Collaborating towards Coherence

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Collaborating towards Coherence
Pragmatics & Beyond

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Collaborating towards Coherence: Lexical cohesion in English Discourse
by Sanna-Kaisa Tanskanen
Collaborating towards Coherence
Lexical cohesion in English Discourse

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CHAPTER 1

Introduction
Cohesion in discourse

1.1 Introduction

…the sequence you actually hear or see is like the tip of an iceberg – a tiny amount of matter and energy into which an enormous amount of information has been 'condensed' by a speaker or writer and is ready to be 'amplified' by a hearer or reader. If this transaction weren’t so commonplace, it would be amazing: and we are still laboring to explain just how it can be done.

(de Beaugrande 1997:11)

When we encounter language, whether through the spoken or the written medium, quite a lot more takes place than simply hearing a sequence of sounds or reading a sequence of letters; how we communicate with these sequences continues to be a central issue in language studies. This book is about how the sequences we hear or see hang together, i.e. about cohesion and coherence. In other words, the book approaches the transaction between speakers and listeners, and writers and readers, from the perspective of the relations of meaning with which speakers and writers can mark the unity within and between sequences and with the help of which listeners and readers can navigate through sequences.

For over three decades now, matters of cohesion and coherence have intrigued researchers of text and discourse. A great number of models of analysis have been introduced, showing how cohesion and coherence are manifested in different types of spoken and written discourse. Applications of the models to teaching, and reports on the suitability of different models for instruction, are almost as numerous. As a result, we have an abundance of books, studies and articles focusing on various aspects of cohesion and coherence. The assertion that there are features in texts which help make them appear as unified wholes rather than as collections of unrelated sentences or utterances will therefore come as no surprise to anyone involved in text and discourse studies.
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Given the extensive interest attracted by cohesion, what is somewhat surprising is the fact that while we have several accounts of cohesion in particular types of discourse, from children's stories to student essays to academic papers, studies dealing with cohesion across several types of discourse are much harder to find. It is also quite difficult to compare the results of the existing studies in order to form a unified picture of the use of cohesion in different types of discourse, since each study will typically use an approach tailored for the analysis of a particular type of discourse. Consequently, there still exist notable gaps in our understanding of the effects on the use of cohesion of the different contexts in which speakers, writers, listeners and readers operate and communicate. Yet, for complementing our understanding of the functioning of cohesion in discourse, comparisons of the operation of cohesion in texts produced under different conditions would be essential. The need for such studies is expressed as follows by Widdowson:

For cohesion is surely an essentially pragmatic matter… What we need to discover are the conditions, the pragmatic conditions, which call for the use of one cohesive device rather than another… And what contextual conditions favour the use of different devices in different texts in modern English? (Widdowson 1992: 109)

It is the starting point of this study that these questions can only be addressed by studying the use of cohesive devices in several distinct types of spoken and written discourse. The material of the present investigation therefore consists of four different groups of texts, representing face-to-face conversation, prepared speech, electronic (e-mail mailing-list) language, and academic writing. While a set of four groups is small enough for a detailed cohesion analysis, the conditions in which the texts have been produced are nonetheless different enough to enable observations of how they are reflected in the use of cohesion in the texts.

Finding a suitable model of analysis forms an important part of the present investigation. As already noted, there is no scarcity of models created for the analysis of cohesion, but each study typically brings with it specific problems and questions and thereby also a need for modifications of existing models. The present study is no exception in this respect. However, while the model used in this study slightly differs from earlier models, there is a conviction behind our model which is similar to that informing earlier models, namely the belief that the choice of lexis is one of the primary means available to speakers and writers for creating continuity in their messages.
The aim of the present study is consequently twofold: firstly, to develop a model of analysis capable of capturing all cohesively meaningful lexical relations in texts, and secondly, to find out if and how their use varies depending on the conditions under which the selected texts have been produced. The aims are discussed in more detail in the final section of this chapter; before that, the following five sections introduce the central concepts of the analysis.

1.2 Text and discourse

Both text and discourse have appeared in the above discussion. A brief consideration on the use of these terms seems to be in order, especially since the distinction between the two is far from clear-cut. Some researchers use only one of the terms, while those who use both terms may use them almost interchangeably, or they may make a clear distinction between them. What is more, definitions found in various studies for either of the terms may seem perplexingly similar. Compare, for instance, “a text is a unit of language in use” (Halliday & Hasan 1976:1), and “the analysis of discourse is, necessarily, the analysis of language in use” (Brown & Yule 1983:4).

When both text and discourse are used within a study, there is often a systematic difference between the two. For instance, text has been used to refer to the theoretical construct that underlies discourse (van Dijk 1977:3). It has also been suggested that text is the record of discourse (Brown & Yule 1983:26; Lemke 1991). To some researchers, the difference between the two terms lies in the mode: texts are written and made up of sentences, whereas discourses are spoken and made up of utterances (Coulthard 1985:6). A definition which has been widely used states that discourse includes text, or, more specifically, that text means discourse without context, while discourse means text with context (see e.g. Hoey 1991:212–213, 2001:11; Widdowson 1979:145, 2000:22, 2004:8). Finally, for some researchers discourse carries ideology: it is “a way of structuring knowledge and social practice” (Fairclough 1992: 3; see also Stubbs 1996:158, 2001:147). Discourse itself is therefore not visible, but it is manifested in texts (Sunderland 2004:7).

The use of the terms text and discourse among researchers thus displays considerable diversity. Similarities do nonetheless emerge. Often, text seems to refer to a more static object, while discourse is usually associated with dynamic qualities: text is considered as a product, while discourse is seen to include processual aspects as well (Brown & Yule 1983:23ff.; Widdowson 1979:148–149).
While it may be appropriate in some studies to view text as the record of discourse or to decontextualise it, it is not altogether clear that such an approach is feasible in a study such as the present one, which stresses the role of contextual conditions and the processing aspects of language use. Accepting that text is a mere decontextualised trace of discourse (cf. Widdowson 2000:22) would amount to admitting that with every reference to text we are missing potentially crucial information. Furthermore, as de Beaugrande (2001:114) asserts, it is very difficult in actual analysis to isolate or decontextualise texts (see also Brown & Yule 1983:25; Halliday 1994:339).

Since analysing text while perceiving it as a static entity completely devoid of contextual factors would be impossible given the approach adopted in the present study, a definition of text and discourse is needed which helps differentiate the two without unnecessarily restricting either. One solution is offered by de Beaugrande:

> It is essential to view the text as a communicative event wherein linguistic, cognitive, and social actions converge, and not just as the sequence of words that were uttered or written. (de Beaugrande 1997:10; emphasis original)

Discourse, on the other hand, is a “set of interconnected texts” (de Beaugrande 1997:21). These definitions seem suitable for at least two reasons. First, both text and discourse are given a dynamic and contextualised status, which corresponds well with the analytical approach of the present book. However, to fully contextualise text in terms of all the aspects listed in the definition may be very difficult. Even de Beaugrande himself (1997:10–11) warns that his view of text is “easy to assert but hard to maintain because of the enormous richness it entails”. Since it would no doubt be impossible in a single study to pay equal attention to all the aspects proposed above by de Beaugrande, it is hopefully a sufficient step towards this direction if text is considered as unfolding in a particular (social) situation with cognitive factors affecting both its production and interpretation, although the main emphasis will be on linguistic aspects.

The definition of discourse as a set of interconnected texts (or a set of interconnected communicative events, if we include the definition of text) is likewise somewhat problematic, because it is not clear from de Beaugrande what it is that actually makes texts interconnected. However, it would not seem illogical to think that the connection between texts could be created by communicative similarities. For instance, spoken and written discourse would include all texts delivered through the spoken or the written medium, respectively, while computer-mediated discourse would cover texts delivered via the instrumentality of computers. The more specific subcategories of these main
categories can also be referred to as discourse: we can have, for instance, face-to-face discourse as a part of spoken discourse, or e-mail discourse as a part of computer-mediated discourse.

The second reason which speaks for the definitions is the fact that they apply to both spoken and written language, which is essential given the material discussed in this book. The analysis of the spoken material in this book starts from “the words on the page”, because it is in a transcribed form, but contrary to some warning voices (e.g. Chafe 1997; Widdowson 2004: 10), using transcribed material does not automatically entail that the material is viewed simply as an undynamic product. In fact, I would claim that there need not be any discrepancy between the decision to use transcriptions of spoken language and the view of text as a communicative event. I find that in this matter it is very helpful to think along the lines of Wilkes-Gibbs, who notes that

The external “text” of conversation is a trace that participants leave behind, but it is a trace of process, not product. It is evidence they use along the way, and evidence we may use as well to learn a great deal about the dynamics of coordinating mutual beliefs in spontaneous performances. (Wilkes-Gibbs 1995: 241)

When the term text is used in the present study to refer to spoken or written language, it should consequently be seen to refer to a dynamic communicative event including linguistic, cognitive and social factors, with the focus of analysis on the first of these, while discourse is the umbrella term for interconnected sets of texts.

1.3 Context

If there exists great variety in the use of the terms text and discourse, the term context is perhaps even more elusive. Fetzer (2004: 3) notes that although context is regularly used in analyses of discourse, it “has remained fuzzy and seems almost impossible to come to terms with” (see also Duranti & Goodwin 1992; Linell 1998: 128; Widdowson 2004: 36). Since the present analysis is based on a contextualised view of text, as was argued above, it is necessary to try to clarify what is meant by context (and contextual or communicative conditions, which are also occasionally used in the present study).

In linguistic studies, it is customary to divide context into three classes, linguistic, cognitive and social (cf. de Beaugrande’s definition of text above). Linguistic context can also be referred to as cotext (see e.g. Brown & Yule 1983: 46; Linell 1998: 128). What the three contexts are perceived to cover may
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vary, as does the extent to which they are utilised for analysis. Furthermore, the contexts may also be subdivided; for instance, some researchers divide social context into two: the “unmarked” social context and the “marked” sociocultural context, with culture providing “a filter mechanism” with which to interpret social context (Fetzer 2004: 10). Linell (1998: 127ff.) offers a very detailed taxonomy of contextual resources, but notes that they can be collapsed into three classes, which he terms cotextual, situational and background assumption resources.

The present study, likewise, adopts the three-partite division of context. Linguistic context refers to the language material surrounding the object being investigated: what is being produced is constrained by what has gone earlier while constraining what is to follow. Cognitive context covers the cognitive factors of communication: not only mental representations and assumptions, but also the cognitive effort required from the communicators. Social context is the broadest: it includes the communication channel, the situation, the communicators and their interactional roles.

As observed above, it is difficult for a single analysis to address all three contexts equally. The different contexts of the texts chosen for analysis will, however, be introduced as fully as possible and utilised to explain the findings, within a set of text (in the chapter summaries) as well as across sets (in the conclusion). However, it is important to keep in mind that although it is possible for us to analytically recognise and list the various contextual features, we should not regard them as separate from the interaction of which they are a part. In other words, texts and contexts have a reflexive relationship, and together they form an indivisible whole (see Linell 1998: 264).

The following three chapters also reflect the three perspectives outlined above (linguistic, cognitive and social). Chapter 2 explores the reasons for communicators’ attempts to achieve coherence with fellow communicators and highlights cognitive aspects as extremely influential in this process. The model of analysis itself, which is purely linguistic, is introduced in Chapter 3. Social context enters the discussion in Chapter 4, where the texts selected for analysis are presented with their contextual situations particularised. It is hoped that the interaction between the three perspectives will be evident in the analysis of the material, even if it concentrates on the linguistic realisations that are the visible result of this interaction.
1.4 Cohesion and coherence

As noted in the beginning of the chapter, the concepts of cohesion and coherence have been widely discussed in text and discourse studies. Researchers mostly agree that there is a difference between cohesion and coherence, but there is considerable disagreement on what actually differentiates between the two. It is generally accepted, however, that cohesion refers to the grammatical and lexical elements on the surface of a text which can form connections between parts of the text. Coherence, on the other hand, resides not in the text, but is rather the outcome of a dialogue between the text and its listener or reader. Although cohesion and coherence can thus be kept separate, they are not mutually exclusive, since cohesive elements have a role to play in the dialogue.

One of the starting points for the present study is the conviction that cohesion contributes to coherence, i.e. cohesion is one of the ways of signalling coherence in texts. However, this issue is of immense importance for the present study and demands lengthier and deeper elaboration than is possible within the confines of this introductory chapter; a thorough discussion will consequently follow in Chapter 2.

1.5 The place of lexis in text and discourse studies

Before discussing the aims of the book, I feel we need to address a very fundamental question: what makes lexis, and lexical relations, important and exciting for text and discourse studies? Why would the use of lexical relations reveal interesting aspects about text, discourse and the organisation of text and discourse? Let us first consider a quotation from Martin, in which he partly addresses our questions but at the same time recognises the fact that the exploration of lexical relations in discourse is still very much a challenge:

This [considering the contribution of lexis to discourse structure] is an ambitious undertaking, in at least two respects. First, lexis has received less attention in functional linguistics than has grammar, and so there is less to build on. And second, the scope of the experiential meaning coded through lexis in any language is vast, which fact alone makes it harder to bring under analytical control. Nevertheless, lexical relations have an important role to play in discourse structure. (Martin 1992:271)
To start answering our questions, we can see that Martin considers the study of lexical relations important for our understanding of discourse structure. The first problem in the analysis of lexis is, however, the fact that the breadth and depth of lexical description do not match those of grammatical description. To quote Sinclair (1998: 3), the tools for lexical analysis remain unrefined, while grammar has gone through “many stages of sophistication”. We will return to this problem in the following section.

The other difficulty, which is also at least partially responsible for the problems in lexical description, is the seemingly obvious fact about lexis, i.e. its richness. Ironically, this potential difficulty is also one of the main reasons for the importance of lexis in discourse. Hoey formulates his viewpoint on this dilemma in the following way:

> It is the flexibility and extent of our lexicon that makes the infinity of syntactic patterns we can produce interesting; it is in part the way we can combine the resultant sentences to make endlessly new patterns of semantic relationships that makes every communication original. (Hoey 1991: 210)

Due to the choice of lexis and the patterns realised by lexis, therefore, every message has the potential to unfold as a unique and original communicative contribution. This certainly sounds daunting: how can something infinitely flexible and endlessly new possibly help us understand the nature of text, discourse and communication? Are we tackling an issue which may in fact be too vast to analytically control and investigate, as Martin seems to suggest?

However, Hoey (1991: 210) argues that “flexibility does not denote anarchy”: he notes that although we cannot make categorical or predictive statements about lexis, we can point out tendencies. It is in other words possible to uncover which forms are most likely to occur in particular contexts of use and make some generalisations on the basis of these tendencies, although it is impossible to say that certain forms will always occur in a particular context.

Consequently, the statements to be made in the present study on lexical cohesion and its use in spoken and written discourse will be probabilistic rather than deterministic; instead of rules and certainties, principles and probabilities will be emphasised (Carter & McCarthy 1999; see also Halliday 1994: 16; Weigand 1998: 27). A probabilistic stance is in effect the only feasible one, since the flexibility of lexical relations, like that of the patterns formed by lexical relations, entail potential novelty and therefore unpredictability. In order to capture the flexibility, however, it is expedient to realise that lexical relations and patterns are conditioned by context, and only by analysing lexical cohesion relations in different texts and contexts is it therefore possible to understand
Chapter 1. Introduction

their role in discourse. It is specifically the unravelling of the relationship between contextual conditions and lexical cohesion relations which is the aim of this book.

1.6 Word versus lexical unit

But it is not only the case that text is lexically signalled; it is also the case that lexis is textually established. (Hoey 1991:220)

As noted in the previous section, lexical description has been lagging behind grammatical description, a fact which is reflected in the units employed for lexical analysis. For a very long time, the orthographic word has been the unit of analysis in lexical studies (Sinclair 1998:2; Weigand 1998:39). In some studies, the term *lexical item* is used, although what it most often refers to is also the single word (Carter 1987:7–8; Halliday 1985:289–290, 1989:63; Martin 1992:290; Nyyssönen 1992).

Sinclair (1998:2, 2004:25, 132) notes two factors which have led to the popularity of the orthographic word: one is the dictionary, where word is used for practical reasons, and the other is the lexical component in transformational grammar, which is word-based. Such has been the effect of these two that although lexicographers have started looking beyond its boundaries, the single word has retained its place as the unchallenged basic unit in many studies dealing with lexis. The practice is evident even in studies which approach lexis from the perspective of various textual strategies. For instance, in Biber’s (1992a) study on referential strategies in a selection of texts, noun phrases containing several nominals have been analysed as several units (referring expressions), and not as single units.

Let us consider for a moment the ramifications of defining the basic unit of analysis as a single orthographic word, especially in the context of a textual (cohesion) study. Such a decision in fact entails that a dynamic textual device, cohesion, would be analysed within the limits of a highly conventionalised system, namely orthography. The units which enter into cohesive relations are clearly not orthographically restricted, however: phrasal verbs and idioms, as well as other “multiple lexical items” can and do take part in lexical cohesion. Martin (1992:293, 326) remarks that the units which form cohesive relations can be realised by a single lexical item, i.e. a word, or by multiple lexical items; for the functioning of cohesion the number of items in a unit is irrelevant (see also Halliday 1994:311).
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One further point in defence of a larger basic unit: if considered separately, words within a unit can enter into sets of relations that are very different from those they enter into when regarded as a single unit (see also Martin 1992: 291). In other words, the words that lexical units consist of can be cohesive with words which the unit as a whole would not be related to, and this would clearly be detrimental to the analysis. The size of the unit is also relevant in terms of the mere number of cohesive items found in a text. With a wider definition of the unit, the number of cohesive items will naturally be smaller than with a narrower definition.

The units whose cohesive relations are examined in the present study will be referred to as lexical units. In addition, those lexical units which are related to other lexical units by cohesion will be referred to as cohesive units (both units can also be referred to simply as units, whenever this cannot lead to a misunderstanding). Throughout the book, it will be argued that lexical cohesion relations are conditioned by context, i.e. they are created, used and interpreted within the confines of their context. Given this conviction behind the analysis, it is natural that the definition of lexical units is also dependent on the text and the context in which they are used. Following Nyyssönen (1992) this could perhaps be called a discourse-based approach to lexis, here applied specifically to lexical units (see also Hoey 1991: 220).

Let us see what the above means in practice. The actual relations between lexical units will not be discussed in detail at this point, because that will have its place in the introduction of the method of analysis in Chapter 3. However, we can here take a quick look at the material and note that some of the units recognised by the analysis are realised as single orthographic words, thus posing very few problems for the analyst in terms of the size of the unit. But the same glance tells us that a good number of the units are multi-word. In the following, four of these are considered at greater length in order to illustrate the importance of the definition of the basic unit of analysis.

Phrasal verbs and idioms may be the most straightforward examples of multi-word units. Thus, when established is repeated as set up in a text, it is not difficult to justify their relation, although the former is realised as a single orthographic word and the latter as two. The same is true when it comes to idioms: when we find a bee in his bonnet used repetitively in a text, a cohesive link is established between the multiple occurrences of the idiom in its entirety. If we were to break the idiom into single orthographic words, it would not only lose its meaning, but the parts could also be related to units that the idiom as a whole is unrelated to, such as various insects or types of headgear.
It is clear that for an analysis of cohesion the meaning of the unit must outweigh the conventions of orthography, and this also applies to units which cannot be classified as phrasal verbs or idioms. For instance, if we have a text which has several occurrences of the unit *cultural determinism*, it would be quite hazardous to analyse it as two distinct words. *Cultural* on its own, with its wide meaning, could enter into relations with a great number of other words, whereas when it is used together with *determinism* its meaning is defined by this co-occurrence, and as a whole the unit is related to, for instance, the other social theories discussed in the text. Similarly, units such as *social services, Standard English, the working people and out of fashion* are analysed as single lexical units.

Let us conclude this discussion by considering an instance which illustrates the importance of the meaning of the unit as a whole. The relevant extract is presented below (with some intervening text deleted, marked with …). The extract comes from a prepared speech (a university lecture) and the potential differences between the written and spoken forms of the unit make it even more interesting:

*Carbon dioxide* is the most soluble of the gases because as it dissolves it doesn’t just go through a physical solution it goes through a chemical conversion […] This system is a dynamic equilibrium. If you put more *CO two* into the system the concentrations of all of these go up…

Because the text we see is a transcription of an audiotape, we cannot know whether the unit that the lecturer first refers to as *carbon dioxide* and a while later as *CO two* was actually so written in his lecture notes, because he may have simply written it as *CO₂*, but we do know that regardless of which spoken form he uses, he is talking about the very same chemical substance. A cohesive analysis that fails to recognise a relation between *carbon dioxide, CO two* and *CO₂* would obviously be quite an imperfect one.

The above discussion and examples have hopefully shown why an analytical approach based on orthography, i.e. using a single orthographic word as the unit of analysis, would be less than ideal for a study of cohesion. Instead, the analysis presented in this book rests on a more fully contextualised view of lexical units, produced, interpreted and defined in their context of use.

1.7 Aims and outline of the book

The aim of the study was quite generally presented in the first section of this chapter as twofold: to develop a model of analysis capable of capturing all cohe-
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sively meaningful lexical relations in texts, and to find out if and how their use varies depending on the conditions under which the texts have been produced. The purpose of this section is to clarify and explicate the central themes of the study. Some main arguments from previous research on cohesion and coherence must be taken up here in order to provide sufficient background for the presentation of the objectives of the present study, but it should be noted that the discussion in this section will be very general. The viewpoints introduced here will be considered at length in Chapters 2 and 3.

As was already noted in the first section of this chapter, several analytical models for studying lexical cohesion have been introduced. In many studies, however, the scope has been restricted to cover only a part of lexical cohesion, and some lexical relations may have been excluded from attention. Some researchers, on the other hand, have concentrated on classifying in great detail all possible relations that can exist between lexical items. Their models of analysis can consist of extremely complicated apparatuses of categories, subcategories and sub-subcategories of relations, making these classifications almost impossible to use as analytical tools in a study of longer authentic texts.

Despite the great number of lexical cohesion studies, there is considerable agreement among researchers as regards certain basic aspects of lexical cohesion. Many concur that lexical cohesion consists of two different types of relation. Halliday and Hasan (1976) call these reiteration and collocation. The term repetition is also used in many studies instead of reiteration: regardless of which term is used, this relation involves the repetition of a lexical item, either identically, or in a modified form (synonymic expression, generalisation, specification, co-specification; contrast is also a special case of reiteration). Items related by reiteration may also be referentially related, but this is not obligatory. The relation of collocation, on the other hand, is an associative meaning relationship between regularly co-occurring lexical items, i.e. ‘words that keep each other company’.

Several researchers have noted that collocation is a subtler relation than reiteration/repetition. In fact, the category of collocation is absent from many studies of lexical cohesion exactly because it is so difficult to define and analyse. Reiteration is usually considered to be “easier” than collocation, both for language users and language analysts, and its function is also often deemed clearer than that of collocation. Because many studies therefore concentrate on studying reiteration and overlook collocation, actual analyses in which the use of reiteration and collocation would be systematically compared are quite difficult to find.
I would like to emphasise that none of the above equals saying that analyses based on reiteration relations are not capable of revealing important aspects of the functioning of lexical cohesion in discourse. On the contrary, some analyses built on reiteration relations have been able to shape our thinking about lexical cohesion in quite fundamental ways. That the present study has a different starting point and also deals with collocation relations is a reflection of the fact that the functioning of these relations has not yet been as comprehensively investigated. In other words, if there is a gap in our understanding of lexical cohesion, it is more likely to be found within the domain of collocation.

Chapter 3 will address the first objective of the present study: it is about developing the model of analysis. A detailed discussion of various models of lexical cohesion will be followed by an attempt to uncover possible underlying similarities between them, in order to help build the model of analysis. The suggested classification will be illustrated with several examples, and special attention will be paid to the analysis of collocation relations.

In the section above dealing with cohesion and coherence, it was mentioned that the present study (like other studies on lexical cohesion) is quite explicitly built on the belief that cohesion contributes to coherence, i.e. that cohesive devices in texts have a role to play in signalling the unity of texts; how this is actually manifested in texts is the topic of Chapter 2. However, it is interesting and perhaps even slightly disturbing that while researchers agree that cohesive devices are meaningful to a text’s coherence, there actually are studies to be found which indicate that the relation between cohesion and coherence may not be that straightforward. For instance, Parsons (1990) and Wessels (1993) report that a higher number of cohesive devices did not result in a higher quality of coherence, i.e. that readers did not find that the amount of cohesion in a text was significant for its perceived coherence.

As I said, this is disturbing but interesting: it is disturbing because it goes against the expectations and speculations of most cohesion analysts, but it becomes interesting when we look at the details of these studies more closely. Both Parsons and Wessels use student writing as their material; this is of course perfectly legitimate, since learning to use cohesion in both speech and writing is an essential aspect of language learning, and there is therefore also a need for studies of cohesion in the speech and writing of students. However, the students in both of the studies produced their writing under strictly controlled conditions: they all wrote an essay on the same topic in the same place and had the same amount of time at their disposal. There was consequently no difference whatsoever in the conditions governing the production of the material. I believe that this is a highly significant factor, and that the results obtained in the
two studies are less surprising if we take it into account. The findings of these
studies should therefore not be regarded as evidence for the unimportance of
cohesion; what they tell us is that cohesion may not differentiate between the
perceived coherence of texts produced under identical conditions. But cohesion
is no less meaningful if it is “only” able to differentiate between texts produced
under different conditions.

It is now possible to formulate the main research questions of the present
study:

- What types of lexical relation have been included in previous analyses,
  and what kind of classification would be best for the purposes of the
  present study?
- What kind of variation can we find in the use of lexical cohesion in the
  material of the present study?
- What are the differences between the use of reiteration relations, on the
  one hand, and of collocation relations, on the other?
- Do the differences mostly exist between spoken texts and written texts, or
could they be better explained by other features and characteristics?
- How can the differences in the use of lexical cohesion between the
texts be related to the communicative conditions under which the texts
were produced?
- What can we say about the role of cohesion in the organisation of dis-
course?
- What does the use of cohesion in the four groups of texts reveal about the
  role of cohesion in the communication process?

The rest of the book is organised as follows. Chapter 2 is a discussion on the
relationship between cohesion and coherence and their role in communica-
tion. Chapter 3 provides an answer to the first objective of the present study: it
deals with the building of the model of analysis. In Chapter 4, we take a close
look at the differences and similarities between spoken and written discourse
and introduce the material of the study. The rest of the book, Chapters 5 to 9,
presents the analysis of the material, the findings and the conclusions.
CHAPTER 2

Cohesion, coherence, collaboration

2.1 Introduction

The close interaction of cohesion and coherence counsels a science of texts as processing events to highlight the distinction between the two.

(de Beaugrande 1997:14)

This chapter is devoted to an exploration of the concepts of cohesion and coherence. It was already pointed out in the introductory chapter that they are of fundamental importance in the present study. Indeed, it would not be an overstatement to note that the relationship between cohesion and coherence, and their role in discourse, are the cornerstones on which the analysis rests. It is therefore appropriate to dedicate a chapter to these two concepts, which have been discussed, debated and disputed like few other concepts in discourse studies. After first surveying various definitions of cohesion and coherence, the chapter concentrates on the roles of cohesion and coherence in communication. The chapter concludes with a consideration of the function of cohesion in the collaboration between communicators in dialogic and monologic discourse.

2.2 Cohesion and coherence: Independent but intertwined

Let us start with Halliday and Hasan, who in 1976 introduced the concept of cohesion in *Cohesion in English*. They use it to refer to relations of meaning that exist within a text and that define it as a text (Halliday & Hasan 1976:4). The definition is thus a semantic one, and like all the components of the semantic system cohesion is realised through grammar and vocabulary. Cohesion can therefore be divided into grammatical and lexical cohesion. Grammatical cohesion includes devices such as reference, substitution, ellipsis and conjunction, while lexical cohesion is divided into reiteration (repetition, synonymy etc.) and collocation (co-occurrence of lexical items) (Halliday & Hasan 1976).
Halliday and Hasan emphasise that grammatical and lexical elements become cohesive only when they are interpreted through their relation to some other element in the text, i.e. no single element can be cohesive by itself (Halliday & Hasan 1976:31–33). But when two elements in a text are related, a cohesive tie is formed, contributing to the unity of the text.

Cohesion in English includes an exhaustive treatment of grammatical cohesive devices, at the expense of that of lexical cohesion, which receives a considerably more limited discussion. This is surprising in view of the fact that grammatical ties in a text can be, and usually are, easier to detect than lexical ties, which can be very subtle. Halliday and Hasan note themselves that the effect of grammatical cohesion is clearer than that of lexical cohesion: reference items, substitutes and conjunctions clearly presuppose another element for their interpretation, whereas lexical items carry no indication of their possible cohesive function (Halliday & Hasan 1976:288).

Some researchers have pointed out that Halliday and Hasan’s concentration on grammatical cohesive devices, and more generally on explicit, overt markers of cohesive relations, more or less ignores the role of the underlying semantic relations in a text. It is worth noting, though, that the aim of Halliday and Hasan’s study is to examine the linguistic resources that can be used to mark cohesion, rather than to find out how texts are understood, and as a survey of these resources Cohesion in English has proved to be an indispensable tool. (For critically favourable views see, for instance, Brown & Yule 1983:195–197; Enkvist 1978, 1985a; Hoey 1983:184 1988:155; 1991:7; Lindeberg 1985.)

The viewpoint presented by Halliday and Hasan which has been most severely criticised over the years is their insistence on seeing cohesion as a necessary property for the creation of unity in texts. Several researchers, confident that overt markers of cohesion were not enough to make a text connected, hurried to demonstrate that cohesion was not necessary at all to make a text appear a unified whole. What mattered, they maintained, was the unity or coherence between the propositional units in the text: without coherence, a set of sentences would not form a text, no matter how many cohesive links there were between the sentences (de Beaugrande & Dressler 1981:3; Brown & Yule 1983:195; Ellis 1992:148; Enkvist 1978; Hellman 1995; Lundquist 1985; Sanford & Moxey 1995).

Example (1) comes from Enkvist (1978). Cohesive elements, which in this example are all instances of repetition, are in italics:

(1) The discussions ended last week. A week has seven days. Every day I feed my cat. Cats have four legs. The cat is on the mat. Mat has three letters.
Examples such as (1) demonstrate that a set of sentences, despite abundant cohesive ties, does not form a unified whole if coherence between the propositions is non-existent; in Enkvist’s words the text is *pseudo-coherent*. By contrast, we can consider example (2), presented by Widdowson (1978: 29), which has been used to demonstrate that coherence can be created without cohesion:

(2)  
A: That’s the telephone.  
B: I’m in the bath.  
A: O.K.

There is no surface textual cohesion in this short text, but the three utterances still form a plausible whole, because a situation can easily be imagined in which their propositional content would make sense together, i.e. cohere. Consequently, it was concluded that overt markers of cohesion are only of secondary importance in the creation of unity in text, compared to the covert aboutness created by coherence (Enkvist 1978, 1990; Widdowson 1978: 28–29).

There seem to be, however, apparent difficulties in finding data that would show coherence without cohesion. As a result, the same examples have been used in several studies to illustrate the lack of surface cohesive elements in a coherent text. For instance, Brown and Yule (1983: 196) and Lautamatti (1990) make use of Widdowson’s constructed example quoted above. It would therefore appear that although coherence without cohesion is a perfectly possible phenomenon, it may actually be quite uncommon, at least in real language data. Short texts such as example (2), whether constructed for the sake of an argument or extracted from a real conversation, may well make sense without textual cohesion, but the longer the text, the more likely it is that it will also show cohesion.

The importance of cohesion, if compared with coherence, may have been subjected to criticism, but the validity of the concept of cohesion and its contribution to the unity of discourse have not usually been challenged. Even the critics tend to agree that cohesion plays a role, although a minor one, in creating unity in discourse. However, there are researchers who are ready to dispute the whole concept of cohesion. Morgan and Sellner (1980) claim that examples such as (1) and (2) above prove that cohesion actually has little if any importance or explanatory value in text studies. Carrell (1982) agrees with Morgan and Sellner and further maintains that cohesion is only an illusion; an illusion created by a text’s coherence.

Brown and Yule (1983) do not actually claim that cohesion is without any explanatory value, as long as it is distinguished from “underlying semantic relations”. They do suggest, however, that an obvious test for cohesion would be
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to "take any narrative text and, leaving the first sentence..., scramble the next few sentences". They anticipate that readers would not find the scrambled collection a text anymore, despite the formal markers of cohesion still present, and thus it would be shown that cohesion cannot guarantee identification as text (Brown & Yule 1983: 197–198).

Brown and Yule’s suggestion of scrambling texts is carried out by van Peer (1989), who analyses short horoscope and anecdote-like gossip texts, each consisting of three sentences. These are reorganised for the analysis so that the following result, for instance, is obtained:

(3) Mick Jagger recently preferred to skip his birthday celebration. “He is shocked he is already forty”, she said. His mother revealed why.

As van Peer’s informants, hardly surprisingly, do not find the manipulated texts as coherent or as well-constructed as the original texts, he concludes that when the order of the sentences is tampered with, the cohesive devices are still there in the linguistic surface structure of the text; nevertheless its textuality will be judged as significantly lower than that of the original texts... The experiments reported here must be taken as a falsification of the theoretical claim that the presence of linguistic cohesion is a necessary precondition to the descriptive use of the term text. (van Peer 1989)

The philosophy behind an analysis such as this easily escapes the reader since, applied more widely, we could for example have students of narrative trying to examine stories where not one sentence has been left in its original place. A deliberate scrambling of an existing text into a non-text may indeed tell us something about the importance of linearity in discourse, but what it can tell us about the role of cohesion remains unclear. I would have to agree with Halliday who notes that “changing the order of sentences in a text is about as meaningless an operation as putting the end before the beginning” (Halliday 1994: xxi).

It is apparent that what some of the critics of cohesion present as evidence must be considered unsatisfactory. Consequently, the prevalent view among researchers is that there are elements in discourse which have the capability of signalling connections and unity. Furthermore, even if Halliday and Hasan were wrong in insisting on cohesion being necessary and sufficient for creating unity in texts, it can be asked whether their book does not indeed raise more interesting questions to investigate about cohesion and coherence than this particular point. Instead of trying to decide which is more important or more necessary for guaranteeing identification as text, we will see that both
cohesion and coherence can be said to have a role to play in contributing to the unity in discourse. It is therefore worthwhile to consider more closely some of the definitions given for cohesion and coherence by previous research, because this will reveal how the two concepts and their role in discourse have been perceived.

Let us start with the definition provided by Halliday and Hasan, which, however, is slightly unclear. They say that cohesion means the coherence of a text with itself, while coherence is the coherence of the text with its context of situation (Halliday & Hasan 1976: 23). In addition, they also use the term texture, which refers to the "property of being a text" (Halliday & Hasan 1976: 2). What seems to be clear, however, is that to Halliday and Hasan the range of cohesion, being limited to the text, is more restricted than that of coherence, which also involves the context.

For de Beaugrande and Dressler, cohesion and coherence represent two of their seven standards of textuality. In their model, cohesion

subsumes the procedures whereby the surface elements appear as progressive occurrences such that their sequential connectivity is maintained and made recoverable. (de Beaugrande 1980: 17–21, 1984: 37–40, 1997: 13–15; de Beaugrande & Dressler 1981: 3–10)

Coherence, on the other hand,

subsumes the procedures whereby elements of knowledge are activated such that their conceptual connectivity is maintained. (de Beaugrande 1980: 17–21, 1984: 37–40, 1997: 13–15; de Beaugrande & Dressler 1981: 3–10)

Thus, de Beaugrande and Dressler treat cohesion and coherence as two clearly separate phenomena, without one having an influence on the other. Conversely, if we consider the statement by Enkvist (1990) that “the difference between cohesion and coherence … can be said to lie in the eye of the linguist rather than in language as such”, it may seem pointless to try to argue that there is a difference between the two. If either of these lines of thought is adopted, namely that cohesion and coherence are kept completely distinct, or that they are difficult to tell apart, there does not seem to be much we can say about their relationship and about how they may possibly have an influence on each other. However, the question can also be approached from a somewhat different perspective.

To start with, we can notice that the difficulties in defining cohesion and coherence mainly concern coherence. There is more unanimity regarding cohesion, because most researchers would agree with Halliday and Hasan (1976)
in regarding cohesion as the grammatical and lexical elements on the surface of a text which form relations that connect parts of the text.

Let us therefore turn to coherence, and to those views which regard cohesion and coherence as separate but related concepts. Hasan (1984) defines coherence as a phenomenon capable of being measured by the reader or the listener of a text. The perceived coherence depends upon the interaction of cohesive devices, which Hasan calls *cohesive harmony*; the denser the cohesive harmony of a text, the more coherent it will be judged. Some texts can thus be considered by the receivers as more coherent than others. Some of Hasan’s claims about the decisive importance of cohesive harmony have been shown to be overstated, whereas many agree on the general idea, namely that coherence is not inherent in text as such, but rather it is the result of the interpretation process and ultimately depends on the relation between the receiver and the text; and that cohesive devices predispose receivers to find the coherence (Dahl 2000; Hoey 1991; Hoover 1997; Martin 1992: 371–372; Parsons 1990, 1991; Thompson 1994).

It follows that some texts may be coherent and meaningful to some receivers but uninterpretable to others. This has led some researchers to postulate that it is really background knowledge that is the predominant factor in the receiver’s ability to perceive coherence. In other words, coherence can be perceived and communication is more likely to be successful if the receiver’s background knowledge is sufficient for making an interpretation. Successful interpretation thus involves both the text itself and the knowledge the receiver brings into it (Enkvist 1985b; Lundquist 1989; Shiro 1994; van de Velde 1985, 1989). To illustrate this point, let us consider the following examples, taken from Blakemore (1992: 35–36):

(4) The river had been dry for a long time. Everyone attended the funeral.

(5) If a river has been dry for a long time, then a river spirit has died. Whenever a spirit dies there is a funeral. The river had been dry for a long time. Everyone attended the funeral.

For most Western listeners, with their background knowledge, (4) would probably not be coherent nor understandable, whereas (5) is more likely to be understood. By contrast, speakers of Sissala, a Niger-Congo language of Burkina Faso and Ghana, with their background knowledge, would find (4) (or rather the Sissala version of (4)) perfectly coherent and understandable, whereas (5) would convey excessive information (Blakemore 1992: 36, 173).
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It seems that following the views presented above enables us to make a distinction between cohesion and coherence. Cohesion can be regarded as a property of the text, while coherence depends upon the communicators’ evaluation of the text. Cohesive devices, being on the surface of the text, can be observed, counted and analysed and are therefore more objective. Coherence, on the other hand, is more subjective, and communicators may perceive it in different ways (see also Bublitz 1988: 32, 1994, 1998; Givón 1995; Hoey 1991: 12; Seidlhofer & Widdowson 1999; Stoddard 1991: 18–20; Widdowson 2004: 72). Although cohesion and coherence will thus be kept separate, it is important to realise that the two phenomena are nonetheless related. There is an interplay between them in that the presence of cohesive devices in a text facilitates the task of recognising its coherence. In conclusion, it is firmly believed in the present study that successful communication depends on both cohesion and coherence, which are simultaneously independent and intertwined.

This brings us to the question of how, in a communicative situation, this kind of a profitable interplay between cohesion, coherence and the communicators can be achieved. Answers to this question can and have been sought within the frameworks of the co-operative principle, relevance theory and collaboration theory. These will be dealt with in the following two sections.

