
Looking inside sentences

This chapter begins an examination of the internal structure of sentences which takes up the remainder of the book. Section 3.1 examines finite and non-finite verbs and auxiliaries, and distinguishes between simple sentences and complex sentences – sentences which contain other sentences. Subordination is the term used for a construction in which a sentence is embedded (or contained) within another sentence. Section 3.2 is an introduction to subordination in English and other languages. Although subordination is common cross-linguistically, not all languages seem to make much use of it. Section 3.3 examines some cross-linguistic variation in clause types, particularly in complex constructions.

3.1 FINITENESS AND AUXILIARIES

3.1.1 Independent clauses

Linguists often divide the sentence into two main parts: the SUBJECT and the PREDICATE. As we saw in Chapter 2, the central role (or ‘head’) in the predicate is normally filled by a verb, but we also find other types of predicate, such as adjectival predicates and nominal predicates. A verbal predicate consists of the head verb plus any phrases modifying the verb, or selected by the verb.

Let’s examine the data in (1). In (1a), the subject is *Kim* and the predicate *waited*; in (1b) the subject is *these guys* and the predicate *like chips*; and in (1c), the subject is the whole phrase *The first-year students in our department* and the predicate is *bought a lot of books at this stage in the year*.

- (1)
- a. Kim waited.
 - b. These guys like chips.
 - c. The first-year students in our department bought a lot of books at this stage in the year.

These examples each illustrate SIMPLE SENTENCES. ‘Simple’ here is a technical term, meaning ‘consisting of just one clause’. To avoid conflict with the (non-linguistic) idea of a sentence as something that starts with a capital letter and ends with a full stop, here I introduce the more precise term CLAUSE. The term ‘clause’ has a specific meaning: it’s a sentence that contains one predicate. As we will see in this chapter, some sentences contain only one clause, and others contain more than one clause.

grammatical categories associated with verbs, such as agreement for person and/or number. Strictly speaking, finiteness is a property of an entire clause, rather than just a verb, and for some languages, finiteness may well not be indicated via the verbal morphology at all. For instance, if a language has nominative case (see Chapter 6), this typically occurs on the subjects of finite clauses, so this is another diagnostic. Finally, some languages only have finite clauses, for instance Mohawk, Nahuatl, Nunggubuyu and Ainu.

Examples (2) through (4) illustrate independent clauses – and therefore simple sentences – in three other languages, each of which expresses finiteness in different ways. The verbs and associated morphology are in bold:

- (2) Dytyna **spyt'**. (Ukrainian)
 child sleep.PRES.3SG
 'The child is asleep.' (literally 'The child sleeps.')
- (3) **Na-bànjäl-ya** na ana-na lai nyungga. (Kambara)
 3SG.SU-put-3SG.OBJ the child-3SG at I
 'He left his child with me.' (literally 'He put his child at me.')
- (4) Ape yu ati **o de**. (Ndyuka)
 there your heart FUT be
 'Your heart will be there.'

The Ukrainian verb is marked for tense and also the person/number of the subject; all this information is fused together, so that there are no separate morphological markers for 'present tense' or 'third person'. This is very common in the verbal morphology of European languages.

In the Kambara example, the finite verb has bound pronominals: person/number markers representing both the subject and the object. But there is no tense marker at all. The 3SG.SU prefix *na-* on the verb in (3) means a third person singular subject. This is translated as a pronoun *he* in English, but the Kambara has no independent pronoun. The 3SG.OBJ suffix *-ya* marks a third person singular object, referring to the child. (You can refresh your memory for such glosses by re-reading Section 1.2.2.3.)

In Ndyuka, (4), the verb *de* 'be' itself has no morphology indicating tense (or any other morphosyntactic category), but there is an independent future tense marker, *o*. Therefore, the clause is finite.

Cross-linguistically, most independent clauses contain finite verbs, as in (2) through (4). Some languages, though, allow independent clauses consisting of a subject and a predicate that is non-verbal, as we first saw in Chapter 2. So in (5), the predicate (in bold) is just an adjective phrase *nadif katir* 'very clean', and this sentence contains no copula (i.e. no word for 'is'):

- (5) al-bēt dā **nadif katir** (Chadian Arabic)
 DEF-house this.M.SG clean very
 'This house is very clean.'

• Modal auxiliaries

MODAL AUXILIARIES are a group of independent words in English which express such concepts as permission, necessity or ability. In some languages similar kinds of meaning are expressed by verbal inflections. English MODALS are distinct from other auxiliaries, and also distinct from main verbs: first, the modals only occur in a finite form, and second, they don't take the third person singular *-s* inflection in the present tense. We don't get such forms as **She mays leave* or **Kim wills arrive soon*. They do, however, mostly have contrasting finite forms which are technically considered to be present and past tense, though their relationship to actual time reference is pretty complex in English. So in these pairs of modals, the first is present tense and the second, past tense: *can/could*; *shall/should*; *may/might*; *will/would*. *Must* is also a modal auxiliary, but it has no distinct past tense form. All these modals precede the bare uninflected form of the verb which is known as the INFINITIVE, such as *leave*, *arrive*. A few elements are generally regarded as modals (e.g. *ought*, *need*), and their meaning is consistent with other modal auxiliaries, but they have exceptional syntactic behaviour in various ways. For instance, they precede *to* + infinitive, as in *Lee ought to leave*, *I need to go*.

I've already noted that in English only one element per clause can be finite, and that this is the first in the sequence of auxiliary/verbal elements. You can be sure, then, that in sequences such as *may leave*, *will arrive*, *must sleep*, *can dream*, only the modal auxiliary (in bold) is finite, and therefore the main verbs (*leave*, *arrive*, *sleep*, *dream*) are all NON-FINITE here. This means that they carry no information about tense, person or number.

• *Have* and *be*: main verbs and aspectual auxiliaries

The elements *have* and *be* in English have two distinct uses: they can be either main verbs or auxiliaries. Ellipsis aside, when they appear as the only verb in the clause, then by definition they must be the main verb. (7) illustrates MAIN VERB *have* and *be* (in bold):

- (7) Kim **isn't** sure about that.
I **had** a cold last week.
Are you a friend of Kim's?

(8) illustrates *have* and *be* in their other function, as ASPECTUAL AUXILIARIES (in bold). Note that each example contains additional verbal elements, including the main verbs *leaving*, *written/played/sung*, *enjoying*:

- (8) a. We're just leaving.
b. Jo **has** often written/played/sung to me.
c. They **have been** enjoying better weather lately.

ASPECT is a grammatical category of verbs which expresses such information as whether the action of the verb is completed or unfinished (Section 2.2.2.1). Two kinds of aspect are illustrated in (8). Auxiliary *be*, along with the *-ing* form of the

main verb, as in (8a), gives PROGRESSIVE aspect (an unfinished or ongoing action); *been enjoying* in (8c) is also progressive. In (8b), *has written/played/sung* illustrates PERFECT aspect, which in its basic meaning refers to a completed event, but one which still has relevance to the time of the utterance. In (8c), *have been* is another example of the perfect. Note from (8c) that progressive and perfect aspect can co-occur. Perfect aspect in English requires auxiliary *have* plus a special form of the main verb known as the PAST PARTICIPLE, which in regular verbs ends in *-ed* (*played*) and *-en* (*written*) in numerous irregular verbs.

Main verb *have* and *be* can also co-occur with auxiliary *have* and *be*: *She has **had** a cold recently; They have been **having** better weather*. The auxiliary forms are underlined, and the main verb forms are in bold type. These examples also show that in English, the main verb always comes after any sequence of auxiliaries. There can be three auxiliaries or more in one clause, as in (6b): *The people in the library may have been **working** late*.

To summarize our findings for English:

Finiteness and auxiliaries in English

- A normal simple sentence in English has *one* (and only one) finite element, which may be an auxiliary or a main verb.
- The finite element always occurs *first* in the sequence of auxiliaries/verbs.
- All other auxiliary and verbal elements in the clause are therefore NON-FINITE.
- The main verb always *follows* any sequence of auxiliaries.
- English *have* and *be* occur both as main verbs and as auxiliaries.
- Auxiliary *have* + past participle of verb gives the perfect aspect, e.g. *has written, had played*.
- Auxiliary *be* + *-ing* form of verb gives the progressive aspect, e.g. *is writing, was playing*.

