Text and discourse 7A

The moment a conversation is started, whatever is said is a determining condition for what, in any reasonable expectation, may follow. What you say raises the threshold against most of the language of your companion, and leaves only a limited opening for a certain likely range of responses. (Firth 1935, reprinted in Firth 1957: 31–32)

People do not usually generate grammatical sentences exclusively within the confines of their own minds; rather, they normally create them in social contexts, in order to achieve interactive purposes. Sentences are thus not normally produced or encountered in isolation, but in larger contexts. In this chapter we are concerned with the ways sentences fit into these wider contexts. Our focus is on the linguistic context, and on the ways sentences go together with other sentences. It is, however, impossible not to mention non-linguistic features of context; these we treat in passing, not because they are less important, but because of considerations of length and complexity. The branches of linguistics that deal with these domains called text analysis and discourse analysis.

Chapter contents

Goals

The goals of the chapter are to:

- show that structure exists beyond the level of the sentence (and utterance), and that this structure is distinct from grammatical structure;
- draw a distinction between texts and discourses in terms of the broad uses of language that are involved in each;
- identify two major text genres, narrative and exposition, and outline their global structures;
- distinguish between coherence and cohesion of texts;
- identify the main linguistic devices used to create cohesion in texts;
- demonstrate that discourses are highly structured linguistically, and identify some of the dimensions of this structure;
- comment on the relation between structure of discourse and the ways it is used to further participants' goals and purposes; and
- identify some strategies conversational partners use to manage the progress of interactive events, such as turn-taking.

Key terms

adjacency pair	discourse	move	transaction
coherence	discourse analysis	narrative	transition
cohesion	ellipsis	pre-sequence	relevance
cohesive tie	exchange	reference	place (TRP)
conjunction	exposition	speech interaction	turn-taking
conversation	genre	substitution	
analysis	lexical cohesion	text	

7A.1 Preliminaries

Structure beyond the sentence

We have seen (p.105) that the sentence is the largest linguistic unit that shows grammatical structure. This does not mean that patterning and structure in language ceases at the level of the sentence. Nor does it mean that grammar is irrelevant beyond sentences.

As to the first point, it is clear that larger linguistic phenomena are structured: this book – indeed, any book – is not a random collection of sentences. Sentences are put together in particular ways; other ways of putting them together would not make sense, make less sense, or convey different meanings. Putting the sentences of e.g. Agatha Christie's *The ABC murders* (Christie 1967/1936) in random order would result (in most instances) in an incomprehensible or at best ridiculous story.

As to the second point, the relevance of grammar to organization beyond the sentence is clear from the way in which sentences are grammatically structured when they occur in text. A perfectly acceptable alternative grammatical organization for the second sentence of the initial paragraph of this section is *That patterning and structure in language ceases at the level of the sentence is not what is meant by this*. But I think you will agree that this alternative does not read very well in that paragraph – that it makes for a less coherent development of ideas. This is one aspect of what J. R. Firth is getting at in the epigraph of this chapter.

What is meant by the claim that grammatical structure stops at the sentence is that the patterning and structure at the 'higher' levels such as book or story is inherently different from patterning at the sentence level (and below): it is not grammatical in nature. This chapter identifies some of the ways in which these larger phenomena are structured, and their effects on grammatical and lexical choices.

Text and discourse

In the previous section we spoke of linguistic items 'larger' than sentences, and made up of a number of sentences. What are these items? We mentioned books and stories; others include lectures and jokes. To constitute entities in their own right these items must be in some sense complete, just as sentences are complete units at some level (and other items complete at other levels). It is intuitively clear that books, stories, lectures and jokes do indeed represent complete units that belong to some level above the sentence. I say 'above' because they are made up of sentences, and because they are complete in a way sentences are usually not. Only rarely would you encounter a sentence such as *The farmer kills the duckling* in complete isolation, without other sentences telling you more about the farmer or the duckling.

The sense in which these larger items are complete is, broadly speaking, in terms of usage. They are unified instances of language in use, to be more precise, unified sequences of utterances or sentence tokens (see Box p. 133). (And this is of course how *sentence* should be interpreted in the previous section.) These tokens cohere in terms of purposeful language use. As a speaker of the language and a member of its speech community (see p. 158) you have an understanding of these wider purposes, and how and when they are achieved. With this knowledge you are able to identify these units and their boundaries – you generally know when a lecture or story is complete or incomplete (although you will sometimes be wrong).

For our purposes it is useful to distinguish two main types among these larger units of usage, texts and discourses.

Texts are units that are primarily concerned with structuring and conveying information, typically where this information is fairly sizeable in quantity and complex. This is the case for jokes and narratives, for instance: they usually convey much too much, and much too complex information to be structured as single sentences. Nevertheless, they carve out segments of the real world or an imaginary world that members of a culture perceive as forming a coherent set of circumstances and events. This is illustrated by the following short piece, my telling of a famous piece of mathematical lore:

> (7A-1)   Carl Friedrich Gauss was perhaps the greatest mathematician of all time. Even as a child he showed great aptitude to mathematics. One day, when he was just a young boy in primary school the schoolmaster gave the class the task of adding up the first 100 integers, thinking that this would be a good way to keep the class quiet for a some time. But the problem had barely been given before Gauss, the youngest in the class, produced the answer: 5050. The other pupils laboured on for an hour or so, adding up the numbers. Gauss was right, while many of his classmates got the answer wrong. He realized that the first hundred integers can be put into 50 pairs whose sum is 101 (1+100, 2+99, …), giving a total of 5050.

(7A-1) clearly presents a coherent chunk of reality, a coherent sequence of events, and expresses them by means of a structured sequence of sentences. It would be rather difficult to express this meaning as a single sentence (except if you resort to a trick like replacing the full stops by semi-colons – try rather to express it as a single spoken sentence), and the result would be hardly comprehensible.

Discourses, in contrast to texts, are units primarily concerned with doing things with words, with language as a form of action (recall again Chapter 7). A discourse is the language component of a complete interactive event such as the purchase of meat at the butchers' or of

a car at a secondhand car lot, or a dinner-time conversation. A meat-purchase discourse, for instance, is a complex social act, the goal of which is to exchange money for meat. It made up of a structured sequence of stages such as greetings, request of information about materials on sale, payment, and so on. Each stage is oriented to certain a sub-goal, and the stages come in certain orders – for example, it would not make sense to pay before greeting the butcher, or before selecting the meat. The discourse is clearly much more than a mere collection of grammatically acceptable utterances.