2.3 Cohesion and coherence in communication

Let us start this section by returning to some of the criticism of cohesion presented by Brown and Yule (1983). Somewhat inadvertently perhaps, they provide us with a good starting point by asserting that

hearers and readers do not depend upon formal markers of cohesion in order to identify a text as a text... those formal realisations which are available to, but not necessarily utilised by, the speaker/writer in constructing what he wants to say. (Brown & Yule 1983: 198)

The point about cohesion as a guarantee of identification of a text was already discussed in the previous section, but the other point Brown and Yule make is more interesting and relevant here. They are obviously of the opinion that speakers and writers consciously choose if and how they want to utilise cohesive devices in the construction of their messages. When we relate this to the idea that producers typically want to help receivers to decode their messages accurately, this point becomes highly relevant for the present study. The producer’s task, consequently, is to try to give the receivers indications of the coherence of
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the message to help them interpret the message so that it seems coherent for them as well; also cohesive devices are available to the producer for this purpose (Bublitz 1994, 1998; Bublitz & Lenk 1999; Charolles 1989; Ellis 1983, 1992: 107; Enkvist 1985b; Fraurud & Hellman 1985; Gumperz 1982; Hatakeyama et al. 1985; Hoover 1997; Lundquist 1989; Seidlhofer & Widdowson 1999; Shiro 1994; van de V elde 1985, 1989).

The view of cohesive devices as a tool available to producers for signalling coherence is linked to a general representation of discourse production by Frederiksen (1977). He maintains that there are four levels in discourse production: message generation, staging decisions, cohesive decisions and sentence generation. At each level, different communicative decisions lead to different types of coherence in the resulting message. At the level of cohesive decisions, cohesion is used to “signal the coherence of the propositions which constitute the message”, which results in message cohesion (Frederiksen 1977).3

Although Frederiksen is interested in discourse production, which means that he concentrates on the produced message and on the role of the producer, his ideas can also be related to a more dynamic view of communication. It is possible to extend these ideas to embrace the entire communication process and especially the relationship between the producer and the receiver. For instance, it has been noted that the structure of a sentence can reveal in “systematic and theoretically interesting” ways how the producer views the receiver’s state of knowledge at a particular time (Lambrecht 1994). In other words, what producers consider contextually appropriate propositions, and how these are marked for information and cohesion and finally formed into sentences and utterances, not only tell us about message generation but also about the relations between the producer and the receiver under different communicative circumstances.

Interestingly, as has been observed by several researchers, in actual communicative situations problems between communicators seldom arise. That is, communicators appear to invariably presume that their fellow communicators are operating according to the principles outlined above in the construction or interpretation of messages. This finding has been explained by the fact that communicators are following the co-operative principle suggested by Grice (1975), which means that they are adhering to the conversational maxims (Quality, Quantity, Relation, Manner).4

Of the four maxims, that of Relation (Relevance) has been given a special status; the other maxims may be flouted, for various reasons, but relevance seems to be something that communicators expect to find behind the messages of their fellow communicators.5 It can therefore be argued that rele-

Both the co-operative principle and relevance theory have been criticised for not taking into account social or other contextual factors affecting communication, and for assuming rather simplistically that communicators always share a common goal (Blakemore 1992: 33; Linell 1998: 11). The co-operative principle is also almost completely producer-oriented, relevance theory slightly less clearly so. More recently, researchers have started to suggest that more attention should be paid to the role of the receiver in communication and to the collaborative nature of communication. These views will be discussed in the following.

2.4 Towards a collaborative view of cohesion and coherence

That it is not a sufficient and satisfactory solution to look at the communication process solely or mainly from the perspective of the producer forms the starting point of several recent works on language in communication. The two quotations below, one from Brown and the other from Clark, point in this direction:

An account of communication which assumes that only the speaker’s intentions need to be taken into account is as inadequate as one which assumes that speaker and listener will share common goals and a common context.

(Brown 1995: 24)

Language use is really a form of joint action, … carried out by an ensemble of people acting in coordination with each other. … Doing things with language is different from the sum of a speaker speaking and a listener listening. It is the joint action that emerges when speakers and listeners – or writers and readers – perform their individual actions in coordination, as ensembles.

(Clark 1996: 3)

Both Brown and Clark emphasise the fact that communication requires two parties: it is therefore basically a collaborative process. The active role in communication of both the producer and the receiver constitutes one of the main arguments of the proponents of the collaborative view of communication. They assert that communicators actively collaborate to ensure that under-
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Linell (1998) proposes that the models which emphasise the interactive and collaborative nature of communication could be grouped under the general heading of dialogism. Although varied in their approaches, dialogic models view communication as a collaborative accomplishment, whereas monologic models would rather stress the role of the (current) speaker or writer in the production of discourse. Monologists see communication as “a process between individuals”, while for dialogists, communication is about “individuals in dialogue with partners and contexts” (Linell 1998: 8). In this work I will use both terms, collaboration and dialogism, noting that the former is slightly more specific and the latter more general, so that it actually covers the former.

The collaboration between producers and receivers is clearly visible in conversation, in which participants actively cooperate to achieve coherence. Collaboration can be realised for example as feedback between participants in the form of completions, clarifying questions or other types of acknowledging that the participants have understood what their fellow communicators were saying (see for example Anderson et al. 1997; Brown 1995: passim; Coates 1995; Geluykens 1999; Traxler & Gernsbacher 1995; Wilkes-Gibbs 1995).

However, the above-mentioned signals are by no means necessary for successful collaboration. In fact, one might argue that a continuous flow of communication is even in itself a proof of collaboration, without overt signals of cooperation – overt in the sense that their purpose clearly is to provide feedback. These signals have so far been more fully investigated, which is quite understandable considering that collaboration theory is a very recent explanatory model of communication. Although they have not yet received similar attention, more covert signals may equally well contribute to collaboration. In terms of cohesive devices, following the view adopted in this book as regards the contribution of cohesion to coherence, it is possible to postulate that cohesive devices can also act as signals of collaboration. Cohesive devices have not yet been analysed from a collaborative perspective, but there are some suggestions that they might profitably be included in such analyses, for instance by Dickinson and Givón, who state that

During face-to-face communication, speakers-hears are engaged simultaneously in a great number of tasks; most prominent among them are the management of cooperative interaction between the interlocutors, and the
processing of coherent information-flow. It seems altogether reasonable that
the two tasks are not totally divorced from each other.

(Dickinson & Givón 1997; see also Linell 1998: 182)

In the collaborative process of a conversation, therefore, the way in which par-
ticipants use cohesive devices can be a signal of their attempts to successfully
interact with their fellow participants.

Although it is likely to be more apparent in the joint process of produc-
ning a conversation, collaboration is not restricted to dialogue; it is also present
in writing and monologic discourse. The producer – speaker or writer – “pro-
duces her topics and arguments with some sensitivity to how a potential re-
sponder, a ‘virtual addressee’, may react” (Linell 1998: 267). More specifically,
monologic collaboration occurs through a cognitive negotiation between the
producers’ own mental representation of the message and their mental rep-
resentation of what they assume the receivers know (Anderson 1995; Gerns-
bacher & Givón 1995; Wilkes-Gibbs 1995). Linell argues that monologic dis-
course is thus “intrapersonally dialogical, though interpersonally it exhibits
only limited dialogicality” (Linell 1998: 267).

In other words, during the production of monologic discourse speak-
ers/writers match their own representations of the message with that of the
(implied) listeners/readers, trying to ensure that they will be able to interpret
the message. The collaboration is thus in the first place the responsibility of the
producer, but the receiver can also make the effort more collaborative by recogn-
nising the attempts of the producer and by taking collaborative signals into
account when interpreting the message. Let us close this point with a quotation
from Linell:

The production of meaning takes place in interactions, on the one hand in
the writer’s struggle with thoughts and words in conceiving and formulating
the text, and in her interplay with the text so-far produced, and, on the other
hand, in the reader’s efforts in assigning meaning to the text and in using the
text as a vehicle, as a means of activating semantic potentials of words and text
chunks, in the service of creating an understanding which somehow fits the
contexts given and the purposes which are relevant for him. (Linell 1998:268)

As in dialogue, collaboration in monologue can take quite visible forms: for
example, questions in written texts which require answers by readers are clear
and overt attempts at collaboration by writers. But just as in dialogue, collab-
oration in monologue need not always be so visibly expressed. Sanford and
Moxey (1995) maintain that in a well-written text the writer “makes use of the
current mental state of the reader” and utilises linguistic devices to “manipu-
late the mind of the reader”. I read their postulation as implying that the devices used for “manipulation” can also include cohesive devices.

Considering the use of cohesion in collaborative or dialogic terms, then, we can say that while the producer is trying to provide the necessary linkage in order to lead the receiver towards the interpretation of the message, the receiver is trying to identify this linkage to arrive at an interpretation. The receiver can assume that the producer is making use of linguistic devices, in our case cohesive devices, that enhance the receiver’s ability to keep up with the discourse. The producer and the receiver thus collaborate to keep the communicative process going. In dialogue, collaboration takes place in the here-and-now of the production of the conversation, as the communicators do their best to coherently interact. In monologic discourse, collaboration is realised at two stages, as it were. At the production stage, the producer interacts with the implied receiver with the help of mental representations, while at the interpretation stage the receiver can take this collaboration into account and look for its signals in the message (see also Caplan 1992: 361; Ellis 1992: 146; Hobbs: 1983; Seidlhofer & Widdowson 1999).6

At this point, a note concerning the terms used for communicators may be in order. Fetzer (2004: 236) suggests that in dialogical analyses terms used in sentence grammar, such as speaker and hearer, should be replaced by coparticipant (and I assume that writer, reader, producer and receiver are likewise problematic). The suggestion is quite valid, in that coparticipant explicitly draws attention to the collaborative nature of communication. However, while the term could easily be used in analyses of spoken discourse (and especially dialogue), it is more difficult to see the benefit it would offer to analyses of written discourse (or spoken monologue). In the present book it will therefore only be used in connection with face-to-face conversation, together with speaker. When discussing the spoken monologues, speaker and listener are used to refer to the communicative parties, and as for written discourse, writer and reader are utilised. All terms, regardless of whether or not they have been used in monological analyses, are here used in the collaborative sense outlined in this section.

As was the case with the co-operative principle and relevance theory, the collaborative or dialogical view of communication can similarly be regarded as somewhat idealistic, or as Linell (1998: 276) phrases it, it would be “foolish to argue simplistically that the world of human experience is characterized by a maximal degree of dialogicality”. One might perhaps even argue that it is simplistic to assume that collaboration or dialogicality automatically imply agreement between the communicative parties (see also Blommaert 2005: 44).
Indeed, it may be more important to consider and even attempt to manipulate the fellow communicator(s) in a situation of disagreement. Nevertheless, collaboration theory brings out the cognitive aspects of the communication process, while stressing the role of the producer and the receiver alike. For answering the difficult question of how it is possible to achieve a successful interplay between cohesion, coherence and communicators, collaborative or dialogical models therefore appear extremely suitable, and they can consequently be used in our effort of trying to understand the demands, but also the possibilities, of a communicative situation.

To conclude this chapter, let us return to the main objective of the present study, which is to find out how communicative conditions are reflected in the use of lexical cohesion. We have seen that cohesion can be regarded as a powerful tool in discourse production and interpretation, whose more or less successful use can even be claimed to differentiate between effective and failed communication. Investigating its use in four different sets of texts seems to be an interesting and worthwhile undertaking, because it will provide us with an understanding of the different cohesive strategies used under different communicative conditions. Analysing these strategies will, it is hoped, contribute toward our understanding of how the communicator can “take the perspective of the other and adapt his or her message accordingly” (Ellis 1992: 145).

Notes

   - intentionality: the producer’s attitude that a text should be cohesive and coherent;
   - acceptability: the receiver’s attitude that a text should be cohesive and coherent;
   - situationality: all the ways in which a text is relevant to current or recoverable situation;
   - intertextuality: the ways in which a text presupposes knowledge of other texts;
   - informativity: the extent to which text events are uncertain, new or surprising.

   We can see that two of these standards, intentionality and acceptability, are closely related to cohesion and coherence in that the producer and the receiver, respectively, have to regard the text as cohesive and coherent for these two standards to be fulfilled. The contribution of cohesion and coherence to the creation of textuality thus seems to be more considerable than that of the other five standards, none of which is expressly required for another standard to be met.

2. I want to stress here that I say “typically”, not “always”. Although I would claim that the producers (and co-producers, in the case of conversations) of the texts studied for the present study do their best to convey their messages in such a manner that the receivers will
be able to understand them, I am by no means implying that this is always the case. The use of cohesive devices in texts meant to be misunderstood (if such texts can be reliably identified or indeed found; jokes might offer some material here, of course) is a topic broad enough to warrant a separate study, however. In the present study, therefore, we will concentrate on the use of cohesion from the perspective of the service they can perform in the communication process.

3. The communicative decisions and types of coherence at the other three levels are the following:

a. Message generation: generating a set of to-be-communicated propositions and illocutionary functions which are coherent and contextually appropriate; results in propositional and functional coherence

b. Staging decisions: staging a message by sequencing, topicalization and marking information as old (given) or new; results in thematic coherence

c. Sentence generation: generating sentences that express message information and are appropriate in a communicative situation; results in within-sentence coherence (Frederiksen 1977).

It is not difficult to identify similarities between Frederiksen's ideas and the standards of textuality of de Beaugrande and Dressler mentioned earlier. The importance of what Frederiksen calls thematic coherence has also been stressed by Grice (1975) who talks about "the communication contract" between communicators. The communication contract is manifested when the producer constructs the message and the receiver interprets it according to the principle that what is marked as given information the receiver already knows, and that new information really is new to the receiver (see also Clark 1977; Sanford & Garrod 1981:93).

4. The co-operative principle states that communicators should make their contribution such as is required, at the stage at which it occurs, by the accepted purpose or direction of the talk exchange in which they are engaged. The maxims are expressed as follows:

   *The maxim of Quality*: try to make your contribution one that is true; do not say what you believe to be false; do not say that for which you lack adequate evidence.

   *The maxim of Quantity*: make your contribution as informative as is required for the current purposes of the exchange; do not make your contribution more informative than is required.

   *The maxim of Relation*: make your contributions relevant.

   *The maxim of Manner*: be perspicuous; avoid obscurity; avoid ambiguity; be brief; be orderly.

5. That this usually seems to be the case can also be noticed in the texts analysed for the present study. Face-to-face conversations provide us with good material, since in them the possibility for immediate feedback is an integral part of the communication process. In the conversations analysed, there are no instances of a participant exclaiming to another participant: "now why did you start talking about that?" (or anything else to that effect). This suggests that communicators do indeed expect that their fellow communicators are
being relevant and try to interpret their messages accordingly. However, it is not possible to deduce on the basis of this fact that the interpretation of the message is automatically successful, only that communicators accept their fellow communicators’ contributions as relevant. As Linell (1998:100) notes, “a contribution to dialogue is … evidence of (some attempt at) understanding”, while “at the same time, it represents a continuation of the social interaction”.

6. When we are talking about the interpretation of messages, the notion of inferencing should also be mentioned. Inferencing refers to the process by which the receiver fills in information which is not explicitly present in the message but which can be inferred from what is present (Clark 1977; Enkvist 1985a; Johnson-Laird 1983; Manktelow & Over 1990). Closely related to inferencing are mental models, which embody various configurations of knowledge. Frames state which elements go together; domains are background knowledge structures; schemas reveal how elements and events are linked; plans direct elements toward actual goals; and scripts show which roles and actions the participants should engage in (de Beaugrande 1980; van Dijk 1977b; van Dijk & Kintsch 1983; Fillmore 1985; Just & Carpenter Eds. 1977; Lakoff 1987; Langacker 1987; Minsky 1977).

The coherence relations introduced by Hobbs (1979, 1983) are also associated with inferencing. Hobbs maintains that a relatively limited set of coherence relations can explain how receivers interpret and understand messages (see also Bateman & Rondhuis 1997; Dahlgren 1992; Sanders 1997; Sanders, Spooren, & Noordman 1992; Spooren 1997).
CHAPTER 3

Building the method of analysis

Lexical cohesion relations

3.1 Introduction

This chapter brings us closer to the actual analysis, since it focuses on lexical cohesion relations in detail. Section 3.2 includes a review of previous studies: the models central for the purposes of the present study will be given longer introductions, while others will be considered more briefly.

In Section 3.3, several approaches to lexical cohesion relations will first be compared in order to highlight their similarities and differences. This survey will lead to a detailed discussion of the categories of lexical cohesion which will be included in the analysis in the present study. The categories will be illustrated by several examples, and the emphasis will be on explicating the relations as clearly as possible. No effort will consequently be made in this chapter to investigate other properties of cohesive relations or their role in discourse: this chapter will be solely dedicated to building the toolkit with which the texts can be analysed in later chapters.

3.2 Previous approaches to lexical cohesion

3.2.1 Halliday and Hasan

However luxuriant the grammatical cohesion displayed by any piece of discourse, it will not form a text unless this is matched by cohesive patterning of a lexical kind. (Halliday & Hasan 1976:292)

In *Cohesion in English* Halliday and Hasan devote only some twenty pages to the treatment of lexical cohesion, which is quite surprising in the light of their comment quoted above. Moreover, in the text analyses at the back of their book, lexical cohesion covers almost half of the cohesive ties they analyse (Halliday & Hasan 1976:340–355). The space allotted to lexical cohesion in
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Cohesion in English therefore does not seem to parallel the importance of this form of cohesion in discourse.

However, the value of Halliday and Hasan’s work lies not only in the model of analysis they propose, but also in the fact that their discussion on lexical cohesion pays attention to the interplay between cohesive items and the knowledge possessed by language users of text and world which is essential to the functioning of cohesion. According to de Beaugrande:

> Often, no special consideration is given to the underlying connectivity of text-knowledge and world-knowledge that makes these [cohesive] devices possible and useful, except in the discussion on lexical cohesion by Halliday and Hasan. (de Beaugrande 1980: 132; see also Ellis 1992: 145)

Halliday and Hasan thus already suggest that lexical cohesion, although on the surface of text, is nonetheless related to conceptual structures, and that cohesion is capable of signalling the relations between these structures. This fact is highly relevant for the present study, as I have been arguing that cohesive devices predispose the receiver to successfully interpret the message; that this should be so is naturally more plausible if there is a close connection between cohesion and knowledge structures.

Halliday and Hasan’s model of lexical cohesion is based on a division of the various lexical cohesive devices into two main categories: reiteration and collocation. Reiteration includes the repetition of the same word (mushroom – mushroom), the use of a synonym (sword – brand), the use of a superordinate (Jaguar – car), and the use of a general word (We all kept quiet. That seemed the best move.). All these devices have the function of reiterating the previous item, either in an identical or somewhat modified form, and this is the basis for the creation of a cohesive tie between the items. Often the tie is strengthened by the fact that the items are co-referential, but as Halliday and Hasan (1976: 282–283) note, this is not required for two items to be cohesive; even without coreferentiality, two occurrences of an item in a text will constitute a tie, as in example (1).

(1) There’s a boy climbing that tree. Most boys love climbing trees.

The category of reiteration and its subclasses are basically relatively straightforward, and it will become clear during this chapter that they have been extensively utilised in lexical cohesion analyses, with sometimes further modifications. But Halliday and Hasan’s model includes another category, which, as we will see, is as elusive as reiteration is straightforward: this is the category of collocation.
According to Halliday and Hasan, collocation is “cohesion that is achieved through the association of lexical items that regularly co-occur” (Halliday & Hasan 1976:284). This general definition of collocation may seem a little vague, but they do try to clarify it: the association is achieved when the lexical items have a tendency to appear in similar lexical environments or when they are related lexicosemantically. For example, boy and girl are cohesive because they have opposite meanings, but laugh and joke, and boat and row are also cohesive, although they are not systematically related, only “typically associated with one another” (Halliday & Hasan 1976:284–286).

The fact that Halliday and Hasan decided to call this relation collocation is somewhat unfortunate. Collocation is a well-known term in lexicography and lexical semantics, referring to the relationship of a word with other words it tends to occur with (see, for instance, Cruse 1986:40; Hoey 2005:7–9; Leech 1981:17, 23; Lyons 1977:613; Sinclair 1991:111; Stubbs 2001:29; Ullmann 1977:153). Due to this fact misunderstandings are often unavoidable. On the other hand, the “cohesive” collocation of Halliday and Hasan is not totally unrelated to the “lexicographic” collocation, for they were both inspired by the same person, J. R. Firth. There is thus a reason for the use of the term in these two different contexts, and it is, of course, the context which should also reveal which of the two collocations is being discussed in a particular study.

Firth introduced the concepts of collocation and collocability in his article “Modes of meaning” in 1957. According to Firth, at the level of meaning by collocation the meaning of words depends upon their co-occurrence in texts. Thus, “one of the meanings of night is its collocability with dark, and of dark, of course, collocation with night.” In a later paper, Firth discusses the notion of collocation in a wider theoretical framework and emphasises the need for the study of lexicography to present words also in their commonest collocations and not only separately (Firth 1957:196, 1968:179–182). Sinclair has continued the study of the lexicographic aspects of collocation, using large computerised corpora; his analyses show the importance of collocational patterns in language use and highlight the fact that there is significant co-selection among words (see, for example, Sinclair 1966, 1991, 2004).

What differentiates between collocation in the lexicographic sense, on the one hand, and in the cohesive sense, on the other, is the proximity of the items. In lexicography, collocation refers to adjacent items: the item investigated is called the node, and a restricted number of items (typically from four to six) positioned on either side of the node are its collocates. But since cohesion refers to connections between longer stretches of a text (clauses and sentences), items that are regarded as being related by collocation in the cohesive sense cannot
be adjacent in that text. We can here reconsider Firth’s example of *night* and *dark*: if they occur next to each other, they are an instance of lexicographic collocation, but if they are separated by a longer stretch of text, their relationship ties together the clauses or the sentences in which they occur and they can be regarded as an instance of cohesive collocation.

Let us now return to Halliday and Hasan and collocation in the cohesive sense. When compared to reiteration, collocation is a very intricate relation indeed: the items are only linked by a subtle association, since they cannot be said to in any way repeat each other. Moreover, a collocation tie cannot be further strengthened by co-reference. It follows from this subtlety that collocation is also a very subjective relation: what is considered as a valid relation will inevitably slightly vary from one communicator to the next. However, although subjectivity is probably unavoidable as regards some instances of collocation, this is hardly grounds for excluding the entire category from an analysis of lexical relations. The challenging fact that some of the relations can be elusive should therefore not be regarded as a hindrance, let alone an obstacle to the analysis. Furthermore, collocation is closely involved with the idea of the connectivity of text-knowledge and world-knowledge, which de Beaugrande (1980: 132) found so essential for the functioning of cohesion. The following example from a prepared speech demonstrates this:

(2) . . . and that is the effect of changes in the curriculum the ways of teaching in *schools* – this is not anything to do necessarily with *comprehensive schools* or the abolition of *the grammar school* – it is notable that in this country it is the middle classes themselves who have revolted against the conception of *the eleven plus* – but those of us who thought that you should postpone the age at which irrevocable decisions were taken about a child’s education... (LLC S.11.2.)

In example (2), which comes from a speech on the year’s activities at a British university, we can first distinguish reiteration relations between items dealing with the educational system: thus *schools* is related to *comprehensive schools*, which is related to *the grammar school*. The relations are marked by the repetition of *school*, and text-knowledge is therefore sufficient for the creation of the relations. World-knowledge comes into the picture with *the eleven plus*; there is nothing on the surface, as it were, to link it to any of the previous items. However, our knowledge (in this particular case, historical knowledge) of the British educational system tells us that *the eleven plus* was a part of a British child’s education, a test of the child’s ability to continue to *the grammar school*. This
knowledge makes the mention of the eleven plus a perfectly valid continuation to the speaker’s discussion of British schools.

All in all, the category of collocation in Halliday and Hasan (1976) remains vague and the relations loosely defined, if compared to the relatively specific definitions provided for the subclasses in the reiteration category. For this reason Halliday and Hasan’s collocation category has even been called “a ragbag of lexical relations” by Hoey (1991a:7). Regardless of this justifiable criticism, however, it remains a fact that with their study Halliday and Hasan were the first to draw attention to these complex relations which contribute to the unity of text and discourse. Moreover, they recognise that it would be necessary to further define the collocation category: they state that when this is done, it should be carried out “in the light of a general semantic description of the English language” (Halliday & Hasan 1976:288). Halliday and Hasan do not leave this task solely for other researchers to tackle, but continue to address the topic themselves in their later studies.

Hasan takes up lexical cohesion relations again in her study on coherence and cohesive harmony (Hasan 1984). In this paper, she adopts a new approach to the problems of studying collocation and presents a redefinition of lexical cohesion categories. The most striking change concerns collocation: Hasan comes to the conclusion that because of the intersubjective nature of collocation “it is best to avoid the category in research”. However, some of the relations that would have earlier been studied under collocation are discussed under new headings in her revised version of lexical cohesion.

Hasan’s new model is divided into two main categories: general and instan
tial. The general category includes the repetition relation and other relations that can be explained by the general semantic system of English: synonymy, hyponymy, meronymy (part-whole relation) and antonymy. Some collocation relations are thus now considered under the general category. For example, Hasan notes that “it is no longer necessary to think of go and come as related to each other through collocation; they fall within the same chain on the ground of being antonyms”. Other relations, which cannot be explained by general semantic terms, are excluded from the analysis on the grounds of being too subjective. For instance, our example of the grammar school and the eleven plus discussed above could not be handled with Hasan’s new model, but would be left outside the analysis.

However, Hasan introduces a new category, the instan
tial category, to deal with those relations which are not general, but created by the text. The category includes the relations of equivalence (the sailor was their daddy), naming (the dog was called Toto) and resemblance (the deck was like a pool). It should be noted
here that Hasan’s model was developed for the analysis of narratives (stories by children, to be more precise), and the material has naturally had an influence on the types of categories deemed important.

What is particularly important about Hasan’s study is that it recognises the chain-forming property of lexical cohesion, instead of concentrating on individual ties as in earlier studies. In other words, Hasan is interested in finding out how cohesive devices and ties combine to create more meaningful cohesion. She notes that the interaction of chains of cohesive ties, which she calls *cohesive harmony*, is of the utmost importance for the text’s coherence. Hasan shows that cohesive ties should be considered in combination with other ties, and not as isolated instances, and that the occurrence of cohesive devices and ties is best explained when this integration is taken into account. However, as mentioned earlier, Hasan’s model was developed for the analysis of narrative, and it is within this type of discourse that it seems to function most efficiently (see, for example, Björklund 1993). It has been pointed out, for instance by Parsons (1990, 1991) that the model may not be directly applicable to non-narrative discourse (see also Hoey 1988, 1991a: 14–15; cf. Taboada 2004: Ch. 6).

Let us now turn to Halliday and to his revision of the lexical cohesion model proposed in *Cohesion in English*. He devotes a chapter to cohesion in his work on functional grammar (Halliday 1985/1994), where we can find a slightly different approach to lexical cohesion compared to the model by Hasan discussed above.

At first sight, Halliday’s categories of lexical cohesion seem surprisingly few: they are repetition, synonymy and collocation. We may leave repetition aside for the moment, since it comes in a form largely unmodified from *Cohesion in English*, i.e. it includes the use of the same word. What Halliday calls synonymy deserves explanation, for Halliday includes under this category a number of relations which he regards as variations of synonymy. There is thus synonymy “proper” (sound – noise), but also superordinates (blackbirds – birds), hyponymy (tree – oak), meronymy (tree – trunk), co-hyponymy (oak – pine), co-meronymy (trunk – branch) and even antonymy (awake – asleep), as a special case. Unlike Hasan (1984), Halliday (1985) also includes in his model the category of collocation. This category is notably smaller than earlier in *Cohesion in English*, because some of the relations are considered under synonymy. Collocation now covers those instances in which the relationship of the items depends on the association between them. Halliday calls collocation a “co-occurrence tendency”, and states that “collocation is one of the factors on which we build our expectations of what is to come next” (Halliday 1985: 312–313). In addition, he
remarks that collocations are usually closely connected with the particular variety of text in which they occur, so that a word like hunting can be related to, for instance, shooting and fishing in one text, and to souvenir or fortune in another (Halliday 1985:313).

3.2.2 Other early studies: Enkvist, Källgren and Daneš

Let us briefly consider three models developed for analysing Finnish, Swedish and Czech, respectively. Enkvist (1975) recognises very similar lexical cohesion categories for Finnish compared to those Halliday and Hasan used for English. Interestingly, Enkvist also includes a category similar to collocation, which he calls implication: this category is further subdivided into causal relations (fire – smoke), culture-based relations (foot – shoe; the cost of energy – a power station) and relations dealing with state or condition or change of state or condition (water – ice).

Källgren (1979a, 1979b) analyses stories by Swedish children for their reference cohesion, a term she uses as an umbrella term for all types of cohesion, both grammatical and lexical. We will here concentrate on the lexical component of her model. In addition to the more widely used relations, e.g. repetition, synonymy and hyponymy, her model also includes relations such as comparison (tall – taller). Källgren also makes use of a category which closely resembles Halliday and Hasan’s collocation and Enkvist’s implication: inference is the name chosen by her to refer to a relation which “is present whenever two elements are in any way associated with each other” (Källgren 1979b).

Daneš’s (1987) work on the Czech language also manifests remarkable correspondences to the treatments of lexical cohesive relations in the other studies discussed in this section. Daneš divides lexical relations into three main classes. Of these, relations of familiarity based on identity refer to instances of repeating an item, also in a modified form, as in happy – happiness. Relations of familiarity based on set relations include relations between an individual member and a class, and vice versa, as in people – many women. Finally, the third class consists of relations of familiarity based on semantic closeness; this class is further divided into two. The first, semantic parallelism, covers co-hyponymous and antonymous cases (to ski – to play tennis; to sleep – to wake up). The second subclass is also already familiar to us, for it includes semantic continuity/contiguity (dog – bark; letter – stamp) as well as symptomatic relations, such as fever – illness; in other words, collocational relations or “relations derived from the mutual expectation between words”, as Daneš phrases it.\footnote{1}
The models by Enkvist, Källgren and Daneš, although not developed for the analysis of English, are nevertheless relevant. The insight that can be gained from them on the similarities across languages regarding the phenomenon of cohesion is especially interesting: cohesion may not work in absolutely identical ways in all languages, but the strategies of forming cohesive relations seem to display considerable similarity across languages.

3.2.3 An application for analysing technical writing: Jordan

It is now convenient to consider three approaches which do not as directly as the earlier studies contribute to the discussion concerning the classification of lexical cohesive devices. However, although these approaches mainly concentrate on certain aspects of the functioning of lexical cohesion, they elucidate our discussion on the work done by lexical cohesive devices, and some of the ideas presented in them will be utilised later in the present study.

Let us start with the study by Jordan (1984). Jordan’s aim is to explain the different techniques used by writers for re-entering a topic into a text, and how these techniques can best be applied for achieving coherent writing. The book is intended for practical use by technical writers, and the more theoretical aspects of cohesion and coherence have consequently been omitted, but the apparatus Jordan develops for analysing re-entry techniques is interesting for a wider audience as well.

Jordan divides re-entry techniques into three main classes: basic re-entry, associated re-entry and perspective re-entry. Basic re-entry includes repetition, substitution (i.e. pronouns), partitive substitution (re-entering a part of a topic previously introduced), embracing substitution (re-entering two or more previously mentioned topics jointly) and synonymy.

Associated re-entry involves some change of the topic under discussion. For instance, in:

*The System 90 Users Group* was established in October of this year. Membership is open to all organizations.

the writer wants to discuss an aspect (membership) of the previous topic (the System 90 Users Group). The association between these two items is clear, but occasionally it is necessary to include what Jordan calls a trigger. A trigger is usually a repetition of the previous topic or a part of it, employed to make clear the association between an item and its re-entry, as the Group in

*The System 90 Users Group* was established in October of this year. Membership of the Group is open to all organizations.
As Jordan (1984:54) notes, however, “untriggered associated re-entry is the unmarked form unless there is a good reason for including the trigger”.

The scope of associated re-entry is a noun or a noun group, but longer stretches of text can also be connected. In Jordan’s model, this connection occurs through perspective re-entry. To understand the difference between associated and perspective re-entry, let us examine the following example from Jordan:

However, the recycled swarf does not have the same properties as the parent metal and could not supply the same market. To be economically feasible, new markets would have to be found.

According to Jordan (1984:68), the possible re-entry in this example would be “for the swarf as partial repetition of the recycled swarf; this could be placed after markets (making an associated re-entry) or at the end of the sentence (making a perspective re-entry)”.

Jordan’s model of analysis is quite similar to the ones discussed earlier as regards basic re-entry techniques, but associated and perspective re-entry clearly provide new tools for trying to uncover the more complex connections in text. The concept of the trigger is especially interesting and perhaps the most useful for the purposes of the present study.

3.2.4 An application for analysing conversation: McCarthy

The second of the three specialised approaches to be discussed is that presented by McCarthy (1988). He defines the purpose of his study as “highlighting how speakers use words in a systematic and patterned way for interactive purposes”. He maintains that natural conversational data cannot be satisfactorily analysed with the models developed for written discourse; his suggestion is to include intonation choices made by speakers to complement the analysis. In addition, he states that a distinction needs to be made between cohesion over a sentence boundary and cohesion over a speaker or a turn boundary.

McCarthy’s model includes four types of lexical relation: equivalence, inclusion: specific – general, inclusion: general – specific, and opposition. He does not include exact repetition into the analysis at all, which is quite surprising in view of the findings presented by, for instance, Tannen (1987a, 1987b, 1989) and Norrick (1987): they maintain that repetition has a special function in conversation and that it is specifically used for interactive purposes. McCarthy is, however, more interested in how different items are fed into the conversation. Besides, he makes extensive use of the intonation choices available to speakers
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for making some items prominent, a position he also argues for in a later article (McCarthy 1992). The results of McCarthy’s analysis are, in his own words, that a speaker will vary his own choice of items for the same existential sense and other speakers will repeat a first speaker’s sense with a different item. (McCarthy 1988)

Whether or not this amounts to a real difference between speakers may remain unclear, and, moreover, the results necessarily reflect the fact that exact repetition was excluded from the analysis.

However, what is probably the most interesting point in McCarthy’s study is his suggestion that general semantic relations, such as synonymy or antonymy, may not be the best choices for describing lexical relations between items in use. McCarthy maintains that more discourse-specific terms are needed: these would more accurately reveal the fact that a relation between two items is dependent upon the text in which it occurs, rather than being an instance of an abstract meaning relation. Although the categories suggested by McCarthy do actually closely correspond to synonymy, hyponymy and antonymy used in the other studies discussed, choosing not to use these general terms is a simple yet efficient way of appreciating the discourse-specific nature of lexical meaning (see also Carter & McCarthy 1988).

3.2.5 A computational approach: Morris and Hirst

Yet another interesting application of lexical cohesion is reported in a study by Morris and Hirst (1991). Working in the field of computational linguistics, Morris and Hirst are interested in finding out if lexical cohesion is applicable to computational analysis. Ultimately, they want to investigate how lexical cohesion chains can predict both coherence and discourse structure.

Morris and Hirst’s categories of lexical cohesion rely heavily on those presented by Halliday and Hasan (1976): they include both reiteration and collocation into the analysis. Reiteration is divided into reiteration proper (which includes synonymy) and reiteration by superordinate. They also divide the category of collocation into two: systematic semantic relations are those that can be described in general semantic terms, i.e. hyponymic and antonymic relations, while others, for instance the relation between garden and digging, are referred to as nonsystematic semantic relations.

Morris and Hirst correctly note that these lexical relations have not only been of interest in cohesion studies, but also in lexicography. Their idea, consequently, is to devise a program which matches a computerised version of a
special dictionary, namely Roget’s Thesaurus, against actual texts, to see if and how efficiently the program is able to find lexical relations in the texts. Interestingly, their pilot study shows that 14 out of the 16 nonsystematic semantic lexical chains given as examples in Halliday and Hasan (1976) could be found in the thesaurus.

The results of Morris and Hirst’s study are illuminating, though not actually surprising. They report that their program is able to detect in the texts most of the systematic relations present, excluding a few cases not covered by the thesaurus (e.g. street names, place names and people’s names). However, the program has slight difficulties with the nonsystematic relations: it would indicate that some items are related, whereas the researchers did not find that a relation exists between the items in that particular text. Conversely, the program would not consider as related some items that the researchers thought are most definitely connected in that particular text; for example, the researchers found a chain comprising environment, setting, and surrounding, but this chain was not thesaurally relatatable.

Morris and Hirst conclude that for discovering nonsystematic semantic relations in a text, knowledge about the text is essential, thus also confirming McCarthy’s claims about the discourse-specificity of lexical relations. They are able to show, however, that the chains found by their analysis closely correspond to the intentional structure of the texts. A continuous lexical chain reflects continuity of the subject matter, and when a chain ends, there is a tendency for a linguistic segment to end.

3.2.6 Patterns of lexis: Hoey

Returning to the main discussion, let us next examine in detail a model of lexical cohesion which offers an interesting insight into the role of lexical cohesion in discourse. This is the approach presented by Hoey in his book on Patterns of Lexis in Text (1991) and further developed in his subsequent articles (Hoey 1994, 1995).

The leading idea behind Hoey’s studies is to stress the importance of the text-forming properties of lexis. He notes that lexical cohesion has received little attention if one considers its significance in texts, which is brought about by the fact that lexical cohesion has the capacity to form “multiple relationships”. In other words, lexical cohesive items can be linked with more than one other item, whereas grammatical cohesive items, except reference, do not have this capacity; they are linked with only one item at a time. Consequently, Hoey draws attention to the fact that
Lexical cohesion is the only type of cohesion that regularly forms multiple relationships. ... If this is taken into account, lexical cohesion becomes the dominant mode of creating texture. In other words, the study of the greater part of cohesion is the study of lexis, and the study of cohesion in text is to a considerable degree the study of patterns of lexis in text. (Hoey 1991:10)

Hoey considers Winter’s (1979) study on repetition-replacement relations very relevant, as well as Winter’s idea that repetition can be seen as a link between the clauses or sentences in which the repeated or replaced items occur, and not just as a tie between the items. In short, Hoey’s idea is to use repetition relations as cues to find those sentences in a particular text that are most central to the meaning of the text and thus also reveal the organisation of the text.

Hoey makes it very clear that the classificatory stages in his study are of secondary importance only if compared to the actual analysis. However, because decisions of classification always have an influence on the analysis itself and because this chapter focuses on lexical cohesion categories, it seems appropriate to discuss them as well. Hoey’s classification, then, includes the following categories:

a. simple lexical repetition (a bear – bears)
b. complex lexical repetition (a drug – drugging)
c. simple paraphrase (to sedate – to drug)
d. complex paraphrase (heat – cold)
e. substitution (a drug – it)
f. co-reference (Mrs Thatcher – the Prime Minister)
g. ellipsis (a work of art – the work)
h. deixis (the works of Plato and Aristotle – these writers).

