

How to analyze clauses: the many functions of the Operator and the related TIME Auxiliaries

1 Preview of this chapter

In the last chapter we saw the key role that the Operator plays, with the Subject, in distinguishing between an information giver such as *Alex might eat it* and a polarity seeker such as *Might Alex eat it?* But the Operator plays many more roles in the English clause than this. This chapter introduces ELEVEN system networks whose meanings it realizes, representing FIVE different strands of meaning - and it shows that it is possible (though rare) to find the simultaneous realization of features from up to FIVE of these system networks in a single instance of an Operator (as we will see in Section 10). This means that the Operator is able to display simultaneously more meanings than any other element of the clause - more meanings, even, than the Subject, which is often cited as the prime example of the way in which a single element can serve several different functions at the same time. In terms of the number of functions that it serves, then, the Operator is the most semantically rich element in the language.^a

It is not surprising, then, that if we want to understand the English clause it is vital to understand the meanings of the Operator - and this is why it is the main focus of attention in this chapter.

However, in the course of discovering the many different functions of the Operator, we will meet four other clause elements whose meanings are intimately bound up with it, and one further item - the morpheme *n't* - that can be added to it. The first two new elements are the **Infinitive Element** (almost always *to*) and the **Negator** (always *not*). Then towards the end of the chapter we will meet two very frequently occurring **Auxiliary Verbs** which also express important 'time' meanings. And these, like virtually all Auxiliaries, very often function simultaneously as the Operator - though they do not necessarily do so. (In this way they are like the Main Verb when it is a form of *be*, which we met in Section 5 of the last chapter.) And, as a complementary part of the growing picture of how TIME is expressed in English, we will note the role played by the type of Adjunct that expresses a 'specifying time position' (a **Time Position Adjunct**). But the main treatment of the many types of Adjunct will be found in Chapter 6.

The present chapter will conclude with a revised set of *Guidelines*, an analysis task upon which to try out the new *Guidelines*, and a discussion of how best to model the multifunctional nature of language. So the two partly interwoven themes of this chapter are the multifunctional nature of the Operator and the expression of TIME in English.

We will begin with a short account of the model of TIME assumed by users of English. This will enable us to relate the FORMS that we will encounter in the rest of

this chapter to their MEANINGS, and so to the corresponding CONCEPTS in the **belief system** of a user of English. Interestingly, this will involve us in considering not one but TWO models of time, both of which are reflected in the grammar of English.^b

If your only aim is to be able to analyze syntax and you are not interested in the functions that language serves, you could skip Sections 2 to 4 and go straight to Section 5. But if you want a brief overview of (1) the basic concepts for understanding how we express TIME in English, and (2) a summary description of the four different strands of meaning that are expressed in the modal verbs, you will find these in Sections 2 to 4.

2 How we express TIME in English: the basic concepts

2.1 The problem of how to locate an event in time

Every clause refers to an **event** which is in the mind of the Performer and which the Performer intends to transmit to the mind of the Addressee. It doesn't matter whether the event is factual or imaginary; whether it is being stated or asked about or proposed as a future action; or whether, if it is being stated, it is real or hypothetical or being asserted or denied - and so on. There is always an event. But in what follows we will take the simplest case and assume that the event actually has occurred, is occurring, or will occur. The explanation of the other cases follows from this.

The question is: 'How does the Performer ensure that the Addressee has a sufficiently clear picture of when the event takes place?' As the first part of the answer, I will give a brief (and necessarily inadequate) account of the beliefs about the nature of TIME which the semantics of English presupposes. The result will be that, when at later points in this chapter we examine the five major clause elements that may be involved in expressing 'time' meanings, we will already have established the basic concepts to which we need to refer.¹ But let me emphasize again that what we will be discussing in the present section are the **beliefs about the nature of time** that a speaker of English has - and not the 'time meanings' that are actually built into the English language. We will encounter these 'time meanings' at various points in the rest of the chapter.

The model of time with which English requires its users to operate is a linear model of time. In other words, we work on the assumption that the moment which we call 'now' travels inexorably on along a **time line**, passing through segments of it that we name in terms of units and sub-units such as years, months, days, hours, minutes and so on, as in Figure 4.1. Here the moment which is 'now' for me as I write these words is shown as a point in time during the month of June in the year 2003. So 'now' is the 'moment of utterance' (in a sense of 'utterance'

1. The five major clause elements that express 'time' meanings are the Operator, the Main Verb, the two Auxiliaries to be introduced in Section 11, and the Time Position Adjunct.

where it may be spoken or written).

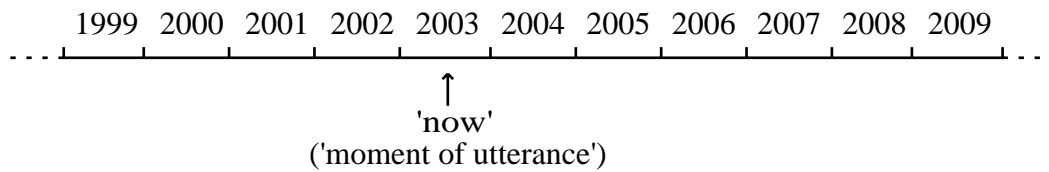


Figure 4.1: The ‘objective’ model of time as a ‘time line’

We will call the model of time in which the time line is segmented into units the **objective model**, and it is this model that underlies most common-sense science. As we will see, we often draw upon this model when using **specifying time positions** in **Adjuncts**, such as *in 1999* and *at five o’clock*.

However, it is not the objective model of time to which the meanings of the ‘tense forms’ of English refer. For this we need a fundamentally different and rather more complex model. We will call it the **performer-based model** of time. It is this model of time that underlies the semantics of time in English.

2.2 The concept of ‘time reference positions’

Consider the model of time presented in Figure 4.2. As you can see, this diagram, like that in Figure 1, contains a ‘moment of utterance’, and it is this that enables us to relate the two models to each other.

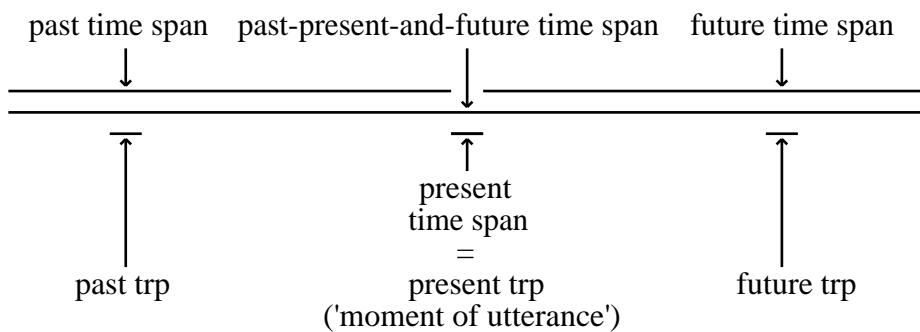


Figure 4.2: The primary time spans and primary time reference positions

Notice first the three **time spans** indicated at the top of the diagram - and then note that each has a **time reference position** that is located within it - these being indicated at the bottom of the diagram. (We will return to the concept of a ‘time reference position’ in a moment.) The **past** and **future time spans** are simply spans of time that stretch backwards and forwards in time from the ‘moment of utterance’. But the concept of the **past-present-and-future time span** requires further comment. Interestingly, by far the most frequent use of the ‘present tense’ form of verbs in English is NOT in fact to refer to the present moment, but to refer to an event which takes place over this much longer time span of ‘past, present and future’. This is true of ‘emotion’ Processes such as ‘liking’ in *Ike likes icecream*, and of other ‘stative’ Processes that inherently last for a long period of time, such as

the Process of ‘living’ in (1), and - most frequently of all - various types of ‘being’, as in *She is clever* and *she is in London all this week*.^c But this meaning of ‘past-present-and-future’ is also used with less long-term events such as ‘eating’ and ‘jogging’, as in (2). Interestingly, in the case of these ‘non-stative’ Processes the clause doesn’t refer to a single event, as in (1), but to a series of **repeated events** of ‘eating’ or ‘jogging’. And, as (2) demonstrates, it has this meaning even when there is no Adjunct to make this explicit, as in (2) - which we could extend by adding the Adjunct *every evening*.^d

- (1) Ivy lives in Cardiff.
 (2) Ivy jogs to keep fit.

However, we also occasionally need to refer to an event that actually does occur in the ‘present’, i.e. at the moment of utterance. Consider the clause in (3), which is spoken as part of a radio commentary on a football match:

- (3) Owen shoots!

Since the time span in (3) is clearly a different time span from the past-present-and-future time span in (1) and (2), we need to recognize the existence of a fourth ‘time span’ - a very brief one that corresponds to the moment of utterance.^e This is shown in the middle of Figure 4.2, below the line indicating ‘past-present-and-future’.²

We are now ready to consider the concept of a **time reference position (trp)**. The first of the three primary trps is the **present trp**. This is relatively easy to identify because it corresponds to the moment of utterance, and from now on we will replace ‘moment of utterance’ by the term **present time reference position**, or **present trp** for short. Note, however, that the present trp can be called upon to function as the time reference position for events that occur in any of the four time spans: the present time span, as in (3), the past-present-and-future time span, as in (1) and (2), the past time span, as in *Ivy has eaten it* (i.e. a time span stretching from some time in the past to the present, as we will see in Section 11.2) and the future time span, as in *Ike will mend the lock by Tuesday* (i.e. a time span stretching from the present to a time in the future, here ‘Tuesday’).^f So, for this reason (and others), there is no necessary connection between the time reference position in a clause and the time of the event to which it refers.

While it is relatively easy to define the present trp (except for the problem that it is constantly changing), the two concepts of the past and future time reference positions are more difficult to pin down - even though in real life situations the Addressee normally has no problem in working out, sufficiently precisely for his or her needs, when they are (usually from the evidence of the preceding discourse). Yet in principle the past trp may be located absolutely anywhere in the past time span, and the future trp absolutely anywhere in the future time span. The starting point for the Addressee’s search in the eternity of time is the fact that the end of the

2. This period is so short that we may be tempted to conceive of it as a ‘point in time’. But for a number of reasons (some theoretical, some practical) it is more helpful to treat any such apparent ‘point in time’ (e.g. *at five o’clock* in *She’ll arrive at five o’clock*) as a very short PERIOD of time.

past time span and the start of the future time span are both the present trp. So in this sense ALL trps are ultimately defined in relation to the present trp. The final point to make about the nature of the present trp is that it is the ‘present’ FROM THE VIEWPOINT OF THE PERFORMER - and only sometimes that of the Addressee, e.g. in face-to-face interaction. And this explains why we call this the **performer-based** model of time.g

Despite the difficulty of pinning down in a few words the way to identify the past and future trps, it is the concept of the time reference position that lies, as we will see in Section 3.1, at the heart of the semantics of ‘time’ in English.

2.3 The time position of the event and the specifying time position

Now we are ready to add two further concepts to the ‘performer-based’ model of time. Neither concept is difficult in itself, but it is important to distinguish between them - and between each of them and the concept of the time reference position.

The first new concept is the **time position of the event** itself. This is simply the period on the time line that the event occupies. Every event has a position on the time line, in principle - though sometimes the Performer does not know when it is, as in *When did Ivy live in Cardiff?* or when it is part of a hypothetical proposition such as *If Ivy lived in Cardiff ...* And even a ‘negative’ event such as *She doesn’t live in Cardiff* there is a period over which the negation of the proposition that ‘Ivy lives in Cardiff’ applies.

The second new concept is the **specifying time position**. A specifying time position is realized syntactically in a **Time Position Adjunct**, such as *in the 1990s* or *next year*. Its function is simply to tell the Addressee when, in the endless vastness of the past or future time spans, the event occurs. This is usually done in a rough and ready way, but sometimes it is done very precisely. It is here that the **objective model** of time comes into the picture, because it enables us to specify the time of the event in terms of units such as years, months, days and minutes, and so to provide a more exact specification of the time than is possible in the performer-based model.

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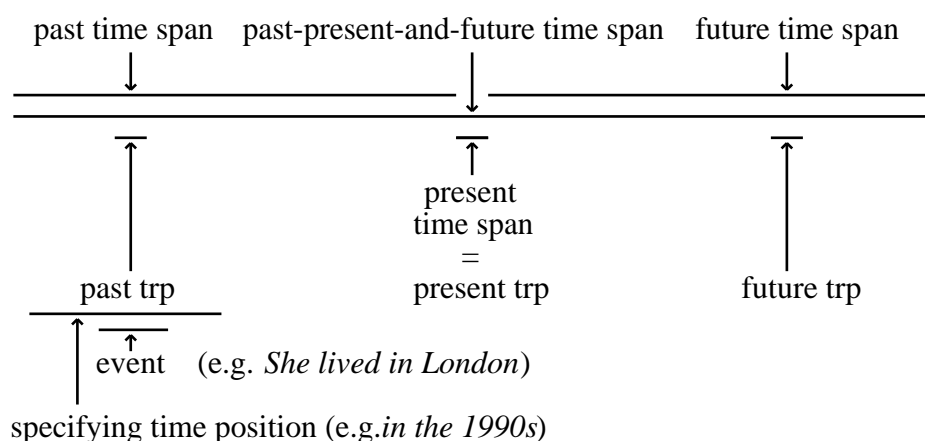


Figure 4.3: The specification of the time position of a past event by an including period: *She lived in London in the 1990s*

In the simplest case, the specifying time position is realized in the clause by naming a period on the time line, e.g. *on the first of January in 2010*. And the period of the specifying time position used to locate the event is, typically, simply a period that INCLUDES the period of the event - i.e. in (4) the 'living' event occurred at some time within the period of 'the 1990s'.³

(4) She lived in London in the 1990s.

A representation in diagram form of this simple 'inclusion' relationship between the event and its specifying time position is shown in Figure 4.3.^h

2.4 Dependent time reference positions

The last complication to be introduced here is the concept that, as well as the three **primary** time reference positions, there may be **dependent time reference positions**, as in the second clause in (5), and in (6):

(5) Fiona arrived at ten but Ivy had arrived at nine. [past trp from past trp]

(6) She will have read it by Monday. [past trp from future trp]

Several other types of dependent trp occur, but these two examples are sufficient to illustrate the point (will be developed further in Chapter 14).ⁱ

2.5 Summary

We have seen that users of English work with two models of time: the **objective model** with its **time line** marked off in named units and sub-units, and the **performer-based model**. The role of the **objective model** is to function as an aid to locating the time position of the event within the vast temporal distances of future and past time.

3. Thus it is not only physical objects such as people, animals and places that have names (as is often assumed), but also times. So: *the first of June* is to *the day after tomorrow* and *then* as *Ike Jones* is to *that tall guy* and *he*.

But it is the performer-based model that is needed to explain the meanings of the ‘tense forms’ of English. It consists of three **primary time spans** (plus one minor one), and a set of three related **primary time reference positions** (the past, present and future trps). The third concept is simply the **time position** of the **event** that is referred to in the current clause - and this, as we will see in later sections of this chapter, is not necessarily the same as the time reference position. The fourth concept is the **specifying time position** (realized as a Time Position Adjunct), which is intended to help to locate the event on the time line. The final concept is that of a **dependent time reference position**; one of these may be set up from each of the past and future time reference positions.

3 The role of the Operator and the Main Verb in expressing TIME

3.1 The primary TIME REFERENCE POSITION

Some of the concepts that we have met in considering the beliefs about time that are presupposed by the semantics of English are directly reflected in the semantics; others are not. One that is directly reflected is the concept of the time reference position. And one of the most important functions that the Operator serves is that of expressing the primary **time reference position (trp)** of the clause. In this section we will make the simplifying assumption that the trp coincides with the **time position** of the **event** itself - an assumption that often does not hold, as we will see in Section 11.2.⁴

The function of the Operator in expressing the trp is unlike the other functions to be described in this chapter, in that it expresses a meaning that is slightly more often expressed in a different element, i.e. the Main Verb. In other words, this is not a meaning that DEMANDS that there should be an Operator in the clause. The position is simply that, if one of the many other types of meaning that results in the presence of an Operator is chosen (as described in Sections 4, 6, 7, 8 and 9 of this chapter) the Operator will ADDITIONALLY carry the meaning of the ‘past’, ‘present’ or ‘future’ time reference position (as described in the last section).

However, if NONE of the many meanings that result in an Operator is chosen, then the Main Verb carries this meaning - and this happens in over half of the clauses in most types of text. But this still leaves around 40-50% of clauses in which the time reference position is expressed in the Operator, and the proportion rises above this in many types of spoken text.⁵ So the fact that all full clauses have a time reference position means that expressing this meaning is one of the major

4. Indeed, when we come to consider the case of the present trp, you will find that our first example - i.e. (1a) - refers to an event that INCLUDES the present trp, rather than coinciding with it.

5. There are also cases in which the past trp is expressed in an Auxiliary Verb, as in *She may have been there*, as we will see in Section 11.2.

the Operator, e.g. as in *She is feeling ill* and *She was feeling ill* (for which see Section 11.1). We will see in Sections 4.1 to 4.4 that it can reasonably be argued that most - but not all - uses of modal verbs are from the present trp. And, as we saw in the last chapter, when the Main Verb is a form of *be*, the ‘present’ or ‘past’ may also be expressed in an Operator that is conflated with the Main Verb (O/M).¹⁰

We should note that the **meaning of the Process** that is expressed in the lexical verb also contributes in important ways to expressing the ‘time’ meaning of the event to which the clause refers. In the cases of (1a) and (1b), it is the combination of (a) the meaning of ‘present trp’ with (b) the fact that the Process of ‘living’ denotes a ‘state’ that lasts for some time that conveys the meaning of a single event that occurs in the ‘past-present-and-future’ time span. However, when the Process is not ‘stative’ but ‘dynamic’ - as in *Ivy jogs to keep fit every evening* - the clause refers to a **series** of ‘jogging’ events’.

Here I am assuming a primary distinction between ‘stative’ and ‘dynamic’ events, and then within ‘dynamic’ events between ‘momentary’ and ‘durative’ events. See Chapter 6 of the *Functional Semantics Handbook* for the full picture of ‘aspectual type’ (or ‘Aktionsart’) that it is necessary to recognize, and for an account of the higher component of the model of language in which these concepts belong.

But it is stative events - and most frequently one of the types of ‘being’ - that occur most frequently with the simple present trp.

So far we have been considering the ‘stative’ Process of ‘living’ and the ‘dynamic’ Process of ‘jogging’. But the same present tense form is also used occasionally, as we noted in Section 2.2, to express the meaning of **instantaneous present**, when a ‘momentary’ event is being referred to, as in (4).¹¹

(4) Owen shoots!

It is an odd fact about the ‘present tense’ forms of lexical verbs that in most cases the only time when there is an overt marker of the **present tense form** is when the Subject is both ‘singular’ and an ‘outsider’ (i.e. not one of the interactants) - as in the case of the *s* on *loves* in *Ike loves Ivy*.¹² The major exception to

10. In Section 11 we will meet two types of Auxiliary Verb that are very frequently conflated with the Operator. Then in Chapters 6 and 14 we will meet several more types of Auxiliary, almost all of which are frequently conflated with the Operator. So the pattern in which a later element in the clause is also called upon to function as the Operator is not confined to the case when the Main Verb is expounded by a form of *be*.

11. The present tense form is also used to realize the meanings of the ‘vivid past’ and, though it occurs much less commonly, the ‘vivid future’. A typical use of the ‘vivid past’ is to refer to a past event as in a gossip narrative such as *And he comes over to me and he says* It may be helpful to point out that the ‘vivid past’ corresponds to both (a) Quirk et al.’s various uses of what they describe as ‘simple present referring to the past’ (pp. 181-2) and (b) their ‘simple present in fictional narrative’ (p. 183). So here, as elsewhere, we can simplify the grammar without loss of coverage by using semantic categories that cover several different types of situation. Yet another meaning of the present tense form is to refer to future time, where it carries the meaning of ‘imminent’ and ‘fully predetermined’. (This is Quirk et al.’s ‘simple present referring to the future’, 1985:182-3.)

12. This is known in traditional grammar as ‘third person singular’. In the explicitly functional description of English provided here we avoid the non-functional categories of ‘first, second and third persons’, preferring

this generalization is the most common verb of all, i.e. *be*. But if we regard *are* as the default form we can say that *be* largely conforms to the usual pattern. Like other verbs, its ‘singular outsider’ form, i.e. *is*, is distinctive, and it is only exceptional in also having a distinctive ‘singular performer’ form, i.e. *am*.¹³

As for the **past tense form**, the picture is mixed. While the vast majority of verbs have a form ending with *-ed*, as in (1a) to (2b) in Section 2.2, very many of the most frequent verbs have an irregular form - examples being *ate* for *eat*, *ran* for *run*, *saw* for *see* and *tore* for *tear*. The verb *be* has two ‘past tense’ forms, *was* and *were*, and it is the frequency of these forms that ensures that in most texts the irregular ‘past tense’ forms outnumber the regular ‘past tense’ forms.

The initial choices in TIME REFERENCE POSITION are therefore simply as shown in Figure 4.7 - where the dots indicate that there are further dependent systems, and the percentages show the likelihood that the feature will be chosen.

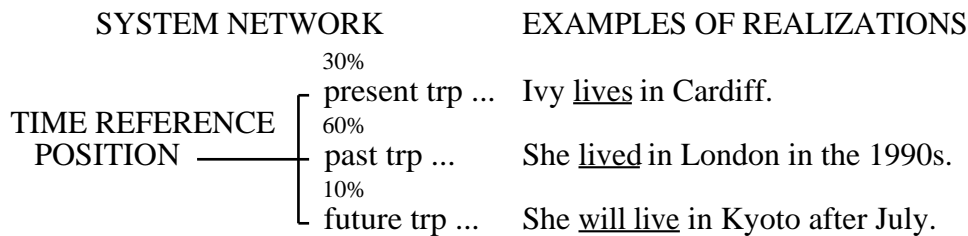


Figure 4.7:
The primary choices in the system network for TIME REFERENCE POSITION

However, there are several important systems that are closely related to this system, either by being entered in parallel with it or being immediately dependent on its features, and we will need to refer to some of these at later points in this chapter. Some of them build up secondary and even tertiary **dependent time reference positions**, such as the ‘past from past’ trp in the first clause in (5) and the ‘past from future from past’ trp in (6):

- (5) He had worked here for five years before he got a permanent post.
- (6) He was going to have mended it by Tuesday.

I will not describe these systems here, because that is not our task in this book. A full, integrated system network for TIME is given in Chapter 6 of *The Functional Semantics Handbook*. But the present book will introduce all the elements through which these meanings are realized, either later in this chapter or in Chapter 14.^k

instead the functional terms ‘performer’ and ‘addressee’ for the two ‘interactants’ (rather than ‘first person’ and ‘second person’), and ‘outsider’ (rather than ‘third person’) for any referent who is - or is treated as being - ‘outside’ the interaction, i.e. neither the performer nor an addressee.

13. While this is true of Standard English, there is no part of the language that is more subject to dialectal variation than the forms of the verb *be*, and it is a quirk of history that this particular pattern of forms has emerged as the standard.

3.2 The REALITY and DIRECTNESS systems

We come now to two more major systems, each of which can be best viewed as presenting options in a very different dimension of ‘time’ from that found in the TIME REFERENCE POSITION system. Yet each is closely related to it in the overall system network.

The first new system concerns the ‘reality’ of the time of the event. The primary choices in the system network for REALITY are displayed in the top half of Figure 4.8. The first system shows that a clause may refer to either ‘real’ or ‘hypothetical’ (i.e. ‘unreal’) time. But there are two types of ‘hypothetical’ meaning. In a clause in which the event - and so its time of occurrence - is ‘hypothetical’, we typically also state the condition under which the hypothetical event might be valid - and this is second hypothetical event. As a result there are usually two clauses: the ‘main’ clause, which we may call the **conditioned** clause, and a dependent clause, which we may call the **conditioning** clause. Each has its own type of ‘hypothetical’ meaning: a type that states the condition (‘conditioning’ in Figure 4.8) and the type that states the consequence of the condition (‘conditioned’ in Figure 4.8).

	SYSTEMS	EXAMPLES OF REALIZATIONS
REALITY	99% real	<i>She saw Ivy last week.</i>
	1% hypothetical	45% conditioning <i>If she had seen Ivy last week, ...</i>
		55% conditioned <i>... she would have known about it.</i>
DIRECT- NESS	98% direct	<i>She saw Ivy last week</i>
	0.1% reported with direct time	<i>(He said) that she saw Ivy last week</i>
	1.9% reported	<i>(He said) that she had seen Ivy last week</i>

Figure 4.8: The choices in the system networks for REALITY and DIRECTNESS and some examples of realizations (simplified)

What is the relationship of the REALITY system to the system for TIME REFERENCE POSITION? The answer is that, irrespective of whether we choose ‘past trp’, ‘present trp’ or ‘future trp’, we must also make choices among the features of the REALITY system. You can see examples of the two types of ‘hypothetical’ meaning at work for each of the three time reference positions in Examples (7) to (9).¹⁴

- | | |
|-----------------------------------|--------------------------|
| (7) If she had liked her teacher, | [past trp, conditioning] |
| she would have been happier. | [past trp, conditioned] |

14. Note, however, that there are several other forms that express ‘hypothetical’ time besides those illustrated here.

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(8) If she liked her teacher , [present trp, conditioning]
 she would be happier. [present trp, conditioned]

(9) If she likes her teacher next term, [future trp, conditioning]
 she will be happier. [future trp, conditioned]

We will come to the question of how to represent the structural relationship between the two clauses in each of these examples in Chapter 11.¹⁵

However, as well as the complex interdependency between these two networks shown in (7) to (9), there is a third major TIME system that interacts with these two. Irrespective of whether we choose ‘past’, ‘present’ or ‘future’ in the TIME REFERENCE SYSTEM and whether we choose ‘real’ or ‘hypothetical’ in the REALITY system, we must also choose in the system for DIRECTNESS.

The DIRECTNESS system is shown in the lower half of Figure 4.8. Its name draws on the concept in traditional grammar of ‘direct’ and ‘indirect speech’ - though it is used, both here and in traditional grammar, to refer to reports of writing as well as speech - and also to reports of thoughts. So in the examples that follow we could replace *He said ...* by *He thought ...*

In all of the examples that we have looked at so far we have assumed that ‘direct’ has been chosen in the DIRECTNESS system. But if we choose ‘reported’ the forms are often different - and this fact is illustrated in the second of each pair in the examples below. The first pair shows examples with a past.trp, the second ones with a present trp and the third with a future trp. The ‘direct’ form is shown in the first of each pair.

(10a) She lived in India in her childhood. [past trp, direct]

(10b) (He said)that she had lived in India in her childhood. [past trp, reported]

(11a) She lives in India. [present trp, direct]

(11b) (He said)that she lived in India. [present trp, reported]

(12a) She will live in India from next year. [future trp, direct]

(12b) (He said) that she would live in India from next year. [future trp, reported]

While we generally to present a report of an event directly - so choosing ‘direct’ in this system - there are times when we judge it right to present it explicitly as a ‘report’ of what someone has said or thought. And very often that ‘someone’ is in fact ourselves, as in *I said / considered that she was the right person for the job.*

Before we leave the DIRECTNESS system, we should note the informal feature of ‘reported with direct time’. The advantage of this choice is that it allows us to combine the sense of currency of the ‘direct’ form with an explicit report, as in *He said that she will live in India from next year.*

What part does the Operator play in these new types of ‘time’ meaning? As the examples show, it plays a major role. Indeed, there are other several other forms that realize ‘hypothetical’ meanings not shown here, such as *If she was / were to ...*

15. However, in the full system network for this complex area of meaning there are in fact three different versions of the REALITY system for the three time reference positions, because each has its own more detailed dependent systems. (For further details, see Chapters 5, 6 and 9 of the *Functional Semantics Handbook*.)

and *If she should ...* that also also require the Operator - so demonstrating once again that the Operator is a vital element in expressing TIME meanings.

We have seen the great variety of forms of expression that occur when a clause is ‘hypothetical’ or ‘reported’. But what happens if a clause is BOTH ‘hypothetical’ AND ‘reported’? The answer is that it is the more complex of the two that is used - i.e. the hypothetical form - as the similarity between (7) and the underlined portions of (13) illustrates:

(13) He said that if she had liked her teacher she would have been happier.

We will come back to the DIRECTNESS system again briefly in Section 4.5, because there are questions to be asked at that point about the use of the ‘past tense’ forms of modal verbs. (We will come to modal verbs in Section 4.)

Finally, we should ask ‘Do the REALITY and DIRECTNESS systems add to our developing picture of the strands of meaning that are expressed in a clause?’ As will probably be clear, the Cardiff Grammar regards each as a sub-network within the broad semantic area of TIME, and so as an enrichment of the **experiential** strand of meaning - rather than as the addition of a new strand.¹

3.3 A summary of the ways in which the three primary TIME systems are realized

We can summarize Section 3 by saying that the Operator, together with the Main Verb, plays a central role in expressing the three major types of TIME meaning described here. That is, it typically serves to state the clause’s ‘time reference position’, its ‘reality’ and its ‘directness’. It often does this by the absence of any explicit marker, as when ‘direct’ and ‘real’ are chosen. These three types of meaning are at least as important as the many other vital functions that the Operator plays in the clause. (There is a very much fuller treatment of the various meanings of TIME in English in Chapter 6 of the *Functional Semantics Handbook*.)

In TEXT ANALYSIS terms, most of the types of meaning introduced here are realized in either the Operator or the Main Verb - or both when the two are conflated, as in most uses of *be* as a Main Verb. This section has therefore introduced no new clause elements - unlike the types of meaning introduced in the remaining sections of this chapter.

There are many other systems that are dependent on the initial choices in the TIME REFERENCE POSITION system, most of which result in the use of an Auxiliary Verb - and so, typically, the Operator - because it is usually conflated with it. Some of these involve ‘past from past’ and ‘past from future’ time reference positions, as we saw in Examples (5) and (6) in Section 3.1. And there are further variants of these, some with even greater complexity. Two other important ‘time’ systems that introduce an Auxiliary - which usually also function as the Operator - are the systems for PERIOD-MARKING and RETROSPECTIVITY, and we will meet these in Section 11.¹⁶

16. Interestingly, while the system for RETROSPECTIVITY is dependent on features in the TIME REFERENCE POSITION, the system PERIOD-MARKING, which linguists often treat as being similar to it, is not. It is in fact a system that operates in parallel with the TIME REFERENCE POSITION system. See

4 The four functions of modal verbs as the Operator

The next four sections introduce the FOUR broad strands of meaning that are expressed in modal verbs. Each is quite different from the others, and each contains a rich variety of meanings of that type. Each is therefore treated as belonging to a separate strand of meaning in the ‘rope’ of the English clause.¹⁷

As we will see, it is a major characteristic of the modal verbs that ALL modal verbs, without exception, are AMBIGUOUS. Indeed, every modal verb can express a meaning that belongs to two or more of these four general types of meaning - and some express two meanings within one general type.

The first two types of meaning to be presented here are different from the second two, in that for each there are system networks that are largely devoted to meanings of this type that are realized in modal verbs - ‘validity’ and ‘control & disposition’. But the meanings of the second two types that are realized in modal verbs are bound up in a close systemic relationship with other meanings that are realized in very different forms - i.e. some types of ‘time’ and ‘mood’.^m

4.1 Modal verbs expressing ‘validity’

The first broad type of meaning for which modal verbs are used is to express the degree of confidence that the Performer has in the **validity** of what she or he is saying. However, as we will discover in the course of this book, there are many different ways of expressing one’s assessment of the ‘validity’ of a clause, and the type that we are considering here is ‘basic validity’. This is the type that is so ‘basic’ to the meaning that it is typically expressed in the Operator - an element that is at the ‘core’ of the meaning of the clause in many ways, as this chapter demonstrates throughout.