Given this understanding of texts and discourses as chunks of language-in-use, it can be seen that they need not necessarily be made up more than one sentence token. In some circumstances a single sentence or even a smaller unit constitutes a complete text or discourse. Examples are the texts of notices such as *No smoking*, *No loitering*, *Open*, and so on. We ignore such minimal texts in what follows.

> The terms *text* and *discourse* are used in many different ways in the literature. Sometimes they are used interchangeably, in reference to the same type of item. Perhaps more often, the term *text* is used in reference to written instances of language use, while *discourse* is used for spoken utterances. Related to this is the use of *text* in reference to the language component of *discourse*, which is construed as the entirety of a social interaction.
>
> The particular distinction drawn in this section, according to whether the item in question constructs a chunk of knowledge or attempts to achieve an interactive goal, is not commonly made. Nevertheless, this distinction is important not just because of the differences in the uses of language, but also because the two types

7A.2 Text organization

Text types and structures

Narratives

The text given in (7A-1) presents a short story, as already mentioned, a version of a piece of mathematical lore, that has been told (and written) in many different ways (although a number of themes are recurrent, as discussed in Hayes 2006). Texts like this, texts that

present a story that unfolds over time, are called **narratives**. Narratives are in fact tightly structured texts, that do much more than present a sequence of events, even events belonging to the same 'world'. This can be seen by comparing (7A-1) with the following, which begins with the same three sentences, but refers to different events that might have occurred (and most of which are mentioned in at least one of the alternative versions):

> (7A-2)   Carl Friedrich Gauss was perhaps the greatest mathematician of all time. Even as a child he showed great aptitude to mathematics. One day, when he was just a young boy in primary school the schoolmaster gave the class the task of adding up the first 100 integers, thinking that this would be a good way to keep the class quiet for a some time. Gauss wrote his answer on his slate, and placed it on the teacher's desk. The other students kept writing on their slates. After an hour everyone was told to stop work. The mathematics class, which the schoolmaster did not like teaching, was finally over.

It is clear that (7A-2) lacks something important that (7A-1) possesses: a plot. Various models have been proposed for describing narrative plots, for the overall structure that narratives follow. These identify elements according to their overall function in the narrative, and state the order in which these elements usually appear. We will refer to these elements as stages, because they generally come in a particular order.

> This approach to narrative organization is reminiscent of the approach to sentence structure we took in Chapter 5, where sentences were analysed into units that serve grammatical roles. (For this reason, some investigators speak of "story grammar"; one must be aware that here the term *grammar* is being used in an extended sense, as texts are not structured grammatically, as mentioned above.)

As a simple model of narrative structure we identify the stages shown in Table 7A.1, where as usual brackets indicate optional elements:

Table 7A.1 Stages in narrative structure

Stage	Features	
(Orientation)	Preliminary information indicating the topic of the narrative, and/or that a narrative is about to be told	
(Setting)	Description of the time and place of the events	
Events	Actions and happenings in the world of the narrative, which include (among other things):	
	Complication	The main happening, an event that raises a problem in the narrative world that is pivotal in the unfolding of the drama
	(Turning point)	An event that brings the chain of events following the complication to a head
Resolution	The final outcome of the drama in which the complication is resolved	
(Coda)	Wrapping up the story, possibly drawing out a moral	

To illustrate this structural scheme, let's look at another narrative, (7A-3). This is a version of a fairly well known urban legend, which has appeared in many different forms.[1]

> (7A-3) When I was a first year student, we had a professor who was notoriously tough on grading term papers; he rarely give anything higher than a 'D'. Then at last in one class he rewarded one student with a 'B–'. Well this student hung onto her paper, and sold it to the highest bidder at the end of the semester. The buyer submitted it to the same professor in the next semester, getting a 'B'. The following year, this student again sold the prized paper to the highest bidder, who submitted it to the same teacher. He received a 'B+'. Finally, yet another student submits the paper for a fourth time and is awarded an 'A'. The paper is returned to the student with a written comment from the professor: "I've read this paper four times now, and I like it better each time."

(7A-3) launches straight into the narrative, giving a setting for the events to follow. This is immediately followed by a complication, that the professor normally gave the lowest marks for term papers. This complication is resolved by his giving a higher mark for one student's paper. There follow a number of events describing how the same essay is marked better and better in subsequent semesters. Finally there is a resolution, in that the professor gives out the highest mark for the paper – this is a is a resolution because it potentially ends the narrative. It

is a somewhat unusual resolution, however, in as much as this is same paper that he first gave a lower mark to. We are forced to conclude that the professor is rather foolish, and at this point construct the narrative as a classic story of the absent-minded and unworldly professor. This resolution is then challenged by the final event, in which the professor reveals that he is not so absent-minded after all.

Table 7A.2 puts the above remarks more explicitly into the stages shown in Table 7A.1. Notice that I have treated the role of the final sentence not as a resolution, but as a coda: it wraps the story up, constructing an ending that contrasts sharply with our expectations. Rather than resolve the complication of the narrative, it resolves a quite different complication, involving the absent-minded professor theme.

Table 7A.2 Structural analysis of the urban legend of the tough professor

Stage	Realization in (7A-3)	
Orientation	Absent	
Setting	When I was a first year student,	
Events	Complication	we had a professor who was notoriously tough on grading term papers; he rarely give anything higher than a 'D'
	Turning point	Then at last in one class he rewarded one student with a 'B–'.
	Well this student hung onto her paper, and sold it to the highest bidder at the end of the semester. The buyer submitted it to the same professor in the next semester, getting a 'B'. The following year, this student again sold the prized paper to the highest bidder, who submitted it to the same teacher. He received a 'B+'.	
Resolution	Finally, yet another student submits the paper for a fourth time and is awarded an 'A'.	
Coda	The paper is returned to the student with a written comment from the professor: "I've read this paper four times now, and I like it better each time."	

Expository texts

Narratives are just one of a range of text types or **genres**. Many of the texts you encounter as a student are not narratives – they do not relate stories – but rather are expository in nature.