A further category, termed closed set (March – April) is introduced in Hoey (1994). The classification shows that not all types of repetition recognised by Hoey are lexical in nature, but that he also includes some grammatical items, such as personal and demonstrative pronouns; these were treated under grammatical cohesion in Halliday and Hasan (1976) and Hasan (1984). Hoey discusses these links as well, because they also allow the speaker or writer to “say something again” in the same way as actual lexical repetitions. He remarks, though, that he only devotes limited attention to these grammatical links, because “in non-narrative texts it is the lexical links that dominate the cohesive organisation” (Hoey 1991:74). And, indeed, in his sample texts substitution, co-reference, ellipsis and deixis play a less prominent cohesive role
than the actual lexical relations. Furthermore, Hoey draws attention to the fact that grammatical and lexical links can be distinguished by their directionality:

Lexical items in lexical repetition or paraphrase links do not depend on each other for their meaning (at least in the definitional sense), though they share a dependence on co-text for realization of their meaning potential. Textual [grammatical] items, on the other hand, entirely depend on other items for their interpretation and have no definitional meaning in themselves. (Hoey 1991: 71)

Considering Hoey’s “proper” lexical relations in more detail, it can be noticed that his categorisation recognises approximately the same relations as Hasan did in her 1984 paper. Hoey’s classification is similar to Hasan’s also in that he does not include collocation. However, in order to include all meaningful relations into the analysis, Hoey nevertheless discusses under complex paraphrase some relations which were considered instances of collocation by Halliday and Hasan. Whether or not the concept of complex paraphrase is actually an improvement on the notion of collocation seems to remain unclear even for Hoey, for he notes that complex paraphrase is “a can of lexical worms” (Hoey 1991: 64). Let us consider an example of how complex paraphrase works according to Hoey:

...imagine that we have three words in a text, hot, cold and heat: then if hot and heat form a complex repetition link, and hot and cold form an antonymous paraphrase link, then cold and heat will form a complex paraphrase. (Hoey 1991: 65)

This is relatively straightforward, but let us imagine that the “mediator” (hot in the previous example) had been missing. According to Hoey, we could still acknowledge a complex paraphrase link between the other two items; this is possible by bringing the missing mediator into the text. Hoey’s example is a text which includes the words instruction and teacher, and he says that

...there is a missing item, teaching, that can substitute exactly for instruction in this context and which, of course, would be in a repetition link with teacher...This allows us to treat the relationship between instruction and teacher as one of complex paraphrase. (Hoey 1991: 67; emphasis original)

It may be debatable if bringing an item into a text that was not originally there to create a relation between other items is less unreliable or less subjective than saying that the items form a link because they tend to co-occur, i.e. because they are related by collocation. However, it is only fair to say that Hoey recognises the difficulties of these “lexical worms” and uses the substitution method
very carefully, including only “safe” cases, because they are adequate for his analysis and because further examination is needed before more complex cases can be included.

The presented categorisation is, nevertheless, only a tool-kit for analysing texts, and finding nets of repetition in texts. First, in order to trace all links in a text, every item is checked against every other item in the text. This is quite time-consuming, because there is no restriction on the number of links that a lexical item can enter into, e.g. one item can paraphrase another while repeating a third. However, Hoey limits the number of links by allowing an item to make only one link per sentence, so that if, for example, an item repeats two items from another sentence, only one link is registered. Links vary in weight and priority is given to lexical links over grammatical links. Thus the order in which lexical relations were presented in the classification above is also their strength order and, if limitation is necessary, the stronger link is recorded. As Hoey is interested in repetition which is important to the organisation of text, he limits his attention to those sentences which, within a text, are connected to others by an above-average number of links. Such sentences form bonds, and these bonds form nets of connections in the text.

Studying the functioning of these bonded sentences in texts forms the main part of Hoey’s analysis. First, according to the number of other sentences they are bonded to, sentences can be divided into marginal and central. Marginal sentences are not lexically bonded with other sentences in a text, and they do not directly contribute to the main theme of the text. Hoey shows convincingly how removing these sentences from a text does not disrupt the argument or the coherence of the text, but creates an understandable summary of the text. Central sentences, on the other hand, are those that manifest an unusually high level of bonding (the exact number of bonds criterial for centrality varies from text to text). Hoey makes two claims about the importance of repetition linkage:

*The weak claim:* each bond marks a pair of sentences that is semantically related in a manner not entirely accounted for in terms of its shared lexis.

*The strong claim:* because of the semantic relation referred to in the weak claim, each bond forms an intelligible pair in its context. (Hoey 1991: 125–126)

With numerous examples, Hoey shows how most of the bonded sentences are coherent when placed together, thus conforming to the strong claim. Those pairs of sentences which do not form a coherent whole are still usually closely related and conform to the weak claim. The fact that the claims are correct
means, according to Hoey, that texts are not linearly organised, which naturally
also has implications on the theory of discourse processing and understanding.

In a later article, Hoey (1994) shows that bonding can also make sense in
narrative texts, albeit with some modifications. The applicability of the model
for an analysis of bonding between texts is presented in Hoey (1995), where
he shows how different texts describing the same event or phenomenon often
bond. That texts on the same topic display similar vocabulary is not surprising;
what is more interesting is Hoey’s finding that bonded sentences extracted from
different texts are coherent and relevant together. This suggests, according to
Hoey, that there is subconscious bonding with what they have previously read
or heard between different authors, which is significant to our understanding
of how text is stored and processed.

Hoey’s analysis not only stresses the importance of lexical cohesion, but
also tangibly shows its relation to the processes of discourse production and
interpretation, a viewpoint which is particularly relevant for the purposes of
the present study.

3.2.7 Redefinition of Halliday and Hasan: Martin

The model of lexical cohesion that will conclude our survey is that proposed
by Martin (1992), whose model offers a redefinition of the lexical cohesion
categories presented by Halliday and Hasan. Martin divides lexical cohesion
relations into three main categories: taxonomic, nuclear and activity sequence
relations. Taxonomic relations are already familiar to us from the previous
studies discussed: they include repetition, synonymy, hyponymy, meronymy, co-
hyponymy and co-meronymy, and contrast. Martin’s taxonomic relations are
thus almost identical with the general relations of Hasan (1984) or the syn-
onymy relations of Halliday (1985).

What is new in Martin’s model compared to Hasan and Halliday are his
nuclear and activity sequence relations. These present a modification of the col-
location category of Halliday and Hasan (1976) and Halliday (1985). Nuclear
relations reflect the ways in which “actions, people, places, things and qualities
configure as activities”: for example serve – ace in Ben serves an ace or in Ben
serves... that’s his fifth ace of the match. Activity sequence relations are based
on the way in which “the nuclear configurations are recurrently sequenced in a
given field”: for example, player serves, opponent returns. The activity sequences
are themselves organised into composition (hyponymy) taxonomies: for in-
stance, player – opponent in the previous example (Martin 1992:309–325).
Consequently, taxonomic and activity sequence relations become intertwined
in the analysis. An additional problem is that acknowledging activity sequence relations means that hardly any elements in a particular sentence or utterance remain unrelated, a situation which may naturally reveal the true complexity of lexical relations in texts, but which also unavoidably makes the analysis rather complicated.

In order to capture all taxonomic, nuclear and activity sequence relations in texts, the actual analysis is carried out in three parts, or “passes” (Martin 1992: 333), one allocated to each of the main categories. The texts are considered in their original form only when taxonomic relations are analysed; for analysing nuclear and activity sequence relations, nominalisations are unpacked, and substitute and ellipted forms are rendered:

Texts will be analysed in the original when taxonomic relations are considered; then when nuclear and expectancy (i.e. activity sequence; SKT) relations are analysed, a lexically rendered version of the text will be used.

(Martin 1992: 330–331)

What this means in practice is that each text will in fact generate three analyses and therefore also three different perspectives. For Martin, this compensates for the fact that he also adopts the strategy of relating items back to the nearest related item, instead of all the preceding related items. With an elaborate analysis such as Martin’s, the latter strategy would clearly become too complex: Martin notes himself that for performing such an analysis some computer tools would be necessary (Martin 1992: 334–335, 338).

In conclusion, while some of the new categories suggested by Martin are certainly useful, notably the nuclear relations, his actual method of analysis is quite cumbersome, due to the principles of analysis outlined above. Regardless of the benefits of such a detailed analysis, the method does not appear suitable for studying longer texts. However, some of Martin’s insights will be made use of in the construction of the model of analysis for the present study.

3.3 Categories of lexical cohesion recognised in the present study

3.3.1 General considerations

In this section, the categories of lexical cohesion which are to be included into the analysis in the present study will be discussed. However, before introducing them in detail, let us first consider in a table form the categories of lexical cohesion in seven of the eleven studies discussed in the previous sections. Of the
studies discussed above those by Enkvist, Kållgren and Daneš have been omit-
ted from the table because their classifications are not concerned with English. 
Jordan’s model is not included, because it is clearly developed for the study of 
one particular genre only. The final column lists the classification proposed for 
the present study, which will be considered in detail shortly.

Table 3.1 clearly brings out the fact that the similarities between the various 
models outweigh their differences: when we get beyond the divergent termin-
ologies, as it were, the relations covered by the models are very similar. Morris 
and Hirst’s classification stands out as the simplest, but the same relations that 
are present in the other models are nonetheless included in their model as well, 
although under fewer categories.

Table 3.1 helps us observe the underlying similarities and differences be-
tween the models, but it should not be seen as an evaluative comparison be-
tween them. I particularly want to stress that the empty slots in the columns for 
some of the models do not imply that these models are somehow inadequate 
or deficient. Rather, they show that models developed for different analyses 
concentrate on slightly different relations; for instance, as already noted in the 
introduction of her model, Hasan concentrates on a very specific type of dis-
course, namely children’s stories, and the model is designed with that particular 
material in mind. Conversely, the model suggested for the present study in-
cludes a great number of categories, because the material includes several types 
of spoken and written discourse. As the specific aim in this book is to find out 
which relations are favoured in which conditions, leaving some of the relations 
outside the analysis would be quite hazardous.

If we start at the first row, it can be noticed that repetition is present in all 
models, McCarthy being the only exception. A relation of synonymy, whether 
by that or some other name, is included in all the models. There is slightly more 
variation from there onwards, but generally the differences between various 
models are relatively slight, once we get past the terminological differences, 
that is. For instance, all models appear to include a hyponymic relation and an 
antonymic relation, and almost all have a meronymic relation. Collocation or 
a corresponding category, however, is present in fewer models, and in Hoey’s 
model it is only partially included.

Considering the categories of the present study in the light of the models 
discussed in the previous section, it is clear that the model of analysis is greatly 
indebted to many of them.

From Halliday and Hasan the present model takes the general division of 
lexical cohesion into two: reiteration and collocation. Regardless of their prob-
lematic nature, it is strongly felt that collocation relations have to be included,

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<tr>
<td>Collocation</td>
<td>General: hyponymy</td>
<td>Synonymy: hyponymy</td>
<td>Synonymy: co-hyponymy and co-meronymy</td>
<td>Reiteration: superordinate</td>
<td>Co-hyponymy and co-meronymy</td>
<td>Taxonomic: co-hyponymy and co-meronymy</td>
<td>Reiteration: specification</td>
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<td>Collocation</td>
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<td>Collocation: non-systematic semantic relation</td>
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* This category is introduced in Hoey (1994).
for they also have an important role to play in contributing to the continuity in discourse.

From McCarthy the model adopts the idea of the discourse-specificity of lexical relations. Consequently, the terms used are not from lexical semantics as is the case with several of the models, but more general, enabling us to regard discourse as the starting point.

From Hoey comes the idea that in addition to lexical items, some grammatical items can function in a very similar manner in repeating something; hence the inclusion of the category of substitution (e.g. a pronoun reiterating a noun) and the recognition of pronoun repetition.

From Martin we get help in clarifying the notorious collocation category, and finally, from Jordan we adopt the idea of the trigger, which will be utilised in explaining some of the collocation relations. It is hoped that this relatively high number of ingredients will not make the present model of analysis more complicated than necessary, but will instead provide a good basis for understanding the work done by lexical cohesion in discourse.

Let us now turn to the categories of lexical cohesion recognised in the present study and discuss them in detail with examples. The categories are:

Reiteration:
1. simple repetition
2. complex repetition
3. substitution
4. equivalence
5. generalisation
6. specification
7. co-specification
8. contrast

Collocation:
1. ordered set
2. activity-related collocation
3. elaborative collocation

3.3.2 Reiteration relations

Simple and complex repetition
Let us start with the reiteration relations. Repetition is without doubt the most straightforward relation in the present study, as has been the case with the earlier studies we have considered. In our classification, repetition is divided
into simple repetition and complex repetition. Simple repetition occurs when an item is repeated either in an identical form or with no other than a simple grammatical change, e.g. singular – plural, present tense – past tense. Complex repetition involves a more substantial change: the items may be identical but serve different grammatical functions, or they may not be identical but share a lexical morpheme.

Before looking at the examples in detail, however, there are three points worth mentioning at this point. As explained in the introductory chapter, the analysis is constructed around the concept of a cohesive pair, which is why three related items, for instance, will form two cohesive pairs. The chains and patterns that the pairs form will be discussed later in the study, but in the introduction of the categories it is more useful to concentrate on individual pairs. Secondly, both intra-sentential and inter-sentential cohesive relations are recognised; both spoken and written sentences can be considerably long, a fact which is likely to render cohesion within a sentence meaningful for the unity of an unfolding text, even if it may not have exactly the same significance as cohesion between sentences. The third point worth bearing in mind is that repetitions of pronouns are also included; they have traditionally been regarded as grammatical cohesion, but they nonetheless function in a fashion very similar to genuine lexical repetitions (cf. Hoey 1991), and excluding them from the analysis did not therefore seem justifiable. The following examples include several repetitions, both simple and complex.

(3) Rosie, one option for dealing with _any_ conflict of interest with a student in your class is to ask a colleague who is familiar enough with the subject and your expectations to grade the student, or at least review with you the grade you give.

(Mailing List 1)

In example (3), we find both simple and complex repetitions at work. There is, first of all, simple repetition of student, while grade is an instance of complex repetition. Determining the relations between the pronouns in this example brings us to the important analytical point which has already been mentioned. Out of the four related pronouns, we get three pairs: your – your, your – you and you – you, all of them simple repetitions. This method of analysis respects the basic unit of cohesion, i.e. a pair, but we will see later that it is also a good starting point for understanding how cohesion functions over longer distances as well.

Example (3) only shows intra-sentential cohesion, so let us next have a look at some examples with inter-sentential relations. In example (4), there is simple repetition of Freud, and also an instance of complex repetition (cultural
The idea that the way people think and act is largely determined by their culture, their upbringing, their socialization, their home environment, peer group pressure, this kind of thing, and is not to be looked for in natural causes, in their genes, for example, or in individual psychological experience, as was the prime focus of Freud in psychoanalysis. So the result is that, where people did take notice of Freud, and here Talker Parsons is the prime example, they interpreted Freud as if he too were a cultural determinist. (Speech 3)

A: oh are you playing the recorder too
b: I play the recorder too and I find this quite amusing and really most undemanding (Conversation 2)

To conclude this section, it is worth noting that it is not necessary for the items in a repetition relation to be co-referential, although this may quite often be the case. The occurrences of an item can be cohesive even if we cannot be sure that all of them refer to exactly the same entity; otherwise, verbs or adjectives, for instance, could not be cohesive. However, the items have to be contextually related: this is to rule out homonymic repetitions from the analysis, since such chance relations cannot contribute to cohesion (cf. Hoey 1991: 56–57).

Substitution

Substitution is the second subcategory of reiteration relations. This is a category that has traditionally been treated under grammatical cohesion (like pronoun repetition), but because substitution items function in a way very similar to lexical repetitions, they are included in the analysis (cf. Hoey 1991:73; see also Hasan 1984).

A pronoun substituting for a noun is the most usual form of substitution (examples (6) and (7)). In example (6), they reiterates any racist employer or group; in (7), her substitutes for Sylvia Plath.

Whatever the merits or otherwise of deciding that English as spoken by many USA blacks is a new, English-descended language instead of a dialect, such a decision opens up the “perfect” way for any racist employer or group to exclude blacks. *ALL* they would have to do would be to say that
they needed only totally English-proficient, English-as-native-language
speakers... (Mailing List 1)

(7) There was nothing wild, feverish or defiant, and nothing unkempt, about
the Sylvia Plath who came to me for supervision on the English Moralists
from the second or third term of that year 1955–1956. I see her clearly at
this moment before my mind’s eye... (Add. Academic Writing)

It is not difficult to defend the inclusion of pronoun substitution under re-
iteration. Had her in example (7) been worded as Sylvia (Plath), the relation
would be an undeniably clear instance of repetition; the use of a pronoun in-
stead of the lexical form does not undermine this relation, only formulates it
in an alternative manner. Regardless of the difference between her and Sylvia,
therefore, one coming from a closed grammatical class and the other from an
open lexical class, their similarity in function is deemed more important than
their difference in form.

Halliday and Hasan discuss pronouns under reference, which is a class
for items which “make reference to something else for their interpretation”
(Halliday & Hasan 1976: 31). Towards the end of their book, however, they
state that it is possible to shift the point of view “from the grammatical to the
lexical and look at reference from the lexical angle, interpreting it as a means
of avoiding the repetition of lexical items” (Halliday & Hasan 1976: 281).

In her discussion of the chains formed by cohesive ties, Hasan (1984: 200)
notes that “the separation of lexical and grammatical cohesive chains quite
clearly did violence to certain aspects of the text’s semantic organization”. She
further states that “text being a semantic unity...the lexico- grammatical cat-
gories of cohesion occurring in a text should be so aligned as to reflect readily
the fact of this semantic unity” (Hasan 1984: 200). Hasan solves this dilemma
with the concept of “chain interaction”, which takes place “when two or more
members of a chain stand in an identical functional relation to two or more
members of another chain” (Hasan 1984: 212). According to Hasan, this so-
lution means “integrating the lexical and grammatical cohesive patterns of
the text, so that they are seen neither as just lexical nor as just grammatical,
but have a status by reference to their potential function in the text” (Hasan
1984: 211). Via a different route, therefore, Hasan seems to be emphasising
the very same fact that was the basis for our including pronoun substitu-
tion into the analysis, namely the similarity in function of some lexical and
grammatical items.

Besides pronouns, there are other substitution items as well, such as one,
do and so, which can reiterate previous items. Example (8) is an instance of
intra-sentential substitution: one substitutes for a Ministry. In example (9), we have one substituting for a phone call inter-sententially. In example (10), so substitutes for offensive, abhorrent or threatening.

(8) A government which chose not to establish a Ministry of Culture, but rather one for the National Heritage, nevertheless sought, largely successfully, to put the values of "enterprise culture" at the centre of most institutions. (Academic Writing 3)

(9) Gordon: Cos they'll be, whe ah well they might, you know you never know if you get a phone call from a school do you?
Audrey: No, that's right.
Gordon: If I, if I don't get one tonight the only chance is early in the morning. (Conversation 4)

(10) What I sought, specifically, was the behavioral expression of beliefs which, I presume, would not be offensive, abhorrent, or threatening to most of us on this list, but which would indeed be so to others. (Mailing List 1)

The substitution items one, do, and so are actually relatively rare in the material. Hoey (1991:73) reports a similar finding and notes that these items may be more significant from a grammatical rather than from a discourse perspective. Substitution items also tend to form connections over very short distances, usually within a sentence, as in two out of our three examples above. However, because pronoun substitution is recognised in the present work, it would be unwise in terms of the internal consistency of the model to disregard other substitution items.

Some researchers, starting from Halliday and Hasan (1976), for whom it is a category of grammatical cohesion, include ellipsis or substitution by zero in their analyses of substitution relations (see also Quirk et al. 1972). In the present work, even though we take substitution relations into account, ellipsis will be left outside the analysis. Previous research has established that ellipsis is especially the property of conversation, the question-answer sequence being the prime example of how ellipsis is created (Halliday & Hasan 1976:Ch. 4; Halliday 1994:310, 316ff.; Quirk et al. 1972). Let us see how it works by considering the example below, which is an extract from one of our face-to-face conversations (Conversation 3); the ellipted elements are included in square brackets:

RG: Have you ever taught children?
HK: [I have taught children] Only once. That was in London in a private school.
Collaborating towards Coherence

RG: Did you like it?
HK: Yes [I liked it], it was more or less a private lesson...

Martin (1992: 329–331) maintains that since ellipsis is quite common in dialogic texts, it follows that they will show a smaller number of other (lexical) relations. It is indeed easy to see even from our short example how the recognition of ellipsis would entail an increase in the number of lexical relations in texts including such sequences. However, the fact remains that the texts are understandable and coherent (for the communicators and even for the analyst) quite as they are; there is nothing missing from the communicative sequence, although admittedly the “ellipted” elements could be filled in. As regards our example extract, in that particular conversation at that particular moment the communicators decided that the message will be clear without the repetition of some elements: for the purposes of the analysis it will not be necessary to interfere with what the speakers obviously regarded as a satisfactory sequence. If the number of lexical relations will be smaller in conversations than in our other groups of texts because of this analytical decision, it is a reflection of the fact that the communicative conditions of conversations do not require a greater number of explicitly marked lexical relations.

The above is by no means to say that ellipsis could not be used for some analytical purposes. For instance, Hoey (1991), who, as already discussed, incorporates several types of grammatical cohesion into his analysis of lexical relations, does not include ellipsis in his analysis proper, but instead uses it to help explain why the sentences the analysis has identified as connected often are coherent together.

Equivalence
The third subcategory of reiteration in the classification is that of equivalence. Following McCarthy (1988), the term equivalence is used to refer to the relation more commonly referred to as synonymy. The reason for this is that McCarthy’s idea about the discourse-specificity of lexical relations is felt to be of great importance, and using general lexical semantic terms would fail to make this fact explicit. In other words, the present analysis does not start from ready-made classifications which would tell us which relations are possible; we start from a text and try to establish which items are related in that particular text. Hoey formulates this in a slightly different manner:

A pair of clauses, ‘A was x, but B was only y’, create an instantial contrastive relation between the lexical items x and y, whatever their decontextualized relation. (Hoey 1991:220)
Chapter 3. Building the method of analysis

The difference between a lexical-semantic and a discourse-specific approach can be illustrated by the distinction made by McCarthy (1988): a semantic analysis can show the “meaning potential” of items, whereas a discourse-specific approach is concerned with the “communicative potential” of items. The two approaches are thus clearly distinct but not irreconcilable; McCarthy observes that a discourse-specific analysis

need neither undermine nor confirm the analysis of a semanticist; it is a statement about use, which is different in kind from statements made in a decontextualized, structural description of the lexicon. (McCarthy 1988)

What is of significance for this more discourse-specific approach to lexical relations is the language user’s decision to use an item for instance in equivalence with another item, although they may not be semantically absolutely synonymous. Using non-lexical-semantic terms draws attention to the fact that the justification and explanation for a relation between lexical items can and should be sought for in the text in which the items occur.

Working within the field of cognitive semantics, Allwood (1998) formulates a similar argument about semantics which is “cognitive, dynamic and context-sensitive”. He maintains that

Meaning and concepts are primarily taken to be cognitive phenomena and are studied in terms of operations on information rather than as static entities. The operations are context-sensitive, so that meaning is seen as determined by operations which are sensitive to and make use of linguistic and extralinguistic context. (Allwood 1998: 1)

In Allwood’s model, all linguistic expressions have a “meaning potential”, which includes “all the information the person can associate with the expression” (Allwood 1998:2; see also Linell 1998:118–121). Allwood sees the context-free meanings of expressions as “activation potentials”, the activation of which into actual meanings is influenced by the meanings of other related expressions and the extralinguistic context, and guided by cognitive operations. Allwood’s model rests on

...the assumption that language provides a set of tools and mechanisms for structuring information which is maximally useful in human action and interaction. (Allwood 1998:16)

Although Allwood’s model is intended for analysing conceptual structures and therefore has very different aims if compared to McCarthy’s study or the present work, it nonetheless shares a similar starting point, namely the conviction that meaning is made in context.
Let us now consider some examples of equivalence. In example (11), *the Nazi extermination of the Jews* and *the Nazi slaughter* are in an equivalence relation in this particular text, in which the writer specifically deals with the issue from the perspective of the Jews. It is perfectly conceivable that in another text in another context, *Nazi slaughter* could be used in equivalence with, for example, *Nazi extermination of the gypsies*. As this example shows, it is possible that items related by equivalence, or indeed by any other reiteration relation, may actually include repetitions (such as Nazi in this example); this is due to our definition of the unit of analysis. Example (12), repeated from Chapter 1, on the other hand, illustrates a more straightforward case of equivalence (*carbon dioxide* – *C O two*), one which would no doubt be more easily accepted as an example of a synonymous relation as well.

(11) I spent a good hour talking to him about anti-Semitism and genocide, and the things that distinguished *the Nazi extermination of the Jews* from other forms of oppression in the world. I also told him that it was an issue that affected me deeply, that my extended family had lost many people to *the Nazi slaughter*.  
(Mailing List 1)

(12) …*Carbon dioxide* is the most soluble of the gases because as it dissolves it doesn’t just go through a physical solution it goes through a chemical conversion [2 sentences omitted]…If you put more *C O two* into the system the concentrations of all these go up…  
(Speech 4)

Example (13) again presents a slightly more problematic case, but nonetheless one in which we can find an equivalence relation, namely that between *pausing* and *a breather*:

(13) We are *pausing* on the road for no other reason than that we have been bounding ahead so rapidly and could all do with a *breather*.  
(Academic Writing 1)

The relation between *pausing* and *a breather* is a good example of an instance where classifications relying on general lexical semantics would run into difficulties, because the items come from different word classes. But let us imagine that example (13) had been worded as follows:

(14) We are taking a *pause* on the road for no other reason than that we have been bounding ahead so rapidly and could all do with a *breather*.

The relation between *a pause* and *a breather* in (14) would have been recognised as synonymous, whereas *pausing* and *a breather* would probably have been left unclassified. But it can be asked whether the difference between (13)
(14) is a real difference, since the meaning is no doubt the same in both; consequently, if the relation is recognised in example (14), it should also be recognised in example (13).

What was said above about equivalence versus synonymy also applies to the other subcategories of reiteration. Therefore, instead of applying classifications from lexical semantics, other labels for the categories of lexical relation will be used. This is a small gesture, but it is a signal of the fact that we appreciate the communicative potential of lexical items and consider their meaning as constructed and controlled by the context in which they appear. The relations between the items should, however, be clear even from the terms utilised here.

**Generalisation**

The fourth subcategory is generalisation, which covers the relation between an item and a more general item. This relation has been referred to as a superordinate or hyponymic relation in most of the earlier studies, or inclusion: specific-general by McCarthy.

In example (15), energy products reiterates and generalises imported oil, while political party is a generalisation of Labour in example (16), and some languages of North American English in example (17).

(15) Over the past decade or more, Western governments have taken action, individually and collectively, both to reduce dependence on imported oil and to provide for an emergency should it arise. In particular, they have made considerable progress, some of it quite recent, in freeing internal markets for energy products. (Speech 2)

(16) Gordon: If Labour get in and they can’t fulfil their promises… (21 turns)
Audrey: Well I can’t well I mean there’s an awful lot, I mean would, no no matter which political party it is, they all make promises, but they don’t carry them all out. (Conversation 4)

(17) It will be observed that, as is often the case, the most informal or ‘slang’ words are regionally restricted, being in this case unknown or unusual in North American English. It will also be observed that there are no strict co-occurrence restrictions here as there are in some languages – one can say ‘long journey’ and ‘lengthy trip’ just as well as ‘lengthy journey’ and ‘long trip’. (Academic Writing 4)
Specifications, the fifth subcategory, is the opposite of generalisation: it refers to the relation between an item and a more specific item. This relation has previously been called *meronymy*, and McCarthy referred to it as *inclusion: general-specific*.

In example (18), *health, education* reiterate and specify *the other social services*; in example (19), *Ebonican* is a specification of *dialects*; and in example (20), *two young Italian brothers* is a specification of *children*.

(18) The deceptive nature of the accelerated growth argument occurs also with respect to *the other social services*. The White Paper tells us that what we want to do in *health, education*, etc. depends on faster growth.

(Academic Writing 1)

(19) *Dialects* which, however widely used in the present, do not access needed information are inferior with respect to those purposes which require that information than those that do not. When I could acquire the sum and total of western science in “Ebonican” then, and only then, is it equal to English for the purposes of science, and perhaps not even then.

(Mailing List 2)

(20) RG: Have you ever taught *children*?
HK: Only once. That was in London in a private school.
RG: Did you like it?
HK: Yes, it was more or less a private lesson. I had *two young Italian brothers*; I used to take them down to the market and get them do shopping for me…

(Conversation 3)

Co-specification
The next subcategory of reiteration is *co-specification*, which includes the relation between two items which have a common general item. The earlier studies that have included this relation have referred to it as *co-hyponymy* or *co-meronymy*. The general item would be *coin* for the items in example (21), and *world English* for the items in example (22). Of course, it is not necessary for the general item to appear in the text; in example (23), *RP speakers* and *Standard English speakers* are related even without the mention of the general item *English speakers*.

(21) *The farthing* has ceased to be a coin of the realm, *the halfpenny* is on its way…

(Speech 1)
(22) C: no but the thing is if they use them you see and if you're describing world English one branch of it is Indian English because it's spoken by a very great many people
A: yes
b: well I'm sure another branch is South African English (Conversation 2)

(23) It is widely agreed, though, that while all RP speakers also speak Standard English, the reverse is not the case. Perhaps 9%–12% of the population of Britain (see Trudgill & Cheshire 1989) speak Standard English with some form of regional accent. It is true that in most cases Standard English speakers do not have 'broad' local accents (i.e. accents with large numbers of regional features which are phonologically and phonetically very distant from RP). . . (Academic Writing 4)

Contrast
The final subcategory of reiteration is contrast, which refers to the relation between an item and another item which has an opposite meaning. This relation has also been called antonymy, opposition, or complex repetition or paraphrase. Again, the items that are considered to be related by contrast need not be strictly antonymous in the lexical semantic sense. What is important is that the items in question are used in a contrasting way in a particular text. The items in example (24), general – particular, would without doubt be considered as antonyms even in lexical semantic classifications, but the other two examples illustrate instances in which the contrastiveness of the items is constructed or enhanced by the context.

In example (25), the contrastiveness of out of fashion and up to date is enhanced by the use of, respectively, dramatically and completely. In example (26), old aged pensioners and working people are related by contrast in this particular context, in which the former group is getting something for which the latter group will have to pay. It is not difficult to imagine a context in which pensioners and working people could be related by co-specification rather than contrast (for instance, when talking about the various phases in peoples' lives, where the two items would just be two points on a continuum, as it were, rather than being clearly in opposition with each other as in example (26)).

(24) The general question concerns the search for a broader curriculum, which stems from dissatisfactions with the limits of given “disciplines” and with the disciplinary confinement of degree structures in higher education. . .
(8 sentences omitted) . . .For Departments of English outside Britain, the
particular questions involve the connections – or distinctions – between “language and literature” and “studies”. 

(25) And the reason for this is that it belongs to a tradition, a fashion if you like, of writing which went dramatically out of *out of fashion* immediately after World War One. So, at the time when it was published most readers would have regarded it as completely *up to date* in its in its style and in its presentation.

(26) Audrey: I mean where are they going, where are they going to get the extra money from to pay for the old aged pensioners’ eight pound rise? 
Gordon: Mm. 
Audrey: Or so they say, we’ll get eight pound. Somebody’s got to pay for it. So it’ll be the working people…

The fact that within the present model the same items could be related in several ways reveals that there is an inherent fluidity in the model, but this is definitely a positive feature. We are, after all, interested in how the process of making meaning in a text is reflected in the cohesive picture of the text, rather than in abstract meaning relations between items. The fluidity is inevitable and necessary simply because each text brings with it a unique possibility of making meaning. In Chapter 1, in connection with the discussion on the place of lexical cohesion in text and discourse studies, we drew attention to the fact that the choice of lexis is extremely significant in the realisation of a text as a unique communicative contribution. We would not be able to appreciate this uniqueness if we did not at the same time accept that the relations between lexical items will also show originality and flexibility, and that the relations truly are discourse-specific.

3.3.3 Collocation relations

Having introduced all the reiteration categories, it is now time to discuss collocation relations. During the discussion of the earlier models of lexical cohesion it was noted that the category has been notoriously difficult to define, so much so that it has often been excluded from analyses. Regardless of the difficulties that we will no doubt have to face, collocation relations will be included in the present analysis.

To begin with, a brief reminder might be in order: Halliday and Hasan (1976) say that collocation is achieved through the association created by habitually co-occurring lexical items. The items occur in similar environments because they describe things or happenings that occur in similar situations. Al-
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though this definition is vague, it will be the basis for our analysis. However, starting from this basis, it is necessary to try to define collocation relations more specifically in order to make the model of analysis as replicable and objective as possible.

Ordered set

Ordered set is the first of the collocation subcategories in our classification. It is perhaps the clearest of the three categories and closest to the more systematic reiteration relations described above. The category includes members of ordered sets of lexical items, for example, colours, numbers, months, days of the week and the like. Because the sets are relatively clear, these relations are not difficult to find in texts, but as luck would have it, they seem to be quite infrequent: there are only a few instances of ordered set in the material of the present study.

In example (27), we find today – tomorrow – yesterday; in example (28), September – January – the end of June; and in example (29), Monday – the Saturday night.

(27) The working people of today are the pensioners of tomorrow; the single people of today were the children of yesterday and are the parents of tomorrow. (Academic Writing 1)

(28) RG: ...So, like, the term starts in September and runs through till January, when we have Spring festival, which is the Chinese New Year. Now schools and universities will close for three weeks, and that is a particularly cold time of the year in the North. And then the term starts again, finishing at the end of June. (Conversation 3)

(29) Judy: Monday?
Doreen: First thing, first thing. Mm. And come back about nine o'clock the Saturday night. (Add. Conversation)

Activity-related collocation

The other relations discussed by Halliday and Hasan under collocation are more problematic to define. They are by definition nonsystematic, based only on an association between items, and thereby resist systematic classifications and definitions. Consequently, we cannot construct watertight rules or models which would always tell us which items are related and which are not, but with the help of some previous studies let us nevertheless try to find some tendencies of association which may help us understand and classify these complex relations.
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We remember that the study of Martin (1992), which presents a redefinition of Halliday and Hasan's collocation category, divides these relations into two: nuclear (extending and enhancing) and activity sequence relations. In the discussion of Martin's model we already noted the difficulty with the activity sequence category, since it actually involves a reclassification of taxonomic (reiteration) relations, and it is not clear how this would benefit the present analysis. Let us therefore concentrate on what Martin (1992) calls nuclear relations, which reflect the ways in which “actions, people, places, things and qualities configure as activities”. As an example of such relations Martin mentions, among others, *serve – ace*.

It appears that in the present material as well we can find pairs such as *cyphers – decode* (example (30)) or *meals – eat* (example (31)) or *driving – the same car* (example (32)) in which the relation between the items is based on an activity: you can decode cyphers, eat meals and drive cars. In classifying such items, it may thus be helpful to think of their association as resulting from such a relation. The category will consequently be called *activity-related collocation*.

(30) C: well I expect you don’t need cyphers during if by that you mean people who
   e: people who can decode yeah (Conversation 1)

(31) . . .it means of course that they will have the utmost difficulty in paying for their meals in the refectories and that means that the refectories go into deficit if they can’t afford to eat here. . . (Add. Speech)

(32) HK: . . .and of course this meant that there was no alcohol, there was no driving with a member of the opposite sex. This was for Sudanese people, but, of course, you, as a foreigner, could not be seen in the same car with a Sudanese man. (Conversation 3)

*Elaborative collocation*

However, even after recognising all the cohesive pairs based on the relations discussed above, there still remain items between which an association exists but which cannot be classified as ordered set or activity-related collocation. Let us consider the following examples:

(33) . . .at the beginning of the Michaelmas term 1955, Sylvia's first year at Cambridge. I had walked into the Mill Lane lecture room a few minutes early… (Add. Academic Writing)

(34) . . .on the topic of the firing of Christina Jeffrey as US House of Representives historian. The reason she was fired was because she complained in
1986 that a proposed Jr. High curriculum on the Holocaust was not balanced or objective because it did not include the Nazi point of view...

(Mailing List 1)


Getting back to the news article: really? The students realised it was about getting additional funds or the schools, ...

(Mailing List 2)

The relations in examples (33), (34) and (35) (Cambridge – the Mill Lane lecture room; the Holocaust – the Nazi point of view; LA Times – the news article) illustrate our third collocation category, elaborative collocation. This is a category for all those pairs whose relation is impossible to define more specifically than stating that the items can somehow elaborate or expand on the same topic.

However, the relation between the items is not totally haphazard. It is with elaborative collocation that the frame concept, referred to in Chapter 2 (Note 6), is reintroduced. Frames are knowledge structures evoked by lexical items: for example, if a text begins with arraignment, it evokes the arraignment frame, and following items, such as magistrate and charges are interpreted according to this frame, thus creating coherence in the text (Fillmore 1985; Fillmore & Baker 2001: 3). Considering example (33), we can say that Cambridge evokes the university frame, and the Mill Lane lecture room can be interpreted within this frame.

Frames thus create a general basis for coherence, but they are conceptual, i.e. they are not visible on the surface of text. However, frames can be related to another concept, which may also be helpful in establishing a relation between items and which, unlike frames, is materialised on the surface of text; this is the concept of the trigger. In the previous section, we drew attention to the concept, discussed by Jordan (1984, 1992, 1998). Jordan argued that a trigger, which is usually a repetition of the previous topic (item), can be used to clarify the association between an item and its re-entry. Let us next consider examples (33), (34) and (35) again in a slightly modified form, as examples (36), (37) and (38):

(36) ...at the beginning of the Michaelmas term 1955, Sylvia's first year at Cambridge. I had walked into Cambridge's Mill Lane lecture room a few minutes early...

(37) ...on the topic of the firing of Christina Jeffrey as US House of Representatives historian. The reason she was fired was because she complained in
1986 that a proposed Jr. High curriculum on *the Holocaust* was not balanced or objective because it did not include the Nazi point of view on *the Holocaust*... 


(15 sentences) 
Getting back to the *LA Times* news article: really? The students realised it was about getting additional funds or the schools, ... 

Although the examples in their new form may not sound as natural as in their original form – it is important to keep in mind Jordan’s (1984) observation that there must be a good reason for including the trigger – we can see that they still make sense even with the repetition of the previous items, *Cambridge, the Holocaust* and *LA Times*, respectively. If there was no relation between the items, the result with the trigger would hardly be so satisfying. Consequently, a “trigger-test” can be helpful in verifying some elaborative relations.

As noted earlier, however, Jordan’s definition and use of the trigger are not the only ones available. In order to complement our understanding of the concept with a related but slightly distinct view, let us first consider the following example:

(39) A: yes the reason is you know the disgusting curmudgeonliness of school caretakers the evening class I went to we all agreed that it should start at quarter to eight so that we could make it instead of half past seven and we did this happily for four years and in the fifth year the school caretaker went on strike and said he wasn’t going to have any more classes that finished after half past nine and everybody just had to knuckle under which was very annoying indeed 
b: well this one starts at half past seven 
A: particularly as the lecturer came down from Hampstead down to Wimbledon and he didn’t like driving all that way through the rush hour  
(Conversation 2) 

The important point in this example is the mention of *the lecturer* in speaker A’s second turn, which can illustrate the use of the trigger in the sense of Hawkins (1978:123ff.). We remember that Hawkins used the concept to refer to the associations created by a lexical item, i.e. the trigger, which make possible “first-mention definite descriptions”. In example (39), *evening class* and the more general item *classes* function as the triggers which make possible the mention of *the lecturer* a little later.8
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Hawkins (1978: 125) notes that such associative use of the definite article is dependent on the fact that “the speaker and hearer share knowledge of the generic relationship between trigger and associate” (i.e. frames) and that the definite article is “an instruction to the hearer to exploit this shared experience in working out which set and referent are intended” (1978: 130; see also Halliday 1994: 182). In example (39), after the introduction of the evening class and classes, the lecturer can be referred to by a definite expression, since (evening) classes are known to have lecturers. Speaker A can thus be quite confident that the mention of the lecturer will not mislead the other participants in the conversation, especially since the school frame is further strengthened by the two mentions of school caretakers (see also Hajicová 1993: 72–73).