3.1.4 Ways to express the grammatical categories for verbs

Many Indo-European languages (the family that English belongs to) also use the equivalents of 'have' and 'be' as auxiliaries, as does the entirely unrelated European language, Basque. But cross-linguistically, there is a great deal of variation in whether auxiliaries are used at all, and if they are, what they are used for. In all languages, 'Auxiliaries are words that express the tense, aspect, mood, voice, or polarity [= negative or affirmative characteristics] of the verb with which they are associated: i.e. the same categorizations of the verb as may be expressed by means of affixes' (Schachter 1985: 41). This means that any of the morphosyntactic categories that are associated with verbs (see Section 2.2.2) can also be expressed by an auxiliary in some language or languages. We saw earlier that, in English, morphosyntactic information about finiteness can be expressed on a main verb or on an auxiliary, but not both within a single clause. In some languages, a verb and an auxiliary in

the same clause both carry the grammatical information, for example by both being marked for tense, as in the Australian language Warlpiri.

We can now see that there are three different ways of expressing all the grammatical categories for verbs: (a) via the verbal morphology itself, (b) via an auxiliary, or (c) by using an independent word. Let's look at these three strategies now. We have seen, for instance, that English expresses progressive and perfect aspect using auxiliaries plus main verbs. The Brazilian language Bare doesn't use auxiliaries; instead, it expresses both progressive and perfect aspect just by inflections on the main verb (these affixes are shown in bold). This, then, is the verbal morphology strategy:

- (9) yaharika nu-tikuwá-**ni** (Bare)
 now 1SG-lie-PROGRESSIVE
 'I am lying down now.'
- (10) i-tíkua-**na**
 3SG-lie.down-PERFECT
 'He has lain down already.'

(Note that once again these examples do not contain actual independent pronouns for 'I' and 'he', just verbal inflections which perform the same work: first person singular in (9) and third person singular in (10). These are known as pronominal affixes.)

Conversely, some languages have auxiliaries not found in English. Evenki, a Tungusic language of Siberia, has a negative auxiliary. In (11), the main verb *duku* 'write' is finite: it has tense and person/number inflections. But in (12), the finite negative auxiliary bears these inflections instead, and the main verb *duku* 'write' is non-finite (Section 3.1.5) – it no longer has the tense and agreement suffixes found in (11). The Evenki main verb and the auxiliary in (11) and (12) take the same basic affixes, although the PAST affix is pronounced rather differently in (12):

- (11) Bi dukuwūn-ma duku-cā-w. (Evenki)
 I letter-ACC write-PAST-1SG
 'I wrote a letter.'
- (12) Bi dukuwūn-ma ə-ə-w duku-ra
 I letter-ACC NEG.AUX-PAST-1SG write-PARTICIPLE
 'I didn't write a letter.'

The English translation in (12) also uses an auxiliary, *didn't*, for the negation. But *do* is not inherently negative, while the Evenki auxiliary is. English expresses negation by using a separate morpheme, *not*, which can optionally be amalgamated with auxiliaries (*isn't*, *shan't*, *won't* etc.). So here we see the third method of expressing a grammatical category associated with verbs: by using an independent morpheme like *not*.

To summarize, this section has shown that the grammatical information associated with verbs is mainly represented in three different ways: with verbal morphology,

with an auxiliary, or by adding an independent word. These alternative means of expressing information (via separate words or via affixes) recur throughout grammars, not just in the verbal systems, and I will indicate other examples from time to time.

Major ways to express grammatical categories for verbs

- Via inflections on the main verb itself. See (2), (3), (9), (10), (11).
- Via a separate word or particle; an independent grammatical word. See (4); also English *not* as described earlier.
- Via an auxiliary. See (6), (8), (12).

3.1.5 Non-finite verbs

NON-FINITE verbs in English are not marked for tense, person/number agreement or any of the other grammatical categories associated with finite verbs, such as aspect or mood. This is very often true of other languages as well, but not all, as we will see. I divide non-finite verbs into the two main types that occur cross-linguistically, INFINITIVES and PARTICIPLES. English has an infinitive plus two different participles.

- Infinitives

It is not easy to provide a satisfactory cross-linguistic definition of the term ‘infinitive’, and forms corresponding to the English infinitive are not particularly common in other languages. Some languages mark the infinitive with special inflections: for instance, French has the suffixes *-er* (as in *dessin-er* ‘to draw’), *-ir* (as in *fin-ir* ‘to finish’) and *-re* (as in *vend-re* ‘to sell’). In English, the infinitive is the bare verb stem, with no inflections: examples are *eat*, *relax*, *sing*, *identify*, *cogitate*. As we’ve already seen in this chapter, however, this property is not sufficient to identify an infinitive in English, since finite verbs in the present tense also have this same form: *I sing*, *you sing* and so on, apart from the third person singular (*sings*).

We can identify English infinitives instead by their distribution. Modal auxiliaries in English require a following infinitive, as in *Kim must ____ (that)*. An infinitive also occurs after *to* in environments such as *I had to ____ then*; *For you to ____ now would be good*. This *to* is an INFINITIVAL MARKER, not to be confused with the entirely different *to* which is a preposition (and which is followed not by a verb, but by a noun phrase).

A distributional test for English infinitives

- Following a modal auxiliary or form of auxiliary *do*, e.g. *must leave*, *could eat that cake*, *can’t relax*, *does love chocolate*.
- Following the infinitival marker *to*: *To err is human*, *We ought to be leaving*, *I have to arrive on time*, *Kim wants Lee to sing*.

- Participles

Participles are widespread cross-linguistically. In Indo-European languages, the term ‘participle’ is generally used to refer to the types of non-finite verbs which primarily co-occur with a finite auxiliary. Such an example is also given from Evenki in (12).

Cross-linguistically, participles are considered to be verb forms that can also be used in positions normally filled by adjectives or nouns. Two examples from German follow. The words in bold are known as ‘present participles’; though derived from verbs, they behave exactly like adjectives in modifying a noun, and in taking the same gender agreement suffixes that adjectives normally take. So in (17), *glaubend* takes the masculine ending *-er*, agreeing with a masculine noun, while in (18), *gehend* takes the feminine ending *-e*, agreeing with a feminine noun:

- (17) ein **glaubend-er** Priester (German)
 a.M believing-M priest.M
 ‘a priest who believes’ (*Literally, ‘a believing priest’*)
- (18) eine **gehend-e** Person
 a.F walking-F person.F
 ‘a person who’s walking’ (*Literally, ‘a walking person’*)

It’s quite common for languages to have a number of distinct participles (e.g. Basque, Armenian and Lezgian), though English has only two different participles. In languages other than English, verbal categories such as tense and aspect are often marked on participles, not just on finite verbs. Some languages, perhaps rather surprisingly from a European perspective, have only a CLOSED class of finite verbs, but an OPEN class of participles. For instance, in the Australian language Wakiman, the finite verb class has only around 35 members, while participles are a genuinely open class of verbs (Cook 1988).

We’ll now consider in a little more detail the two distinct PARTICIPIAL forms in English – the *-ing* form and the *-ed/-en* form. Note that the morphology (each has its own suffix) distinguishes the participles from the English infinitive, which is the bare verb stem.

- The *-ing* participle

What traditional grammars term the ‘present participle’ is the *-ing* form of the verb which, together with auxiliary *be*, gives progressive aspect, as in (19a). But the *-ing* form doesn’t only co-occur with an auxiliary: the verb form *laughing* also appears on its own in the other examples in (19):

- (19) a. Kim was **laughing** loudly.
 b. Kim kept on **laughing**.
 c. **Laughing** loudly, Kim rushed into the room.
 d. I found Kim **laughing** in the corner.