That is, they explain or describe something. Most scientific writing is constituted by expository texts or expositions; narratives play a quite minor role. This chapter can be seen as a set of related expositions treating a number of topics, including the nature and structure of text and discourse. You will probably be expected to write expository essays in some of the courses you take at university. If I asked you to explain some linguistic concept in a test, I would expect your answer to be structured as a short exposition. More concretely, the model answer to the phonological problem given in §2.3 of the website for this book is an example of an exposition.

Like narratives, expositions have internal structure. This structure is, however, quite different for the two genres. The model answer to the phonological problem just referred to does not begin with a setting; nor are any events referred to, and thus the complication-resolution organization is absent. Rather, it begins with the statement of a claim; this is followed by an argument for the claim. Finally, the claim is restated in slightly different words. These components can again be seen as stages in the exposition, which we might formalize as in Table 7A.3.

Table 7A.3 Structure of the model answer exposition

Stage	Realization in the model answer
Introduction	Statement of thesis (the segments are phonemically distinct)
Argument	Evidence for thesis
	Claim 1 (the segments are suspicious pairs)
	Reason
	Claim 2 (the segments contrast)
	Exemplification
Conclusion	Restatement of thesis

This text might be referred to as an argumentative exposition. Other types of exposition exist, and they show different structures. For instance, descriptive expositions explain ideas or things by mentioning details and listing features; an example might be the description of a language you wrote (Chapter 13, Question 5, p. 325). Another type of exposition focusses on comparison among ideas or things, relating them to one another by observing similarities and differences. An example would be a text that discussed the differences between formal and functional theories of syntax.

Other genres

Narratives and expositions come in a variety of types. We have already mentioned a few different types of exposition. Subtypes of narrative include narratives of personal experience, myths, urban legends, historical narratives, and so on. Each of these subtypes is characterized by certain structural peculiarities.

In some sense, narratives and expositions might be regarded as the most fundamental genres. There are a range of other genres as well, including: procedural texts (which specify procedures for doing certain things, for instance, how to connect your computer to the internet), recounts (which recount sequences of events, but lack the complication-resolution components of narratives), biographies (which relate life experiences, but are not organized as narratives), lectures, sermons, and so on.

All of these text types are characterized by different structures, corelating with the differences in the type of knowledge they construe. They are also characterized by linguistic differences of various types. For instance, different genres differ in terms of the patterns and frequency of word choice and use of grammatical categories and constructions. Discussion of these features is beyond the scope of this introductory text.

Coherence and cohesion

Coherence

In §7A.1 we mentioned the property of coherence, that texts represent coherent chunks of knowledge, of real or imaginary 'worlds' – chunks that hold together in the eyes of members of a culture. To the extent that a text does this, we can attribute the property of coherence to a text. A coherent text is a text in which we can establish a mapping from the sentences to a 'world' that makes sense, and is constituted by events that belong together. It follows that a coherent text will have theme, a main idea that it is 'about', that encapsulates the 'world' it describes.

The property of coherence does not just depend on linguistic features of a text. Consider (7A-4). Is it a coherent text?

(7A-4)   The procedure is actually quite simple. First you arrange things into different groups depending on their makeup. Of course, one pile may be sufficient depending on how much there is to do. If you have to go somewhere else due to lack of facilities, that is the next step; otherwise you are pretty well set. It is better to do too few things at once than too many. Remember, mistakes can be expensive. At first

the whole procedure will seem quite complicated. Soon, however, it will become just another fact of life. (From Bransford and Johnson 1972, cited in Whitney 1998: 236)

Quite likely you find this incomprehensible, and the experimental study by Bransford and Johnson (1972) confirmed that it is very difficult for subjects to remember it. However, if you reread it knowing that it is about washing clothes, it immediately becomes comprehensible (and easy to remember). Knowledge of the theme permits you to construct a coherent 'world' for the text. The coherence of the text therefore cannot lie just in the language, since it is unchanged; it must also depend on knowledge of what the text is about. This possible interpretation permits you to bring other knowledge to bear on the problem of interpreting the text – your knowledge of how to wash clothes in a washing machine.

Notice that I did not claim that the language of the text is irrelevant to its coherence. There are linguistic features that facilitate textual coherence. We now turn to these.

Cohesion

Lets begin by comparing (7A-4) with (7A-5).

> (7A-5)   The farmer kills the duckling. Remember, mistakes can be expensive. They followed his dripping blood until nightfall. The other pupils laboured on for an hour or so, adding up the numbers. When I was a first year student, we had a professor who was notoriously tough on grading term papers; he rarely give anything higher than a 'D'.

This collection of sentences is incoherent not just because you can't figure out what the theme is. (As far as I can see, there is no theme whatever.) It is also incoherent because the sentences have no obvious links to one another. (7A-5) appears to be a collection of independent sentences. By contrast, you will notice that there are a number of links among the sentences of (7A-4) that contribute to its hanging together. For instance, in the third sentence *one pile* clearly links to *different groups* in the second sentence, selecting as it were one of the groups constructed by the latter noun phrase. By contrast, in (7A-5) there is nothing in the first three sentences that the noun phrase *the other pupils* in the fourth sentence can be linked to: no group of pupils has been set up in the previous text.

Linguistic 'devices' that help to establish links among the sentences of a text are called **cohesive devices**; the types of link that these devices construct are called **cohesive links** or **ties**. Following the pioneering work of Michael Halliday and Ruqaiya Hasan (1976), five types of cohesive devices and links are usually identified: reference, conjunction,

substitution, ellipsis, and lexical cohesion. We discuss each of these briefly in the following sections.

Reference

Reference devices are items like *one* in *one pile* discussed above: they are linguistic elements that are interpreted via other words in the text, rather than directly. The *one* in (7A-4) that we were just talking about is interpreted via *pile* and *group*; it selects one of the piles that make up the groups. The interpretation of *one* will be different in different contexts. For instance the fourth sentence of (7A-1) – *But the problem had barely been given before Gauss, the youngest in the class, produced the answer: 5050* – might be replaced by *But the problem had barely been given before **one boy**, the youngest in the class, produced the answer: 5050*. In this case *one* must be interpreted in relation to *boy* and *class* (in the third sentence). Items like *one* don't have full lexical meanings of their own, at least they don't when they are used as cohesive devices.

