbs used? Do you use a mixture of intransitives, transitives, copulas, and other types?
C. Do you use coordination? If so, which coordinators do you use and is your coordination of phrases or of clauses?
D. Adverbials. Are there many adverbials and, if so, which kinds (clausal or PP)?
E. Auxiliaries.
F. Passive.
G. Embedded clauses. What functions do they have?
H. Finite as opposed to non-finite clauses.
I. Dummy elements.
J. Split infinitives, dangling modifiers, or anything else banned by prescriptive rules?

(For fun, you could use http://textalyser.net. This site will give you the frequency of words in a text you want).

Homework 3, or take-home exam, covering chapters 7-11.
In the text below, taken from Thomas Kuhn:

A. Locate the relative clauses and indicate whether they are restrictive or non-restrictive.
B. Find all the finite verbs and indicate whether or not they are lexical.
C. Analyze the last sentence of the first paragraph in terms of basic sentence structure. Try to draw a tree.
D. Draw a tree for the NP its practitioners’ insistence . . . being considered (second paragraph)
E. How might one analyse a sentence with if as in (last but one sentence in the second paragraph).

Anyone who studies the history of scientific development repeatedly encounters a question, one version of which would be, "Are the sciences one or many?" Ordinarily that question is
evoked by concrete problems of narrative organization, and these become especially acute when the historian of science is asked to survey his subject in lectures or in a book of significant scope. Should he take up the sciences one by one, beginning, for example, with mathematics, proceeding to astronomy, then to physics, to chemistry, to anatomy, physiology, botany, and so on? Or should he reject the notion that his object is a composite account of individual fields and take it instead to be knowledge of nature tout court? In that case, he is bound, insofar as possible, to consider all scientific subject matters together, to examine what men knew about nature at each period of time, and to trace the manner in which changes in method, in philosophical climate, or in society at large have affected the body of scientific knowledge conceived as one.

Given a more nuanced description, both approaches can be recognized as long-traditional and generally noncommunicating historiographic modes. [note deleted] The first, which treats science as at most a loose-linked congeries of separate sciences, is also characterized by its practitioners' insistence on examining closely the technical content, both experimental and theoretical, of past versions of the particular specialty being considered. That is a considerable merit, for the sciences are technical, and a history which neglects their content often deals with another enterprise entirely, sometimes fabricating it for the purpose. On the other hand, historians who have aimed to write the history of a technical specialty have ordinarily taken the bounds of their topic to be those prescribed by recent textbooks in the corresponding field. If, for example, their subject is electricity, then their definition of an electrical effect often closely resembles the one provided by modern physics. With it in hand, they may search ancient, medieval, and early modern sources for appropriate references, and an impressive record of gradually accumulating knowledge of nature sometimes results. (from Kuhn "Mathematical versus Experimental Traditions in the Development of Physical Science")

**Examples of final exams**

**Example 1**

This exam is based on a text adapted from *The Games Helmet* (the *London Sunday Times*, 25 Nov 2007).
A. Label the categories (N, V, D, etc.) in the sentence below:

(1) The fact that an advanced system has been developed for computer games should come as no surprise.

B. Label the six lexical verbs (Intransitive, etc) that are underlined:

Think carefully before you answer: is a device that is capable of reading people’s minds fact or fantasy? We knew you’d say that. But scientists at an American laboratory have been brainstorming the same question for more than five years and have thought up a mind-blowingly different answer. They call it Epoc, but when it is launched early next year in Britain and the US we will probably give it the name of “mind-reading helmet”, capable, supposedly, of knowing what users are thinking.

is: reading:
thought: call:
give: knowing:

C. Identify the functions of the eight underlined and numbered phrases (Su, Dir Object, etc. or Modifier):

The device is being hailed as a revolutionary breakthrough in the way that humans will be able to interact (1) with computers. Its implications are (2) massive, opening the possibility that one day (3) people will be able to control everything from light switches to the cursor on their computer screen simply by thinking about it. (4) However, for now, the technology will be used as the ultimate gimmick: to play computer games simply by thinking your screen character (5) into action. Emotiv Systems, the San Francisco company that has developed the technology, says Project Epoc could mean the end of joysticks and keyboard bashing. Instead games players will be able to visualise a move in their head and that move will be replicated (6) on the screen in front of them. So, for example, Harry Potter could be
ordered to cast exotic spells, or a jedi might exert “the force” to fling (7) his enemies around – all through the willpower (8) of the gamer, with no buttons pressed.