However, not all words with an *-ing* suffix are participles, or indeed verbs of any kind, as the usual distribution tests show. For instance, *boring* is clearly an adjective

in *this very boring film* – it co-occurs with the adjectival modifier *very*. Compare this with a (**very*) *sleeping child*, where *sleeping* is participial (i.e. a verb form), so can't be modified by *very* – remember that the asterisk inside the parentheses means that the example is ungrammatical if that word is included. Another English example is *a burning branch*, where again, the participial form *burning* does not behave like an adjective. Other *-ing* forms can be nouns; *singing* is a noun (a form traditional grammar refers to as a gerund) in such contexts as *Their singing was beautiful*.

- The past participle

The past participle of most English verbs has the *-ed/- (e)n* ending, as in *played, shown, seen, forgotten*. In English, this form of the verb, together with auxiliary *have*, gives the perfect aspect. Some examples (with the past participles in bold) are: *Have you **eaten** the cake?*; *Kim has **had** flu*. There are many irregularities in the form of English past participles. Although some verbs have distinct past participle forms (e.g. *eaten, known*), these are all irregular verbs. Regular verbs have past participles which are identical to their PAST TENSE, such as *worked, left, decided*: they both have an *-ed* ending. It is important that you understand the distinction between past participle and past tense. A simple distribution test can help you to tell which is which:

(20) **Distribution test to distinguish between English past participle and past tense**

- Kim has ____ (that) already.
PAST PARTICIPLE, e.g. *eaten, forgotten, written, left, decided, played*
- Kim ____ (that) yesterday.
PAST TENSE, e.g. *ate, forgot, wrote, left, decided, played*.

In English, as well as a number of other European languages, such as French and German, past participles are also used in the PASSIVE construction (see Section 7.1) as in *This book was **written** last year*, or *It has been **made** into a film*.

English also often uses a past participle to modify a noun, as in a ***boiled** egg, a **baked** potato*. These are verbal rather than adjectival; for instance, they don't take any of the typical adjectival modifiers discussed in Section 2.4.

3.1.6 Co-ordination of clauses

So far in this chapter, we have looked mostly at simple sentences: sentences containing only one clause. COMPLEX SENTENCES are sentences that consist of more than one clause. One way that complex sentences are formed is by CO-ORDINATION. In (21), we see three independent clauses. These simple clauses can be joined together, or CO-ORDINATED, to form a complex sentence, as in (22):

- (21) Kim arrived early.
Lee was half an hour late.
Ceri didn't even show up.
- (22) Kim arrived early **and** Lee was half an hour late, **but** Ceri didn't even show up.

The words in bold are CO-ORDINATING CONJUNCTIONS (another in English is *or*), used to CONJOIN (= join together) strings of simple sentences. In clausal co-ordination, each clause could stand alone as an independent clause, and there are no syntactic restrictions on the order of the clauses, though there may be pragmatic restrictions (the sentence may not make good sense if the clauses are re-ordered).

All the clauses in a co-ordination have equal syntactic status – no clause is dependent on any other. As we will see in Section 3.2, this is not the case in complex sentences involving SUBORDINATION.

3.1.7 Summary

Simple sentences consist of only one clause, and most contain a finite verb, although some languages allow sentences with no finite verb, or no verb at all. The finite element may be either a main verb or an auxiliary; a finite auxiliary always co-occurs with a main verb, which is usually non-finite. In English, the finite verb always appears before any non-finite verbs, and if there are any auxiliaries, the main verb always follows them. Cross-linguistically, non-finite verbs fall into two major categories: the infinitive, and participial forms of the verb, which often combine with aspectual auxiliaries to give various categories of verbal aspect. Simple sentences can be conjoined to give a type of complex sentence where all the clauses have an equal syntactic status: this is co-ordination. We turn next to an examination of subordination: a subordinate clause is one that is dependent on another clause in some way.

3.2 INTRODUCTION TO SUBORDINATION

3.2.1 Complement clauses

In (23), the clauses do not all have an equal syntactic status. Each of these examples has two clauses: a MAIN or MATRIX clause, and a SUBORDINATE clause which is embedded within the matrix clause. The subordinate clauses are all in square brackets in (23), and the verbs in the matrix clause are in bold. The subordinate clause is dependent on the matrix clause, as we'll see in a moment:

- (23) a. My friend **claimed** [(that) Ceri liked chips].
 b. **I wondered** [whether/if Lee had gone].
 c. They **want** [to leave before breakfast].

Each of the bracketed subordinate clauses is an obligatory ARGUMENT of the verb in the matrix clause. In other words, these verbs (*claim*, *wonder*, *want*) need a particular kind of syntactic phrase to complete their meaning. We can't have sentences like **My friend claimed* or **I wondered* or **They want* – these wouldn't be complete. In some of these cases, we could just have a direct object as the argument of the verb: for instance, *They want an egg*. Other verbs, though, like *wonder*, in fact require an argument which is an entire clause. The subordinate clauses specify what was

claimed, wondered or wanted. Subordinate clauses that are selected by a verb in this way are known as COMPLEMENT clauses.

You can see from these examples that subordinate clauses have some distinctive properties. First, they are often introduced by a small functional element known as a COMPLEMENTIZER. In (23), *that*, *whether* and *if* are all complementizers. Complementizers can typically be omitted if they don't bear any real meaning, and this is true of English *that* in (23a). But *whether* and *if* couldn't be omitted. In fact, the matrix verb *wonder* selects a clause that starts with a complementizer of this kind, whereas *claim* selects a finite clause introduced (optionally) by *that*. We can't switch these around:

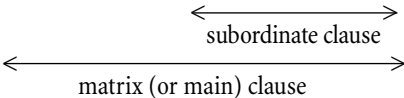
- (24) a. *My friend claimed whether/if Ceri liked chips.
 b. *I wondered that Lee had gone.

The verb in the matrix clause not only selects a subordinate clause, it selects a subordinate clause with specific properties, and often, a specific type of complementizer.

A second property of subordinate clauses concerns finiteness. Independent clauses in English must be finite, as we've seen. The verb in the highest matrix clause must be finite too. But many subordinate clauses contain only a non-finite verb form. This is the case in (23c), where *to leave before breakfast* is a non-finite clause. The verb *want*, then, selects a non-finite clausal complement. From the examples so far, you should be able to see that these subordinate clauses are syntactically dependent on the matrix clause, or more specifically, on the verb in the matrix clause.

A third property of (some) subordinate clauses is also seen in (23c), *They want [to leave before breakfast]*. Here, the non-finite complement clause *to leave before breakfast* has no overt subject; it has only an understood subject, referring back to *they* in the matrix clause. This is a sure signal in English that we are dealing with a subordinate clause. An alternative option to (23c) is a non-finite subordinate clause with an overt subject: *They want [the girls to leave before breakfast]*. But then it is clearly understood that this subject, *the girls*, refers to a different entity from the matrix subject, *they*.

A subordinate clause is part of the matrix clause, and so is said to be EMBEDDED (= contained) within it. We can indicate this embedding as in (25). The innermost square brackets show the subordinate clause, and the outermost brackets show the matrix clause; as you can see, the subordinate clause is entirely contained within the matrix clause.

- (25) [My friend claimed [that Ceri liked chips]].


In (26), we see another role that subordinate clauses (underlined) can fulfil:

- (26) a. That Chris liked Lee so much really **surprises** me.
 b. For Mel to act so recklessly **shocked** everyone.

These subordinate clauses are known as CLAUSAL SUBJECTS (or SENTENTIAL SUBJECTS), because they are clauses, but also fulfil the requirement for the matrix verbs (in bold) to have a subject. You can see that they are in the subject position by replacing them with an ordinary noun phrase subject, the phrase in square brackets here:

- (27) a. [This] really surprises me.
 b. [Mel's behaviour] shocked everyone.

Again, the clausal subjects are embedded within the matrix clause, but this time, of course, they are in the subject position:

- (28) [[That Chris liked Lee so much] really pleases me].
 ← subordinate clause →
 ← matrix (or main) clause →

Like the subordinate clauses in (23), these clausal subjects may be either finite (26a) or non-finite (26b). Both of them are also introduced by a complementizer: *that* introduces the finite clause, and *for* the non-finite clause. It's not too surprising that both of these complementizers are obligatory here, because they signal the start of a special kind of subject: an entire subordinate clause. For instance, having complementizer *that* at the start of the finite clausal subject prevents the hearer from assuming incorrectly that the noun phrase *Chris* is just the subject of the matrix clause: **Chris liked Lee so much really pleases me*.