That Jordan’s and Hawkins’s ideas about the trigger are closely related can be seen in example (39) as well. We could arrive at a satisfactory explanation even with Jordan’s model, i.e. we could reintroduce the trigger and get the lecturer of the class (or the lecturer of the evening class with the “secondary” trigger). The difference between Hawkins and Jordan, very briefly, is that for Hawkins the first-mention definite article is the signal of the relation, whereas for Jordan the possibility of re-introducing the previous item is what explains the association.

In some cases the relation between the trigger and the associate(s) can be dependent on specific knowledge rather than on shared general knowledge (Hawkins 1978: 125). Example (40) can serve as an illustration of such an instance, although it could of course be argued that it is generally known today that moderated e-mail mailing lists have editors. But for the sake of argument, let us assume that such information is not yet shared general knowledge, but relies on more specific knowledge on computer-mediated communication. In example (40), the writer is writing a message to a particular mailing list, the ling.list (i.e. the Linguist List) and can therefore presume that the readers of the list will be aware that it has editors, who can consequently be referred to by a first-mention definite expression by the writer without a danger of misleading the readers.

(40) Well, the ling.list has finally broken its wall of silence, though it has not yet unleashed the backlog of opinions and comments on the “Ebonics” issue that I expected. I was going to charge the editors with cowardice, but that would have been unjust. They need some time with their families, just as we all do, and I know they know just how to make up for it.

(Mailing List 2)
However, regardless of which knowledge is required – shared general knowledge or more specific knowledge – both the speaker (or writer) and the listener (or reader) have to be aware of the association. As Hawkins (1978:123) points out, “it is no use the speaker alone being aware of the existence of an association”. Here we come to the most important point regarding triggers and associates: whether the association between a trigger and its associate(s) can be explained by a reintroduction of the trigger or whether it is signalled by a first-mention definite expression, the association will be profitable to a text’s coherence only if it can be identified by the receiver.

A successful use of a trigger is therefore quite demanding for both the speaker/writer and the listener/reader. The producer has to evaluate the communicative situation and decide whether the trigger and the associates will be clear to the receiver, so that the receiver’s task of identifying the relation will not be overwhelmingly difficult. The importance of the connectivity of text-knowledge and world-knowledge to collocation relations was already referred to at the beginning of this chapter, and it is especially apparent in this context. The producer’s evaluation of the situation must involve a consideration of the receiver’s knowledge of the text and/or of the world; if the evaluation fails, the trigger will not evoke the correct associations in the receiver’s mind and the relation will remain unnoticed. Equally, the receiver cannot assume a passive role, but has to actively negotiate with text-knowledge and world-knowledge in order to recognise triggers and identify relations.

It seems that we could add a third dimension, as it were, to the knowledge required from producers and receivers in using and identifying triggers. The producer has to consider the possibilities of the receiver to recognise the relation, and the receiver has to be receptive to the signals of these relations, i.e. triggers. Besides text-knowledge and world-knowledge, the process calls for something further, and as it appears that collaboration between the communicators is especially essential in this process, the third dimension could be called collaborative knowledge. If text-knowledge tells the communicators of the textual context of the relation and world-knowledge of the wider context, collaborative knowledge unites these with knowledge of the communicative process. In other words, collaborative knowledge tells the communicators how to keep the communicative process going. As a bonus, it can also tell an analyst what is going on in the communicative process.

Let us consider an example which can throw light on what we actually mean by collaborative knowledge. The previous examples of elaborative collocation have only illustrated instances in which the same speaker or writer is responsible for producing the related items. Example (41) shows a situation
in which two (or three, eventually) different speakers collaborate; speaker (B) produces the first item oil, and speaker (a) the second item the Arabs:

(41) B: yeah it’s a factor I agree but don’t you think it’s rather a small one
a: yes well probably
B: I mean for instance one of the things that has really shaken the world up and may yet have a very substantial effect on things which as far as I can see although it was part of the landscape nobody predicted and certainly Kahn and his people didn’t is sudden change in world commodity prices especially oil
a: right no nobody predicted that
B: well they could have done actually if if you were really in the predicting game you’d have would have been and indeed a I think a few people did actually
a: but John could anybody predict the Arabs would turn stroppy just then
B: not just then but people had been saying for a long time that they would
C: well surely it was an option they had open wasn’t it everybody must have realized it (Conversation 1)

Strictly speaking, the relation between the items in example (41) cannot be explained with a trigger – unless we somewhat expand the notion, that is. We cannot reintroduce oil into speaker (a)’s utterance and thus explain the association: if we included oil as a trigger into speaker (a)’s utterance to get, for instance, the Arabs with their oil, it would sound very artificial in the context, and moreover, the idea of the trigger would be somewhat invalidated if we started introducing extra words between the trigger and the associate. Furthermore, we cannot make use of the first-mention-definite-expression argument, because the definite article can accompany nationality words even if the meaning is generic.

Even if it is not actually a case of a triggered association, what is undeniably happening in example (41) is that speaker (a)’s the Arabs is prompted by speaker (B)’s oil. In other words, speaker (a)’s contribution and the mention of the Arabs is a perfectly good continuation to speaker (B)’s earlier comment on world commodity prices and oil. World-knowledge is of great importance, since without it the connection between oil and the Arabs would not be clear and speaker a’s comment would be quite illogical. The present context of the aftermath of the oil crisis (the conversation took place in 1976) makes the association unmistakably obvious.
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However, world-knowledge is connected with text-knowledge: in this particular text, oil is in a relation with the Arabs, because the current topic, world commodity prices, does not support other interpretations. Consequently, as has already been pointed out, associations are discourse-specific; it is easy to imagine other texts, dealing with, say, car engines or cooking, in which oil would be related to totally different sets of words, i.e. in which the associates would be quite different. The negotiation of an association thus takes place in the immediate context of occurrence; what has already been repeatedly pointed out about the unsuitability of ready-made classifications for the analysis of lexical relations is especially relevant as regards elaborative collocation.

In example (41), the association is clear and all goes well in the collaboration between the communicators: speaker B acknowledges speaker a’s association by continuing from a’s comment, and, furthermore, also speaker C corroborates the association by continuing after speaker B. What we have here is an example of collaboration between three speakers, an example which tells us a great deal about the management of relations of meaning within a text. By observing the reaction of the other communicators to speaker a’s contribution, we can learn from this expression of collaborative knowledge: because the conversation continues without the slightest suggestion of a problem, we can only reach the conclusion that at least this particular associative relation – subtle by definition and thus difficult for the communicators – does not hinder the communicative process.

We have devoted quite a number of pages to elaborative collocation. The reason for this is simple enough: the category is the subtlest in our classification and thus difficult to describe in a fashion that would make the analysis easily replicable. In fact, as has already been noted, elaborative collocation relations have often been deemed almost impossibly difficult to analyse and have therefore repeatedly been excluded from investigations of lexical cohesion. It is true that elaborative collocation relations are not typically as numerous as other relations in any text, but although they may not be globally as important as, say, repetition, they can be locally exceedingly significant, which our examples have hopefully been able to demonstrate. Neglecting these relations would therefore be a grave oversight in a study which tries to understand the connection between lexical relations and communicative conditions.

It is hoped that the discussion has been able to show that it is perfectly possible to recognise, understand and analyse elaborative collocation relations. On a conceptual level, we can recognise the frames evoked by lexical items; on the surface of text, we can use triggers and associates as helpful tools in the analysis; and in the cases where they do not apply, we can think of the relation
as one between a prompt and an associate. With the help of these concepts and tools, by observing the unfolding of the communicative process and by taking into account world-knowledge, text-knowledge and collaborative knowledge, we can begin to appreciate the contribution of these relations to the cohesive constitution of discourse.

3.4 Towards the analysis

We have now discussed all those relations between lexical units that will be included in the analysis of the present study. The classification presented will be the toolkit for examining in Chapters 5 through 8 the manner in which lexical units combine with each other and mark the unity and coherence in discourse.

Because of their inherent subtlety, it is clear that the analysis of collocation relations may not be as replicable as that of reiteration relations, but I trust the criteria presented above will have made it clear why collocation relations are included. Of course we cannot totally rule out intersubjectivity in the recognition of collocation pairs, and as Halliday and Hasan (1976: 320) state, “it is the essentially probabilistic nature of lexical patterning which makes it effective in the creation of texture”. The very same point is noted by Ellis (1992: 145):

> [t]he semantic system of a language, and the patterns of use that recur over time, determine what words are related to what other words. These relationships are central to the linguistic system even if they can only be stated as inclinations and propensities, and not as rules.

The analysis in the present book relies on both kinds of relation between lexical items: those created by the general semantic system of language – although conditioned and controlled by the texts in which they occur – as well as those created by associations of items with other items. Both of these contribute to the coherence of discourse and thereby to successful communication.

Notes

1. I am indebted to Renata Pípalová for bringing this study to my attention and especially for translating it from Czech into English.
2. Hawkins (1978) introduced the concept of the trigger in his discussion on associative anaphora and first-mention definite descriptions; his definition is slightly different from
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Jordan’s (see also Jordan 1992). For Hawkins, a trigger is a lexical item which “conjures up a set of associations” and makes possible the use of a first-mention the; for example, a wedding makes possible or triggers off the bride, the bridesmaids, and so on. We will return to the concept of the trigger later in this chapter, and make use of the concept in the sense of both Hawkins and Jordan. Particularly Hawkins’s but also Jordan’s ideas on the trigger have been greatly influenced by the study by Christophersen (1939), in which the associative use of the definite article is thoroughly discussed; Christophersen does not, however, make use of the concept of the trigger.

3. What is presented here is a simplification of Martin’s classification, for in his thorough discussion on lexical cohesion he further subdivides the subcategories of these three main classes, so that the individual subcategories consist of several subclasses, which are themselves divided into subclasses, and so on. To make his model comparable with the others, however, we will use a level of specificity similar to those in the other studies. This is also the system that Martin uses in his own analyses (see Martin 1992:Ch. 5).

4. All examples come from the material of the present study; the texts are introduced in detail in Sections 5.2, 6.2, 7.2 and 8.2. Please note that although there may be other cohesive relations present in the examples, only those relevant to the particular category being introduced are italicised and discussed. Furthermore, as the main purpose of the examples in this chapter is to illustrate the relations as clearly as possible, it was decided to select examples in which the related items are relatively close to each other. Although this does not give an absolutely untrue picture of how the related pairs are situated in the texts as a whole, there may still be an overemphasis on short-distance pairs in the examples.

5. Although there are two I’s in “...and I find this quite amusing...” in example (5), they are counted as a single I. In spoken material, especially in conversations, repetitions like this are not unusual; since they cannot be regarded as instances of meaningful cohesion, but rather as hesitations typical of speech production, they are consequently always treated as a single unit. – Throughout the book, all the extracts from the texts appear unedited; hesitations in speech or typing errors in writing have not been corrected.

6. The following can serve as an example of chance repetition, which is excluded from the analysis: in Conversation 2, the speakers talk about giving papers in conferences and in front of committees and one of the speakers (speaker C) says that

“I think I’d quite enjoy giving papers to bodies actually.”

A little later, the speakers start discussing handicapped or disabled people, and the following exchange takes place:

A: ... we’ve got a new pedestrian crossing in Raynes Park and it’s one of the kind where you press a button and it operates the lights and they’ve got a buzzer..
C: m ah yeah
A: ...which I think is a very good idea for people who can’t see or can’t tell the difference between green and red
C: oh God perfectly able-bodied but colour-blind person

Obviously, there is no relation between bodies and able-bodied in this example.
7. Halliday and Hasan also draw attention to the fact that the meaning of lexical items depends on the context. They say that

\[ \text{...each occurrence of a lexical item carries with it its own textual history, a particular collocational (SKT: in the original Firthian sense) environment that has been built up in the course of the creation of the text and that will provide the context within which the item will be incarnated on this particular occasion. This environment determines the ‘instantial meaning’, or text meaning, of the item, a meaning which is unique to each specific instance.} \] (Halliday & Hasan 1976:289)

8. The reason why we somewhat surprisingly seem to have two triggers is that according to our model of analysis an item is related to the closest related item (the pairs in example (39) would be \textit{the evening class – classes and classes – the lecturer}) and therefore the trigger would actually be \textit{classes}. However, because \textit{the evening class} is related to \textit{classes} and would be recognised as belonging to the same chain I have included it in the example as a “secondary” trigger. As noted earlier, the purpose of this chapter is to elucidate the relations that form the basis of our analysis; we will have occasion to discuss the combinations and functioning of these relations in later chapters.
CHAPTER 4

Spoken and written discourse

4.1 Introduction

…we found formal written language to differ from informal spoken language by having a larger proportion of nominalizations, genitive subjects and objects, participles, attributive adjectives, conjoined phrases, series, sequences of prepositional phrases, complement clauses, and relative clauses. These are all devices which permit the integration of more material into idea units.

(Chafe 1982)

…it is only in spoken language, and specifically in natural, spontaneous interaction, that the full semantic (and therefore grammatical) potential of the system is brought into play.

(Halliday 1992)

There are few, perhaps no, absolute differences between speech and writing, and there is no single parameter of linguistic variation which can distinguish all spoken from all written genres. Rather, the range of potentially distinguishing linguistic features provides a ‘pool’ of resources which are used by spoken and written genres in various ways. When we appreciate this, the distinction between speech and writing, far from being obvious and transparent, becomes a complex and intriguing domain of linguistic enquiry.

(Crystal 1995)

The purpose of this chapter is to elucidate the selection of material for analysis. Since the material consists of both spoken and written language, we will first discuss what is already known about their similarities and differences, a knowledge of which is essential for choosing the categories of spoken and written discourse that will be included in the analysis. Many of the earlier studies can now be shown to display problems in their choice of material and even methodology, but it was in these studies that the foundation for our understanding of the relations between spoken and written language was established.

The three quotations above aptly illustrate the contradictory views that emerge from studies on spoken and written discourse carried out over the last three decades or so. Findings have been reported showing the complexity of written language as opposed to spoken language. Conversely, it has also been demonstrated that spoken language may possess far greater complexities than
written language. Lately, however, researchers have adopted less dichotomous approaches to the study of the two modes, and many now think that the real differences do not lie between the written and the spoken modes as such, but vary between the modes and within various types of text in each mode.

4.2 From speech versus writing to the spoken-written continuum

The earliest comparisons of spoken and written language were based on word frequency counts. For instance, Drieman's written material had longer words, more adjectives and a more varied vocabulary than his spoken material (Drieman 1962), while the study of Gibson et al. (1966) showed that spoken language had shorter average sentence length and fewer syllables per 100 words but more personal words than written language. As the number of studies increased, however, some rather contradictory findings started to emerge, suggesting that clear-cut differences and distinctions form only a part of the picture, and that similarities and overlaps are also undeniably present.

Let us consider a few of these studies. Several researchers have endorsed the claim that written language is syntactically and lexically more complex than spoken language (see, for instance, Chafe 1982 and Redeker 1984 on connectives, nominal constructions, complement clauses and attributive adjectives in spoken and written language; Altenberg 1986 on the use of contrastive items in spoken and written language; Hermerén 1986 on the use of modalities in written and spoken material). However, quite opposite claims have also been put forward. Halliday (1992, 1994) has always insisted that only spoken language displays the true potentiality of language. He maintains that the complexity of writing is a result of “the packing together of lexical content, but in rather simple grammatical frames”, whereas in speech “much more of the meaning is expressed by grammar than by vocabulary” (Halliday 1994:xxiv). There exist some studies which support Halliday’s view. In an early study, in which he compares eight spoken and written text sets, Svartvik shows that speech has more passive constructions than, for instance, novels and advertising language (Svartvik 1966:152–155). Similarly, Beaman’s study on co-ordination and subordination in spoken and written texts reveals that the number of subordinating clauses, which reflects the degree of complexity, is almost equally high in her spoken and written material (Beaman 1984).

Many of the studies discussed above, the earlier ones even more clearly than the more recent ones, start from the assumption that spoken and written language must differ structurally because they differ in their method of pro-
duction, transmission and reception. It would be unjust not to note, however, that many of the researchers mentioned themselves propose that the differences between spoken and written modes should be investigated less categorically, because a strictly contrasting view on spoken and written language does not necessarily yield the most reliable results. For instance, although he concludes that written language favours passives, nominalisations and more complex clause relationships compared to spoken language, Chafe goes on to caution his readers that

...these seemingly categorical statements about spoken and written language apply in fact to extremes on a continuum...: spontaneous conversational language on the one hand and formal academic prose on the other. There are other styles of speaking which are more in the direction of writing, and other styles of writing which are more like speech. (Chafe 1982:49)

Greenbaum and Nelson directly answer Chafe in their study on clause relationships in three types of spoken and three types of written English. They note that their results “do not support a sharp distinction between speech and writing” and that “factors other than the speech/writing difference affect the use of coordination and subordination in discourse” (Greenbaum & Nelson 1995:16–17). In support of Chafe they add that conversations show less coordination and less subordination than other categories so that “insofar as conversations are the most typical and most frequent use of speech, Chafe is correct in his view that there is less complexity in the spoken language” (Greenbaum & Nelson 1995:17).

Since there seems to be some consensus that mode alone is insufficient for explaining potential differences and similarities between different types of language, there are naturally also ideas as to what could better explain them. Tannen (1982) suggests that register and genre are more important factors than mode, while Mazzie (1987) notes that the content in various kinds of discourse, rather than mode, is more decisive in causing differences between discourses. It has also been pointed out that unplanned and planned texts and discourses differ considerably: not all spoken language is unplanned nor all written language planned, and differences due to the degree of planning exist even within the modes (Greenbaum & Nelson 1995; Ochs & Schieffelin 1983:133–146). Furthermore, as Akinnaso remarks, it should be considered “...whether comparison is between spokenness and writtenness or between informality and formality” (Akinnaso 1982; see also Givón 1979:229–230; Greenbaum & Nelson 1995). Beaman (1984), too, is of the opinion that at least some of the differences that have been found to exist between spoken and written language are due
Collaborating towards Coherence

to unfortunate choices of material, i.e. comparisons have been made between different styles and degrees of formality, not between the two modes.¹

What is known, then, about the differences in cohesive features between spoken and written discourse? As already noted in Chapter 1, not many studies exist which actually discuss these, and the studies which do exist can show problems similar to the ones discussed above, namely that comparisons may have been made between only one spoken and one written category. Although the generalisability of the findings in these studies can therefore be questioned, it is useful to consider them in order to see whether some general guidelines or proposals can be drawn from them.

It has been proposed that cohesion tends to be denser and more noticeable in written discourse than in spoken discourse (Ventola 1987: 141). A possible reason for this could be the fact that although spoken and written discourse have at their disposal the same grammatical and lexical devices for marking cohesion, spoken discourse can also make use of prosodic and paralinguistic devices, whereas in written discourse all cohesion must be lexicalised (Tannen 1985; see also Ventola 1987: 141). Fox draws attention to the communicative differences between spoken and written language, after her study reveals a pattern of long-distance pronominalisation in spoken (conversational) discourse which is not found in written discourse. She concludes that this finding is due to differences in communicative needs and interaction in spoken and written discourse (Fox 1987: 146–151). Lautamatti seems to be following similar lines of thought when she divides coherence into propositional and interactional coherence. Propositional coherence is based on the content of discourse and reflected as textual cohesion on sentence level, while interactional coherence is based on sequences of communicative acts, and no textual cohesion is needed. It follows that propositional coherence is prominent in written language and interactional coherence in spoken language (Lautamatti 1990).

Reflecting on these findings, it appears that we should expect cohesive devices in written texts to outnumber those in spoken texts. When we take into account Fox’s and Lautamatti’s studies, however, and note the importance of the communicative situation, it is rather safe to assume that the cohesive differences we may be able to uncover in the material of the present study cannot be attributed to single factors such as mode.

It clearly emerges from the above discussion that establishing features which would differentiate all spoken language categories from all written language categories in a reliable way is an almost hopeless undertaking. Furthermore, in order to uncover potential differences and similarities between spoken and written language, it is rather unproductive to start from a viewpoint which
defines the two as being strictly in opposition with each other. It seems that a new approach is called for, one where the opposition is given up in favour of a less dichotomous approach.

Such an approach is reported in studies by Biber and Finegan (Biber 1985, 1988, 1992a, 1992b; Biber & Finegan 1986). They are of the opinion that the whole speech–writing dichotomy should be abandoned. According to Biber and Finegan, comparisons between the modes should rather be based on dimensions defined by functional criteria. What they suggest, in other words, is that considerations of various situational, functional and processing relations across different types of speech and writing should override the idea of an absolute distinction between spoken and written discourse. Considering the findings presented in the previous section, their suggestion appears plausible.

Biber’s earlier studies (1985, 1988) deal with various characteristics of texts from several categories of spoken and written language. His idea, in short, is to eliminate the problems plaguing most of the previous research by analysing a great variety of features in a large amount of spoken and written texts. Biber’s material consists of all the texts in the LOB Corpus and the London-Lund Corpus, and some non-published written texts (professional and personal letters) are also included. The analysis starts with a counting of those features that have been suggested to differentiate between the two modes by previous research (e.g. the studies discussed in the previous section). The 67 features analysed include, for instance, tense and aspect markers, nominal forms, subordination features and lexical specificity (for details, see Biber 1988: Ch. 4). Next, with a statistical tool called factor analysis, co-occurrences of the features are counted in each text. Factor analysis utilises correlations of the chosen linguistic features so that it is possible to say which features co-vary or occur together. These co-occurrences reveal, according to Biber, various tendencies in the texts; each set of co-occurring features serves some function (Biber 1988: Ch. 5).

To interpret the sets, Biber distinguishes several underlying functional dimensions which explain their use. In other words, he postulates that each set indicates a communicative function shared by the features in the set. For example, on one dimension a high type/token ratio, long words and a large number of attributive adjectives co-occur, on the one hand, and a large number of first and second person pronouns, private verbs and present tense forms, on the other. The former can be said to characterise a high informational focus in a text, whereas the latter associate with interactional, generalised content in a text (Biber 1988:104–108). Biber calls this Dimension 1, ‘Involved versus Informational Production’. Figure 4.1 shows how the genres in Biber’s corpus are situated along Dimension 1.2
Figure 4.1 Mean scores for each of the genres. Dimension 1: ‘Involved versus Informational Production’ (Figure 7.1 in Biber 1988)

For example, conversations seem to be situated at the “involved” end of the continuum, academic prose and official documents are “informational”, and mystery and adventure fiction have intermediate values on this dimension. What is particularly interesting about this dimension, however, is that the
spoken genres and the written genres do not form a simple dichotomy on the scale. There are clear differences between some spoken and written genres, such as conversations and official documents, which are situated at the opposite ends of the continuum. However, personal letters show very similar values if compared to spontaneous speeches, and prepared speeches are very close to fiction on this scale. When all the genres are considered, their distribution on this dimension clearly indicates that merely contrasting spoken and written language is indeed an oversimplification.

The other five dimensions in Biber (1988) are the following: 'Narrative versus Non-narrative Concerns', 'Explicit versus Situation-dependent Reference', 'Overt Expression of Persuasion', 'Abstract versus Non-Abstract Information' and 'On-line Informational Elaboration'. Naturally, the positions of the genres vary on each dimension, but the picture that emerges from Dimension 1 remains unchanged in one respect: on no dimension is a simple dichotomy displayed between all the spoken genres and all the written genres.

In a later article, Biber concentrates on the analysis of features of complexity in a sample of spoken and written texts. Here he uses a slightly different statistical procedure (an improved version of factor analysis), which, for instance, allows the researcher to decide about the number of features associated with each factor. Biber concludes that there is a distinction between spoken and written genres as regards complexity: the written genres show several complexity profiles, i.e. they make use of a variety of complexity features, whereas only one complexity profile is manifested in the spoken genres (Biber 1992a).

Biber (1988:207, 1992a) has also called for studies on other aspects of discourse organisation to see how they compare to his findings. In her study on the use of intonation in the texts from the London-Lund Corpus, Nevalainen found that intonation type, or nuclear tone, seems to function as an independent dimension, i.e. it did not function in agreement with the dimensions recognised by Biber (Nevalainen 1992).

Biber answers his own call in an article on referential strategies in spoken and written texts (Biber 1992b). In this paper he analyses, again by computational means, referring expressions (e.g. repetitions, synonyms and pronouns) and their distributions in a selection of texts. He concludes that certain referential features correlate with his earlier dimensions (e.g. exophoric pronouns and chain length correlate with Dimension 1), whereas others (e.g. density of referents) seem to form more independent dimensions (Biber 1992b). This particular article displays, however, some methodological problems that can affect the findings. The “texts” in this study are 200-word samples drawn from the beginning of the original texts. It is obvious that the extent of referential
strategies within a text cannot become fully apparent from an analysis of the first 200 words. Furthermore, the samples have been analysed using thorough but entirely automated procedures, and the fact that a textual feature like reference is thus investigated without as much as a glance at the texts themselves is rather disturbing. Consequently, the generalisability of at least some of Biber’s findings presented in this study must be questioned.

Except for the study by Biber, there have been no attempts to examine if and how the use of cohesive features correlates with Biber’s earlier findings. Consequently, it will be interesting to see whether the use of lexical cohesion shows a simple dichotomy between spoken and written discourse, or – a more likely option – whether it will actually reflect the situational, functional and processing aspects of different types of spoken and written discourse.

4.3 Material to be analysed

4.3.1 General considerations

We have seen that the relations between spoken and written discourse are complex, and that comparisons between texts should take into consideration various factors governing the communicative conditions under which the texts have been produced. The selection of material for a study comparing spoken and written texts is consequently far from straightforward.

The difficulties connected with finding comparable spoken and written texts have sometimes led to very strict constraints being suggested on the selection of material for comparisons. It has been proposed, for instance, that the spoken and the written texts to be compared should be identical in all respects except in their method of production (Akinnaso 1982; cf. Drieman 1962). This would mean that not only should the producer be the same, but also all the production and situational conditions should be identical. Following this suggestion would lead to several problems: practically all natural data would be excluded from the analysis, as only texts produced under strict test-like circumstances could be accepted as material.

However, there is another suggestion which has been put forward and which seems more appealing and practicable. According to Biber, we can find unmarked texts in both the spoken and the written mode; in other words, there are texts which show what is typically done in writing, and texts which show what is typically done in speaking (Biber 1988: 52–58; see also Fox 1987: 138). Thus, according to Biber’s idea of comparability, if we want to compare writ-
ten and spoken texts we should select material of the same “typicality” or markedness from each mode.

Drawing upon Biber’s analyses and upon earlier studies on speaking and writing, let us try to define the unmarked types of each mode. In the spoken mode, it seems that face-to-face conversation most clearly shows the characteristics associated with speaking: it is the stereotypical, unmarked type of the spoken mode. In studies of spoken language, conversations are often the obvious choice as data, and some researchers even suggest that conversation is the basic type of all language use, and that other types have developed from this norm (Biber 1988: 160–164; Clark 1996; Fox 1987: 138).

In the written mode, academic expository writing stands out as the most suitable category to represent stereotypical, unmarked writing. Academic writing has most of the features typical of writing (Biber 1988: 160–164), and it is therefore not surprising that it has been used as material in a great number of studies of written language.

We have now been able to define the end-points, as it were, for our continuum of spoken and written text categories. In other words, face-to-face conversations and academic writing differ as regards their production, situational and communicative characteristics to such a degree that comparing the use of cohesion in them should lead to interesting findings; if communicative conditions have an effect on the use of cohesion, these two categories should show a marked difference in this respect.

However, after having dedicated the entire first section of this chapter to a discussion of the difficulties arising from a comparison of just one spoken and one written category, it would appear less than judicious to base the analysis on only one of each. Consequently, two more categories will be included: prepared speeches and electronic language, or more specifically, mailing-list language. Let us next briefly consider why these two categories are suitable for complementing our material.

A feature shared by prepared speeches and mailing-list language is that they can both be said to fall, as it were, between face-to-face conversations and academic writing. In other words, on a continuum of spoken and written language they would be situated somewhere in the middle, possessing characteristics of both spoken and written language. Prepared speeches are spoken language, but they have been planned, which draws them towards written language. Mailing-list language is written, but usually (although not always) without the careful planning and editing of, say, academic writing. Moreover, the interaction between the participants in an electronic discussion approximates that of
Collaborating towards Coherence

Figure 4.2 The four sets of texts on the spoken-written continuum

<table>
<thead>
<tr>
<th>Face-to-face conversations</th>
<th>Prepared speeches</th>
<th>Mailing-list language</th>
<th>Academic writing</th>
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</thead>
<tbody>
<tr>
<td>Spoken</td>
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<td>Written</td>
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</table>

a conversation, making mailing-list language appear more spoken-like in this respect.³

If we consider all the four categories in terms of their spoken and written characteristics, we can place them on a spoken–written continuum in the way as shown in Figure 4.2.

In the material of the present study, face-to-face conversations represent the most spoken-like language, while academic prose is no doubt the most written-like category. Prepared speeches and mailing-list language occupy an intermediate position between these two.

However, presenting the material on a single continuum provides too simplistic a picture and overemphasises the importance of mode. Let us see how the four categories are positioned on the six functional dimensions suggested by Biber. Figure 4.3 indicates how the categories are related to each other as regards certain textual and extratextual features, interpreted through the dimensions of informativity, narrativity, explicitness, persuasion, abstraction and elaboration.⁴ The figure shows how the relative positions of the categories change depending on the dimension, and some interesting similarities and overlap between the categories become evident.

Starting with Dimension 1, we can see that face-to-face conversations are situated at the involved end of the scale, while academic prose is positioned at the opposite end. Prepared speeches show an intermediate value on this scale, but electronic language is clearly more involved, although not as involved as face-to-face conversations. In terms of narrativity (Dimension 2), only prepared speeches show a low narrative value; the other three categories are situated towards the non-narrative end of the scale, academic prose showing the highest non-narrative value. On Dimension 3, face-to-face conversations and electronic language display situation-dependent reference, while prepared speeches and especially academic prose demonstrate explicit reference.

The picture is quite different on Dimension 4: here face-to-face conversations and academic prose show very similar values and are situated towards the negative end on the scale of persuasion. Prepared speeches demonstrate more overtly expressed persuasion, but it is electronic language that has the
### Table 4.3

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### Figure 4.3

Biber's six dimensions (approximate mean scores) for face-to-face conversations, prepared speeches, academic prose (Biber 1988) and electronic language (Collot & Belmore 1996)
highest value of all on this dimension. As regards abstraction (Dimension 5), it may not be surprising that academic prose is situated at the extreme abstract end of the scale, but it is quite interesting that electronic language also shows a relatively high value. The two spoken categories are positioned towards the non-abstract end of the scale, face-to-face conversations being the least abstract.

The last dimension is that of on-line informational elaboration. Interestingly, all the four categories are positioned towards the positive end of the scale, i.e. all of them seem to demonstrate at least a degree of informational elaboration. Face-to-face conversations and academic prose show almost identical, intermediate values. It should perhaps be clarified that Dimension 6 illustrates a particular type of informational elaboration, namely that happening on-line, which is undoubtedly the reason for the relatively low score for academic prose on this dimension. There are written texts which even show negative values on this dimension: for example, mystery, adventure and science fiction are all situated at the negative end of the scale (Biber 1988: Ch. 5). Electronic language scores a relatively high value, but prepared speeches clearly show the highest degree of on-line informational elaboration.

All in all, the picture emerging from Figure 4.3 is one of extreme complexity as regards the relationships between the four sets of text chosen for analysis in the present study. What we can learn from it is that it is unwise to expect a simple answer to the question of how the use of cohesion will vary between the sets.

4.3.2 Segmentation and quantitative treatment of the material

The question of segmenting the material into suitable units of analysis is especially significant in studies dealing with both spoken and written discourse, for there is little unanimity about the suitability of units used in the study of written discourse for that of spoken discourse, and vice versa. In this study, sentence will be used to refer to units of both written and spoken discourse in the analyses of the prepared speeches and the written texts; for analysing the conversations, turns will be used instead.

In studies of written discourse the position of sentence as a basic category has rarely been questioned, but its role becomes slightly problematic in a study which also deals with spoken discourse. Some suggestions as to how to overcome a potential written-language bias in studies of spoken language have been put forward. Halliday (1985: 192–193) suggests that the term clause complex instead of sentence could be used for the grammatical unit in both
written and spoken language, so that sentence could be restricted to refer to
the orthographic unit between full stops in written language (see also Hoey

In Brazil (1995), we find a term specifically coined for spoken discourse: he
uses the term increment to refer to the basic unit of spoken discourse, mainly
in order to draw attention to the fact that spoken discourse should not be
analysed according to a sentence-grammar model based on written discourse.
Brazil does not suggest, however, that there is a fundamental difference be-
tween a sentence and an increment, for he says that an increment “may often
be indistinguishable from what a sentence grammarian calls a sentence” (Brazil
1995:39, 225–228). A further comment by Brazil is especially noteworthy: he
states that our ability to analyse discourse with the help of the concept of sen-
tence does not imply that the concept is needed for successful communication
(Brazil 1995:16). Consequently, if sentence is regarded as an analytical tool, it
seems entirely appropriate to use it for both spoken and written discourse, re-
gardless of the fact that it may be more explicitly coded in written discourse.
In the present study, then, sentence will be used for both written and spoken
units, without any implications that written language is the norm to which
spoken language is compared.

Thus, sentence, rather than clause, was selected as the basic unit, but it
must be noted that cohesive relations can and do also exist between the clauses
of a sentence. However, it has been claimed that because of the force of the
grammatical structure, cohesive relations within a sentence are not as no-
ticeable as they are between sentences (see e.g. Halliday & Hasan 1976:7–9;
Halliday 1985:288; Hoey 1991:216). While it is acknowledged that cohesive re-
lations within a sentence may not be as striking as those between sentences,
they are nevertheless included in the analysis, because it is quite conceivable
that they may help to make the unity of a sentence clearer.

As noted above, in the analysis of the material in the present work, the con-
cept of sentence is relevant only in so far as the written texts and the prepared
speeches are concerned, and, moreover, it will be used only in connection with
the examination of the role of cohesion in discourse organisation.

The recognition of sentences in the written texts, i.e. in both the mailing-
list messages and in academic writing, is unproblematic, since the writers’
intentions can be followed and their sentence divisions accepted. As regards
the speeches analysed in the present study, three out of the four were avail-
able as orthographic transcripts with sentence divisions, namely the speeches
from the SEC and the BNC Corpora. Because of their preparedness and non-
spontaneous nature, the division into sentences of prepared speech is not very
difficult (see also Foster et al. 2000; Thompson 1997:54–55). The sentence divisions in the three speeches were accepted as such, and the final one was segmented with the help of grammatical, prosodic and contextual information.

The conversations will not be divided into sentences or sentence-like units for the analysis. We will be investigating the use of cohesion in the conversations across turns and across speakers, not across sentences; the information so gained will be sufficient for forming a picture of the functioning of cohesion in the conversations. Some of the examples of conversation which we discuss later in the book will, however, show punctuation and sentence divisions. This is due to the fact that the conversations from the SEC and the BNC Corpora have been divided into sentences during their transcription. The conversations from the London-Lund Corpus have not been treated like this, and extracts from these data will therefore appear without punctuation and sentence divisions.

Some quantitative information about the distribution of cohesion in the texts selected for analysis in the present study will be provided during the analysis. Since the texts analysed in the present study vary a great deal in length, it would be difficult to compare the findings across texts without a standardising procedure. Consequently, the numbers presented in the tables of Chapters 5 through 9 are normalised frequencies of the features we are studying. The frequencies are normalised to a text length of 1000 words. Thus if, for example, we find 266 cohesion pairs in a sample text of 2370 words, and we want to know how many pairs would have occurred if the text had been 1000 words long, we divide the number of pairs (266) by the sample text length (2370) and multiply it by 1000. This gives us the number of pairs (112) per 1000 words (for details of the normalising procedure, see for instance Biber 1988, 1999).

The rest of the book is organised as follows. Each set of texts will be introduced, analysed and discussed in a chapter of its own. As the material varies from one chapter to another, so will the questions to which we try to find answers; what we may expect to learn from, say, face-to-face conversation is naturally somewhat different from what academic writing can tell us. The distribution of cohesive devices as well as chains of cohesion will be analysed in all texts, which makes it possible to compare these features across all the sets of texts. The method of recognising pairs as well as chains of cohesion in the texts will be introduced in detail in Chapter 5, and the principles will not be repeated in later chapters.

In addition to the primary investigation, further analyses will be carried out on parts of the material in order to gain a fuller insight into the functioning of cohesion. In the two sets of dialogue (face-to-face conversations and mailing-list messages), the distribution of cohesion across speakers and writers
as well as across turns and messages will be studied. This will reveal how cohesion functions in the overt collaboration between the communicators, which is a central feature of dialogue.

As for the two types of monologue (academic writing and prepared speech), another aspect will be investigated, namely the role of cohesion in discourse organisation. We will examine how cohesion can signal the central sentences of a text and thus reveal important aspects of its construction. The method with which this aspect is investigated will be introduced in Chapter 7, and assumed familiar in Chapter 8.

These secondary analyses recognise the special properties present in the texts: the first acknowledges the fact that a dialogue is a joint production of several communicators, while the second pays attention to the features of a planned, monologic text. Although we cannot therefore compare our texts across the dialogue-monologue divide, we will however be able to note the similarities and differences between the spoken and written forms of dialogue and monologue.

Since it was determined in Chapter 2 that the dialogistic or collaborative framework can best help us unravel the functioning of cohesion in communication, it will not be surprising that we start the analysis, in Chapter 5, with the set of texts most clearly created in a collaborative situation: face-to-face conversations. Investigating the use of cohesion in spoken dialogue will provide us with an understanding of how cohesion functions in a situation of two or more co-present communicators; this information will be used for explaining the patterns of cohesion found in the other sets of texts. However, although spoken dialogue is thus treated as a foundation for the analyses of the other sets, this does not mean overlooking the special features and properties present in the texts of the other sets.

Bearing in mind the above, it is equally natural that we continue with the set of texts which comes closest to conversations in terms of overt collaboration: Chapter 6 is on mailing-list language, i.e. on written dialogue. Similarities and differences with spoken dialogue will be pointed out, but the special features present in mailing-list language also give rise to questions not addressed in the discussion of face-to-face conversations.

Chapter 7 deals with the first set of monologue, academic writing. Again, the communicative conditions present in the production and processing of academic writing are relevant when we discuss patterns of cohesion found in this set of texts.

Chapter 8 is concerned with spoken monologue, i.e. prepared speeches, and concludes our analysis of the texts. Chapter 9, finally, summarises and
Collaborating towards Coherence

comparis the findings in the previous four chapters. By bringing together the four sets of texts, the concluding chapter charts the tendencies in the use of cohesion across the texts and sheds light on the interplay of cohesion, communication and collaboration.