Basic validity is the most frequent type of validity by far.¹⁸ The following examples provide an introduction to just a few some of its range of meanings, and I give after each the semantic features that they exemplify. See Figure 4.9 for their places in a simplified system network for BASIC VALIDITY. These examples assume that in each case the features ‘real’ and ‘direct’ have been chosen in the REALITY and DIRECTNESS systems, and that the *trp* is ‘present’.¹⁹

Section 11 for these two further ‘time’ systems.

17. Many descriptions of the English modal verbs recognize the first two of the four types of meaning to be distinguished here, but none, so far as I am aware, recognize all four as distinct types. I have found that, in developing system networks for the meanings associated with the various modal verb forms, each of the sets of meanings that are available within the four broad types of meaning needs to be modelled in its own terms.

18. ‘Basic validity’ is also occasionally expressed in an Auxiliary Verb, as we will see in Chapter 14. However, there are several other ways in which we express ‘validity’, some being quite complex. We will meet one of these later in the present chapter, with the others being introduced in various later chapters.

19. I have used the *be ... ing* form of the verb in each case, to try to ensure that you interpret the example as referring to an event that is current at the time when the Performer is uttering the clause. (If I had used the simple form you might interpret some of the examples as referring to the future, e.g. you would probably

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- (1a) Ike **may** be feeding the baby. [possibility, clear, positive]
- (1b) Ike **might** be feeding the baby. [possibility, tentative, positive]
- (1c) Ike **will** be feeding the baby.²⁰ [prediction, positive]
- (1d) Ike **must** be feeding the baby. [conclusion, clear, positive]
- (1e) Ike **should** be feeding the baby. [conclusion, tentative, positive]
- (1f) Ike **can't** be feeding the baby. [conclusion, clear, negative]

Example (1f) illustrates the fact that *can*, which is hardly ever used in a 'positive' clause to express 'validity', occurs frequently when the clause is 'negative'.²¹ All the other modal verbs regularly express 'validity' - though with varying degrees of probability. (See Section 6 for the POLARITY system in English, where the primary choice is between 'positive' and 'negative'.)

We come now to an important fact about the 'validity' meanings of the modal verbs. This is that there are no modal verbs that express 'past' meanings that are equivalent to, say, *may*, *will* and *must*. The reason - which is obvious once it is pointed out - is that the only position in time from which the Performer can assess the validity of an event is the 'present'.²² This in turn explains why, when we wish to express our level of confidence in the validity of a past event, we do not use the 'past tense' form of a modal verb, such as *might* instead of *may* or *would* instead of *will*.²³ And this allows the language to exploit these forms to express further variants of 'validity', such as the two in the examples above with the feature 'tentative'. So forms such as *might*, *would* and *should* that express 'validity' - and that may at first sight appear to be 'past tense' forms of *may*, *will* and *shall* - are in fact either (a) alternative 'present' forms, as is *might* in (1b) and *should* in (1e), or (b) 'reported' forms, as described in Section 4.5 below.²⁴

Notice finally that the first choice in the BASIC VALIDITY network is whether or not to express a 'validity' meaning at all. This expresses the interesting fact that the strongest statement that a Performer can make about the validity of a clause is to

interpret *Ike will feed the baby*, which corresponds to (1c), as referring to the future, and *Ike may feed the baby*, which corresponds to (1a), as an indirect type of 'permission giver'.

20. If we add the Adjunct *at present* to this example, it makes it clear beyond doubt that this is not the 'future' sense of *will*. This 'prediction' sense of *will* can be applied to 'present' situations, as here, and also to 'past' situations, as in *He will have arrived there yesterday, I reckon*. The key concept in 'prediction' is the Performer's belief that evidence will become available to the Addressee at some future time, and that it will corroborate the information given in the clause about a 'past', 'present' or 'future' event.

21. The only situation in which it occurs regularly is as a direct contradiction of a use of *cannot* or *can't*, i.e. in a dialogue such as: A: *His story can't be true*. B: *It can!* Here the form of the item that *can* contradicts licenses the use of the positive form of *can* in its 'validity' sense.

22. Here we are assuming that 'direct' has been chosen in the DIRECTNESS system, as in the examples above. We will consider what happens in 'reported' clauses in Section 4.5. 'Hypothetical' clauses have their own range of meanings and do not select in this system.

23. Instead we use a modal verb of the type illustrated here and the Auxiliary Verb *have*, as described in Section 11.2, as in *Ike may have been feeding the baby (at four o'clock this morning)*.

24. However, while the VALIDITY may be being assessed from the Performer's present, this does not mean that the EVENT in examples such as *Ike may have been feeding the baby (at four o'clock this morning)* is viewed from the present trp - as we will see in Section 11.2.

make no statement at all about its validity - as a comparison of the meanings of the examples in Figure 4.9 shows. In other words, *Ike is feeding the baby* makes a stronger claim about the validity of the clause than *Ike must be feeding the baby*.²⁵

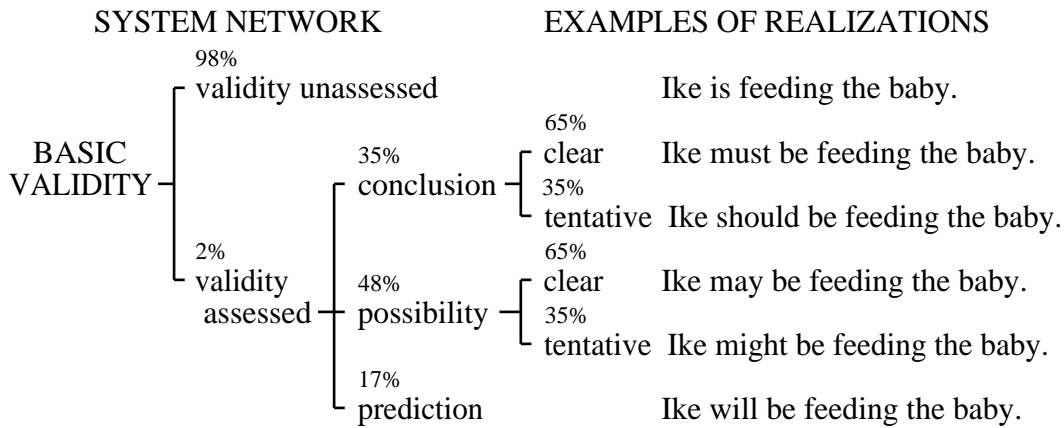


Figure 4.9:
Some primary choices in the network for BASIC VALIDITY (simplified)

To summarize, then, we can say that the Operator is the primary location for the expression of the Performer’s level of confidence in the validity of what she is saying or writing - which is why it is termed ‘basic validity’. There is a full treatment of the range of meanings in the ‘basic’ type of ‘validity’ - as well as all the other types - in Chapter 8 of the *Functional Semantics Handbook*.

4.2 Modal verbs expressing the ‘experiential’ meanings of ‘control & disposition’ (‘modulation’)

We turn now to the second of the four broad types of meaning that are expressed through modal verbs.)ⁿ This includes (a) various sources and degrees of **control** (i.e. power over people and events) - and (b) certain ways of expressing the **disposition** of whatever object - typically a person - is the Subject of the clause. Here the term ‘disposition’ is being used in a broad sense that includes ‘willingness’, ‘insistence’, and ‘ability’ (whether physical ability or ‘know-how’ ability).²⁶ Although these are all clearly types of ‘experiential’ meaning, there is no noun in everyday English that covers them all, so when we require a one-word alternative to what we will ordinarily call the ‘control & disposition’ meanings, we will use Halliday’s rather less transparent term ‘modulation’.^o

When these ‘control & disposition’ types of meaning are used, there is typically a Participant in the clause who performs some type of ‘action’ - for example, *Ike* in Examples (2a) to (2h) below. So, in a clause that refers to a ‘state’ rather than a

25. Indeed, *Ike is feeding the baby* is even stronger than *Ike is quite definitely feeding the baby*, in which the strongest possible type of Validity Adjunct is used. See Note 3 in Section 6.8 for a further comment on the Validity Adjunct, and Chapter 6 for an introduction to the full range of types of Adjunct.

26. In Chapter 14 we will see that meanings of ‘liability’, ‘habit’ and even ‘unintentionality’ are also included within the term ‘disposition’.

‘dynamic’ event, as *Ivy must be a doctor*, the meaning of *must* is much more likely to express a ‘validity’ meaning. But the meaning of *must* in *Ike must feed the baby* could easily be either ‘validity’ or ‘control’. For example, if a sentence beginning *Ike must feed the baby* were to continue ... *in the middle of the night, because Ivy has told me that she almost always gets a full eight hours of sleep*, the word *must* would have the ‘validity’ meaning of ‘conclusion’. But if *Ike must feed the baby* continued *regularly, or she won’t put on weight properly*, the word *must* would have the ‘control’ meaning of ‘obligation’, and more specifically, ‘important’.

Here are a few examples of ‘control & disposition’ uses of modal verbs. As with the ‘validity’ modals in the last section, I have indicated the semantic features that have been chosen in generating them to the right in square brackets. See Figure 4.10 for their place in a simplified system network.

- | | |
|---|--------------------------------|
| (2a) Ike must feed the baby. | [obligation, important] |
| (2b) Ike has to feed the baby. | [obligation, simple, unmarked] |
| (2c) Ike ought to feed the baby. | [recommendation, re-enforced] |
| (2d) Ike can/may feed the baby. | [permission] |
| (2e) Ike can touch the ceiling. | [ability] |
| (2f) Ike will feed the baby. | [willingness] |
| (2g) Ike WILL keep feeding the baby
(when she really needs to sleep). | [insistence] |
| (2h) This plant must have water. | [inherent nature, requirement] |

The most frequently used modal verbs of this type express various sub-types and degrees of ‘control’. These typically involve the concept that there is external pressure on the referent of the Subject of the clause, and that it comes from some figure of **authority** - either an individual or a social group. Examples (2a) to (2c) illustrate these. This ‘authority’ is often the Performer of the utterance (especially with *must*), but it may equally well lie with some other person or group. Indeed, it is a key aspect of this ‘basic’ way of expressing the concept of ‘control’ that the ‘authority’ for the control is left unspecified - as it is in all of these cases. Sometimes authority is exercised merely by responding to what we will refer to as a ‘proposal for action’, i.e. by giving ‘permission’, as in (2d).

The next most frequent type are various types of ‘disposition’ that are attributed to the referent of the Subject of the clause.²⁷ Examples (2e) to (2g) illustrate three types. As with (2a) to (2d), the Subject is almost always a living creature and it is usually human. Interestingly, the two typical preconditions to asking someone else to carry out an action (such as feeding a baby) are the first two types of ‘disposition’ illustrated here - i.e. that the Subject is **able** to perform the action (so is ready - or ‘disposed’ - to do it in terms of their ability) and is **willing** to do it (so is ‘disposed’ to do it as far as their willingness is concerned.²⁸ Notice too that the

27. It would in fact be more accurate to talk of the ‘Subject Theme’ of a clause, because sometimes the Subject has no referent (as we saw in Chapter 3). We met the concept of the Subject Theme briefly in Section 7.5 of Chapter 3, and it will be introduced properly in Section 3 of Chapter 6.

28. But note that this does not mean that we are considering here a type of ‘interpersonal’ meaning; we are still TALKING ABOUT someone’s ability or willingness, etc., to perform an action, and the Subject may be an

main way of realizing the difference between ‘willingness’ and ‘insistence’ is through intonation or, as in (2g), a written expression of ‘emphasis’ such as the use of capital letters or underlining.²⁹

The third type of ‘modulation’ meaning is also, in a sense, a type of ‘disposition’ - which is why we can refer to the ‘modulation’ meanings collectively by the more easily understood name of ‘control & disposition’. But in this type it is the ‘inherent nature’ of the Subject that ‘requires’ or ‘enables’ the event, as in (2h - and since such objects are typically non-human it isn’t really appropriate to use the term ‘disposition’ for them. Indeed, we have had to change the event in the example.³⁰

Finally, notice that we have now seen the modal verb *can* in use to express three different meanings. Two are ‘experiential’ meanings, i.e. the ‘control’ meaning of ‘permission’ and the ‘disposition’ meaning of ‘ability’, as in (2d) and (2e) respectively. And since *can* is also regularly used for ‘negative possibility’ (as we saw in (1f) in the last section), *can* as the Operator has three frequent meanings.

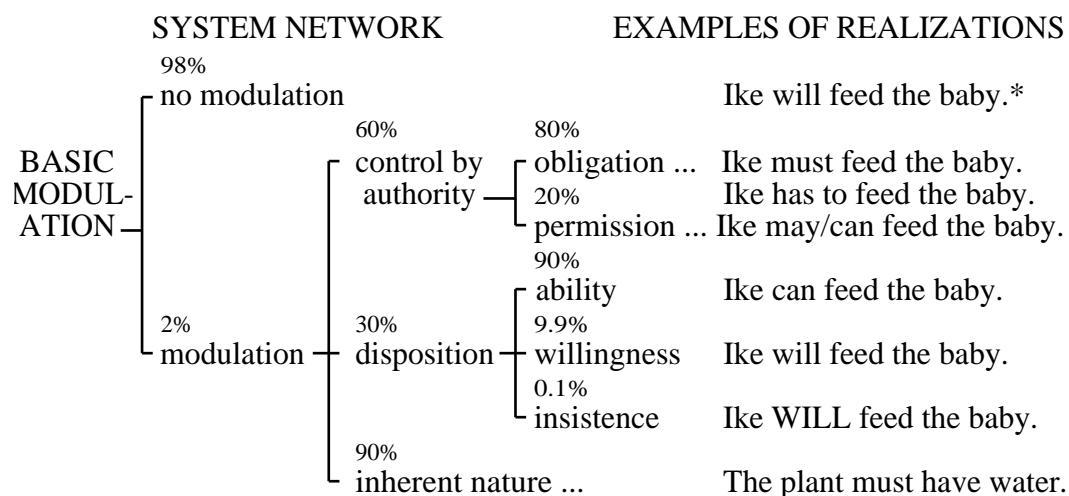
All these types of ‘experiential’ meaning are brought together under heading of the term ‘modulation’. Figure 4.10 gives a simplified picture of a few of the main choices in the system network for BASIC MODULATION. There is in fact not just one modulation’ network but three different ones: one for each of the ‘past’, ‘present’ and ‘future’ trps, with each making available to the user a different set of options. The network in Figure 4.10 is one is for ‘future trp’. Perhaps its major simplification is that it doesn’t show the further systems that are dependent on [obligation] - which options that foreground different aspects of ‘obligation’ that are realized in *must*, *have to*, *have got to*, *should* and *ought to*. (A very much fuller treatment of the wide range of options in this type of meaning can be found in Chapter 4 of the *Functional Semantics Handbook*.)

outsider - as well as the Performer or the Addressee.

29. There are several other uses of modal verbs to express distinct ‘modulation’ meanings that are not mentioned here. Indeed, there are other ways of expressing ‘control from inherent nature’ that draw on the analogy of ‘ability’, as in *The sports day can take place indoors*.

30. Often the ‘control’ in such uses of modal verbs is seen as a ‘natural law’ - and here the use of the word *law* gives away the fact that we regard ‘control by (a law of) nature’ as similar in many respects to ‘control by (a law of) society’. So it seems that we find it natural to extend the concept of ‘authority’ from the social world to the natural world.

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* Note that here *will* realizes the meaning of 'future', and not 'willingness' or 'insistence' (as shown lower in the network), nor 'prediction' (as in the VALIDITY network in Figure 4.9).

Figure 4.10:
Some primary choices in the network for BASIC MODULATION (simplified)

We should now ask: 'Since these are **experiential** meanings rather than **validity** meanings, and since all of the examples above have the **future** as their time reference position, are there equivalent forms for each that express the equivalent meanings when they refer to **present** and **past** events?' The rather unsatisfactory answer is 'It depends...' That is, most of the same forms are used for events that occur in the 'past-present-and-future', but for 'past' events it depends on which modal verb it is. In some cases a 'past tense' form is available and in some contexts it may be preferred. For example, (2i) illustrates the 'ability' sense of use of *could* that corresponds to (2e), and (2j) illustrates the use of *could* in its 'permission' sense, so corresponding to ((2d).

- (2i) Fred **could** open beer bottles with his teeth at the age of fifteen.
- (2j) (On Sundays) Fred **could** feed the baby (but he wasn't allowed to on weekdays).

The past equivalent of (2b) and (2g) also occurs quite frequently, as (2k) and (2m) illustrate:

- (2k) Fred **had to** feed the baby.
- (2l) Fred **WOULD** keep feeding the baby (when she needed to go to sleep).

But there is simply no equivalent 'past tense' form of *must*, *ought to* and *should*. The form *had to* is usually used as a substitute for the missing 'past' form of *must*, since the meaning of *has to* is close to that of *must*, but there is no close past equivalent to *ought to* and *should*. But even when there is an equivalent 'past tense' form, as in the four cases illustrated in (2i) to (2l) above, alternative forms are often preferred. Examples covering the range of meanings in (2a) to (2g) - though not in a one-to-one relationship - are *Fred was obliged / advised / allowed / able / willing /*

determined to feed the baby.

As you can see, all of these examples require more than one word to express the ‘control’ or ‘disposition’ (e.g. *was able to*), and this in turn involves additional elements. We will therefore leave the explanation of how to analyze them to Chapter 14.

So the position is that English lacks **past** forms - and so meanings - for some of the modal verbs when they are used to express ‘control & disposition’. But where clauses include modal verbs that are **reported** the position is very different - as Section 4.5 shows.

4.3 Modal verbs expressing TIME meanings

The third of the four important uses of the Operator is for referring to **time**. We saw in Section 3.2 that, when the time reference position (trp) is in the future - as in (3a) and (3b), the Operator is nearly always used.³¹

(3a) Fred **will** be in London tomorrow.³²

(3b) I **shall** join him the day after tomorrow.³³

Here I will simply list a few other types of ‘time’ meaning that happen to be expressed in modal verbs, in order to demonstrate the importance of their use for this purpose too. These are:

- 1 ‘hypothetical future’ time (which we first met in Section 3.2), as in each of the two clauses in each of (4a) and (4b), and
- 2 ‘repetition over a long period of time in the past’, as in (5).

31. One exception is the use of the ‘present simple’ form to express future time, as in *She starts her new job next week*. Other forms, such as (a) *She is starting work next Monday* and (b) *She is going to start work next Monday*, do not use a modal verb as Operator - but they do use the Operator - as we will see for (a) in Section 11 of this chapter and for (b) in Chapter 14.

32. Clearly, there is the possibility that it will be hard to distinguish, when analyzing texts at the level of meaning, between (a) ‘future’ time, as in (3a); (b) the ‘prediction’ type of ‘validity’, as in (1c); (c) the ‘willingness’ sense in (2f); and (d) the ‘insistence’ sense, as in (2g). But in practice problems only normally arise in distinguishing between ‘future’ and uses of ‘prediction’ that refer to a future event - and for obvious reasons. The existence of this ambiguity does not invalidate the distinction (as some descriptions of English seem to imply); it simply gives us the meanings in terms of which we can discuss whether given examples are ambiguous or perhaps represent a ‘blend’.

33. The use of *shall* in spoken usage has steadily diminished over the last half century, so that its use to express the meaning of ‘future’ when the Subject is *I* or *we* is now restricted to the older generations and very formal contexts (and often both). It is sometimes said that it remains in use for more users in the ‘interrogative’, but the small continuing use of the forms *Shall I ...* and *Shall we ...* in speech is not in fact due to their use in polarity seekers that happen to have *shall* as the Operator, but to the fact that they express certain other MOOD meanings. Thus *Shall I ...* expresses a simple ‘offer’, while *Shall we ...* expresses the meaning of an ‘invitation’ to a shared event. And ... *shall we?* may occur as a Confirmation Seeking Tag Adjunct, e.g. *Let’s go soon, shall we?* Thus *Shall I go now?* is an ‘offer’, while *Will I go now (or won’t I)?* is a ‘polarity seeker’ (probably one where the Performer is thinking aloud). On the other hand, *shall* continues to be used in formal writing, though more frequently in its ‘volitional’ rather than its ‘future’ sense, and more frequently in British English rather than Americal English (Biber et al 1999:488). Nonetheless its use is decreasing steadily, even in academic writing, and it is not used in its ‘future’ sense in this book. Indeed, the house style of one well-known American academic publisher of linguistics books actually requires that all ‘future’ uses of *shall*, as in *as we shall see in Chapter 10*, shall (sic) be changed to *will*.

The following examples remind us, as we saw in Section 3.2, that the TIME meanings of English include various types of ‘hypothetical’ time as well as the ‘real’ time meanings of ‘past’, ‘present’ and ‘future’.

- (4a) If Ike **was/were to** eat any more, he **would** be ill.
- (4b) If Ike **should** eat any more, he **would** be ill.³⁴
- (5) I **would** visit my grandmother every Saturday.

4.4 Modal verbs expressing MOOD meanings

In the last three sub-sections we have sampled three of the four major types of meaning that are expressed in modal verbs. The fourth is an important set of meanings that express the MOOD of the clause, e.g. the use of *could* (followed by *you*) in *Could you open the window?* and *shall* (followed by *I* or *we*) in *Shall I open it for you?*

This rich set of uses of the modal verbs will be explored more fully in Sections 3 and 4 of the next chapter, so I will say no more about them here. Further structures that realize MOOD meanings will be added in Chapter 14, but the fullest treatment of MOOD meanings comes in Chapter 7 of the *Functional Semantics Handbook*, where you will find a comprehensive semantics of MOOD.³⁵

4.5 Modal verbs in reports of clauses (whatever type of meaning they express)

So far we have been assuming that the modal verbs are being used to express **direct** meanings - in contrast with **reported** meanings, e.g. as in *Ivy saw it* rather than *He said that Ivy had seen it*. The question is: ‘How are the ‘reported’ meanings of the modal verbs typically expressed in English?’ This concept of a ‘report’ includes both a report of what someone has said or written and a report of what someone has thought.

In Figure 4.8 in Section 3.2 we met the system for DIRECTNESS. In this system the options are: ‘direct’, ‘reported with direct time’ and ‘reported’. Since ‘reported with direct time’ uses the same forms as ‘direct’, we only need to think here about how the choice of ‘reported’ is expressed.

In Section 4.2 we saw that only some of the modal verbs that express a meaning of ‘control’ or ‘disposition’ have a ‘past tense’ form, and that English typically prefers - and often needs - to use a more syntactically complex form such as *was allowed to* or *was able to*. So we should now ask: ‘Are these more complex forms also needed for the ‘reported’ forms of such verbs - and indeed for their three other uses, i.e. in their ‘validity’, ‘time’ and ‘mood’ senses?’

34. Here, *should* is treated as being either an old-fashioned usage or a consciously elegant, ‘highflown’ style (or both) - as also is the form *were to* in (4a), though to a lesser extent.

35. Notice that here we are considering the contribution to MOOD meanings of the INTERNAL MEANING OF THE ITEM that functions as the Operator. This is quite different from the contribution to the expression of MOOD of the Operator and the Subject, which is a contribution that is made by the the simple fact of the Operator’s presence - irrespective of the word that expounds it. But both are contributions to the expression of the same general type of meaning.

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The answer is that precisely the same set of forms is used for all four types of modal verb in ‘reported’ clauses - and that this form is what is traditionally (but misleadingly) referred to as the ‘past tense’ form of the modal verb. The fact that this is sometimes the same as the present form (e.g. *should*, *would* and *might*) does not affect this valuable generalization.³⁶

Notice that these ‘past forms’ are used WHEN WE REPORT THE USE OF A MODAL VERB FROM THE PAST, as in Table 4.1. Interestingly, the form of the modal verb in a reported clause does NOT change when the report is from the present, e.g. as in *He thinks that many of the terrorists have simply moved out of Afghanistan into the neighbouring parts of Pakistan.*

Table 4.1 shows a representative sample of the ‘reported’ forms of modal verbs in English. The original text is given in the left hand column, and the reported equivalent is shown in the right hand column. Since we may report a thought as well as a spoken or written message, we must allow for the middle column to be *Ivy thought that* as well as *Ivy said that* ...

<i>original text or thought</i>	<i>reporting clause</i>	<i>reported clause</i>
He may be in London.	Ivy said that ...	he might be in London.
He might be in London.	Ivy said that ...	he might be in London.
He can’t be in London.	Ivy said that ...	he couldn’t be in London.
He must feed the cat.	Ivy said that ...	he had to/must feed the cat.
He should feed the cat.	Ivy said that ...	he should feed the cat.
He is to feed the cat.	Ivy said that ...	he was to feed the cat.
He would feed the cat, if...	Ike said that ...	he would feed the cat, if...
He will feed the cat.	Ike said that ...	he would feed the cat.
Will you feed the cat?	I asked Ike if ...	he would feed the cat.
Could you feed the cat?	I asked Ike if ...	he could feed the cat.

Table 4.1: Examples of the various types of ‘report’ forms of modal verbs

In Table 4.1 the first three examples report a ‘validity’ meaning, the second three a ‘control’ meaning, the next two a ‘time’ meaning, and the final two a ‘mood’ meaning - so illustrating the fact that there are ‘report’ forms for all the modal verbs, irrespective of their type of meaning - which is just what one would expect.

However, while there is often a different ‘reported tense’ form when the modal verb is ‘reported’, e.g. in the cases of *will*, *may*, *can*, *is to* and *has to*, in the cases of *could*, *would*, *might*, *should* and *ought to* the same form is used. But in the case

36. So there is no need to bring into the picture the syntactically complex alternative forms that are used to express the nearest equivalent to a form of a ‘control & disposition’ meaning, such as *was allowed to*. However, if the original text or thought contained a form such as *is able to*, the ‘reported’ form would of course use the equivalent ‘past’ form, i.e. *was able to*.

of *must* a form of *have to* is usually preferred.

The conclusion, then, is that even when we complicate the semantics by combining the 'time' meaning of 'reported' with one of the other four types of meaning, the syntax remains a simple matter. Once again the complexity is contained within the Operator - with the addition of the Infinitive Element *to* in the case of *had to*.

5 The forms of the 'modal verbs' that function as the Operator

5.1 The full set of the forms of the modal verbs

We now have an introductory picture of the considerable array of MEANINGS that the modal verbs express - and, as you can see, analyzing them at the level of semantics is quite a complex task. At the level of form, however, analyzing them is usually very easy. This is because:

Almost all modal verbs function as Operators (99% reliable).

And this is true, WHATEVER TYPE OF MEANING THEY EXPRESS. Essentially, all you have to do to ensure that this aspect of your syntax analysis is correct is to remember the list of fourteen expressions (mostly a single word) given below in the first two rows of Table 4.2. Note the 'fading' forms of *shall* and *should*, and also that the forms of *be* as Operator are typically followed by *to*, and that the forms of *have* as Operator are typically followed by *got to*.³⁷

Full modal forms as Operator:			
will	shall*	can	may
would	should*	could	might
		must	ought (to)
		am/is/are (to)	have/has got (to)†
		was/were (to)	had got (to)†
Contracted 'modal verb' forms:		'll <i>for</i> will	'd <i>for</i> would
Contracted forms of the verb 'be':		'm <i>for</i> am	's <i>for</i> is
		're <i>for</i> are	
Contracted forms of the verb 'have':		've <i>for</i> has	's <i>for</i> has
		'd <i>for</i> had	
* These are cases of 'fading usage' among many younger people, except when they are used to express MOOD meanings, as in <i>Shall I ...?</i> and <i>Should we perhaps...?</i>			
† But not <i>have/has/had to</i> , where in Modern English the form of <i>have</i> rarely functions as the Operator (see 5.7). This case and that of <i>have/has/had got to</i> are introduced in Chapter 14.			

Table 4.2: The modal verbs in modern English that can be the Operator

In addition to these items, however, there are a few cases where an interesting change is occurring in the usage of current speakers of English. This change is to

37. In Chapter 14 I will introduce the two sets of forms of (a) *have/has/had to* and (b) *have/has/had got to* - both of which express meanings fairly similar to *must*. But *have*, *had* and *had* in *have/has/had to* do not normally function as Operators in Modern English. In contrast, *have*, *had* and *had* in *have/has/had got to* do, which is why they are listed in Figure 4.2.

treat a verb that has till very recently been an Operator AS A VERB THAT IS NO LONGER AN OPERATOR. These cases are described in Sections 5.7 and 5.8, but they are listed here in Table 4.3 to make it easy to refer to these two summary tables of modal verb forms. The examples in Table 4.2 are cases of what we will call ‘fading usage’.³⁸

<i>Full forms:</i>	have / has / had (to)*	need	dare
<i>Contracted forms</i>	've	's	'd
*It is only the lexical and modal uses of forms of <i>have</i> whose use as an Operator is fading - and not the Auxiliary uses to be met in Section 11.			

Table 4.3: Verbs with fading usage as the Operator

To summarize so far: we can say that the words listed in Table 4.2 are ALWAYS to be analyzed as **O**, and the items listed in Table 4.3 are SOMETIMES to be analyzed as **O**, e.g. when found in text from before the 1980s, or a later text that is spoken or written by an older person, or a fictional representation of such texts.³⁹ (Tables 4.2 and 4.3 also include the contracted forms given in Section 5.6 of the last chapter.)

Clearly, we need a definitive test for the Operator, in order to be in a position to make decisions in such cases - and the next section provides this.

5.2 The Operator Test

In *Guidelines 1*, the first criterion for identifying the Operator was to check an incomplete list of modal verbs. Now that we have the full list of modal verbs that expound the Operator in modern English (in Tables 4.2 and 4.3), the *Guidelines* at the end of this chapter can simply list them. We will continue to rely on this list as the first indication that an element is functioning as the Operator, but at this point we will add to the set of text analysis tools established in the last chapter a definitive test for the Operator.⁴⁰

This ‘definitive test’ is simply an adaptation of the wording for the test for the Subject in *Guidelines 1*.⁴¹ It is as follows:

The Operator (O) is the word which, by occurring before or after the Subject (S), shows whether the clause is an **information giver** or a **polarity**

38. There is another potentially ‘borderline’ case, namely *used* in examples such as *She used to live around here, ??Used she to live here?* and *She didn’t use to live here*. But I have never found this in a naturally occurring text and it is omitted from the list on the grounds of its extreme unlikelihood. See Section 5.2 of Chapter 14 for *used* as an Auxiliary Verb.

39. The exceptions are cases where a superficially similar item is serving a totally different function, such as *will* in *Have you made your will yet?* and *can* in *I’ve opened the can*.

40. However, it requires the addition of ‘**or O/X**’ after **O/M** on both lines to be complete. We will meet **O/X** in Section 11.

41. The fact that the test for the Subject and the test for the Operator are essentially parts of the same test does not make the test any less viable; it simply means that you get two elements for the price of one test.

seeker -

i.e. when **S O (or S O/M or S M)**
becomes **O S (or O/M S)**.

All of the modal verbs in Table 4.2 always pass it. But it is not the case that all - or even most - instances in texts of the words in Table 4.3 pass it, and we will return to consider these occasionally awkward cases of ‘fading usage’ in Sections 5.7 and 5.8.