Subordination is not generally restricted to a depth of just one embedded clause. In fact, in most languages (though perhaps not all), complex sentences contain a potentially infinite number of subordinate clauses. For example, (23c) could be extended as *They want to know whether we'd expect to leave before breakfast* or *They want to know whether she thought we'd expect to leave before breakfast* (and so on). Such examples of RECURSION are typical, though recursion may be fairly restricted in some languages. Each subordinate clause is dependent on the clause above it, and contained, or embedded, within the clause 'upstairs'. Each verb selects the following dependent clause as its complement. This means that we have structures of the following kind, where each clause is nested inside the clause directly above it:

- (29) They hope/want [to leave before breakfast].
 (30) They hope [we'd expect [to leave before breakfast]].
 (31) They want [to know [whether we'd expect [to leave before breakfast]]].

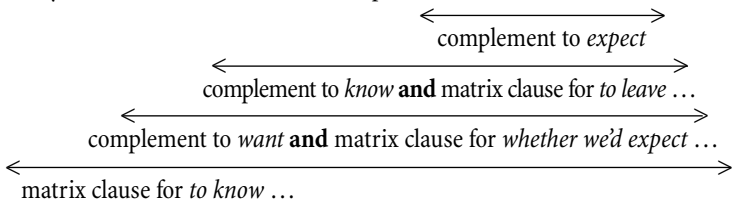
The brackets show the start and end of each clause. So in (30), for example, the *expect* clause doesn't end after *expect* – it can't, because *expect* absolutely requires the presence of the dependent clause *to leave before breakfast*. Instead, the *expect* clause ends after *breakfast*, at which point it is complete. In (30) and (31), the *leave* clause is dependent on the *expect* clause – the verb *expect* selects the non-finite subordinate

clause ‘downstairs’. And the *expect* clause in turn is dependent on the clause above, and again, is selected by the verb in the clause above it (*hope, know*). So the highest clause in (31) (the *want* clause) in fact contains all the other clauses within it:

(32) [They want [to know [whether we’d expect [to leave before breakfast]]]].

What we find, in other words, is not a linear sequence of clauses strung out one after the other, [...] [...], but rather, a HIERARCHICAL structure of clauses embedded within clauses: [... [...]]. The *know, expect* and *leave* clauses here are all complement clauses, since they are required by the verb in the ‘upstairs’ clause. But the *want, know* and *expect* clauses are also all matrix clauses, since they each select as a complement the clause ‘downstairs’. So a clause can be simultaneously a matrix (from the Latin meaning ‘mother’) clause and a complement clause:

(33) [They want [to know [whether we’d expect [to leave before breakfast]]]].



At the moment, we are only talking about English, where complement clauses follow the verb that selects them. Later on we will see that in languages such as Japanese, complement clauses precede the verb that selects them.

The subordinate clauses discussed so far are all complements, because they are essential; they can’t simply be omitted without loss of grammaticality. Clausal subjects, as in (26), are also arguments of the verb, just as much as the embedded clauses in examples like (23). For this reason, clausal subjects are traditionally termed ‘subject complement clauses’.

However, not all subordinate clauses are complements – required arguments of a matrix verb. As we’ll see next, some are optional.

3.2.2 Adjunct or adverbial clauses

Some embedded clauses are not selected by any verb, and instead are just optional modifiers:

- (34) a. Mel will be there [when she’s good and ready].
 b. [If you’re leaving early], please get up quietly.
 c. [Kim having left early], we drank her beer.

The clauses shown in brackets are all ADJUNCTS, to use a term introduced in Chapter 2; this means that they are not obligatory. You can see this for yourself by removing them from (34); all the remaining sentences are fully grammatical. In traditional grammar, these optional subordinate clauses are known as ADVERBIAL CLAUSES. They add a very wide range of additional meanings, including information about time,

Here are the main verbs, in bold:

- (37) a. When Kim **got** on the train, someone **said** she'd left her rucksack in the middle of the platform on a trolley.
 b. Unless we **want to arrive** late, we really **need to be leaving** now.
 c. To **get** to class on time, you should **set** your alarm every Wednesday for about 6.15 in the morning.
 d. To arrive on time **feels** brilliant.
 e. I **promise** to cook the meal while you **sort** the groceries.

And all the complement clauses (including the clausal subject in (37d)) are underlined. Note that the whole of the complex sentence *unless we want to arrive late* is an adjunct to the *need* clause. However, that adjunct itself contains two clauses: a matrix clause with the main verb *want*, and its complement, the subordinate *arrive* clause. The adjuncts are:

- (38) when Kim got on the train
 unless we want to arrive late
 to get to class on time
 while you sort the groceries

At this stage, you will have noticed that I am beginning to use a great deal of the terminology which was introduced and defined in earlier sections and chapters. If you are finding it hard to keep things straight in your mind, you will need to do some revision before reading further, since I will be using the technical terms more often from now on without any reminder of their meaning. In any case, I recommend re-reading this section (3.2) up to this point before moving on.

3.2.4 Root and subordinate clauses: Some distinctions

In a complex sentence, the highest clause in the hierarchical structure is known as the ROOT CLAUSE. It is not uncommon, cross-linguistically, for root clauses to display some special properties that are not shared by embedded clauses. For instance, embedded clauses in English may be finite or non-finite, but the root clause is *always* finite; in other words, it must contain a finite verb. Independent clauses share these properties too, and for that reason may also be termed root clauses.

Another way in which root clauses often differ from subordinate clauses concerns word order. A root clause may have a word order that does not occur in embedded clauses, or vice versa. The Germanic languages are well known for this phenomenon, and later we will see some indications of it in English (which is a Germanic language). The illustration here, though, is from a Celtic language, Breton. Back in Chapter 1, we saw that Welsh, another Celtic language, has verb-initial word order: in other words, the finite verb comes first in the clause. We might expect that the closely related language Breton would be verb-initial too, but it appears from the ungrammaticality of (39) that this is not the case:

- (39) *Lenn ar wazed al levr. (Breton)
 read.PRES the men the book
 ('The men read the book.')

Rather than (39), one grammatical version of this sentence would be (40), where the subject is initial in the clause:

- (40) Ar wazed a lenn al levr.
 the men PRT read.PRES the book
 'The men read the book.' (*Literally, 'It's the men that read the book.'*)

It's also possible for the object of the verb to be initial in the clause:

- (41) Al levr a lenn ar wazed.
 the book PRT read.PRES the men
 'The men read the book.' (*Literally, 'It's the book that the men read.'*)

However, if we make the verb-initial sentence in (39) into a subordinate clause (introduced by a small particle, *e*) then it's perfectly grammatical:

- (42) Int a gav dezho [e lenn ar wazed al levr].
 they PRT think.PRES to.3PL PRT read.PRES the men the book
 'They think that the men read the book.'

So what is going on here? In fact, finite verbs are indeed initial in Breton – but generally, that order is not allowed in root clauses, only in embedded clauses. What happens in Breton (as in German) is that some element must precede the finite verb in a root clause; as we've seen, this could be the subject, the object, or indeed various other elements, such as an adjunct.

In some languages, of which English is generally said to be an example, root clauses do not have complementizers. This is definitely not a universal property; for instance, Swedish is a Germanic language quite closely related to English, and as (43) shows, it does have complementizers in root clauses. One of two complementizers can be chosen here (in bold):

- (43) **Om/att** jag gillar blodpudding. (Swedish)
 if/that I like black.pudding
 'You bet I like black pudding!'

It's true that we don't get English sentences such as **That my friend likes chips* or **Whether/if it will rain today*. On the whole, then, we can agree that English typically lacks root clause complementizers. However, a common usage in some varieties of English has *so* in root clauses:

- (44) Interviewer: Tell us about the new website, then.
 Interviewee: **So** this site has been up and running for around a month.

This is clearly not the *so* of purpose adverbial clauses, as in *I'll stop talking so you can concentrate* – in fact, its only function seems to be to delineate the start of the clause. I consider, then, that *so* here is a root clause complementizer.