Notes

1. In addition to speech and writing, the concepts of orality and literacy have also been widely discussed. Often, they are used in contexts where language is discussed in terms of the changes that take place in the shift from an oral culture to a literate culture (see, for example, Wårvik 2003 and the articles in Olson et al. Eds. 1985 and Olson & Torrance Eds. 1991).

2. For Biber, genre is a functional category defined by text-external criteria; the texts of a particular genre are related because they have a similar communicative function (see e.g. Biber 1988:68–70).

3. Of the studies concentrating on linguistic aspects of electronic language, quite a few compare it with spoken and/or written material (see, for example, Adrianson & Hjelmquist 1991; Baron 1998; DuBartell 1994; Collot & Belmore 1996; Hancock & Dunham 2001; Herring 1996; Hiltz et al. 1986; Kolko & Reid 1998; McCarthy et al. 1992; Murray 1991; Walther 1996; Werry 1996; Yates 1996.) The results vary, depending on the spoken and written material used for comparison, but there are some general tendencies noted in several studies. For example, electronic language seems to be closer to spoken language in terms of its use of interpersonal features, e.g. personal pronouns, but more like written language with respect to its vocabulary. Electronic language also possesses unique characteristics, such as the use of emoticons or smileys, i.e. faces composed of ASCII characters.

That there is a discrete “electronic language” as suggested by Collot and Belmore (1996) is a matter of some controversy. Moran and Hawisher (1997) argue that since electronic language shows similarities to both spoken and written language, it is not really a category of its own. However, as I have been arguing throughout this chapter, some spoken categories can be very close to some written categories, and vice versa. I find the term ‘electronic language’ helpful as a general term, to refer to a variety of language produced by people communicating via the medium of computers. When ‘electronic language’ is used in the present study (synonymously with the language of computer-mediated communication), it therefore implies the same kind of internal richness and variety as the terms ‘spoken’ and ‘written’ language.

4. Electronic language was not yet represented in Biber’s studies. However, Collot and Belmore (1996) analyse electronic language using Biber’s methodology, and their results can be used alongside with Biber’s, enabling us to compare all the four genres. The material of Collot and Belmore comes from electronic bulletin boards, which are discussion forums with a wide range of topics. Their material is thus more heterogeneous than the electronic language used in the present study. It is nevertheless interesting to compare their findings to those of
Biber, especially when we consider the fact that the texts in the genres studied by Biber also form a heterogeneous group.

The positions of the sets of texts in Figure 3.3 are based on approximate mean scores; while this partly distorts the fact that there is considerable overlap in the positions of individual texts within each set, it is still a good basis for a general comparison of the sets.

5. The highly persuasive nature of electronic language, apparent on Dimension 4, can be regarded as a result of the purpose of communication, which in Collot and Belmore’s material is “to request and impart information and to discuss specific issues” (Collot & Belmore 1996).

6. Using the term dialogue for mailing-list language may not be standard practice, but so many features typical of dialogue are nevertheless evident in e-mail messages that the term does not seem inappropriate. Linell’s definitions of monologue and dialogue are helpful here, since they are broad enough to subsume different kinds of text. In monologue, “only one person is, at least at face value, active as speaker or author”, whilst dialogue refers to “any dyadic or polyadic interaction between individuals who are mutually co-present to each other and who interact through language” (Linell 1998:9). We can adopt his definition of monologue as such, but dialogue needs some redefining. Linell himself mentions telephone conversations and electronic real-time interactions as special cases of dialogue, but I would like to extend it to cover mailing-list discussion as well. Although mailing-list messages are not produced synchronously, they definitely have an element of interactivity: with the help of an electronic medium, the communicators discuss a topic, express opinions and exchange ideas, albeit usually at a slower speed than in face-to-face or telephone conversations.
CHAPTER 5

The spoken dialogue

Face-to-face conversation

5.1 Introduction

Chapter 3 was devoted to building the analytical model. Through the examples provided there, a picture of the cohesive relations existing between lexical units in texts started to emerge, but since the purpose of the examples was to illustrate the relations as clearly as possible rather than to reveal how they may actually function in texts, at the moment the picture is undoubtedly only partial or even blurred. It is now time to start exploring the relations in detail: their occurrences in the material, their interplay and, eventually, their contribution to successful communication.

This chapter deals with spoken dialogue. The conversations selected for analysis are first introduced. The following section, on patterns of cohesion, discusses the distribution of the cohesive pairs in the texts, since we are interested in finding out which relations are more frequent and which less frequent. Next, we move on to investigate how cohesive relations and related pairs are distributed across speakers and across turns, in order to discover how they are utilised in actual collaboration. In Section 5.6, we explore how the related pairs combine and form chains within and through texts. The final section summarises the analysis and discusses its implications.

5.2 Material

Conversation 1
S.2.3. from the London-Lund Corpus of Spoken English, recorded 1974, 3 speakers

Conversation 2
S.2.14. from the London-Lund Corpus of Spoken English, recorded 1976, 3 speakers
Conversation 3
J06 from the Lancaster IBM Spoken English Corpus, recorded 1985, 2 speakers

Conversation 4
KBC from the British National Corpus, recorded 1992, 2 speakers

Of the four conversations,¹ two come from the London-Lund Corpus of Spoken English (LLC), one from the Lancaster IBM Spoken English Corpus (SEC) and one from the British National Corpus (BNC). As regards the LLC, there are some problems that the analyst has to be aware of. The first problem has to do with the age of the corpus: its oldest recordings date from the 1960s (the conversations chosen for the present study were recorded in the middle of the 1970s). However, since the investigation focuses on lexical cohesion, a textual device the change of which is likely to be slow, the age of the texts is not a crucial question.

Besides its age, the representativeness of the LLC is also a potential problem in terms of the producers of its data. Despite the considerable number of texts in the corpus, there is not a great deal of variation as regards the speakers: the corpus mainly represents speech by educated people (more specifically, academics and their families and friends). Although the present study is interested in exploring variation in the use of lexical cohesion, it is not a sociolinguistic study, examining the use of cohesion across the boundaries of class, age, gender or other such factors. Rather, it charts the effect of various communicative conditions on the use of cohesion. The fact that the selection of speakers is socially limited in the LLC thus has no direct bearing on the present analysis. We will shortly see that this shortcoming can actually be turned to advantage.²

The Lancaster IBM Spoken English Corpus was completed in 1988. It is a relatively small corpus of 52000 words of spoken British English (for more detailed information, see Taylor & Knowles 1988; Knowles et al. 1996). The background of the speakers in the SEC is similar to that in the LLC: the speakers come from the educated section of the population.

Problems of age or representativeness are not issues to be related with the British National Corpus. Published in 1995, the BNC is a huge corpus of approximately 100 million words, 90% of which represents written discourse and 10% spoken discourse. In addition to its awe-inspiring size, the variety of writers and speakers in the corpus is quite impressive both socially and geographically.

The texts in the BNC have been segmented into orthographic sentence units and each word has been automatically tagged. The spoken texts have been
segmented and coded according to the same principles as the written texts, which means, for instance, that there is no prosodic information included in the coding. In this respect the spoken component of the BNC differs from the LLC, in which prosodic information forms a major part of the coding. The SEC texts are available in both an orthographic version and a prosodic version. However, as the present analysis does not include an examination of prosodic features, this difference between the corpora is of no great relevance (see Taboada 2004: 5 for a similar decision to exclude prosodic aspects from an analysis of cohesion).

Let us next consider the conversations from the perspective of the three contexts outlined in Chapter 1. As for the linguistic context, in a conversation the utterances of the speakers are constrained by both their own previous utterances and those produced by the other coparticipants. Similarly, what speakers produce constrains what follows, regardless of whether the same speaker continues or another speaker takes over. The linguistic context, just like the entire conversation, should thus be seen as jointly and collaboratively constructed.

Considering the cognitive context, we can note that conversation is real-time communication: the coparticipants have to produce and interpret the utterances in a here-and-now situation. However, what makes the cognitive burden less demanding is the fact that coparticipants have possibilities for feedback, so that if they for instance have difficulty in interpreting something, they can ask clarifying questions.

In terms of the social context, finally, it can first be pointed out that the channel is spoken and the coparticipants are in visual contact with each other. As for the relationships between the coparticipants, it was already pointed out that the texts in the BNC represent language use by a socially very diverse group of informants. It would be possible, therefore, to balance the texts from the LLC and the SEC with a selection of texts produced by persons from a different social and educational background. However, since the present study is a mainly qualitative analysis of a textual phenomenon, it was decided that instead of including new material that would create a difference between the texts, an attempt should be made to eliminate the difference and choose material compatible with the LLC and the SEC material, i.e. material produced by educated speakers. Furthermore, all conversations represent communication between equals, i.e. family members and friends.

Having dealt with one potential difference between the texts, we must now draw attention to another, which has to do with the number of speakers in the conversations. There are two coparticipants in two of the four conversations, and three coparticipants in the other two; i.e. there are two two-party (dyadic)
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conversations and two multi-party (polyadic) conversations. The number of coparticipants in a conversation is clearly a contextual factor, and we will see during the analysis if and to what extent it is reflected in the use of cohesion.

5.3 Patterns of cohesion in face-to-face conversation

This section concentrates on the variation found in the use of lexical cohesion relations in face-to-face conversations, and on the potential differences between reiteration and collocation. First, some quantitative information is provided on the occurrences of pairs of reiteration and collocation in the conversations. This is, I believe, a good way of showing some general tendencies, and also of giving a clear idea of the number of pairs of reiteration and collocation in the texts. Extracts from the conversations are then discussed in order to elucidate, on the one hand, the recognition of the pairs in the texts and their functioning in the texts, on the other. The quantitative part of the analysis thus provides macro-level information, while the qualitative part takes the analysis to the micro level.

As explained in Section 4.5, the numbers shown in the tables in this and the following four chapters are normalised frequencies of the cohesive pairs occurring in the texts. In other words, frequencies of cohesive pairs are normalised to a text length of 1000 words, showing how many times they would occur in a text of 1000 words. This makes it possible to compare frequencies of cohesive pairs in texts of different lengths in a reliable way. The numbers in the tables of this and the following four chapters are therefore directly comparable, which facilitates comparing the findings across the different sets of data.

Let us start with the distributions of pairs of reiteration and collocation in the four conversations. Table 5.1 shows the number of pairs per 1000 words of reiteration and collocation in each of the conversations.

The fact which most clearly emerges from Table 5.1 is, not unexpectedly, that reiteration relations are far more frequent than collocation relations in

<table>
<thead>
<tr>
<th></th>
<th>Conversation 1</th>
<th>Conversation 2</th>
<th>Conversation 3</th>
<th>Conversation 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reiteration</td>
<td>112</td>
<td>109</td>
<td>143</td>
<td>150</td>
</tr>
<tr>
<td>Collocation</td>
<td>10</td>
<td>9</td>
<td>15</td>
<td>13</td>
</tr>
<tr>
<td>TOTAL</td>
<td>122</td>
<td>118</td>
<td>158</td>
<td>163</td>
</tr>
</tbody>
</table>
all the conversations. In Conversation 1, there are 112 reiteration pairs and 10 collocation pairs per 1000 words, and in Conversation 2, 109 reiteration pairs and 9 collocation pairs. Conversations 3 and 4 show somewhat higher frequencies: 143 reiteration pairs and 15 collocation pairs, and 150 reiteration pairs and 13 collocation pairs, respectively. Although the number of collocation pairs is small compared to the number of reiteration pairs, it is by no means insignificant. The exclusion of collocation relations from the analysis on the basis of the difficulties connected with recognising them could indeed mean that an important aspect of lexical cohesion would remain unacknowledged.

As mentioned during the introduction of the material, there is a difference between Conversations 1 and 2, on the one hand, and Conversations 3 and 4, on the other. The former are three-party conversations, whereas there are two participants in the latter. This difference appears to be reflected in the number of cohesive pairs, in that the three-party conversations have fewer pairs than the two-party ones; in terms of the overall number of pairs, the difference is quite striking. The potential causes of this difference are discussed later in this chapter, since making any conclusions naturally requires more detailed information on the actual use of the cohesive pairs in the conversations. Yet, it is interesting that the number of cohesive pairs seems to differentiate between the two types of conversation quite clearly.

The three-party conversations are almost identical as to the distribution of reiteration and collocation pairs: there is a difference of three reiteration pairs and of only one collocation pair between Conversations 1 and 2. The distribution of pairs in Conversations 3 and 4 shows somewhat greater variation, for there is a difference of seven reiteration and of two collocation pairs between the two two-party conversations.

Let us next examine the distribution of cohesive pairs per category for reiteration and collocation; as already pointed out during the discussion of the categories in Chapter 4, some of the relations clearly seem more frequent than others. Table 5.2 shows the normalised frequencies of the eight reiteration categories and the three collocation categories. The final column shows the mean of the frequencies (where applicable), provided to demonstrate the order of the categories in terms of frequency, although it is apparent that there is variation between the four texts.

The largest category by far in all the four conversations is simple repetition. Substitution comes second, except in Conversation 3, which has slightly more co-specification pairs than substitution pairs. Pairs related by generalisation, specification and co-specification are present in all the texts, and equivalence relations can be found in all except in Conversation 2. Complex repetition is
infrequent in all the conversations, and so are, perhaps less surprisingly, the collocation categories of ordered set and activity-related collocation. Pairs of elaborative collocation are thus almost solely responsible for the occurrences of collocation relations in the texts. Pairs related by contrast are also rare in the conversations, although in Conversation 4 contrast is the third largest reiteration category.

Although reducing textual features into numbers may not always be an appropriate practice, in the case of reiteration and collocation relations they can undoubtedly help us see the most important general tendencies. This information might be harder to deduce from extracts from the texts, which are of course important to consider as well (and which are in fact discussed next). Examples (1) and (2) are from the three-party conversations, showing both reiteration and collocation relations at work. Please note that in the extracts discussed only those lexical units which are related to other units in the current extract are italicised and discussed, because discussing units related to units outside the extract would be misleading. Although this may slightly skew the picture of the use of cohesion in the texts, it is still the best and most reader-friendly alternative. The same strategy is applied throughout the discussion, so that only the relevant units are italicised.

(1) B: I’d be interested to know in fact if they had made maps of the the area before the First World War broke out
a: surely surely they must have Napoleon I shouldn’t be surprised
B: there must have been maps yes
Chapter 5. The spoken dialogue

a: there are certain French maps much earlier than that I mean like early nineteenth century like ours
B: oh yes I mean the British army
a: no I only meant that maps must have existed
B: oh maps must have existed certainly... (Conversation 1)

Although it comes from a three-party conversation, example (1) shows only two communicators discussing, but as sequences such as this are not uncommon in the multi-party conversations, it can be regarded as a representative sample of Conversation 1. There is only one collocation relation in the example: the First World War and the British army are related by elaborative collocation (the mention of the First World War evokes the war frame and acts as a prompt to the British army). As was to be expected on the basis of the numbers given in Tables 5.1 and 5.2, reiteration relations are frequent. Maps occurs several times as such, and once in a specified form French maps. It is worth noting that the two nationality adjectives British and French are not related in this example, since according to the discourse-specific principle of recognising cohesive units adopted for the present study they are considered as parts of the larger lexical unit, which in this case is the noun phrase. In addition to these relations, there are simple repetitions of pronouns: there is a pair of they, and both the speakers also refer to themselves so that we have two separate pairs of I.

In example (2), all the three communicators are active:

(2) A: ...and having toyed with places like Malta and Cyprus he thought perhaps he would try South Africa
C: yeah
A: only I think he has he has a cousin who was a year or two in Cape Town and spoke warmly of Cape Town
C: m
A: so he went and tried Barry was just saying why did he get bitten with South Africa
C: yes why choose South Africa indeed
b: m
A: well as I say because Vidor wanted a place with a warm climate where people spoke English so that he could earn some money
b: can he really earn some money there... (Conversation 2)

This example only shows reiteration relations: Malta, Cyprus and South Africa are in a relation of co-specification, and South Africa is related to Cape Town by specification, which is then related back to South Africa by generalisation and
then repeated. *Earn* is repeated, and *some money* as well. Simple repetitions of the pronoun *he* occur, until eventually *Vidor* substitutes for *he* only to be substituted by *he* a bit later. As this example shows, in the analysis substitution works in both directions: from noun to pronoun and pronoun to noun.

In example (2), speaker A also refers to herself by *I*. It is interesting to note in this context that first-person (and second-person) pronoun repetitions have sometimes been considered as problematic in cohesion analyses, because they refer to persons external to the text and thus their role in the cohesive constitution of a text may not be quite clear (cf. Hoey 1991: 71 and passim). It should be added that in several analyses the problem has been avoided by leaving pronoun repetition out of the analyses, but this is hardly a commendable solution. If we consider the context of example (2), it is evident that for the three communicators, the referent of *I* – as well as the referents of the two other possible *I*’s – was anything but external to the situation; it must have been as clear as the relation between *he* and *Vidor*. If the current speaker refers to herself or himself as *I* and to the fellow communicator(s) as *you*, it is unlikely that this could ever be a serious problem to co-present communicators.³

If we then look at examples from the two-party conversations, we can notice that the same relations tend to be frequent in them as well.

(3) **HK**: *I’m* beginning to wonder what *I* do want. Are there any more *ads* here in the paper?

**RG**: Well, I think *they’re* only *small ads* now. But you know, *I* look at these *small ads* and *I* think, well, am *I* not *overqualified* for *them*?

**HK**: Yes, but can you ever really be *overqualified* to teach? (Conversation 3)

Example (3) shows, first of all, both speakers referring to themselves as *I*, and *overqualified* is also repeated. With *ads* we can find both substitution and simple repetition at work: *ads* is first substituted with *they* which is next substituted by *small ads*, which is then repeated and finally substituted by *them* (throughout the conversation, the speakers talk of the advertisements they find in the paper almost as equivalents of the jobs offered in them).

(4) **Audrey**: *I mean, er* erm and *I* went to see *her* in *Park Hospital* and *she* was very frustrat very frustrated because *she* couldn’t speak. No.

**Gordon**: What was *she* doing in *Park Hospital*?

**Audrey**: *She* took *ill* at *Aunty Edith’s*.

**Gordon**: *Well was it* *Edith’s*?

**Audrey**: Yeah. *I* th *I* think they’d been on *holiday* and, *she* took *ill* on *the* *holiday* and… (Conversation 4)
In example (4), we can again find one collocation pair: *Park Hospital* and *ill* are related by elaborative collocation (*Park Hospital* evokes the hospital frame and prompts *ill*). Both *Park Hospital* and *ill* are also repeated, as are *I* (used by Audrey), *she*, *(Aunty) Edith’s*, and *holiday*.

What was presented as numerical information in the tables is illustrated and confirmed by the above extracts from the conversations: reiteration relations are frequent, especially simple repetition and substitution, and if collocation relations are to be found, they are very likely to be instances of elaborative collocation.

This section has dealt with the cohesive relations from the viewpoint of the two main categories and the eleven subcategories, i.e. we were here interested in the general distribution of the cohesive pairs in the conversations. To adopt a different perspective, we will next look at the way in which cohesive relations are used between the speakers in the conversations. As all the above examples have demonstrated, cohesive devices are also used interactionally, i.e. units forming cohesive pairs can also be produced by different speakers. Consequently, the next section concentrates on the interactional or collaborative use of cohesion.

### 5.4 Cohesion across speakers

In Chapter 4, a number of studies were mentioned which have suggested that spoken discourse would not make use of surface cohesion to the same extent as written discourse. According to these views, prosodic and paralinguistic cohesion can replace textual cohesion especially in conversations, and consequently actual lexicalised cohesion would be rarer in them (Lautamatti 1990; Tannen 1985; Ventola 1987: 141). However, both the numerical information and the examples in the previous section showed us that the amount of cohesion in the conversations of the present study is by no means insubstantial.

Even more important, however, than the actual number of cohesive devices used is the manner in which surface cohesive devices are utilised in the interaction between the communicators (cf. McCarthy 1988), for it is through their usage by participants in conversations that the interactional or collaborative capacity of lexical cohesive devices becomes most apparent. Let us therefore consider how reiteration and collocation relations are used by the participants in the sample conversations. As in the previous section, we start with numerical information and then proceed to investigate extracts from the conversations in more detail.
Table 5.3 Same-speaker and different-speaker pairs of reiteration and collocation (per 1000 words) in the face-to-face conversations

<table>
<thead>
<tr>
<th></th>
<th>Conv. 1</th>
<th>Conv. 2</th>
<th>Conv. 3</th>
<th>Conv. 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Same speaker</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reiteration</td>
<td>76</td>
<td>81</td>
<td>105</td>
<td>112</td>
</tr>
<tr>
<td>Collocation</td>
<td>8</td>
<td>7</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>TOTAL (same speaker)</td>
<td>84</td>
<td>88</td>
<td>115</td>
<td>121</td>
</tr>
<tr>
<td>Different speaker</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reiteration</td>
<td>36</td>
<td>28</td>
<td>38</td>
<td>38</td>
</tr>
<tr>
<td>Collocation</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>TOTAL (different speaker)</td>
<td>38</td>
<td>30</td>
<td>43</td>
<td>42</td>
</tr>
<tr>
<td>TOTAL</td>
<td>122</td>
<td>118</td>
<td>158</td>
<td>163</td>
</tr>
</tbody>
</table>

Table 5.3 shows the distribution of reiteration and collocation pairs into same-speaker and different-speaker pairs in the four conversations.

Let us start with the total number of pairs produced by the same speaker or by different speakers. In all the conversations, the majority of pairs are produced by the same speaker; the total number of pairs is 84 in Conversation 1, 88 in Conversation 2, 115 in Conversation 3, and 121 in Conversation 4. The number of pairs produced by different speakers is 38 in Conversation 1, 30 in Conversation 2, 43 in Conversation 3, and 42 in Conversation 4.

The difference between the three-party and the two-party conversations is caused by a general increase in the number of pairs in the two-party conversations. The proportions of reiteration and collocation are approximately the same between the two types of conversation.

If we then look at the number of pairs per the two main categories, reiteration and collocation, we notice another difference between the two kinds of conversation: the collocation pairs in the three-party conversations seem to be almost entirely produced by the same speaker. Only two collocation pairs are produced by different speakers. In the two-party conversations, the difference between same-speaker collocation and different-speaker collocation is smaller. What Table 5.3 appears to be telling us is that in a multi-party conversation speakers tend to rely more on reiteration, especially between speakers, whereas in a two-party conversation collocation is more frequently used, although reiteration dominates there as well.

Let us look at a couple of examples from the perspective of the speakers.

(5) B: I mean for instance one of the things that has really shaken the world up and may yet have a very substantial effect on things which as far as I can see although it was part of the landscape nobody predicted and certainly Kahn and his people didn't is sudden change in world commodity prices especially oil
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a: right no nobody could predict that
B: well they could have done actually if if you were really in the predicting game . . . (Conversation 1)

In example (5), speaker B is responsible for the production of most of the units, but speaker a collaborates with predict, and B then continues with a specification the predicting game.

(6) HK: No, not at all. I think this is because, partly anyway, because of the heat in Sudan. And, of course there’s no air-conditioning because it’s such a poor country, and it is very difficult to work under conditions like that, when the temperature’s – what? 50 degrees centigrade sometimes.
RG: It’s as high as that?
HK: Yes, very hot indeed.
RG: Hm. So what do the children do during that time? Do they do any sort of agricultural work or they just stay at home?
HK: I think the majority stay at home. (Conversation 3)

Example (6), from a two-party conversation, shows the communicators first talking about heat and air-conditioning and temperature (elaborative collocations; heat evokes the temperature frame), all introduced by speaker HK, the last of which is then specified as 50 degrees centigrade; speaker RG joins in with high (specification), and HK corroborates with hot (equivalence). In the following turn, RG uses both stay and home, which are then repeated by HK.

The differences between the two-party and the three-party conversations demonstrated in Table 5.3 may not really become apparent in these relatively short extracts. Since the tendencies in the use of cohesion nevertheless seem to vary between the two kinds of conversation, it is interesting to consider some of the reasons that may lead to these differences.

The relative scarcity of different-speaker collocation pairs in the three-party conversations is perhaps not so surprising if we take into account the fact already referred to several times earlier in this study that collocation relations are subtle, even difficult, compared to reiteration relations. It is understandable that the conversations with a more demanding communicative setting, i.e. with more speakers, should show a lower number of these relations. A low number of collocation pairs, especially when produced by different speakers, may therefore be an indication of the demands of the communicative situation. The communicators in two-party conversations, on the other hand, are
not under such communicative demands, which may very well explain why more instances of different-speaker collocation can be found in them.

It is more difficult to find a satisfactory explanation for the high number of same-speaker reiteration pairs in the two-party conversations; especially the number of simple repetition pairs is strikingly large in these. One explanation might be that the speakers of a two-party conversation would refer to themselves and to their fellow communicator more often than speakers in a three-party conversation. However, the number of first and second-person pronoun pairs is not higher in the two-party conversations compared to the three-party ones, so the instances of simple repetition cannot be explained by a difference created by such usage.

At this point it can therefore be concluded that the differences between the two kinds of conversation are that the two-party conversations have a higher number of pairs, especially same-speaker simple repetition pairs, and that the three-party conversations show a lower number of collocation pairs, especially if produced by different speakers. If we want to say that a two-party conversation is the stereotypical form of spoken dialogue, we can note that spoken dialogue is characterised by a high number of same-speaker reiterations and that collocation relations are typically produced by the same speaker, but also by different speakers. If a multi-party conversation is our starting point, then we can point out that especially pairs produced by different speakers “favour” reiteration, whereas collocation is rare.

5.5 Cohesion across turns

The previous two sections have investigated the general distribution of cohesive pairs in the conversations and their distribution across speakers. In this section we explore how reiteration and collocation pairs are utilised within and over turn boundaries. The previous section established that same-speaker reiteration pairs are most frequent, but whether the units forming a pair occur in close proximity with each other (i.e. within a turn) or whether they allow greater distances (over turn boundaries) remains to be investigated.

Table 5.4 shows the distribution of reiteration and collocation pairs within and over turn boundaries; the latter are further divided into same-speaker and different-speaker pairs. It is the same-speaker pairs that mainly interest us here, since all different-speaker pairs naturally also occur over a turn boundary; the latter are also included in the table so that we can compare same-speaker and different-speaker usage.
Chapter 5. The spoken dialogue

Table 5.4 Pairs of reiteration and collocation (per 1000 words) within turn boundaries and over turn boundaries (divided into same-speaker and different-speaker pairs)

<table>
<thead>
<tr>
<th></th>
<th>Conv. 1</th>
<th>Conv. 2</th>
<th>Conv. 3</th>
<th>Conv. 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Within turn boundary</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reiteration</td>
<td>48</td>
<td>52</td>
<td>81</td>
<td>72</td>
</tr>
<tr>
<td>Collocation</td>
<td>5</td>
<td>4</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td><strong>Over turn boundary</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Same speaker</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reiteration</td>
<td>28</td>
<td>29</td>
<td>24</td>
<td>40</td>
</tr>
<tr>
<td>Collocation</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Different speaker</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reiteration</td>
<td>36</td>
<td>28</td>
<td>38</td>
<td>38</td>
</tr>
<tr>
<td>Collocation</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 5.4 is quite interesting, and some of the tendencies revealed in it show great consistency. Reiteration within turn boundaries is the most frequent type in all the four conversations. The difference between different-speaker collocation pairs between the two-party and the three-party conversations has already been mentioned, but if we look at the same-speaker pairs, we can note that the picture is quite consistent except for Conversation 3, in which the collocation pairs are less evenly distributed between within-turn and over-turn pairs than in the other three conversations. Conversation 3 also shows a higher number of reiteration pairs within turn boundaries than the other texts, with Conversation 4 showing a second highest number of pairs here. The two-party conversations seem to differ in this respect from the three-party conversations 1 and 2.

What we can learn from Table 5.4 is that in the two-party conversations the speakers may be more able either to complete their turns or to take longer turns, since a clear majority of same-speaker pairs are within turn boundaries in these texts, as in example (7) below. In the multi-party conversations, the number of speakers may be influencing the length of turns of individual speakers, so that a greater proportion of pairs are over-turn-boundary pairs than in the two-party conversations (illustrated by example (8)).

(7) Audrey: I think it’s going to be nice for this weekend. It says the erm, this low is going is moving away and a high’s coming in so it might be nice for this weekend.
    Gordon: Good. (Conversation 4)

(8) C:  m – yeah no really tough it’s bad luck
    A:  it is bad luck yes
    C:  and after all they’re not very well paid but I suppose even at that rate we can’t afford too many of them
A: I think they’re better I seem to think they’re better paid than they used to be… (Conversation 2)

To conclude, if two-party conversation is regarded as a standard of spoken dialogue, we can say that reiteration pairs produced within a turn seem to be most characteristic of spoken dialogue. In multi-party conversation there is a somewhat smaller tendency to favour such pairs.

5.6 Chains of cohesion

This chapter has so far concentrated on pairs of lexical cohesion in the four face-to-face conversations and on their use across speakers and turns. Isolated pairs of lexical cohesion in a text form a tie and thus help create coherence, but their contribution to the overall organisation of the text is less significant. However, lexical cohesion is also capable of marking unity over longer distances. This becomes possible as lexical cohesion pairs form chains of related pairs. In the examples discussed above, we have already seen how some of the units, when utilised several times by the speaker(s), can form quite elaborate pairs and chains of lexical relations. Through chain formation, lexical cohesion thus also functions on the level of discourse organisation.

Analyses of cohesive chains have featured in numerous cohesion studies. Cohesive chains were first introduced by Halliday and Hasan (1976), and the notion has been further developed later studies (Björklund 1993; Hasan 1984; Hoey 1988, 1991b; Källgren 1979; Martin 1992; Parsons 1990, 1991; Ventola 1987). As the present material consists of non-narrative discourse and the analysis concentrates on lexical cohesion relations, we are naturally interested in the models which have been developed for similar material and for similar analytical purposes.

In Chapter 3, we discussed the model of cohesive chains introduced by Hasan (1984), which can be used for analysing the degree of coherence in texts. This model would thus appear suitable also for our purposes. However, the model was developed for narrative discourse, and it is with narrative texts that it seems to give the best results (cf. Björklund 1993). Parsons applies Hasan’s method to non-narrative texts (student essays on a set topic), and his results indicate that Hasan’s claims based on analyses of narrative texts cannot always be corroborated by analyses of non-narrative texts. Parsons shows that texts including long chains are more often graded as coherent by his informants than other texts. Consequently, he recommends that in non-narrative texts it
might be best to concentrate on the longer chains, because they seem to be more powerful and meaningful for a text’s coherence (1990: 154–223, 1991).

The importance of lexical cohesion chains has been referred to in other studies as well. Ventola (1987) pays attention to the capacity of lexical chains to indicate, by showing all related items, the field of a text. Along similar lines, Morris and Hirst (1991) demonstrate in their study how lexical chains are an indication of textual organisation. They draw attention to the fact that when a lexical chain begins or ends, there is a tendency for a textual segment to begin or end.

Before analysing chains in the texts, the basic principle of how chains are formed should be presented. A cohesive pair is the basic unit of analysis in the analysis of the chains as well. Consequently, a lexical unit will always be considered to be connected to the previous related unit. A chain is formed when more than two units are related. Let us see how this works in practice by considering a short example (only the units taking part in the chain are italicised):

(9) C: you can’t *sack* a person for leading a strike
   A: for Samps well he was apparently well this is what he says anyway
   C: Pen do you believe it Barry could you *sack* a man for leading a strike
   A: I should think so
   b: no no I don’t think you would you wouldn’t have a hope of *sacking* him
   A: you’d probably have some other reason I don’t know anyway he feels discriminated against this is all I can tell you
   C: well I only hear from Barry but of all I hear the difficulties of *sacking* people in this country today… (Conversation 2)

In example (9), there are three pairs: *sack* – *sack*, *sack* – *sacking* and *sacking* – *sacking*, which form a chain. The view of chain formation according to which a unit is first and foremost considered related to one previous unit only has been criticised, on the basis that it overlooks the fact that each of the units forming a chain is actually related to all other units in that chain (see, for instance, Hoey 1988, 1991a, 1991b). However, although the relation of a unit to the immediately preceding unit is regarded as primary in the present study, the relations of the unit with the other units in the chain are also acknowledged. A chain is formed as new related units join earlier units, and an analysis based on a cohesive pair recognises this. Having joined the chain, the new unit will be related to all the earlier units through and with the help of the chain.
The discussion in this section will be mainly qualitative, but let us start with a quantitative observation: chain forming is very common in the conversations, and only a minority of the pairs are individual pairs. Most of the pairs thus make a contribution to coherence on a more global level as well. Furthermore, there is no difference between reiteration and collocation in this respect: the majority of both reiteration and collocation pairs take part in chain formation. A final general observation, which regards interaction between the speakers: it is very typical for all the communicators in the conversations to take part in the creation of chains. Chain forming can thus also be regarded as a collaborative process.

The importance of long chains for the coherence of a text was referred to above. One might argue, however, that in conversations the length of the chains is not so significant. After all, in dialogue topic shifts are not uncommon, and it is likely that cohesion chains also reflect these. Moreover, the decision whether or not a conversation is coherent rests with the communicators in that particular conversation: an analyst can only observe their reactions and their collaboration. If very long chains are to be found in a conversation, however, they can reveal something about the topics of the conversation: a very long chain, running through an entire text indicates that the text may be a single-topic text, while several shorter chains may indicate that the conversation includes several different topics.

When the four conversations are examined, we can find, first of all, chains formed by simple repetitions of I, as the speakers refer to themselves, often throughout the whole conversation. Although these chains without doubt have a role to play in the cohesive constitution of the conversations, they do not tell us about the possible topics of the conversations. Let us therefore have a look at the other long chains in order to find out what they might reveal.

Conversation 1 appears to be a single-topic conversation, for there is a chain there which runs through the conversation almost from the beginning to the very end. The chain includes, for example, the following units: the first world war, the British army, a mass army, the war, the Allies, the Germans, regiments, militaristic nation, in wartime, military matters, officer, war games. On the basis of this chain, it is not difficult to guess that the general topic of the conversation is war and peace.

The other three-party conversation differs from Conversation 1 in that it does not seem to have a very long chain at all. Instead, it has more chains, the majority of which are relatively short. If we look at the longest chain in Conversation 2, we can find for instance the following units taking part in it: disabled, people in wheelchairs, paraplegic, paralysed, able-bodied, poor sight, disabilities,
handicapped. Although shorter than the long chain in Conversation 1, this long chain in Conversation 2 reflects one of the main topics of this conversation: the disabled.

The situation as regards long chains in the first two-party conversation is again slightly different from Conversations 1 or 2. In Conversation 3, there are two chains which are almost equally long. One has to do with the countries where the speakers have been working or are planning to seek employment and includes, for instance: Saudi Arabia, France, Egypt, Indonesia, Sudan, China. The other long chain includes units related to teaching: teachers, schools, teaching advisor, principal, universities, academic year, graduates. The main topic of the conversation, teaching abroad, is reflected in these two long chains.

Finally, in Conversation 4, a situation not unlike that in Conversation 2 is displayed: there are again several shorter chains, but no excessively long chains. The longest one is about politics and includes: political party, Labour, John Smith, the Conservatives, all of which are also mentioned several times by a pronoun substituting for the noun. Like Conversation 2, Conversation 4 also appears to be a multi-topic conversation.

The long chains discussed above are interesting because they are able to reveal whether a conversation revolves mainly around a single topic or whether it includes several different topics. It would be highly impractical, however, to study these chains in detail in order to observe how the chains are developed by the speakers in the conversations, for the extracts needed to illustrate them would in some cases be impossibly lengthy. It is more convenient to examine in detail some of the shorter chains occurring in the conversations: the manner in which the chains are built becomes obvious even with the help of these shorter examples.

To start discussing some of the shorter chains in the conversations in detail, let us take a look at an extract from the first of the two three-party conversations. Example (10) shows one complete chain (we could perhaps call it the photocopying chain), and it illustrates both how a chain is developed and how speakers interact to create a chain.

(10) B: what would interest me most about those well one of the things that would interest me most about them would be to know
    C: thank you very much Fanny
    B: whether they really surveyed the whole lot themselves or whether they copied it all from from they copied the basic layout from the French I mean I wonder if they had things like photocopying techniques in those days I don’t suppose they did
Collaborating towards Coherence

a: I shouldn’t think so
C: they didn’t you know
a: no no I’m sure
C: no these were copied by hand
B: you think so yes
a: traced
C: in those days when when an architect wanted another copy of a drawing he had a man called a tracer who used to trace a drawing in ink on linen and that was
B: good Lord yes
C: you know in times that I can remember
B: really
a: good Lord
C: oh yes
B: yes
a: yes photocopying’s fairly recent
C: photocopying’s very recent m certainly is
a: another thing they didn’t have presumably was aerial photography used for map-making after all just beginning
B: but of course there were photographic processes weren’t there I mean this is all photographic I assume isn’t it
a: I suppose they reproduced
B: oh it’ll be printed it must have been it must have been engraved this must have been engraved on something I suppose (Conversation 1)

The chain in example (10) is a reiteration chain formed by 16 reiteration pairs; there are no collocation pairs taking part in it. Speaker B initiates the chain, but speakers a and C also offer their contributions. The chain is formed of the following units:

\[
\text{copied} \rightarrow \text{(simple repetition)} \rightarrow \text{copied} \rightarrow \text{(specification)} \rightarrow \text{photocopying techniques} \rightarrow \text{(co-specification)} \rightarrow \text{copied by hand} \rightarrow \text{(equivalence)} \rightarrow \text{traced} \rightarrow \text{(generalisation)} \rightarrow \text{copy} \rightarrow \text{(specification)} \rightarrow \text{tracer} \rightarrow \text{(complex repetition)} \rightarrow \text{trace} \rightarrow \text{(co-specification)} \rightarrow \text{photocopying} \rightarrow \text{(simple repetition)} \rightarrow \text{photocopying} \rightarrow \text{(co-specification)} \rightarrow \text{aerial photography} \rightarrow \text{(generalisation)} \rightarrow \text{photographic processes} \rightarrow \text{(generalisation)} \rightarrow \text{photographic} \rightarrow \text{(generalisation)} \rightarrow \text{reproduced} \rightarrow \text{(specification)} \rightarrow \text{printed} \rightarrow \text{(specification)} \rightarrow \text{engraved} \rightarrow \text{(simple repetition)} \rightarrow \text{engraved}.
\]

Although it may not be perfectly legitimate to talk about textual segments in conversations, we can note that after the completion of this chain, i.e. after B’s
last turn in the extract, no more units related to *photocopying* appear in the conversation. Even if this cannot be considered a textual segment in the sense of Morris and Hirst (1991), whose model was developed for written texts, it is interesting that it at least reflects a *topical* segment.