Apart from these cases of ‘fading usage’, the picture so far has been extremely straightforward. But now we come to a frequent but relatively minor complication - the word *to*, functioning as an element of the clause.⁴² We will meet it in the next two sections in the expressions *ought to* and *am/is/are/was/were to*, but it will also reappear, serving a number of quite different functions, at various other places - most importantly in Chapters 11 and 14.

5.3 Analyzing *to* with modal verbs: *ought to*

We will consider the problem of the syntax of the little word *to* in contexts such as (1) below. The situation is that Ivy has had to go into hospital for a minor operation, and her friends are discussing who will visit her, and when. Fiona knows that Fred is going away to London for a week in a couple of days, so she says:

(1) Fred ought to visit Ivy tomorrow.

How would you analyze the word *to* in this example? You might be tempted to analyze it as part of the Operator, along with *ought*, since it has been introduced because of the choice of the meaning of ‘obligation’ expressed in *ought*. But Example (2) below demonstrates that *to* cannot be treated as part of the Operator, because it is frequently separated from it by another element (here, the Subject).

(2) Ought Fred to visit Ivy tomorrow?

Alternatively, you might be inclined to analyze *to* as part of the following Main Verb, perhaps influenced by the fact that *to visit* would be translated into French, German or Latin as a single word (French *visiter*, German *besuchen* and Latin *visitare*). Traditional English grammars, influenced by Latin, would say that *to visit* is the ‘infinitive’ form of the verb *visit* - and prescriptive grammarians would say that it should never be ‘split’ into *to* and *visit* (as it is in the mission statement of the starship Enterprise in the TV series ‘Star Trek’, *to boldly go where no man has gone before*).

But (3) shows that, however much we might (or might not) want to obey that rule, it is quite impossible to do so in every case. In other words, we cannot treat *to* as a part of the Main Verb in English, because of the presence of the word *have* in such examples.

42. Here, of course, I am not referring to the item *to* when it is functioning as a preposition. (This is covered in Chapter 7.)

(3) He ought to have gone to the hospital yesterday.⁴³

And in Example (4) the underlined words show that our model of syntax must allow *to* to be separated from both the Operator and the Main Verb:

(4) He ought perhaps to have left the party earlier.

In other words, when the item *to* follows *ought* it must be treated as AN ELEMENT IN ITS OWN RIGHT. As we will see in the course of this chapter and several later ones, there are many other meanings that trigger the use of *to* as a clause element. Surprisingly, it hardly ever realizes a meaning in its own right, and yet it is vital that it is present in the clause in almost every case when it is used.^p So what should this element be called? In traditional grammar it is usually associated with the following Main Verb - wrongly, as we have just seen - and the two together are said to make up the ‘infinitive form’ of the verb. So, since the clause element *to* carries virtually no meaning, we will maintain a link with traditional grammar by borrowing the term ‘infinitive’ - and name this element the **Infinitive Element (I)**.⁴⁴

5.4 Analyzing *to* with modal verbs: *am/is/are/was/were to*

Now let’s look at another of the uses of the Infinitive Element. This one is also with a modal verb, and in this case the verb is *am/is/are/was/were + to*. For practical purposes we can treat all of these forms of *be* as variants of the same ‘modal verb’, and we will simply refer to them as *am/is/are/was/were to*.^q

The first question is how we should analyze *to* in (5a)?

(5a) He is to go to the head teacher immediately.

The answer will now be clear. It is an Infinitive Element, just as it is in the case of *ought to*. Indeed, the meanings of the two types of ‘modal verb plus *to*’ are very similar. The meaning of *ought to* is ‘obligation’, and the meaning of *am/is/are/was/were to* can perhaps be specified as ‘obligation from a plan’.

Example (5b) shows that other elements may sometimes separate *to* from both the Operator and the Main Verb, so demonstrating clearly that *to* cannot be analyzed as a part of either of them. (We will meet the Negator *not* in Section 6 and the Auxiliary *be* in Section 11.)

(5b) He is not to be eating it (when the head teacher comes in).

5.5 A note on the potential ambiguity of *am/is/are/was/were*

The only problem in analyzing *am/is/are/was/were to* arises from the fact that all of these forms of the verb *be* can occur as any one of THREE DIFFERENT ELEMENTS OF CLAUSE STRUCTURE. The problem for the analyst is: ‘How can I tell which of these three elements it is?’ Now that we have met the second of them, it is time to resolve

43. In (3) the word *have* is an Auxiliary Verb (X). We will come to this element in Section 11.

44. This has the small but useful advantage of letting us represent it by a letter of the alphabet that is not needed for any other clause element.

this question. The three uses of *am/is/are/was/were* are as follows:

- 1 They occur as **O/M** when the **Main Verb** *be* is conflated with an Operator (as we know from Section 5 of the last chapter). This is the most frequent type - and, since a clause must have a Main Verb, there is usually no problem in recognizing cases in which a form of *be* has the function of expressing the Process of 'being'.
- 2 Forms of *be* also occur as **O/X**, when one of several types of **Auxiliary Verb (X)** is used and is conflated with the Operator. These uses are also very frequent. Two of the most frequent types are introduced in Section 11.
- 3 Finally, as in the present case, the forms *am/is/are/was/were* occur as **O**, followed by *to*, when they typically express the meaning of 'obligation from a plan'. This use is usually quite easy to identify because of the following item *to*.⁴⁵

This last type is much less frequent than the other two. But the first two types are among the most frequent word-element combinations in English, so that this does not mean that this third type is at all rare; it is in fact quite frequent.

5.6 Analysis task

Now analyze (2) and (6).

- (2) Ought Fred to visit Ivy tomorrow? (6) Ike is to be there today.

DO YOUR ANALYSIS BEFORE LOOKING AT FIGURE 4.11.

45. Occasionally, when there is ellipsis, the word *to* is omitted, as in

A: Am I to eat it now?

P: Yes, you are (to eat it now).

We will come to *Yes* in Section 6, and its relations to the clause that follows in Chapter 12.

Note also that the words *was* and *were* followed by *to* can in fact also be used to express the 'time' meaning of 'hypothetical condition', as in *If she was/were to leave now, everyone would be very disappointed*. We noted this type of meaning in Section 4.3.

Solutions

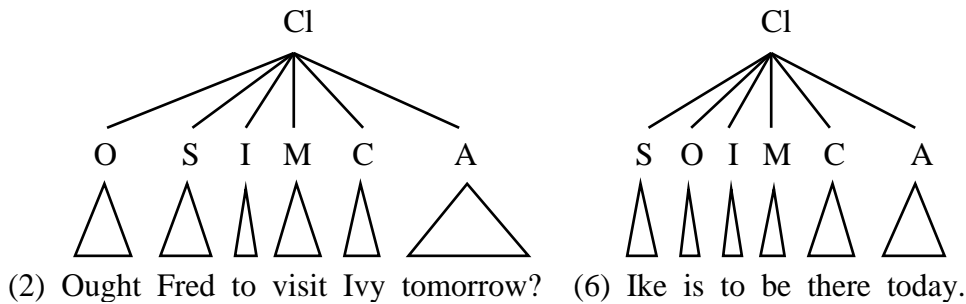


Figure 4.11: Two clauses with an Infinitive Element

Comments on the analyses

You will probably have had no difficulty in identifying the Infinitive Element in (2) - if only because we discussed this example in the last section. But (6) may have been a little harder, because you will have had to sort out what function each of the two forms of *be* is serving. But if you applied the *Guidelines* carefully you will have had no difficulty. Firstly, the tests show that the clause clearly expresses a Process of ‘someone being somewhere’, and it is clearly the SECOND instance of the word *be* that expresses the Process of ‘being’. And, since we know that a form of *am/is/are/was/were* followed by *to* is a modal verb, we know that the word *is* is the Operator - as virtually all modal verbs are. You can make a final check on this analysis by applying the *Operator Test*. This shows that the equivalent polarity seeker is *Is Ike to be there today?*, and this shows that *is* is definitely the Operator.

In other words, we have demonstrated that MORE THAN ONE OF THE THREE SENSES OF THE FORMS OF *be* IDENTIFIED IN THE LAST SECTION CAN OCCUR IN THE SAME CLAUSE.⁴⁶

5.7 The fading usage of *have/has/had to* and *need* as the Operator

In this section and the next we will consider four cases of **fading usage**. This phenomenon occurs when a language is changing - i.e. when younger people start using some form in a different way from older people. Even though the two modal verbs to be considered here are gradually ceasing to be used as the Operator, some variants of them are still in quite widespread use. We will deal with them at this point so that, by the end of this section, we will have discussed all of the forms of the modal verbs that may be found functioning as the Operator in current English - including the fading usages.

One set of forms that occurs frequently in spoken texts is *have/has/had to*.⁴⁷ Example (7a) expresses the ‘control’ meaning of *have to*, and (7b) expresses a meaning of ‘validity’ - but both are subject to the same fading usage. (In the next

46. Exceptionally, all three types can be expressed in the same clause, e.g. when a primary school teacher tells her potentially boisterous class: *You are not to be being noisy when the Head Teacher visits us during the next lesson.* (See Section 11 for the use of *be* as an Auxiliary.)

47. As we will see in Chapter 14, these function syntactically in a very different way from the apparently similar forms of *have/has/had got to*, where *have/has/had* serves happily as the Operator in modern English.

section we will come to the fading usage of *have* as a Main Verb that is conflated with the Operator.)

(7a) Fiona had to be told about this.

(8a) That has to be right.

Have the guidelines given in this chapter equipped you to analyze these? The answer is ‘Yes, but only up to a point’. We can easily recognize that *to* is an Infinitive Element, but the question in the case of both (7a) and (8a) is: ‘Is *has* an Operator?’. So let us apply the *Operator Test*. This is, as you will remember, to re-express (7a) and (8a) as ‘polarity seekers’. The questions to ask are: ‘Would the Performer of the text in which (7a) occurs have said (7b) or (7c)?’, and similarly ‘Would the Performer of (8a) have said (8b) or (8c)?’

(7b) Does Fiona have to be told about this? OR

(7c) Has Fiona to be told about this?

(8b) Does that have to be right? OR

(8c) Has that to be right?

Sometimes you don’t have enough information about the Performer to make a reliable guess, and then you just have to make the best guess that you can, based on what you know about their age, social class, etc. As a general guide, we can say that most speakers of Modern English would use (7b) and (8b) - and that if (7c) or (8c) occurred today it would probably be in the speech of an older person, or of someone wishing to appear refined - or someone of whom both are true! So, from the viewpoint of modern English, *has* in (7a) and (8a) would usually NOT be an Operator. And for this reason *has* in (8a) would usually NOT be an Operator either. Assuming a modern speaker of English, then, the word *has* is in both cases a special type of Auxiliary Verb (X) - one which, unusually, CANNOT ALSO FUNCTION AS THE OPERATOR, as most Auxiliary Verbs can. (We will meet two frequent Auxiliaries that can be conflated with the Operator in Section 11 of this chapter, but for the type of Auxiliary needed for *have to* and *need* see Section 5.10 of Chapter 14.)

The verb *need*, when followed by *to*, is at roughly the same stage of fading usage as *have to* - as a comparison of (9a), (9b) and (9c) suggests:

(9a) Fiona needs to know that.

(9b) Does Fiona need to know that? OR

(9c) Need Fiona know that?

This only applies to the ‘obligation’ sense of *need*, i.e. the meaning that is similar to that of *have* followed by *to*. (This is in contrast with the sense that is like that of *want*, as in *Fiona needs a drink*, in which it functions as a Main Verb.) It is relatively easy to distinguish the two senses in modern English, because the ‘obligation’ sense of *need* is always followed by *to*. In contrast, the item *to* is absent in the fading usage illustrated in (9c) - where, interestingly, the item must be *need* rather than *needs*, as with a typical modal verb such as *must* or *may*. In its ‘obligation’ sense *need* frequently occurs with an inanimate Subject, as in (10a), (10b) and (10c):

THE MANY FUNCTIONS OF THE OPERATOR AND THE TIME AUXILIARIES

(10a) The switch needs to be changed.

(10b) Does the switch need to be changed? or (10c) Need the switch be changed?

Table 4.4 summarizes the status of various forms of *have to* and *need (to)* in Modern English. How natural does each sound to you? As the table shows, the fading usage is only apparent in an ‘information giver’ that is ‘negative’ or a ‘polarity seeker’ - and not in an ‘information giver’ that is ‘positive’. (The labels above each column are the semantic features that have been chosen in each case; ‘positive’ and ‘negative’ clauses are covered in Section 6.) Interestingly, some forms seem to hang on in the language longer than others, e.g. *He needn’t leave* is probably more likely to be heard in the speech of young middle-aged people at the start of the twenty-first century than *Need he leave?* - but both are significantly less frequent than *He doesn’t need to leave* and *Does he need to leave?*^r

	information giver		polarity seeker
	positive	negative	
<i>modern usage</i> (as X)	He has to leave. He needs to leave.	He doesn’t have to leave. He doesn’t need to leave.	Does he have to leave? Does he need to leave?
<i>fading usage</i> (as O/X)	He has to leave. He needs to leave.	He hasn’t to leave. He needn’t leave.	Has he to leave? Need he leave?

Table 4.4: Modern and fading usages of *have* and *need* as Auxiliary (X) or Operator/Auxiliary (O/X)

5.8 The fading usage of ‘possessive’ *have* and *dare (+to)* as the Operator

The two lexical verbs *have* and *dare* present the analyst with a similar problem - except that in this case the modern usage is that they do not function as an **Auxiliary Verb**, as in Section 5.7, but as a **Main Verb**.⁴⁸ Consider the examples in Table 4.5. How natural does each sound to you?

48. It is understandable that forms of *have* should pattern like forms *be* because, after with the forms of *be*, they are the second most frequent way in which ‘relational’ Processes are realized. These uses of forms of *be* and *have* as the Operator are the remnants of what was a widely (but not universally) used pattern for Main Verbs in Shakespeare’s day. But it is a minor anomaly of the language that the use of *dare* in this way should have remained in use for so long.

THE MANY FUNCTIONS OF THE OPERATOR AND THE TIME AUXILIARIES

	information giver		polarity seeker
	positive	negative	
<i>modern usage</i> (as M)	She has a car. She dares (to) do it.	She doesn't have a car. She doesn't dare (to) do it.	Does she have a car? Does she dare (to) do it?
<i>fading usage</i> (as O/M)	She has a car. She dares do it.	She hasn't a car. She daren't do it.	Has she a car? Dare she do it?

Table 4.5: Modern and fading usages of *have* and *dare* as the Main Verb (M) or Operator/Main Verb (O/M)

For many older people among the current users of English the picture is a mixed one, and there are still a few 'fading' usages that linger on in the usage of younger generations. This typically occurs in **formulaic** or semi-formulaic utterances, such as *We dare not fail* (which has more of a ring to it than *We do not dare fail*), and perhaps *Have you a moment?* (instead of *Do you have a moment* or *Have you got a moment?*). Interestingly, many modern speakers, in treating *dare* as the Main Verb, simply omit the item *to*, as in the examples in Table 4.5).

As in Section 5.7, the *Operator Test* should be your criterion when you encounter any such problems in text analysis. Remember that the question is not 'How would you form a polarity seeker?' but 'How do you think THE PERFORMER OF THIS TEXT would form a polarity seeker?' Here too you simply have to make the best possible guess at the answer, based on what you know about the Performer's age, social class, and so on.

Summary so far

The problems described in this section and the last are simply typical examples of bits of language that are in the process of changing. In fifty years time, perhaps, the use of *have/has/had to* and *need* and *dare* as Operators may have faded away completely. But the fact that they are still in regular use at the present time - if only by minority groups of users of the language - means that, like *have/has/had to*, we need to add them to the list of words that can AT TIMES be modal verbs. And this is done in Table 4.3, at the start of this section.

In the last few sections we have met some of the main functions that the Infinitive Element serves, but we will meet several others later in this book - especially in Chapter 11, when we come to clauses that are embedded in other clauses. And we will even meet one unusual case where this element is NOT expounded by *to*.

Back in Section 4 we met the four functions served by modal verbs, and so four functions that are served by the Operator. Now, in each of Sections 6 to 9, we will examine four further functions served by the Operator. But this time we will be looking at it in its role AS AN ELEMENT OF STRUCTURE IN THE CLAUSE - i.e. irrespective of whether the word that expounds it is a modal verb or some other type of verb. In

other words, all of the types of meaning that we have discussed in Sections 3, 4 and 5 can occur in the same Operator as the following four types of meaning.

6 The role of the Operator in expressing POLARITY

6.1 'Negation' as one of four reasons for introducing *do* as an Operator

In this section we will discover the essential role of the Operator in expressing the meaning of 'negation' in English. In other words, if (a) the Performer (P) of a text wishes to express the meaning of 'negative' and (b) P does not make a choice elsewhere in the overall system network that would result in the presence of the Operator (e.g. to express one of the four types of meaning found in the modal verbs) - then THE GRAMMAR AUTOMATICALLY SUPPLIES A FORM OF *do* TO ENSURE THAT THERE IS AN OPERATOR. The fact is that the expression of negation in the English clause requires the presence of the Operator. (This is simply the first of FOUR distinct reasons for introducing the Operator as a default, and I will introduce the other three in the following three sections.)

If you are only interested in syntax and you don't want to know about the various functions that the items that express 'negation' serve, you can skip to Section 6.3.

6.2 The meaning of 'negative'

The best way to discover the meaning of 'negative' is to ask: 'What are the preconditions for uttering a clause that is negative?'^s To illustrate the answer, consider the words of the mother of a one-year-old child called Alex, one of whose great delights is to explore any electrical lead to its source, and if possible to pull the plug out of its socket. His mother says to a friend: *Up to yesterday he seemed not to understand when I told him not to do something. But this morning, when he was reaching towards the plug and I said 'No, Alex!', he didn't touch it! He actually pulled his hand away, and went back to playing with his cars.*

Consider the meaning of the 'negation' in *He didn't touch it*. Would you be satisfied if I said that it means 'the Performer of the utterance believes that it is not the case that Alex touched the plug'? I suspect not, because it is merely a longer rewording of the original text, rather than an explanation. In order to EXPLAIN the meaning of choosing 'negative' in the system network in the course of generating a text-sentence, we need to relate the semantic feature of 'negative' in the POLARITY system to THE FACTORS IN THE PERFORMER'S MIND THAT DETERMINE THAT CHOICE.

Essentially, what leads us to choose to make a clause **negative** is a combination of two factors. They are as follows: (a) the Performer of the utterance (P) believes that the Addressee (A) is (or may be) predisposed to believe some proposition, and (b) P believes that the belief is (or would be) mistaken. So the

purpose of P's utterance of the clause is to correct A's possible - and possibly mistaken - belief. In our example, this 'possible and possibly mistaken belief' is that Alex would have tried to pull the plug out of its socket - a belief that follows logically from what his mother has said earlier. So, to simplify, we can say that the meaning of 'negative' is 'the Addressee's possible belief is mistaken'. And the meaning of 'negative' in more dramatic denials - such as *I didn't do it* when spoken by a man caught standing over a dead body with a gun in his hand, is exactly the same. Moreover, essentially similar conditions apply for the use of negation with a directive such as *Don't shoot!* (as as we will see in Section 3.4 of Chapter 5).⁴⁹

6.3 Three common ways of expressing negation

The question to be addressed here is: 'How do we express the meaning of 'negative' at the level of form in English?' There are three main ways - as well as a rich array of subsidiary ways which we will come to in Chapter 14. The three main ways are: (a) by adding *n't* to the clause, (b) by adding *not* to the clause, and (c) by having a clause in which all the types of meaning except 'negative' are recoverable by the Addressee, so that all the Performer needs to say is *No* or *No it isn't*, etc.⁵⁰

But it is equally important to ask: 'How do we express the meaning of 'positive' in English?' Here there are just two main ways: (a) by NOT having an expression of negation (such as *n't* or *not*) in the clause, and (b) by having a clause in which all the types of meaning except 'positive' are recoverable by the Addressee - so that the Performer simply says *Yes* or *Yes it is*, etc. But there is more to the syntax of POLARITY than this implies, as we will see (including a third way of expressing the meaning 'positive' that we will come to in Section 7). We will begin with the expression of POLARITY in full clauses that are information givers.^t

Example (1a) below shows a **positive** clause, and (1b) and (1c) illustrate the two main ways - apart from saying *No* - of expressing a **negative** meaning in English. Here we will assume that the style is 'casual', and the text may be written or spoken. The words in square brackets above and to the right of the examples are the semantic features that have been chosen in generating these examples.

[positive]

[negative]

(1a) Alex touched the plug. (1b) Alex didn't touch the plug. [unmarked]

(1c) Alex did not touch the plug. [strong]⁵¹

We will now look in turn at the syntax of each of these two ways of expressing

49. Note that the meaning of 'positive' does not imply an equivalent precondition such as 'the Addressee's possible belief is justified'. It simply implies that the Performer sees some purpose in informing - or reminding - the Addressee of a possible belief - and this precondition to uttering an information giver applies to both positive and negative clauses.

50. Later, as a tailpiece to the description of embedded clauses in Chapter 11, we will meet cases where the form of realization is in *so* and *not*, as in *if so, ...* and *if not, ...*, and in *he said/thought so/not*.

51. The words in square brackets above and after each example show the semantic features that each expresses. The terms 'positive', 'negative', 'unmarked' and 'strong' are all taken from the system network for POLARITY. We will conclude this section with a simple version of that network.

negation - together with their positive equivalent. But before we do so we need to establish a simple framework for referring to the variations in **register** (or ‘style’) in texts. Here all we need to recognize is that texts are (a) in either the ‘spoken’ or ‘written’ **mode** and (b) in either a ‘formal, ‘consultative’ or ‘casual’ **tenor**.^{52,u}

In most speech and in casual writing (such as letters to friends) the ‘unmarked negative’ form is by far the most frequent. But we should note that in the speech of some dialects of English (e.g. many of those in the North of England) the ‘strong negative’ of *not* is more frequent. And we should further note that in formal writing there is no choice, in that *not* is always used. Here, then we will start by assuming that the register is ‘casual’ - whether spoken or written, and we will begin with the form that is the most frequent in speech overall, i.e. *n’t*.

6.4 The ‘unmarked negative’ form *n’t*

Are you in a position to analyze Examples (1a) and (1b) from the last sub-section? (We will leave (1c) till later.) You can certainly analyze (1a) without any difficulty - but can you analyze the ‘unmarked negative’ form in (1b)? Try! If you are successful you will have discovered for yourself the two key points to be made in this sub-section.

DO YOUR ANALYSIS BEFORE LOOKING AT FIGURE 4.12.

Solutions

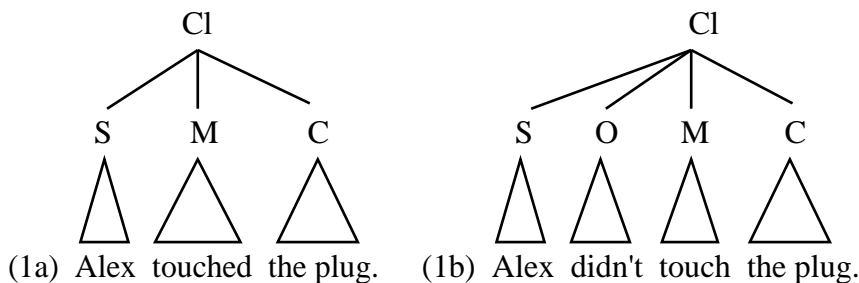


Figure 4.12: The analysis of a positive clause and its negative equivalent

Comment

If you compare the two analyses in (1a) and (1b), you can see clearly that the ‘unmarked negative’ requires the presence in the clause of an Operator. In other

52. In these terms, the **mode** of discourse of this book is ‘written’ and the **tenor of discourse** is, by and large, ‘consultative’ - i.e. I am writing with a degree of formality that lies between ‘formal’ and ‘casual’. However (sic), I occasionally employ forms that are typically associated with a ‘formal’ register, such as the use of *however* and *moreover* when I want to bring out explicitly the logical relationship with a preceding proposition, and there are also occasional moments when I strike a slightly more casual note. Thus the three types of TENOR of discourse found in the main text of this book are ‘formal’, ‘consultative’ and ‘casual’, and these, together with the two tenors that lie beyond these of ‘very formal’) and ‘intimate’, constitute one of the most important systems in the REGISTER part of the overall system network.

words, if there isn't an Operator, a form of the verb *do* is supplied to fill the gap - just as happens with a polarity seeker. This is the first key point.

The second is that the item which expresses the meaning 'negative' - i.e. *n't* - is NOT a separate element of the clause, as one might at first think, but an integral part of the Operator.⁵³ If you wish to make quite sure that the whole of the item *didn't* really is the Operator, try applying the *Operator Test* that we introduced in the last section.

This produces *Didn't Alex touch the plug?* The fact that this is an acceptable utterance demonstrates conclusively that *didn't* is indeed the Operator in such examples. But there is a problem which I should point out - and it is this. At the level of form *Didn't Alex touch the plug?* may look like a 'negative polarity seeker', but a moment's thought will show that, logically, there can be no such meaning. In other words, since the purpose of uttering a 'polarity seeker' (e.g. *Did Alex touch the plug?*) is precisely to discover the polarity, it follows that the clause cannot have polarity already. Examples such as *Didn't Alex touch the plug?* are in fact instances of a 'confirmation seeker' (for which see Section 2.4 of the next chapter).

6.5 Modal verbs and *be* as O/M with the 'unmarked negative'

What happens if you try to form an 'unmarked negative' equivalent to Examples (2a) and (3a)?

(2a) Fiona might visit Ivy on Friday. (3a) Ivy is lonely.

The answer is that in both cases the process is much simpler than it was with (1a) - the reason being that each of the two clauses already has an Operator. In the case of (2a) it is a modal verb, and in (3a) it is a form of *be* as the Main Verb - so in neither case is there any need to introduce a form of *do*.

(2b) Fiona mightn't visit Ivy on Friday. (3b) Ivy isn't lonely.

6.6 The forms of the 'unmarked negative'

The forms of the Operators when they have a suffix expressing the meaning of 'unmarked negative' are as set out in Table 4.6. The first two lines cover the forms that we have met so far.

53. In terms of **morphology**, the item *n't* is a **suffix** that is added to the **base** of the Operator. But in terms of **syntax** the two operate as a single element, and there is no need to show any internal structure within the word *didn't*.

won't shan't can't mayn't mustn't aren't/isn't don't / doesn't
 wouldn't shouldn't couldn't mightn't oughtn't wasn't/weren't didn't

plus the following, which will be added in Section 11: haven't hasn't hadn't

and the fading usages introduced in Section 5: needn't daren't.

Table 4.6: The 'unmarked negative' forms of the modal verbs, *be*, *do* and *have*

The list covers all the forms of *be*, whether they are used as the Main Verb (O/M), as a modal verb (O), or as an Operator that has been conflated with an Auxiliary Verb (O/X) - for which see Section 11). We will also meet *have* as an Auxiliary, so that the complete list of words in general use that end with *n't* is as shown in Table 4.6. But there is also, as you may have guessed, the fading usage of older people of *needn't* and *daren't*.

There are two exceptions to note, both occurring with *I* as Subject. First, we don't say **Amn't I lucky?* but *Aren't I lucky?* This doesn't affect the syntax. But the second exception does. This is because we don't say **I amn't lucky*, but instead *I'm not lucky*. And the fact that the word *not* must be used in such cases makes a difference to the syntax in such examples - as we will see in the next section.

6.7 The 'negative' form *not*

So far we have concentrated on the syntax of the 'unmarked negative'. But in speech and reported speech and in casual writing (such as a letter to a friend) P also has the option to express negation in 'strong' terms, through the use of *not* as a separate word. In other words, in such texts *n't* is not simply a contracted form of *not*, but an item with a different meaning - where the difference lies in the degree of prominence that is assigned to the negativity.⁵⁴

In formal writing, however, there is no choice between the 'unmarked' and the 'strong' meanings of 'negative', because the form *not* is always required. This is no doubt a by-product of the general stigma that is attached to contractions in formal writing, and its effect is that when a use of *n't* does occur in formal writing it indicates that P wishes to move away from a formal register. When the register is (a) 'formal' or (b) 'written' (and 'consultative' or 'casual'), then the system of 'strong negative' vs. 'unmarked negative' is not entered. Interestingly, while this difference in meaning may appear relatively small, it has a fairly major impact on the syntax of the clause - which in turn suggests that it is a mistake to think of such differences in the 'strength' meanings as 'relatively small'.

Let's now consider the syntax of *not*, starting with Example (1c) (this being is repeated from Section 6.4):

54. As it happens, there is by chance an example of the choice to use a 'strong negative' in the first clause of the sentence to which this footnote is attached.

(1c) Alex did not touch the plug.⁵⁵

In such cases P introduces a separate element, called the **Negator (N)**. There are two key points to note about the Negator. The first is:

The Negator (N) is always expounded by the item *not*.

This makes it an easy element to identify when analyzing a text. However, while well over 99% of instances of *not* are Negators (with a capital ‘N’) and so elements of the **clause**, they occasionally occur in a **group** - e.g. *Not a single person (saw it)* and *(It was) a not unsatisfactory solution to the problem*. We will come to such cases in Chapters 7 to 10.

Note that *never* is NOT a Negator, but an Adjunct of the same type as *always*, *sometimes*, *usually*, etc.^v

And the second key point is:

A Negator cannot occur without an Operator.

In other words, the expression of negation in English through *n’t* or *not* requires the clause to have an Operator - and this is true whether the negation is expressed as a suffix on the Operator or as a separate element, i.e. as the Negator. This fact demonstrates, yet again, the centrality of the Operator to the expression of POLARITY in the English clause.

The next question to ask is: ‘What position in the clause does the Negator occupy?’ To discover the answer to this question for yourself, do the following analysis task.

Analysis task

Analyze (4a) and (5a).⁵⁶

(4a) Ike might not visit Ivy today. (5a) He will definitely not visit her tomorrow.

DO YOUR ANALYSIS BEFORE LOOKING AT FIGURE 4.13.

55. Since (1b) would almost certainly occur in a natural text with a casual register, we are likely to interpret the use of *not* in this example as a ‘strong negative’ in its own right, rather than as the by-product of formality.

56. You can save paper by placing the two examples on the same line, as is done here.

Solutions

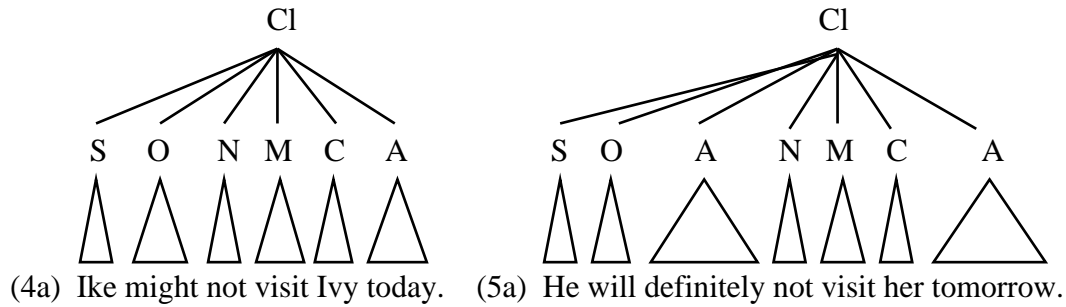


Figure 4.13: Two clauses with Negators

6.8 Comments on Figure 4.13

- 1 Example (4a) illustrates the fact that the Negator typically follows the Operator directly. But occasionally an Adjunct may intervene, as in (5a). This demonstrates conclusively that *not* cannot simply be regarded as part of **O**, in the way that *n't* is.⁵⁷
2. The standard *Operator Test* also demonstrates this point, as Examples (4b) and (5b) show.

