

In the last chapter we looked at the way a text hangs together – how is it is ‘made cohesive’. But a text needs to do more than simply hang together. It also needs to make sense. In this chapter we will look at ways that this is achieved and the relation between this sense-making quality (a text’s *coherence*) and its internal cohesion. To do this it may help to unravel a text in order to demonstrate that its coherence is more than simply a function of its cohesive ties.

Discovery activity 3.1 Ordering

Here, for example, is a short text from a children’s encyclopedia³⁰. The sentences have been re-arranged and lettered. Can you sort them into their correct order? What linguistic (and non-linguistic) clues did you use to help you do the task?

3.1a

- a) Two years later his father took him to play at concerts in the great cities of Europe.
- b) Mozart wrote church music, opera and nearly 50 symphonies.
- c) The Austrian composer Mozart was a musical genius.
- d) He worked hard but earned little money and died very poor at the age of 35.
- e) He began writing music at the age of five.

Commentary ■ ■ ■

In case you didn’t get it, the original text is as follows:

3.1b

(c) The Austrian composer Mozart was a musical genius. (e) He began writing music at the age of five. (a) Two years later his father took him to play at concerts in the great cities of Europe. (b) Mozart wrote church music, opera and nearly 50 symphonies. (d) He worked hard but earned little money and died very poor at the age of 35.

The point of this exercise is that the correct ordering of the sentences does not depend on cohesive ties alone. The only sentence that is explicitly linked to its predecessor is (a) because of the connector *later*. Neither it, nor sentences (e) and (d) – because of the referring pronoun *he* – could begin the text. But apart from that constraint, they could go anywhere, technically speaking. Nevertheless, our expectation, as readers, is that the text will more or less follow the chronological order of Mozart’s life. Moreover, it simply wouldn’t make sense to put sentence (a) at the end, for example:

3.1c

He worked hard but earned little money and died very poor at the age of 35. Two years later his father took him to play at concerts in the great cities of Europe. ■

Coherence

This capacity of a text to 'make sense' is called *coherence*. An incoherent text, such as 3.1c, doesn't make sense: however closely connected its individual sentences might be, it is non-sense. Coherence is a quality that the reader derives from the text: it is not simply a function of its cohesion. Even quite cohesive texts can be nonsense, as in this invented example:

3.2

The Austrian composer Mozart was a musical genius. He has got a swimming pool. It actually tingles on your skin to tell you it's working. Water would then come out of fountains such as the one shown here. And that is why dogs still chase rabbits.

The text, in case you hadn't noticed, is constructed out of sentences from other texts in this and the previous chapter. Meaningless as it is, it is not without cohesion – the sentences are notionally connected by the use of pronouns, substitutions and conjuncts. But it is incoherent – however hard we try, we can't get it to make sense.

Cohesion, then, is a surface feature of texts, independent of the reader. Coherence, on the other hand, results from the interaction between the reader and the text. This is not to say that cohesion and coherence function independently. Writers intentionally use cohesive devices with the aim of making their texts easier to follow, ie more coherent. But if the text is basically nonsense, no amount of linkers will make it coherent. Unfortunately, a lot of student writing reflects an over-dependence on the cohesive 'trees' at the expense of the coherent 'wood', as we shall see shortly.

First, though, we need to consider what exactly it is that makes a text coherent – or, rather, what *helps* make a text coherent, since coherence, I am arguing, is in the eye of the beholder.

The issue of coherence is usually approached from two perspectives: the *micro-level* and the *macro-level*. At the micro-level, readers have certain expectations of how the proposition (ie the meaning) of a sentence is likely to be developed in the sentence or sentences that follow it. When these expectations are met, the immediate text will seem coherent. At the macro-level, coherence is enhanced if a) the reader can easily discern what the text is about, b) the text is organized in a way that answers the reader's likely questions and c) the text is organized in a way that is familiar to the reader.

Micro-level coherence

We'll start by looking at the micro-, sentence-by-sentence, level.

Discovery activity 3.2 Logical relationships

Match the two halves of these short authentic texts. What is the logical relation between the two parts of each text?

1 Shares in Parmalat, the Italian global food group, fell by more than 50% after a three-day suspension.	A Pool, brook, stunning views, lush groves, comfort, privacy. ³¹
2 Doctor Foster went to Gloucester In a shower of rain.	B They may be recovered via the lodge on payment of the current fee.
3 Magical Provence: modernized farmhouse in medieval village.	C Add Spice Paste and stir well.
4 Shockingly, 10 passengers on a flight are at risk of DVT.	D The company had been plagued by apparent balance sheet discrepancies. ³²
5 Bicycles parked other than in the racks provided are liable to be impounded.	E We are blocking the pavement. Thank you.
6 Boil water in a saucepan.	F Scholl flight socks can help prevent you being one of them. ³³
7 To all smokers: Please cross the road to smoke.	G He stepped in a puddle Right up to his middle And never went there again.

Commentary ■ ■ ■

The complete texts are: 1-D, 2-G, 3-A, 4-F, 5-B, 6-C, 7-E. The exercise should have been easy to do: apart from anything else, there are lexical clues that bind the texts together. But, there are also implicit logical connections and it is these that help create the feeling that the (admittedly minimalist) texts make sense. The logical connections are the same as those we looked at when discussing linking devices, but note that there are no explicit conjuncts signalling the relation between the two sentences. We take the relation on trust. Here are the relations:

- **additive**, as in text 3-A. The second sentence gives details about, or *specifies*, the statement in the first sentence. This movement, from general to specific, is one that readers are 'primed' to recognize.
- **adversative**, as in texts 4-F and 5-B. In 4-F the second sentence, in claiming to solve the problem stated in the first, makes a contrast that could have been signalled with *however*, for example. In 5-B (which was a notice in the forecourt of an Oxford college) there is a contrast between *impounded* and *recovered*, which could have been signalled with *but* or *however*.
- **causal**, as in texts 1-D and 7-E, where the second sentence provides a reason for the situation or request mentioned in the first.
- **temporal**, as in texts 2-G and 6-C, where the chronological order of events (*and then...*) is implied, rather than explicitly stated. Note that when two past tense sentences are placed together, and in the absence of any other evidence, we assume that the first happened before the second, as in *John sang a song. Janet told a joke.* ■

The above texts have been chosen to demonstrate how whole (admittedly short) texts cohere because of the kinds of expectations that are both set up and satisfied by their component parts. This happens both at the level of the whole text and

also at the local level, from one sentence to the next, such that at any point in a text any one sentence both reflects what has gone before and anticipates what is going to come. The sentence 'represents' the text at that point. Take a sentence randomly chosen from the middle of a text:

(12) The genes carry all the information needed to make a new plant or animal.

We can fairly safely assume that the previous sentence was about genes, and that the sentence that follows will develop this general statement further by saying something more, and possibly more specific, about either *genes* or *information*. Let's see if this is in fact the case:

(11) Each part is called a *gene*. (12) The genes carry all the information needed to make a new plant or animal. (13) They decide its sex and also what characteristics it inherits.

Our hypotheses have been confirmed: sentence 11 introduced the term *gene* and sentence 13 specified two sub-sets of information subsumed under *all the information* in sentence 12.