Let us take another example which also illustrates how a topical segment may be reflected by a chain. In example (11), which comes from Conversation 4, Audrey and Gordon have been trying to remember when certain events happened by trying to recall which car they had at the time; we come in as the *diary* chain begins and follow it to its completion:

(11) Gordon: Yeah about twenty. This is why you know, I, I think you should keep di I keep *diaries* from years ago because I know you don’t like nostalgia, and I don’t, but it’s interesting
Audrey: Mm mm.
Gordon: to look up.
Audrey: Yes.
Gordon: Er, events.
Audrey: Yes.
Gordon: I mean I’ve got no *diaries* dating back that long.
Audrey: No, I know. Well I haven’t.
Gordon: I have no *record* of anything
Audrey: No.
Gordon: happening then.
Audrey: No.
Gordon: But just *one line* of things that you know, I don’t mean a *diary* where you write a *page* every night, but just two *lines* you know.
Audrey: Yeah.
Gordon: All, and what you did and when I got the car, the date and when you got that Triumph then.
Audrey: Yeah.
Gordon: You know, little, just a *line*. And then when you look at it er ca you can recall then
Audrey: Oh yes.
Gordon: other things.
Audrey: That’s right. The *one line* sort of sets it all off, you can remember.
Gordon: That’s right. Yeah. (Conversation 4)

In example (11), there are several units which are related to *diaries*: Gordon first introduces *diaries* and repeats it, and then generalises to *record*. Next we have three elaborative collocation pairs: *record – one line, one line – a diary*, and
a diary – a page. A page is then related by co-specification to two lines, which is related to a line also by co-specification, which is then substituted by it, which is finally substituted by the one line. This diary chain also seems to illustrate a particular topical segment concentrating on a specific aspect of memories and recollection; after the one line, no further diary-related units can be found in the rest of the conversation.

After considering a chain consisting of reiteration pairs only (example (10)), and a chain consisting of both reiteration and collocation pairs (example (11)), it is time to draw attention to the fact that there are no “pure” collocation chains in any of the conversations. This can be regarded as both a surprising and an expected finding. It is surprising because there are a number of collocation pairs in all the texts, and it is reasonable to assume that they could also form chains. However, it is also an expected finding because a chain, by definition, consists of several pairs, and when units occur several times, they are likely to start occurring in reiteration relations. Consequently, the collocation pairs taking part in chains can obviously be found in the chains which combine reiteration and collocation pairs, as the diary chain in example (11). Such chains are quite numerous in all the conversations. Example (12), from Conversation 2, presents another combination chain; this extract is a part of the longest chain in Conversation 2, some units of which were already listed in the discussion of the long chains above.

In example (12), speaker A first mentions handicapped of all kinds; speaker C then introduces mental health, which is related to handicapped of all kinds by elaborative collocation. Later, speaker A takes up mental health again, and now it is used in reiteration relations with mental health (simple repetition) and mentally wrong (specification).

(12) A: yes it’s quite true I mean a the the higher the general level of well being the more you think you can afford to spend on the handicapped of all kinds
b: m
C: and you don’t begin to think about mental health till quite high up
A: no
   ... (7 turns)
A: m and anyway I think mental health is a very relative thing I mean mental health must be related to sort of general mentality or whatever other word you use of the community you’re living in
C: for instance all Americans think they have something mentally wrong with them it’s fashionable (Conversation 2)
Collocation pairs thus take part in chains, but only in combination with reiteration pairs. Collocation pairs can join a chain of reiteration, as in example (11), or they may introduce items which are then taken up again and used in reiteration pairs, as in example (12). Although it is difficult, if not impossible, for collocation pairs to form a chain on their own, their contribution to a text's coherence does not remain purely local. In combination with reiteration pairs they can also participate in the more global construction of coherence.

5.7 Collaborating with cohesion in a spoken dialogue

This chapter discussed lexical cohesion in face-to-face conversations from several perspectives: the variation in the use of reiteration and collocation, their use between the speakers of the conversations, and their contribution through chain formation to the organisation of the conversations. The purpose of this section is to discuss the findings presented above and consider their implications. The discussion above has illustrated how cohesion is used in spoken dialogue, in its particular linguistic, cognitive and social contexts. It is especially interesting in this concluding section to consider the findings in relation to the communicative differences between the conversations analysed.

In the introduction of the material the number of speakers in the conversations was recognised as the contextual feature most clearly separating the conversations, and the differences between the two-party and the three-party conversations became apparent with the first set of numerical information presented in this chapter: the number of cohesive pairs was found to be considerably higher in the two-party conversations. This concerned both reiteration and collocation pairs. When the frequencies of the pairs were examined more closely, it was found that the difference was mainly created by a high number of simple repetition pairs in the two-party conversations. Moreover, a great majority of these pairs were same-speaker pairs, which were also typically produced within a turn. There were differences in the use of collocation as well: collocation relations produced by different speakers were much less frequent in the three-party conversations than in the two-party ones.

What all the above tells us of the use of cohesion in a spoken dialogue is that the cohesive picture is greatly dominated by reiteration relations produced by the same speaker. As communicative conditions change and the number of speakers increases, this seems to be reflected in the use of cohesion: the number of both reiteration and collocation pairs is lower. The overwhelming majority of same-speaker pairs, evident in the two-party conversations, is not repeated
in the three-party conversations; instead, the pairs are more evenly distributed across speakers and also across turns.

It is a somewhat paradoxical finding that in the set of texts deemed most collaborative in the sense that they represent stereotypical dialogue, i.e. the two-party conversations, collaboration between the communicators seems to materialise as same-speaker dominance. Undoubtedly this is still collaboration: the communicators in a two-party dialogue obviously allow for themselves and each other longer turns in which it is possible also to create cohesive relations. The collaboration also manifests itself in the number of collocation pairs: compared to the three-party conversations, there are more collocation relations and they are also more often produced by both of the two co-present communicators.

It would be unwise to claim, however, that collaboration is only evident in the two-party conversations. In the three-party conversations, collaboration is present in the speakers' negotiation with the existing communicative conditions to create a coherent dialogue. Although previous research has noted that in comparison with a two-party conversation a three-party one is characterised by “flexibility, instability and unpredictability” (Kerbrat-Orecchioni 2004:7; see also Schegloff 1995), the three-party conversations could almost be claimed to reflect greater collaboration, for the distribution of pairs is more equal in them. For individual speakers in a three-party conversation, the demands of the communicative situation apparently mean that their possibilities to dominate the creation of cohesive relations are smaller, but, on the other hand, their possibilities to create cohesive relations together with their fellow communicators are greater.

Let us conclude by drawing attention to a similarity between all the conversations, which, no doubt, reveals something of the role of cohesion in the overall organisation of text. This has to do with chain forming. It was found that chain formation followed similar patterns in all the conversations. Some differences existed between single-topic and multi-topic conversations, reflected in the long chains of cohesion, but these differences did not follow the division into two-party and three-party conversations. The shorter chains analysed were found to reflect the topics of the conversations, so that when a chain began or ended, a topical segment would also often begin or end. In all the conversations, speakers also collaborated in the creation of chains.

In the next three chapters, as cohesion is analysed in a written dialogue, in a written monologue and in a spoken monologue, the findings presented in this chapter will be referred to. We now have an understanding of how cohesion
works in actual collaboration; it is time to explore how it works in situations where collaboration has to take different forms.

Notes

1. In addition to these four, examples useful for illustrating some points in the discussion have been drawn from an additional text not included in the analysis proper:

   Add. Conversation
   KCR from the British National Corpus, recorded 1992, 2 speakers

2. Since the London-Lund Corpus has been available to researchers for such a long time, there naturally exist numerous studies based on its material. For a list of publications, as well as a useful description of the complete corpus, see Svartvik (Ed., 1990).

3. The pronoun you can of course lead to an initial misunderstanding, as in the following example, in which speaker b’s choice of words adds to the confusion, but the problem is solved quite easily:

   b: and how did you get enamoured of South Africa was
   A: well could you explain what you mean in simpler English Barry
   b: m
   A: do you mean did I like it or what
   b: I I don’t mean you I mean you as a family
   A: m ah well… (Conversation 2)
CHAPTER 6

The written dialogue
Mailing-list language

6.1 Introduction

This chapter is devoted to the other set of dialogue in the material of the study, namely mailing-list language. This variety of language and of dialogue is relatively recent, and it is interesting to compare the use of cohesion between this new kind of dialogue and the more “traditional” dialogue discussed in Chapter 5. However, any suggestions as to the place of mailing-list language on the continuum of spoken and written language will naturally have to wait until we have had the chance to investigate all the material, i.e. until Chapter 9.

As in the previous chapter, after the introduction of the material the chapter deals with the distribution of cohesive pairs in the texts. The following section tackles the question of collaboration by examining the use of cohesion across communicators and across messages. Section 6.5 presents an investigation of the chains of cohesion occurring in the mailing-list texts. The chapter concludes with a summarising discussion of cohesion and collaboration in a written dialogue.

6.2 Material

Mailing list 1
Discussion on student bigotry
Women's Studies List (February 1995)
42 messages, 30 participants

Mailing list 2
Discussion on Ebonics
Linguist List (December 1996 – January 1997)
18 messages, 11 participants
Collaborating towards Coherence

The material for this chapter consists of a selection of electronic language, i.e. language used in computer-mediated communication. The field of electronic language is of course as varied as that of spoken or written language, ranging from spontaneous chat and instant messaging to articles in speciality magazines found on the internet.

Since the present study is about communicative conditions and their effect on the use of cohesion, it is interesting to note here one of the unique communicative features of computer-mediated communication: it is possible for a great number of people to communicate with each other either in real time (as in chat) or almost real time (as on most mailing lists and other discussion forums). The fact that all communication happens via computers renders the physical distance between the participants irrelevant – although time differences cannot be eliminated – and makes interactive communication between a vast number of people feasible. This feature clearly sets electronic language apart from spoken and written language.

Interactive real-time communication via computer is nowhere more visible than in chat, where communication takes place synchronously. However, choosing chat as material would mean that the one social factor we are trying to keep constant, i.e. the level of education of the contributors, would have to be abandoned, because chat groups are usually open to everyone. We are consequently going to turn to another type of electronic language: the mailing list. Mailing lists and other discussion forums are rarely as synchronous as chat, but an element of spontaneity and certainly a feeling of interactivity are nevertheless present. What is important for the present study is that the mailing lists selected are academic mailing lists, which makes the electronic material well-suited for a comparison with the spoken material in terms of the background of the writers.

Because it was felt that a single mailing list could not satisfactorily represent the wide field of existing mailing lists, two different lists were chosen: the Linguist list and the WMST (Women’s Studies) list. These two have been used as material in some previous studies as well (see e.g. Herring 1996). Both lists maintain archives of the mailings sent to the list, which can be freely browsed and read, and this open-access policy means that studying the lists is ethically unproblematic.

Let us in the following consider the list discussions from the perspective of their linguistic, cognitive and social context. Starting with the linguistic context, it can be noted that although the immediate context, i.e. the message, is created by a single writer, the wider linguistic context consists of messages written by other participants as well. Similarly to spoken dialogue, the linguis-
tic context of written dialogue is jointly created; the messages contributed by writers may be (but do not have to be) longer than the turns contributed by speakers, and the pace of the dialogue can therefore be slower than in face-to-face conversation, but the discussion is nonetheless the result of the joint activity of the participants.

In terms of the cognitive context, as the lists are asynchronous, neither the production nor the interpretation of the messages have to take place in real time. In other words, when writing messages the participants have the possibility to carefully plan and edit their contributions, while when reading they can reread messages or parts of them if needed to arrive at an interpretation. Participants also have possibilities for feedback, although the immediate feedback of a face-to-face situation is not possible, and they can therefore negotiate potential misunderstandings.

As for the social context, the channel is written, and contact between the participants is realised through text only. Both lists are large (several thousand subscribers) and have an academic focus, but there is one major difference between them: the majority of contributors to the Linguist list are male, while the WMST list is mostly female. In addition, the messages on the Linguist list tend to be longer than on the WMST list, and it follows that there will typically be more messages and also more contributors on a WMST discussion if compared to a Linguist discussion of equal length.

Both lists are international, which means that messages written by people whose native language is not English appear on the lists. In the Women’s Studies List discussion there are three non-native writers participating in the debate, and, interestingly, they all mention this fact in their messages (“I, as a German woman, would try to...” ; “Being a 27-year-old German who is...” ; “I am a 22 years old Italian student...”). These messages were excluded from the analysis.

6.3 Patterns of cohesion in e-mail messages

Let us start with numerical information: the distribution of cohesive pairs in the mailing-list texts is given in Table 6.1. The numbers are normalised frequencies, and can therefore be directly compared with the numbers presented in Table 5.1.

As in the conversations, reiteration relations are more frequent in the e-mail messages as well. There are 134 reiteration pairs in Mailing list 1 and 118
Collaborating towards Coherence

Table 6.1  Pairs of reiteration and collocation (per 1000 words) in the e-mail messages

<table>
<thead>
<tr>
<th></th>
<th>Mailing list 1</th>
<th>Mailing list 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reiteration</td>
<td>134</td>
<td>118</td>
</tr>
<tr>
<td>Collocation</td>
<td>17</td>
<td>16</td>
</tr>
<tr>
<td>TOTAL</td>
<td>151</td>
<td>134</td>
</tr>
</tbody>
</table>

Table 6.2  Pairs of reiteration and collocation relations (per 1000 words) in the e-mail messages

<table>
<thead>
<tr>
<th></th>
<th>Mailing list 1</th>
<th>Mailing list 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple repetition</td>
<td>83</td>
<td>57</td>
</tr>
<tr>
<td>Complex repetition</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Substitution</td>
<td>24</td>
<td>11</td>
</tr>
<tr>
<td>Equivalence</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Generalisation</td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td>Specification</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>Co-specification</td>
<td>7</td>
<td>16</td>
</tr>
<tr>
<td>Contrast</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Ordered set</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Activity-related collocation</td>
<td>3</td>
<td>–</td>
</tr>
<tr>
<td>Elaborative collocation</td>
<td>14</td>
<td>16</td>
</tr>
</tbody>
</table>

in Mailing list 2. The number of collocation pairs is 17 and 16, respectively, making a total of 151 and 134 pairs of cohesion.

The two mailing lists thus seem to differ as regards the total number of pairs; the difference is caused by the higher number of reiteration pairs in List 1, which also means that the proportion of collocation pairs is higher in List 2. If we compare the distribution of pairs in the mailing-list texts to that in the conversations, we can note that in terms of the overall number of pairs as well as the number of reiteration pairs, the mailing lists would be situated between the two-party and the three-party conversations. List 1 is closer to the two-party conversations, while List 2 shows a number of pairs which is closer to the three-party conversations. If we consider collocation pairs, a slightly different observation can be made, for there are more collocation pairs in both of the mailing-list texts than in any of the conversations (although Conversation 3 is actually quite close to the mailing lists in this respect).

We can then move on to examine the distribution of cohesive pairs in more detail, i.e. per categories of reiteration and collocation. Table 6.2 presents the number of pairs for each of the categories.
The most frequent relations in both of the mailing lists are simple repetition relations. Substitution comes second in List 1, whereas in List 2, co-specification and elaborative collocation have the second highest frequencies. List 2 seems to generally show more variation, as generalisation and specification also show relatively high numbers of pairs. List 1 presents a less varied profile, with simple repetitions and substitutions clearly dominating the picture. Other collocation relations except elaborative collocation are rare, although List 1 has three pairs of activity-related collocation.

Compared to the face-to-face conversations, the distributions of reiteration and collocation pairs in the mailing-list texts reveal similar tendencies. The heavy reliance on simple repetitions observed in the conversations seems to be a feature of the e-mail messages as well.

On the basis of this numerical information only, it may be concluded that the mailing-list texts show a cohesive profile quite similar to the conversations studied in the previous chapter. The same relations seem to be frequent in both types of dialogue. In the use of collocation relations, mailing-list texts are closer to the two-party conversations. The total number of pairs in the mailing-list texts is not quite as high as in the two-party conversations, but higher than in the three-party conversations. If positioned on the same continuum with the conversations, the mailing-list texts would thus be situated in between the two-party and the three-party conversations, but closer to the former than the latter.

Let us next take a look at a couple of examples from the mailing-list texts in order to observe how reiteration and collocation pairs function in them. It is also interesting to find out if some of the differences between the two mailing-list texts, apparent in the tables above, can be explained by considering pairs of cohesion in their context of use. The first examples come from the first messages of the two mailing-list discussions, and thus also provide an introduction to the topics of the discussions.

(1) Strictly speaking, this isn’t about women’s studies but since you are my community, I will ask if anyone can help me to deal with this. A few weeks ago, a young Latino (from the Dominican Republic) who is taking my intro to Latin America history class came to chat in my office and asked me what I thought of Hitler. I was thrown by the question – I do a lot of work with the Latino/a students, am Latina myself, and Jewish as well. He said that he didn’t understand why Jews thought of themselves as special and didn’t Hitler have a point that they were trying to take over his country.
I spent a good hour talking with him about anti-Semitism and genocide, and the things that distinguished the Nazi extermination of the Jews from other forms of oppression in the world. I also told him that it was an issue that affected me deeply, that my extended family had lost many people to the Nazi slaughter. (Mailing List 1)

Has anyone on this list been following the controversy in the media about the Oakland, California school board’s decision to classify African American children as “limited English proficient”? They unanimously passed a resolution last week that called Ebonics (Black English) a separate language, and blamed the children’s high levels of school failure (low GPA, high drop-out rates, statistical overrepresentation in special education, etc.) on language mismatch.

Here is a statement I sent to a local newspaper. I understand that the OBEMLA office in Wash, DC has been deluged with calls from other school districts nationwide who want to know if African American children can qualify for LEP funds, so this issue has national implications. Any comments? (Mailing List 2)

Even on the basis of these short extracts it is possible to understand some of the differences indicated by the numerical information presented above. Although the extracts are not long, it is already quite difficult not to start talking about chains of cohesion, since many of the units appear not in individual pairs but in pairs taking part in chains. However, let us concentrate for the moment on the pairs of cohesion in the extracts and consider some of them in detail. Chains will have their turn later in the chapter.

We remember from Table 6.2 that simple repetition and substitution were the most frequent relations in List 1, and even example (1) alone already shows why this should be the case. To start with, the writer refers to herself several times; hence the repetitions of I. Furthermore, the message centres on the actions of a student, who is mentioned several times (a young Latino – he). There is also a complex repetition pair Jewish – Jews; Jews is then substituted by themselves, which is repeated by they. Example (1) also shows two equivalence pairs: chat – talking, the Nazi extermination of the Jews – the Nazi slaughter; the first unit of the latter pair is a specification of genocide. Finally, as an example of collocation, asked is related to question by activity-related collocation.

The extract from List 2 tells a slightly different story. There is repetition of I and of (African American) children; limited English proficient is specified to LEP funds; and nationwide is related to national by complex repetition. There is also an elaborative collocation pair the media – a local newspaper. Example (2) does
not quite show the same dominance of simple repetition and substitution pairs as example (1).

The two examples therefore seem to be able to illustrate the variation between the two mailing-list texts. It seems that the difference between the texts suggested by the numerical information is an actual one, with List 1 showing more simple repetition pairs.

6.4 Cohesion across writers and messages

This section focuses on cohesion used across writers and messages in the mailing-list discussions. As noted in the previous section, chains of cohesion almost automatically become evident when longer extracts are introduced, and the same naturally applies to a situation where messages written by several writers are considered. However, chains will be discussed in the following section, while this section concentrates on a feature of discourse characteristic of e-mail language only, in order to find out what it can tell us of the use of cohesion. This feature is text-copying or quoting.

Quoting refers to a strategy whereby the current writer includes excerpts of previously mailed messages into the response message. DuBartell suggests that by using copied text a writer may wish to emphasise certain parts of a previous message, especially those the writer wants to address in the response message, or that the writer may want to remind the readers of what has previously been said. Quoting can also help in the creation of cohesion (DuBartell 1995, 1999). It occurs in all types of e-mail language, from personal messages to messages sent to public mailing lists.

To show which parts of the message have been copied, each line of the copied text is usually marked with the > symbol. The copied excerpts can occur at the beginning or the end of the message, or even throughout the message, which is perhaps the most interesting strategy, because it creates a sequence which simulates conversational turn-taking. Studying the use of cohesion in such sequences and comparing the findings to those from conversations could thus produce interesting findings.

However, mailing lists apparently vary as regards their tolerance towards quoting. The travel-in-Europe list studied by DuBartell (1995, 1999) seems to have greater tolerance towards this practice, perhaps because the messages sent to this list appear to be quite short, and copying text does not thus considerably add to the size of the messages. The lists of the present study show smaller tolerance: they do not really seem to favour quoting at all. This may be due to
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the fact that the messages tend to be quite long even by themselves, and thus adding text from earlier messages would produce even longer messages.2

A further factor contributing to the rare use of quoting in the present discussions may be the speed of the discussions. The first of the discussions, on student bigotry, lasted for only a week, with messages being posted at quite a speed. Consequently, the list-members may not have found it necessary to remind other list-members of what had been said in previous messages, since they could assume that they would still remember most of the points raised in the discussion. The Ebonics discussion was longer, from late December 1996 to late January 1997, but because of the holiday break on the list, most of the messages were posted during the last two weeks of the discussion.

Whatever the reason, quoting is uncommon in the discussions, for it occurs in six out of the 42 messages on List 1, and in three out of the 18 messages on List 2. Regardless of this, let us have a look at some of the occurrences of quoting in the discussions, because they may still be able to reveal something of the functioning of cohesion in e-mail language.

(3) > This list has changed a bit since I last logged on, as I didn’t think we were supposed to have discussions like this. . . .

At the risk of adding further to the list’s exceptionally heavy mail volume, I think I should try to explain why I think this discussion is appropriate for WMST-L. The situation Rosie described is very similar to problems that arise involving offensive classroom speech and behavior directed against all or some women. Indeed, a number of respondents have offered suggestions based explicitly on their experiences with just such situations. So I do feel that this discussion falls within the list’s focus. (Mailing List 1)

Let us start with example (3), which shows quoting message initially. As we can see, some of the units (list and discussion) in the copied text and in the message proper are related, but we can ask if it was actually included to create coherence, i.e. if the message is in fact clearer or less ambiguous because of the copied text. It should be pointed out that the original message had been sent on the same day as the response, so it is not likely that it would have been forgotten. I would therefore like to argue that the message on its own would have been quite enough, for there can be little doubt that the list-members would not be able to tell which list and which discussion are being referred to.

However, the writer, who is actually the founder of the list, decided to add the copied portion. There is cohesion between the copied text and the message, but the same cohesion, as it were, exists between the original message and the response.3 If the reason for quoting is not primarily to create coherence, or
alternatively to remind the readers of the earlier message, sent only a couple of hours prior to the response, I think we can ask if the writer’s intention is not in fact simply to make clear that she is responding to this message only, and, importantly, in her status as the founder of the list correcting the assumptions of the earlier writer.

Let us take another example of quoting; this time the copied text occurs message-finally.

(4) imho – I feel there is a distinction to be made between dressing a certain way (i.e. cross dressing was brought up) and wearing a symbol that clearly represents hate, murder and oppression.

-------------------------
> I agree with Georgia that a student should not be judged by how he/she dresses. Isn’t the point of feminism to overcome biases? If the particular student in question has not violated the instructor in any other way than dressing in a manner which she finds offensive, then the instructor should make every effort to ignore his appearance. (Mailing List 1)

Example (4) is quite interesting in that the message proper is very short, only one sentence, whereas the copied text is longer. There are units in the message and in the copied portion which are related (referring to dress). Again, the message would be a coherent contribution to the discussion even without text-copying, for the whole discussion started with the behaviour of the student and his inappropriate dress, and has been revolving around this topic from the beginning. The current writer is possibly trying to make it perfectly clear that she disagrees with some of the other list-members on the meaning of dressing in a certain way.

Let us next consider a sequence of three messages in order to see if similar tendencies can be observed in them.

(5) At the very least, the current situation calls for a mini-unit on political semiotics...like, flip the student and use him as exhibit a.

On a related note, at bedtime I’ve been flipping through the big bio of the Kennedy women. There’s this photo of a young Jackie Bouvier with her pony at a horse show in the mid-thirties. She’s dressed as an “Indian princess,” and emblazoned on the front of her jumper/dress is a great big swastika. It’s jarring (esp. since the photo was taken in 1936 or 1937, well into the Nazi era), and the photo might be a good example for the class discussion proposed above.
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(6) > [...] On a related note, at bedtime I’ve been flipping though the big bio > of the Kennedy women. There’s this photo of a young Jackie Bouvier > with her pony at a horse show in the mid-thirties. She’s dressed as an > “Indian princess,” and emblazoned on the front of her jumper/dress is a > great big swastika. It’s jarring (esp. since the photo was taken in 1936 > or 1937, well into the Nazi era), and the photo might be a good example > for the class discussion proposed above.
I don’t have the photo in front of me, but Jackie O’s “Indian Princess” dress was probably decorated with the original Native American symbol (for “well being,” I think) that was “copied” by the Nazis, reversed, and then used as their symbol. Therefore, she was probably wearing what for her was a “benign” Native American symbol, with no idea of its Nazi connotations.

(7) The symbol has a long history and appeared in many cultures in one form or another, such as the three legs joined at the center found I think in Greek history. The ancient and honorable form was reversed from the Nazi symbol. (Mailing List 1)

Example (6) is an answer to (5), and example (7) is an answer to (6) and also indirectly to (5). Let us take examples (5) and (6) first. There are several related units in the messages; two of them are particularly interesting. Consider the photo in example (6). It seems that the copied text could be functioning here as almost a part of the message, making it possible for the writer to use the photo instead of, for instance, the photo of a young Jackie B. However, let us next consider what happens with dress: this is not repeated as the dress or her dress in (6), but as Jackie O’s “Indian Princess” dress, although the/her dress would have been equally clear. Consequently, even though on the basis of the photo it could be claimed that the copied text is an essential part of the message, the dress contradicts this.

If we move on to example (7), which is a short message with no quoting, we can note that the writer repeats the symbol without any copied text to support it, as it were. The writer also repeats reversed from example (6). No problems result from such a strategy, i.e. the message is a coherent contribution to this discussion, and the list-members would not have had any difficulties in interpreting it.

What makes this sequence of messages even more interesting is the fact that examples (5) and (6) were sent on the same day, while example (7) was sent on the following day. It would therefore make more sense if example (7) was the one including quoted text, but as we saw this is not the case. It is intriguing that example (6), with quoted text, is again an instance of disagreement, i.e. the
writer of (6) wants to correct something presented in example (5). Example (7), on the other hand, agrees with example (6) and corroborates the claims made in it.

The strategy of quoting throughout a message, which as already noted can be used for creating a conversational sequence within a message, does not occur at all in the discussions analysed. We are thus unable to study cohesion in such sequences. There are some messages, however, where quoting occurs in the middle of a message; let us next take a closer look at those. Examples (8), (9) and (10) are, incidentally, the three instances of quoting occurring in List 2.

(8) But, seriously, I agreed with a lot of what Tom S. wrote in his posting. Then I hit a bump at the following point.
> The *time, effort, and money* that was to have been dedicated to teaching teachers about BEV would be much more profitably spent teaching them about the *differences* between *spoken* and *written* English.

Idealistically this sounds good, and indeed in terms of “more or less (time, effort, money)” some formula is necessary, because indeed the *difference* between *speaking* and *writing* is not well recognised for what it is. Nevertheless, in case Tom does not realise it, in the US the position of African Americans in the overall society is historically and continues to be “special”…

(9) The following statement by Tom seems to me to strike at the core of the discussion relating to the Ebonics controversy:
> “Children already *speak a language* before they first attend school. The role of *formal schooling in first language learning* is minimal.”;

The problem with the *Oakland school district kids educationally* is not that *they speak BEV or AAVE or Standard Written English*. A significant problem is that *their use of oral language* has been restricted, they haven’t had sufficient practice to formulate grammatical hypotheses, or to develop a knowledge base adequate to understand the material addressed in the *books* or by *their teachers*.

(10) As Michael says, Ron’s comments on the ‘lack of linguistic preparedness’ of inner-city pupils is similar to the debate about Bernstein’s Elaborated and Restricted codes, and Bereiter and Engelman’s ‘deficit theory’. But I don’t agree that this makes Ron’s comments invalid, as Michael implies:
> It’s interesting how these ideas just keep repeating themselves in spite of the fact that, when looked at in a historical perspective, they seem quite bizarre. It’s also interesting that they seem to always come from *nonlinguists*.
It’s not that simple. There is good solid work done by linguists which suggests (to my mind at least) that some kinds of homes do not prepare kids for the linguistic demands of schools in the way that other homes do.

(Mailing List 2)

There is again quite a number of cohesion relations present in the messages and in the copied portions. For instance, *time, effort money* is repeated in example (8); *children* is specified to *the Oakland school district kids* in example (9); and *nonlinguists* is contrasted to *linguists* in example (10). However, what is also clear is that the writers, in these examples as well, disagree with a previous writer.

To conclude, on the basis of the small number of messages showing quoting it is impossible to say whether or not cohesion relations are more frequent in such messages than in the other messages. Examples (6) and (7) seem to indicate that the same kind of relations can be used with or without quoted text. It is quite intriguing that all the messages which include copied text either show disagreement with an earlier message or are intended as corrections. Two messages in List 1 and only one in List 2 show disagreement without quoting. It appears that in a situation of potential conflict the writers are indeed trying to make sure that the readers know which message or which comment is being referred to (see also Tanskanen 2001).

Although overt collaboration in the form of quoting between the communicators in the mailing-list discussions is uncommon, it is worth repeating here the findings of Section 6.2: the distribution of cohesive pairs in the mailing-list texts generally seems to mirror the distribution in the conversations. Even without a great number of overtly conversational or dialogical sequences, the writers of the mailing-list messages thus appear to be trying to achieve dialogical coherence.

Next, we turn to examine chains of cohesion in the mailing-list discussions; this should also give us an opportunity to observe the writers collaborating, for we saw in connection with the spoken dialogue that all communicators tend to take part in building chains of cohesion.

6.5 Chains of cohesion

This section discusses chains of cohesion in the mailing-list texts. As in the conversations, most of the pairs take part in chain formation, and both long and shorter chains occur in the mailing-list discussions as well. Let us first consider
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a long chain from both of the discussions, and then concentrate on some of the shorter chains. As expected, pairs of cohesion taking part in the long chains are to be found in almost all of the messages of the discussions.

The longest chain in List 1 concerns the student whose behaviour initiated the discussion. The chain includes several different units referring to the student: a young Latino, the student, this young man, the Nazi student, the neo-nazi; the pronoun he is also used several times. Below are extracts from four different messages, showing how the chain is built.

(11) My problem is a pedagogic one. How do I grade this young man? He must have known that I would be severely upset by it after our conversation. Should I just turn to blind grading? Should I tell him that I can’t treat him fairly? What would you do?

(12) The debate over Rosie’s Nazi student raises interesting questions about what we as teachers should or must tolerate in our classrooms. I have a student in one of my classes who is schizophrenic and sometimes very disruptive – talking to herself, reacting in a hostile manner to other students’ contributions to class discussion, etc.

(13) I think (hope) we would all agree with Georgia that dress is not an issue. I think the problem here is that the dress becomes a representation of a belief system. In this case, an ideology that the particular student has already expressed, and an ideology that is based on extreme violent and restrictive responses to people.

(14) His action was not merely offensive, but a blatant threat towards a Jew (a Jew with power). His action goes beyond symbolism, beyond personal expression, beyond peer pressure (and I don’t see anything admirable about his coming to Rosie’s class in his uniform – if he had to wear it to fit in, as part of his self-definition, given that he clearly knew how it should affect Rosie, he should have cut class and taken the consequences; I certainly don’t see him as a model student). (Mailing List 1)

In Mailing List 2, the longest chain, unsurprisingly, includes units referring to Ebonics and languages in general; extracts from three different messages follow:

(15) I don’t think we should call Ebonics a ‘triviality’, though. I think many people will get the wrong impression that linguists trivialize their daily language practices and home ways of speaking. I also detect some misinformation underpinning the Ebonics proposal. Did Toni Cook (Oakland school board pres.) really say that Ebonics is
genetic? Somehow part of the genetic heritage of the grandchildren of African slaves? With features typical of 'West African language'? Any linguist should definitely scoff at this!

(16) I’ve been following the “Ebonics” debate in the papers (and needless to say, I’m horrified at the depth of public ignorance about language, but that’s not the reason for this post). In a couple of the news stories that I read, it was stated that Black English “has the vocabulary of English but a grammar based on that of Niger/Congo languages”. The journalist probably misunderstood what s/he was told – “based on” is pretty strong, maybe “shares some features of” is what s/he meant to say –

(17) I believe we have to communicate the following: linguists “begin” with the assumption that “Ebonics” “is” (a) “language,” because it’s a coherent etc. etc. communication system that, obviously, works for its speakers. This assumption is orthogonal to the question of whether it’s “a separate language,” “a dialect of English,” etc. – those are questions that aren’t particularly interesting to the linguist; we simply recognize that it exists and investigate its structure and use.

So – if any of us ever gets onto a talk radio program, can we point out right up front that “Ebonics” is a language, and whether it’s identical with, totally different from, or similar to some extent to Standard English has no bearing on its importance? (Mailing List 2)

The long chains obviously create topical coherence in the discussions; in other words, we can recognize the messages as parts of a single discussion on the basis of the chain which runs through the messages and unites them. Several shorter chains also occur in both of the mailing-list discussions. Let us consider one from each list in the following, presenting the symbol chain and the SWE (Standard Written English) chain, respectively. The first two of the examples were already discussed in Section 6.3 but from a different perspective; the first message of the sequence is omitted here because the relevant part of the message is copied in the beginning of the second message.

(18) > [...] On a related note, at bedtime I’ve been flipping through the big bio > of the Kennedy women. There’s this photo of a young Jackie Bouvier > with her pony at a horse show in the mid-thirties. She’s dressed as an > “Indian princess,” and emblazoned on the front of her jumper/dress is > a great big swastika. It’s jarring (esp. since the photo was taken in 1936 > or 1937, well into the Nazi era), and the photo might be a good example > for the class discussion proposed above.

I don’t have the photo in front of me, but Jackie O’s “Indian Princess”
dress was probably decorated with the original Native American symbol (for “well being,” I think) that was “copied” by the Nazis, reversed, and then used as their symbol. Therefore, she was probably wearing what for her was a “benign” Native American symbol, with no idea of its Nazi connotations. This is quite different from the situation of the young man in a current classroom who wears a highly-charged symbol, the meaning of which he and those around him are fully aware.

(19) The symbol has a long history and appeared in many cultures in one form or another, such as the three legs joined at the center found I think in Greek history. The ancient and honorable form was reversed from the nazi symbol. (Mailing List 1)

This symbol chain shows how the original a great big swastika is co-specified by the second writer to the original Native American symbol, then to (Nazi) symbol, then back to a benign Native American symbol and finally to a highly-charged symbol. Example (19) starts with the symbol, which is then related to the ancient and honorable form by equivalence, which is then co-specified to the nazi symbol. The three messages thus form a topical segment concentrating on the swastika/symbol.

(20) The important linguistic point that we should be bringing to the general discussion is that there are radical differences between written and spoken language, and indeed, that the “Standard English” we want students to learn should really be renamed “Standard Written English” (let’s call it SWE) since nobody speaks it natively. . .

It is a truism that SWE is closer to some dialects than others, and that some students, including those whose native dialect is BEV, will have further to go than others from their ideolec to approximate SWE. It is also a truism that no-one is a native speaker of written language; even northern white students with no educational disadvantages have to work hard, and some fail.

(21) The problem with the Oakland school district kids educationally is not that they speak BEV or AAVE or Standard Written English. A significant problem is that their use of oral language has been restricted, they haven’t had sufficient practice to formulate grammatical hypotheses, or to develop a knowledge base adequate to understand the material addressed in the books or by their teachers. . .

We need to go see how many can’t form simple future tense answers to the question “What are you gonna do after school today?”, and having been presented with a ONE paragraph story written in present tense, how
many can’t answer with even one-word responses to:
“What is the boy’s name?”
“Where did the boy go?”
“How did the boy get there?”
I think you will find that the number is significant, and that the number has nothing to do with who uses Ebonics or SWE. Those that are good at Ebonics will know the answers, those that are good at SWE will know the answers, but those with limited expressive language skills will be the ones who do not give the answers… (Mailing List 2)

In examples (20) and (21), let us follow the SWE chain. We can see how it is introduced and used in (20), and taken up again in (21) and used several times. The two messages from which these extracts come are the only ones in the discussion referring specifically to SWE; together they thus seem to form a topical segment. It can be concluded that the shorter chains in the mailing-list discussions appear to be able to reflect topical segments, as was the case in the conversations as well.

6.6 Collaborating with cohesion in a written dialogue

We can start this concluding section by noting that the mailing-list texts show a cohesive profile quite similar to the conversations studied in the previous chapter. Regardless of the contextual differences between the two types of dialogue, the same cohesive relations tend to be favoured. The total number of pairs in the mailing-list texts is not quite as high as in the two-party conversations, but higher than in the three-party conversations. Situated on the same continuum with the conversations, the mailing-list texts would be situated between the two-party and the three-party conversations, but closer to the former than the latter.

In terms of its cohesive profile, the written dialogue simulates the profile of two-party conversation, and it is interesting to compare the two from the perspective of collaboration. The contributions of the communicators in the mailing-list discussions are definitely the most monologic in the material: there is nobody to interrupt a writer’s message, which can even be rewritten and polished before it is sent to the list. The use of cohesion in the mailing-list messages is thus mainly monologic, which is also the case with the two-party conversations, where cohesion is dominated by same-speaker pairs. In both types of interaction, similar cohesive strategies are favoured.
When introducing the mailing-lists, attention was drawn to differences in the social context of the lists, namely that the Women's Studies list is female-dominated and the Linguist list male-dominated, and that the messages on the latter are longer than those on the former. Concerning the first difference, it is interesting at this point to mention the study by Herring (1996), in which the same two lists are investigated from the perspective of potential gendered practices. Herring (1996:104) concludes that women's and men's messages are different in that women's messages tend to be aligned and supportive while men's tend to be opposing and critical, and that the lists show similar tendencies according to whether women or men are dominant. We could therefore postulate that denser cohesion could be linked to what Herring calls the “aligned variant”, while less dense cohesion would characterise the “opposed variant”.

However, it is important not to forget the other contextual difference between the two lists, namely the length of the messages: the contributions on the Linguist list are considerably longer than those on the Women's Studies list. The discussion on the WMST list therefore shows participants taking shorter (writing) turns, while the Linguist list discussion is characterised by participants' lengthy turns, leading to less overt collaboration. It would therefore be possible to postulate that the more monologic strategies on the Linguist list, compared to the more dialogic ones of the WMST list, could be the reason for the cohesive differences between the lists.

The strategy of quoting was also discussed. It was noted that the strategy is uncommon in the mailing-list discussions studied for the present study. However, we were able to see that quoting seems to serve other purposes in the communication than the creation of cohesion between the messages. The function of quoting in the discussions seems to be to help the writer avoid (further) conflict by explicitly showing which message or part of a message the current writer is reacting to.

As for chain forming, we were able to observe that both long and shorter chains occur in the mailing-list texts. The long ones are related to the general topics of the discussions, while the shorter ones reflect topical segments. Most of the messages included pairs or units taking part in some of the chains.

All in all, it can be concluded that the cohesive strategies in the mailing-list texts are not markedly different from those in the conversations. The cohesive profiles of both types of dialogue are similar, and more global features such as chain formation are also to be found in both. That the cohesive profile of the mailing-list discussions is closer to that of stereotypical dialogue, i.e. the two-
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party conversations, is a strong indication of the collaborative basis of the use of cohesion in this type of e-mail language.

Notes

1. It is worth noting here that the statement referred to by the writer as well as another similar article originally written for a newspaper were excluded from the analysis, although they were included in the writers' messages. The reason for their exclusion was that the language of these articles could not really be considered as representative of mailing-list language.