- (4b) Might Ike not visit Ivy today?
 (5b) Will he definitely not visit her tomorrow?

In other words, the item *not* does not appear before the Subject, as the Operator does, in this case. (These examples may sound a little stilted in modern English, but if *Ike* was changed to *Mr Darcy* and *Ivy* to *Elizabeth*, they could be ‘confirmation seekers’ spoken by characters in Jane Austen’s *Pride and Prejudice* - and they are certainly still possible in modern English.)

3. The point to be made now is not directly concerned with negation, but it will be useful in helping to broaden the picture of the types of meaning that are conveyed by Adjuncts. You may have noticed that there is an Adjunct in Example (5a) that does NOT play the role of a ‘circumstance’ in the clause - as all the other Adjuncts introduced so far have. The **A** between **O** and **N** is in fact a **Validity Adjunct**. Such Adjuncts express a wide range of types of ‘validity’. One set expresses degrees of ‘probability’, so that it expresses a range of meanings that are strikingly similar to the ‘validity’ meanings in the Operator that we met in Section 4.1. In other words, *may* in *Ivy may understand Japanese* serves roughly the same ‘validity assessment’ function as *possibly*

57. It should be equally clear that the Negator is NOT simply a special type of Adjunct. It is unlike Adjuncts (a) in only occurring at one place in the clause, and (b) in requiring the presence of an Operator. Historically, of course, the suffix *n't* on the Operator is derived from the Negator *not*, but it will be clear from the examples above that in modern English *n't* functions as part of the Operator.

Interestingly, on current British radio and TV programmes that engage in intellectual disputation there is a growing tendency to use the strong form rather than the unmarked form for a particularly challenging type of ‘confirmation seeker’, so that you may occasionally hear an example such as *Is not the whole history of imperial rule one of callous exploitation of the indigenous people?* - suggesting, perhaps, that in such cases the Performer perceives the item *not* as a formal version of *n't*.

serves in *Ivy possibly understands Japanese*. It is an important fact about the expression of **validity** in English, as these examples illustrate, that this strand of meaning can be expressed in more than one element of the clause, i.e. both as an Operator and as an Adjunct (and in other ways that we will meet in Chapter 14 and in later chapters). From now on, I will occasionally introduce other Validity Adjuncts in the examples, and in Chapter 6 we will meet a reasonably representative range of this and several other frequent types of Adjunct.^w

- 4 The presence of *definitely* in (5a) raises a second question about Adjuncts. This is our first example of a clause with more than one Adjunct - and each is in a different position. So how many different types of Adjunct are there? And what is the full range of possible positions that Adjuncts can occupy in the clause? Clearly, there are lots of questions to be asked and answered about Adjuncts, and it is the task of Section 2 of Chapter 6 to deal with the most important of these. It provides an overview of: (a) the impressive range of different functional types of Adjunct found in English; (b) the various places in clause structure where Adjuncts may occur; and (c) the constraints on the maximum number of Adjuncts that may occur in one clause.

Before we leave the Negator, I should point out one quirky little problem that arises with written texts. Consider how you would analyze (6) and (7):

- (6) Ivy must not sleep. (7) Ivy cannot sleep.

Clearly, the analysis of (6) is as in (4a) above, but using only **S O N M**. But how would you analyze (7)?

DO YOUR ANALYSIS NOW.

The answer is that the analysis of (7) is exactly the same as that of (6). This is in spite of a strange convention of the English spelling system, which decrees that when the two elements *can* and *not* occur together they must be written as if they were one element. This is yet another example of the untrustworthiness of the notion that a word is what is found between two spaces on the page, which we first noted in Section 5.6 of Chapter 3.⁵⁸

6.9 Yes and No, etc, and what typically follows them

Now we come to the most frequently used of all the different ways of expressing the meanings of 'positive' and 'negative'. Again, the context is that of Alex, a small child who loves pulling electric plug out of their sockets. His mother's friend asks *Did Alex touch the plug?* The response might be *Yes* or *No* - or more probably *Yes, he did* or *No, he didn't* . It might also be one of the equivalent casual forms, such as *Yeah* or *Mm* and *Nope*, possibly followed by *he*

58. A similar case arises in the nominal group, with the word *another*; compare *some more books* and *another book*.

did or *he didn't*, or even a formulaic expression such as *No way*. And, although these would occur rather less frequently, the response could also simply be *He did* or *He didn't* - i.e. without a preceding *Yes* or *No*. By the end of this sub-section it will be clear how each of these cases is to be analyzed.⁵⁹

The questions on which I will focus first are about the two words *Yes* and *No* (and their equivalents), and they are:

1. What are the meanings of *Yes* and *No*?
2. What element of the structure of what unit do they expound?
3. In cases where they immediately precede *he did* or *he didn't*, etc., as in *Yes, he did*, *No he didn't* and *No he did not*, what is the relationship between the two parts of the utterance?

The key to understanding *Yes* and *No* and their equivalents such as *Yeah* and *Nope* is to recognize that, even though they may not look like clauses, each does in fact function as a full clause. But it is a clause that contains either **substitution** or **ellipsis**. A clause that consists just of *Yes* or *No* is a case of 'substitution', because *Yes* or *No* is a substitute for a full 'positive' or 'negative' clause, while a clause that consists of *he did* or *he didn't* is a case of 'ellipsis', because other elements that are recoverable at the level of form have been 'ellipted'. (We will return briefly to the concept of ellipsis at the end of this sub-section.) Now we are ready to answer the three questions.

The answer to the first, which was 'What are the meanings of *Yes* and *No*?', has three parts. In responding *Yes*, *Yeah* or *Mm* to the question *Did Alex touch the plug?*, the Performer is in effect saying to the Addressee:

- (a) The **interpersonal** meaning of this clause is 'information giver';
- (b) the **polarity** meaning is 'positive'; and
- (c) you, the Addressee, already know its experiential meaning - a type of meaning which is itself a type of **informational** meaning (see below).

And the meaning of *No* and its equivalents is the same, except of course that the polarity is 'negative'. And, as we saw in 6.1, the meaning of 'negative' is essentially that 'the Addressee's possible belief is mistaken', while the meaning of 'positive' carries no such presuppositions about the Addressee's beliefs.

But the aspect of the meaning of *Yes* and *No* that I want to bring out here is that a major part of the meaning of both is that they signal that the Performer considers that the experiential meaning is RECOVERABLE BY THE ADDRESSEE. The semantics of RECOVERABILITY is part of a strand of meaning that we have not met so far in this book: the **informational** strand of meaning. This strand covers the choices that are open to the Performer of a text-sentence in how to present it FROM THE VIEWPOINT OF THE 'INFORMATIONAL NEEDS' OF THE ADDRESSEE - as the Performer

59. The response might also be *I don't know*, *I'm not sure but I'm pretty certain he did*, etc., but all of these cases can be analyzed in terms of the usual elements of clause structure. In *I don't know*, the structure is *I* [S] *don't* [O] *know* [M] ([C]), where the rounded brackets surrounding the unrealized Complement show that it is **covert**; see Section 13 of the next chapter for such cases. It could also be *Yes, and d'you know what happened next?*, etc. The point is that *Yes* and *No* do not occur on their own as responses to polarity seekers as frequently as is usually suggested.

perceives them. These choices come at various points in the overall network of semantic choices, and the particular part that we are concerned with here includes the choice between expressing a clause in full or expressing it in a partial form - here, specifically in a form that expresses only the 'mood and polarity'. (This contrast is shown in the 'entry conditions' to the two summary system networks given below in Figure 4.15, and the second system shown there also appears, in a slightly fuller version, in Figure 4.17 of Section 8).

Let's now turn to the second question. This asks, in effect, 'At what element of what unit do the words *Yes* and *No* occur?' The first part of the answer is that, since *Yes* and *No* and their equivalents always stand for a full clause, we can analyze them most straightforwardly if we treat any simple case of *Yes* or *No* as a **clause** - but one with only one element. So the next question is: 'Which element of the clause should we use?' The answer to be suggested here follows from what we have established already about where POLARITY is typically expressed. In other words, we have seen that one of the major functions of the Operator is to express POLARITY, and it is therefore the most natural of the existing elements to use for these alternative ways of expressing polarity.⁶⁰ It also allows for the possibility of having another element in the same clause, as would be needed in *Yes or No* and *If yes*, etc.^x (Of course, an Operator that is expounded by *Yes* or *No* does not pass the *Operator Test* in the *Guidelines*, but that is not a problem because the test is only intended for use in clauses with more than one element.) The analyses of some typical examples are shown in (9), (10) and (11) in Figure 4.14 - except that the relationship between the two clauses in each of (10) and (11) is not shown, because this involves a syntactic relationship that we have not yet covered.⁶¹

To illustrate the reason why we use the Operator as the element that is expounded by *Yes* and *No* - i.e. the closeness of the tie between the Operator and the expression of POLARITY - Figure 4.14 also shows in (8) the analysis of the polarity seeker that elicits these responses. Any such polarity seeker must itself have an Operator, of course, in order to seek the 'polarity'.

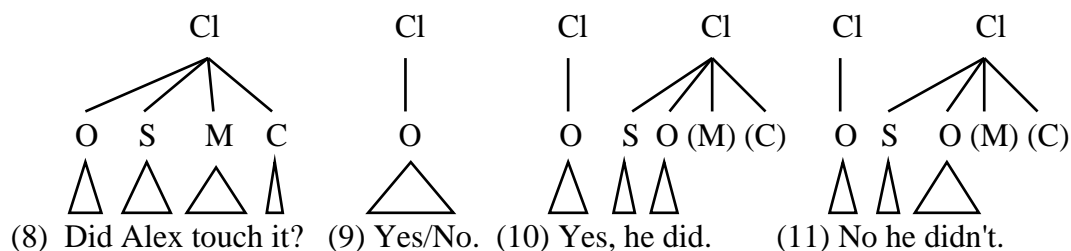


Figure 4.14: The analysis of *Yes*, *No*, *Yes, he did* and *No he didn't*.

60. Halliday says in *IFG* that *Yes* and *No* are 'Mood Adjuncts', but they do not behave like the other items that he lists with them, and when he comes to analyze 'the silver text' he gives no analysis for "yea", which occurs twice.

61. In each of (10) and (11) the two clauses are **co-ordinated** as sister units that are parts of the same **sentence** (though in an untypical type of co-ordination). But since the co-ordination of units is covered in Chapter 12 we will delay the representation of structures such as these till then. At that point we will look again at these cases.

Let us now consider the third question, which is ‘In an example such as (10), what is the relationship between the two parts of the utterance?’ AS we have already noted, we will come to the syntactic relationship between the two clauses shown in each of (10) and (11) in Chapter 11, but we can at this point look at the relationship in terms of the examples **information structure**. This involves asking ‘What work does the comma do in (10)?’, and ‘Does it make any difference if the comma is omitted, as in the case of *No he didn’t* in (11)?’ And similar questions can also be asked about *No he did not* and *No, he did not* (which introduce the Negator, as we saw in Section 6.7).

As the analyses of (10) and (11) in Figure 4.14 suggest, the answer in all of these cases is that the syntactic analysis of *Yes* and *No* remains the same, i.e. *Yes* is an element of one clause, and *he* and *did* are elements of a second clause - and the analysis of (11) is similar. We will come back to the function of the comma in (10) in a moment, but first we will ask ‘What do (10) and (11) add to the meanings of the simple *Yes* and *No* in (9)?’ The answer is fairly clear, and it is that the repetition of the statement of the polarity in a different form in (10) and (11) expresses the meaning much more forcibly.

Now we are ready to return to the question of the meaning of the comma in (10). The first step is to note that the comma in the WRITTEN representation of the example - as in (10) - corresponds to a rise in the voice on the word *Yes* in the SPOKEN mode. In other words, whether the text is spoken or written, in such cases the Performer is presenting the text as having an additional ‘information unit’. And, because each of *Yes* and *he did* is a separate unit of information, each contains a piece of ‘new information’.⁶² So the utterance *Yes, he did* in (10) presents the ‘positive polarity’ of the proposition that ‘Alex touched it’ as ‘new’ information twice over - so re-enforcing it more strongly than if the Performer had simply said (or written) *Yes he did* (without a comma).

In contrast, *No he didn’t* in (11) is a single information unit. Here, the polarity is only explicitly marked as ‘new’ once, through the occurrence of the fall in intonation on *did* - i.e. in its typical place at the end of the spoken or written text.

To summarize, we can say that *Yes, he did* brings out the polarity more strongly than *Yes he did*, and that this is in turn stronger than *He did* or *Yes* on its own. Perhaps this explains why it is relatively unusual to hear a bald reply of *Yes* or *No* to a polarity seeker; i.e. it could be felt to lack conviction. Another factor is that the sheer brevity of *Yes* or *No* may be interpreted as rudeness. And when the meaning is ‘negative’ there is the additional option of further strengthening the ‘negative’ force of the utterance by saying *No, he did not*.

There is one final aspect of the analyses of (10) and (11) in Figure 4.14 that needs a comment. This is the brackets round the unrealized Main Verb and Complement in each of (10) and (11). They stand for the ellipsed words that the Performer has decided not to utter or to write, on the grounds that they are

62. The meanings of the terms **information unit** and **new information** are relatively clear, as they stand. But they are in fact two of the main concepts in a broader framework of concepts that are used to describe this type of meaning, which is realized in intonation and punctuation. This framework is explained a little more fully in Section 7.

considered to be fully recoverable by the Addressee. So **ellipsis** is ‘recoverability taken to the limit’, in the sense that the items deemed to be recoverable are not merely marked as ‘recoverable’ by the intonation - as are *touch* and *it* in *Yes he DID touch it* - but omitted altogether. Ellipsis is an important topic in the analysis of texts, and it will be addressed in Chapter 20.⁶³

If you are only interested in syntax and do not want to know about the various functions that *Yes* and *No*, etc. serve, you can skip to Section 6.11.

6.10 Aside: five discourse functions served by *Yes* (and two by *No*)

At this point it may be helpful to clarify the distinction between the MEANING of the words *Yes* and *No* that we find in the semantics of the lexicogrammar - which is what we have been considering so far - and the DISCOURSE FUNCTIONS that utterances of *Yes* (and to a lesser extent *No*) may serve - i.e. their function in the structure of **discourse**.

So far we have assumed that the discourse context of *Yes* or *No* is that the word is uttered, in an **exchange**, as a **response** to an **initiating move** that consists of a clause that is, in semantic terms, a polarity seeker, as in (12).

- (12) P: Did Alex touch the plug?
A: Yes, he did (etc).

Notice, though, that by describing it in this way I have provided a description that belongs to a different component of language: the ‘grammar’ of discourse structure (rather than in the grammar of text-sentences). In other words, I am discussing the text-sentence *Yes* (and so also *Yes, he did*, etc.) as possible choices in the **lexicogrammar** that **express** elements of the structure of a ‘higher’ representation of the text, i.e. as elements in the structure of **discourse**. And the structure of a given chunk of discourse is in turn the product of decisions in the ‘higher’ discourse-generating component in the overall model of language. (In Figure 1 in Chapter 1 we saw how these different ‘levels’ of representation relate to each other.) In other words, just as there is a SENTENCE-generating component (the system networks of the lexicogrammar) whose outputs are structures, there is a DISCOURSE-generating component in language whose outputs are structures. The ‘act’ in discourse is typically (though not absolutely always) expressed through a text-sentence that is generated from the lexicogrammar - and both *Yes* and *Yes he did* would be one such ‘act’.

The problem is that the word *Yes* occurs very frequently in interactive spoken texts, and that it serves at least FOUR OTHER FUNCTIONS in discourse, in addition to that of responding to a initiating act in an exchange that is a polarity seeker. In

63. The concept of a **clause with heavy ellipsis**, as here, is to be differentiated from that of a **truncated clause**, in which there is no ellipsis. For the latter, see Section 2.5 of the next chapter, which introduces Confirmation Seeking Tag Adjuncts, such as *She likes him, doesn't she?*

contrast, while *No* is also used for one of these other discourse functions, it is not used for the other three. So the question that must be asked in a book about lexicogrammar is this: 'Is the syntax of the other four cases of *Yes* (and the one other case of *No*) the same as the syntax described in the last section?' To answer this we will briefly consider each of the four additional functions.

The second function of *Yes* and *No* is essentially like the first, except that it occurs in a **monologue** (rather than in a dialogue, as in the first type).⁶⁴ As an example, consider (13a). Here the Performer is looking through a tray of sweaters in a shop, and it illustrates the use of *Yes* in this context. And (13b) illustrates the use of *No* in the same context.

(13a) I like this one. Yes, it'll do very well. Yes. I'll definitely take it.

(13b) I don't think much of that one. No, I certainly don't.

In such cases *Yes* and *No* carry essentially the same meaning that they have when they are being used in an interactive exchange - i.e. they give the mood and polarity of a proposition, the rest of which the Performer assumes to be recoverable by the Addressee. The fact that the Performer may then go on to produce a further clause that 'expands' upon that 'pro-clause', as in *Yes, it'll do very well* and *No, I certainly don't* does not change this fact, and the two clauses in each example are co-ordinated in exactly the same way that we saw in Section 6.9 that *Yes* and *he is* are in *Yes, he is*.

This function of *Yes* or *No* in a monologue may occur with varying degrees of prominence. It is most prominent of all when it has the status of being a separate sentence - i.e. when it is followed by a full stop, as in the third sentence of (13a). Alternatively, it may be a part of the same sentence as the following clause, while having a separate 'information unit' within it - so being separated from it by a comma, as in the second sentence in (13a).⁶⁵ In this case it is a little less forceful. Finally, it may merely be part of the same 'information unit' as the following clause (so without an intervening comma), as in *Yes it will*. Clearly, this function of *Yes* and *No* can be analyzed in the same way as the first.

The third and fourth functions in discourse of *Yes* are probably more frequent than either of the two functions identified so far. But they are very different, in that they are functions that *Yes* may serve but *No* may not - as is also the case with the fifth function.^y

The third function is the use of *Yes* in a interactive exchange as an **acknowledgement** (when it is typically spoken with either a low rising or low falling tone). This is the most frequent class of **act** that occurs in the **Respond** element in the type of **exchange** in which the initiating move is an **information giver**. As an example, consider A's use of *Yes* in (14), which is spoken during a walk in the hills of mid-Wales:

(14) P: It's going to start raining soon.

64. Note that monologues don't necessarily make up a complete text; they often occur as parts of extended turns in dialogue, so that the two types are not in complete contrast.

65. The term **information unit** is explained a little more fully in Section 7.

A: Yes, let's go back.

As in the previous type, A's response might also be either (a) *Yes. Let's go back*, with two sentences, (b) *Yes, let's go back*, with one sentence but two information units, or (c) *Yes let's go back*, where it is all spoken as one information unit. But here *Yes* functions as just one of a set of possible 'acknowledgements', along with *I see, Right, Really, Is it?, Oh, Yeah, Mmm*, a nod of acknowledgement, etc. - or two or more of these. Notice that this use of *Yes* and its equivalent forms doesn't necessarily mean 'I agree with you' but it does always mean 'I understand what you're saying'.

A fourth discourse function of *Yes* - and also of the other items that can be used to expound the 'acknowledge' type of Respond move in exchange structure - is as part of what is termed 'back channel' communication. This function is best seen as originating as an extension of the use of the 'acknowledgement' in exchange structure, the difference being that it no longer keeps to its prescribed place in that structure. A typical use occurs when someone is giving you an account of some event over the telephone, and you respond every now and then with *Yes* - as well as with *I see, Right, Really, Oh, Mm*, etc. As before, it doesn't necessarily signify agreement, but merely 'I understand what you're saying (so you can go on)'.

The fifth additional discourse function of *Yes* is rather different. It occurs in the 'attention-getting' type of exchange, as a response when someone calls your name. In this case it typically has a high rising tone, and the meaning is something like 'I can hear you (so tell me what you want)'.

The reason for identifying the various discourse functions of *Yes* and *No* in a book about the lexicogrammar of English is to make it clear that the appropriate place to show these functional differences is IN THE ANALYSIS OF THE TEXT IS AT THE LEVEL OF REPRESENTATION THAT SHOWS THE STRUCTURE OF THE DISCOURSE - and so NOT in the representation of structure in the lexicogrammar.⁶⁶

We have seen that, in each of the five functions of *Yes* described above, *Yes* realizes a meaning which, if expressed in full, would be a clause. At a fairly high level of generalization, the three components of the meaning of *Yes* identified in Section 6.9 can be seen to be relevant to the four other discourse functions too - even though their force is diminished to a quasi-formulaic status by their frequent repetition in these functions. Rather than trying to make a distinction between cases in which the item has a purely formulaic function, so that it could be modelled as directly expounding the discourse element of 'act', it seems sensible to generate all five types of *Yes* and both types of *No* via the lexicogrammar - so allowing for possible structural additions (e.g. as in *Yes please*, which is a type of discourse 'act' that we haven't provided for so far).⁶⁷

66. The only reasons for showing a difference in the lexicogrammatical structure would be (a) if a variation in the sequence of the elements on the relevant unit showed that there was indeed a different structure at this level of analysis (and since there is only one element this is not the case), or (b) if the element being used (the Operator) was clearly inappropriate for some reason. But this is not the case either.

67. To take this position is not, of course, to suggest that the wordings of *I understand what you are saying* and *I can hear you* occur in the mind of the Performer. An alternative approach would be to analyze the last three cases of *Yes* as items that directly expound the relevant element of the discourse structure (the 'act'), without

The conclusion, then, is that the differences between the five discourse functions of the word *Yes* recognized here should be reflected at the level of the description of a text at which the discourse structure is analyzed - and so not in either the semantics or the syntax within the lexicogrammar. This is a good example of one of the basic principles of linguistic description, namely that it is important to perform each type of analysis AT THE APPROPRIATE LEVEL OF THE OVERALL MODEL - and not to try to do too much at any one level.^z

6.11 Summary

The most frequently used choices in meaning for POLARITY and their realizations in syntax can be summarized in the three little system networks shown in Figure 4.15. The three features that are the entry conditions to these three systems of POLARITY are ones that we will meet in Section 8, where we consider the concept of RECOVERABILITY. The reasons why treat the two lower systems as separate from the first are (a) that the second is different (being simpler) and (b) that the two lower systems do not enter the full, multifunctional system networks for the clause that the first does. And it is the multifunctional nature of the full English clause that is our main focus here.

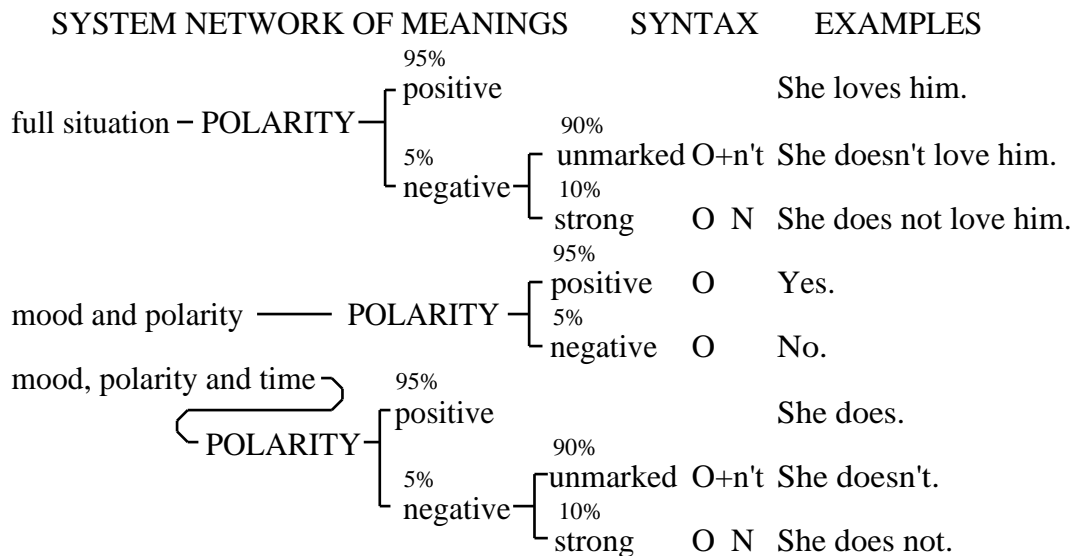


Figure 4.15: The most frequent choices in POLARITY (simplified)

Interestingly, English requires the presence in the clause of an Operator in order to express both ‘unmarked’ and ‘strong’ negation. So it is NOT the case, as one might at first think, that in a clause such as *She doesn't love him* a form of the verb *do* is introduced in order to have a ‘base’ to which the suffix *n't* is attached. We know this because the Operator is also required when the ‘strong’ form of ‘negative’, i.e. *not* is chosen. In other words, we don't say **Alex touchedn't the*

being processed through the lexicogrammar.

plug or - at least not in modern English - **Alex touched not the plug*.⁶⁸ And we use the same element of the Operator to show the analysis of *Yes* and *No*, and for *He did*, etc, and *He didn't*, etc.

There are other types of POLARITY meaning, but these are much less frequent. Some of these are mentioned when the elements that they 'borrow' are introduced in later chapters, and the full picture of options in POLARITY, with the rich array of ways of expressing various types of 'negative' meaning, is given in Chapter 8 of the *Functional Semantics Handbook*.⁶⁹

From the viewpoint of SYNTAX ANALYSIS, then, two key points of this section are (a) that the **Negator** must be used for *not*, (b) that it must not be used for *n't*, which is part of the Operator, and (c) that the Operator should be used for *Yes* and *No* and their close equivalents such as *Yeah*, *Mm* and *Nope*.^{aa}

7 The CONTRASTIVE NEWNESS function of the Operator in 'polarity correction'

7.1 The context of 'polarity correction'

We turn now to a third function of the Operator. Like the one that we have just been considering, this may require the Performer to introduce a form of the verb *do*. Consider the following scrap of conversation, which concerns the question of how Fred feels about Fiona - and notice in particular Paula's response.

- (1a) Adam: Fred doesn't like Fiona.
Paula: Fred DOES like Fiona.

Adam's clause is 'negative', and the function of Paula's response is clearly to 'correct' its 'polarity'. But Paula's response doesn't simply give the 'positive' version of it, which would be:

- (1b) Adam: Fred doesn't like Fiona.
Paula: ??Fred likes Fiona.

Paula's response in (1a) is not impossible, as the '??' which precedes it indicates, but it would be very unusual indeed. It is the response in (1a) that shows the typical pattern, introducing the item *DOES* as an Operator.

So the question for the functional grammarian is: Why does Paula introduce this additional element? Clearly, she does so because she needs to have the Operator in the clause - but the question is: WHY does she need it?

68. However, in Shakespeare's time people could have said *He touched not the plug* - (though it wouldn't have been the same sort of plug that Alex's mother is worried about.

69. For example, there are negative meanings in the following: *Nobody touched it*, *She never touched it*, *She hardly touched it*, *Unless she touches it*, and even in *She almost touched it*.

If you are only interested in syntax and do not want to know about the various functions that the Operator serves, you can skip to Section 11.

7.2 The role of the Operator in ‘polarity correction’

The first part of the answer is that the Operator, as we saw in Section 6, is the element at which the POLARITY of the clause is typically expressed. So, by introducing a form of the verb *do/does/did*, Paula’s clause has an element which expresses the clause’s ‘positive’ polarity. The second part of the answer is that this gives her a clause element which she can make prominent in a way that expresses the **contrastive newness** of the ‘positive’ polarity. (Here we will use capitals to represent ‘contrastive newness’ in examples, as in (1a), and underlining to represent ‘unmarked newness’ - the concept to be introduced in the next section.)

But what is ‘contrastive newness’? And what is its relationship to ‘polarity correction’? To understand the meaning of ‘contrastive newness’, we need first to understand a little about the far more frequent type of ‘newness’ that we will term ‘unmarked newness’. (The accounts of ‘unmarked newness’ and ‘contrastive newness’ in the next two sub-sections are shortened version of the accounts of these concepts given in Chapter 19.)

7.3 The meaning of UNMARKED NEWNESS

‘Unmarked newness’ is the type of ‘newness’ that is found in every single text-sentence that is ever spoken or written - except when it is replaced by ‘contrastive newness’ (which we will meet in the next section).

Every sentence (though not necessarily every clause) has at least one element that is marked by the intonation with which it is spoken as **new** information - and quite often a sentence has more than one such ‘new’ element. After all, if a sentence didn’t contain any information that the Performer wishes to present to the Addressee as ‘new’, there would logically be no point in producing the sentence.⁷⁰ The meaning of ‘This element is new information’ is conveyed in speech by having a significant CHANGE IN PITCH on the element that the Performer is presenting as ‘new to the Addressee’. It is usually a **fall** in intonation, but sometimes it is a **rise** and sometimes a combination of the two. The item on which the fall or rise occurs is typically the last vocabulary word in the sentence (usually a noun, adjective, adverb or verb). But almost always it is the referent of the whole of the clause element of

70. However, the fact that it is at first sight illogical to tell people things that they know already doesn’t prevent us from doing so on numerous occasions. For example, someone looking out of the window in Britain and seeing the sun shining may say *It’s lovely day*. Similarly, a contestant in a quiz show will happily give the answer to a question put to him by the quizmaster, even though the quizmaster already has the answer written on the card in his hand. In each case, of course, there is a logical reason for indulging in this superficially illogical behaviour. But even in these cases we normally use the intonation patterns that are associated with telling people things that they don’t know already. An apparent exception to this is the quiz situation. Here the participants are allowed to guess, so that they might answer the question *What is the capital of Bulgaria* with *Bucharest?* (spoken with a rising tone). But what is ellipted here is not *It is*, as would be the case in a response to a ‘straight’ question, but *Is it*, as in *Is it Bucharest?*

which the word is a part that is ‘new’. So in a typical use of *Fred likes Fiona* the fall in pitch would come on the ‘o’ in *Fiona*, spoken as *Fred likes Fiona*. (Here I am using underlining to indicate the unmarked Tonic.)⁷¹

So far the explanation has been mainly in terms of the level of MEANING. In terms of the intonational sub-component of the level of FORM, we may say that each sentence is spoken with one or more **intonation units**, and that the **syllable** on which the major pitch movement (or **Tone**) of the intonation unit begins is termed the **Tonic**. So the role of the Tonic is to mark the item in which it occurs as one that carries ‘NEW’ INFORMATION.

While every **sentence** has at least one element that is marked as ‘new’, it is not the case that every **clause** in every sentence has one (as we will see in the fuller treatment of this topic in Chapter 19). For each clause, then, the choice is simply between presenting it as containing ‘new information’ or as NOT containing ‘new information’. And in the generative version of the grammar, there is a default rule that makes sure that every sentence has at least one element of one clause that is presented as ‘new’.^{bb}

7.4 The meaning of CONTRASTIVE NEWNESS

However, if the Performer (P) speaks or writes a sentence in such a way as to emphasize a CONTRAST between what the Addressee (A) may think is the case (perhaps because someone has just said it) and what P thinks that A SHOULD BELIEVE, then P is introducing a very different and particularly strong type of ‘newness’. In terms of its ‘experiential’ meaning, a clause such as *Fred DOES like Fiona* is NOT ‘new’, in that the proposition that ‘Fred likes Fiona’ is ‘in the air’. But when you bring the meaning of ‘polarity’ into the picture it IS ‘new’ - because the Performer believes that its polarity is wrong.⁷² It is this type of ‘newness’ that we will call **contrastive newness**.