D. AND name these phrases (e.g. NP, PP):

<table>
<thead>
<tr>
<th>Function (e.g. Adverbial)</th>
<th>Name (e.g. NP, PP)</th>
</tr>
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<tbody>
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<td></td>
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</tbody>
</table>

E. Draw a tree for:

(2) Scientists at an American laboratory brainstormed the question for five years

F. Circle the lexical verbs and underline the auxiliaries in the text. Which are finite?

So how does the helmet work? In simple terms it relies on the fact that every time a human thinks about something, electrical impulses are triggered in the brain. This has been known for years in the medical world and is the basis of an electroencephalogram (EEG) – the technique that measures the electrical activity of the brain by recording from electrodes placed on the scalp. Emotiv claims to have refined the technique to isolate and identify the electrical patterns that are given off when humans think about a given course of action, such as moving their arm to the left or right or depressing their right thumb or index finger. The Epoc helmet recognizes these electrical patterns and translates them into “real” movements on the screen.
G. Identify the function and type of the clauses in brackets, e.g. modifier/reduced RC, Subject/non-finite, etc. in:

[To look at], the helmet resembles nothing so much as a novelty head massage gadget with several spidery arms [curving around the head and meeting at the top]. The arms are fitted with a total of 16 sensors [that are positioned so that they are in contact with the relevant part of the head and pick up electric signals in the brain]. The system’s software analyzes these signals and then wirelessly relays what it detects to a receiver plugged into the USB port of the game console or PC. Emotiv says that it has mapped 12 specific actions [that the helmet will recognize].

H. Draw a tree for:

(3) Emotiv says that it has mapped specific actions to use in its program.

I. Circle the phrasal verbs, if any, and underline the passives, if any, in:

If true, the implications are huge. Gaming is believed to merely be the way to popularize the technology rather than being an end in itself: the tip of the virtual iceberg. In the long run the headset could be used widely, from the use of brain scanners as lie detectors to see whether suspects can make out a crime scene, to enabling consumers to turn machines on or off or change television channels without a remote control.

Example 2
Please read the following text. Most questions are based on it. It is adapted from The New York Times, 4 December 1996, but even as late as 2009, the debate on ice/water on the moon continued.

The Moon May have Water
Scientists think they have detected water on the Moon. Suddenly, visions of people living in lunar colonies that stop off to refuel on the way to Mars are less far-fetched. After two years of careful
analysis, scientists said yesterday that radar signals from an American spacecraft indicated the moon was not bone-dry. The spacecraft's radar signatures suggested the presence of water ice in the permanently cold shadows of a deep basin near the lunar south pole.

The survey revealed a vast landscape in which ice crystals are mixed with dirt. It seems a kind of permafrost that is presumably the residue of moisture from comets striking the Moon over the last three billion years.

Even though scientists are not positive, they see signals consistent with ice. Dr. Paul Spudis, one of the scientists reporting on the discovery, acknowledged that the discovery needed to be confirmed by an independent investigation. That might come a year from now because then another spacecraft will orbit the Moon with instruments of even greater precision for determining the presence of lunar water.

This discovery gives astronauts hope for longer stays in space. Told of the new discovery, Dr. Story Musgrave was very enthusiastic. He said that this implied there might be water and water is extraordinarily important to establishing a permanent base on the Moon. Other scientists reacted to the report with a mixture of caution and enthusiasm. They noted that the radar results were particularly difficult to interpret.