The words that are perhaps most commonly used as reference devices are personal pronouns and demonstratives. In (7A-1) the third person pronouns *he* and *his* link back to *Carl Friedrich Gauss*. In the same text the demonstrative *this* is used to link to the event constructed in the previous clause, namely the schoolmaster's giving the addition problem to the class. (7A-4) also uses personal pronouns and demonstratives to construct a cohesive text. For instance, in the final sentence *it* links back to the noun phrase *the whole procedure* in the previous sentence.

Aside from *one*, pronouns and demonstratives, reference devices include words like *some*, *other*, *same*, and *different*. (7A-1) illustrates cohesive use of *other* in the noun phrase *the other pupils*, which refers to the entire class with the exception of Gauss.

In all of the examples we have discussed in this section the reference item points back to a referent that has already been established. This sort of reference relation is called **anaphoric reference**. Sometimes reference items point forward to a referent that is established in a later sentence. (7A-1) might begin with *He* rather than *Carl Friedrich Gauss*, not identifying the person by name until say the third sentence. This would be a perfectly possible though marked alternative to the version given, and might be used to create tension, for instance – to make you wonder 'who is this person?'. (You have probably encountered this device in literature.) This sort of reference is called **cataphoric**.

Note that personal pronouns and demonstratives serve functions other than forging cohesive ties within a text. Thus in example (7A-4) the second person pronoun *you* can be interpreted as the reader or as any arbitrary person (in which case it could be replaced by *one*). Either way, it establishes a link from the text to the wider context of the world out there (see also pp. 144–145 on reference); at the same time, it is not unreasonable to say that the second and subsequent instances of this pronoun link back to the first instance. The type of reference where the link goes directly to the referent is sometimes called **exophoric**, in contrast to **endophoric**, which is achieved via ties within the text itself; the discussion above focusses on endophoric reference.

Conjunction

Adjacent sentences in a coherent text will normally be related to one another in some way. For instance, in a narrative the events described by a sentence often follow the events described by the previous sentence. The events referred to in the fourth sentence of (7A-3) follow those referred to in the third sentence; we know this because of the phrase *in the next semester* in the fourth sentence. Another way in which the relation among sentences can be explicitly indicated is by means of a connective, a linguistic item that links a sentence to a previous one by indicating the nature of the relation between the events or situations described. For instance, *then* serves as a connective in *They followed his dripping blood until nightfall. Then they made camp.*

The type of cohesion achieved by connectives is referred to as conjunction. Various types of linguistic item are used in conjunction. These include:

- Conjunctions (see p. 84 and p. 334) including *and*, *or* and *but*:

    (7A-6)   At first the whole procedure will seem quite complicated. But with a little experience it will become just another fact of life.

- Words of various types such as *then*, *nevertheless*, *furthermore*, *alternatively* and *however*:

    (7A-7)   At first the whole procedure will seem quite complicated. However, it will soon become just another fact of life.

- Prepositional phrases such as *in spite of*, *by the way* and *to sum up*:

> (7A-8)   At first the whole procedure will seem quite complicated. In spite of
> this, it will soon become just another fact of life.

The basic types of conjunction as a cohesive relation include: addition (e.g. expressed by *and*); alternation (e.g. indicated by *or*); contrast (e.g. indicated by *but* and *yet*); temporal (e.g. indicated by *then*); and causal (e.g. marked by *because* and *therefore*).

Substitution

Substitution is a cohesive tie created by the use of a general word as a type of counter, replacing words that have already been used in the text. Words like *one*, *do* and *so* can be used in this way in English. In (7A-9), for instance, the word *one* in the second sentence stands for the word *pile*.

> (7A-9)   First you make one pile with the coloureds. Then you should make a
> new one with the whites.

The following example illustrates the use of *do* – actually an inflected form of it – as a substitute. Notice that *does* serves as a replacement for *solves it*, mentioned (with the verb in a different inflectional form) in the previous sentence.

> (7A-10) Although he worked all night on the problem, he was still unable to
> solve it. If he ever does, I will be surprised.

So frequently serves as a substitute for entire clauses, as illustrated in the following pair of sentences.

> (7A-11) Could the other pupils have solved the problem in the way Gauss did?
> I don't think so.

The second clause in (7A-11) *I don't think so* might be expressed as in *I think not*. In this case the negative particle *not* is being used as a substitute.

Note that in these instances, as in (7A-10), it is not the precise grammatical form of the phrase or clause that is substituted for, but a variant of the form that is suitable to the new environment: a finite form of the verb phrase, or the corresponding declarative clause. The lexical component remains unchanged.

Ellipsis

Perhaps counterintuitively, omission of something that is required by the grammar can serve as a cohesive device. Consider the rather labourious rephrasing of the second last sentence in (7A-1):

> (7A-12)   Gauss was right. But some of his classmates got the answer wrong. A
>   few _ got it right.

   In the position indicated by the underline _ the words *of his classmates* or *of them* are left out. The gap, the material that is missing where you expect it effectively forces you to look back in the text for something to fill in what is missing. In this way missing material can be cohesive.

   Some languages use ellipsis as a cohesive device much more frequently than English. This is the case, for instance, in many Australian Aboriginal languages, where it is common to omit explicit mention of a character in a narrative after it has been introduced.

   Ellipsis is not restricted to noun phrases. In the following example there is missing material in two places in the second sentence: in the subject noun phrase *of his classmates* (or *of them*) is missing, while in the verb phrase *get the answer right* (or *get it right*) is clearly missing.

> (7A-13)   Some of his classmates got the answer right. Most _ didn't _.

   In a sense, ellipsis can be thought of as substitution by zero: what is missing effectively serves as a counter standing for the words that have already been mentioned.

Lexical cohesion

Texts concern coherent portions of real or imaginary worlds, and hence they normally involve a number of sentences that concern the same or similar things, circumstances, props, and so forth. For this reason it is only to be expected that the common elements will be referred to again and again using identical or related lexical words. Text (7A-1), for instance, is about Gauss, and he is mentioned by name on two occasions subsequent to his introduction by full name in the first sentence. The use of such related lexical items will contribute to the cohesiveness of a text. This phenomenon is referred to as lexical cohesion. Lexical cohesion is saliently absent from (7A-5), consistent with the fact that there is no apparent coherent interpretation for the sentences.