So we can say that the function of a clause that contains contrastive newness is to CORRECT A POSSIBLE MISAPPREHENSION IN THE MIND OF THE ADDRESSEE. Its meaning can be expressed informally like this: ‘While I believe that the part of this information unit that occurs after the element marked as ‘contrastively new’ is ‘common ground’ between us, the element itself is in direct contrast with what I think you may mistakenly believe it to be - so, if you do believe it, please correct this misapprehension.’ Let’s test the validity of this general statement by applying it to Paula’s utterance in (1a). Here she means something like ‘You and I both know that there is a relationship between Fred and Fiona but, in contrast with what I have reason to think you may believe it to be, namely that Fred doesn’t like Fiona, I am

71. In this case the whole clause might well be information that is ‘new’ to the Addressee, but the fact is that English normally allows the Performer to mark just one element in each information unit explicitly as ‘new’. However, the language has other resources for showing that an item is ‘recoverable’, so that in *He likes Fiona* (where *Fred* is replaced by *he*) the Performer would almost certainly NOT be presenting the first element as ‘new’.

72. And the same principle applies to other types of contrastive newness, as in *FRED likes Fiona* (i.e. not Bill), where the mistaken assumption concerns part of the ‘experiential’ meaning, i.e. the identity of the first PR.

telling you that Fred likes Fiona, so please believe this instead.’⁷³

In speech, the prominence of ‘contrastive newness’ is typically conveyed by using a significantly greater fall in pitch than that typically used for ‘unmarked newness’. And in an informal written style, such as a letter or an email message to a friend, we show this strong prominence by using devices such as underlining or, as we do here - e.g. in (1a) - upper case letters. So in the spoken version of Paula’s reply in (1a) the fall in her intonation comes on *DOES* - rather than in its typical place at the end of the clause, when it would fall, as we have seen, on *Fiona*.

7.5 ‘Polarity correction’ as just one type of contrastive newness

So in Example (1a) Paula introduces the Operator *DOES* because she requires an Operator in order to express the ‘contrastive newness’ of the POLARITY. And in this case it is the ‘negative polarity’ of Adam’s clause that she wishes to correct, by replacing it with ‘positive polarity’. In other words, the presence in Adam’s mind of the proposition with ‘negative polarity’ that could be expressed in *Fred doesn’t like Fiona* must be overcome and changed into ‘positive polarity’. To be certain that Adam gets this message, Paula needs to use the strongly ‘corrective’ meaning of ‘contrastive newness’ - as found in (1a).

But ‘polarity correction’ is simply one of many types of ‘contrastive newness’. Others can be seen in *FRED doesn’t like Paula* (- *IVY likes her*); *Fred doesn’t LIKE Paula*; (- *he HATES her*), and *Fred doesn’t like PAULA* (- *he likes FIONA*). All uses of ‘contrastive newness’ seek (or pretend to seek) to correct mistaken assumptions, but the type whose aim is to correct the polarity of the proposition is seeking to correct the most serious mistaken assumption that it is possible to make.⁷⁴

7.6 Other forms of ‘polarity correction’

So far we have been considering the case where it is necessary to supply a form of the verb *do* as the Operator. But to complete the picture of ‘polarity correction’ we should look at two other types in which this isn’t necessary. As examples of the first type, consider (2a) and (3a). As before, each of these utterances is produced in order to correct a mistaken negative assumption. But there is no need to introduce a form of *do* in these two cases, because each already contains one - to express ‘possibility’ in (2a) and because the Process is ‘being’ in (3a). So the presence of

73. While we will locate the choice to express ‘contrastive newness’ with ‘unmasked newness’ in the ‘informational strand of meaning in summary diagrams (such as Figure 4.18 in Section 10.3), we should note that ‘contrastive newness’ typically brings with it some degree of what we might term ‘emotional charge’. This is because it carries the implication that P is saying to A: ‘You’re wrong about this,’ so explicitly inviting A to accept correction (e.g. by saying *Oh I see*) and so to lose face - to a greater or lesser degree. The emotional charge experienced by the Performer may therefore be somewhere on a continuum between triumphant pleasure and regretful sadness. But the fact that there is an associated ‘emotional charge’ does not make this an ‘affective’ meaning; it is the concept of ‘newness’ that is explicitly realized in the intonational form. (However, the emotional charge is part of the explanation as to why ‘contrastive newness’ is so often associated with the ‘experiential enhanced theme’ construction, which we will meet in Chapter 23.)

74. I should point out that ANY element of the meaning of a clause may be marked as ‘contrastively new’ - and not just the polarity, which we are considering here. For example, in *IVY gave it to me*, the implication is that it was Ivy who gave it to me, and not the person who you may mistakenly be thinking that it was.

might in (2a) and *are* in (3a) is sufficient to make it possible to express ‘contrastive newness’. The only change that is needed in these two cases is to write the word that expounds the Operator in capital letters.

- (2a) Fred MIGHT visit Ivy.
 (3a) They ARE reporters.

Since the analysis is completely straightforward, we can at this point introduce a space-saving version of our usual tree diagram in which the element is stated after the word or words that expound it, as follows:

- (2b) Fred [S] MIGHT [O] visit [M] Ivy [C].
 (3b) They [S] ARE [O/M] reporters [C].⁷⁵

The second additional type of ‘polarity correction’ to note occurs when the misapprehension that is to be corrected is ‘positive’. In this case the clause that contains the ‘polarity correction’ is ‘negative’ - and, as you might expect from what we learnt about negative clauses in Section 6, there are two possible forms: the ‘unmarked’ and the ‘strong’ negatives. As a result, the correction to the mistaken assumption that ‘Ivy likes Fred’ can also take two forms, as in (4) and (5). And in these cases too there is no additional element.

- (4) Ivy [S] DOESN’T [O] like [M] Fred [C].
 (5) Ivy [S] does [O] NOT [N] like[M] Fred [C].

In all of these examples we have assumed that we are representing speech (or writing in a casual register), and we have therefore been able to use upper case letters to represent the ‘contrastive newness’. But in formal writing the distinction between a clause with contrastive newness and one without is lost - except when the meaning is ‘positive contrastive newness’, and a form of *do* is used for which there can be no other explanation.

So in the written form of Paula’s utterance in (1a), i.e. *Fred does like Fiona*, we know that P is correcting the polarity of A’s mistaken assumption. But in the written forms of (2a) and (4) - i.e. *Fred might visit Ivy* and *Ivy doesn’t like Fred*, we cannot be sure whether the clause is a simple ‘negative information giver’, or whether it also carries contrastive newness and so expresses the ‘polarity correction’ function.

But this uncertainty is a by-product of considering examples out of context, and when they occur as part of a full text it is usually possible to ‘read in’ the intonation with which the text would be spoken if it was read aloud - and so to infer the meaning of ‘contrastive newness’, whenever this is intended.

75. It will be convenient to use this simplified notation at various points in the next few chapters, but we should not allow ourselves to think that it is more than a temporary space-saver. This is because, as soon as we reach the point where we wish to analyze more than one layer of structure in the representation of a text-sentence, we will need to revert to the ‘tree diagram’ representation of syntax. See Fawcett (2000a:245-8) for a discussion of alternative notations for representing syntax.

7.7 Summary of ‘polarity correction’

We can summarize the choices in the two types of ‘newness’ that we have considered here in the simplified system network in Figure 4.16. As you will see, the system of UNMARKED NEWNESS (whose name is omitted) is dependent on the choice of ‘no contrastive newness’ in the system for CONTRASTIVE NEWNESS.

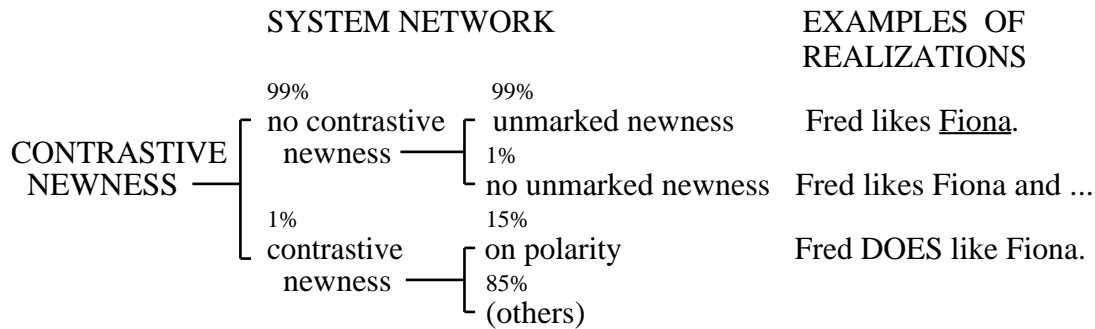


Figure 4.16: The primary choices in the network for CONTRASTIVE and UNMARKED NEWNESS (simplified)

8 The ‘informational’ role of the Operator in expressing the RECOVERABILITY of experiential meaning

There is a fourth - and final - reason to introduce a form of *do* to expound the Operator as a default. Consider the use of *does* in the following :

- (1) Adam: Does Fiona like Ike?
 Paula: Yes, she does (like him).

The clause in which we are interested is *she does (like him)*.⁷⁶ Notice first that in this case the Operator *does* is introduced simply to express the polarity - and not to correct it. Note too that the typical version of Paula’s response (without *like him*) simply re-uses the two elements that express the MOOD in Adam’s polarity seeker *Does Fiona like Ike?* - though in the ‘information giver’ order. It would be rather odd (but not impossible) for Paula to reply *Yes, she likes him*. In the most natural form of a reply to a polarity seeker a form of *do is* required as a supplement to *Yes* or *No* - and for two reasons. The first is to avoid the unnecessary redundancy of repeating the parts of Adam’s original clause that occur after the element that signals the polarity, and the second is to avoid the brusqueness of too brief a reply - as a simple *Yes* might be.

Notice, however, that the form of *do* is only required if the clause does not already contain an Operator - as it does, for example, in (2):

- (2) Adam: Will they get married?
 Paula: No, they won’t (get married).

76. We will ignore the word *Yes* here. It is a separate clause, as we saw in Section 6.9, and it is related to the following clause of *she does (like him)* by the relationship of **co-ordination** - as we will see in Chapter 12.

This type of ‘recoverability of experiential meaning’ is very common in spoken conversation, but it is rare in written texts - except, of course, for those that report spoken conversations.⁷⁷

There is another type of clause in which a form of *do* functions as the Operator, but it is much less common.^{cc} Consider the use of *does* in the second clause of Example (3):

(3) Fiona strongly recommends Kubrick’s film *2001*, and so does Ivy.

This can be expanded to ... *and so does Ivy strongly recommend it*, so demonstrating clearly that *does* is functioning as an Operator.^{dd}

This fourth use of *do* as the Operator to signify ‘recoverability’ can be compared with the much more frequent type of RECOVERABILITY that we met in Section 6.9, when we were considering the meanings of the words *Yes* and *No*. In *Yes* and *No* the words are a SUBSTITUTE for other words that express a full clause, but in (3) the use of *does* as the Operator signals that the words that could have followed the Operator are not being reproduced, because they are fully recoverable.

We can summarize the choices in the two types of ‘recoverability’ that we have considered here, together with those considered in Section 6, in the simplified system network in Figure 4.17 - where each is contrasted with the full version of the clause. (The combination of the two recoverable forms, as in *Yes, she has*, is treated as a type of co-ordination, as explained at the end of Section 6.9.)⁷⁸

	SYSTEM	EXAMPLES OF REALIZATIONS
RECOVERABILITY	95% full situation ...	She has read <i>War and Peace</i> .
	4% mood and polarity ...	Yes.
	1% mood, polarity and time ...	She has (read <i>War and Peace</i> .)

Figure 4.17:
Some primary choices in the network for RECOVERABILITY (simplified)

9 The ‘interpersonal’ role of the Operator in expressing MOOD: retrospect and prospect

There is a fourth type of meaning that the Operator serves - and we have already met two examples of it. We saw in Chapter 3 how the Operator, working in partnership with the Subject, serves to express the meaning of ‘polarity seeker’. Compare:

77. The words in brackets in (1) and (2) are examples of **ellipsis**. Ellipted words are words that P presents as being so clearly recoverable by A that they do not even need to be pronounced at all. Recognizing is a major factor in getting the analysis of text-sentences right, and it will be examined in Chapter 20.

78. As you will see if you compare Figure 4.17 with the POLARITY systems in Figure 4.15, the three features in the present system function as the entry conditions to the three POLARITY systems.

the meaning of ‘information giver’, as in *You saw him* and
 the meaning of ‘polarity seeker’, as in *Did you see him?*

In the second case a form of the verb *do* is introduced to the clause in order to provide an Operator. But why is it so vital to have an Operator? The answer - as we saw in Chapter 3 - is that in modern English we cannot express the meaning of **polarity seeker** without having an Operator in the clause.⁷⁹ So if no meaning has been chosen that will result in the clause having one of the elements that can be an Operator - such as a modal verb - we use a form of the verb *do* to fill this role.

However, ‘information givers’ and ‘polarity seekers’ are just two of the many options in the **MOOD** network - though they are the most frequent ones. But the Operator plays an equally central role in realizing practically all of the other choices in MOOD, as we will see in Sections 2 to 4 of Chapter 5 and then in Chapter 14. But we cannot list all of those uses here, so at this point in our developing picture of the centrality of the Operator in the clause we will simply let its contribution to the meanings of the ‘information giver’ and the ‘polarity seeker’ to stand as a placeholder for the many further functions that it serves in expressing different types of MOOD.⁸⁰

We are now in a position to evaluate the claim of the Operator to serve more functions than any other element in the clause - and Section 10 addresses this issue.

10 The Operator as the prime example of the multifunctional principle

10.1 How many strands of meaning are expressed in the Operator?

In Sections 2 to 9 we have seen the complexity of the answer to the question ‘What does the Operator mean?’ We have identified no fewer than SEVEN different strands of meaning that can be expressed in the Operator. In other words, it may be used to express any of the following:

1. basic **interpersonal** meanings in MOOD (typically in conjunction with **S**, but also through the **ITEMS** that expound **O** (Sections 3 and 6 of Chapter 3, Sections 4.4 and 4.9 of this chapter, and more fully in Sections 2, 3 and 4 of Chapter 5, and again in Chapter 14);
2. the Performer’s strength of confidence in the **validity** of the clause (Section 4.1 of this chapter),
3. **experiential** meanings expressing **control** and **disposition** (Section 4.2 of this chapter),
4. **experiential** meanings expressing **time: time reference position, reality** and **directness** (Sections 3, 4.3 and 4.5 of this chapter),

79. It may be helpful to point out that the meaning of *You saw this?* is not that of a polarity seeker, but a ‘polarity challenging check’ - as we will see briefly in Chapter 14 and more fully in Chapter 7 of the *Functional Semantics Handbook*.

80. When we come to examine MOOD more fully in Chapter 5, we will find that the network of the meanings of MOOD is considerably richer than the standard presentations of MOOD that are found in most other grammars of English - the reason being that the standard MOOD networks are essentially at the level of form rather than meaning.

5. **negation** (Section 6 of this chapter),
6. the **informational** meaning of **contrastive newness** in **correcting polarity** (Section 7 of this chapter), and
7. the **informational** meaning of the **recoverability** of experiential meaning (Section 8 of this chapter).

We have also seen that any of Functions 1, 5, 6 and 7 may cause the introduction of a form of *do* as the Operator - but only if the expression of one of the other types of meaning does not independently provide the clause with an Operator.

In Chapter 3 we saw that the **Subject** typically serves three functions: (1) as a Participant Role, (2) as a contribution (with the Operator) to the expression of MOOD, and (3) as the 'Subject Theme'. (We have said very little about 'Theme' so far, since it will be covered in Chapter 6). But it will by now be clear that the **Operator** is capable of serving even more functions than the Subject. And this leads us to the question this is to be asked and answered in the next section.

10.2 How many strands of meaning can be expressed in the Operator simultaneously?

If we ask the question 'Does the Operator ever serve all of the seven types of meaning mentioned above simultaneously?' the answer is that it does not. The reason is simple, and it is that it is logically impossible for the Operator to serve more than one of the four types of meaning realized in the modal verbs at the same time, since their realizations at the level of form all occupy the same 'space' in the clause.^{ee}

However, it is possible to find examples of Operators that simultaneously realize at least FIVE different types of meaning. Consider the functions served by *CAN'T* in (1):

- (1) P: We saw an amazing man on TV last night - he can eat virtually anything.
He even ate a watch and a razor blade.
A: Yes, I saw it too. He was amazing! What *CAN'T* he eat?

Here the Operator *CAN'T* in the clause that constitutes the last sentence of A's response carries the following types of meaning:

1. with the Subject, the **interpersonal** meaning of 'information seeker' (of a sub-type which we will meet in Section 2 of Chapter 5),
2. the **experiential** meaning of 'ability',
3. a second **experiential** meaning, i.e. that of the 'time reference position'; thus the meaning of 'present trp' is realized in the use of *can* (in contrast with *could*, as in *What could he eat last year?*),
4. the **negativity** meaning realized in *n't*, and
5. the **informational** meaning of 'contrastive newness' in *CAN'T*.

And the same set of five meanings would be realized if the example was *What CAN he eat?*, because we would simply have replaced [negative] by [positive] in the POLARITY system.^{ff}

Thus the Operator has the potential to combine more strands of meaning than the

three that typically occur in the Subject (the **experiential** meaning of the Participant Role, the **interpersonal** meaning of the Subject's contribution to the MOOD, and the **thematic** meaning of 'Subject Theme'. (We will come to the full treatment of 'Subject Theme' in Section 3 of Chapter 6).

10.3 The Operator and our developing model of strands of meaning

So the multifunctionality of the Operator is quite amazing. We noted in Sections 3 to 9 the seven types of meaning that it serves, and we have now demonstrated the fact that five of these can be realized in this element at the same time. These facts significantly enrich our picture of a multi-strand model of English, so we will now revise and expand the simple picture given in Figure 3.4 of Chapter 3.

It was at the very beginning of that chapter that I stated that one of the basic principles underlying Systemic Functional Grammar is the **multifunctional principle**. And then in the course of that chapter we met the two major areas of meaning in each of the 'experiential' and the 'interpersonal' strands of meaning, i.e. TRANSITIVITY in the 'experiential' strand and MOOD in the 'interpersonal' strand. The two 'areas of meaning' of TRANSITIVITY and MOOD are the major system networks in these two strands of meaning, and the choices within them go a long way towards determining the most central parts of the 'experiential' and 'interpersonal' strands of meaning.

But then we began to meet other areas of meaning that are also 'experiential'. As I began to introduce a few Adjuncts to the examples in Chapter 3, we recognized that these realize the Circumstances that surround the event (in a broad sense of 'Circumstance' that includes 'Time Position'). Then, earlier in this chapter, we saw that the TIME REFERENCE POSITION system, the other TIME systems and the systems that express CONTROL and DISPOSITION are all further expressions of **experiential** meaning. Furthermore, in our exploration of the meanings that are expressed in the modal verbs, we found that they also contribute to two other major strands of meaning - VALIDITY and MOOD. And we also met POLARITY and three types of **informational** meaning: RECOVERABILITY, UNMARKED NEWNESS and CONTRASTIVE NEWNESS.

Finally, we also met in Chapter 3 (very briefly, in Section 7.5) the concept of SUBJECT THEME - a topic which will receive its full treatment, together with other types of 'thematic' meaning, in Chapter 6. Even though it has barely been introduced, we will include it in our growing picture of the multifunctional nature of language, to make it as complete as is possible at this stage.

In the simple picture of the strands of meaning that we had in Figure 3.4, at the end of Chapter 3, there was only the TRANSITIVITY network in the 'experiential' strand and the MOOD network in the 'interpersonal' strand. It is the additions listed above that account for the enormous expansion over in Chapter 3 that you will find in Figure 4.18.

THE MANY FUNCTIONS OF THE OPERATOR AND THE TIME AUXILIARIES

strand of meaning	expressed in the unit:
	clause
experiential	TRANSITIVITY CIRCUMSTANCES CONTROL & DISPOSITION TIME
interpersonal	MOOD
negativity	POLARITY
validity	BASIC VALIDITY ADJUNCTIVAL VALIDITY
thematic	SUBJECT THEME
informational	RECOVERABILITY UNMARKED NEWNESS CONTRASTIVE NEWNESS

Figure 4.18: Six of the eight major strands of meaning in the English clause and some of their associated system networks

Let me now say a little about the reasons for locating the various system networks in their respective strands of meaning - as shown in Figure 4.18.

CIRCUMSTANCES belong in the **experiential** strand for the obvious reason that it is they and the Participant Roles (generated from the system networks for TRANSITIVITY) that constitute the experiential semantic roles in the clause. The difference between the Circumstantial and the Participant Roles is, as we saw in Chapter 3, that the Participant Roles are ‘expected’ by the Process and are typically realized in the Subject and Complement(s), while the Circumstantial Roles are not ‘expected’ by the Process and are realized in Adjuncts.⁸¹

The reason for assigning the CONTROL & DISPOSITION meanings of the modal verbs to the experiential strand of meaning is that they express the same sort of meanings as those expressed through TRANSITIVITY. Let’s consider an example that demonstrates this. Suppose that Adam and his friend Nick have arranged for Nick to go round to Adam’s house, and that they then decide that it would be even better if he could stay the night and go home the next day. Adam asks his mother *Can Nick stay over tonight?* She replies *Yes, that’ll be fine*, and Adam then passes the good news on to Nick by saying *It’s cool - Mum’s allowing you to stay over tonight*. The meaning of *can* in Adam’s request is the seeking of ‘permission’, and the meaning *are allowing* in Nick’s re-expression of it is one of giving ‘permission’. In other words, since the Process of ‘allowing someone to do

81. While we have included various types of Adjunct that express ‘Circumstances’ in many of the examples used so far, the first systematic discussion of them will not come until Section 10 of Chapter 6.

something' is a type of TRANSITIVITY, which is the most central type of **experiential** meaning, so too this sense of *can* is 'experiential'. Similar broadly equivalent examples could be given for all the meanings of 'control' and 'disposition' that are expressed in the examples of modal verbs in Section 4.2. (Interestingly, a number of these have been taken over for use in the semantics of MOOD, typically with *I*, *you* or *we* as Subject, as we will see in Section 2 of the next chapter.^{gg})

The third major sub-strand of 'experiential' meaning introduced so far is the expression of TIME meanings, and specifically the choices in TIME REFERENCE POSITION, REALITY and DIRECTNESS. This type of meaning is placed here because the meanings of 'time' express one aspect of our mental model of the world in which we live.^{hh}

In the Cardiff Grammar, the MOOD network is virtually the only system network realized in the clause that is 'interpersonal'. There are various dependent system networks, including several for meanings realized in intonation, but these can all be justifiably regarded as parts of the overall MOOD network.ⁱⁱ

I have placed BASIC VALIDITY (i.e. the 'validity' meanings expressed in the modal verbs) in a separate 'validity' strand, because it is clearly a different type of meaning from any of those mentioned in this summary so far. It is unlike MOOD, for example, in that VALIDITY expresses 'personal' meanings (i.e. 'evaluation') while MOOD expresses 'interpersonal' meanings (i.e. 'interaction').^{jj} We have also met examples of **Validity Adjuncts**, so I have included the system network that generates these as a separate area of meaning within 'validity'. (The term 'adjunctival' is intended to express two facts: (1) that these meanings are realized at the level of form as Adjuncts, (and (2) that they are 'adjuncts' to the 'basic' type of 'validity'.)⁸²

POLARITY, as we saw in Section 6, is yet another type of meaning, so that it is assigned to a different strand. We term the strand of meaning 'negation', to distinguish it from the system network for POLARITY, because there are a number of minor ways of expressing 'negation' that lie outside the main POLARITY system. And 'polarity', as we have seen, requires the use of the Operator.

Next comes the 'thematic' strand of meaning, which we will develop further in Chapters 6 and 23. The only type of 'thematic' meaning mentioned so far is the type associated with the Subject, which is therefore termed SUBJECT THEME. Here the word 'subject' carries its everyday meaning (like the term 'adjunctival' that I introduced just now), so that the Subject of a clause (in the syntactic sense) is typically also the 'subject' of the clause, in the sense that it is the entity that the Performer wishes to say something about.⁸³

Finally, the three types of meaning of RECOVERABILITY, UNMARKED NEWNESS, and CONTRASTIVE NEWNESS are all aspects of the Performer's

82. This area of meaning is not as closely related to the BASIC VALIDITY network as is sometimes assumed. Specifically, the choices in meaning that it offers do not match up, in a one-to-one manner, with the 'validity' meanings realized in the modal verbs.

83. See Fawcett (1999) for a full discussion of the meaning of the Subject in English, in the framework of a comparison between my account of it (and Halliday's earlier account) and Halliday's more recent account.

presentation of the message from the viewpoint of the anticipated informational needs of the Addressee. All three are assigned to the ‘informational’ strand, and the first and frequently the third are realized in the Operator.⁸⁴

This section is the last that is primarily about the Operator, so let’s conclude it by summarizing what we have learnt so far about CLAUSE ANALYSIS SKILLS that relate to it. Firstly, we now have a complete list of the modal verbs that may occur at the **Operator (O)**, together with a picture of the ‘fading usage’ - as the Operator - of a few other verbs. Secondly, we have noted three new uses of forms of *do* as the Operator. This is in addition to the use of *do* to form an ‘information seeker’, as described in Chapter 3, so making four such uses of *do* in all. Thirdly, we have learnt to recognize the **Infinitive Element (I)**, which is often introduced to accompany a specific item that expounds the Operator, and is almost always realized as *to*. Fourthly, we have noted the important fact that *n’t* is always part of the Operator, while the item *not* is always a separate element, i.e. the **Negator (N)**. And, fifthly and finally, we have noted the use of the Operator to express the ‘polarity’ meanings of *Yes* and *No* - and that they are frequently followed by heavily ellipsed clauses with only a Subject and Operator, as in *Yes, he is (having a snooze)*.

We turn next to two other elements that frequently serve as the Operator. In other words, if no other meaning is chosen that would result in the presence in the clause of an Operator, whichever of these two new elements comes first in the clause takes on this function - as well as its inherent function as an Auxiliary Verb. In other words, they behave rather as forms of *be do* when they expound the Main Verb, as in *Is she here yet?* (as we saw in Section 5 of Chapter 3).

11 Two Auxiliary Verbs that express aspects of TIME

11.1 The ‘period-marking’ Auxiliary

The time has come to significantly expand our picture of how TIME meanings are expressed in English, as we meet two new major, high-frequency elements of the clause. Each is a type of **Auxiliary Verb (X)**, or ‘Auxiliary’, for short.⁸⁵

84. The two other major strands of meaning will be introduced at later points in the book.

85. As you may have guessed, we use ‘X’ to represent ‘Auxiliary’ because ‘A’ is already in use for ‘Adjunct’. In traditional grammar, the various classes of verb that expound the Operator are usually treated as sub-categories of ‘auxiliary verb’ - with the result that the term ‘auxiliary verb’ gets applied to any verb that is not a ‘lexical verb’. This reduces its value as a name for a grammatical category. In contrast, here we use the terms ‘Operator’ and ‘Auxiliary’ as the names of two types of **clause element**. As you will realise, this is a significantly different use of the term ‘Auxiliary’.

The two Auxiliaries to be introduced in this section and the following one are typically described in traditional grammar as expressing two ‘aspectual’ meanings. But this sets up a contrast between ‘aspect’ and ‘time’, because ‘aspect’ is traditionally contrasted with ‘tense’. While the explanations given here of the meanings of the two Auxiliaries respects the concepts discussed under the traditional label of ‘aspect’, both types of meaning are treated here as aspects (sic!) of the broad area of meaning that we call TIME.

If you are only interested in syntax and you don't want to know about the different meanings that this element expresses, skip to the analysis task just before Figure 4.19.

First, let's consider the type of 'time' meaning that is expressed in a form of *be* + *-ing*, as in the underlined portion of (1a):

(1a) They were discussing your case yesterday afternoon.

(1b) They discussed your case yesterday afternoon.

Drawing on the concepts introduced in Section 2, we can say that (1a) contains two types of 'time' meaning. The first is the **time reference position (trp)** from which the Performer is presenting the 'discussing' event - and in this case it is the **past trp**. This is familiar - but what is the second 'time' meaning? It is a meaning that marks the event as continuing over a period of time, and we will say that a clause that contains this meaning is **period-marked**.⁸⁶ In other words, the Performer of (1a) is using the *be ... -ing* form to draw the Addressee's attention to the fact that the event lasts for a period of time, and the contrast in the meanings of (1a) and (1b) illustrates this difference.

But what does it mean to say that an event is 'period-marked'? In the case of a 'durative' Process such as 'discussing' - i.e. a Process that inherently lasts for a period of time - the effect of the choice of 'period-marked' is to draw the period out further, so that the event in (1a) may appear to have lasted longer than that in (1b).

Interestingly, however, the effect of the feature 'period-marked' differs according to the type of Process that it occurs with.⁸⁷ Here I will illustrate three ways in which the combination of the meaning of 'period-marked' with three further types of Process changes the meaning from its use in (1a). Consider the following three pairs of examples:

(2a) He was living in Paris at the time.

(2b) He lived in Paris at the time.

86. In traditional grammars, the two equivalent terms that are used most frequently are 'progressive' and 'continuous'. But the usual meaning of 'progressive' in everyday language is 'in tune with modern ideas', which is unhelpful, and its second meaning of 'gradual' is hardly better. 'In progress' would have been closer to the meaning, but this two-word term is not used in grammars. 'Continuous' is better, but a 'continuous noise' is an 'endless noise'. The word 'continuing' is closer to the meaning, and we would have adopted it if it had been in use already. But the term 'period-marked' expresses the meaning even more accurately, and the following paragraphs will explain why this is so.

87. We noted a similar phenomenon in Section 2.2, where the fact that the simple 'present tense' form typically carries the meaning 'past-present-and-future' gives it a different meaning with each of 'stative' and 'non-stative' Processes. While the use of the 'present tense' form with a stative event refers to a single long-lasting event, its use with a 'non-stative' Process refers to a repeated series of events. The types of Process mentioned here are taken from the following categorization: 'stative' vs. 'dynamic'; if 'stative' then 'momentary' vs. 'durative'; and then, for both 'momentary' and 'durative', 'transitional' vs. non-transitional'. See Chapter 6 of the *Functional Semantics Handbook* for a full presentation of this set of concepts, and for their relationship to the system network for TRANSITIVITY.

(3a) She was hitting him with a baseball bat.

(3b) She hit him with a baseball bat.

(4a) She was killing him.

(4b) She killed him.

The Process in (2a) is 'living' - and 'living' is a 'state' that typically lasts for a fairly long period of time. The effect of drawing the Addressee's attention to the period for which the event of 'living in Paris' lasts is - in contrast with the effect of using this tense in (1a) - to SHORTEN it. In other words, the event in (2a) is presented as having lasted FOR LESS time than that in (2b). This, then, is the effect of the feature 'period-marked' on all 'stative' Processes.⁸⁸

The Process of 'hitting' in (3a) is very different. The Process of 'hitting' is inherently 'momentary', so that the only way in which the selection of the feature 'period-marked' can be given meaning is to interpret the event as a CLOSELY REPEATED SERIES of 'hitting' events. Contrast the meanings of (3a) and (3b). The effect is the same with all 'momentary' Processes, e.g. *He was coughing*.