English root clauses have two other properties that will help you to distinguish them from subordinate clauses.

- **Only root clauses in English have subject/auxiliary inversion.**

The usual way of asking YES/NO QUESTIONS in English (that is, questions expecting the answer *yes* or *no*) involves what is known as SUBJECT/AUXILIARY INVERSION. The subject of a root clause undergoes inversion (= switching of position) with a finite auxiliary. In a simple sentence, the word order in a statement is *Kim didn't like chips*, while the word order in a question is *Didn't Kim like chips?* *Kim* is the subject, and *didn't* the finite auxiliary, which moves to the left of the subject. Some more instances of this are: *You can speak Italian fluently* (statement) and *Can you speak Italian fluently?* (question); *Lee has been sleeping badly* and *Has Lee been sleeping badly?*

Now let's look at subject/auxiliary inversion in the root clause of some complex sentences:

- (45) a. If you're leaving early, **should you** make sure your alarm works?
 b. **Can Mel** persuade Kim to cook a nice meal?

The inversion test will tell you whether a clause is a root clause or an embedded clause. Obviously, this test can be used only in finite clauses, since only *finite* auxiliaries can be inverted in this way. So we can't apply the inversion test in non-finite clauses: **Having Kim left early, we drank her beer*. But we already know that all non-finite clauses are subordinate clauses anyway. Let's try the test in a complex sentence with a finite subordinate clause: *Your friend claimed that Ceri liked chips*. There are two finite clauses here: first, the *claimed* clause:

- (46) **Did your friend** claim that Ceri liked chips?

This works (with *do*-support, as there's no other auxiliary), so we can be sure that *claim* is the verb of the root clause. But we can't do this in the embedded *like* clause:

- (47) *Your friend claimed that **did Ceri** like chips?

This is ungrammatical, so confirming what we already knew: a clause introduced by complementizer *that* must be a subordinate clause.

Here we should add the proviso that inversion is in fact allowed in embedded clauses that are (or act like) a quotation of someone's words. So we find sentences such as *My friend said, 'Did Lee think that Ceri liked chips?'* and *Ceri asked, could they be a little quieter?*

- **Only root clauses in English can have tag questions.**

Tag questions are usually 'tagged onto' the end of the entire sentence, and they have a pronoun as their subject which matches the subject of the root clause. Since they

also use subject/auxiliary inversion, tag questions too are found only in root clauses or when quoting speech. Example (48) illustrates, with the finite verb/auxiliary of the root clause and its associated tag in bold:

- (48) a. We **persuaded** Kim to cook a nice meal, **didn't we?**
 b. For you to act so hastily **was** unexpected, **wasn't it?**
 c. If you're leaving early, you **should** ensure that your alarm works, **shouldn't you?**
 d. Kim having left early, we **drank** her beer, **didn't we?**

As usual, if there's no finite auxiliary in the root clause, then *do*-support is required, as in (48a) and (d). Note that when the root clause is affirmative, the tag is negative, and vice versa: *She hasn't gone yet, has she?*

Tag questions can't be formed from embedded clauses, even if they're finite, as (49) shows – these sound very odd:

- (49) a. *I wondered whether Lee had gone, hadn't he?
 b. *If you're leaving early, you should ensure that your alarm works, aren't you/doesn't it?

In (49b), there are two subordinate clauses: the *leaving* clause (an adjunct) and the *works* clause (a complement). Forming a tag associated with either of these is impossible. We can only form a grammatical tag question from the root clause, as (48c) shows

There are a few exceptions, so some caution is needed: if the root clause verb is a verb like *think* or *say*, we can, in fact, get embedded tag questions, such as *I think we're leaving soon, aren't we?*

3.2.5 Some cross-linguistic variation in subordination

So far, we have only seen examples of subordinate clauses that *follow* the main verb that selects them, as is the case in English and in European languages generally. The next two examples both have a complement clause which *precedes* the verb that selects it. We will be looking at word orders like this in more detail in Chapter 4. For now, you need to understand that the matrix verbs meaning 'know' and 'want' select an embedded clause, just as in English, but that this clause (bracketed) precedes the verb that selects it:

- (50) ?ah [ce k'ew ew tum-tah] hatiskhi? (Wappo)
 1SG that man fish buy-PAST know
 'I know that man bought fish.'

- (51) ?ah [ce k'ew ew tum-uhk] hak'se?
 1SG that man fish buy-INFIN want
 'I want that man to buy fish.'

In (50), the subordinate clause is finite, as we can tell from the past tense marker on the verb, and in (51), the subordinate clause is infinitival.

In English, verbs such as *try* and *want* select subordinate INFINITIVAL clauses, as in *Kim tries/wants/hopes [to leave before breakfast]*, where the infinitival clause (containing the infinitive *leave*) is bracketed. Rather than having an overt (pronounced) subject, such clauses often have an *understood* subject, referring back to the subject of the main clause – we understand that the person leaving will be *Kim*. In English, many matrix verbs can select either an infinitival clause, or alternatively a finite clause, as their complement. So we can also have *Kim hoped [that she could leave before breakfast]*. But not all languages have infinitives. So what do the embedded clauses selected by the equivalent verbs look like in such languages? The examples in (52) and (53) are from modern Greek, and the embedded clauses are in brackets (S_{JTV} is a subjunctive marker, used to mark some event that hasn't actually happened yet).

(52) o Sokratis theli [i Afrodhiti na ton filisi] (Greek)
 the Socrates want.3SG the Aphrodite S_{JTV} him kiss.3SG
 'Socrates wants Aphrodite to kiss him.'

(53) i Maria prospathise [na diavasi ena vivlio]
 the Mary tried.3SG S_{JTV} read.3SG one book
 'Mary tried to read a book.'

A literal translation of (52) would be something like 'Socrates wants that Aphrodite kisses him' and of (53), 'Mary tried she reads a book'. In other words, the embedded clauses are both *finite* in Greek: as in the matrix clauses, both verbs in the embedded clauses have a third person singular inflection.

3.2.6 Summary: Properties of subordinate clauses and root clauses

- Complement clauses and adjunct (or adverbial) clauses are both types of subordinate clause. A third major type of subordinate clause has not been discussed in this section: the relative clause. This is the construction underlined here: *I never like the food that they serve in the canteen*. Relative clauses are optional, so are in fact a type of adjunct. We will explore them in detail in Chapter 8.
- Complement clauses serve as arguments of the verb (or other lexical 'head') in the matrix clause. For that reason, they are typically obligatory.
- Adjunct clauses are not arguments, but optional modifying elements. These are traditionally termed adverbial clauses.
- Not all subordinate clauses would be possible as independent clauses. All non-finite clauses are impossible as 'stand-alone' clauses, in English and in many (though not all) languages.
- Both complement and adjunct clauses in English can be finite or non-finite. Some languages have more restrictions on the finiteness of subordinate clauses, though

many do not. Any clause that *only* has a non-finite verb, and no finite element at all, will generally be a subordinate clause of some kind.

- Both complement and adjunct clauses in English may begin with a complementizer. English root clauses typically do not, but root clause complementizers are common cross-linguistically.
- Root clauses often have special properties cross-linguistically. In English, they are identified by their ability to take subject/auxiliary inversion and tag questions. In some other languages, root clauses have a special word order that differs from the word order in subordinate clauses.

3.3 MAJOR CROSS-LINGUISTIC VARIATIONS

The majority of languages have complex sentences of some form, but not all languages share the type of complex sentences found in English. The kind of subordination used in familiar European languages is not universal, although it is also widespread outside Europe. But many languages have strategies which seem to avoid the type of complementation common to European languages. This section examines some of the main cross-linguistic variations in clause types.

3.3.1 The co-ordination strategy

The first alternative strategy is CO-ORDINATION. Compare the Kambera examples in (54) and (55) with their English translations. The gloss CONJ indicates a conjunction; see Section 3.1.6:

- (54) Ku-ita-ya **ba** na-laku la Umalulu. (Kambera)
 1SG.SU-see-3SG.OBJ CONJ 3SG.SU-go to Melolo
 ‘I saw him going to Melolo.’
- (55) Ku-rongu-kau **ba** u-ludu.
 1SG.SU-hear-2SG.OBJ CONJ 2SG.SU-sing
 ‘I heard you sing.’