   The clearest instances of lexical cohesion involve the repetition of a lexical item, as in the just mentioned case of repetition of the proper noun *Gauss*. (7A-3) also involves two

repetitions of the common noun *professor*, as well as five repetitions of *student*. In the repetitions of *Gauss* and *professor* the same individual is being referred to. This is not so in the repetitions of *student*. But the repeated instances of this word do denote individuals of the same general category, which plays a crucial role in this urban legend. Repetition of words of other parts-of-speech also contributes to the cohesiveness of a text. For instance, the repetition of *add up* in (7A-1).

Instead of repeating the lexical item, a synonymous lexeme might be used. Thus in (7A-1) we find the roughly synonymous *pupil* and *classmate*, and *integer* and *number*. In addition, lexical cohesion can be achieved by lexical items related by any of the other semantic relations identified on pp. 137–139. Antonymy is illustrated by *right* and *wrong* in (7A-1); these are non-gradable antonyms. In (7A-14) and (7A-15) we see another type of antonymy in *break (down)* and *be repaired*: these are of course reverses. Hyponymy is exemplified by *boy* and *child* in (7A-1) and *car* and *vehicle* (7A-14), and meronymy by *front axle* and *car* in (7A-15).

> (7A-14)   We did a tour over Denmark in an old car. At one point the vehicle broke down, and it took a week before it could be repaired.

> (7A-15)   We did a tour over Denmark in an old car. At one point the front axle broke, and it took a week before it could be repaired.

Lexical cohesion can involve other types of semantic relation than these fundamental ones. For instance, in (7A-1) there are a range of them, including: *mathematician* and *mathematics*; *primary school*, *schoolmaster*, and *pupil*; and *task* and *answer*.

7A.3 Discourse: language in interactive use

In Chapter 7 (p. 157) we used the notion 'being things with words' to account for the existence of varieties and variation in languages. Within limits, people use lexical and grammatical choices as well as choices of varieties to construct social identities for themselves, and to achieve things by positioning themselves in social space. We also hinted at another socially relevant dimension to language use, 'doing things with words'. We now adopt this perspective on language in context, and examine how language is used to do things, to achieve interactive goals. This invokes a somewhat different slant on 'doing things with words' to pragmatics (see §6.3, pp. 141–148). And our earlier attention (in Chapter 7) to

choices in the linguistic system and their social meanings is replaced by a focus on speech interactions.

Hierarchical organization of interactions

In §7A.1 we introduced the term discourse to refer to the linguistic component of interactions, the largest units of social and interpersonal action. A discourse might be the language component of a buying and selling event, which is marked off by the arrival of a buyer at a particular location and their subsequent departure from that location. (As usual, there are difficulties. It is not always this easy to determine precisely where a discourse begins or ends, and nor is it necessarily warranted to treat discourse as being made up exclusively of linguistic phenomena. For example eye-gaze and gesture are also arguably an integral part of spoken discourse.)

Discourses are made up of utterances, the acts of producing and using sentences to do things – speech acts. We normally think of an utterance as being produced by a single speaker. But this is not always so. It is not unusual for an utterance to be made up of contributions from two speakers acting in concert, jointly constructing it. This is illustrated in the following example, where E completes the utterance begun by B.

> (7A-16) B: An' there – there wz at least ten mi:les of traffic bumper tuh bumper
> E: – because a'that   (from Jefferson 1973)

It has been suggested by Jennifer Coates – on the basis of an investigation of a large body of informal talk between British women friends – that utterances in women's talk are frequently jointly constructed by speakers. This is illustrated in the following brief extract in which D, C, and A together construct a single utterance over the first three and fifth lines (from Coates 1994: 181). (Here = on successive lines indicates that there is no perceptible pause between the end of one speaker's contribution and the beginning of the next speaker's):

> (7A-17) D: it's sort of pleasure
> C: a perverse pleasure=
> A: =in their
> C: =yeah
> A: downfall=

This highly cooperative sort of talk is, according to Coates, more characteristic of females than males, who tend not to jointly construct utterances so often (Coates 1997).

There is, however, much more to the structure of discourse than a mere sequence of utterances; other units of intermediate size must be recognized. We will distinguish three additional general types of unit, forming a hierarchy of units: discourse, transaction, exchange, move, and utterance.

Moves

In discourse a speaker may utter a single sentence (possibly abbreviated) or a sequence of sentences which cohere together in terms of their speech act value, representing the speaker's contribution to the discourse at that point. Such coherent sequences of utterances – including the minimal case of single utterances – are called **moves**. Moves correspond fairly well to speakers' turns in conversation. The term move is used here instead because the correspondence is imperfect: sometimes a speaker's turn is made up of more than one move, as for example when the other participants in the discourse fail to take their own turn when available, or when a speaker is telling a joke or story. For example, consider (7A-18), from an argument between spouses Molly and Ben about who should be making popcorn and who should be minding the child (cited in Tannen 2003: 195). Each speaker's turn is made up of two or more moves. For instance, Molly turn is made up of a refusal followed by a justification (her moves are each single utterances in this case). How would you analyse Ben's turn?

> (7A-18) Ben: Molly! Mol! Let's switch.
> You take care of her.
> I'll do whatever you're doing.
>   Molly: I'm making popcorn.
> You always burn it.

This is reminiscent of the situation in chess where the rule of *en passant* permits a player to make two moves in a single turn. (Compare castling, which is a single turn made up of one complex move.)

Another place where moves and turns do not coincide is in back-channel signals or continuers, those small words like *mhm*, *yeah*, *right*, and the like that interactants use to signal that they are attending to what is being said. The use of these items represents a minimal response, and constitutes a supporting move by one participant, reinforcing the speaking participants' turn. But speaker and hearer roles are not exchanged, and a turn has not been taken by the person who produces the continuer.

Exchanges

Exchanges are sequences of moves by different speakers that go together as complementary in speech act value, such as questions and answers, offers and acceptances, commands and compliances, and so forth. The term "exchange" captures the idea that the roles of speaker and hearer are exchanged in these sequences of move; these sequences are also called **adjacency pairs**, since they are often made up of pairs of moves, as in (7A-19). However, some sequences consist of three essential component moves. This is typical of teacher-student interaction, in which the pupil's response to a teacher's question is almost invariably followed by a feedback move by the teacher as illustrated by (7A-20). This need not necessarily be verbal: a nod might suffice. When the third move is absent – that is, the teacher gives no response – this is usually interpreted as indicating that the answer is wrong.