In the case of (4), 'killing' is a Process that is not only 'momentary' but also 'transitional' - i.e. it causes a 'transition' to a new state. So, after a 'killing' event is over, the thing that has been killed is in the new state of being dead. The effect of using the meaning of 'period-marked' with such Processes, as in (4a), is to draw our attention to the part of the very short 'killing' event that took place BEFORE THE COMPLETION of the event - to run the event in slow motion, as it were. Contrast (4a) with (4b). As with the three previous pairs of examples, the effect is the same with all Processes of this sub-type, i.e. 'transitional' Processes. To illustrate this point further, consider (5), which is both the 'durative' type of 'dynamic' Process, like 'discussing' in (1a) and (1b), and 'transitional', like 'killing'. Here the meaning of 'period-marked' draws our attention to the fact that Ike hasn't yet completed the Process of eating the chocolate bar - so the inference is that if the Addressee moves fast he may still be able to save some of it!

(5) Ike is eating your chocolate bar.

You may have noticed that most of the examples in this sub-section have had a 'past trp' rather than a 'present trp'. The reason is that the contrast between clauses with and without the feature 'period-marked' can be demonstrated most clearly with 'past trp' examples. But the meaning is the same with the present trp, as is shown in the analysis that I have just given of the meaning of (5).⁸⁹

The meaning of 'period-marked' can be combined, in principle, with any of the other types of 'time' meaning that we have met. So 'period marked' occurs with the simple 'present', 'past' and 'future' trps, e.g. *Ike is eating it, Ike was eating it and Ike will be eating it*. It also occurs with more complex trps, such as *Ike had been eating it, Ike will have been eating it* etc. And it can even be combined with

88. The same effect carries over to the combination of *be* as a Main Verb with a following Attribute, in that we don't say **She is being tall* but we do say *She is being silly*.

89. This would not have been possible with 'present' examples, except in the case of the 'stative' Processes, because the simple 'present trp' is used for cases such as *Owen shoots!*, as we saw in Section 3.1.

‘hypothetical’ and ‘reported’ times, as in *If he had been eating it, ...* and *(She said that) he had been eating it, etc.*

However, we should note that the *be + -ing* form is also used to express a very different meaning from ‘period-marked’. When it is used with a ‘present tense’ form and a future time specification, as in (6), it expresses a type of ‘future’ meaning which we can characterize with the two features of ‘imminent’ and ‘by arrangement’.

(6) I’m seeing him tomorrow.

And it can also be used with an equivalent ‘past’ form and meaning, as in *I was seeing him tomorrow (but the meeting has been cancelled)*, where the meaning is ‘unfulfilled past arrangement’. So here too, as at earlier points in the chapter, we find that a form that realizes a frequent ‘time’ meaning can also be used to realize completely different types of meaning.

How is the meaning of ‘period-marked’ realized at the level of form? It is typically requires the use of TWO elements. In the first place, it introduces to the clause an **Auxiliary Verb** that is expounded by a form of the verb *be*. And in the second place it adds the suffix *-ing* to the next Auxiliary, if there is one, and if there isn’t- (which is the more likely situation - to the Main Verb. (In some cases minor spelling adjustments have to be made to the item that expounds the Main Verb, such as doubling the final consonant, as with verbs such as *hitting* and *swimming*, or removing the final *e*, as with verbs such as *living*.) So, even though the meaning of ‘period-marked’ is realized in two different places in the clause, this only entails adding one additional element to the clause - because the Main Verb is there in any case.⁹⁰

What is the syntactic analysis of (7a)? I have added (7b) to suggest the answer.⁹¹

(7a) Ike’s eating your chocolate. (7b) Is Ike eating your chocolate?

It is now time for you to do a little more analysis. But instead of analyzing (7a) and (7b), try analyzing (8) and (9). The analysis of (9) will in fact show you what the analysis of (3a) should be like - and so also the analysis of (3b).

(8) Ike may be eating your chocolate. (9) He is definitely eating Ivy’s!

DO YOUR ANALYSIS BEFORE LOOKING AT FIGURE 4.19.

90. However, if there is ellipsis, as in *P: Was he eating it? A: Yes, he was (eating it)*, the Main Verb may not be actually present in the text. For ellipsis see Chapter 20.

91. In (7a) the form *'s*, is the contracted form of *is*, but we will find in Section 11.2 that *'s* can also be a contracted form of *has*.

Solutions

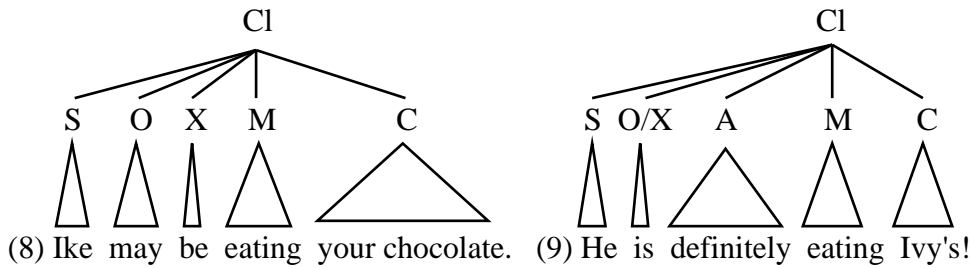


Figure 4.19: Two clauses with an Auxiliary Verb

The analysis of (8) will have been straightforward, with the Auxiliary taking its place as an independent element, alongside the Operator. But the analysis of (9) requires you to recognize that the Auxiliary *is* is also functioning here as the Operator. In other words, the same principle applies in this case as in examples such as *They are reporters*, *Alex is quiet now* and so on, which we met in Section 5 of Chapter 3. In those examples the word that expounds the Main Verb (which is also, as you will have noted, a form of *be*) also functions as the Operator. So in both of these cases - and in the case of the vast majority of the other Auxiliaries that we will meet (mostly in Chapter 14) - an element that frequently functions independently can also function as the Operator. And - again as in Chapter 3 - we represent the fact that the word serves this dual function by showing that the Auxiliary is **conflated** with the Operator, with the relationship of **conflation** shown as **O/X**.⁹²

Finally, note the Adjunct *definitely* in (9), whose presence makes two points. Firstly, it shows that there cannot be a simple rule that adds *-ing* to whatever word immediately follows the Auxiliary. Secondly, it provides us with yet another example of a Validity Adjunct, to set alongside those that we have met earlier.

The system that generates most of the examples that use this Auxiliary is the one shown in Figure 4.20. The other system network that generates meanings that use this Auxiliary is, as we have seen, the TIME REFERENCE POSITION network, from which examples expressing a ‘future’ meaning such as (6) are derived.

SYSTEM	EXAMPLES OF REALIZATIONS
PERIOD MARKING —	90% not period-marked He lives / lived in Germany.
	10% period-marked He is / was living in Germany.

Figure 4.20: the choices in the system for PERIOD MARKING

From the viewpoint of SYNTAX ANALYSIS, all we need to note is that the analysis will contain an Auxiliary that is expounded by a form of *be* - and that there is a

92. And when the Auxiliary also functions as the Operator, it naturally takes on all of the types of meaning that are specifically associated with the Operator, as described in Sections 3, 6, 7, 8 and 9 - so including, for example, ‘past trp’ and ‘present trp’.

strong probability that it will be conflated with the Operator, as in (9).

Now we will turn to a second Auxiliary Verb that expresses a 'time' meaning - the most obvious difference being that this one is expounded by a form of *have*.

11.2 The 'retrospective' Auxiliary

Consider the two examples of this Auxiliary in Examples (10a) and (10b). The parallels at the level of form with (3a) and (3b) in the previous section will be clear from the underlined portions of each. But the meaning of this construction is very different - and it is one that is rather harder to tie down in words.

(10a) Ike's eaten your chocolate bar. (10b) Has Ike eaten your chocolate bar?

If you are only interested in syntax and you don't want to know about the different meanings that this element expresses, skip to Section 11.3.

Here, although the **time reference position** is the 'present', the **time position** of the 'eating' **event** is in the past. So this structure provides speakers of English with an alternative way of referring to past events - alongside the use of a simple past trp of the type that we met in Section 3.1, as in (11):

(11) He ate some of my fudge last week.

The question is 'What is the meaning of each of these two types of 'pastness', and when do we use each of them?'

Example (11) illustrates the most frequent way of referring to a past event.⁹³ But the type of 'past time' meaning expressed in (10a) and (10b) is significantly different. In informal terms, the meaning is that the event occurred at an UNSPECIFIED time position that is located SOMEWHERE WITHIN A PAST TIME SPAN - a time span that reaches back from the current time reference position (which in this case is the present trp) to the start of the past time span - whenever that was. We will shorten this definition to SOMEWHERE WITHIN A PAST TIME SPAN FROM THE CURRENT TRP.⁹⁴ Since in (10a) and (10b) there is no specification of the time position of the

93. If you wish, you can refer back to Figure 4.3 in Section 2.3, in order to refresh your memory of the relations within (11) between (a) the past trp, (b) the time position of the event, and (c) the time position specification in *last week*.

94. There are two difficulties with this definition, both of which concern the start of the past time span. The first is that the start of the past time span is - in principle - the 'big bang', i.e. the beginning of the universe (or even earlier, in the opinion of some scientists). In practice, luckily, the start of the time span that is relevant to the interpretation of most clauses in real texts is usually rather closer to the present. The second difficulty is that, even so, it is often still hard to identify. The best specification that I can suggest is that it is THE START OF THE TIME SPAN THAT THE PERFORMER BELIEVES THAT THE ADDRESSEE CAN INFER TO BE RELEVANT IN THE CURRENT CASE. In a computer model of text generation, then, one possible practical solution, in a model in which P and A both have belief systems that include details about the birth or creation of each object (and so person), the earliest possible start of the relevant time span could be modelled as the moment that the youngest of the referents came into existence. In the case of *Have you seen the terra cotta army in Xian?*, for example, it would be reasonable to infer that the start of the relevant time span is the start of the Addressee's life - and probably her adult life. Naturally, if the Performer and the Addressee share more common beliefs about where

event and the time reference position is the present, the Performer is presenting the fact that the event has occurred as what is important and is at the same time indicating its relevance to the present time reference position. Hence the frequent characterization of the meaning of this tense as 'past with current relevance'. But the meaning of 'current relevance' is, I suggest, a meaning that is inferred from the fact that the time span ends at the present trp, rather than being the basic meaning.

In examples such as (10a) and (10b), the relationship between (a) the present trp, (b) the relevant past time span and (c) the time position of the event can be represented in diagram form as in Figure 4.21. The arc pointing to the event from the present trp is intended to express the concept that the Performer (P) is inviting the Addressee (A) to look back at the past time span from the present trp, in such a way that the event might have occurred AT ANY POINT WITHIN IT.

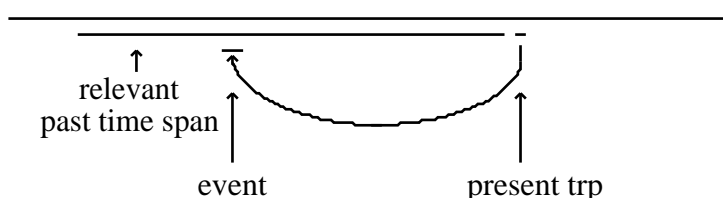


Figure 4.21: An event in the past time span, looked at from the present trp

Here we will use the term **retrospective** for this type of 'pastness', in preference to the terms used in traditional grammars.⁹⁵ This is because the word 'retrospective' comes closer than the other terms to encapsulating the meaning described above, i.e. the meaning of 'at an unspecified time position somewhere within a past time span from the current trp'.

In Figure 4.21, it is the arrow pointing back from the present trp to the event that signifies the 'retrospection'. But there is a second point to notice about Figure 4.21, and this is that the event is shown as a very short line. This is fine for most types of event, such as 'eating fudge', but with a 'stative' Process such as 'living' or 'loving', the line representing the event would be longer and ITS ENDPOINT WOULD BE AT THE PRESENT TRP.^{kk}

and when the Addressee has travelled, it may be more recent than that. The key point is that the start of the time span can only be inferred from a knowledge of P's assumptions about P's and A's shared beliefs.

95. In traditional grammars, this tense form is usually called the 'perfect' or 'perfective' tense or 'aspect'. This reflects a second aspect of its meaning, which is that the event to which the clause refers is 'completed' (this being the meaning of the Latin verb from which 'perfect' is derived). However, this second aspect of the meaning is in fact merely an IMPLICATION of its meaning, rather than a core component. We can see this if we test it by using it with a full set of types of process. It carries this implication of 'completeness' strongly when it occurs with any of the four types of 'dynamic' process, but it does not carry it when it is used with the fifth type, the 'stative processes'. Consider an example of a 'stative' process such as the first clause in *She has lived in Cardiff for over twenty-five years (so I think she can find her way to the station)*. Here there is no implication whatsoever that the event of 'living in Cardiff' has been completed. And the same goes for *Ike has loved Ivy all his life (and he always will)*. (Either example could of course have been followed instead by a clause introduced by *but ...*, signalling that the event HAS now been completed, but that doesn't invalidate my point. This is that the basic meaning of this tense is a temporal meaning, as defined in the main text, and the 'completion' meaning is one that is implied when it is used with a 'dynamic' process. This is the reason why we use here the term 'retrospective' rather than either 'perfect' or 'perfective'.

You may remember that in the last section we noted that the *be + -ing* form is used to realize two quite different meanings: (a) its principle meaning of ‘period-marked’ and (b) a second meaning of ‘imminent future, by arrangement’. And the present Auxiliary of *have + -en/ed* is similarly used to express a meaning other than its principle meaning of ‘retrospective’. In this case the second meaning is - perhaps surprisingly - the simple ‘past trp’. This occurs in several contexts, the most frequent being when the Performer also chooses to express her evaluation of the **validity** of the clause, as in (12):

(12) Ivy may have eaten some of my fudge last week.

In such cases the language has ‘borrowed’, as it were, the element that is primarily associated with the meaning of ‘retrospective’ to enable its users to refer to simple past events in those cases when its validity is being assessed in a modal verb, such as *may*. So I am claiming that in (12) the ‘time’ meaning is simply ‘past trp’, and NOT ‘retrospective’ from ‘present trp’. At this point you might want to ask: ‘Isn’t this simpler to analyze (12) as being similar to *Ivy has eaten some of my fudge?* Or, more fully: ‘Isn’t this simply a case in which the time position of the event is at an unspecified time position somewhere within a past time span?’ The answer is that it might be simpler, but it would be a poor analysis. The evidence in (12) which proves that the event is a simple ‘past trp’ event rather than a ‘retrospective’ view of the event lies in the words *last week*. All such Time Position Adjuncts (i.e. those that simply specify a position in time, in contrast with *already*, *yet*, and *since Monday*, etc) show that the clause in which they occur refers to simple past trp event. In contrast, clauses with *already*, *yet*, and *since Monday*, etc. can only occur with a ‘retrospective’ meaning.⁹⁶

To bring out this difference clearly, contrast (12) with (13).

(13) Ivy may have eaten all of my fudge by now.

Example (13) has exactly the same tense form of *have ... -en* as (12) has - but in this case it contains the Adjunct *by now*, which signals clearly that the meaning is that of ‘somewhere within a past time span from the current trp’.⁹⁷

There is one final point to note about (12). This is that, while the time reference position of the event in (12) is the ‘past trp’ (as shown by *last week*), the time from which the Performer is assessing the validity of the event is the present. But notice

96. A counter-example that might at first appear to challenge the claim that Time Position Adjuncts can be used to distinguish the two types of meaning is the small set of temporal referring expressions of *today* and *this morning / afternoon / evening*, since these can occur with both. But notice that, while we can happily say **Ivy has eaten some of my fudge this morning*, we are very much less likely to say **Ivy has eaten some of my fudge last week*. This points to the reason why this small set of items can be used with both meanings. It is only possible because the closeness to the present moment of the period to which they refer means that they are interpretable as a specification of the time position of EITHER a simple **past** event - like *yesterday*, *last week*, etc. - OR an event that occurred at an unspecified time position within a past time span from the current trp - i.e. an event that is viewed from a **retrospective** viewpoint, and so like *by now*, *already*, etc.

97. In Section 5.5 of Chapter 14 we will meet the other parts of the grammar where this systematic ambiguity occurs. Other Adjuncts that indicate the presence of the ‘retrospective’ meaning are (a) *already* for (10a) and *yet* for both (10b) and ‘negative information givers’ such as *Ike hasn’t eaten your chocolate (yet)*.

that this does not imply that the use of the ‘present tense’ form in modal verbs that express meanings of ‘validity’ reflects a choice in meaning. This is because a Performer cannot choose to assess the validity of an event from a position in time other than the present. It is simply a fact about the assessment of validity that it must be done from the present.

In the last few paragraphs we have been noting yet another of the many types of ambiguity that occur with the various forms that express ‘time’ in English. The fact is that there isn’t a single form - whether expressed in a modal verb as Operator, an Auxiliary or as a suffix on the Main Verb - that has a simple one-to-one relationship with any one ‘time’ meaning.

So far, our discussion of the meaning of examples such as *Ike has eaten it* has assumed that the time reference position from which the event is located is the **present**. But the meaning of ‘retrospective’ can also be applied to **past** and **future** time reference positions, as (14) and (15) illustrate:

- (14) Ivy had arrived already.
- (15) She will have read it by Monday.

And it can also be combined with ‘hypothetical’ and ‘reported’ times, as in the first clause in (16) and the second one in (17):

- (16) If he had been eating it (we would have noticed).
- (17) (She said that) he might have been eating it.

But in every such case the element that is used is the same Auxiliary, and in every case it is expounded by a form of *have*.

Finally, we should ask ‘How precisely is the meaning of ‘retrospective’ realized - and so also the meaning of ‘past trp’ when it occurs with a modal verb?’ The answer is that it is typically expressed simultaneously in TWO elements. In this it is similar to the realization of the meaning of ‘period-marked’ that we met in the last section. Firstly, we introduce to the clause an **Auxiliary Verb** that is expounded by a form of the verb *have* (so including *has*, *'s*, *had* and *'d*), and then we add *-en* to the next Auxiliary, if there is one, and otherwise we change the form of the **Main Verb**. But this is a much more complex matter than the equivalent for ‘period-marked’. There we simply added the suffix *ing* to all cases, but in the present case we have to use what is termed the ‘past participle’ form of the Main Verb - and this varies according to whether the verb is **regular** or **irregular**. If it is **REGULAR** we add the suffix *-ed*, as in *Ike has consumed your chocolate*. (Sometimes there is a minor spelling adjustment, e.g. in this case the removal of the final *e* of *consume*.) But if the verb is **IRREGULAR** the form of the past participle must be specified in each case, e.g. *sung*, *spoken*, *gone* or, as in the Process of ‘eating’, *eaten*.¹¹

It takes quite a bit of work to make sure that all of these variants come out correctly in a generative grammar, but from the viewpoint of SYNTAX ANALYSIS these details do not matter. The reason is that in every case the past participle form is simply a Main Verb. The only complications that the text analyst needs to be prepared for are (a) the possibility that the Auxiliary may be conflated with the

Operator, as in (10a) and (10b), (b) that the form *has* may be reduced to 's, in which case it is the same short form as that for *is*, as in *Ike's eaten it.*, and (c) that it may be followed by another Auxiliary, as in *Ivy has been travelling round Europe* - for which see the next section.

Most examples that use this element are generated from the system shown in Figure 4.22.⁹⁸

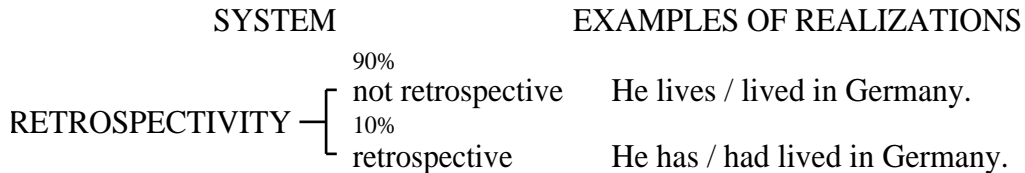


Figure 4.22: the choices in the system for RETROSPECTIVITY

11.3 Two 'time' Auxiliaries in one clause

Can both of these two 'time' Auxiliaries occur in the same clause? Indeed they can, as we can see in (18a) and (18b):

(18a) Ivy's been eating your chocolate.

(18b) Has Ivy been eating your chocolate?

Using the space-saving linear analysis introduced in Section 7.6, we can show the structure of (18a) in (18c), as follows:

(18c) Ivy [S] 's [O/X] been [X] eating [M] your chocolate [C].

And we can also introduce a separate Operator, as in (19):

(19) Ike [S] may [O] have [X] been [X] eating [M] your chocolate [C] too [A].

As you can see, we have used the same symbol (X) for both types of Auxiliary in all of these examples. Does this matter? The answer is that, for the purposes of TEXT ANALYSIS, it does not. The reason is that we can see quite clearly which type of Auxiliary it is from the item that fills it. This is a form of *have* for the 'retrospective' X and a form of *be* for the 'period-marked' X. But in the generative version of the grammar they are shown as RX and PdX, which stand for 'Retrospective Auxiliary' and 'Period-marking Auxiliary' respectively.

Another factor that makes the analysis of the Auxiliaries relatively easy is that they occur in a fixed sequence. In (18c), for example, the 'retrospective' X comes before the 'period-marking' X, and the other Auxiliaries to be introduced later in the book also occur in a fixed sequence. So we cannot change the sequence of

98. The exception is the meaning of a 'past trp', as described above, in which *have eaten* is generated as an alternative realization to *ate* when a meaning expressed in a modal verb is chosen, as in *He may have eaten it last week*. This is generated from the TIME REFERENCE POSITION network.

elements in, for example, a) and say **Ivy is having eaten your chocolate*.⁹⁹

Finally, we should note that, in the **ellipted** versions of clauses that contain Auxiliaries, the second of the two items that realize the meaning of, say, ‘retrospective’ is usually lost. (See Chapter 20 for ellipsis.) Consider (20):

- (20) Adam: Ivy has been eating your chocolate.
 Paula: Has she? (with *been eating it* ellipted)¹⁰⁰
 Adam: Yes, she has. (with *been eating it* ellipted) OR
 Yes, she has been. (with *eating it* ellipted)

This is one of several reasons for treating the form of *be* or *have* as the basic element in the realization of the meaning, rather than the following suffix (i.e. *-ing* or *-en* in the two cases considered here).¹⁰¹

This completes the part of this chapter that introduces new elements and their meanings. Section 12 sets out an expanded version of the *Guidelines* that we first met in Chapter 3, and Section 13 gives you the chance to test them in an analysis task.

12 Guidelines 2

What do we need to add to *Guidelines 1*? First, we now have a much more complete picture of the functions served by the Operator, and so the forms that may realize it - including having an Auxiliary conflated with it, and having *n't* as an integral part of it.¹⁰² Second, there are four new elements to look out for, all of which occur frequently in most types of text: the Negator (N), the Infinitive Element (I), and the two Auxiliaries (X).

Remember the **three tips for drawing syntax diagrams**:

- 1 When you write down the clauses to be analyzed, you should LEAVE FOUR OR FIVE LINES OF SPACE ABOVE THE TEXT itself, for the analysis diagram. (We will

99. We will meet a third high-frequency Auxiliary in Chapter 6, and several more in Chapter 14. This means that the decision to use ‘X’ to represent all of the different types of Auxiliary in text analysis will make the task of analyzing them all considerably easier - and luckily we can do so without loss of insight. Two factors contribute to this. The first is that, even when we introduce more Auxiliaries, each type is clearly differentiated from its neighbours by the item that expounds it, or by its related suffix or, in the case of those in Chapter 14, by its ‘Auxiliary Extension’. Secondly, the analyst is also greatly helped by the fact that the additional Auxiliaries come in a fixed sequence.

In the GENERATIVE version of the grammar, however, it is necessary to give each element a different label, and in that version the Auxiliary that carries the meaning of ‘retrospective’ is called the Retrospective Auxiliary (Rx), the ‘period-marking’ Auxiliary is PdX, etc.

100. But note that the form *Has she been?* is very unusual.

101. To be fair, I should point out that there is other evidence from ellipsis that points in the other direction. Consider this exchange:

P: What are you doing?
 A: Writing a letter on your computer. (where *I'm* is ellipted).

102. However, there are many uses of it to express choices in MOOD that we have not yet met, as we will discover in the next chapter.

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- need more space for the full analysis of sentences, later in the book.)
- 2 You can often save space by writing two or more sentences side by side.
 - 3 It is best to WORK IN PENCIL, with an ERASER ready in case you change your analysis.

Guidelines 2 - brief version

- 1 Preparation: make the clause an information giver.
- 2 Find the Process, and so the Main Verb. M
Also pencil in the probable PRs as 'S?' and 'C?'.
- 3 Working leftwards, find any Auxiliary Verbs. X, X
- 4 Working leftwards, find the Infinitive Element, if there is one. I
- 5 Working leftwards, find the Negator, if there is one. N
- 6 Find the Operator - if there is one. (It helps to show the MOOD). O
- 7 Find the Subject (which also helps to show the MOOD). S
- 8 **S** is probably also a PR. Confirm any Complements (0, 1 or 2). C, C
- 9 Find any Adjuncts. . A, A ...

Guidelines 2 - full version

- 1 **Preparation** Most clauses are **positive information-givers**. If the clause to be analyzed is NOT of this type (so NOT **S O** or **S M**), first re-express it so that it is (either in your mind or on a piece of paper). This is because most of the tests used here depend on the clause having this structure. To do this:

- (a) Give the clause the MOOD structure of **S O**, **S O/X**, **S O/M** or **S M**.
- (b) Remove *not* or *n't*.

Worked example: *Has Fred been using my laptop this morning?*

Re-express this as: *Fred has been using my laptop this morning.*

Then apply the tests to this, either mentally or on paper, and transfer the results to the original text-sentence of *Has Fred been using my laptop this morning?*

- 2 **Find the word that expresses the Process**, and at the same time have a first guess (to be confirmed later) at **the Participant Roles that it 'expects'**. (The term 'Process' includes 'states' such as 'being' and 'liking'.)

The Process is expressed in a **lexical verb** at **M**, so the main task is to find **M**, which is OBLIGATORY (99.9% reliable).

2.1 The Process and PR test (99.9% reliable)

Assuming that **xxx** stands for the Main Verb, and that **someone/thing/where** stands for each possible PR, try saying:

**In this Process of xxx-ing, we expect to find
 someone or something
 xxx-ing
 (someone or something)
 ((to or from) someone or something or somewhere).**

(The last line says that the possible second or third PR is sometimes preceded by *to* or *from*.)

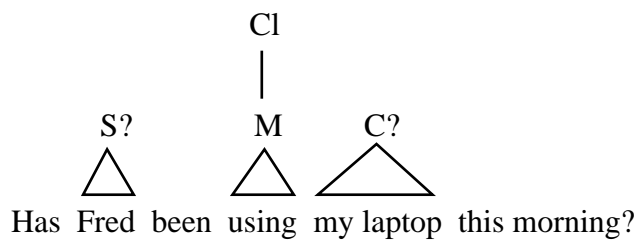
If the result corresponds to the ‘test’ clause (even though some PRs may not be expressed), the item corresponding to **xxx** is **M**. So you can now lightly pencil in all of the following:

- 1 **M** above **xxx**,
- 2 **CI** above the **M**, and so the line to link **CI** with **M**,
3. **S?** and **C?** above the elements that you think are PRs in the Process.

Worked example:

Try saying: ‘In this Process of ‘using’, we expect to find someone using something’. This makes sense, so *using* is the **M**.

The analysis at this point is as follows - where ‘S?’ and ‘C?’ indicate the tentative assignment of **S** and **C**:



If in doubt, go to 2.2.

2.2 A supplementary check

As a check on your analysis, consider the following examples and find the one most like the clause you are analyzing. Then try re-expressing it on the model of the test beneath each. If the result of the test makes sense, the item corresponding to **xxx** in (b) above is **M**.

Examples

- Ivy sneezed* -
 ‘This clause is about someone sneezing.’ (1 PR)
- She is a doctor / happy* -
 ‘This clause is about someone being something.’ (2 PRs)
- She gave Fred the book* -
 ‘This clause is about someone giving someone something.’ (3 PRs)
- He took the snake out of the box* -
 ‘This clause is about someone taking something from somewhere.’ (3 PRs)

But note that you will need to confirm which of them is 'S' in a later test - and that occasionally NONE of the PRs is 'S'.

2.3 Problems to watch out for

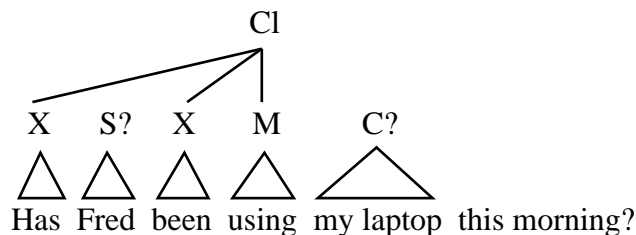
- 1 Do not make the mistake of assuming that if an element is 'important in the message' it is a PR. All elements are potentially important. A PR is an element that is EXPECTED by the Process, i.e. by M.
- 2 Some verb forms may co-occur with TWO OR MORE patterns of PRs, e.g. (a) *open* in *he opened the door* (2 PRs) and *the door opened* (1 PR); and (b) *make* in *he made a sand castle* (2 PRs) and *Racial prejudice makes him angry* (3 PRs). Figure 3.16 in Section 7.7 illustrates many of the main patterns.
- 3 When the item *it* occurs at S, it may be EITHER an 'empty Subject' expounded directly by *it*, OR it may be a normal referring expression. To test which it is, try re-expressing the clause, replacing *it* by *what*. Does it still make sense? If so, it is a PR. Example: *It's here* can be re-expressed as *What's here?*, but *It's raining* cannot be re-expressed as *What's raining?* And by extension we also analyze *it* in *It's sunny* as an 'empty Subject'.
- 4 In *It's sunny*, the Process is 'being sunny', and the word *sunny* is treated as a MEx.
- 5 As we have seen, *somewhere* is used in the test for a PR. But occasionally *some time* is needed instead, e.g. in testing *That war was in the 1960s*. But note that *somewhere* and *some time* can also replace Adjuncts (expressing 'Place' and 'Time Position'), so you should apply the C or A test in such cases.

3 Look to the left of M for any Auxiliary Verbs (X). These are OPTIONAL. They are ALMOST ALWAYS expounded by:

- (a) forms of *be*: *am, is, are, was, were, being, or been* OR
- (b) forms of *have*: *have, has, had, or having* (99% reliable)

Worked example:

In the re-expressed form of the example, i.e. in *Fred has been using my laptop this morning*, each of *has* and *been* is a form of *have* or *be*, and each is between the probable S and the M. So the analysis is:



4 Look to the left of any X or M for the Infinitive Element (I) - if there is one. It is almost always the word *to*, and it is predicted by a 'modal' meaning at O, expressed as EITHER:

- (a) *ought* OR
- (b) *am, is, are, was, or were*. (We will meet other types of I later.)

Problem to watch out for: Sometimes a N or A will intervene between the O and the I, e.g. the N in *Fred ought not to have been using my laptop this morning*.

Worked example:

In *Fred has been using my laptop this morning* there is no I. But there is in

Fred ought to have been using it.

- 5 **Find the Negator (N)** - if there is one (under 5% probability).
It is always the word *not*.

Reminder: *n't* is part of **O**, because it would precede **S** in a 'polarity seeker'.

Worked example:

In *Fred has been using my laptop this morning* there is no **N**. But there is in *Fred ought not to have been using it*.

Problem to watch out for: Despite the fact that the word *never* usually occurs in a similar position to that of the Negator, *never* is an Adjunct, not **N**. This is because it tells us 'how usual' the situation is, along with *always, sometimes, occasionally*, etc., and it can be thematized.