2. At least on the basis of my personal experience, it is indeed not uncommon during mailing-list discussions that the list-members can be irritated by their fellow list-members who may be (over)using copied text and thus filling everyone's mailbox with extremely long messages.

3. Because it in fact is the same cohesion, such related pairs were only counted once in the analysis.
CHAPTER 7

The written monologue

Academic writing

7.1 Introduction

The previous two chapters explored the use of cohesion in the dialogue texts in the material. It is now time to start investigating the monologue texts, starting with the more stereotypical monologue, i.e. written monologue, and more specifically academic writing.

The chapter begins with an exploration of the distribution of cohesion pairs in the academic articles and continues with an investigation of chains of cohesion in the academic articles. Section 7.5 analyses the role of cohesion in abridging texts, and discusses the implications of this analysis as regards the role of cohesion in text organisation. The final section summarises the findings and presents the conclusions as well as comparisons of the findings with those discussed in the previous two chapters.

7.2 Material

Academic writing 1

Academic writing 2

Academic writing 3
Michael Green, "‘And ??’ or, between the cracks: locating Cultural studies”. The European English Messenger, 4(1). 1995.
The category of academic writing consists of writing by (and usually also mainly for) the academic community. The texts were selected from journals and magazines or collections of articles. The topics of the articles naturally vary, as is the case with the topics of the conversations, speeches and mailing list discussions as well. Two of the articles deal with language, one with cultural studies and one with economics. What unites all of them is the attempt of the writers to convey information on a topic within their field of expertise to readers who are well-informed in general but not necessarily expert in precisely the field being discussed. One of the articles is from the 1970s, so that a more balanced comparison with the older spoken material is possible, although, as was noted earlier, differences in the use of cohesion due to the age of the texts are not anticipated.

Let us next consider written monologue from the perspective of the three contexts: linguistic, cognitive and social. Unlike in the dialogues already studied, the linguistic context in written monologue is created solely by the writer. Traces of other texts are of course almost always present through the various mechanisms of intertextuality, but these, too, are incorporated in the text by the writer. On its surface, therefore, monologue is not a joint activity, but this does not entail a lack of collaboration, and this is where we come to the cognitive context.

As argued in Chapter 2, collaboration in monologue takes place at the cognitive level, as producers negotiate their mental representation of the message with the mental representation they assume the receivers have, while receivers for their part look for the signals of this negotiation. Although the production and interpretation of written monologue do not have to happen under severe temporal constraints, with writers normally having time for editing and readers for rereading, the cognitive collaboration described above adds to the overall cognitive burden.

Looking at the social context, finally, it can be noted that the channel is written and there is no contact between the communicators (during the production and interpretation stage, that is). Any feedback can therefore be provided only after the articles have been published and read. The writers are or have been members of the academic community, and they are writing mainly though not solely for an academic audience.
Table 7.1 Pairs of reiteration and collocation (per 1000 words) in the academic articles

<table>
<thead>
<tr>
<th></th>
<th>Article 1</th>
<th>Article 2</th>
<th>Article 3</th>
<th>Article 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reiteration</td>
<td>86</td>
<td>94</td>
<td>85</td>
<td>96</td>
</tr>
<tr>
<td>Collocation</td>
<td>16</td>
<td>14</td>
<td>16</td>
<td>14</td>
</tr>
<tr>
<td>TOTAL</td>
<td>102</td>
<td>108</td>
<td>101</td>
<td>110</td>
</tr>
</tbody>
</table>

7.3 Patterns of cohesion in academic writing

In this chapter as well, we start the discussion by presenting the distribution of pairs of cohesion in tabular form. Table 7.1 shows the normalised frequencies of pairs of reiteration and collocation in the academic articles.

The most obvious fact emerging from Table 7.1 is that all the articles show very similar figures. Article 1 has a total of 102 pairs (86 reiteration and 16 collocation pairs), Article 2 a total of 108 pairs (94 reiteration and 14 collocation pairs), Article 3 a total of 101 pairs (85 reiteration and 16 collocation pairs), and finally, Article 4 has a total of 112 pairs (98 reiteration and 14 collocation pairs). Articles 2 and 4 thus have slightly more pairs; these “additional” pairs are actually reiteration pairs, because there are more collocation pairs in Articles 1 and 3.

If we want to compare these numbers to those presented in the previous two chapters, it is immediately clear that the cohesive profile in the articles is quite different from the profile of both the conversations and the mailing-list texts. The number of pairs is lower in the articles, and the proportion of collocation is also clearly higher; this is especially true as regards Articles 1 and 3.

As the variation between the articles seems to be quite small in terms of the total number of pairs, let us see in the following what we can learn from the distribution of the pairs per category. This information is presented in Table 7.2. The mean is again provided to show the order of the categories in terms of the frequency of pairs.

The uniformity between the articles, suggested by Table 7.1, is corroborated by Table 7.2: all the articles again show amazingly similar figures, although some variation is of course also evident. The most striking difference between the figures presented here and those given in the two previous chapters concerns the number of simple repetition pairs. We remember that these dominated both the conversations and the mailing-list texts, but in the articles their proportion is considerably smaller. Other relations show slightly higher figures than what we saw in connection with the dialogues, although again other collocation relations apart from elaborative collocation are rare. Interestingly, of
Table 7.2 Pairs of reiteration and collocation relations (per 1000 words) in the academic articles

<table>
<thead>
<tr>
<th></th>
<th>Article 1</th>
<th>Article 2</th>
<th>Article 3</th>
<th>Article 4</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple repetition</td>
<td>34</td>
<td>29</td>
<td>26</td>
<td>27</td>
<td>29</td>
</tr>
<tr>
<td>Complex repetition</td>
<td>6</td>
<td>4</td>
<td>6</td>
<td>7</td>
<td>5.7</td>
</tr>
<tr>
<td>Substitution</td>
<td>9</td>
<td>16</td>
<td>12</td>
<td>13</td>
<td>12.5</td>
</tr>
<tr>
<td>Equivalence</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Generalisation</td>
<td>7</td>
<td>11</td>
<td>13</td>
<td>12</td>
<td>10.7</td>
</tr>
<tr>
<td>Specification</td>
<td>7</td>
<td>6</td>
<td>12</td>
<td>10</td>
<td>8.7</td>
</tr>
<tr>
<td>Co-specification</td>
<td>13</td>
<td>17</td>
<td>9</td>
<td>14</td>
<td>13</td>
</tr>
<tr>
<td>Contrast</td>
<td>6</td>
<td>8</td>
<td>4</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>Ordered set</td>
<td>3</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Activity-related collocation</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Elaborative collocation</td>
<td>13</td>
<td>14</td>
<td>16</td>
<td>14</td>
<td>14</td>
</tr>
</tbody>
</table>

the dialogues studied earlier, Mailing List 2 actually shows figures which are quite similar to those of the articles, except of course for simple repetition.

Let us now take a look at a couple of extracts from the articles in order to see if the information gained from these figures can be substantiated by considering pairs of cohesion in use.

(1) A list of reforms would start with urban policy. It is about time something really drastic was done about the schools in the inner city. Policy has not failed in this area; it has simply not really got going. The schools need a larger share of available resources, especially good teachers, and deserve more of the attention of the administrators. Much of the remedial effort in the secondary schools could better be diverted to the primary schools to prevent the problems emerging in the first place. Turning to the NHS, it is also about time that these same areas had a decent general-practitioner service instead of the absentee doctors they presently have to put up with. More generally in health there are resources to be reallocated by making treatment less institutional and concentrating more on the home.

(Article 1)

(2) The former editor of The Messenger, himself a confessed sceptic about the desirability – or perhaps just feasibility – of doing work in cultural studies on another country and society, invited comments in the last issue on different models for teaching a “mixture” of “language, literature and ???”.

My remarks concern the three ???, and strategies for the “mixture”. They are based on experiences teaching here in a Department of Cultural Studies (formerly CCCS), for a semester each in France (Montpellier) and in Germany (Munich), and on short courses for Danish teachers of English. They
are also influenced by a recent conference in Rabat, where the proposed development of cultural studies programmes in some Moroccan universities (initially but not exclusively in English Departments) was debated in an impassioned and good-humoured way which included some scepticism about the importation, and potential professionalisation, of a “Western” model of cultural studies.

(Article 3)

At this stage of the analysis, when the principles for recognising cohesive pairs are already familiar to us, it may be sufficient to provide a general commentary on the two examples rather than a detailed pair-by-pair discussion. First of all, it can be noted that simple repetitions do not indeed seem to be very frequent, at least if compared to the situation in the two types of dialogue. Simple repetitions of course do occur; we have, for instance, resources in example (1) and teaching in example (2), which are repeated. Altogether, however, the cohesive profile of at least these extracts looks slightly more varied than what we were able to observe in the dialogues. Thus, for instance, in example (1), schools is specified to secondary schools which is then co-specified to primary schools, and there is also a pair of contrast, institutional – home. In example (2), we have an elaborative collocation relation between The Messenger and the last issue, and there is a substitution pair remarks – they.

Examples (1) and (2) therefore seem to corroborate what we could deduce from the numerical information: the academic articles have a more uniform distribution of cohesive relations than the dialogues.

7.4 Chains of cohesion

Having already discussed chains of cohesion and their functioning in the two types of dialogue, it will not be surprising when we note that in the academic articles as well, the majority of the pairs take part in chain formation, and that both long and shorter chains of cohesion can be found. Let us again start with the long chains.

The longest chain in Article 1 includes units related to public expenditure: economy, incomes policy, the inflation rate, gross domestic product. In Article 2, the longest chain is about spoken and written language: the two media, speech, writing, the spoken medium, the written medium. The longest chain of Article 3 consists of units related to cultural studies: cultural studies departments, courses on culture, cultural studies writers. Finally, in Article 4 the longest chain includes
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units dealing with Standard English: standardisation, the standard variety, non-standard varieties.

The longest chain in each of the articles runs through the entire article, and none of the articles shows a competing long chain. The articles therefore appear to revolve around a single topic. Any other finding would actually have been quite surprising, given that we are talking of academic articles, where logical continuation of the topic matter is very much the favoured strategy.

In the following we consider a couple of the shorter chains in the articles in order to find out if they reflect a topical (or, indeed, textual) segment. The chains to be discussed are the boundary chain and the accent chain. The first example is quite lengthy, but as we will only concentrate on the chain, I trust it is not too long.

(3) Turning from minimal units and their segmentation to larger units and their segmentation, we find that in this latter realm both with regard to units and with regard to segmentation criteria, there are two kinds of phenomena: on the one hand, units and their boundaries (the latter being the goal of segmentation) which are given in the nature of the data, and on the other hand, units and their boundaries which have to be identified by a process of recognition and/or analysis.

In linguistic analysis, I have called the former units behavioral units, and the latter analytic units. In the present context, it is perhaps more felicitous to use the term “naturally given units” instead of “behavioral units”. The crucial attribute of naturally given units is that their boundaries are in some way perceptible, either to the senses of a human being (including the analyst), or to the sensing mechanisms of a piece of electronic equipment. *The naturally given boundaries in speech* are various kinds of pauses and other interruption phenomena. Some of these, as noted above, are perceptible to the human ear; at least in some schools of thought, *these boundaries* can by linguistic analysis be converted into *analytically established boundary features* such as *junctures*. The boundaries which, for whatever reason, are not perceptible to the human ear but can be sensed by electronic equipment, can often also be inferred from the inspection of instrumental records such as acoustic spectrograms. *They* may well play an important role in automatic speech recognition (cf. Garvin & Trager 1964:7–8).

In most alphabetic writing systems, *the perceptible boundary signals* are spaces and punctuation marks, both of which are equally accessible to human perception and to electronic manipulation. These are the analogs of the interruption phenomena discussed above; unlike the *junctures* of spo-
ken language, not much attention has been paid, at least in the United States, by linguists (as opposed to literacy pedagogues) to these boundary features of written language, until the computer processing of natural language became an important interest for some of them.

As to analytic units, in ordinary linguistic analysis their establishment (or the need for establishing them, as opposed to just taking them for granted on the basis of native speaker’s or analyst’s intuition) differs on the basis of the researcher’s theoretical orientation rather than on the basis of the kind of medium or its manifestation that is at play in the given case. In my opinion, very few of the significant units of a language are naturally given in the spoken medium; when analysts take such units for granted, it is often on the basis of school grammar or at least literacy, as can be seen from the very different responses in this regard that have been reported by competent linguistic field workers for speakers who have not been exposed to literacy. For the purposes of the present paper, there is no need to pursue this question further.

Not so for computer-driven linguistic analysis. Here, all schools of thought agree that the establishment of analytic units is one of the essential tasks for computer programs for linguistic analysis. Research in computational linguistics has taken discrete printed input, including naturally given boundaries, for granted and proceeded from there to the analysis of the input text. The actual conduct of the analysis (which of course means the actual design of the computer program intended to accomplish it) varies in line with the school of thought followed, but in my opinion is always concerned (even if it is not overtly stated as an aim) with the establishment of units and their boundaries that are not naturally given, that is, the analytic units of computer-driven analysis. In my experience, the naturally given units of alphabetically written languages of the “Western world” are words separated by spaces, and clauses and sentences separated by punctuation marks (in some languages, such as English, punctuation marks are not closely enough correlated with syntax to serve this separation function consistently). All other kinds of units, which means most syntactic units, have to be computed.

(Article 2)

This segment occurs in the middle of the article, without a subtitle, i.e. it is in no way separated from the flow of the text. It is interesting that the boundary chain seems to be marking this segment as a textual whole; there are no occurrences of boundary anywhere else in the article. Had he so wished, the writer of the article could have provided this section of his article with the subtitle “on boundaries in language analysis”, for instance.
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If we then look at the accent chain, we can note that the writer of this article has decided to mark this segment as a textual whole with a subtitle. The topic matter becomes evident through the several accent-related units.

(4) **Standard English is not an accent**

There is one thing about Standard English on which most linguists, or at least British linguists, do appear to be agreed, and that is that Standard English has nothing to do with pronunciation. From a British perspective, we have to acknowledge that there is in Britain a high status and widely described accent known as Received Pronunciation (RP) which is sociolinguistically unusual when seen from a global perspective in that it is not associated with any geographical area, being instead a purely social accent associated with speakers in all parts of the country, or at least in England, from upper-class and upper-middle-class backgrounds. It is widely agreed, though, that while all RP speakers also speak Standard English, the reverse is not the case. Perhaps 9%–12% of the population of Britain (see Trudgill & Cheshire 1989) speak Standard English with some form of regional accent. It is true that in most cases Standard English speakers do not have 'broad' local accents (i.e. accents with large numbers of regional features which are phonologically and phonetically very distant from RP), but it is clear that in principle we can say that the standardisation which has led to the development of Standard English has not included standardisation of phonetics and phonology.

This point becomes even clearer from an international perspective. Standard English speakers can be found in all English-speaking countries, and it goes without saying that they speak this variety with different non-RP accents depending on whether they came from Scotland or the USA or New Zealand or wherever. (Article 4)

However, unlike in example (3), this is not quite the end of the accent chain. In the concluding section of the article, the writer also returns to accent, and we have the following sequence:

(5) If Standard English is not therefore a language, an accent, a style or a register, then of course we are obliged to say what it actually is. The answer is, as at least most British sociolinguists are agreed, that Standard English is a dialect. As we saw above, Standard English is simply one variety of English among many. It is a sub-variety of English. Sub-varieties of languages are usually referred to as dialects and languages are often described as consisting of dialects. As a named dialect, like Cockney, or Scouse, or Yorkshire, it is entirely normal that we should spell the name of the Standard English
dialect with capital letters. Standard English is however of course an unusual dialect in a number of ways. It is for example by far the most important dialect in the English-speaking world from a social, intellectual and cultural point of view; and it does not have an associated accent. (Article 4)

Although we have missed the other sections of the article, which on the basis of the first sentence in (5) concentrate at least on language, style and register, this conclusion makes sense together with the accent section; the writer notes that Standard English, instead of being an accent is, in fact, a dialect, which does not have an associated accent. Together examples (4) and (5) form a summarising segment, which focuses on accent.

It seems that we have now come quite far in understanding what chains of cohesion can tell us of the organisation of text. With the dialogues we first saw how the chains seem to mark topical segments, and with the written monologues we were able to show how the chains mark (potential) textual segments. If the force of cohesion is enough to mark such segments, it can be asked what else it is capable of marking in terms of the organisation of discourse, i.e. what the role of cohesion is in discourse organisation. This question will be tackled in the following section.

7.5 Cohesion and discourse organisation

This section deals with an aspect of cohesion which was not directly discussed in connection with our two sets of dialogue, namely the role of cohesion in discourse organisation. The aspect was touched upon in our discussions of the chains of cohesion in both spoken and written dialogue, but it is with our monologue texts that we will explore it further, since as outlined in the end of Chapter 4, the analysis presented here pays attention to features particular to planned, monologic discourse.

Let us start by repeating some of the ideas suggested by Hoey (1991) as to the role of cohesion in text organisation. We remember from Chapter 3 that Hoey is interested in repetition which is important to the organisation of text. He concentrates on sentences which are connected to other sentences by an above-average number of links (these are counted on the basis of checking every item in a text against every other item in the text in order to see if they are related). These sentences then form bonds. Hoey makes two claims about the importance of bonds:
The weak claim: each bond marks a pair of sentences that is semantically related in a manner not entirely accounted for in terms of its shared lexis.

The strong claim: because of the semantic relation referred to in the weak claim, each bond forms an intelligible pair in its context. (Hoey 1991: 125–126)

Hoey shows how most of the bonded sentences in his material are coherent when placed together, thus conforming to the strong claim. Those pairs of sentences which do not form a coherent whole are still usually closely related and conform to the weak claim. The fact that the claims are correct means that texts are not linearly produced and organised, even if they usually are linearly processed (Hoey 1991). Furthermore, on the basis of bonded sentences, Hoey presents abridgements of his texts which show that bonded sentences placed together can provide a satisfactory summary of the text. Dahl (2000) uses Hoey’s methodology as a starting point in her study, which shows that it is possible to produce acceptable abstracts of scientific papers with a computer program which recognises bonded sentences.

The present analysis differs from Hoey’s, but his ideas will nevertheless be applied to the material of the present study. However, as our principles for recognising cohesive pairs are different from Hoey’s, we have to modify his ideas slightly to suit our purposes. Instead of the number of links per sentence, we are interested in the number of cohesive units per sentence, counted on the basis of our analysis. In practice this means that we simply count the number of cohesion units in each sentence of the text; unlike the methods in Hoey’s analysis, the distance between the related units is not relevant.

In order to find out if the analysis in its modified form works in practice, let us consider in detail the first 23 sentences of Article 4. This extract is short enough to be manageable for our analysis, yet long enough so that we can demonstrate the functioning of cohesion within it.

(1) There is a reasonably clear consensus in the sociolinguistics literature about the term standardised language: a standardised language is a language one of whose varieties has undergone standardisation. (2) Standardisation, too, appears to be a relatively uncontroversial term, although the terminology employed in the discussion of this topic is by no means uniform. (3) I myself have defined standardisation (Trudgill 1992) as consisting of the processes of language determination, codification and stabilisation. (4) Language determination ‘refers to decisions which have to be taken concerning the selection of particular languages or varieties of language for particular purposes in the society or nation in question’ (p. 71). (5) Codification is the process whereby a language variety ‘acquires
a publicly recognised and fixed form’.(6) The results of codification ‘are usually enshrined in dictionaries and grammar books’ (p. 17). (7) Stabilisation is a process whereby a formerly diffuse variety (in the sense of Le Page & Tabouret-Keller 1985) ‘undergoes focussing and takes on a more fixed and stable form’ (p. 70).

(8) It is therefore somewhat surprising that there seems to be considerable confusion in the English-speaking world, even amongst linguists, about what Standard English is. (9) One would think that it should be reasonably clear which of the varieties of English is the one which has been subject to the process of standardisation, and what its characteristics are. (10) In fact, however, we do not even seem to be able to agree how to spell this term – with an upper case or lower case <s> – a point which I will return to later, and the use of the term by non-linguists appears to be even more haphazard.

(11) Standard English is often referred to as ‘the standard language’. (12) It is clear, however, that Standard English is not ‘a language’ in any meaningful sense of this term. (13) Standard English, whatever it is, is less than a language, since it is only one variety of English among many. (14) Standard English may be the most important variety of English, in all sorts of ways: it is the variety of English normally used in writing, especially printing; it is the variety associated with the education system in all the English-speaking countries of the world, and is therefore the variety spoken by those who are often referred to as ‘educated people’; and it is the variety taught to non-native learners. (15) But most native speakers of English in the world are native speakers of some nonstandard variety of the language, and English, like other Ausbau languages (see Kloss 1967), can be described (Chambers & Trudgill 1997) as consisting of an autonomous standardised variety together with all the nonstandard varieties which are heteronomous with respect to it. (16) Standard English is thus not the English language but simply one variety of it.

(17) There is one thing about Standard English on which most linguists, or at least British linguists, do appear to be agreed, and that is that Standard English has nothing to do with pronunciation. (18) From a British perspective, we have to acknowledge that there is in Britain a high status and widely described accent known as Received Pronunciation (RP) which is sociolinguistically unusual when seen from a global perspective in that it is not associated with any geographical area, being instead a purely social accent associated with speakers in all parts of the country, or at least in England, from upper-class and upper-middle-class backgrounds. (19) It is widely agreed, though, that while all RP speakers also
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speak Standard English, the reverse is not the case. (20) Perhaps 9%–12% of the population of Britain (see Trudgill & Cheshire 1989) speak Standard English with some form of regional accent. (21) It is true that in most cases Standard English speakers do not have ‘broad’ local accents (i.e. accents with large numbers of regional features which are phonologically and phonetically very distant from RP), but it is clear that in principle we can say that the standardisation which has led to the development of Standard English has not included standardisation of phonetics and phonology.

(22) This point becomes even clearer from an international perspective. (23) Standard English speakers can be found in all English-speaking countries, and it goes without saying that they speak this variety with different non-RP accents depending on whether they came from Scotland or the USA or New Zealand or wherever.

The number of cohesive units ranges from one (in sentence 6) to fifteen (in sentences 14 and 18); the mean is 5.3. Let us first see if sentences with an above-average number of cohesive units conform to the claims presented by Hoey (1991), i.e. if they seem to make sense together or even form a coherent sequence. In Hoey’s analysis, the bonded sentences can be situated anywhere in the text; what matters is the cohesive relations they share. Because of the differences between our approach and Hoey’s, we will take a slightly different perspective; we take a sentence with an above-average number of cohesive units and consider it together with the next sentence which shows an above-average number of units. This procedure respects the linearity of text, for texts are very often linearly processed although of course they may not have been linearly produced; this claim is naturally more accurate as regards spoken discourse, where linearity is imposed by the medium.

As the mean number of cohesive units per sentence was 5.3, let us first play it safe and start by considering if sentences with five or more cohesive units make sense together and thus conform to Hoey’s claims. The first pair of sentences are from the beginning of the text, i.e. sentences 1 and 3:

(1) There is a reasonably clear consensus in the sociolinguistics literature about the term standardised language: a standardised language is a language one of whose varieties has undergone standardisation. (3) I myself have defined standardisation (Trudgill 1992) as consisting of the processes of language determination, codification and stabilisation.

Since there is in fact only one sentence missing between sentences 1 and 3, it is perhaps not surprising that they should appear to form a coherent sequence.
Let us next take a look at a pair where the sentences are further apart; this pair is formed by sentences 3 and 9:

(3) \textit{I myself} have defined \textit{standardisation} (Trudgill 1992) as consisting of the processes of \textit{language determination}, \textit{codification} and \textit{stabilisation}. (9) One would think that it should be reasonably clear which of the \textit{varieties of English is the one} which has been subject to the process of \textit{standardisation}, and what \textit{its} characteristics are.

Even if five sentences have been omitted between these two sentences, they do not appear to be unrelated. On the contrary, they definitely seem to form an intelligible pair. Let us take one more pair of sentences, this time from the end of our extract, i.e. sentences 21 and 23:

(21) It is true that in most cases \textit{Standard English speakers} do not have 'broad' \textit{local accents} (i.e. \textit{accents} with large numbers of \textit{regional features} which are \textit{phonologically} and \textit{phonetically} very distant from \textit{RP}), but it is clear that in principle we can say that the \textit{standardisation} which has led to the development of \textit{Standard English} has not included \textit{standardisation} of \textit{phonetics} and \textit{phonology}. (23) \textit{Standard English speakers} can be found in all \textit{English-speaking countries}, and it goes without saying that \textit{they speak this variety} with different \textit{non-RP accents} depending on whether \textit{they came from Scotland or the USA or New Zealand or wherever}.

Again, probably because the sentences of this pair also only had one sentence separating them, they form quite a coherent sequence together.

The next test for our analysis is the abridgement test. In other words, if the bonded sentences of a text in Hoey's analysis formed a satisfactory summary of the text, how about a summary created from sentences with an average or above-average number of cohesive units? Let us see what kind of a summary we would arrive at if we take into account sentences with five units or more and combine them (sentences 1, 3, 9, 10, 13, 14, 15, 17, 18, 21 and 23):

(1) There is a reasonably clear \textit{consensus} in the \textit{sociolinguistics literature} about \textit{the term standardised language}: a \textit{standardised language} is a \textit{language} one of whose \textit{varieties} has undergone \textit{standardisation}. (3) \textit{I myself} have defined \textit{standardisation} (Trudgill 1992) as consisting of the processes of \textit{language determination}, \textit{codification} and \textit{stabilisation}. (9) One would think that it should be reasonably clear which of the \textit{varieties of English is the one} which has been subject to the process of \textit{standardisation}, and what \textit{its} characteristics are. (10) In fact, however, we do not even seem to be able to agree how to spell \textit{this term} – with an upper case or lower case $<$s$>$ – a
point which I will return to later, and the use of the term by non-linguists appears to be even more haphazard.

(13) Standard English, whatever it is, is less than a language, since it is only one variety of English among many. (14) Standard English may be the most important variety of English, in all sorts of ways: it is the variety of English normally used in writing, especially printing; it is the variety associated with the education system in all the English-speaking countries of the world, and is therefore the variety spoken by those who are often referred to as ‘educated people’; and it is the variety taught to non-native learners. (15) But most native speakers of English in the world are native speakers of some nonstandard variety of the language, and English, like other Ausbau languages (see Kloss 1967), can be described (Chambers & Trudgill 1997) as consisting of an autonomous standardised variety together with all the nonstandard varieties which are heteronomous with respect to it. (17) There is one thing about Standard English on which most linguists, or at least British linguists, do appear to be agreed, and that is that Standard English has nothing to do with pronunciation. (18) From a British perspective, we have to acknowledge that there is in Britain a high status and widely described accent known as Received Pronunciation (RP) which is sociolinguistically unusual when seen from a global perspective in that it is not associated with any geographical area, being instead a purely social accent associated with speakers in all parts of the country, or at least in England, from upper-class and upper-middle-class backgrounds. (21) It is true that in most cases Standard English speakers do not have ‘broad’ local accents (i.e. accents with large numbers of regional features which are phonologically and phonetically very distant from RP), but it is clear that in principle we can say that the standardisation which has led to the development of Standard English has not included standardisation of phonetics and phonology. (23) Standard English speakers can be found in all English-speaking countries, and it goes without saying that they speak this variety with different non-RP accents depending on whether they came from Scotland or the USA or New Zealand or wherever.

This is quite a satisfactory summary of the original extract, and we were able to reduce the length of the text to about a half of the original length. The method of selecting sentences for the summary naturally means that very short sentences will almost automatically be eliminated, since they are unlikely to show a great number of cohesive units (see also Dahl 2000:352, 369). However, it is equally important to note that even long sentences can be eliminated. Selecting sentences on the basis of their length only would result in a different summary.
This is a suitable point also for noting that I would not like to claim that the eliminated sentences are meaningless in the original text. On the contrary, they often seem to elaborate on the previous sentence (this is the function of sentence 2 of the original version), or to prepare for the following sentence (this is what sentence 22 does in the original text). They can thus be very important in guiding the reader through the text. However, summarising by definition means leaving something out, and this is the fate of these sentences, which regardless of their local importance do not show as many cohesive units as some of the other sentences in the text.

It seems that combining sentences which have an average or an above-average number of cohesive units results in an intelligible summary. This raises the question if combining sentences which have an even higher number of cohesive units would result in a shorter but equally readable summary.

If we set the limit at eight cohesive units per sentence instead of five, there are still enough sentences left for creating a summary; with a very high limit almost all of the sentences would be eliminated. Let us again start with pairs of sentences in order to see if they are related. The first pair, with sentences with eight or more cohesive units, is formed by sentences 1 and 14:

(1) There is a reasonably clear consensus in the sociolinguistics literature about the term standardised language: a standardised language is a language one of whose varieties has undergone standardisation. (14) Standard English may be the most important variety of English, in all sorts of ways: it is the variety of English normally used in writing, especially printing; it is the variety associated with the education system in all the English-speaking countries of the world, and is therefore the variety spoken by those who are often referred to as ‘educated people’; and it is the variety taught to non-native learners.

The relation and coherence between these sentences is not as clear as in the pairs above, although it is no doubt possible to see that they come from the same text, with sentence 14 providing one example of a standardised language introduced in 1.

Next, let us consider sentences 14 and 18:

(14) Standard English may be the most important variety of English, in all sorts of ways: it is the variety of English normally used in writing, especially printing; it is the variety associated with the education system in all the English-speaking countries of the world, and is therefore the variety spoken by those who are often referred to as ‘educated people’; and it is the variety taught to non-native learners. (18) From a British perspective, we have to
acknowledge that there is in Britain a high status and widely described accent known as Received Pronunciation (RP) which is sociolinguistically unusual when seen from a global perspective in that it is not associated with any geographical area, being instead a purely social accent associated with speakers in all parts of the country, or at least in England, from upper-class and upper-middle-class backgrounds.

Again, there seems to be something missing between 14 and 18, even though we can think that 14 presents the situation from the perspective of Standard English, while 18 specifically focuses on the British situation. Both of these pairs, although not actually coherent together, are nevertheless related and would therefore conform to the weak claim presented by Hoey.

If we then try to produce a shorter summary by taking into account only those sentences which have eight or more cohesive units, we should include sentences 1, 14, 18, 21 and 23. The summary looks like the following:

(1) There is a reasonably clear consensus in the sociolinguistics literature about the term standardised language: a standardised language is a language one of whose varieties has undergone standardisation.
(14) Standard English may be the most important variety of English, in all sorts of ways: it is the variety of English normally used in writing, especially printing; it is the variety associated with the education system in all the English-speaking countries of the world, and is therefore the variety spoken by those who are often referred to as 'educated people'; and it is the variety taught to non-native learners.
(18) From a British perspective, we have to acknowledge that there is in Britain a high status and widely described accent known as Received Pronunciation (RP) which is sociolinguistically unusual when seen from a global perspective in that it is not associated with any geographical area, being instead a purely social accent associated with speakers in all parts of the country, or at least in England, from upper-class and upper-middle-class backgrounds. (21) It is true that in most cases Standard English speakers do not have 'broad' local accents (i.e. accents with large numbers of regional features which are phonologically and phonetically very distant from RP), but it is clear that in principle we can say that the standardisation which has led to the development of Standard English has not included standardisation of phonetics and phonology. (23) Standard English speakers can be found in all English-speaking countries, and it goes without saying that they speak this variety with different non-RP accents depending on whether they came from Scotland or the USA or New Zealand or wherever.
All in all, this abridgement is clearly less satisfactory than the one produced of sentences with five or more links. There are obvious gaps between the sentences, and the summary appears only to be a collection of loosely related sentences. The summary does not really form a coherent whole, although with some effort we can perceive the relations between the sentences.

What can we conclude on the basis of the analysis in this section? We can first note that it is undoubtedly an indication of the force of cohesion that we were able to make a coherent summary of a text with a relatively simple procedure. Merely counting the number of cohesive units per sentence is simpler than recognising bonded sentences, although unlike Hoey’s methodology, the procedure used in the present book cannot really uncover related sentences which are situated far apart from each other. The analysis can however be regarded as further evidence of the important role cohesion plays in the organisation of discourse.

The analysis corroborates that cohesion indeed clusters, as has been suggested in some earlier studies, but it seems that the clustering is not necessarily dependent on the relation between the cohesive units. In other words, for certain purposes it is clearly sufficient if there simply is a particular number of cohesive units in a particular sentence; in our analysis the ideal number of units required seemed to be the average or higher.

7.6 Collaborating with cohesion in a written monologue

The linguistic, cognitive and social contexts of written monologue were noted as being quite distinctly different from those of both spoken and written dialogue. Likewise, collaboration towards coherence in the written monologue texts appears to be achieved in a manner different from the dialogue texts. We saw that the cohesive profile of the academic articles differs from that of both the conversations and the mailing-list texts. The number of pairs is generally smaller, and the proportion of collocation is higher in the articles if compared to the two types of dialogue. The distribution of the cohesive relations is more even in the articles; unlike the dialogues, the articles rely less on simple repetition.

The communicative conditions of the written monologue thus seem to favour a more varied cohesive profile, which is nevertheless achieved with a smaller number of pairs than in the dialogues. One possible reason for this is the fact that temporal constraints are less severe than in the dialogues studied in the previous chapters. In other words, the writer of a written monologue
has the possibility to edit and revise the text while recognising that typically the readers can also revisit the text for rereading and reinterpreting, and this may have an influence on the cohesive strategy used.

Despite the differences in the cohesive profile, studying chains of cohesion in academic writing produced results similar to those gained from the dialogues. Both long and shorter chains occur in the articles. We were able to also investigate the functioning of the chains in indicating textual segments. We saw that the shorter chains are capable of marking segments which concentrate on a particular topic and which can but need not necessarily be marked by the writer as a separate section.

Continuing on the topic of organising discourse, we next investigated the role of cohesion in the organisation of the texts. We saw that it is possible to make a summary of a text by combining sentences which have an average or a higher number of cohesive units. Although the total number of pairs is lower in the articles than in the dialogues, it seems that the articles are making good use, as it were, of their fewer cohesive pairs: the pairs seem to cluster in meaningful ways.

To conclude, the communicative conditions of the written monologue, both at the producing and the interpreting end, lead to a cohesive profile clearly distinct from the dialogues. In the following chapter we will be able to see if this finding is repeated in the other set of monologue texts, namely spoken monologue.
CHAPTER 8

The spoken monologue
Prepared speeches

8.1 Introduction

This chapter concludes the analysis: it concentrates on the last of the four sets of texts, namely spoken monologue, and more specifically prepared speeches. Because this variety of discourse is analysed last, it will be possible to make some comparisons between spoken monologue and the other texts already analysed: written monologue, written dialogue and spoken dialogue. However, as it is the purpose of Chapter 9 to present the findings of Chapters 5 through 8 together, to compare them and to discuss their implications, the discussion in this chapter will not include any conclusive comparisons.

As in the previous chapters, we begin with an exploration of the distribution of cohesion pairs, and continue with an investigation of chains of cohesion in the speeches. The chapter also discusses the role of cohesion in discourse organisation; this will take place in Section 8.5. The final section summarises the findings and presents the conclusions.

8.2 Material

Speech 1
S.12.2a. from the London-Lund Corpus of Spoken English, recorded 1965
Speech 2
C01 from the Lancaster IBM Spoken English Corpus, recorded 1985
Speech 3
HUH from the British National Corpus, recorded 1993
Speech 4
F8E from the British National Corpus, recorded 1992
Let us now have a look at the texts chosen for analysis in this chapter. One speech comes from the London-Lund Corpus of Spoken English (LLC), one from the Lancaster IBM Spoken English Corpus (SEC) and two from the British National Corpus (BNC). The corpora were introduced in Chapter 5 in connection with the presentation of the spoken dialogue material, but perhaps it could be repeated here that prosodic information (available for Speeches 1 and 2) will not be utilised in the analysis.

The name of the category, prepared speech, is perhaps not as transparent as one would wish, but other terms suggested for similar material, such as non-spontaneous oration, tend to be equally vague. The unifying feature of all the texts in this category is that they are all talks or lectures delivered for a larger audience, and all of them have been prepared or planned in advance. There is again a difference between the texts: two of the speeches are radio talks (or lectures), and these have obviously been quite carefully planned. The other two are conventional lectures, given in a university lecture room. It is not possible to say anything definite about their preparedness before delivery, but as they are both the length of a normal lecture, it is quite safe to assume that some planning has been required. I would again want to stress that this study focuses on communicative conditions, and although the amount of planning is assumed to have an influence, it may not be crucial: what unites the four speeches is the fact that the speaker has to deliver a talk packed with information to an audience which has to process that talk on-line as it is delivered.

Looking at the three contexts in more detail and starting with the linguistic context, it is clear that spoken monologue comes close to written monologue in that the speaker creates the surrounding linguistic context. However, as with written monologue, the production is accompanied at the cognitive level by a negotiation of the speakers’ mental representations and their assumptions of the mental representations of the listeners. What looks like a solitary activity on the surface is therefore in actual fact a result of cognitive collaboration. Although the speaker of a spoken monologue may have had ample time for preparing the speech, the negotiation described above adds to the cognitive burden. For the listeners of a spoken monologue the situation is extremely demanding and the cognitive load correspondingly heavy: the interpretation has to take place in an instant, and there are few possibilities for feedback (none in the case of the radio talks).

Concluding with the social context, we can note that the channel is spoken and that in the lecture-room situation the communicators are in visual contact. The speakers are academics and the listeners are students (in the lectures) or people with an interest in the topic discussed by the speaker (in the radio talks).
Table 8.1 Pairs of reiteration and collocation (per 1000 words) in the prepared speeches

<table>
<thead>
<tr>
<th></th>
<th>Speech 1</th>
<th>Speech 2</th>
<th>Speech 3</th>
<th>Speech 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reiteration</td>
<td>148</td>
<td>129</td>
<td>145</td>
<td>144</td>
</tr>
<tr>
<td>Collocation</td>
<td>12</td>
<td>12</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>TOTAL</td>
<td>160</td>
<td>141</td>
<td>154</td>
<td>155</td>
</tr>
</tbody>
</table>

8.3 Patterns of cohesion in prepared speeches

As in the previous chapters, let us first examine some numerical information on the distribution of pairs of cohesion in the prepared speeches. Table 8.1 shows the normalised frequencies of pairs of reiteration and collocation in the speeches.

Table 8.1 offers, again, an interesting cohesive profile: both similarities and differences with the tables presented in the previous chapters can be observed. The total numbers of pairs are quite high, at least in comparison to the other type of monologue, academic writing. Speech 1 has a total of 160 pairs (148 reiteration and 12 collocation pairs), Speech 2 has 141 pairs (129 reiteration and 12 collocation pairs), Speech 3 has 154 pairs (145 reiteration and 9 collocation pairs), and Speech 4 shows a total of 155 pairs (144 reiteration and 11 collocation pairs).

In terms of the overall number of pairs, speeches seem to come very close to the two sets of dialogue. In terms of the proportions of the pairs the speeches are very similar to the conversations, especially the two-party conversations, which also show a cohesive profile dominated by reiteration pairs.

As mentioned in the introduction of the material, there is a difference between the speeches: Speeches 1 and 2 are radio talks, whereas Speeches 3 and 4 are conventional lectures given in a lecture room. Interestingly, this difference does not really seem to be reflected in the figures shown in Table 8.1. One of the radio talks, Speech 2, has the lowest number of pairs, but the figures for the other radio talk are very similar to those for the conventional lectures. The number of collocation pairs is smaller in the conventional lectures, especially in Speech 3, than in the radio talks.