A. Identify all the categories in (1), e.g. D, N, etc.:

(1) a kind of permafrost that is presumably the residue of moisture from comets striking the Moon over the last three billion years.

B. List all PPs used as adverbials in the first paragraph (or underline them clearly in the text).

C. Indicate function and name (or realization) of the phrases at sentence/clause level in the sentences/clauses below, e.g. the world is round: SU: NP/Pred: VP/SubjPr: AdjP. DO NOT ANALYSE THESE UNITS ANY FURTHER.

(2) Suddenly, visions of people living in lunar colonies that stop off to refuel on the way to Mars are less far-fetched.

(3) The survey revealed a vast landscape in which ice crystals are mixed with dirt.

(4) . . . another spacecraft will orbit the Moon with instruments of even greater precision for
determining the presence of lunar water.

(5) This discovery gives astronauts hope for longer stays in space.

D. Locate all non-finite clauses in the third paragraph. List them here or underline them clearly in the text.

E. What is the function and name of the following phrases in the structures in which they occur (e.g. Su/NP):

(6) positive (l. 10)
(7) consistent with ice (l. 10)
(8) Told of the new discovery (l. 15)
(9) that the radar results were particularly difficult to interpret (ll 18-9)

F. List the modifiers in the fourth paragraph. Also indicate what their name is (e.g. PP, CP, etc.)

G. List all auxiliaries. Indicate what kind they are (perfect . . .)

H. Draw trees for (10) and (12):

(10) After two years of careful analysis, scientists said yesterday that radar signals from an American spacecraft indicated the moon was not bone-dry.
(11) Paul Spudis acknowledged that the discovery needed to be confirmed by an independent investigation.

Example 3
Please read the following text, A Life of Fiction, adapted from Jane Smiley (New York Times Magazine, 3/12/00)

When Charles Dickens was traveling home from France in June 1865, the train he was riding in
went off the tracks while crossing a bridge over a river. Seven first-class carriages dropped into the river. The eighth, which was the one Dickens was travelling in, dangled off the bridge. Dickens calmed his companions and clambered out. He was indefatigable and helped to free his friends in the carriage and many others.

When all that could be done for the victims had been done, Dickens, who was 53 years old and not in very good health, climbed into the carriage again and retrieved from the pocket of his coat the installment of `Our Mutual friend' he had just finished.

The author, who hadn't shrunk from describing the lurid and the terrible before, made no effort to describe what he had seen. "I don't know what to call the accident" he wrote to a friend. He also refused to give testimony to the subsequent inquest. Why did Dickens hide his heroism? It so happens that Dickens' traveling companions were his mistress Ellen Ternan and her mother. What is really interesting is that a man whose volume of writings approach logorrhea could dissemble his most intimate concerns and feelings so consistently and for so long.

A. List all adverbials in the second paragraph.

B. Indicate function and name of the phrases/clauses at sentence level, e.g. Su/NP; Adverbial/PP in the sentences below. Do not go further than the first layer:

(1) I don't know what to call the accident
(2) When all that could be done for the victims had been done, Dickens, who was 53 years old and not in very good health, climbed into the carriage again
(3) ... helped to free his friends in the carriage and many others

C. What is the function and name of the following:

(4) his mistress ... mother (ll. 12-3)
(5) testimony (l. 11)
(6) off the bridge (l. 3)
(7) a man … logorrhea (l. 13)

D. List all auxiliaries in the second paragraph. Indicate what kind they are.

E. List all finite verbs in the third paragraph.

F. Indicate the relative clauses in the first and second paragraphs. Are they restrictive, non-restrictive, or reduced?

G. Draw trees for:
(8) When Charles Dickens was traveling home from France in June 1865, the train he was riding in went off the tracks while crossing a bridge over a river.
(9) Why did Dickens hide his heroism?