- 6 **Find the Operator (O)** - if there is one. It is:

EITHER (a) a 'modal verb', i.e.

- (i) *can, could, will, would, shall, should, may, might, must, ought*
or (ii) *am, is, are, was, or were* (typically + *to*) - when it is **O**;

OR (b) *am, is, are, was* or *were* as a Process of 'being' - when it is **O/M**;

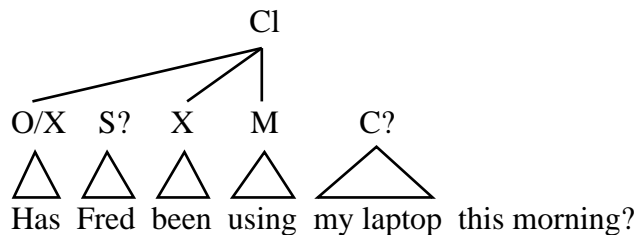
OR (c) *am, is, are, was* or *were* as an Auxiliary - when it is **O/X**;

OR (d) *have, has* or *had* as an Auxiliary - when it is **O/X**;

OR (e) *do, does* or *did* - when it is **O**.

Note that any word at **O** may have *n't* added to it (except *am*, which requires the Negator *not* in *I am not ...* and is replaced by *are* in *aren't I ...?*).

Worked example: *has* is the first of the two **X**s, and in here the first **X** is also **O**. So the analysis is:



The test for the Subject in 7 below should corroborate this decision.

Further examples:

- (a) In *Ivy will / may arrive soon*, the word *will* or *may* is **O**.

In *She is to tell the truth*, the word *is* is **O** and *to* is **I**.

- (b) In *She was here*, the word *was* expresses a Process of 'being',
so it is **M** as well as **O** - and so is **O/M**.

(c) In *She is eating an eel* the word *is* is **X** as well as **O** - and so is **O/X**.

(d) In *She has eaten an eel* the word *has* is **X** as well as **O** - and so is **O/X**.

(e) In *Did she enjoy it?* the word *did* is **O**.

Problems to watch out for:

THE MANY FUNCTIONS OF THE OPERATOR AND THE TIME AUXILIARIES

- 1 Forms of the verb *be* occur as several different elements:
 - (a) very frequently as **M** or **O/M**,
 - (b) very frequently as **X** (and so also as **O/X**),
 - (c) occasionally as **O** (as in *He is to leave now*).
- 2 Forms of the verb *have* occur as several different elements:
 - (a) very frequently as **M** (but not **O/M** in modern English), and
 - (b) very frequently as **X** (and so also as **O/X**),
- 3 Forms of the verb *do* occur as two different elements:
 - (a) frequently as **O** (e.g. *Did* in *Did he do it?*),
 - (b) occasionally as **M** (e.g. *do* in *Did he do it?*).
- 4 Very occasionally, in an old-fashioned style, **O** may sometimes be:
 - (a) *need* or *dare* (sometimes + *to*) or
 - (b) *have*, *has*, or *had* (typically + *to*).

7 Find the Subject (S). To do this:

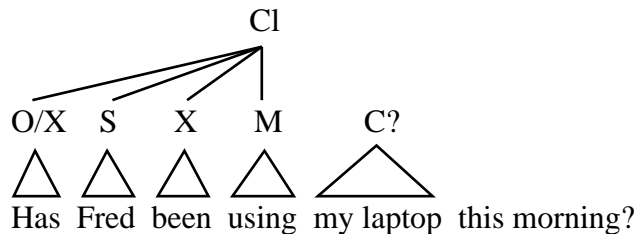
- (a) If the clause has no Operator, supply the test version of the clause with *do*, *does* or *did* to function as **O**. Then re-express the clause as a **polarity seeker** (seeking the answer *Yes* or *No*).
- (b) The Subject is the word or words which, by occurring before or after the Operator, shows whether the clause is an **information giver** or a **polarity seeker**. In other words:

S O or S O/X or S O/M or S M means 'information giver'
 (95% reliable) and
O S or O/X S or O/M S means 'polarity seeker'
 (95% reliable).

Problem to watch out for: 'environmental Processes', such as *It's raining* and *It's sunny*, have no PRs. The S is NOT a PR, but an 'empty Subject'.

Worked example: Re-express *Fred has been using my laptop this morning* as *Has Fred been using my laptop this morning?*

The change in the sequence of the words *Fred* and *has* reflects the change in sequence of **S** and **O/X**, and so the change of MOOD. So *Fred* is **S**. This confirms that the tentative 'S?' is indeed **S**, so you can join it to **Cl**. The analysis is therefore now:



8 Find the full configuration of Participant Roles (PRs), i.e. those elements that are EXPECTED by the Process at **M**.

Any PR that is not **S** is a **Complement (C)**. Most Processes expect two associated PRs (around 90%). But some expect one and some expect three (and some environmental Processes expect none), so look for 0, 1 or 2 **Cs**.

If you are in any doubt about whether a word or words is a **Complement or Adjunct**, apply the following test:

The C or A test (99% reliable)

- 1 **Thematize the element to be tested** (i.e. put it first in the clause),
- 2 **Treat it a separate ‘information unit’** (i.e. separate it by a comma).

If the clause sounds natural with the element first, it is almost certainly an Adjunct. But if it sounds odd it is almost certainly a Complement.

Worked example:

To test *my laptop*, re-express *Fred has used my laptop this morning*
as *My laptop, this morning Fred has used*.

This sounds very odd, so *my laptop* is almost certainly a Complement.

To test *this morning*, re-express *Fred has used my laptop this morning*
as *This morning, Fred has used my laptop*.

This sounds natural, so *here* is almost certainly an Adjunct.

Two further examples:

Consider the element *in Paris* in *Ike lives in Paris*.

In Paris, Ike lives sounds odd, so *in Paris* is almost certainly a Complement.

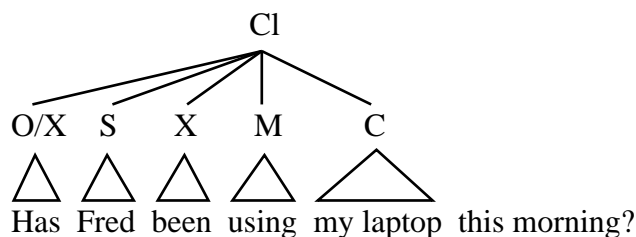
Now consider the element *in Paris* in *I saw Ike in Paris*.

In Paris, I saw Ike sounds natural, so *in Paris* is almost certainly an Adjunct.

For further examples using this test, see Section 7.3 of Chapter 3.

You can also re-run the **Process and PR test** from Step 2.1.

Worked example: As we saw in Step 2, it makes sense to say ‘In this Process of ‘using’ we expect to find someone using something’. So *Fred* and *my laptop* are the two PRs and, since Fred has just been confirmed as **S**, *my laptop* can now be confirmed as **C**. So the analysis at this point is:

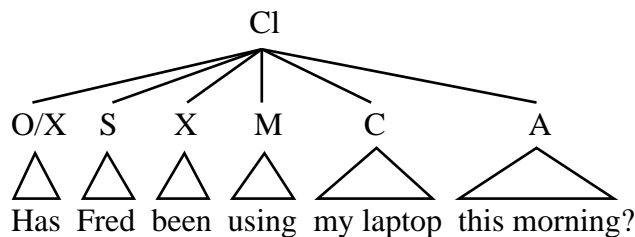


- 9 **Find any Adjuncts (A)**. So far, we have met Adjuncts that express the ‘Manner’, the ‘Time Position’ or the ‘Validity’ of the event, and we will meet many other types in later chapters. Use the **C or A test** from Step 2 to distinguish Adjuncts that express an ‘experiential’ meaning from Complements. There are over 60 functionally distinct types of Adjunct in English, but it is rare to find more than two or three in any one clause.

Are you unsure about whether a string of words is **one A or two As**? If so, test them by re-expressing the clause (i.e. its test version as a ‘positive information-giver’) version) as follows. Place each possible **A** in turn in a

position that separates it from the other possible **A**. Usually you can do this by thematizing one of them. Most **As** can occur in several different places (99% reliable).

Worked example: In *Fred has been using my laptop this morning*, the words *this morning* do not express one of the two PRs expected by the Process of 'someone using something', so it is probably an Adjunct. Now check this by the 'C or A Test' of re-expressing the test clause as *This morning, Fred has been using my laptop*. This sounds natural, so confirming that *this morning* is an Adjunct in the present clause. The full clause analysis of our worked example is therefore as follows:



Summary so far: we may find, in their most typical sequence:

- (a) ONE of each of **S**, **O**, **N**, **I**, and **M** (with the possibility of **O/M** for forms of *be* and **O/X** for forms of *be* or *have*),
- (b) UP TO TWO **Xs**,
- (c) UP TO TWO **Cs**,
- (c) ONE OR MORE **As** (only two in the examples so far - but we will see in Chapter 6 that there can be more),
- (d) either **S O** or **S O/X** or **S O/M** or **S M**;
or **O S** or **O/X S** or **O/M S**.

There will be an increasingly complete *Guidelines* at the end of each of the next two chapters, and other partial *Guidelines* in later chapters. Chapter 21 provides the nearest possible thing to a full, definitive set of *Guidelines*.

13 Analysis task 2

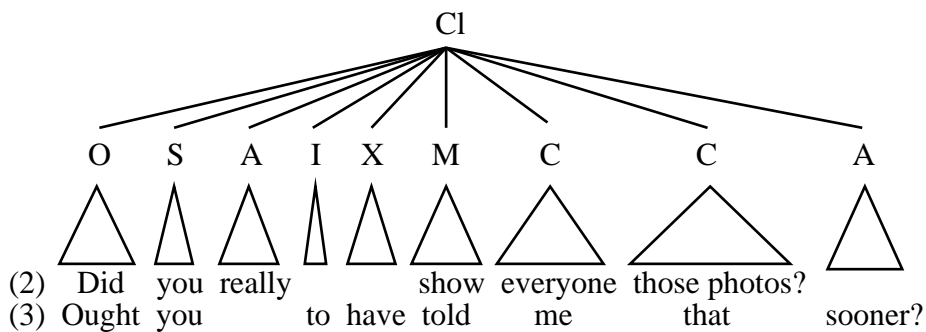
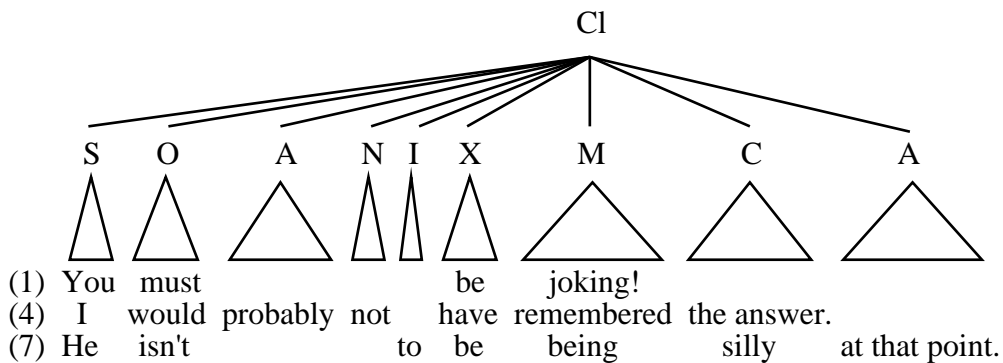
13.1 The task

Now apply these additions to your analytical skills by analyzing the following examples.¹⁰³

- (1) You must be joking!
- (2) Did you really show everyone those photos?
- (3) Ought you to have told me that sooner?
- (4) I would probably not have remembered the answer.
- (5) Are you enjoying the show?
- (6) Has the washing machine been eating my socks again?
- (7) He isn't to be being silly at that point.

DO YOUR ANALYSIS BEFORE LOOKING AT FIGURE 4.22.

13.2 Solutions



103. Remember the tips for drawing syntax diagrams (e.g. as stated in Section 9.1 of the last chapter).

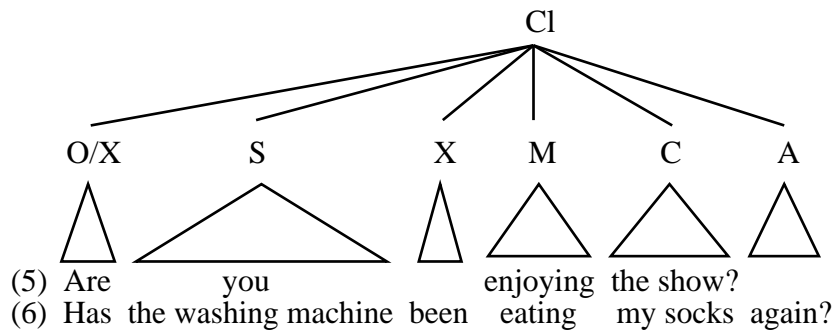


Figure 4.22: Examples containing Auxiliaries, Infinitives and a Negator
 XXX Add a and b if the figure is split.

13.3 Comments on the analyses

1. This analysis task should have given you plenty of practice in identifying the four new elements introduced in this chapter; all but two of the examples involve one of the two Auxiliaries (X); two include an Infinitive Element (I), and one has a Negator (N).
2. None involves more than one Auxiliary, but in one case (7) there are three forms of *be* in one clause.
3. Of the Adjuncts, two identify the ‘time position’ - *sooner* in (3) and *at that point* in (7) - but neither does so in the most typical way, which is to refer directly to a period on the time line (e.g. *in the 1990s*, *on Sunday*). Finally, one Adjunct is an example of a new type - *again*, in (6). This reminds us that there are over 50 different types of Adjunct, some of which we will meet in Chapter 6.
4. As a revision of Chapter 3, I have included clauses with one, two or three Participant Roles - and so clauses with no Complement (1), one Complement (4), (5), (6) and (7), and two Complements (2) and (3).

If you are only interested in syntax and do not want to think about the various functions that syntax serves, you can skip to Chapter 5.

14 The role of the concept of ‘strands of meaning’ in the theory

14.1 The metaphor of ‘language as rope’: how well does it work?

We will conclude this chapter with an evaluation of a concept which has played a major role in this chapter, and which is generally assumed to be one of the key concepts of the systemic functional theory of language. This is the concept of ‘strands of meaning’ (to use a description employed by both Halliday and myself), and it is essentially the same notion as Halliday’s concept of ‘metafunction’.

At the start of Chapter 3, I suggested that the metaphor of a rope might be helpful in understanding the concept that a text-sentence may consist of several

simultaneous ‘strands of meaning’. I suggested that, just as a strong hemp rope is made up of several smaller ‘ropes’ (each with many single strands within it), so too a clause is made up of many interwoven strands of meaning.

However, the time has come when we must look at this metaphor a little more critically. The fact is that the ‘rope’ of the English clause is very uneven - as the structures introduced in Chapters 3 and 4 have demonstrated. For some stretches of a clause the ‘rope’ seems to consist of a single strand (e.g. the ‘time’ Auxiliaries, the Negator and the Main Verb), but in other parts of the ‘rope’ it seems that up to four additional short strands are spliced into the rope, making up to FIVE strands altogether - each corresponding in length to one or two elements (as we saw in Section 10.2). The extra meanings are often spliced in at just the points where they are most valuable in orienting the Addressee to the central meanings of the clause - hence the ‘multifunctionality’ of the **Subject** and, above all, the **Operator**.

The attractive concept of a rope made up of even strands of meaning is reflected in the diagrams for representing clause structure that we find in Halliday’s writings (e.g. Halliday 1994:371-85). Yet these in fact give us a much less accurate picture of what is happening in the clause than is usually assumed (as I show in Chapter 7 of Fawcett 2000a). While the ‘rope’ metaphor gives us a useful concept from which to start, we need to move on from it. The *Functional Semantics Handbook* show how to do this - in a way that builds on from the single, integrated representation of the structure at the level of form that we are developing in the present *Handbook* to a representation of the eight major ‘strands of meaning’ that we can usefully distinguish at the level of meaning. But for many stretches of the text there is no expression of many of these strands of meaning: we only show the semantic features where a choice has been made.^{mmm}

14.2 Halliday’s ‘metafunctions’ and our ‘strands of meaning’

In Figure 4.18 in Section 10.3 we saw an illustration of the six very different types of meaning that we have met so far, and some of the main system networks within each. In the full model there are EIGHT major strands of meaning (as we saw briefly in Section 6 of Chapter 2).

However, Halliday has suggested that there are four functional components, or ‘metafunctions’, in the lexicogrammar of English - and of all languages. These are the ‘experiential’, the ‘logical’ (for ‘and’ and ‘or’ relations between units, etc), the ‘interpersonal’ and the ‘textual’. But Halliday had suggested from his earliest presentations of the concept (e.g. in Halliday 1971/73c) that the ‘experiential’ and ‘logical’ components were two sub-components of a single ‘ideational’ component, and in Fawcett (1980) I suggested the value of recognizing further sub-components - rather as Halliday himself had already done for the ‘ideational metafunction’. Moreover Halliday’s diagrammatic representations of clauses nearly always show that his ‘textual’ ‘metafunction’ must also be conceived of in terms of both a ‘thematic’ and an ‘informational’ strand of meaning - so in effect recognizing that the ‘textual metafunction’ also contains two sub-components. But in Fawcett (1980) I suggested the value of recognizing several additional strands of meaning, breaking down the mixed bag of meanings covered by Halliday’s ‘interpersonal’ component

into four distinct strands: ‘interpersonal’, ‘polarity’, ‘validity’ (which in Fawcett 1980 I termed ‘modality’, following Halliday’s terminology at the time), and ‘affective’ meaning (which we met briefly in Section 5.5 of Chapter 3, and for which Halliday has no equivalent). This is not the place to justify this decision - but I hope that the descriptions of the types of meaning involved in each of those introduced earlier in this chapter will have demonstrated the great differences between them.ⁿⁿ

However, if it is useful to recognize two or more distinct ‘sub-components’ within a ‘component’, we need to ask if there is any value in also continuing to think in terms of the various superordinate components. We need to ask: ‘Doesn’t the retention of the ‘higher’ layer of terms complicate the description unnecessarily?’ In the Cardiff Grammar we think it does, and we find no use - either theoretical or practical - for the concept of the ‘ideational’ as a ‘super-strand’ of meaning that includes the strands of ‘experiential’ and ‘logical relations’ meaning. And the same goes for each of Halliday’s three other superordinate ‘metafunctions’.

To summarize so far: Halliday’s concept that language is multifunctional has proved to be extremely valuable as a stimulus to thinking about language, but the ‘delicacy’ in his model (to borrow his own term) is not sufficiently fine. I will say a little more about why his three or four ‘metafunctions’ are not delicate enough in the next section.

14.3 How important, in theory and practice, are the ‘metafunctions’ and ‘strands of meaning’?

In this section I will express a viewpoint that will strike some systemic functional linguistics as even more controversial than that set out in the last. It is as follows.

Many linguists would consider that my decision to split up Halliday’s four ‘metafunctions’ into eight strands of meaning in the way described above is a matter of considerable theoretical importance. But I do not. This is because I don’t consider that Halliday’s concept of ‘metafunctions’ is the grand theoretical construct that the writings of many of my fellow systemic functional linguists assume it to be. And it is consequently NOT a matter of great theoretical importance that the Cardiff Grammar has an alternative way of dividing ‘meaning’ into its sub-components.

However, my taking this position should not be taken as implying that the GENERAL CONCEPT of ‘metafunctions’ and ‘strands of meaning’ has no value. On the contrary - I believe that the concept has very great value. But its value is PRACTICAL rather than THEORETICAL. In other words, the true value of the concept of ‘metafunctions’ - or ‘strands of meaning’ - lies in the fact that it provides us with an OUTLINE FRAMEWORK FOR THINKING ABOUT LANGUAGE. By working all the time in such a framework, the linguist is continually reminded of the range of types of meaning that are built into the lexicogrammar itself. The question of whether there are three or four or six or eight or more is a pragmatic matter of what works best - and so not one of high principle.

It may be the case that, for those of us who tend to think in trios of concepts (as

Halliday often seems to), a framework for analyzing texts that contains a primary division into three ‘metafunctions’ is the most attractive. But the trouble with the ‘three-strand’ model is that it makes it too easy to neglect the types of meaning that are NOT selected for presentation as the dominant system network in one of the three ‘metafunctions’. The fact is that too many introductory (and intermediate-level) presentations of Systemic Functional Grammar give us a picture in which the only important system in ‘ideational’ meaning is TRANSITIVITY, the only important ‘interpersonal’ meaning is MOOD, and the only ‘textual’ meaning is THEME. It must be said that Halliday himself almost always includes ‘informational’ meaning alongside ‘thematic’ meaning in his diagrams, but the types of meaning referred to here as TIME (three types), CIRCUMSTANCES, POLARITY, VALIDITY and above all AFFECTIVE meaning are typically underplayed in descriptions that use his framework (affective meaning, perhaps, because it is typically not realized directly in the structure of the clause, but rather within groups, while most of Halliday’s writings concern the clause).

Paradoxically, the concept of ‘metafunctions’ can actually get in the way of developing a clear model of language for oneself. This happens when those using Halliday’s framework spend time in trying to decide which of the three (or four) ‘metafunctions’ to place some type of meaning in - when none is truly appropriate.^{oo}

My colleagues at Cardiff and I have considerable experience that bears on this issue. For the last fifteen years or so, we have been carrying out the detailed work of building a very large systemic functional lexicogrammar of English that is explicit enough to be put into a computer. And this work has shown us that the question of where the boundaries between functional components comes is, ultimately, irrelevant. What really matters is to ensure that we have semantically motivated system networks that provide a very broad coverage of the language for each major type of meaning, and that they connect appropriately with each other. As it turns out, many of the closest clusterings of these connections do correspond in some measure to the ‘strands of meaning’, but it is equally true that there are also a great many important connections between the different system networks that cut right across any tentative grouping of system networks into ‘metafunctions’ that has so far been proposed by any scholar. And some of the major types of meaning have their systemic ‘point of origin’ WITHIN a system network in a different strand of meaning (e.g. some THEME systems are dependent on features in TRANSITIVITY).^{pp}

In my view, then, it has been a mistake to elevate the concept of the ‘metafunction’ to the dominating THEORETICAL principle that it appears to hold today for many of those who work in the framework of systemic functional linguistics. THE CONCEPT THAT A TEXT-SENTENCE REALIZES MANY DIFFERENT STRANDS OF MEANING SHOULD EMERGE FROM THE GRAMMAR, AND NOT THE OTHER WAY ABOUT. In other words, the concepts of ‘metafunction’ and ‘strand of meaning’ are no more - and no less - than a useful reminder of the many types of meaning that we need to look out for when analyzing language - whether it is language in the form of texts or language as itself.

If you accept this viewpoint, it follows that it is not a productive use of time to

expend a great deal of time and effort on trying to decide which of two possible 'metafunctions' (or strands of meaning) a given system network of choices in meaning belongs in. WHAT MATTERS IN CONSTRUCTING A SYSTEMIC FUNCTIONAL GRAMMAR FOR A LANGUAGE IS WHETHER THE SYSTEM NETWORK OF CHOICES BETWEEN MEANINGS IS ORGANISED IN SUCH A WAY THAT THE LEXICOGRAMMAR OPERATES EFFICIENTLY AND INSIGHTFULLY. In other words, the question 'Which metafunction does this type of meaning belong in?' is secondary to the question 'Are the system network and its accompanying realization rules constructed in such a way that they work together holistically and elegantly?'

To summarize: the real value of Halliday's concept of the three (or four) 'metafunctions' - or the eight main strands of meaning, which replace them here - is as a USEFUL MNEMONIC to remind us of the complex nature of our task as linguists. In foregrounding the concept of the multifunctional nature of language - and so making this general approach available to all linguists - Halliday has performed a major service to the community of those interested in language and how it functions. But the danger of identifying only the three or four 'metafunctions' that he does is that several types of meaning that are logically and systemically distinct from these may be overlooked by the analyst of a language or a text - as for example 'affective' meaning has been in Halliday's work. A framework with the EIGHT MAIN STRANDS OF MEANING that are recognized here provides a better guarantee that all of the types of meaning will be attended to when one is analyzing texts.⁹⁹

What matters is the following:

- 1 We should give a central place to each **major network of meanings** in our picture of the semantics of English - and so also in the semantics of all natural languages.
- 2 We should therefore give a central place to each **major strand of meaning** when making a full semantic analysis of the clauses of a text.
- 3 Within each broad strand of meaning, the diagrams showing our analyses of text-sentences should relate the key **semantic features** to the way in which they are expressed at the level of form (i.e. in **syntax** and **words**, and in **intonation** or **punctuation**). These are the **realizations** of the meanings.

In other words, no account of a clause can be considered complete without attending to each strand of meaning and to the realization of those meanings in the integrated structure of the clauses and other units of the text. So for each clause we must ask, in relation to each strand of meaning, 'How are the choices for this type of meaning expressed in this clause?' In a full analysis of the meaning of the clause, then, each of the eight strands of meaning recognized here requires attention. And that is precisely the task of the *Functional Semantics Handbook*.

But the prerequisite for a good semantic analysis is the ability to provide a good functional analysis of the syntax. And that is the task on which we are engaged here in the *Functional Syntax Handbook*.

Endnotes

These endnotes, like those in earlier chapters, provide ‘follow-up’ comments, comparisons and references for readers with prior knowledge and experience of linguistics.

104. The Subject is the element that Halliday has always used to exemplify the multifunctionality of language. An early influential example occurs in the chapter in *New Horizons in Linguistics* (Lyons 1970) that first made Systemic Functional Grammar available to a wide readership (Halliday 1970:159). Here he draws on Sweet (1891:10f., 89f.) to introduce the notions of ‘logical subject’, grammatical subject’ and ‘psychological subject’. There is a more recent exposition of the same concepts in Chapter 2 of his *Introduction to Functional Grammar* (Halliday 1985/94).

104. The time concepts in the ‘belief system’ corresponds roughly to what Quirk et al. (1985:175) call the ‘referential level’, which they rightly recognize as being one that it is necessary to distinguish from the ‘semantic’ level.

104. It is encouraging to find Quirk et al. (1985:179) moving some way in the direction of the position taken here. In describing what they term the ‘state present’, they state that ‘there is no inherent limitation on the extension of the state into the past and future’, citing various types of ‘stative’ Processes that illustrate this concept. But in fact the concept also applies to ‘non-stative’ Processes, as we will shortly see, so that it is in fact one of the most basic concepts in explaining the meanings of time in English.

104. Quirk et al (1985:179-180) describe a tense that they term the ‘habitual present’.as if it was a separate tense - so reflecting the use of this term in traditional grammar. But it follows from the recognition of the concept of ‘past-present-and-future’, together with the distinction between ‘stative’ and ‘non-stative’ (or ‘dynamic’) Processes, that it complicates the model unnecessarily to claim that there is an additional type of ‘present’ called the ‘habitual present’. It is simply the result of combining a ‘non-stative’ Process with the ‘unmarked present’, as in (2) - just as Quirk et al.’s ‘state present’ (1985:179) is the combination of the concepts of ‘past-present-and-future’ with a ‘stative’ Process, as in (1). (In any case, the term ‘habitual’ narrows the meaning too much, because it implies that the Participant is a living creature with ‘habits’ - when in fact this combination of meanings can be used with ALL types of object, e.g. *In June the sun rises at about five.*)

104. In the semantics of time in English, this is the **instantaneous present**. (The same term is used in Quirk et al. 1985:180.) This time meaning is used for commentaries, whether professional (e.g. sports) or personal (e.g. in a demonstration of a procedure) - and also for ‘performative’ verbs such as *I hereby resign, I apologize, etc.*

104. In the last case it is the Time Position Adjunct *by Tuesday* that shows that the meaning is ‘in a time span that stretches from the present trp forwards to Tuesday’. In other words, there is no tense form to indicate this meaning that corresponds to the *have ... -en/ed form* for the equivalent past meaning. (For this see Section 11.2.) I should perhaps point out that, in the Cardiff Grammar the meaning realized by *be going to* is not seen as the future’ equivalent of the *have ... -en/ed form*, as has sometimes been suggested.

104. It could equally well be called a ‘deictic model of time, since its meanings - like all types of deictic meaning - can only be interpreted when you know the Performer’s location in time and space.

104. It may be helpful to compare the present model with the well-known model proposed by Reichenbach (1947), which has influenced most models of time developed since then to a greater or lesser extent. Our ‘time reference position’ corresponds directly to his ‘point of reference’ (‘R’), our ‘present trp’ and its informal characterization as the ‘moment of utterance’ corresponds to his ‘point of speech’ (‘S’), and our ‘time position’ of the event corresponds to his third ‘point’, i.e. his ‘point of event’. Notice, however, that the present model is unlike that of Reichenbach in treating

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such 'positions' as PERIODS (rather than 'points'), so that even the present *trp* is viewed here as a period - though a very short one. (This reflects the influence of the 'event-based' approach to time of Davidson (1967).) But the present model also has the concept of the four general **time spans**, and also that of a **time position specification**, as introduced in Section 2. The term 'specification' is taken from Crystal's ground-breaking paper on this topic (1966).

104. Halliday (1994:200-7) has suggested that there are 36 tenses in all, and that 'the system ... has the potential for being further expanded, ... there is no clear boundary between what is in and what is out.' (p. 207). I agree with this as a general statement, but would add that while the grammar should generate all possible combinations it has a responsibility to show the relative probability of occurrence. Some will occur only very rarely indeed.

I should also point out that Halliday's figure of 36 tenses is reached by including simple *be ...-ing* forms for each as a type of 'present' tense, so that the equivalent total in present terms is 18. A further factor in reducing this still large number is that he treats *be going to* and *will* as different tenses, so allowing combinations of each with other tenses (and indeed with each other). While such combinations undoubtedly occur - and while there are other ways of referring to future time in English that Halliday excludes (such as the use of simple modal verbs, as in *You may see her tomorrow*, they do not, in my view, set up additional time reference positions. In other words, here we treat *He will see her tomorrow*, *He's going to see her tomorrow* and *He will be going to see her tomorrow* as variants of the 'future'. (I have so far not found a naturally occurring example of one of the logically possible combinations, namely the type exemplified in *He had been going to have read it by now*, so this possibility receives a very low probability of occurrence in the generative model.) See Chapter 6 of *The Functional Semantics Handbook* for the full treatment of this topic.

104. Some rather more form-centred approaches to the grammar of English (such as Palmer 1965/87) give priority to the FORMAL differences between (1) the expressions of 'past' and 'present' time as morphemes (and irregular verb forms) and (2) the expression of 'future' time in modal verbs. In such an approach English is said to have only a 'present' and a 'past' tense, with 'future' time being dealt with as a type of modal verb. This is clearly a distinction in which greater emphasis is placed on criteria that are derived from the level of form than criteria from the level of meaning.

104. Work over the last few years on the COMMUNAL Project has shown (a) that 'time' is a complex of concepts that involve, in a systemic functional description of English, a rich variety of meanings and forms; (b) that the TIME REFERENCE POSITION and its dependent systems are just as central to the full understanding of a text as, say, TRANSITIVITY or MOOD; and (c) various aspects of 'time' are realized, often in the same clause, in (i) the Operator or Main Verb (i.e. what is known in traditional grammars as 'finiteness'), (ii) several types of Auxiliaries, and (iii) several different types of Adjuncts. In terms of the concept of 'strands of meaning', therefore, it is helpful to include in our model of the meaning potential of a language a **temporal** 'sub-strand' of meaning within the main **experiential** strand.