We could repeat the exercise with sentence 11 and sentence 13, reflecting back and projecting forward, and again with sentences 10 and 14, and so on, until, in theory, we had 'guessed' the whole text – or, rather, a limited set of potential whole texts. We are able to do this not only because of cohesive clues like the definite article *the* that goes with *genes* in sentence 12, suggesting a previous mention, but also because the information in sentences is distributed in a predictable way. In English, sentences (and the clauses of which they are composed) have a simple two-way division between what the sentence is about (its *topic*) and what the writer or speaker wants to tell you about that topic (the *comment*). Moreover, the topic of the sentence is often associated with what is already known, or *given*. Given information is information that is retrievable because it has been explicitly mentioned at some prior point in the text, or because it is inferable from the text or from the context, or because it is part of the shared world knowledge of writer and reader (or speaker and listener). Given information normally precedes *new* information in the sentence. The new information is typically placed in the comment position.

Theme and rheme / Topic and comment

The topic and comment are also called the *theme* and the *rheme* of the sentence or clause. The different terms derive from different theoretical viewpoints and also from the need to distinguish the topic of a sentence from the topic of a text (which we will discuss below). In our example sentence the topic is *the genes*:

topic (theme)	comment (rheme)
<i>given information</i>	<i>new information</i>
(12) The genes	carry all the information needed to make a new plant or animal.

The topic is the 'launch pad' of the message and is typically – but not always – realized by a noun phrase (the grammatical *subject* of the sentence). The comment is what the writer or speaker considers to be 'newsworthy' about the

topic: what you as reader or listener need to pay attention to. (For this reason, the comment typically carries the major word stress when articulated.)

The tendency to place the new information in the latter part of a clause or sentence is called *end-weight*. This new information, in turn, often becomes the given information of the next sentence, as in sentences 11 and 12. Or the same topic is carried over and a new comment is made about it (as in sentences 12 and 13):

topic (theme)	comment (rheme)
<i>given information</i>	<i>new information</i>
(11) Each part	is called a <i>gene</i> .
(12) The genes	carry all the information needed to make a new plant or animal.
(13) They	decide its sex and also what characteristics it inherits.

Predicting 'backwards' again, we can be fairly sure that the word *part* (in the theme of sentence 11), or one of its synonyms, was either the topic or comment of sentence 10. This is in fact the case:

topic (theme)	comment (rheme)
(10) Different parts of each chromosome	carry different 'coded messages'.
(11) Each part	is called a <i>gene</i> .

Going back again, we are not surprised to find that *chromosome* is 'carried over' from sentence 9:

topic (theme)	comment (rheme)
(9) Inside every cell	are tiny <i>chromosomes</i> ...
(10) Different parts of each chromosome	carry different 'coded messages'.
(11) Each part	is called a <i>gene</i> .

The comment may consist of more than one element (as in sentence 13), only one of which may be carried over:

topic (theme)	comment (rheme)
(13) They	decide its sex
	and also what characteristics it inherits.
(14) Some inherited characteristics	are stronger than others.

Discovery activity 3.3 Logical relations

It's time to look at the whole of the *Genetics* text³⁵. You should now be able to identify the logical relations between its sentences, showing how each sentence either anticipates the sentence that follows, or encapsulates some element of the sentence that preceded it.

3.3

GENETICS

The science of genetics explains why living things look and behave as they do. Advanced animals have two sexes, male and female. Each individual produces sex cells. If a male and female sex cell join, the female cell grows into a new individual. Each parent passes on certain characteristics to its offspring. This process is called *heredity*.

Heredity works in an amazing way. Inside every cell are tiny *chromosomes*, largely made of a chemical called DNA. Different parts of each chromosome carry different coded messages. Each part is called a *gene*. The genes carry all the information needed to make a new plant or animal. They decide its sex and also what characteristics it inherits.

Some inherited characteristics are stronger than others. They are dominant. Weaker ones are recessive. Genes for brown eyes, for example, dominate over the weaker genes for blue eyes.

Commentary ■ ■ ■

The following outline summarizes the logical relations between the sentences of the text.

(1) GENETICS	Statement of topic.
(2) The science of genetics explains why living things look and behave as they do.	The topic (<i>genetics</i>) is now a given, having been announced in the title and takes theme position. The definition that follows is the 'news' and takes the rheme slot. The embedded question (<i>Why do living things look and behave as they do?</i>) predicts an answer. The rest of the text in fact answers the question.
(3) Advanced animals have two sexes, male and female.	The topic (<i>advanced animals</i>) echoes part of the comment in (2) (<i>living things</i>) – this suggests that (3) is the beginning of an answer to (2).
(4) Each individual produces sex cells.	Again, the topic (<i>each individual</i>) is a re-focusing of the <i>living things</i> , <i>advanced animals</i> thread – same topic, new comment, with the word <i>sex</i> carried over. The dynamic verb

	<p>(<i>produces</i>) suggests a process is being described (compared to (3), which describes a state), and since processes usually have stages, we can predict more sentences with more dynamic verbs.</p>
<p>(5) If a male and female sex cell join, the female cell grows into a new individual.</p>	<p>This sentence is almost entirely composed of ingredients from the previous two sentences: the topic combines elements from the comments of both sentences (3) and (4), ie <i>male and female, sex cell(s)</i>; the word <i>individual</i> is also carried over. Again, the dynamic verbs <i>joins</i> and <i>grows</i> confirm the 'process' hypothesis.</p>
<p>(6) Each parent passes on certain characteristics to its offspring.</p>	<p>Re-phrasing of parts of (5): <i>male and female = each parent; new individual = offspring</i>. New dynamic verb: will there be more stages to the process? And will these <i>certain characteristics</i> be itemized?</p>
<p>(7) This process is called <i>heredity</i>.</p>	<p><i>This process</i> summarizes the text to date. <i>Heredity</i> is given special emphasis by the use of italics, suggesting it's a key word which will be further explained or elaborated on.</p>
<p>(8) Heredity works in an amazing way.</p>	<p>Previous comment becomes topic; <i>way</i> anticipates a description.</p>
<p>(9) Inside every cell are tiny <i>chromosomes</i>, largely made of a chemical called DNA.</p>	<p><i>Cell</i> is carried over from (4); two comments: <i>chromosomes</i> and <i>DNA</i>. If this is the description of <i>a way something works</i>, it is incomplete, because so far there are no dynamic verbs. We expect more to follow.</p>
<p>(10) Different parts of each chromosome carry different coded messages.</p>	<p><i>Chromosome</i> is carried over from (9). Dynamic verb (<i>carry</i>) suggests this is part of the <i>way</i> signalled in (8) and anticipates further sentences with dynamic verbs, since 'ways', like 'processes', have stages.</p>
<p>(11) Each part is called a <i>gene</i>.</p>	<p>The topic is the same as (10); new comment, given special emphasis (italics) which anticipates further commentary.</p>

(12) The genes carry all the information needed to make a new plant or animal.	Previous comment becomes topic; <i>information</i> is similar in meaning to <i>coded messages</i> in (10).
(13) They decide its sex and also what characteristics it inherits.	Same topic as previous sentence. <i>Characteristics</i> is carried over from (6). Again, will the characteristics be itemized?
(14) Some inherited characteristics are stronger than others.	One of the previous comments becomes the topic.
(15) They are dominant.	Re-wording of previous sentence.
(16) Weaker ones are recessive.	<i>Weaker ones = others</i> in (14); the structure of the sentence imitates (15) – and is an example of parallelism (see page 22).
(17) Genes for brown eyes, for example, dominate over the weaker genes for blue eyes.	At last, and as expected, some specific characteristics are mentioned (see 6, 13 and 14); <i>dominant</i> becomes <i>dominate</i> ; <i>weaker</i> is repeated; <i>genes</i> is repeated twice.