Starting just for comparison with the English translations, the constructions *I saw him going*, *I heard you sing* are examples of COMPLEMENTATION: the verbs in each matrix clause (*see* and *hear*) select a non-finite subordinate clause which contains the verbs *going* and *sing*. As we have already seen, it’s common in English to have a finite verb in the matrix clause which selects some kind of non-finite subordinate clause – one way to tell that we have a subordinate clause in the English translations in (54) and (55) is the very fact that they are non-finite. (If you are not sure that *sing* really is non-finite here, note that the verb cannot take the *-s* inflection for present tense third person singular: **I heard him sings*.)

But the Kambera equivalents use co-ordination rather than subordination. Literally, the Kambera examples could be translated as ‘I saw him and he went to Melolo’ and ‘I

of *hated*, and in (56b), the subject of *surprised*. These nominal *-ing* constructions are traditionally known as GERUNDS in English.

Now compare this Kambera example, where the nominalized clause is in brackets:

- (57) Nda ku-mbuti-nya [na tàka-mu] (Kambera)
 NEG 1SG.SU-expect-3SG.OBJ the arrive-2SG
 'I did not expect you to arrive.'

Literally, this means '*I didn't expect it, your arrival*', which is definitely not very natural English; but the Kambera is perfectly natural. The verb meaning 'arrive' is clearly nominalized here because it occurs with a determiner, *na* 'the', which is a property of nouns.

Example (58) shows a similar example from a native American language, Comanche, with the nominalized clause again bracketed:

- (58) [u-kima-na] nii supanaʔi-ti (Comanche)
 his-come-NOMINALIZER I know-ASPECT
 'I know that he's come.'

Here, instead of a finite subordinate clause, as in the English translation, we find a nominalization: the verb *kima* is turned into a noun form with a nominalizing suffix *-na*, and then it takes a possessive marker *u-* 'his', rather like the examples in (56) had the possessive marker *-ʔ*.

Nominalizations of this kind are still examples of subordination, because the nominalized clause is dependent on a matrix verb (*Lee's*) *losing his licence* couldn't occur as an independent clause, for instance). The next section discusses a construction that doesn't involve subordination.

3.3.3 Serial verbs

As we have seen from English and other languages, the type of complementation familiar from European languages involves an embedded clause which is subordinate to a matrix clause. This strategy is widespread cross-linguistically, but not all languages make much use of subordination. A different but very common strategy, known as VERB SERIALIZATION, occurs widely in the world's languages, for instance in Chinese, in many African languages, and in many of the languages of New Guinea.

Example (59) illustrates a serial verb construction from Nupe (a language of Nigeria), showing two finite verbs simply following one after the other.

- (59) Musa bé lá èbi. (Nupe)
 Musa came took knife
 'Musa came to take the knife.'

English and other European languages allow only *one* finite verb in each clause – that is, a verb marked for such categories as tense and/or person and number (we don't

get **Musa comes takes the knife*). In English, each clause contains just one main verb. In serial verb constructions, though, two main verbs occur within a single clause. Both are finite. Both belong to a single predicate. In the English translation of (59), there's a matrix clause with a finite verb, *Musa came*, and an embedded clause with an infinitival verb, *to take the knife*, but in the Nupe serial construction the two verbs form a single predicate: there is no subordinate clause.

Let's look at the typical properties of serial verb constructions. First, it's very common that no elements at all are allowed to intervene between the two serial verbs, which is not too surprising if they are closely tied together in a single predicate. This is the case in (59), from Nupe, and it's also true of Bare, an extinct language formerly spoken in Brazil and Venezuela. In the Chinese example that follows, also, the direct object *men* 'door' does not intervene between the serial verbs *la-kai* 'pull open':

- (60) Ta **la-kai** le men. (Chinese)
 he pull-open PERF door
 'He pulled the door open.'

In some languages, though, if the first of the two serial verbs is transitive, an object noun phrase can occur between them, as in (61). Here, the object of the transitive verb *mú* 'took' (*iwé*, 'book') intervenes in this way between the serial verbs *mú* and *wá*, 'came':

- (61) ó mú iwé wá (Yoruba)
 he took book came
 'He brought the book.'

The same happens in (62), where there's a transitive verb *kpá* 'take', with an object *kíyžèè* 'knife', and this immediately follows the verb:

- (62) ù kpá kíyžèè mòng ówl (Vagala)
 he take knife cut meat
 'He cut the meat with a knife.'

A second property of serialization is that the meanings of the two serial verbs together often make up a single complex event. So in (61), the meaning could literally be seen as 'He took the book and came', which is more or less possible in English, but which instead we denote with *bring* – which means to get something and take it to your destination.

Third, the two finite verbs in a serialization must have the same subject. This is crucial to the claim that they are both part of a single clause. We see this in (59), with the subject *Musa*; it's also shown in the Yoruba example in (61), where there is only one subject, *ó* 'he', but it is shared by the two verbs; and it's shown again in the Vagala example in (62), where the subject *ù* 'he' is shared by the two verbs. Another way that this shared subject is sometimes expressed is shown in (63), from Bare: crucially,

the two verbs must both have the same bound pronominal prefixes showing person/number, here *nu-*, giving the meaning ‘I’:

- (63) **nu**-takasā **nu**-dúmaka (Bare)
 1SG-deceived 1SG-sleep
 ‘I pretended (that) I was asleep.’

Note that once again, the English translation uses a finite subordinate clause, (*that*) *I was asleep*.

Contrast (63) with an example of SUBORDINATION in Bare, (64) (some of the following Bare examples are slightly adapted). This is not a serial construction, but instead is very like the English, with an adjunct clause (in brackets) before the matrix clause:

- (64) [mientre-ke **nu**-nakúda-ka] **i**-mare-d’a kubati (Bare)
 while-SEQUENTIAL 1SG-go-SEQUENTIAL 3SG.M-steal-ASPECT fish
 ‘While I was coming in, he stole the fish.’

Despite the fact that the two verbs *nunakúdaka* and *imared’a* in (64) follow one after the other, we can tell that this isn’t a serial construction because each verb has a different subject. Again, this is shown not by independent pronouns as in the English (*I, he*) but by the two different bound pronominal prefixes, *nu-*, *i-*, on the two verbs, indicating the person and number (and gender) of the two different subjects: the ‘go’ verb has the 1SG subject marker (meaning ‘I’) and the ‘steal’ verb, the 3SG masculine subject marker (meaning ‘he’). The verbs are therefore in separate clauses.

A fourth property of serialization is that there is only one marker of negation for the whole serial verb construction. In (65), this is the negative marker *hena*:

- (65) **hena** **nihiwawaka** **nu-tšereka** nu-yaka-u abi (Bare)
 NEG 1SG.go 1SG-speak 1SG-parent-F with
 ‘I am not going to talk to my mother.’

The two serial verbs, *nihiwawaka* and *nutšereka*, both share the negative marker *hena*.

Compare (65) with (66), which is not a serial verb construction, but instead has two separate finite clauses, each with their own negative marker, *hena*:

- (66) **hena**-ka ini-hisa **hena** in-hiwawaka (Bare)
 NEG-DECLARATIVE 2PL-want NEG 2PL-go
 ‘If you do not want, do not go.’

Fifth, the serial verbs can’t be marked independently for such grammatical categories as tense, aspect or mood, but must share the same tense etc. This is either marked on each verb, or else occurs just once but is shared by both verbs. A good example is the Chinese perfect aspect marker *le*, seen in (60); this occurs only once

for the whole serial construction. Another such category is the Bare ‘sequential’ marker *-ka*; this occurs only on one verb in a serial construction:

- (67) nuni hena nu-kiate-d’áwaka nu-yuwahada-ka (Bare)
 I NEG 1SG-fear-ASPECT 1SG-walk-SEQUENTIAL
 ‘I’m not afraid of walking.’