(7A-19) P: It's a really clear lake isn't it?
           L: It's wonderful   (Hutchby and Wooffitt 1998: 44)

(7A-20) T: Those letters have special names. Do you know what it is? What is one name that we give to these letters?
           P: Vowels.
           T: They're vowels, aren't they?   (Coulthard 1985: 125)

An exchange can be enclosed within another exchange, as in the following example:

(7A-21) A: Can I have a bottle of Mich?
           B: Are you over twenty-one?
           A: No.
           B: No.   (Levinson 1983/1992: 304)

Transactions

A discourse is typically oriented to the achievement of some general goal, such as the purchase of goods, conveying of information (e.g. in a class), or oiling the wheels of interaction (which Bronislaw Malinowski called 'phatic communion'). But usually these goals are achieved in stages, rather than all at once. These stages are called **transactions**. Transactions are thus sequences of exchanges that go together to form coherent phases or stages of a discourse, component parts that are oriented to the same intermediate ends. For example, in a study of buying and selling interactions in Cyrenaica (a region in North Africa now part of Libya), T. F. Mitchell distinguished, in certain types of encounter, five

transaction types: salutation; enquiry as to object of sale; investigation of object on sale; bargaining; and conclusion.

Boundaries of transactions are often marked by framing words such as *OK*, *well*, *right*, *now*, and the like. In classroom interactions, teachers often use these words, followed by a short pause, to mark the beginning of a topic-focussed transaction. In casual conversation, they are often used to mark the end of a transaction, to close it down.

Transactions tend to be consistent in register, more so than entire discourses. For example, a university lecture in linguistics will normally begin with a greeting transaction, and end with a farewell transaction; this will be in a more or less formal (depending on lecturer and norms of the country) but non-academic register. In between will be informing transactions characterized by an academic linguistic register.

Summary of discourse components

Table 7A.4 provides a summary of the major features of the five types of discourse unit we have distinguished.

Table 7A.4 Hierarchy of discourse units

Discourse unit	Alternative terms	Characteristics
Discourse	Conversation, Presentation	A stretch of interaction characterized by a common ultimate goal (macro-goal), and usually same participants, environment, etc. Structured as a staged sequence of components oriented to various subtasks and topics.
Transaction	Stage, Topic sequence	A stretch of talk within a discourse made up of sequences of exchanges and coordinated to the achievement of shared sub-goals. Consistent register choice; boundaries are often marked by discourse particles.
Exchange	Adjacency pair	Tightly linked sequences of acts by different speakers with complementary speech act functions.
Move	Turn (roughly)	A coherent contribution to the discourse representing a single step, that is usually produced by a single interactant; often corresponds to a turn of speaking.

Discourse unit	Alternative terms	Characteristics
Utterance	Sentence, Locution, Speech act	Smallest component pieces of speech action by a participant; realized by a sentence, and showing lexical and grammatical structure.

Box 7A.1 shows the major outlines of a discourse involving two Chinese graduate students (P1 and P2) temporarily residing in the USA. It is an informal dinner invitation, conducted in the Beijing dialect of Mandarin Chinese. The invitation is divided into three transactions, and the content and speech act value of each speaker's turn is summarized briefly in English. The actual spoken utterances included many interjections; in addition

Box 7A.1 An informal dinner invitation between Chinese graduate students (adapted from Saville-Troike 1989: 173–174)

Transaction 1: Opening
P1: Greeting
P2: Acceptance of greeting
Offer of seat
Return of greeting

Transaction 2: Invitation
P1: Hints that he will ask P2 to do something
[Pauses to look for P2's reaction, observing facial expression]
Offers invitation to dinner at his home
P2: Refuses the invitation [surprized expression, then frown]
P1: Insists on acceptance
P2: Accepts indirectly
[Facial expression indicates he has no other alternative]
P1: Reassures P2 of sincerity o invitation; sets definite time
P2: Agrees on time; expresses thanks
P1: Reassures P2 it will be informal

Transaction 3: Closing
P1: Confirms the time
Makes an excuse for leave-taking
P2: Thanks P1 again
Closing salutation
P1: Closing salutation

there were many head movements, and facial expressions, only a few of the most relevant of which are indicated.

Managing interactions

We conclude our discussion of the organization speech interactions with a brief glance at just two of the many strategies interactants use to manage the progress of discourse. We first discuss ways turn-taking is controlled, then we look at how speakers prepare the ground so to speak for the accomplishment of their goals. **Conversation analysis** is the name of a discipline that focuses on such concerns. The related field of **discourse analysis** has a somewhat broader scope, and is concerned with all aspects of the structure of discourse.

Turn-taking

A fundamental feature of most types of discourse is that interactants alternate in taking on the roles of speaker and listener. (Even in the rather rarefied a-social "discourse" environment in which I am writing this book I alternate between the roles of writer and reader. You as a solitary reader are, hopefully, engaged in dialogue with me (as a constructed author), perhaps uttering "yes" or "no" in reaction to some of the words I've written, or inserting marginal comments on the page.)

In certain ceremonial contexts (for instance certain religious events) turns are laid down by convention: everyone knows when and what contribution they should make. But in spontaneous casual conversation there is no preordained order for speakers to take turns, or fixed durations of turn size. This raises the question of how speakers negotiate or manage the switches in speaker and hearer roles. How do interactants coordinate their roles so that things flow smoothly?

Analyses of various forms of conversational interaction suggest that there is a tendency or ideal for precisely one person to speak at a time, and for there to be little gap or overlap between the utterances of two speakers. For this to be possible, there must be some mechanisms governing turn-taking, and participants must be continually monitoring what the others are saying, and projecting what they will soon be saying. The turn-taking model is based on the notion that any turn of speech has **transition relevance places**, points where an utterance is potentially complete (Sacks, Schegloff et al. 1974). These include boundaries of grammatical units, as well as intonation; in face-to-face encounters non-verbal cues such as eye-gaze and gestures can also mark these points. Exchanges of speaker roles tend to occur at transition relevance places. Thus, one study of telephone conversations revealed that fully a

third of turns were initiated less than 200 milliseconds (i.e. one fifth of a second) from the end of an intonation unit (Beattie and Barnard 1979).