Next, it will be interesting to see what the distribution of the pairs per categories looks like in the prepared speeches. This information is provided in Table 8.2.

The most frequent relation by far is simple repetition: the speeches show approximately similar, high figures as the conversations (and Mailing List 1). Substitution, specification and co-specification have a good number of pairs.
Table 8.2 Pairs of reiteration and collocation relations (per 1000 words) in the prepared speeches

<table>
<thead>
<tr>
<th></th>
<th>Speech 1</th>
<th>Speech 2</th>
<th>Speech 3</th>
<th>Speech 4</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple repetition</td>
<td>79</td>
<td>65</td>
<td>91</td>
<td>86</td>
<td>80</td>
</tr>
<tr>
<td>Complex repetition</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>4</td>
<td>3.5</td>
</tr>
<tr>
<td>Substitution</td>
<td>13</td>
<td>11</td>
<td>16</td>
<td>17</td>
<td>14.3</td>
</tr>
<tr>
<td>Equivalence</td>
<td>9</td>
<td>4</td>
<td>8</td>
<td>10</td>
<td>7.8</td>
</tr>
<tr>
<td>Generalisation</td>
<td>8</td>
<td>16</td>
<td>6</td>
<td>7</td>
<td>9.3</td>
</tr>
<tr>
<td>Specification</td>
<td>14</td>
<td>11</td>
<td>7</td>
<td>9</td>
<td>10.3</td>
</tr>
<tr>
<td>Co-specification</td>
<td>18</td>
<td>13</td>
<td>10</td>
<td>9</td>
<td>12.5</td>
</tr>
<tr>
<td>Contrast</td>
<td>5</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>3.8</td>
</tr>
<tr>
<td>Ordered set</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Activity-rel. colloc</td>
<td>1</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Elaborative colloc</td>
<td>11</td>
<td>12</td>
<td>9</td>
<td>11</td>
<td>10.8</td>
</tr>
</tbody>
</table>

As for collocation relations, elaborative collocation again dominates the picture. There is only one other collocation relation, namely one pair of activity-related collocation in Speech 1. The conventional lectures have a higher number of simple repetition pairs than the radio talks, but otherwise the profiles look quite similar in all the speeches.

All in all, it is as if the speeches were a combination of the conversations and academic writing: the number of simple repetitions is reminiscent of the conversations, while the figures for generalisation, specification and co-specification are very similar to academic writing.

Let us next look at some extracts from the speeches in order to try to discover how some of the admittedly small differences apparent in the tables can be seen in the examples. The extracts are from the beginning (or near the beginning) of each speech.

(1) In my last lecture I argued that although the Reformation is a major force of the Elizabethan age and although the change in political power is a major force in the Elizabethan age I’m quite clear that the greatest force of all was the sharp relatively sharp rise in population and the inflation which kept it company. I am aware of course that the debasement of the currency under Henry the Eighth played its part in inflating the coinage. I am aware too of course that the inflow of precious metals from the New World starting in the fifteen forties may have had some part in inflation. (Speech 1)

(2) Last week I showed my hand as the price mechanist that I am, and I argued, with the help of my fictional colleague Mr MacQuedy that individual willingness to pay should be the main test of how resources are used. You
may recall that we made fun of a number of soap-opera notions of do-it-yourself economics (DIYE). In this lecture I want to enlarge on the contrast between DIYE and economic orthodoxy. I want to consider first an aspect of DIYE which I call “unreflecting centralism”. (Speech 2)

(3) Okay, now erm, today as you realize with feelings of immense relief is the last lecture of the term, so, so what I’m gonna do, is to start talking about the er, so called black books of Freud, the set texts in this, in this course and I’m gonna start talking today about the first, and in some ways, one of the most important of these, Totem and Taboo, and since it’s the last lecture of term, and you probably all forget what I said over the Christmas holiday, and won’t be able to recall it afterwards, through the alcoholic haze, er what I thought I’d do today, was talk about Totem and Taboo in the way in which it looked backwards rather than forwards. Totem and Taboo as we’ll see is a key book, not only in terms Freud’s writings on social sciences, but in Freud’s development. (Speech 3)

(4) Lecturer: Right then we, we’ll leave some of the physics and stuff that we’ve been doing behind now and just spend one lecture looking at some chemistry which I know will be equally popular.
Unknown: Oh good.
Lecturer: Most of the ninety two naturally occurring elements, that’s leaving aside the, the elements that have been created artificially in particle accelerators and things, have been found in sea water and it’s quite likely that those that haven’t yet been recorded from sea water will be recorded as our analytical techniques get better. So basically you can consider sea water as being a solution containing salts of all of the naturally occurring elements. (Speech 4)

As in the previous chapter, the commentary offered will be a general one, since the principles for recognising pairs have no doubt become obvious by now. We can first note that the differences between Speech 1 and 2, on the one hand, and Speeches 3 and 4, on the other, become quite evident from these extracts. Speeches 1 and 2 are, if you like, clearly prepared; Speeches 3 and 4 are undoubtedly also prepared, but they also show features typical of a slightly less demanding communicative situation; most notably the hesitations and false starts, and also some of the vocabulary and the structures, give an impression of greater spontaneity. This impression is enhanced in example (4) by the intervening comment, presumably from one of the students. It is interesting to note at this point that although it is possible for the audience to offer feedback in lectures, it is actually quite rare in the two lectures studied and occurs mainly
in the form of short comments such as in example (4). In example (6) below we can find an uncommonly long contribution from the audience, as a student offers some additional information on a particular topic.

This difference in the preparedness of the speeches is not reflected in the use of cohesion, for all the examples show a great number of cohesion pairs, and the reliance on simple repetition pairs evident on the basis of the numerical information is demonstrated in the extracts. Starting with the radio talks, we can see that in Speech 1, the speaker repeats, for instance, major force and the Elizabethan age. In Speech 2, do-it-yourself-economics or DIYE is repeated several times. Both speakers also several times refer to themselves as I.

As for the conventional lectures, Table 8.2 revealed that Speech 3 has the highest number of simple repetition pairs, and this becomes apparent even in the short extract: the speaker repeats, for instance, talking, today, Totem and Taboo, you and I. The extract from Speech 4 also shows several repetitions, such as naturally occurring elements, sea water and recorded. Unlike the other examples, this extract shows the speaker referring to himself only once; the speaker does, however, twice refer to himself and his audience as we.

8.4 Chains of cohesion

If we then turn to examine chain formation in the prepared speeches, it can first of all be noted that all the speeches have a number of chains, one longer chain and several shorter chains, and most of the cohesive pairs take part in these chains. In this respect the speeches do not differ from the other texts in this study. Let us examine some of these chains, starting with the long ones.

In Speech 1, the longest chain is related to the historical period covered by the lecture, i.e. Elizabethan England: the Elizabethan age, the Elizabethan period, the sixteenth century. Speech 2 shows a long chain with units referring to economics: do-it-yourself economics, economic superpowers, economic scene, orthodox economic doctrine. In Speech 3, the longest chain deals with Freud, who is mentioned throughout the speech. Speech 4 has a long chain having to do with sea water, which alternates with ocean water throughout the speech. Like the examples of written monologue in the previous chapter, the texts representing spoken monologue seem to concentrate on a single topic as well.

Let us next look at a couple of the shorter chains in detail, the first from a radio talk and the second from a conventional lecture. Example (5) presents the employment chain, and example (6), the taboo chain.
(5) In a primitive economy with surplus population under-employment is more characteristic than unemployment. That is to say there aren’t the conditions to give even those who are employed a full week’s work. Each week has its share of empty days. In the Middle Ages underemployment was chronic but it was masked by the numerous saints’ days public holidays which sometimes were as many as sixty in the year. In abolishing the saints’ days Protestant England may have made more clear the underemployment which had been prevalent for centuries. And all this was made much worse in Tudor England by the conversion from corn to wool which reduced the demand for labour.

(Speech 1)

(6) And as we saw when we discussed the book, Freud gives a number of examples of ambivalence, and the taboos to which they give rise. Taboo is a Polynesian word, and it means some kind of supernatural law or prohibition which you infringe at your supernatural peril. If you infringe a taboo something terrible will happen to you. But if you had to explain why you have to obey the taboo, you would probably find it very, very difficult in the, in the sense that taboo prohibitions are not like legal rational ones. If you as somebody what’s the explanation for a fact you may have noticed if you walked down the Strand here just from the School, if you’re observant, I’m sure you’ve all instantly noticed as you walked by, that Strand Street, which is a short street that, sorry, I’m Savoy Street, which is a short street that leads off the Strand into the Savoy Hotel, is an exception to the rule that in England you drive on the left, because in Savoy Street, you drive on the right. And you may say, well why is this? Is this just an aberration, if you look at the road markings, you’ll see it seems to be official, cos the road is marked out for driving on the right, and the reason is that er, traffic law in this country says that vehicles drive on the left, except in Savoy Street. And that is the one street in the, in the whole country, where legally, you are obliged to drive on the other side. And the reason is, it’s for the benefit of taxis, cos, everybody knows that London taxi drivers are above the law. If you’ve ever driven around London you immediately notice this. These guys do anything, you know, U turns in the middle of anywhere, they, they can do it, you can’t. Well if you do it they just shout at you.

Unknown: It’s so they can open the door behind them, the passengers getting in on that side of the road.

Lecturer: That has to be the reason. I, I knew, I knew that it was because of the, that the taxi cabs had insisted, but now told us the reason. Alright, now we know. That, that’s a rational law, okay, it’s nothing to do with a taboo, there’s not some strange supernatural principle which says, in Savoy
Street you drive on the other side, and if you don’t you’ll be struck down with a fever or ill luck or something like that. It’s a rational, legal principle, okay. Now that is not a taboo. A taboo is quite different. A taboo is something you can’t justify or explain, or rationalize as existing for the convenience of taxi drivers. A taboo is something beyond reason, and as we saw, what Freud does in the book is compare it with neurotic prohibitions which are kind of personal taboos, and in fact the sub-title of the book is some points of agreement between the mental lives of savages and neurotics. And the principal point of agreement is the agreement between the neurotic prohibition, which like the taboo, is something that the neurotic cannot bring themselves to do, fears for the consequences if they do do it, and er, feels constrained by some irrational force er, to obey, even though it isn’t rational. And as we saw, Freud compares these, and explains taboos and neurotic prohibitions as a means of dealing with ambivalence.

(Speech 3)

The fact that these chains reflect topical segments, a shorter one in (5) and a longer one in (6), corroborates the findings of the earlier chapters. Employment (or unemployment or underemployment) is not referred to after the end of the short chain in Speech 1. The longer chain in Speech 3 also marks a topical segment: it introduces taboos and discusses them, and after this segment they are not mentioned again during the speech.

It can accordingly be concluded that chain formation is a feature characterising all the texts, from conversations to prepared speeches. The long chains can reveal whether a text is a single-topic or a multi-topic one, while the shorter chains can indicate textual or topical segments.

8.5 Cohesion and discourse organisation

As with the other set of monologue texts, i.e. the articles discussed in the previous chapter, the role of cohesion in discourse organisation will be examined in this chapter as well. Let us have a look at (the beginning of) Speech 1 in order to make a summary on the basis of the number of cohesive units in the sentences of the speech. The principles of the summarising procedure will not be repeated here, because they are similar to those presented in the previous chapter (see 7.5 for details). In other words, the number of cohesive units in each sentence is first counted in order to find out the average number of cohesive units per sentence.
(1) Inflation is one of the great corrosive forces of any society. (2) It saps at the fundamentals of that society and when the phase comes to an end or it slackens then the whole structure is different from what it was at the beginning. (3) We know that from our own day. (4) When I was a small boy my grandmother used to give me a farthing and tell me to go and buy sweets which I did with some measure of success. (5) They weren’t good sweets but they were sweets. (6) The farthing has ceased to be a coin of the realm. (7) The halfpenny is on its way. (8) My own guess roughly would be that by the end of the present century a number of other coins will have followed the farthing and the two shilling piece the florin will be the basic unit in which case you will have reached the decimal currency without needing to do anything about it. (9) Well Tudor society saw this in process more rapidly more astonishingly because they didn’t know what was happening than we in our own generation are experiencing it. (10) It’s more like Germany in the period between the wars and if you meet Germans today in their fifties or sixties they will talk of the inflation period as the great watershed of their lives. (11) And you could if you wanted to I think quite logically build up an argument which would show that the rise of Hitler to power in Germany derived from the enormous social and political consequences of what Germans call our inflation period. (12) And our inflation period our great inflation period occurred in the middle years of the sixteenth century the formative years not only of the Elizabethan age but of the whole Elizabethan outlook. (13) In my last lecture I argued that although the Reformation is a major force of the Elizabethan age and although the change in political power is a major force in the Elizabethan age I’m quite clear that the greatest force of all was the sharp relatively sharp rise in population and the inflation which kept it company. (14) I am aware of course that the debasement of the currency under Henry the Eighth played its part in inflating the coinage. (15) I am aware too of course that the inflow of precious metals from the New World starting in the fifteen forties may have had some part in inflation. (16) So I think most historians would agree that its part has been exaggerated until quite recently and that population pressures are probably the most important of all the influencing forces in this formative period.

The number of cohesive units in this extract ranges from 2 (in sentences 3 and 7) to 14 (in sentence 13); the mean is 5.9. Let us see what kind of a summary we can arrive at by taking into account sentences with an average or an above-average number of cohesive units, i.e. six or more units. The summary includes sentences 2, 4, 8, 9, 10, 12, 13 and 14, and it looks like the following:
(2) It [inflation] saps at the fundamentals of that [any] society and when the phase comes to an end or it slackens then the whole structure is different from what it was at the beginning. (4) When I was a small boy my grandmother used to give me a farthing and tell me to go and buy sweets which I did with some measure of success. (8) My own guess roughly would be that by the end of the present century a number of other coins will have followed the farthing and the two shilling piece the florin will be the basic unit in which case you will have reached the decimal currency without needing to do anything about it. (9) Well Tudor society saw this in process more rapidly more astonishingly because they didn’t know what was happening than we in our own generation are experiencing it. (10) It’s more like Germany in the period between the wars and if you meet Germans today in their fifties or sixties they will talk of the inflation period as the great watershed of their lives. (12) And our inflation period our great inflation period occurred in the middle years of the sixteenth century the formative years not only of the Elizabethan age but of the whole Elizabethan outlook. (13) In my last lecture I argued that although the Reformation is a major force of the Elizabethan age and although the change in political power is a major force in the Elizabethan age I’m quite clear that the greatest force of all was the sharp relatively sharp rise in population and the inflation which kept it company. (14) I am aware of course that the debasement of the currency under Henry the Eighth played its part in inflating the coinage.

With the procedure it is possible to reduce the number of sentences to a half of the original. We can again note that sentence length does not automatically reflect the centrality of the sentences in terms of the summary, for some of the eliminated sentences are quite long (such as sentences 11 and 16).

For the summary to read well, however, it is necessary to substitute in the first sentence (i.e. sentence 2) it with the full form inflation, and also to replace that with any. That we should have to do this can, in fact, be regarded as an indication of the force of linearity. The units could not be repeated in an identical form from sentence 1 without at the same time adversely affecting the text-flow: a repetition of inflation, although possible, would be clearly marked, and repeating any would simply be impossible. With these changes, however, the resulting abridgment reads quite well. The continuation from sentence 4 to sentence 8 slightly suffers from the omission of intervening sentences, but it is not impossible to see that they are related, with sentence 4 providing historical background information and sentence 8 describing the speaker’s prediction for the future.
If we try to make an even shorter summary by eliminating more sentences, let us see what happens if we only include those sentences which have eight or more cohesive units. This summary includes sentences 2, 4, 8, 10 and 13 and reads like the following:

(2) It [inflation] saps at the fundamentals of that [any] society and when the phase comes to an end or it slackens then the whole structure is different from what it was at the beginning. (4) When I was a small boy my grandmother used to give me a farthing and tell me to go and buy sweets which I did with some measure of success. (8) My own guess roughly would be that by the end of the present century a number of other coins will have followed the farthing and the two shilling piece the florin will be the basic unit in which case you will have reached the decimal currency without needing to do anything about it. (10) It’s more like Germany in the period between the wars and if you meet Germans today in their fifties or sixties they will talk of the inflation period as the great watershed of their lives. (13) In my last lecture I argued that although the Reformation is a major force of the Elizabethan age and although the change in political power is a major force in the Elizabethan age I’m quite clear that the greatest force of all was the sharp relatively sharp rise in population and the inflation which kept it company.

Comparing this summary to the previous one, it is clear that by eliminating sentences 9, 12 and 14 we get a summary which is not only shorter but also definitely less readable, if not incoherent. The transition from sentence 8 to sentence 10 greatly suffers from the elimination of sentence 9, and because the reference to Tudor society is lost, the summary would lead to a misrepresentation of the speaker’s original message. Furthermore, removing sentence 12 means that the reason why the speaker starts talking about the Elizabethan age in sentence 13 becomes unclear.

To conclude, the summarising procedure with sentences with an average or a higher number of cohesive units seems to work with a spoken monologue equally well as it did with a written monologue. However, just as we found with academic writing in the previous chapter, eliminating more sentences in order to arrive at a shorter summary results in a highly unsatisfactory abridgement of a prepared speech as well.
8.6 Collaborating with cohesion in a spoken monologue

Our second set of monologue texts produced a number of interesting findings. The cohesive profile of the prepared speeches is an intriguing mixture of the profiles of the conversations, on the one hand, and academic writing, on the other. The speeches show a high number of simple repetitions, a pattern familiar from the conversations and also from the other set of dialogue texts, but in addition, they demonstrate a much more varied profile than the dialogues in terms of the categories of cohesion and come close to academic writing in this respect.

Although making conclusions on the effect of communicative conditions on the use of cohesion is the topic of the following chapter, we can here briefly note that in terms of the contextual features of the speeches, the finding that the spoken monologue seems to be a mixture of the spoken dialogue and the written monologue is not illogical. Prepared speeches occupy a position between spoken dialogue and written monologue, in that they are prepared (i.e. at least partly written) monologues delivered through the spoken medium to an audience which has to interpret the speech in real time. The spoken monologue thus shares preparedness and a more varied cohesive profile with the written monologue, while its temporal demands (at the interpretation stage) and reliance on simple repetition bring it close to the dialogues, especially spoken dialogue.

The difference between Speeches 1 and 2, which are radio talks, and Speeches 3 and 4, which are conventional lectures, is a noticeable contextual difference, but it does not seem to have a great effect on the cohesive profile of the speeches, although one of the radio talks (Speech 2) shows the lowest number of cohesive pairs of all the speeches, and there are fewer collocation pairs in the conventional lectures than in the radio talks.

In terms of chain formation, the speeches do not differ from the other texts in our material, for long and shorter chains are present in the speeches as well; the former are connected to the overall topics of the speeches, while the latter reflect topical segments. We also discussed the role of cohesion in discourse organisation, and noticed that the summarising procedure developed for the written monologue produces satisfactory results when applied to the spoken monologue as well.

In the following, final chapter, we will consider on the basis of the analysis what the actual effect of communicative conditions is on the use of cohesion, and what it all means for our understanding of the functioning of cohesion in discourse.
CHAPTER 9

Lexical cohesion across spoken and written discourse

9.1 Introduction

It is now time to bring together the findings from the previous four chapters and to engage them in a dialogue with the theoretical framework introduced in the earlier chapters. On the basis of this dialogue theoretical and practical conclusions will be drawn, and suggestions for further research presented.

The aim of the present study was defined as being twofold: firstly, to develop a model of analysis capable of capturing all cohesively meaningful lexical relations in texts, and secondly, to find out if and how their use varies depending on the conditions under which the selected texts have been produced. This chapter addresses these main aims by providing answers to the more specific questions formulated for the analysis at the end of Chapter 1, which are for convenience repeated here:

– What types of lexical relation have been included in previous analyses, and what kind of classification would be best for the purposes of the present study?
– What kind of variation can we find in the use of lexical cohesion in the material of the present study?
– What are the differences between the use of reiteration relations, on the one hand, and of collocation relations, on the other?
– Do the differences mostly exist between spoken texts and written texts, or could they be better explained by other features and characteristics?
– How can the differences in the use of lexical cohesion between the texts be related to the communicative conditions under which the texts were produced?
– What can we say about the role of cohesion in the organisation of discourse?
– What does the use of cohesion in the four groups of texts reveal about the role of cohesion in the communication process?
Collaborating towards Coherence

In the following section, answers will be offered to each of these questions. Relevant findings from the analysis presented in the previous four chapters will be recapped and their implications discussed.

9.2 Collaborating with cohesion in spoken and written discourse

Let us start by answering the first question and considering how the model of analysis developed for the present study served the purposes of the analysis and also how it affected it.

– What types of lexical relation have been included in previous analyses, and what kind of classification would be best for the purposes of the present study?

The central assumption underlying this whole study is that of the discourse-specificity of linguistic features. What this means in practice is that the unit of analysis and the model of analysis need to be determined by discourse-specific criteria. The unit of analysis, i.e. lexical unit, is defined on the basis of its occurrence and meaning in its particular discourse, rather than on the basis of some criteria irrelevant to meaning, such as orthography. In a similar manner, the model of analysis respects the meaning of a unit in its particular context. To demonstrate that the relations between the lexical units are discourse-specific, we use terminology which is not derived from lexical semantics.

One of the decisions which has a significant bearing on the analysis is to include both reiteration and collocation relations in the model of analysis. In her influential paper on cohesive harmony, Hasan writes:

> While I firmly believe that behind the notion of collocation is an intuitive reality, I have come to accept the fact that unless we can unpack the details of the relations involved in collocation in the Firthian sense, it is best to avoid the category in research. The problems of inter-subjective reliability cannot be ignored. (Hasan 1984: 195)

In this study, I have decided not to take Hasan’s advice, because I firmly believe that regardless of problems or difficulties, even intuitive realities can and should be tackled in cohesion analyses, which by definition are analyses of meaning. Consequently, in addition to the more straightforward reiteration relations, the model includes collocation relations. They actually receive a fair share of the discussion on the cohesion categories, offered in the hope of demonstrating very clearly that some of the intuitiveness present in the
recognition of collocation relations can be supported by less intuitive means. Problems of intersubjectivity are naturally still present in the model of analysis presented in this book, since we are dealing with meaning, but with the tools suggested for understanding especially elaborative collocation, I believe that the model is both capable of capturing all cohesively meaningful lexical relations in a text and replicable in further studies.

Another important theoretical decision for the study concerns the view of the role of cohesion in communication. In order to explain the use of cohesion in communication, the collaborative or dialogistic framework was identified as offering the most fruitful approach. The decision is based on the fact that the collaborative or dialogistic viewpoint most clearly takes into account the interplay between cohesion, coherence and communicators, which is central for our purposes.

We will next consider the four questions for which answers are provided by the primary analysis of the material, i.e. questions having to do with the distribution of cohesion in the four sets of discourse. To help us discuss them, let us start by placing the texts on three different continua, so that the trends and tendencies in the distribution of cohesion become more easily apparent. These continua are those of reiteration, collocation and density, and the positioning of the texts is determined by the number of reiteration pairs, collocation pairs, and all pairs respectively (the figures are given in parentheses next to each category).

Because of the clear dominance of reiteration pairs in all texts, their numbers and the total numbers produce a similar positioning, but regardless of their smaller number, it is of course interesting to see the picture produced by collocation pairs as well, and the three continua are therefore presented separately.

It should also be pointed out that because they show such different cohesive profiles, the two-party and the three-party conversations are listed separately. Likewise, the two mailing lists are treated separately for reiteration and density, for their intra-set differences were quite noticeable (although not as regards collocation). For academic writing and prepared speeches, mean scores are used for all continua, as the internal differences in these groups of texts were smaller.

– What kind of variation can we find in the use of lexical cohesion in the material of the present study?

Figure 9.1 reveals that the two-party conversations are situated at the top of both the continuum of reiteration and that of overall density: they have the
<table>
<thead>
<tr>
<th>Reiteration</th>
<th>Collocation</th>
<th>Density</th>
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</thead>
<tbody>
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<td></td>
<td></td>
</tr>
<tr>
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<td>mailing lists (16.5)</td>
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</tr>
<tr>
<td>prepared speeches (142)</td>
<td>academic writing (15)</td>
<td>prepared speeches (153)</td>
</tr>
<tr>
<td>mailing list 1 (134)</td>
<td>two-party conversations (14)</td>
<td>mailing list 1 (151)</td>
</tr>
<tr>
<td>125</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mailing list 2 (118)</td>
<td>prepared speeches (11)</td>
<td>mailing list 2 (134)</td>
</tr>
<tr>
<td>three-party conversations (110)</td>
<td>three-party conversations (10)</td>
<td>three-party conversations (120)</td>
</tr>
<tr>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>academic writing (90)</td>
<td></td>
<td>academic writing (105)</td>
</tr>
</tbody>
</table>

**Figure 9.1** The texts positioned on continua of reiteration, collocation and density (pairs per 1000 words)
Chapter 9. Lexical cohesion across spoken and written discourse

highest numbers of reiteration pairs and all pairs. Prepared speeches show the second highest numbers of reiteration and all pairs, followed by the two mailing-lists. The other type of spoken dialogue in the material, the three-party conversations, are markedly different from the two-party ones, for they are situated towards the lower end of the continuum. Academic writing, finally, has the smallest number of reiteration and all pairs.

The picture is slightly different when we look at the continuum of collocation. Here, the two sets of written discourse are situated at the top; interestingly, the mailing-list texts show a slightly higher number of collocation pairs than the academic writing texts. The two written sets are followed by the two-party conversations, while the prepared speeches and the three-party conversations show smaller numbers of collocation pairs.

– What are the differences between the use of reiteration relations, on the one hand, and of collocation relations, on the other?

We can first note that there is no competition between reiteration and collocation: collocation is rare in all our texts. This does not, however, mean to say that it is meaningless; several of our examples showed collocation relations doing important work towards coherent discourse.

As already pointed out above, the density continuum closely follows that of reiteration, for the number of collocation pairs is relatively small in all the texts. The differences in the distribution of reiteration and collocation pairs across the texts are nevertheless interesting and revealing, and they will be considered at greater length in the following as we consider answers for the more detailed research questions.

– Do the differences mostly exist between spoken texts and written texts, or could they be better explained by other features and characteristics?

The first continuum, that of reiteration, already makes it clear that simple explanations for the differences will not suffice. Neither the spoken-written difference nor the dialogue-monologue difference can explain the positioning of the texts. It is true that the stereotypical forms of dialogue and monologue are maximally different, but apart from that, the situation is more complicated. The three-party conversations are, intriguingly, actually closer to academic writing than to the two-party conversations, and both the spoken monologue and the written dialogue are situated in between the two spoken dialogues.

When we look at collocation, we find an almost equally baffling situation. It is perhaps not surprising that it is the two written groups of text that occupy
the top positions on this continuum, but it is definitely interesting that the
two-party conversations are among the top three.

The density continuum mirrors that of reiteration, as already noted, with
the two-party conversations, prepared speeches and Mailing List 1 showing
higher values, while Mailing List 2 occupies a middle position and the three-
party conversations and academic writing show lower values.

The suggestion that cohesion in spoken language might be less dense than
in written language is thus not supported by our analysis (although it must
be remembered that the earlier studies claiming this used different models of
analysis). Admittedly, the cohesive profiles of the conversations in particular
were different from those of academic writing, but this had nothing to do with
density. Moreover, the other set of texts delivered through the spoken medium
combined, as it were, the profiles of the conversations and academic writing.

– How can the differences in the use of lexical cohesion between the texts
be related to the communicative conditions under which the texts were
produced?

Together with the first question, this was the main research question of this
study, and its importance is reflected in the length of the discussion below. In
order to try to explain and understand the findings presented in Figure 9.1,
let us first reconsider the six dimensions for conversations, prepared speeches,
electronic language and academic prose from Biber (1988) and Collot and
Belmore (1996) presented earlier in the study (Figure 4.3). We can note that the
three continua presenting the results of the present study do not exactly match
any of the dimensions of Figure 4.3 in terms of the positioning of the texts.

Similarities are, however, apparent. For instance, academic writing and
the two-party conversations in the present study form the end-points of two
continua; in Figure 4.3, academic prose and face-to-face conversations (both
dyadic and polyadic) form the end-points of three out of the six dimensions
(involved versus informational production, explicit versus situation-dependent
reference, and abstract versus non-abstract information). Combining the re-
sults from Figures 4.3 and 9.1, we can observe that conversations are charac-
terised by high involvement, more instances of situation-dependent reference
and non-abstract information; furthermore, dense cohesion is characteristic of
two-party conversations, while three-party conversations show less dense cohe-
sion. Academic writing/prose, on the other hand, can be characterised by a high
degree of informational production, explicit reference, abstract information,
and less dense cohesion.
Moving on to the mailing list texts, we can see that they show a very high value for persuasion, relatively high values for involvement, abstract information and on-line informational elaboration, and an intermediate value for cohesion. Prepared speeches, finally, are characterised by a very high degree of on-line informational elaboration, a high degree of cohesion and a modest degree of persuasion, narrativity and explicit reference.

It appears that the stereotypical form of dialogue, the two-party conversation, represents a situation where the use of cohesion is carried furthest. When we remember that the two-party conversations were dominated by cohesion pairs produced by the same speaker within a turn, we arrive at the somewhat paradoxical conclusion that the use of cohesion in our stereotypical dialogue is based on monological strategies. But this is not the whole picture. The speakers in a two-party conversation are responsible for the conversation together, in collaboration, and it seems that the collaboration in a dyadic dialogue enables the speakers to create cohesive relations in an unhindered manner.

When we bring in our three-party conversations, the picture changes, and it is not immediately easy to see why they should show a positioning so different from the two-party conversations. In comparison to dyadic conversations, the higher number of speakers in polyadic conversations apparently changes the communicative situation to such an extent that their cohesive profile is quite drastically different. In the on-line production and processing situation of a three-party conversation, the creation of cohesion may be so demanding that with a higher number of speakers the conditions simply are not there for the speakers to use more cohesion. This would also explain why the two types of conversation are so different in their use of collocation as well. As Kerbrat-Orecchioni (2004:6) suggests, the more numerous the participants in a conversation, “the more delicate conversational activities become”. It is perhaps the specific constraints and intricacies of three-party conversations, partly due to the number of speakers, that lead to a cohesive profile clearly distinct from two-party ones.

The relatively low number of cohesion pairs in academic writing is perhaps understandable if we consider the fact that the communicative situation for both the writer(s) and the reader(s) is less difficult because, although neither the production nor the processing of such informational text can be easy, neither of these processes has to be carried out on-line. The high number of collocation pairs can be explained by this same communicative feature. In other words, the writers may be confident that the readers will be able to grasp the unity of the texts even with less dense and more subtle cohesion.
Let us then take the texts positioned in the middle of our continua, the prepared speeches and the mailing-list texts. In Figure 4.3, prepared speeches occupy the top position on one dimension, that of on-line informational elaboration. This is clearly a factor which entails great difficulty, both for the speaker and the listeners. Accordingly, on our collocation continuum, prepared speeches show very low values, but on the other two continua they are situated towards the top. The former finding is an indication especially of the difficulty of the situation, I would claim, while the latter reflects not only the difficulty but also the attempt by the speakers to create cohesion in a manner reminiscent of a dyadic dialogue and thereby overtly collaborate with the hearers. In Chapter 2 we quoted Linell (1998:267) saying that monologic speech is “intrapersonally dialogical, though interpersonally it exhibits only limited dialogicality”. We can now add to this by noting that intrapersonal dialogicality seems to be reflected in the use of cohesion, at least in our speeches material.

In the mailing-list texts, the profile is slightly different. The higher number of collocation pairs may indicate both the writtenness of the texts and the fact that the on-line processing and production constraints found in the prepared speeches are not so evident in the mailing-list situation. The number of reiteration pairs and the overall density are, however, quite high in the mailing-list texts as well. We may therefore conclude that in terms of cohesive profile, the written dialogue texts simulate the profile of the dyadic dialogue, although not as clearly as spoken monologue does.

In light of the above discussion, what can we say about the findings in relation to the contextual dimensions discussed in connection with each set of texts? In the discussion on context in Chapter 1 it was noted, following Linell, that a text and its context cannot be separated, except for analytical purposes. Linell continues that “contexts are not objective environments”, they are produced, and

...the contexts “produced” are those aspects of physical, social and cognitive environments which are assumed, perceived, believed or known to be relevant by actors (and to be reconstructed as such by the analyst).

(Linell 1998:137; emphasis original)

The starting point for the present study was the assumption that certain contextual features and certain cohesive strategies would go hand in hand. During the analysis, we were able to observe that this is indeed the case, but that the relationship between cohesion and contexts is a complex one. First of all, there was more variation within the individual dialogue texts than monologue texts. In the spoken dialogue texts, the number of speakers (two versus three) affects
the cohesive profiles of the texts. In the written dialogue texts, it was suggested that the nature of the messages on the two mailing lists (shorter and more dialogical versus longer and more monological) might be the reason for the difference. The monologue texts show little internal variation, but when we compare the monologue texts with each other, interesting differences emerge, and it seems that cognitive contextual features can explain most of them. The extreme cognitive load in both the production and interpretation of the prepared speeches, and the lighter load in especially the interpretation of academic writing, lead to clearly distinct cohesive profiles.

Finally, looking at contextual features across the sets of texts, we can note that the linguistic context (whether the text was produced solely by the speaker/writer or jointly produced by the coparticipants) does not seem to be relevant in terms of cohesive strategies. Cognitive contextual factors, on the other hand, do appear to be significant, especially real-time production and interpretation constraints versus smaller temporal constraints. In terms of social contextual features, it appears that the channel (spoken versus written) may have a small effect on the use of cohesion, (especially) collocation, but the presence or absence of visual contact between the communicators is not a decisive feature.

What can we say about the role of cohesion in the organisation of discourse?

To understand the role of cohesion in discourse organisation, two analyses were carried out. First, chains of cohesion were studied in all the texts, and the results of the investigation corroborate the findings of previous studies. In all texts, both reiteration and collocation pairs take part in chain forming, and all texts show both shorter and longer chains.

As has been suggested in previous studies, cohesive chains seem to be capable of marking topical segments. In other words, when a cohesive chain begins or ends, a topical segment also often begins or ends. This was found to be the case in all the texts. In the written monologues studied, we were able to further observe that cohesive chains could also mark parts of text that the writers had marked as actual textual segments.

Furthermore, studying cohesive chains can reveal if a text is a single-topic or a multi-topic one. One longer chain running through the entire text, with shorter chains occurring at particular points of the text, is an indication of a single-topic text. A multi-topic text, on the other hand, does not show a dominating, long chain at all, but instead includes several shorter ones. Not
surprisingly, we found that the monologue texts tended to be single-topic ones, while there was more variation in the dialogue texts.

Secondly, the role of cohesion in discourse organisation was further investigated in the monologue texts. Modifying the ideas presented by Hoey (1991) on how cohesion can signal central sentences in a text, we were able to produce coherent summaries of the texts by combining sentences with an average or a higher number of cohesive units. I see it as a further indication of the important role of cohesion that our relatively straightforward procedure resulted in an understandable abridgement of a text.

- What does the use of cohesion in the four groups of texts reveal about the role of cohesion in the communication process?

In order to answer this final question, let us revisit Linell’s (1998: 8) definition of communication as “individuals in dialogue with partners and contexts”. The previous four chapters discussed the role of cohesion in the dialogue between communicators in various contexts, and above, we have further compared the cohesive profiles shown by the texts.

We started the analysis with the set of texts in which the communicators are in overt collaboration, i.e. spoken dialogue, but found that collaboration in dyadic and polyadic conversations leads to different cohesive strategies. The picture became clearer as we investigated further texts, and noticed that as the communicative situation changes, so do cohesive strategies. Of particular interest were the two sets of texts which showed cohesive profiles similar to stereotypical dialogue, i.e. written dialogue and spoken monologue. On the basis of this analysis we may conclude that in a difficult communicative situation, be the medium spoken or written, or the type of discourse monologue or dialogue, cohesive strategies that are favoured in a dyadic dialogue will be utilised; in such contexts the communicators’ interaction with their fellow communicators leads to a similar outcome.

It is important to reiterate in this concluding chapter the comment made earlier in the study: I am not claiming that the presence of the cohesive units which we have been discussing and analysing in this study is a guarantee of coherence or a guarantee of successful communication. The purpose of this study was to show which cohesive strategies are used, and in what manner, in texts produced in different contextual conditions. We cannot conclude on the basis of our analysis that a particular cohesive strategy would be the correct strategy for a particular text in a particular condition. What we can conclude is that there appear to be certain tendencies in the use of cohesion, which were sug-
gested to be a reflection of the language users’ attempts to collaborate towards successful communication.

9.3 Limitations of the study and suggestions for further research

The first concern to be discussed here must be the fact that the present book deals with both spoken and written discourse, and both dialogue and monologue. This means that it was not possible to analyse all of the texts studied from exactly similar perspectives. I hope to have shown, however, that some cohesive features can be studied across spoken and written texts as well as across dialogues and monologues, while others are inevitably linked with particular type(s) of discourse only.

From the multitude of spoken and written discourse, this book deals with a limited range of different categories of text, and a limited number of individual texts. It would no doubt be worthwhile to study more texts in order to gain an even deeper understanding of the communicative conditions which call for the use of particular cohesive strategies.

As regards spoken dialogue, we could for instance explore the use of cohesion in dyadic dialogue with a more demanding communicative setting, for instance telephone conversation; or polyadic dialogue with a higher number of speakers could be investigated. As for written dialogue, the material of the present study did not make it possible to study in detail the interesting strategy of quoting found in e-mail language. It might be a good idea to study messages (on mailing lists or other discussion forums) with more occurrences of quoting in order to try to find out if this strategy results in a cohesive profile even more similar to the two-party conversations. Synchronous written dialogue, such as chat, did not feature in this book either, but it would no doubt be interesting material for a comparison with spoken dialogue.

As regards monologue, other types of monologue could be investigated. Studying spontaneous speeches might produce interesting findings, or on the written side, we could include a wider range of types of text in addition to academic writing.

Finally, within the scope of the present study it was possible to pay attention to a limited number of contextual factors. This was a conscious decision, for we drew attention in the introductory chapter to a number of studies suggesting that the use of cohesion may not differentiate between texts produced under identical or very similar conditions. It will be a task for future
research to try to establish if the use of cohesion reflects other communicative differences as well.

9.4 Concluding remarks

This book set out to examine communication between writers and readers, and speakers and listeners, from the perspective of the relations of meaning with which speakers and writers can mark the unity within and between their messages. We found that speakers and writers make use of cohesion in different manners in different texts, which suggests that cohesive strategies are sensitive to communicative conditions.

A practical implication of the findings is that for comparing texts on the basis of their use of cohesion, whether for research or instructional purposes, the communicative differences of the texts should be carefully mapped and considered. Most of the texts within a particular set in the present study showed very similar cohesive profiles; it seems that texts produced for similar purposes do not show so many cohesive differences.

It can be concluded that if we want to understand collaboration and communication, we can look at the use of cohesion and expect to find reflections of collaboration and communicative conditions in cohesive strategies. If our aim is to understand the functioning of cohesion and the use of cohesive strategies, issues of communication and collaboration should definitely form a part of our investigation.
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