This analysis does not in any way exhaust the intricate network of intertwining themes and arguments in this one text: not for nothing does the word *text* derive from the Latin *texere*, to weave. In fact, some writers use the word *texture* to describe the combined effect of such structural features of a text as the topic-comment organization and of its internal cohesion, both grammatical and lexical. ■

It is important to stress, at this point, that texture is not simply a decorative or stylistic quality of texts, but that it fulfils a vital communicative purpose. When we are reading a text – or listening to spoken text – we are attending only to the immediate sentence or utterance. We cannot process the whole text all at once. (Of course, with a written text, you can glance back through it, but, generally, we don't.) Therefore, as readers and listeners, we need guidance as to what has gone before and what is yet to come. The immediate sentence has to represent the text *at that moment*. Or, as John Sinclair puts it, 'The text at any particular time carries with it everything that a competent reader needs in order to understand the current state of the text.'³⁶

This view of a text unfolding *in time* has led Sinclair to propose a radical theory of text, which argues that the text is *only* the immediate sentence. This focal sentence either *encapsulates* the immediately preceding sentence, or it sets up an anticipation of the sentence that follows (what is called *prospection*). So far this argument is consistent with our analysis of the genetics text. In fact, its coherence is achieved almost entirely by acts of *prospection*, that is, by setting up an expectation that is immediately satisfied, as in:

Heredity works in an amazing way. → Inside every cell are tiny chromosomes, largely made of a chemical called DNA. etc.

But Sinclair goes on to argue that, for all intents and purposes, the rest of the text apart from the immediate sentence exists only as a trace or an echo. It is not subject to mental consultation, hence there cannot really be such a thing as anaphoric (or back) reference. This is of course easier to argue with regard to spoken language, where it is simply not possible to consult the text in any physical way. But Sinclair extends the argument to written text as well. The interconnectivity of texts is only an artefact, he argues. It is available for us to study after the event, but it is not an accurate way of modelling what happens when we actually read. What *does* happen? As the focus of our attention proceeds from one sentence to the next, the state of our mental representation based on the text – the knowledge shared by writer and reader – is continuously updated through processes of encapsulation and prospection. Referents in the sentence, such as pronouns, do not ‘point back’ in the text. Rather, they point at what has become shared knowledge, much in the same way as definite articles or proper nouns do, as in the sentence from text 2.18: *And the apron will be perfect for Sant Pol barbies...* The referents are not in the text, but in the reader’s and writer’s heads, as it were.

Sinclair concludes that ‘a text does not consist of a string of sentences which are intricately interconnected, but of a series of sentence-length texts, each of which is a total update of the one before’.³⁷ As compelling (and exciting) as Sinclair’s argument is, it does not invalidate the study of cohesion in texts, but it does suggest that the processes of *encapsulation* and *prospection* demand more attention than they have been normally been given.

Reader expectations

Not all texts are as transparent as text 3.3, which, apart from anything else, was written for children and therefore is relatively straightforward and unadorned. Some texts do not yield their sense without more of a struggle. Nevertheless, as readers we approach a text assuming it will make sense until proven otherwise, even if it means putting our initial hypotheses on hold, or even abandoning them altogether. Take these two sentences, for example:

3.4

(1) I learned to read around my sixth birthday. (2) I was making a dinosaur in school from crêpe bandage and toilet rolls when I started to feel as if an invisible pump was inflating my head from the inside.

Our understanding of the first sentence suggests that the second sentence will be connected to it either in some temporal or causal sense, eg it will relay the circumstances, or the cause, or the effect of the writer’s learning to read. The past continuous in sentence 2 (*I was making a dinosaur...*) tends to support the temporal hypothesis, as it is a verb form often used to set the scene for some particular narrative event. It’s only when we get to the ‘invisible pump’ that the hypothesis starts to wobble a bit. Perhaps the writer is implying that the experience of learning to read felt like his head was being pumped up. But how is the dinosaur related to reading? Is the dinosaur a red herring? Let’s put our theory on hold and move on:

(3) My face became a cluster of bumps, my feet dangled limp and too far away to control.

While this possibly relates to the sensations described in sentence 2, the theory that it has something to do with learning to read is becoming untenable. We are compelled to read on with no clear idea of what the connections are:

(4) The teacher carried me home on her shoulders.

Well, now sentences 2, 3 and 4, are starting to cohere. Sentences 2 and 3 are related in an additive way (*What's more...*) and 3 is related in a causal way (*So...*). But we are still none the wiser as to how sentence 1 fits in. Much later in the same paragraph, after the writer has described in detail the onset of mumps, the connection at last becomes clear:

(12) When I caught the mumps, I couldn't read; when I went back to school again, I could. (13) The first page of *The Hobbit* was a thicket of symbols, to be decoded one at a time and joined hesitantly together... (15) By the time I reached *The Hobbit's* last page, though, writing had softened and lost the outlines of the printed alphabet and become a transparent liquid, first viscous and sluggish, like a jelly of meaning, then ever thinner and more mobile, flowing faster and faster, until it reached me at the speed of thinking and I could not entirely distinguish the suggestions it was making from my own thoughts.³⁸

It is now clear, in retrospect, that sentence 2 launched a long detour in which the circumstances leading up to the writer's learning to read are described in detail. Normally, this would have been signalled more obviously, eg *It happened when I was away from school with mumps...* Perhaps the writer wanted to suggest that there was more than simply a temporal connection between the experience of catching mumps and the experience of learning to read. The imagery of accelerating fluids in sentence 15 is not unlike the invisible pump image in sentence 2, as if learning to read *is* like catching mumps. The text is not only coherent but there is a coherent sub-text as well!

The writer has taken certain risks, testing the reader's faith in the coherence of his text, but it all comes clear in the end. (It's no coincidence, either, that the extract comes from a book about reading.) The writer is able to take these risks because he knows that readers are on the constant look-out for clues that will support their assumption that texts are, first and foremost, coherent – that they make sense. These clues are usually close at hand, in the associated text (or the *co-text*) – and often in the adjoining sentence. Or they may be in the *context* where the text is situated. (For more on co-text and context, see Chapter 5.)

When, occasionally, two sentences are juxtaposed whose relationship *cannot* be established, we have to conclude that their juxtaposition is accidental, as in this illuminated sign on a café in the USA in 2003:

3.5

**OUR PRAYERS ARE WITH THE TROOPS
TRY OUR FRESH TENDER HOME COOKED TURTLE**

Discovery activity 3.4 **Rogue sentences**

Good readers can usually spot lack of coherence quickly – in fact, the capacity to do so is sometimes used as a test of reading ability. What, for example, is the sentence that doesn't fit in this text³⁹?

3.6

TORTOISE AND TURTLE

(1) Unlike other reptiles, tortoises and turtles have hard shells to protect their bodies.

Tortoises are land animals. (2) They live in warm countries and eat plant food. (3) A tortoise cannot run away from an enemy. (4) Instead, it tucks its head and legs into its shell. (5) Some tortoises can live to be much more than a hundred years old – older than any other animals.