(Note that we again have the same bound pronominal subject markers *nu-* on each verb in the serial construction, and the single shared negative marker, *hena*.) We can compare (67) to an example of subordination in Bare, where we find that each verb in the two subordinate clauses takes the sequential *-ka* marker. In (68), the ‘roll’ verb is in the root clause, and the two other verbs, meaning ‘see’ and ‘sleep’, are in two subordinate clauses; the English translation is just the same in this respect. *Both* the verbs in the embedded clauses take a *-ka* marker.

- (68) nu-khuruna hnumiye ibeuku nu-yada-ka sepultura tibuku
 1SG-roll 1SG.hammock when 1SG-see-SEQUENTIAL tomb over
 nu-duma-ka
 1SG-sleep-SEQUENTIAL
 ‘I rolled my hammock when I saw that I had slept over a tomb.’

Finally, if the serial verb construction seems exotic, note that something similar was common in sixteenth century English (the time of Shakespeare). An example would be *Come live with me and be my love*; constructions of this type have also survived especially in American English, as in *Let’s go eat!* for example.

3.3.4 Summary

Section 3.3 has shown that languages do not necessarily share the same syntactic strategies as the familiar European languages. Finite and non-finite subordination, where one clause is embedded inside another clause, is widely used in many language families, including non-European ones. But it’s important to realize that it’s not the only possible strategy. The two major alternative constructions are nominalization (a verb converted to a noun, so that the dependent clause takes on the properties of a noun phrase) and serialization, which does not involve any subordination, but instead has two finite verbs within the same predicate.

FURTHER READING

Hurford (1994) is helpful for further illustrations concerning both simple and complex sentences, auxiliaries and main verbs, matrix clauses and embedded clauses. Huddleston and Pullum (2002, 2005) provide comprehensive information about English clauses. On what are termed ‘complementation strategies’, the topic of Section 3.3, Dixon (1995) is good but advanced reading, which should be tackled only

after you've finished this book. Whaley (1997: Chapter 15) covers all types of complex clauses. See also T. Payne (1997, 2006).

EXERCISES

1. This exercise concerns a set of words that are possible candidates as English modal auxiliaries: *dare*, *need*, *ought (to)*, *used (to)* (the last two in their auxiliary uses are often represented by linguists as *oughta*, *useta*). All of these display both auxiliary and main verb syntactic properties. A set of properties is taken to be diagnostic of auxiliaries in English. Four central ones, some of which we've already met in Chapter 3, are the NICE properties:
 - a. Negation – an auxiliary, but not a main verb, can be directly negated by *not*:
 - (i) *We do / should / may not talk about that. / *We talk not about that.*
 - b. Inversion – an auxiliary, but not a main verb, can invert with the subject:
 - (ii) *Can/will/did Lill bake a cake for me? / *Baked Lill a cake for me?*
 - c. Code – an auxiliary, but not a main verb, can be used with an ellipsis (omission):
 - (iii) *Lill said she'd bake a cake, and she did/will/might too.*
**Lill said she'd bake a cake, and she baked too.*
 - (iv) *Kim should get his work finished on time, and so should Lee.*
 - d. Emphasis – an auxiliary, but not a main verb, can bear heavy stress for emphasis:
 - (v) *You say you might not go, but you **might**.*
*You don't think he read it, but he **did**.*
You don't think he read it, but he **read.*

Some additional properties are shared by standard English modal auxiliaries. They don't take the third person singular present tense *-s* suffix (**She **mays** leave* or **Kim **wills** arrive*), while main verbs do. And the auxiliaries in the standard set are also unlike main verbs in that they don't have an infinitive (**She **wants to** may*) and don't have an imperative (**May **leave!** vs. *Leave!**).

Task: Using the diagnostics just presented, work out (i) the ways in which *dare*, *need*, *oughta* and *useta* behave like modal auxiliaries, and (ii) the ways in which they behave like main verbs. There is no single 'right' answer, in part because different dialects of English have different usages of these words. Below I suggest some data that should get you started, but you'll need to provide some additional data of your own. Make sure you list such data in your response. Organize the answer clearly. **NB!** No grammaticality judgements are provided here, since mine may well differ from yours. Decide for yourself which are grammatical in your dialect and which are not.

- (1) *I daren't leave./I don't dare leave./He dares leave./He dare(s) not leave. /He daresn't leave.*

- (2) Dare you (to) pick up that spider? / Do you dare pick up that spider?
- (3) I might not dare to pick it up. / Well, Lill dared to pick it up.
- (4) Kim used not to / usn't to take any exercise. / Kim didn't use to take any exercise.
- (5) Used Kim to take any exercise? / Did Kim used to take any exercise?
- (6) She ought to stop eating so much chocolate. / She oughtn't to eat that. / She didn't ought to eat any sweets at all.
- (7) Ought/oughtn't she to stop eating chocolate? / Did she ought to stop eating chocolate?
- (8) I needn't go. / He need not / needn't go. / He doesn't need to go.
- (9) Do you need to leave? / Need you leave?
- (10) Kim needs a holiday.

2. Section 3.2 presented some tests for distinguishing root clauses in English from subordinate clauses. One construction discussed there shows up again in the data in (1) through (7).

Task: (i) What construction is it? (ii) What seems to trigger the appearance of this construction in these examples? (iii) Can you decide what property the examples have in common?

- (1) Not for any money would Lill pick up a spider. Neither will I, actually.
- (2) Rarely have we seen such snow before.
- (3) Never again must those students take the last train to Durham.
- (4) Under no circumstances should you press the red button.
- (5) Seldom can you find a better bargain than at Den's Dealership.
- (6) Not till after the weekend might those who are on strike return to their desks.
- (7) Only after 22.00 will there be another train.

- (iv) What issues are suggested by these additional examples?

- (8) She said that under no circumstances could she learn Irish.
- (9) I knew that not even on Sundays / only on Sundays could my daughter lie in bed till midday.

3. This exercise asks you to consider the possible positions and functions of complementizers cross-linguistically.

Task: Examine the data in (1) to (13) and work out: (i) what kinds of function the complementizers (in bold) appear to have in these examples; and (ii) what appear to be the possible positions that complementizers can take in the clause, cross-linguistically? Discuss each data set separately where necessary.

Hints

- Regarding question (i), the function of a complementizer is often simply to introduce a clause; this is the case for complementizer *that* in English. However, some of the complementizers here do more work than this, i.e. they bear some additional meaning.
- Note that the terms *NOM* (nominative) and *ACC* (accusative) in the Japanese data set are used to case-mark the subject (*NOM*) and the object (*ACC*), as outlined in Chapter 2.
- As was the practice in the text of Chapter 3, square brackets indicate the start and end of an embedded clause in these data.

A. Yaqui (Noonan 1985)

- (1) Tuisi tu?i [ke hu hamut bwika-kai]
 very good COMP the woman sing-COMP
 ‘It’s very good that the woman sings.’
- (2) Tuisi tu?i [ke hu hamut bwika]
 very good COMP the woman sing
 ‘It’s very good that the woman sings.’
- (3) Tuisi tu?i [hu hamut bwika-kai]
 very good the woman sing-COMP
 ‘It’s very good that the woman sings.’
- (4) *Tuisi tu?i [hu hamut bwika]
 very good the woman sing
 (‘It’s very good that the woman sings.’)

B. Japanese (Tsujimura 1996; Kuno 1978)

- (5) a. Hanako-ga susi-o tukurimasita
 Hanako-NOM sushi-ACC made
 ‘Hanako made sushi.’
- b. Hanako-ga susi-o tukurimasita ka
 Hanako-NOM sushi-ACC made COMP
 ‘Did Hanako make sushi?’
- (6) Taroo-ga [Hanako-ga kuru to] itta.
 Taroo-NOM Hanako-NOM come COMP said
 ‘Taroo said that Hanako was coming.’
- (7) Taroo-ga [Hanako-ga oisii susi-o tukutta to] itta
 Taroo-NOM Hanako-NOM delicious sushi-ACC made COMP said
 ‘Taro said that Hanako made delicious sushi.’