There is no general agreement in SFL about which strand of meaning 'time' meanings belong in. I first placed TIME meanings in the **experiential** strand of meaning in Fawcett (1973/81), on the grounds that the model of time that we inherit from our language makes us 'experience' time in a way that is peculiar to our culture (cp. Whorf 1956). And, since I have found no arguments that persuade me to change this position in the writings of Halliday or any other scholar, that this is still my position today.

Halliday, however, places his 'tense' systems in his 'logical' 'metafunction' for reasons that are, as I understand him, essentially derived from the recursive nature of the system networks - as he takes them to be - and the resultant structures for 'tense' at the level of form. But these systems and structures are themselves the product of his decision to model time as 'recursive'. His line of reasoning is that, because the system networks for the 'tense' systems of English are recursive, they should be placed in what he terms the 'logical' component - because this is where he places ALL recursive systems. So Halliday's proposal for locating 'tense' there is part of a wider claim that the types of structure in which the meanings of each 'metafunction' are realized are all different - with recursive structures (or, more strictly, the **realizations** in structure of recursive choice in the system network) showing the presence of meanings from his 'logical' 'metafunction'. (Incidentally, the fact that 'time' meanings are abstract is not a reason for treating them as 'logical' rather than 'experiential', as has sometimes been suggested, because many other 'experiential' meanings are abstract, e.g. the meanings of items such as *generosity*, *mile*, *absence* etc.)

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In the computer implementation of the Cardiff Grammar, however, we have shown that the systems for 'time' can be handled more elegantly by NOT treating them as recursive. The result is that, even if we decided, as Halliday has, that 'type of structure' should be a criterion for setting up a 'metafunction' (which we do not) there would be no reason to locate 'time' in the 'logical metafunction'. Interestingly, Halliday himself actually agrees that this area of meaning in English can indeed be handled without using recursively entered system networks and in an economical fashion (personal communication). Despite this, he still stands by his 1960s 'recursion plus stops' system network for 'tense' - and so by his view that the 'logical metafunction' is the one in which TIME meanings belong.

In the framework assumed here there is a **logical relations** strand of meaning, which handles the relations between the current unit and another unit, particularly the relationship of co-ordination - these being, of course, a type of meaning. But for Halliday this is just one of the types of meanings handled in his 'logical' component

Interestingly, Halliday's approach to 'time' requires him to add an otherwise unnecessary concept to his theory - that of 'stops' in recursive systems (which he introduced to prevent overgeneration in his recursive 'time' systems).

In the view taken here, then, the various system networks for TIME are so crucial to the meaning of a clause - and so different from other types of meaning - that they deserve at least a 'sub-strand' of meaning to themselves. And since they express a view on how we EXPERIENCE time - time being, after all, the 'fourth dimension' of all physical entities - 'time' meanings are, in terms of Halliday's set of four broad 'metafunctions', experiential.

104. Halliday, using a rather different terminology, would treat his equivalents of these two areas of meaning as belonging in his 'logical' metafunction, on the grounds that they are both recursive systems - which is also how he sees what we are here calling the TIME REFERENCE POSITION system.

104. In developing the various system networks that contain semantic features that are realized in modal verbs, I found Halliday (1970/76a) an insightful starting point. However, as Sections 4.1 to 4.4 of this chapter show, it seems to be necessary to recognize that modal verbs realize four different areas of meaning - rather than the two suggested in that work. And for the detailed work of constructing system networks for the semantic features that generate the modal verbs I have found that the characterizations of meanings that are closest to my own are those that emerge in the detailed descriptive work of scholars such as Coates (1983) and Leech (e.g. in the relevant sections of Quirk et al 1985) rather than the descriptions of Halliday (e.g. in *IFG*, pp. 354-63). In practice, therefore, I have found that the evidence of the data is that there is NOT the close parallelism between the 'meaning potentials' of the two types of meaning that are here termed 'validity' and 'control & disposition'. This is in contrast with the position taken in Halliday (1970/76c) which uses the same system network for both 'experiential' and 'interpersonal' meaning, and in even stronger contrast with Halliday (1994:357), where it is suggested that the same set of concepts can be extended to cover additionally 'usuality' (realized as *sometimes*, *usually*, *always*, etc) and what are here termed 'disposition' meanings (*willing*, *keen*, etc - for which see Chapter 14).

104. A fundamental distinction between these first two types of meaning realized in modal verbs is made by most of those who have made thorough studies of this area of the grammar, often under other names and sometimes with the addition of other, less central categories, e.g. Lyons' 'deontic' vs 'epistemic' distinction (Lyons 1977), Leech's 'root' vs epistemic' (Leech 1971), and Halliday's 'modulation' vs 'modality' (1970/76a). Others add up to six additional types (e.g. Rescher 1968), and Perkins (1983) provides an excellent guide to the main approaches. Halliday, in his first description of this area of grammar (Halliday 1970/76a) makes essentially the same dual distinction, introducing the term 'modulation' to refer to the 'experiential' type of meaning and 'modality' to refer to the 'interpersonal' type. Later, however, in Halliday (1994:354-63) he replaced the term 'modality' by 'modalization', making both 'modulation' and 'modalization' subcategories of 'modality' - and presenting 'modality' as one of several types of 'interpersonal' meaning. So he has changed his position on this area of meaning quite drastically, in that he has made what he considered in 1970 to be an 'experiential' meaning' into an 'interpersonal' meaning in Halliday 1994. As the previous endnote indicates, I think his original position was the more insightful one. See Section 10.3 for the rationale for taking the present approach.

104. As I pointed out in the previous endnote, Halliday first introduced the term 'modulation' in Halliday (1970b).

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104. Very occasionally it is relatively unimportant whether the item is present or not. Compare *He helped me unload the car* with *He helped me to unload the car*.

104. Many grammarians do not recognize *am/is/are/was/were to* as modal verbs. The reason is undoubtedly that, unlike the other modal verbs, their form varies according to the Subject - i.e. we find *I am to do it, You are to do it, She is to do it*, etc. But to exclude this set of items on these grounds reflects a form-centred approach to grammar. In a functional approach, the variation in the internal morphology of the forms of *be* and the formal 'agreement' between the Subject and the verb is much less important than the syntactic behaviour of the items and the meanings that they express. By these criteria *am/is/are/was/were to* are clearly modal verbs.

104. It would be interesting to make a corpus study of these types of fading usage, but the corpus would need to be well-defined with respect to the ages, social class, gender of the Performers in equally clearly defined social situation types. At present we do not have detailed data.

104. Here I am drawing on the pioneering work in this area of Peter Wason (1965/68).

104. Essentially, POLARITY functions as a separate strand in the meaning of the clause. But some systemic linguists might argue, on formal systemic grounds, that it is 'within' the MOOD network, in that its entry conditions are various features within MOOD. But this criterion should not be given great weight, because it leads logically to the view that we should only recognize separate strands of meaning when they are generated from system networks that are entered SIMULTANEOUSLY. However, it is a very serious oversimplification to model a grammar in this way, and in particular to model POLARITY as being entered SIMULTANEOUSLY with the main MOOD network. Yet this is what is suggested in a number of introductory system networks (e.g. Halliday 1973:40, Berry 1975:142-6 and, to my present regret, Fawcett 1980:174).

The reason why this approach is mistaken is that there are several MOOD options which cannot co-occur with POLARITY - most obviously the 'polarity-seeker'. (The reason is that, if it is seeking polarity, it follows that it cannot already have polarity.) And there is similarly no choice of POLARITY with 'confirmation seekers' (for the same reason) or with 'exclamations' (for a different reason). For the 'confirmation seeker', see Section 2.4 of the next chapter, and for the 'exclamation' see Chapter 14. On the other hand POLARITY varies independently with many of the most frequent MOOD options, e.g. 'information givers' such as *They are reporters* and a 'directive' can be either 'positive' or 'negative' (e.g. *Read it!* or *Don't read it!*).

However, for text analysis purposes, experience shows that it is extremely useful to treat POLARITY as a distinct strand of meaning (as I first proposed in Fawcett 1980). The meaning of negativity is very different from the meanings of MOOD, and the analysis of their realizations in a text consequently reveal quite different aspects of the text. (We will consider memorable negatives statements by three Presidents of the United States when we come to the semantics of negativity in the *Functional Semantics Handbook*.)

104. See Joos (1964) for the original characterization of what is treated in the Cardiff Grammar as the system for TENOR, and Gregory (1967) for the first full statement of Halliday's concept of 'register' (which contrasts with 'dialect') - with special attention to the refinement of differences in MODE. In the COMMUNAL implementation of the grammar, we have found that the natural place to locate the REGISTER systems of TENOR, MODE and TECHNICALITY (the last of which which corresponds to part of Halliday's 'field') is actually within the overall system network for the semantics of the lexicogrammar, as one of the first system networks. Thus these options are for us not 'situational variables' (as some of Halliday's descriptions suggest, but features that affect the 'style' of a text, through the absolute or probabilistic weighting of the probabilities that a given feature in a system will be chosen. Gregory (1967) rightly distinguishes between what I am here calling 'situational variables' and register variables'.

104. The word *never* is of course derived from *not + ever*, and this explains why it is more limited in the places in the clause at which it can occur than the other Adjuncts that express 'usuality', such as *always, sometimes and occasionally*. But unlike *not* it can be thematized, as in *Never have I heard such rubbish*. But when it is thematized it carries with it the unusual but obligatory requirement that the Operator must precede the Subject, as in the example.

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104. There is a second reason why it is useful to introduce ‘validity’ briefly at this point. This is to bring out the difference between the positions taken in the Cardiff and the Sydney Grammars on the relationship between (a) POLARITY and (b) the VALIDITY type of ‘modality’. (Halliday formerly called this type ‘modality’, but in *IFG* he renames it ‘modalization’.) The difference between the position taken here and that presented in *IFG* is that Halliday appears to treat the various degrees of strength of ‘validity’ as occurring on a scale between ‘positive’ and ‘negative’. He writes on p. 356 that ‘modality refers to the area of meaning that lies between yes and no - between positive and negative polarity’. While this sounds persuasive from a logical viewpoint, it is not in fact how the language itself treats these meanings. In other words, there is NOT a system with ‘positive’ at one end and ‘negative’ at the other, with features expressing various degrees of ‘probability’ in between (as seems to be implied by the diagram on p. 357 of *IFG*). Instead, we find that the grammar has two systems that vary independently of each other. These are (a) the system of POLARITY (where ‘negative’ is realized in *n’t* and *not* and ‘positive’ is unrealized, as we have seen in this section), and (b) the system of VALIDITY (as realized in modal verbs such as *may* and *must*). The independence of the two systems is shown by the fact that we can say (i) both *Ivy may like Ike* and *Ivy may not like Ike*, (ii) both *Ivy will like Ike* and *Ivy won’t like Ike*, and (iii) both *Ivy must (surely) like Ike* and *Ivy can’t (possibly) like Ike* (where *can’t* is the negative equivalent of *must* in its ‘validity’ sense). It may well be Halliday’s assumption that ‘validity’ (his ‘modalization’) lies between ‘positive’ and ‘negative’ that leads him to locate these two types of meaning within the same ‘metafunction’ - i.e. in the ‘interpersonal metafunction’, along with MOOD. This, as the summary diagram in Section 14 shows, is not the position taken here.

104. Before deciding that the most suitable element for the items *Yes* and *No* to expound is the Operator, I considered two alternatives. The first was the use of the Formula element (F), which we will meet in Chapter 19, and the second was the introduction of a completely new element. The latter seemed unjustified if it was to be used for just two items, unless there was no alternative, and the former seemed unnecessarily vague, given the availability and the semantic appropriateness of the Operator. Another possibility might appear to be the Negator element, but this would be quite inappropriate for *Yes*.) To label *Yes* and *No* as Adjuncts - which is the solution that is sometimes proposed (e.g. in *IFG*) is unhelpful for at least the following three reasons. Firstly, the concept of a ‘Adjunct’ is inherently the concept of something that is ‘adjoined’ to something else. But the items *Yes* and *No* do not occur as Adjuncts to anything; they typically occur as single items, and on those occasions when they are followed by further text, it is not material to which *Yes* and *No* are ‘Adjuncts’. (If anything, what follows is in a loosely ‘Adjunct-like’ relationship to the initial *Yes* or *No*.) Secondly, Adjuncts are almost always able to occur in a number of different places in the clause, and this is not true of *Yes* and *No*. The third reason is rather different; it is that to label *Yes* and *No* as Adjuncts would contribute further to what is already, in some descriptions of English, a seriously overused ‘ragbag’ category.

104. However, there is currently no way of measuring this guess, since we do not have overall statistics on the relative proportions of speech and writing, etc. Indeed, it is hard to see how we can extend our growing insights about frequencies within corpora that are defined by register and dialect variables (e.g. as in Biber et al 1999) to allow us to make corpus-based comparisons on this scale.

104. On p. 92 of *IFG* Halliday identifies three discourse functions of *Yes* (and two of *No*). Let us compare these with our five. His first function corresponds to our first; his second perhaps corresponds roughly to our second (though he does not allow for the variation in information units that we do here); and his third corresponds to our fifth. But he omits from his list our third type (the use of *Yes* as an acknowledgement), although he introduces the concept of an ‘acknowledgement’ on p. 69 and gives as an example *Yes, he is*. Finally, he does not mention our fourth type, i.e. the ‘back channel’ use of *Yes*.

104. There are three important differences between the analysis of *Yes* and *No* in the Cardiff Grammar and in Halliday’s *IFG*. Let’s start with his analyses of three possible responses to *It’s Tuesday, isn’t it?* (*IFG* p. 92, Figure 4-18). Halliday analyzes *No* as a ‘Modal Adjunct’ in all three of (a) *No* on its own, (b) *No it isn’t* (without a comma) and (c) *No, it isn’t* (with a comma). Yet its function in the syntax of the clause in these cases is quite different from the other types of item that he labels as ‘Modal Adjuncts’ (such as *usually*, e.g. on p. 93 - an element which, most linguists would agree, can be fairly labelled an Adjunct). But if *usually* is to be labelled as a Modal Adjunct *Yes* should be given a different name. (Incidentally, the same element is referred to

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as a ‘Mood Adjunct’ in the main text, which is confusing.) Elsewhere, on p. 82, Halliday lists *Yes* and *No* as ‘Polarity Adjuncts’ and *usually* as a ‘Usuality Adjunct’, but he does not use these labels in his analyses of texts. This criticism is one of labelling - but the labels that we choose to use for the categories in our models are important.

However, there is a more important difference between the analyses of the syntax of the above examples found in *IFG* and in the Cardiff Grammar. This is that Halliday analyzes each of (b) and (c) above in two quite different ways. He suggests that (b), i.e. *No, it isn't* (with a comma) consists of two clauses (as we would in the Cardiff Grammar), but that (c), i.e. *No it isn't* (without a comma) consists of just one clause - with *Yes* being treated as a ‘Modal Adjunct’ that is part of the following clause. This in turn leads him to treat all instances of *Yes* or *No* on their own as the heavy of a full clause (so long as they are functioning as responses that express polarity) so that he treats *No* in response to *It's Tuesday, isn't it?* as an ellipped version of *No it isn't Tuesday* (necessarily with no comma). The Cardiff Grammar takes the alternative approach, which is, as we have seen, to treat *Yes* and *No* as pro-forms for clauses and not as the remains of a clause from which all other elements have been ellipped. (The fact that we analyze them as expounding the clause element Operator does not, of course, imply, because *Yes* and *No* cannot be expanded.) In the present model of how we process language, the recoverability of the propositions for which *Yes* and *No* stand is handled at a higher level of representation than that of syntax (specifically, that of the logical form into which the semantics is ‘translated’ for purposes of deduction, etc.). Since the Cardiff Grammar treats *No* as a one-element clause in all three of (a), (b) and (c), it differs from *IFGs* in treating (c), i.e. *No it isn't* (without a comma) - as two co-ordinated clauses rather than one. Our position is that the difference between (b) *No, it isn't* and (c) *No it isn't* is that in (b) each of the two clauses has its own information unit, while in (c) the Performer has chosen to assign a single information unit to both clauses - with the syntax being the same in both cases. It seems to me that in this small section of *IFG* Halliday is over-working the functional SYNTAX by trying to use its categories to show a distinction that really belongs in the representation of the INTONATION - and the result is to create an unnecessary complication for those trying to apply the model in the analysis of syntax. In the Cardiff Grammar, *No* in all three of (a), (b) and (c) above is simply the Operator in a clause, and *it isn't* in both (b) and (c) is a heavily ellipped second clause. The difference between (b) and (c) is shown in both the representation of the intonation or punctuation and in the semantic analysis (for which see *The Functional Semantics Handbook*).

However, Halliday shows in his analysis of *Yes* and *No* a further distinction that is not made here (*IFG* p. 92-3). In the dialogue (d) *P: They're late. A: Yes they usually are*, he claims that *Yes* serves the function of a ‘continuative Theme’ - one that he however claims is NOT AN ADJUNCT. So he is suggesting that it requires a completely different analysis from those of (a) and (c) or (b). (He doesn't say what his analysis of (d) would be if there was a comma between *Yes* and *they usually are*, but I infer from his discussion of (b) and (c) that he would treat *Yes* as a separate clause, and so as a ‘Modal Adjunct’, with the rest of the clause ellipped.). His second example to illustrate this pattern shows the use of *No*, but here the example is a monologue - so that the function in the discourse is rather different. (It could also occur in a dialogue, in fact.) The example is: (e) *P: I don't like it. No I don't like the idea* - where P's second sentence repeats and slightly expands on the first. (This is like the second function described in Section 6.10.) So Halliday's analysis of *Yes* and *No* in (d) and (e) is completely different from either of his analyses of *Yes* and *No* in (a), (b) and (c). But are these three alternative analyses necessary? I suggest that this third analysis is no more necessary than the second, and that, as with (a), (b) and (c), a simpler and clearer picture emerges if we analyze one component of the representation of a text-sentence at a time. In the first case the two components are both sub-components of the level of form (intonation and syntax), but in the present case the difference is between two components of the overall model of language: the lexicogrammar and the discourse grammar. (For the relation between the two, see Section 2.3 of Chapter 1.) In other words, the item *Yes* or *No* should be interpreted FIRST - i.e. at the level of SYNTAX within the LEXICOGRAMMAR - as a pro-clause, and THEN, in response to the question of what function this clause serves for the Performer in the development of the dialogue at the level of DISCOURSE, we might wish to analyze it as serving a ‘continuative’ function (but perhaps using some other label that reflects more directly its function). And let us remind ourselves that, whatever explanation of (d) and (e) is given, we must also provide for the variant of each of (d) and (e) with a comma, i.e. for dialogues such as *P: They're late. A: Yes, they usually are* (and also for *Yes. They usually are*) - as well as for monologues such as *P: I don't like it. No, I don't like the idea (at all)* - and so for all such examples with two information units.

In the context of Section 6.10, I suggest that the function of the initial *Yes* or *No* in such examples is to reflect the preceding proposition and its polarity - and so, if it is uttered by the

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Performer, to re-enforce it, and if it is uttered by the Addressee to acknowledge it. The Performer may then - as in (d) and (e) - go on to expand on it, or he/she may not. In other words, I suggest that this use of *Yes* and *No* serves a function that is much more like to the function that it serves when it is the response to *It's Tuesday, isn't it?*) than Halliday allows.

In short, the two additional distinctions that Halliday introduces in *IFG* do not require a different syntactic analysis. Instead, the first requires two complementary analyses in terms of (1) intonation or punctuation (depending on the medium) and (2) semantics. And the second may not be as different from the first as Halliday suggests.

104. This account of **unmarked newness** is based quite closely on that of Halliday, e.g. as found on pp. 295-9 of *IFG*. However, the semantic concept of the 'contrastiveness' in **contrastive newness**, as presented in the next section, is not found in Halliday's account, though its realization in intonation at the level of form corresponds directly to his notion of 'marked tonicity'. See Chapter 19 for a fuller account of the model of intonation and punctuation and their meanings that is presented here, and Fawcett (1994b) for the first published account of the Cardiff Grammar model. See Tench (1996) for the descriptive approach to intonation that underlies it.

104. Most discussions in grammars of English that cover this area (e.g. Huddleston 1984:138-9 and Palmer 1987:19-21), are centred on the use of forms of *do* as a pro-form, and they are not concerned with whether it is an Operator or a Main Verb. In the examples cited in such discussions it always seems to be arguable that the form of *do* is a Main Verb - and so that in such cases it 'stands for' both the Main Verb and the remaining experiential content of the clause.

104. There is a superficially similar - and much more frequent - use of forms of *do* (and *do so*) as a pro-form for the Main Verb - or, more accurately, for the Main Verb and whatever experiential meanings follow it in that clause. Consider the second clause in *The reviews recommend that film quite warmly, and Ivy does too*. In order to show that *does* is an Operator in an example of this type (rather than being a pro-form for the Main Verb and what follows it) one would have to argue that the second clause is an ellipted version of *and Ivy does recommend it too*. However, a much more natural form would be *and Ivy recommends it too* (i.e. without a form of *do*), and this suggests strongly that *do* is here a pro-form for M. Such examples are therefore not further evidence for the use of *do* as the Operator being considered here.

104. The exception would be a semantic blend of two types of meaning, a phenomenon that is allowed for in the framework for describing modal verbs proposed by Coates (1983).

104. One might think that it could be argued that *CAN'T* in (1) realizes **seven** meanings simultaneously - with three of them being 'time' meanings: 'present trp' has been chosen rather than 'past trp' or 'future trp'; 'real' has been chosen rather than 'hypothetical'; and 'direct' rather than 'reported'. But the probabilities on the features in the system network would in fact be set so that on this first pass through the network 'hypothetical' and 'reported' could not be chosen, and they would only become available on re-entry to the network to generate an embedded clause.

104. It is probably the fact that some of these modal verbs have been taken over for use in the semantics of MOOD that led Halliday - mistakenly in my view - to change his original decision (Halliday 1970/76a) to treat the 'modulation' meanings (our 'control & disposition') as 'experiential' meanings. Thus in Halliday (1994:354-63) the 'modulation' meanings are presented as types of 'interpersonal' meaning - on the grounds, it would seem, that they concern a 'proposal' rather than a 'proposition'. But there are many uses of these modal verbs in which there is no sense in which they can be interpreted as 'proposals for action', i.e. as being 'interpersonal' rather than 'experiential', and this is demonstrated by the ability of many of the examples in Section 4.2 to be re-expressed in the past. Thus alongside *Ike ought to / should / can feed the baby* we can say *Ike ought to / should / could have fed the baby (but he didn't)*. And, since these events are clearly ones that happened in the past, they cannot carry the 'interpersonal' meaning that the Performer is proposing to the Addressee that some future action should take place. (Note that it is not possible to see them as 'interpersonal' on the grounds that they refer to a proposal for action that was uttered in the past; the clause simply points out that Fred had an obligation or an ability to feed the baby.)

104. Perhaps the most celebrated exposition of this concept is the account of the very different

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ways in which 'time' is experienced in English (and other European languages) and the Native American language of Hopi, as pointed out by Whorf (1956).

104. In contrast, Halliday includes the 'validity' and 'affective' strands of meaning with 'interpersonal' meaning, even though these two 'evaluative' strands of meaning seem to some of us (including scholars who do not work the Cardiff Grammar framework) to be 'personal' rather than 'interpersonal' (e.g. Prakasam, personal communication). Moreover, in some works (e.g. 1971/73a:40) Halliday also places 'polarity' in the same 'metafunction', so including in a single 'metafunction' no less than FOUR of the strands of meaning recognized here. However, in other works he places 'polarity' in the 'logical' sub-component of the 'ideational metafunction' (Halliday 1971/73c:141) - or in the 'experiential' sub-component of the 'ideational' (Halliday 1977/78:132). If this susceptibility to change has any significance, it is as a kind of indirect support for the position taken here, i.e. that POLARITY should be given its own strand of meaning.

104. As we have seen, Halliday places VALIDITY (which he calls 'modality' in his earlier writings and 'modalization' in Halliday 1994) within the interpersonal strand of meaning, along with MOOD. I suggest that the Performer's statement of her strength of confidence in the validity of the event to which she is referring is essentially EVALUATIVE, and so an expression of her attitude. In contrast, the function of the meanings in the MOOD network is TO ASSIGN COMMUNICATION ROLES TO THE PERFORMER AND THE ADDRESSEE. As I have said in the main text, one is 'personal' and the other is 'interpersonal'. The two types of meaning are therefore very different. The fact that the VALIDITY system is dependent on the choice of 'information' in the MOOD network does not invalidate this position, and many other major types of meaning are also dependent on features in other networks (e.g. all types of THEME, because you can't talk about 'thematizing' something until there is something to thematize.).

104. Halliday's equivalent to our term 'retrospective' is 'past'. The effect is that he uses the term 'past' for what most other linguists, including myself, consider to be two different meanings. Thus he describes both *ate* and *has eaten* as 'past', the first being said to be simply 'past' while the second is 'past in the present'. (If he had called it 'past viewed from the present' that would have been readily interpretable, but the word *in* presents a misleading picture of the relationship.) In my view Halliday's approach, which is followed by Matthiessen (1996), brings far more problems than insights. Halliday is presumably seeking to capture a broad generalization about 'pastness' by the use of the same term for the two forms, but the two types of 'pastness' are in fact different in meaning in English (unlike the position in informal registers of French and German, where *a mangé* and *hat gegessen* express both meanings). We can see that there are two types of 'pastness' in English when we note the different Time Position Adjuncts with which they do and do not co-occur. Thus *yesterday* and *in 1999* co-occur with 'past' meanings such as *ate*, and *already* and *by now* with 'retrospective' meanings such as *has eaten*.. If these two forms do indeed have two different meanings, as most linguists would agree, we need two different labels for those meanings - hence our use here of 'retrospective' and 'past'. (Interestingly, the term 'retrospective' is also used - and in a fairly similar sense - in the very different 'minimalist' framework described in Cinque 1999.)

104. On the other hand, some linguists would argue that in this section we have introduced new elements within the 'unit' (i.e. the word) that expounds the Main Verb. In traditional grammar this has traditionally been seen as consisting of the two 'elements' of a 'base' and a 'suffix' - at least in 'regular' cases such as *reached* in *He reached Lagos yesterday*. In the present grammar we take a different view. Here we see an item such as *reached* as the combined realization in one word of two meanings rather than two forms - the two meanings of meanings of 'reaching' and 'past'. In this case the two meanings happen to be realized in two distinguishable morphemes, but in the majority of cases in most types of text, in which irregular verbs predominate, they are not. But we can say of both *reached* and *saw* (e.g. as in *He saw Amy yesterday*) that they are the combined realization of the meanings of 'seeing' and 'past'. In other words, both *reached* and *saw* are cases of 'portmanteau realizations', in the terms of Lamb (1966) - i.e. words in which two meanings are realized in one item. In this way we minimize the difference between 'regular' and 'irregular' verbs, as seems appropriate in a functional grammar, without compromising its ability to generate efficiently. `and in addition we save the need to add another layer of structure to the analysis of each clause. For a discussion of the place of morphemes in relation to other units of syntax, see Fawcett (2001a:227-9 and 254-6), and for an account of the way in which such 'portmanteau realizations' can be generated economically, see Fawcett (2001c:330-8).

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104. See Chapter 7 of Fawcett (2000a:107-58) for a detailed critique of the concept that the 'strands of meaning' in a clause should be represented in the way that they are in the Sydney Grammar, and for the reasons for preferring the alternative way of modelling 'strands of meaning' that is used in the Cardiff Grammar.

104. There was in intermediate stage, in that in Fawcett (1973/81:152) I suggested that we need to recognize six functions.

104. One major area of the lexicogrammar area where the concept of 'metafunctions' has been 'over-applied', in my view, is that of Adjuncts, as I will show in Chapter 6.

104. It was in Halliday (1973: 110) that the bold claim was made that 'if we represent language ... as networks of interrelated options which define, as a whole, the resources for what the speaker wants to say, we find empirically that these options fall into a small number of fairly distinct sets. ... The total network of meaning potential is actually composed of a number of smaller networks, each one highly complex in itself but related to the others in a way that is relatively simple: rather like an elaborate piece of circuitry made up of two or three complex blocks of wiring with fairly simple interconnections. EACH OF THESE BLOCKS CORRESPONDS TO ONE OF THE FUNCTIONS OF LANGUAGE [my emphasis]. This was a bold claim, and my colleagues and I have certainly learnt a lot about the nature of the interrelations between system networks as we used it as a basis for building the very large computer-implemented lexicogrammar of English (and the smaller grammars of other languages) that we have built using the assumptions of the Cardiff version of SFL ('the Cardiff Grammar'). As so often, the judgement on the rightness of Halliday's original bold proposal must be that it is 'Partly right'. It has inspired a great deal of valuable work by very many scholars, and it is in part corroborated by the detailed work - but only in part. The fact is that there are many areas of the lexicogrammar that do not fall neatly into these categories (e.g. the system network for DEPENDENCE in the implementation in GENESYS of the Cardiff Grammar).

104. I first pointed out the omission of 'affective' meaning' from Halliday's work in the 1970s and 1980s (Fawcett 1973/81 and 1980), but it wasn't till the 1990s that Jim Martin and colleagues such as Peter White began to fill this gap in the descriptive apparatus of the Sydney Grammar. In the context of a focus on text analysis, they developed the concept of 'appraisal' as a supplement to the 'discourse semantics' that Martin had offered as the level of description above that of the lexicogrammar in Martin (1992). (Martin's 'discourse semantics' is from the viewpoint of the Cardiff Grammar, a mixture of the grammar of discourse - 'exchange structure' for interactive texts and rhetorical structure for monologues - and the semantics of the lexicogrammar.) His term 'appraisal' includes the expression, through any 'metafunction' of the lexicogrammar, of an evaluation of the propositional content of a text, and its coverage is therefore extremely broad. Most obviously, it includes 'affective' meaning - but it also includes what would here be covered by the parts of the grammar that express the assessment of 'validity', and it also includes experiential meaning - most obviously when the Process is the 'emotion' type and the Subject is *I* or *we*. So in appraisal terms there is a similarity between *I like that* and *That's nice*. This illustrates clearly the fact that the kinds of 'meaning' that decisions in 'appraisal' add to a text belong at a higher level of planning than the semantics of the lexicogrammar. In other words, a full model of how a text gets generated must include a level of decision making for what to choose in the system networks of the lexicogrammar with respect to this type of meaning (as well as for many others).

The proposals for choices in 'appraisal', which are often expressed as system networks, are in my view better regarded as decision trees, and so as one the dozen or more 'micro-planners' whose output is to predetermine the choices in the system networks at the level of meaning in the lexicogrammar. In the case of the 'appraisal' decisions, some are expressed in the 'affective' and 'validity' areas of the lexicogrammar (and these might be seen as 'congruent', in an adaptation of Halliday's sense of the term), while others are expressed indirectly, often as experiential meaning, as in *I like that*. In the framework of the Cardiff Grammar, the emphasis has been on developing very full system networks for the semantics of these areas within the lexicogrammar, and, while we have developed 'microplanners' for areas of the English language such as decisions about which Participant Role to make a 'Theme' of the clause (recognizing various types of 'Theme'), we have not worked on the detailed microplanners for any area that comes under the umbrella of 'appraisal' except some central parts of the microplanner for VALIDITY. For computer implementations of

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the microplanner for 'theme', see Fawcett (1997/8) and Glover (1997), and for the implementation for validity see Hood (1997) . XXX Add refs on appraisal.. refs