(6) Turtles live in the sea. (7) Some seaweeds can be eaten. (8) They have flatter shells than tortoises and use their legs as paddles for swimming. (9) On land they are very clumsy.

See also REPTILE.

Commentary ■ ■ ■

The rogue sentence is, of course, number 7. A fairly easy exercise, you'll agree, but it can be made more difficult depending on the choice and length of the text and the choice of 'rogue' sentence. It can be made still more difficult if the text, along with its inserted sentence, is jumbled up (as in text 3.1a) – so that the exercise becomes a test of the ability to recognize cohesive ties as well as overall coherence. ■

The above exercise is a type of 'deletion' exercise. The opposite process involves insertion. Insertion exercises also require (and therefore test) the ability to recognize how coherence works and are now popular in some public ELT examinations.

Discovery activity 3.5 **Sentence insertion**

Here is a text from Henry Widdowson's *Teaching Language as Communication*⁴⁰ (in which the sentences have been numbered for convenience). The two sentences that follow (A and B) have been extracted from it (in no particular order). Can you re-insert them? As you do, consider the kinds of skills and knowledge that you need to enlist in order to do the task. How would you prepare students to do similar tasks?

- A In some respects, however, it is unsatisfactory.
- B But what exactly do we mean by this?

3.7

(1) The aims of a language teaching course are very often defined with reference to the four 'language skills': understanding speech, speaking, reading and writing. (2) These aims, therefore, relate to the kind of activity which the learners are to perform. (3) But how can we characterize this activity? (4) What is it that learners are expected to understand, speak, read and write? (5) The obvious answer is: the language they are learning. (6) We might mean a selection of lexical items recorded in a dictionary combined with syntactic structures recorded in a grammar. (7) In this view, the teaching of a language involves developing the ability to produce correct sentences. (8) Many teachers would subscribe to this view and it has been productive of a good deal of impressive language teaching material. (9) We may readily acknowledge that the ability to produce sentences is a crucial one in the learning of a language. (10) It is important to recognize, however, that it is not the only ability that learners need to acquire. (11) Someone knowing a language knows more than how to understand, speak, read and write sentences. (12) He also knows how sentences are used to communicate effect.

Commentary ■ ■ ■

To do this task requires more than simply recognizing cohesive ties (such as *however*, *but*, etc), although this is of course very important. It also involves the ability to understand and follow the thread of the argument, sentence by sentence, including recognizing what is 'new information' in each sentence. This in turn involves more than simply understanding the words and the grammar. Familiarity with the argument itself, and with this kind of text and writing style, is an obvious advantage.

To prepare learners for this kind of task requires, therefore, that attention be given to the formal ties between sentences, including the use of reference and conjuncts. It also means encouraging learners to read for meaning – stepping back, as it were, from the text in order to get its overall gist. For example, learners would be advised to read the whole text first, before attempting to re-insert the missing sentences. Knowing that the text is a complete paragraph would help matters. Since paragraphs (in academic writing) typically start out by presenting the writer's case, going on to elaborate it or give examples, before finally summarizing it, it's generally a good idea to pay special attention to the beginnings and endings of paragraphs. In the case of the above text, Widdowson's whole argument can be summarized in sentences 1, 11 and 12.

The missing sentences, by the way, fit in like this: **A** comes between sentences 8 and 9; **B** comes between sentences 5 and 6. ■

Classroom applications

End weight

The principle of 'end-weight' – of placing the newsworthy information at the end of the clause – is one that can form the focus of a number of classroom tasks. Asking learners to choose the best of a number of options for continuing a text can help draw attention to the way given and new information is typically distributed. For example:

Choose the sentence (a or b) that is the best way of continuing the text.

- 1 The ancient Egyptians buried their pharaohs in tombs called pyramids.
 - a In Giza, near Cairo, are the most famous pyramids.
 - b The most famous pyramids are in Giza, near Cairo.
 - 2 Some pyramids are made of more than two million blocks of stone.
 - a They were dragged into place by teams of workers.
 - b Teams of workers dragged them into place.
 - 3 The pyramids were built to house the body of the pharaoh.
 - a Inside each pyramid is a secret chamber.
 - b A secret chamber is inside each pyramid.
 - 4 This is the tomb where the mummy of the pharaoh was laid.
 - a Robbers have stolen most of these mummies.
 - b Most of these mummies have been stolen by robbers.
- etc.

You'll probably agree that the best way of continuing the first sentence of the text is option **b**, where the end-weighted comment of the first sentence (*pyramids*) becomes the topic of the second. By the same principal, 2a is the logical choice. In 3, the new information is *a secret chamber*, which suggests it should go into the comment slot at the end of the sentence, as in option **a**. Similarly, *robbers* is new information, so 4b is the preferred choice.

A similar kind of awareness-raising activity is to ask learners to spot the sentences that are 'back-to-front' in a text. The exercise on pyramids could serve as the basis for such a text. For example: What are the two awkward sentences in this text?

- (1) The ancient Egyptians buried their pharaohs in tombs called pyramids.
 (2) The most famous pyramids are in Giza, near Cairo. (3) Some pyramids are made of more than two million blocks of stone. (4) Teams of workers dragged them into place. (5) The pyramids were built to house the body of the pharaoh.
 (6) Inside each pyramid is a secret chamber. (7) The tomb where the mummy of the pharaoh was laid is this. (8) Most of these mummies have been stolen by robbers.

(Answer: 4 and 7)

Passive constructions

Notice that a number of the alternatives in the exercise on pyramids involve a choice between active and passive constructions. This is a reminder that one of the chief functions of the passive is to allow for the possibility of placing the object of the verb in the theme slot – normally the domain of the grammatical subject – and at the same time placing new information in the rheme slot:

topic (theme)	comment (rheme)
Brutus	stabbed Caesar to death.
→ Caesar	was stabbed to death by Brutus.

If English only had active sentence constructions it would be difficult to divert the reader's focus on to what is newsworthy in a sentence. Moreover, it would be difficult to maintain topic consistency over extended stretches of text. Compare these two versions of the same text (passive verb forms are underlined):

3.8a

Napoleon regained power in 1815. He ruled for a hundred days. But Wellington defeated him at the Battle of Waterloo. Napoleon surrendered to the British and they exiled him to St Helena, where he died in 1821.

3.8b

Napoleon regained power in 1815. He ruled for a hundred days. But he was defeated by Wellington at the Battle of Waterloo. He surrendered to the British and he was exiled to St Helena, where he died in 1821.

This suggests another exercise type, where information is re-formulated according to a different point of view. For example, here are some short encyclopedia entries about famous people.⁴¹ Can you re-write them so that they are about famous achievements instead?

Cervantes, Miguel de	He wrote <i>Don Quixote</i> in 1605.
Hill, Mildred and Patty	They wrote <i>Happy Birthday</i> in 1893.
Gates, Bill	He started Microsoft in 1975.
Fender, Leo	He invented the electric guitar in 1948.
Roddick, Anita	She started <i>The Body Shop</i> in 1976.

<i>Don Quixote</i>	<i>Don Quixote was written by Cervantes in 1605.</i>
Electric guitar
<i>Happy Birthday</i>
Microsoft
<i>The Body Shop</i>

The next stage might be some more productive activity, such as writing the description of a process from the point of view of the thing being processed (eg coal) or of the people who process it (eg coal miners). It is more likely that the former will require more use of passive constructions than the latter.