Overlaps in speakers' turns do, of course, occur. It has been suggested that overlaps usually occur at potential transition relevance places, at places where a transition relevance place has been inferred. When this happens, one speaker usually rapidly relinquishes their turn. This is illustrated in the following excerpt, from Hutchby and Wooffitt (1998: 58). (The figures in brackets indicate pauses of the specified fraction of a second, (.) indicates a pause of less than 0.2 seconds, and the square bracket indicates the beginning of an overlapping segment of speech.)

> (7A-22) M: We:ll? She doesn't kno:w. (laughs)
> L: Ohh my Go:d,
> M: hhhhh Well it ⌈was an-
> L: ⌊Are you watching Daktari:? (0.2)
> M: nNo:, (.)
> L: Oh my go:sh Officer Henry is (.) uh locked in the ca:ge wi- (0.3)
>   with a lion

Notice that M has interpreted L's first utterance as a response to her own *she doesn't know*, when in fact it is in response to something happening on the television program Daktari that L had been watching when M phoned. But M gives up her turn very soon after L's overlap, and allows L to take on the role of questioner, to which she (M) answers in the fifth line.

The above turn taking patterns were initially observed in telephone conversations in the USA. Studies of other social and cultural contexts have revealed somewhat different patterns. Thus, long segments of overlapping speech are common in certain socio-cultural contexts. It has been reported that public talk among villagers in Antigua is characterized by much simultaneous speech (Reisman 1974). Coates also argues that overlapping is more typical of women's speech than men's speech in British English; men's speech follows the norm of 'one speaker at a time' more closely than does women's speech (Coates 1994, 1997). Nor is the norm of filling virtually all available time with speech always adhered to. Some cultures allow much more silence in general in conversational interaction than do westerners. And in the west face-to-face discourses among people who know each other well can show long periods of silence, much longer than what occurs in typical telephone conversations.

Pre-sequences

Pre-sequences are techniques speakers use to prepare the listener for what is to come, techniques to prepare the ground for the joint pursuance of a new discourse goal. They are as

it were preparatory exchanges involving a proposal by one interactant for the ensuing discourse goal, to which another participant can concede or not. Pre-sequences are steps in negotiation of discourse orientation; they are motivated by the avoidance of loss of face, if for instance the other participant rejected the new goal.

Someone who wants to tell a joke or story that is likely to involve them as the speaker for a length of time might prepare the ground by beginning with a move like *Have you heard the one about the Irish electrician?* The response to the pre-question sets up an agenda that the two parties agree to follow, namely to tell or not to tell the joke or story. Pre-story sequences can be more indirect than this, as in the following, cited in Hutchby and Wooffitt 1998: 134):

(7A-23) (A calls B, an employee at 'Bullocks' department store)
    A: Well I thought I'd jus' re- better report to you what's happened at Bullocks today
    B: What in the world's happened?
    A: Did you have the day off? (.)
    B: Yah?
    A: Well i:- (.) got outta my car at fi:ve thirty … (story follows)

Pre-sequences are used in many other circumstances, for instance: to set up the grounds for asking a request, as in (7A-24); for offering an invitation as in (7A-25); for asking a question (e.g. *Um, there's one thing I wanted to ask you – yes mhm*); for closing a conversation or transaction (e.g. *well okay – okay*); and so forth.

(7A-24) A: Hi. Do you have uh size C flashlight batteries?
    B: Yes sir
    A: I'll have four please
    B: (turns to get)   (cited in Levinson 1983/1992: 346)

(7A-25) A: Whatcha doin'?
    B: Nothin'
    A: Wanna drink?   (cited in Levinson 1983/1992: 357)

Summing up

Linguistic patterning exists above the level of the individual sentence or utterance, although this is very different from the grammatical patterning found within sentences. This patterning is in terms of two main dimensions: text, which is concerned with the construal of complex

chunks of knowledge; and discourse, which is concerned with the achievement of interpersonal goals.

Texts fall into different **genres** according to the type of knowledge they convey and how they construe the relations among the components. Two primary text genres are **narrative**, which is concerned with the construction of sequences of events; and **exposition**, which is concerned with the presentation of relations amongst ideas. Texts of these two genres also show different structural organizations in terms of their component elements, **stages**.

This macro-structure contributes to the coherence of a text. Another aspect of text coherence is found at the micro-level, and concerns explicit linkages within the language of the text. These **cohesive links** are of five main types: **reference**, **conjunction**, **substitution**, **ellipsis**, and **lexical**. Although both the macro- and micro-structure of a text contributes to its coherence, neither guarantees coherence.

Discourse or **speech interaction**, the spoken component of interpersonal interactions, is hierarchically structured. At the top of the hierarchy is the largest unit, the discourse, which corresponds to a complete interactive event. It is made up of a structured sequence of **transactions**, stages or phases in which interactants orient to sub-goals, e.g. greetings, farewells. Transactions are in turn made up of **exchanges** consisting of groups of complementary **moves** by different speakers, such as a question-answer sequence.

Discourse analysis is the field that studies the structure of discourse. A sub-discipline is **conversation analysis**, which focus on the management of the progress of discourse. One feature of this is the management of **turn-taking**, which turns out to be highly principled. In most types of discourse just one speaker holds the floor at a particular time; overlapping of speakers is normally resolved by one yielding the floor to the other. Turns tend to occur at **transition relevance places**, points where a speaker's utterance is potentially complete. Other phenomena of concern to conversation analysis are: use of **continuers** or **back-channel signals** to signify to the hearer that the addressee is attending to what they are saying, and **pre-sequences**, exchanges that prepare the ground for joint pursuance of a new discourse goal. For instance, someone who wants to tell a story or joke might prepare the ground with the move *Have you heard the one about …*

Guide to further reading

There is an enormous literature dealing with narratives from a bewildering array of perspectives. The approach taken in this chapter is a structuralist one. Classic structuralist treatments of narrative include Propp (1968); Labov and Waletzky (1967); and Prince (1982). Johnstone (2001) provides a comprehensible overview of the fundamentals of structuralist approaches to narrative organization.