C. Irish (McCloskey 1979; Ó Siadhail 1989)

- (8) Deir sé [go dtuigeann sé an scéal].
 say.PRES he COMP understand.PRES he the story
 ‘He says he understands the story.’

- (9) Deir sé [**nach** dtuigeann sé an scéal].
 say.PRES he COMP understand.PRES he the story
 'He says he doesn't understand the story.'
- (10) Deir sé [**gur** thuig sé an scéal].
 say.PRES he COMP understand.PAST he the story
 'He says he understand the story.'
- (11) Deir sé [**nár** thuig sé an scéal].
 say.PRES he COMP understand.PAST he the story
 'He says he didn't understand the story.'
- (12) Ní dheachaidh mé ann.
 COMP go.PAST I there
 'I didn't go there.'
- (13) Chuaigh mé ann.
 go.PAST I there
 'I went there.'

4. In Section 3.1.4 we looked at some ways of forming clausal negation cross-linguistically. The Evenki example in (12) has a special negative auxiliary, while English has an independent negative word, *not* (though this is often optionally attached to auxiliaries, giving forms like *can't* and *shouldn't*). This gives us two of the three major ways of expressing grammatical categories listed in Section 3.1.4: a third strategy would be expressing negation via an inflection on the verb itself. All three strategies are exemplified in the following data (1) to (9).

Task: Work out which strategy – negative auxiliary, negative particle, or verbal inflection – is used for the negation in each example that is negative. (There are some positive examples for comparison.) Make sure you cite clear evidence for each answer. If any cases cannot be decided straightforwardly, or display more than one strategy, explain why. Finally, point out any *relevant* grammatical features or changes in the negative examples which don't occur in corresponding positive examples.

Hint

A negative auxiliary can be distinguished from a negative particle like *not* because an auxiliary expresses some of the grammatical categories associated with verbs generally, such as tense, person and/or number. An independent negative particle is just invariable, so will not be marked for any of these morphosyntactic categories. You can see this by comparing (11) and (12) in Chapter 3, and re-reading the discussion of these examples.

- (1) a. Si ə-tci-si bū-ra (Orok)
 you NEG-PAST-2SG give-PARTICIPLE
 'You didn't give.'

- b. Si ə-tcil bŭ-rə-si
 you NEG-PAST give-PARTICIPLE-2SG
 'You didn't give.'
 (J. Payne 1985a)
- (2) Anghofia / anghofiwch y caws!
 forget.IMPER.SG / forget.IMPER.PL the cheese
 'Forget the cheese!'
 (Welsh)
- (3) Paid / Peidiwch ag anghofio 'r caws.
 NEG.IMPER.SG / NEG.IMPER.PL with forget.INFIN the cheese
 'Don't forget the cheese.'
- (3) a. Gwall ampart eo va breur.
 very competent be.PRES.3SG my brother
 'My brother is very competent.'
 b. Gwall ampart n' eo ket va breur.
 very competent NEG be.PRES.3SG NEG my brother
 'My brother isn't very competent.'
 (Press 1986)
- (4) a. ama-wa-t b. ta-ka-wa-t
 1SG(SU)-go-PERF NEG-1SG(SU)-go-PERF
 'I went.' 'I didn't go.'
- (5) a. kpa-n amayak b. ama kpa-n tampan
 big-1SG be.1SG 1SG big-1SG be.NEG
 'I'm big.' 'I'm not big.'
 (Foley 1991)
- (6) a. apenim un an kasye
 father TOPIC NEG go
 'Father is not going.'
 b. apenim un ka-ci an-husyey
 father TOPIC go-NOMINALIZER NEG-do
 'Father is not going.'
 (adapted from Sohn 1999)
- (7) a. xola-xa-si b. xola:-si-si
 read-PAST-2SG read-NEG.PAST-2SG
 'You were reading.' 'You weren't reading.'
 (T. Payne 1997)
- (8) a. ́ tē ḱ
 he buy rice
 'He bought rice'
 b. ́ sé ḱ tē
 he NEG buy rice
 'He didn't buy rice.'
 (J. Payne 1985a)

- (9) a. Mae Aled yn darllen y llyfr. (Welsh)
 be.PRES.3SG Aled PROG read.INFIN the book
 'Aled is reading the book.'
- b. Dydy Aled ddim yn darllen y llyfr.
 NEG.be.PRES.3SG Aled NEG PROG read.INFIN the book
 'Aled isn't reading the book.'

5. Examine the English sentences in (1) to (8).

Task: (i) Mark in bold type the main verb (i.e. the lexical verb) in each clause. This will help you find where the clauses are. Now, (ii), decide which is the root clause in each example, and underline its main verb. Also, (iii), give at least one piece of evidence for the root status of each of these root clauses you've picked out, using the tests established in Section 3.2. Next (iv), underline each of the subordinate clauses. Give at least one piece of evidence that each clause you've chosen really is a subordinate clause, using the criteria established in Section 3.2. Then, (v), list the adjunct clauses and (vi) the complement clauses, giving some evidence for your decision in each case. Finally, (vii), say which matrix verb each of the complement clauses is a complement to.

Hint

Here is an example that I've done for you: *Kim has sometimes wondered how to cope with unexpected visitors.*

- (i) Kim has sometimes **wondered** how to **cope** with unexpected visitors.
 (ii) Kim has sometimes **wondered** how to cope with unexpected visitors.
 (iii) The *wondered* clause is the root clause here because (a) it can take a tag question: *Kim has sometimes wondered how to cope with unexpected visitors, hasn't he?* and (b) it can take subject/auxiliary inversion: *Has Kim sometimes wondered how to cope with unexpected visitors?* These tests are not relevant for the *how to cope ...* clause as this is non-finite.
 (iv) There is just one subordinate clause, *how to cope with unexpected visitors*. This can only be a subordinate clause in English, because it's non-finite.
 (v-vii) This is a complement clause; the complement to *wondered*. *Wonder* obligatorily selects an embedded interrogative clause (i.e. a clause introduced by a question word such as *how, why, whether* and so on).
- (1) Lee knows it's illegal but she still photocopied the entire book.
 (2) Kim can't accept that the earth was only formed 5,000 years ago.
 (3) That student with the unbelievably bright red sweatshirt over in the corner often stays in the gym till around 11pm.

- (4) Since you write so well, we hope to hire you to work on the student newspaper.
- (5) That you could spend so much time with Kim frankly amazes Lee.
- (6) Yesterday evening, both the manager of the bar and the person behind the desk expected to give that part-time job to the guy with the faded jeans.
- (7) Before the sun rose, we'd already run about three miles.
- (8) Meet me in my office for a brief chat after class has finished.

6. The examples in (1) to (6) are from a Melanesian language, Tinrin, first seen in Chapter 1, and are taken from Osumi (1995). They all show verb serialization, so you will need to re-read Section 3.3.3 before starting.

Task: (i) Work out what typical properties of verb serialization these examples show. Compare the grammatical and ungrammatical sentences where shown. Be as explicit as possible in your answer, and use the correct grammatical terminology. Then (ii) decide how and why the serialization in (1) to (4) is different from the serialization shown in (5) and (6). The forms *ri*, *rri*, *nrî*, *u* and *nrâ* are all pronouns.

- (1) a. u nrorri gadhu peci ei toni
1SG give waste letter to Tony
'I wasted a letter by giving it to Tony.'
- b. *u nrorri peci ei toni gadhu
1SG give letter to Tony waste
('I wasted a letter by giving it to Tony.')
- (2) a. ri ve fi toni
1PL.INC take go Tony
'We took Tony away.'
- b. *ri ve toni fi
1PL.INC take Tony go
('We took Tony away.')
- (3) a. rri ve mê arrò
3PL take come water
'They brought water.'
- b. *rri ve arrò mê
3PL take water come
('They brought water.')
- (4) a. nrâ nyôrrò mê ò
3SG cook come pot
'She cooked and brought the pot dish.'
- b. *nrâ nyôrrò ò mê
3SG cook pot come
('She cooked and brought the pot dish.')

- (5) ri ve nrî fi
1PL.INC take 3SG go
'We take it/him away.'
- (6) rri ve nrî mê
3PL take 3SG come
'They bring it.'