Cleft sentences

Certain constructions, such as *cleft sentences*, are used, like the passive, to alter the normal order of sentence elements, in order to place special emphasis on new information. For example, the second of these two sentences is a cleft sentence:

- 1 Robin paid.
- 2 It was Robin who paid.

Like the passive, cleft sentences are best understood and manipulated in context. Which of the above sentences, for example, best fits these mini-contexts?

A I was mistaken in thinking that Jan paid for dinner. _____ . Jan just left the tip.

B Jan, Robin and I had dinner together. _____ . Jan left the tip.

In this context it should be clear that the cleft construction adds extra emphasis in order to contradict, or correct, an earlier statement or inference (as in **A** above). The given information is 'Jan (or somebody else) paid.' The new information ('No, Robin did.') is superimposed on to this original statement.

We can represent the distribution of topic and comment like this:

topic (theme)	comment (rheme)
(1) Robin	paid.
(2) [It was]	Robin who paid.

In (2) *it was* is in brackets because it's not really a topic at all; it's simply a way of filling an empty slot, a bit like the *it* in *It was raining*.

The use of 'mini-contexts' to practise passive and cleft constructions would seem to be essential. An exercise that simply asked students to change statements like *Robin paid* into *It was Robin who paid*, with no reference to a context, would not be addressing the significance of the choice between the two constructions.

An exercise type that addresses a number of ways that sentences can be combined coherently is one in which learners are asked to *textualize*, ie turn into coherent text, a number of isolated propositions. For example:

Use this information to write a short text entitled 'Paper'. You can change the order of information in the sentences, but try to maintain the order of the sentences. You can combine sentences, if necessary.

The Chinese invented paper.

The Chinese originally produced paper from plant fibres and rags.

The Arabs introduced paper to Europe.

This happened in the Middle Ages.

Parchment had been the standard material for written and printed documents until then.

Paper eventually superseded parchment.

From the nineteenth century wood pulp was used to make paper.

Plant fibre and rags continued to be used to make some kinds of paper.

Waste paper is recycled to make most paper nowadays.

In France they introduced the first machines for making rolls of paper.

This happened in the eighteenth century.

Early paper was hand made.

Early paper consisted of single sheets.

One of several possible ways of textualizing these sentences might be the following:

(1) Paper was invented by the Chinese, who originally produced it from plant fibres and rags. (2) It was introduced to Europe by the Arabs in the Middle Ages. (3) Until then the standard material for written and printed documents had been parchment, but this was eventually superseded by paper. (4) From

the nineteenth century paper was made from wood pulp, although some kinds of paper continued to be made from plant fibre and rags. (5) Nowadays most paper is made by recycling waste paper.

(6) The first machines for making rolls of paper were introduced in France in the eighteenth century. (7) Early paper had been hand made and consisted of single sheets.

The textualizing process has involved the following kinds of operations:

- transforming active constructions into passive ones, in order to achieve end-weight (eg sentence 1)
- re-arranging the order of elements in the sentence, again in the interests of end-weight (eg sentence 3)
- combining sentences using relative pronouns (eg sentence 1) or linkers (eg sentence 4)
- using referring pronouns, such as *it*, to connect sentences and avoid repetition (eg sentence 2)
- changing verb forms in order to re-position events relative to other events (eg sentence 7).

Macro-level coherence: Topics

At the *macro-level*, texts achieve coherence because they are obviously *about* something, that is, there is an identifiable topic, or topics. This is a slightly different sense of the term *topic* than the one we have been using to talk about the themes of sentences. Of course, the topic of a text is often also the topic of at least some of the individual sentences in that text. Even without its title, text 3.6, for example, is clearly about *tortoises and turtles* since these comprise the topics of most of the sentences in the text. What other clues, apart from such obvious ones as headings and titles, indicate topical coherence?

Discovery activity 3.6 Key words

Key words are those words that occur with a frequency that is significant when compared to the normal frequency of these same words, as determined by corpus data. That is to say, if a word occurs, say, five times in a text that is a hundred words long, but only ten times in a general corpus of a million words, it is clearly disproportionately represented in the text. Chances are that the word's prominence in the text is not accidental, but is due to the fact that the word is intimately related to what that particular text is about.

Here are the key words of three texts. The first set of key words (which are ordered in descending order of significance) comes from a text you are already familiar with. Notice how just the key words alone convey a strong sense of what the text is about.

1 *heredity, genes, characteristics, weaker, cell, female, sex, male, carry, eyes, each, individual*

Can you work out the topic of each of the texts from which the two lists below were derived?

2 *striker, goalkeeper, ten, headed, penalty, corner, shot, ball, yards, cross, goal, home*

3 *paint, door, edges, frame, brush, colour, separately, painted, face, room, each, side*

Commentary ■ ■ ■

I shouldn't have to reproduce the texts to be able to prove that the second is the report of a football match (from a tabloid newspaper) and the third is from a DIY (*Do-it-yourself*) book and is about the painting of doors. The point of the exercise is simply to show that the *topic* of a text is, to a large extent, carried by its words. And that, moreover, these topic-carrying words tend to be nouns. ■

As we saw when we looked at cohesion, chains or threads of lexis ripple through texts and hold them together. This suggests some useful classroom activities, both in advance of and after reading a text, and also as preparation for writing or speaking. In advance of reading a text, for example, learners can be asked to brainstorm all the words they know that are related to the topic of the text, using dictionaries to top up, if necessary. In this way, they are well primed, cognitively speaking, to make sense of the text when they get down to actually reading it. Brainstorming the vocabulary related to a topic in advance of writing about the topic is also a useful pre-writing task – on the understanding, of course, that not all the words that have been brainstormed need to be included in the written text. The same goes for preparation for a speaking task.

Post-reading vocabulary work can involve the mapping of lexical chains in a text (or in the transcript of a listening text, too, of course). Scrutiny of these word sequences can help in the unpacking of difficult texts.

Discovery activity 3.7 Lexical chains

You may not be entirely sure what the following poem⁴² is about, but you will probably agree that, because of the tight lexical chains running through it, it is about *something*. Can you identify at least two chains of words that run through it?

3.9

DEATH OF THE POET

*This year
the roof of my hive
broke open to the sky*

*my bees buzz
like anxious flies*

*will they learn to feed on
absence?*

*my combs are filling
with dark space.*

*Forget selling myself
to the first sweet tooth
that sniffs along*

*the night air is licking me
clean out of honey.*

*This year
the roof of my hive
gave up*

*and let everything
down.*

*Does it matter
that the moon is pouring
through my holes?*

Commentary ■ ■ ■

There are at least two themes here that intertwine through the length of the poem. The first is the more obvious one, pertaining to bees and honey: *hive, bees* (and, by association, *flies*), *buzz, combs, sweet, honey*. The second has to do with the act of opening, emptying and thereby destroying something and consists of two sub-themes, represented on the one hand by these verb phrases: *break open, gave up, licking me clean out of, let everything down*, and on the other by these noun phrases: *absence, dark space, holes*. The combined effect of these interweaving themes is to suggest the destruction and exposure of a bee-hive, which – with or without the title – seems to be some sort of metaphor for the poet's own sense of implosion and creative emptiness. The point, though, is that, because of its lexical 'texture', the poem *seems* to make sense, even if we have to work hard to locate that sense. It's *about* something. ■

But word chains on their own are not enough to make a text coherent. Indeed, it would be quite possible to compose a text that is complete nonsense, but that is still lexically cohesive. Thus:

Ten cross goalkeepers shot a striker and then headed home from the ball...