Exposition is less well studied, and I am aware of few references suitable for beginners. Chapters 1–3 of Martin (1985) and Martin and Peters (1985) could be consulted.

The classic work on cohesion is Halliday and Hasan (1976); for simpler treatment see Chapter 9 of Halliday (1985), (the first and second editions provide the most accessible treatment). Salkie (1995), a workbook on text and discourse analysis, is largely concerned with cohesion; it provides numerous exercises and examples.

A good textbook on conversation analysis is Hutchby and Wooffitt (1998); chapter 6 of Levinson (1983/1992) gives a more technical treatment. Coulthard (1985) and Stubbs (1983) are good introductory textbooks on discourse analysis.

Schiffrin, Tannen et al. (2001) is a rich resource of articles on a range of aspects of discourse and text analysis; unfortunately most of these are unsuitable for beginners.

Issues for further thought and exercises

1. What is the structure of narrative (7A-1)? Identify the stages and their linguistic realizations.

2. What genre of text do you think (7A-4) would be? What type of knowledge does it construct as a whole, and how would you say it is structured – that is, what stages do consider should be identified?

3. In the following short text-segments identify the type of cohesive relation, if any, that each underlined word serves. What does it tie to? (Note that the in many of these examples the ties are within single sentences. Do not exclude them on this basis.)

   a. The same letters refer to the same muscles in all three figures; but the names are given of only the more important <u>ones</u> to which <u>I</u> shall have to allude. (Darwin 1898: 22–23)

   b. During hunting the spears were usually hurled with a wommera or spear thrower, but some heavy <u>ones</u> made from hard wood were <u>thrown</u> directly from the hand by balancing <u>them</u> in the middle. (Thomas 2007: 62)

   c. There is a great resemblance between the Victorian and Tasmanian legends of the origin of fire and the apotheosis of heroes. <u>Thus</u>, according to the Yarra blacks, Karakarook, a female, was the only one who could produce <u>fire</u>, and <u>she</u> is now the seven stars (the <u>Pleiades</u> presumably). (Mathew 1899: 20)

   d. This naturally leads to the conclusion that one-dimensional scales have to be discarded in favour of multidimensional <u>ones</u>, which lend <u>themselves</u> to analysis by computational techniques designed for capturing similarities, such as <u>multidimensional</u> <u>scaling</u>. (Richards and Malchukov 2008: ix)

e. His teacher Master Büttner was amazed that Gauss could add all the whole numbers 1 to 100 in <u>his</u> head. Master Büttner didn't believe Gauss could <u>do it</u>, so <u>he</u> made <u>him</u> show the class how <u>he</u> did <u>it</u>. (Cited in Hayes 2006: 203)

4. In the following passage identify as many cohesive ties as you can, and classify them according to the types identified in §7A.2. (The best way of proceeding is to make a few copies of the text and indicate on each copy cohesive relations of just one type. You might for instance circle words related by ties of a particular type, and draw a line between them.)

It was a perfectly ordinary night at Christ's high table, except that Hardy was dining as a guest. He had just returned to Cambridge as Sadlerian professor, and I had heard something of him from young Cambridge mathematicians. They were delighted to have him back: he was a *real* mathematician, they said, not like those Diracs and Bohrs the physicists were talking always about: he was also unorthodox, eccentric, radical, ready to talk about anything. This was 1931, and the phrase was not yet in English use, but in later days they would have said that in some indefinable way he had star quality. (C. P. Snow's *Foreword* to Hardy 2006/1940, p. 9)

5. Find an example of a short expository text in a popular scientific magazine such as *Scientific American*. Identify its structural stages, and its overall type (is it argumentative, descriptive, or what?). To what extent does the structure of this exposition resemble that of the model answer exposition shown in Table 7A.3?

6. In Chapter 5 (pp. 121–122) we introduced the notion of Theme, characterizing it as a clause-level grammatical role defined by initial position (there are complications, but it would take us too far from our present concerns to deal with these). It was observed that the Theme can either establish what the clause is about, or establish a setting for the event described. Granted this, we would expect Theme to be relevant to the coherence of a text. Identify the Themes of each of the clauses in the narratives of (7A-1) and/or (7A-3). How do they relate to one another, and do they contribute to the coherence of the texts? If so, how?

7. Michael Stubbs reports the following utterance from his recordings of secondary school interactions (Stubbs 1983: 40–40). It occurred at the beginning of an English class. The teacher had been talking to some pupils at the front of the classroom, then turned around and said to the class: *Right! Fags out please!* No one in the class was smoking. Stubbs interpreted this as a strategy of gaining the students' attention, that the class was to begin. Explain how this could be so.

(*Continued*)

Issues for further thought and exercises—Cont'd

8. Find out how one type of buying and selling encounter is conducted in your city by observing an example in a post office, supermarket, restaurant, or some other place of your choice. (One way of doing this would be to get a friend to do the interaction, while you observe from nearby; another way is to do it yourself, and observe from the perspective of a participant.) Based on the observed encounter, how was the discourse structured in terms on transactions?

9. Shown in Box 7A.1 is the structure of a discourse into transactions and speaker turns. Give a full analysis of the structure of this discourse in terms of exchanges and moves. Comment on any aspects of this invitation that seem atypical of the ways such an invitation would most likely be constructed in your culture. Try observing a comparable invitation (or make one yourself with a co-student). How closely did it resemble your expectations?

10. Record with an audio or video recorder a short segment of casual conversation involving friends or family. Transcribe a short segment of a few minutes in duration, indicating features such as overlap of turns, continuers, hesitations (e.g. *um*, *aa*, and the like). Discuss turn-taking in this segment of the conversation, and the extent to which the norm of one speaker at a time is adhered to.

Note

1. The versions differ enormously in plot, but all share the theme of the recycled paper that is marked differently on different occasions. For instance, in a 1987 episode of the Canadian television series *Degrassi Junior High* entitled "The Experiment", one boy tries to improve his grades by turning in old term papers written by someone else. He is given higher grades than the author received for the same papers but is eventually exposed for submitting someone else's work. Other versions can be found at http://www.warphead.com/urban-legends/school-001.shtml under the heading *The resubmitted term paper*.

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