The words of a text need to be organized in such a way that they form internal patterns within the text and also so that they relate to the world outside the text insofar as the reader understands it. We shall look at these two aspects of coherence in turn.

Internal patterning

The internal patterning of a text is realized locally in the way words – or their synonyms or derivatives – are carried over from one sentence to the next, as we saw in the discussion of information structure in sentences. Often the *comment* of one sentence becomes the *topic* of the next. In fact this 'carrying over' happens globally, too. That is to say, it occurs over quite long stretches of text. Here, for example, is the first sentence of a news report in a scientific journal⁴³:

3.10

(1) A draft version of the honey bee genome has been made available to the public – a move that should benefit bees and humans alike.

Not surprisingly, a number of words in this sentence flow over into the next two sentences (you might like to predict what they will be):

(2) The honey bee (*Apis mellifera*) is multi-talented. (3) It produces honey, pollinates crops and is used by researchers to study human genetics, ageing, disease and social behaviour.

However, considerably further on in the text, parts of sentence 1 are still popping up, to the point that sentence 11 paraphrases it almost exactly, using the same or similar vocabulary:

(1) A draft version of the honey bee genome has been made available to the public – a move that should benefit bees and humans alike. [...]
 (11) The genome's publication is good news for beekeepers and victims of bee stings alike.

Note how the proposition *the honey bee genome has been made available to the public* has been 'nominalized' into the noun phrase *the genome's publication*. And notice how *should benefit* in sentence 1 becomes *is good news* in sentence 11 – another instance of nominalization (see page 27). The transition from *public* to *publication* is a form of indirect repetition based on derivation. The change from *benefit* to *good news* is one based on synonymy. By tracing these repetitions, both direct and indirect, through a text, we can get a clear sense of what the text is about, which in turn helps integrate the text into a coherent whole. Even in the very last sentence words from sentence 1 make a re-appearance:

(1) A draft version of the honey bee genome has been made available to the public – a move that should benefit bees and humans alike. [...]
 (23) This is the first time that the amassed sequence data have been made publicly available.

Michael Hoey, in a fascinating study⁴⁴, has shown how these patterns of lexical repetition can extend further still, over the whole length of a book, in fact. He argues that it is the cohesion induced by these recurring patterns that accounts, to a large extent, for the sense we get of a text's coherence, a view that leads Hoey to question the whole cohesion-coherence dichotomy.

Discovery activity 3.8 Lexical patterns across long texts

You might like to test this theory on this very book. Flick ahead or back a few pages and take one or two sentences at random from the body of the text. How many words in those sentences are repeated on this page, either verbatim or in the form of derivations or synonyms?

Classroom applications: Key words

Traditionally, the checking of students' understanding of a text involves asking a series of comprehension questions, often about discrete details of the text. While this may be a valid testing activity (although I have my doubts), it does not provide much assistance in understanding the text if learners have no idea what the text is *about*. In the absence of any global understanding of the text, post-reading tasks may well be a waste of time.

One of the first things to establish, then, is the topic. This may require nothing more than to direct students' attention to the title (if it is obvious, like *Mozart*, for example), or to unpack the title if it is dense or otherwise not so obvious (eg *Honey bee genome sequenced*). In the absence of any title or headline, readers have only the text itself to guide them. Of course, the teacher could simply tell them, 'This is a text about bees.' But practice in identifying the topic is good training for learners.

As we have seen, the best indicators of the topic are the key words and the key sentences. The key words are those that are content words (ie not grammar words like articles, prepositions, etc) and ones that recur in the same sentences with some regularity, although possibly in different forms (eg *genome made public; genome's publication*). At least some of them will occupy the topic slot in the text's sentences fairly frequently.

The key sentences are those that begin the text, or come near the beginning, and which reflect the content of the headline, title and subtitle (if there is one). It often pays to focus initially on the first sentence of a text, eg by writing it on the board, dictating it, or having a student read it aloud, and to 'unpack' it, before going on to read the rest of the text. Other key sentences are those that repeat or paraphrase at least two, maybe three, elements of that first key sentence. And so on. Training learners to seek out these clues not only gives them an idea of what the topic is, but a mini-summary of the argument of the entire text.

Schemas and scripts

So far we have been looking at the internal relations and patterns operating across the words and the sentences that comprise a text. But however interrelated a text is, it doesn't make much sense if it doesn't somehow correspond to the reader's idea of the world *outside* the text. Take the word *bee*, for example. If we hear someone say *Be careful in the orchard. There are bees*, we can make perfect sense of this by reference to what we know about bees and the fact that, not only do bees like orchards because of their flowers, but bees sting. We have activated a 'bee schema'. A schema is simply the way knowledge is represented mentally. A bee schema includes the knowledge that bees frequent flowers and that bees sting. It is also likely to include the fact that bees make honey, they live in hives, they buzz and they are always on the move. Indeed, it's this last fact that enables us to make sense of language that is used metaphorically, such as *I'm as busy as a bee*. Of course, the depth and breadth of a schema will vary with each individual: a beekeeper's schema for *bee* will be much more elaborated than either yours or mine.

If, however, we heard someone say *Be careful in the orchard. There are goalkeepers*, we would be hard pressed to find anything in our orchard schema or our football schema that would help us make much sense of it. In the absence of an accessible schema, the text is senseless.

Related to the notion of schemas, are *scripts*. Scripts are the ways in which we come to expect things to happen. If a schema can be represented by a 'spider diagram', with various branches radiating from a central node, a script, being sequenced, is more like a list. For example, catching a bus in London used to follow this sequence:

- wait at stop
- board bus
- sit down
- pay conductor when he or she approaches.

Nowadays, the London bus script goes like this:

- wait at stop
- board bus
- pay driver
- sit down.

If you come from a culture where you are used to the former script, you may be caught off guard by the latter. (In fact, the London bus script is already being replaced by a new one, which involves buying the ticket from a machine at the bus stop and punching it when you board, something I learned to my cost recently.)

Discovery activity 3.9 Scripts

To take another example, take a minute or two to write a short description of your house or apartment for someone who has never visited it. Imagine, for example, it's part of a letter you are writing to a friend.

Commentary ■ ■ ■

Now, I am fairly confident that your description did not start with the colour of the walls, or the garden shed. Rather, you probably followed an apartment or house script and your description was possibly organized along similar lines to this e-mail I received from my niece:

3.11

Dan and I have bought a house in Tanunda and move in next weekend.

It's a circa 1950s house, with three bedrooms, a lounge, dining room, kitchen, one bathroom, cellar (for all that Barossa wine) and big backyard. We also have about four sheds ranging in size from an old outdoor toilet to a much bigger one and a carport. There's polished floorboards in the lounge, dining and kitchen. The kitchen and bathroom will eventually need renovating and there's room to expand out the back and make another living area – depending on how long we stick around.

In fact, there seems to be a 'macro-script' for describing anything static, of which the house script is one variety and of which text 3.11 is one instance. The macro-script organizes information according to the following parameters (among others):

- from general to particular (*it's a 1950s house with three bedrooms...*)
- from whole to part (*a lounge... there's polished floorboards in the lounge*)
- from 'including' to 'included' (*... cellar (for all that Barossa wine)*)
- from large to small (*three bedrooms, a lounge... one bathroom...*)
- from nearer to further, front to back, or outer to inner (*three bedrooms etc... and big backyard*)
- from possessor to possessed (*Dan and I have bought a house...*)
- from now to then (*Dan and I have bought a house... the kitchen and bathroom will eventually need renovating*).

These parameters are not carved in stone, of course, but to work in the opposite direction, eg from small to large, would create a marked effect. Sometimes, too, there is a tension between the parameters, so that, for example, the backyard, although bigger than the kitchen, is mentioned after the kitchen, because it is further away. ■

Macro-scripts

Other macro-scripts apply to processes, to biographies and to narratives. We saw, at the beginning of the chapter, how the 'biography script' determined the order of sentences in the text about Mozart (3.1). The biography script tends to follow a chronological order. But this is not the case with all past narratives. Take the news story script, for example. If you remember the story of the confused police dog in Chapter 1 (text 1.2), you may recall that the events are related in this order:

- A police dog (Shep) got the sack.
- A man was taken to hospital.
- Shep's handler had been called to a burglary.
- He was told the suspect was in the building.
- Officers carried out a search.
- Shep wandered off.
- He bit a man.
- A police spokesman commented on the incident.

The story appears to start with the *outcome* of the events, before filling in the narrative details of the incident itself and concluding with a comment. In fact, it would be more correct to say that the text starts with a condensed summary, including the main participants and the setting, of the story. This initial summary is, in turn, an expansion of the headline that precedes it:

Police dog sacked after biting innocent man

A police dog in Basel, Switzerland, has | bystander at the scene of a burglary.
got the sack for biting an innocent

Bearing in mind that the purpose of news texts is to present *news*, ie that which is *newsworthy*, rather than simply to recount facts (as in an encyclopedia, for example), it is not surprising that news stories focus on outcomes, especially when these are unusual or catastrophic. The dog's being sacked is more newsworthy than the fact that it bit someone. (An American newspaper editor famously said, 'When a dog bites a man that is not news, but when a man bites a dog that is news.')

News stories, then, set out to address the reader's (usually unvoiced) question when he or she opens the newspaper, or logs on to a news website, or turns on the TV: *What's new?* (or *What's happened?*) The purpose of the headline is to provide a succinct answer to the question. Typically, this will include some kind of activity or event, someone or something affected by the activity, an agent and possibly a reason. Either the agent or the affected party will take topic position in the headline, as in this sample of headlines from the website news service ananova.com:

topic	comment		
<i>affected</i>	<i>event</i>	<i>agent</i>	<i>reason</i>
Police dog	sacked	–	after biting innocent man
Pet kangaroo	hailed	–	for saving farmer
Caravan	damaged	by low flying cow	–

topic	comment	
<i>agent</i>	<i>event</i>	<i>affected</i>
Cat	saves	drowning lamb
Kitten	survives 70C tumble wash	–

If this attracts the reader's attention sufficiently, then the first sentence of the text addresses the reader's next questions: *Where? When? Who?* Having established the circumstances, the text goes on to answer the reader's next most likely question: *How did it happen?* At this point the narrative unfolds, each stage in it an answer to the reader's question: *What happened then?* Finally, the reader may be left still wondering as to the significance of the event, and the final comment, (usually by one of the participants or some kind of authority or expert), answers the question: *So what?* Or, more elaborately: *How has this affected things, or how will it affect things?*

In other words, the text is organized in order to answer the reader's evolving questions. All texts are organized to answer the questions that the reader puts to them and this is probably the single most important factor in terms of a reader's assessment of the text's coherence. The text will make sense if the reader, at any one point, is satisfied that his or her questions are being answered, and in the right order.

This helps explain why scripts are the way they are. The features of the house description script, as displayed in text 3.11, are not arbitrary, but respond to the reader's need to get the big picture first (*What does it look like?*), before having the details filled in (*What's it got inside?*). Likewise, the encyclopedia text (as in 3.1) answers the reader's need to know not *What's new?* but *Who was Mozart? What did he do? What did he do next?*

In this sense, texts are *interactive*. Or, as Michael Hoey puts it, 'Texts gain their meaning from a reader's interaction with them.'⁴⁵ As readers, we come to texts with unanswered questions (or what would be the point of reading them?). We search the text for answers: if the writer has been co-operative, the text will answer our questions, and in more or less the order we would expect. These expectations relate to cognitive factors (the way we think about things, or perceive or experience them, for example) and take the form of scripts. Over time, the way scripts are routinely realized through texts has given rise to certain predictable *text types* (the news story, the encyclopedia entry, etc), such that familiarity with the text type makes the interactive process even more fluid. (We will return to the topic of text types in Chapter 5.) The text will also raise further questions – and will provide answers, or at least explain why it *can't* provide them. The cumulative effect of this dynamic interaction between text and reader (or listener) is a measure of the text's coherence.

Discovery activity 3.10 Keeping the reader in mind

Before you read the following text, imagine you are faced with the challenge of painting a door. You have never painted a door before. You consult a DIY manual. What kind of questions would you want answered?

Now read the text⁴⁶. What questions does the writer attempt to answer at each stage of the text? Did these correspond to your own questions? On balance, did the text answer most of your questions, and in the right order? Does it pass the 'coherence test'?

3.12

Doors have a variety of faces and conflicting grain patterns that need to be painted separately – yet the end result must look even in colour, with no ugly brush marks or heavily painted edges. There are recommended procedures for painting all types of door.

Remove the door handles and wedge the door open so that it cannot be closed accidentally, locking you in the room. Keep the handle in the room with you, just in case. Aim to paint the door and its frame separately so that there is less chance of touching wet paintwork when passing through a freshly painted doorway. Paint the door first and when it is dry finish the framework. If you want to use a different colour for each side of the door, paint the hinged edge the colour of the closing face (the one that comes to rest against the frame). Paint the outer edge of the door the same colour as the opening face. This means that there won't be any difference in colour when the door is viewed from either side. Each side of the frame should match the corresponding face of the door. Paint the frame in the room into which the door swings, including the edge of the stop bead against which the door closes, to match the opening face. Paint the rest of the frame the colour of the closing face.

Commentary ■ ■ ■

There are probably more answers than you had questions for in this text – but the writer has had to anticipate not only a variety of doors and colour schemes, but different degrees of background knowledge on the part of the readership. Nevertheless, these are some of the questions that you might have asked (and which the text answers):

- What do I need to know before I start?
- What is the effect I'm aiming at?
- Is there any set procedure or order?
- What precautions ought I take?
- Where do I start?
- What do I do next? (And next? etc)
- What if I want to paint each side a different colour?
- etc.

Of course, there are many other possible questions, including those raised by the text itself, eg *What if I lock myself in?!* But on the whole, the text is comprehensive. It is also very explicit and unambiguous: notice how often key words like *door* and *frame* are repeated, and consequently how few pronouns there are. Cohesion is achieved lexically, with few conjuncts. The definite article is used frequently, suggesting either a narrow field of reference, or a lot of shared knowledge, or both. The cohesion is more an effect, though, than a cause, of the text's sense-making capacity, ie its coherence. This coherence is achieved because the writer has the reader *in mind*. ■

Classroom applications: Macro-level coherence

There are many teaching implications of the kinds of macro-level features of coherence we have been looking at – such as topics, schemas and scripts. Some applications have already been mentioned, such as the usefulness of brainstorming topic-related vocabulary in advance of reading or listening and writing.

Other implications for classroom reading or listening activities include the following:

Schemas and scripts

Just as it is important to establish the topic of a text, so it is to establish the schema and/or script of a text – either in advance, by brainstorming around a theme, for example, or after reading (or listening to) the first one or two sentences, or after having read or heard the whole text. Some conventional text types have very clearly associated schemas and scripts. Consider, for example, how the following text openings set in train a number of associations, both in terms of the topics and their associated words and in terms of the organization of the subsequent text:

- 1 Once upon a time there was a king...
- 2 I am sixteen. I have been dating the same boy now for...
- 3 To select the required program, turn...
- 4 Unwanted facial hair can be embarrassing. Now...
- 5 This man walks into a bar and he says to the barman...
- 6 There was a young girl from Nebraska...

When dealing with texts in class, the teacher needs to estimate the extent of the learners' familiarity with both the content of the text and with the text type itself and to adapt the approach to the text accordingly. In Chapter 6, where text difficulty is discussed, we will look at more ways of doing this.

Comparing texts in the learners' mother tongue with the same kind of texts in the target language (eg English) can help alert students both to similarities and to differences in the way such texts are organized. Because human cognition is essentially the same, irrespective of language and culture, the organization of such basic scripts as narrative and description are likely to be more or less the same. This is good news for students: their expectations about a text are more likely to be met if they realize what kind of text it is and that it will be organized along similar lines to a text in their own language.

As with the text about painting doors, it is often a good idea to let the learners themselves decide the questions they would like answered in the text. Apart from anything else, it may be more motivating to answer your own questions than someone else's. To do this, though, it is essential that the learners have a clear idea of what the text is about, what kind of text it is and where it comes from.

Writing

Helping learners *write* coherently presents more of a challenge. Consider the following piece of written work, for example:

3.13

On balance, this is a very complex subject, still nowadays, in spite of the fact that this is not a new discussion. To find an easy answer and a more or less rapid solution for the problem is practically impossible, because it grows bigger and bigger every day. At this

moment in our history too many people would have to work together and collaborate with one another and unfortunately it is something very uncommon in our days.

In my opinion, everything should be secondary in front of the fact of saving the lives of thousands of people, but there are some other things, apart from culture, that should be placed firstly in a secondary place. For example, I think it would be a good starting point if the rich countries reduced their expense of arms and used that money to send food to the more poor ones.

Only in the last sentence does the reader start to get a clue as to what the issue is that the writer is attempting to address, which is the contribution developed countries might make to global problems. One writer has called this kind of rambling, barely coherent style 'spaghetti writing'⁴⁷:

Spaghetti writing is the kind of loose-jointed composition writing which second-language students can produce in paragraph after paragraph. It is characterized by long incoherent sentences and a surfeit of subordinate clauses in search of a main one. All language stimulates expectations, but so often these expectations are not fulfilled in spaghetti writing and a *however* or a *so* leads the reader to a wrong conclusion. It is difficult to correct, because tinkering with a relative or a conjunction will not solve the problem and the usual correction shorthand (Sp, T, Art – spelling/tense/article) is inadequate: short of rewriting the passage, there is little the teacher can do.

Little the teacher can do *after* the event, perhaps, but there is quite a lot the teacher can do *before* the writing gets to this stage. I concluded the previous section by saying 'coherence is achieved because the writer has the reader *in mind*'. The challenge, in setting writing tasks that have any hope of achieving the production of coherent texts, is to devise ways of helping learners to *keep their readers in mind*. Here are some suggestions:

- When setting the writing assignment, make sure that the task rubric specifies a) the kind of text, b) the purpose of the text, and, most importantly, c) the reader. Ideally, the reader should be someone the writer knows who will actually read and respond to the text – for example, another student in the class or institution, or an on-line pen pal. If this is not possible, a 'putative' reader should be specified – that is, an imagined reader who would be typical of this kind of text's readership. And of course the reader could be yourself, the teacher, but not 'teacher-as-corrector'. Rather, 'teacher-as-reader'.
- Having established the readership, the writer should then brainstorm the kinds of questions the reader is likely to want to have answered. This is especially important in factual writing, but applies equally well to discursive writing of the type attempted in text 3.13.
- Suggest that the writer includes at least some of these reader questions in the body of the text, in the form of rhetorical questions. Note how Widdowson uses rhetorical questions to good effect in text 3.7: *What is it that learners are expected to understand, speak, read and write? The obvious answer is: the language they are learning. But what exactly do we mean by this?* etc...
- Challenge writers to sequence their sentences in such a way that no conjuncts (*so, therefore, finally*, etc) are necessary. Note that this is not always possible, especially with adversative relations, eg *but, however*. Where a conjunct is

necessary, suggest they use one that includes the word *this*, as in *this means...*, *this is why...*, *because of this...*, *despite this...*, etc. This (!) will ensure that any conjuncts are firmly anchored.

- Remind writers that the topic and the way the topic is being considered, needs to be spelled out lexically and early on in the text. This may mean repeating, paraphrasing, or re-formulating elements of the rubric in the opening sentence. So, if the rubric asks the writer to *Suggest ways developed countries can contribute to global well-being*, an appropriate opening sentence might be: *How can developed countries contribute to global well-being?*
- Show learners how sentence topics are frequently carried over from the comments of previous sentences. Thus, a follow-on sentence to the opening one might begin: *Global well-being [depends on a number of factors... | can be defined as... | was once thought to mean..., etc].*
- Explain to writers that lexical repetition is not necessarily a bad thing. Show, using authentic texts, how effective writers use both direct and indirect repetition to convey their argument and to create cohesion. If the rubric includes words like *developed countries* and *global well-being*, these should re-appear in the body of the text, along with derived forms and synonyms, such as *development*, *developing*, *nations*, *international*, *welfare*, etc. This is where some pre-writing dictionary work might be useful – pre-activating not only key words, but derived forms and synonyms as well.
- Having written a first draft, learners should read this aloud to other students, in pairs, or at least silently read and then comment on each other's texts. Any point where their 'audience' asks for clarification should be considered a potential 'danger spot' and subject to re-writing. Ask students to summarize the gist of each other's texts, even if this has to be done in their first language. If they can't easily summarize their colleague's argument, then there may well be something wrong with the coherence of the text.
- As a last resort, be prepared, as teacher, to tell the writer, 'I'm afraid, this doesn't make sense.' This is best done on a one-to-one basis, if possible, where you can challenge the writer to tell you what it was he or she intended to say. Often this is enough for the bits to fall into place, for the logic to emerge, for coherence to kick in.

Conclusion

In this chapter we have looked at ways texts achieve coherence – ie how they make sense to the reader – through a combination of local (or micro-level) and global (or macro-level) effects. Writers use cohesion to help readers create coherence in a text, but it is the degree to which the reader is able to interact with the text that is the true test of coherence. Ultimately the reader has to decide whether the writer has kept the reader in mind.

The discussion has centred almost exclusively on written texts. Do the same principles apply to the production and interpretation of spoken texts? What makes spoken text coherent? What are the particular characteristics of spoken text that distinguish it from written? And what are the implications for teaching? These issues will be addressed in the next chapter.